Appendix L
Human Health Risk Assessment Report

BASELINE HUMAN HEALTH RISK ASSESSMENT
OMEGA CHEMICAL SUPERFUND SITE
OPERABLE UNIT 2
MONTEBELLO FOREBAY
LOS ANGELES COUNTY, CALIFORNIA

EPA Contract No. 68-W-98-225
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CH2M HILL Project No. 335392.RR.01

Prepared for
United States Environmental Protection Agency
Region 9
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San Francisco, California 94105

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January 2008

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Acronyms and Abbreviations

µg/L	micrograms per liter
µg/m^3	micrograms per cubic meter
1,1-DCE	1,1-dichloroethene
Cal-EPA	California Environmental Protection Agency
CD-SOW	Consent Decree and associated Statement of Work
CERCLA	Comprehensive Environmental Response, Comprehensive, and Liability Act of 1980
CHHSL	California Human Health Screening Level
cm/hr	centimeters per hour
cm^2	square centimeter(s)
COPC	chemical of potential concern
DA_event	absorbed dose per exposure event per area of skin exposed
DTSC	Department of Toxic Substances Control
ELCR	excess lifetime cancer risk
EPA	United States Environmental Protection Agency
EPC	exposure point concentration
Freon 11	trichlorofluoromethane
Freon 113	trichlorotrifluoromethane
FS	feasibility study
HEAST	Health Effects Assessment Summary Tables
HHRA	human health risk assessment
HI	hazard index
HQ	hazard quotient
HVAC	heating, ventilation, and air conditioning
IRIS	Integrated Risk Information System
J&E	Johnson and Ettinger
kg	kilogram(s)
L	liter(s)

L/day	liters per day
L/m^3	liters per cubic meter
m^3	cubic meter(s)
m^3/hr	cubic meters per hour
mg/cm^3	milligrams per cubic centimeter
mg/kg	milligrams per kilogram
mg/kg-day	milligram per kilogram per day
mg/L	milligrams per liter
mg/m^3	milligrams per cubic meter
MTBE	methyl tertiary butyl ether
NAS	National Academy of Sciences
NDMA	n-nitrosodimethylamine
NPL	National Priorities List
OEHHA	Office of Environmental Health Hazard Assessment
Omega	Omega Chemical Corporation
Omega Site	Omega Chemical Superfund Site
OPOG	Omega Chemical Site PRP Organized Group
ORD	Office of Research and Development (EPA)
OSVOG	Omega Small Volume Organized Group
OU	operable unit
PCE	tetrachloroethene (perchloroethene)
PRG	preliminary remediation goal
PRP	potentially responsible party
QA	quality assurance
QAPP	Quality Assurance Project Plan
QC	quality control
RAGS	Risk Assessment Guidance for Superfund
RfD	reference dose
RI	remedial investigation
RME	reasonable maximum exposure
SAP	Sampling and Analysis Plan

SVOC	semivolatile organic compound
TCE	trichloroethene
UCL	upper confidence level
VOC	volatile organic compound

1. Introduction

The United States Environmental Protection Agency (EPA), under the authority of the Comprehensive Environmental Response, Comprehensive, and Liability Act of 1980 (CERCLA), is conducting a remedial investigation/feasibility study (RI/FS) to address groundwater contamination downgradient of the Omega Chemical Corporation Superfund Site (Omega Site), located in Whittier, California (Figure 1).

EPA manages the Omega Site as three operable units: Operable Unit 1 (OU1), which includes the contaminated soil and groundwater in the immediate vicinity of the former Omega property; Operable Unit 2 (OU2), comprising the groundwater contamination downgradient of OU1; and Operable Unit 3 (OU3), comprising the indoor air contamination at the former Skateland building and other buildings. The former Omega facility is located at 12504 and 12512 East Whittier Boulevard, and occupies Los Angeles County Assessor Tract Number 13486 (Lots 3 and 4). It covers an area of approximately 41,000 square feet (200 feet wide by 205 feet long) and contains two structures, a 140-foot by 50-foot warehouse and an 80-foot by 30-foot administrative building. A loading dock is attached to the rear of the warehouse. The former Omega property is paved with concrete and secured with a 7-foot-high perimeter fence and locking gate. The fence is topped with razor wire. Prior to construction of buildings at the Omega parcel in July 1951, the property was used for agriculture.

OU2 generally includes the contaminated groundwater area that extends from the former Omega facility to approximately 4.5 miles south-southwest of the site. A site map showing the approximate boundaries of OU1 and OU2 is presented in Figure 2.

The Omega Chemical Corporation (Omega) was a refrigerant/solvent recycling facility that operated from approximately 1976 to 1991. Drums and bulk loads of waste solvents and chemicals from various industrial activities were processed to produce commercial products. Wastes generated from treatment and recycling activities included still bottoms resulting from distillation of spent solvents, aqueous fractions, and nonrecoverable solvents.

The site was placed on the National Priorities List (NPL) in January 1999. The Omega Chemical Site Potentially Responsible Party (PRP) Organized Group (OPOG) entered into the Consent Decree and associated Statement of Work in February 2001 (CD-SOW). Under the CD-SOW, OPOG was to perform an RI/FS for the vadose zone soil at OU1 and install an interim groundwater remedy to cut off the contaminant flux from the former Omega property to the aquifer; both activities are ongoing. OPOG also prepared a human health risk assessment (HHRA) for the vadose zone soils at OU1 in 2007.

The RI report presents an evaluation of data collected at OU2, which EPA began in 2001. The purpose of the RI is to evaluate the nature and extent of groundwater contamination and to assess the potential risks posed by this contamination to human health and the environment. EPA's evaluation will:

- Support the determination of risk-based cleanup levels; and

- Lay the foundation for the development and evaluation of possible cleanup alternatives in the feasibility study (FS).

A baseline HHRA was prepared as part of the Omega OU2 RI report. The following paragraphs summarize the approaches followed, methods used, and results obtained from the HHRA.

This risk assessment helps to determine and document whether groundwater contamination in OU2 poses a current or potential future risk to human health. The HHRA provides the basis for determining whether unacceptable human health risks might be caused by exposure to contaminants in OU2 groundwater such that a remedial action is necessary to address contaminated groundwater in OU2. The HHRA also identifies which exposure pathways require mitigation or remediation.

EPA will use the HHRA results in determining the scope of any response action undertaken to address contaminants in the groundwater at OU2. The HHRA also helps to determine if soil gas contamination in OU2 poses a current or potential future risk to human health. This includes a screening-level risk evaluation of soil vapor intrusion into indoor air at the Whispering Fountains Apartments.

The following terms were adopted for the purpose of the OU2 RI report:

Omega Wells	This term means (a) wells installed by EPA and the potentially responsible party (PRP) group named Omega Small Volume Organized Group (OSVOG), and (b) wells installed by the Omega Chemical Site PRP Organized Group (OPOG).
Omega Contaminants	Omega Contaminants are chemicals found at concentrations exceeding their screening levels (shown in Tables 5-1 to 5-4) at OU1 wells OW1A, OW1B, OW2, OW3A, OW3B, OW8A, and OW8B. These compounds are believed to have been introduced to groundwater as a result of the hazardous substances released at the former Omega facility. The same chemicals are also believed to have been introduced to groundwater at other facilities throughout OU2. Omega Contaminants also include the degradation products of these chemicals.
Chemicals of Potential Concern (COPCs)	COPCs are all chemicals found at concentrations exceeding their screening levels in OU2. They may have originated from hazardous substances released from known and unknown sources. Some of these compounds may be naturally occurring. Treatment of these chemicals will potentially be required for the groundwater remedy.
Operable Unit 1 (OU1)	OU1 is an area encompassing the former Omega Property and extending about 100 feet southwest across Putnam Street.
Operable Unit 2 (OU2)	OU2 is defined by the extent of the Omega Contaminants that are above screening levels in groundwater. Within OU2, groundwater contamination from the Omega property has commingled with chemicals released at other source areas; consequently, it is not always possible to distinguish exactly the extent of hazardous substances released from individual sources.
Operable Unit 3 (OU3)	OU3 is defined by the extent of indoor air impacts at the former Omega Chemical property as well as adjacent and nearby properties where the underlying vadose zone has been impacted by contamination derived from the former Omega Chemical property.

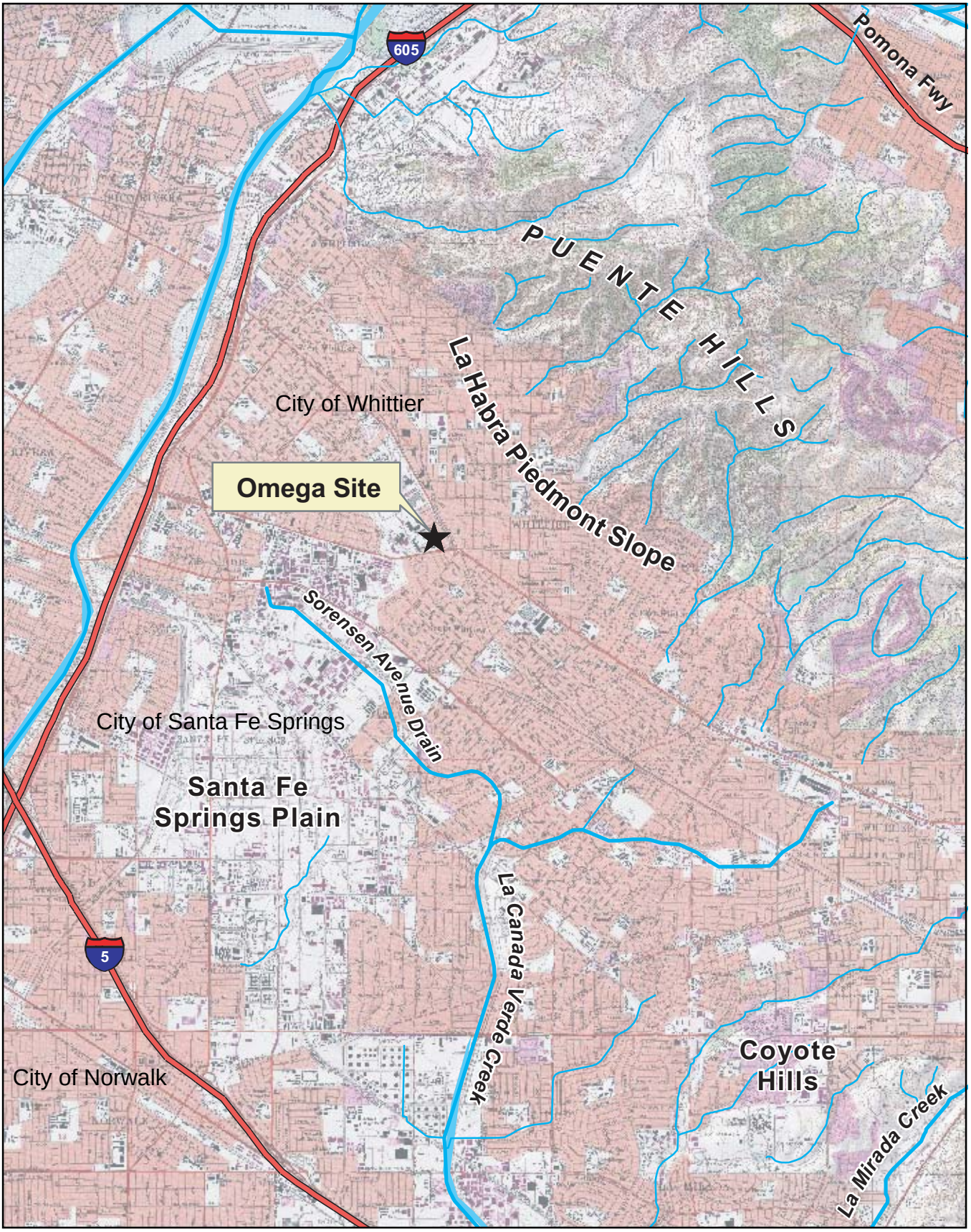

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Figure 1
Site Location Map
Omega Chemical Superfund Site

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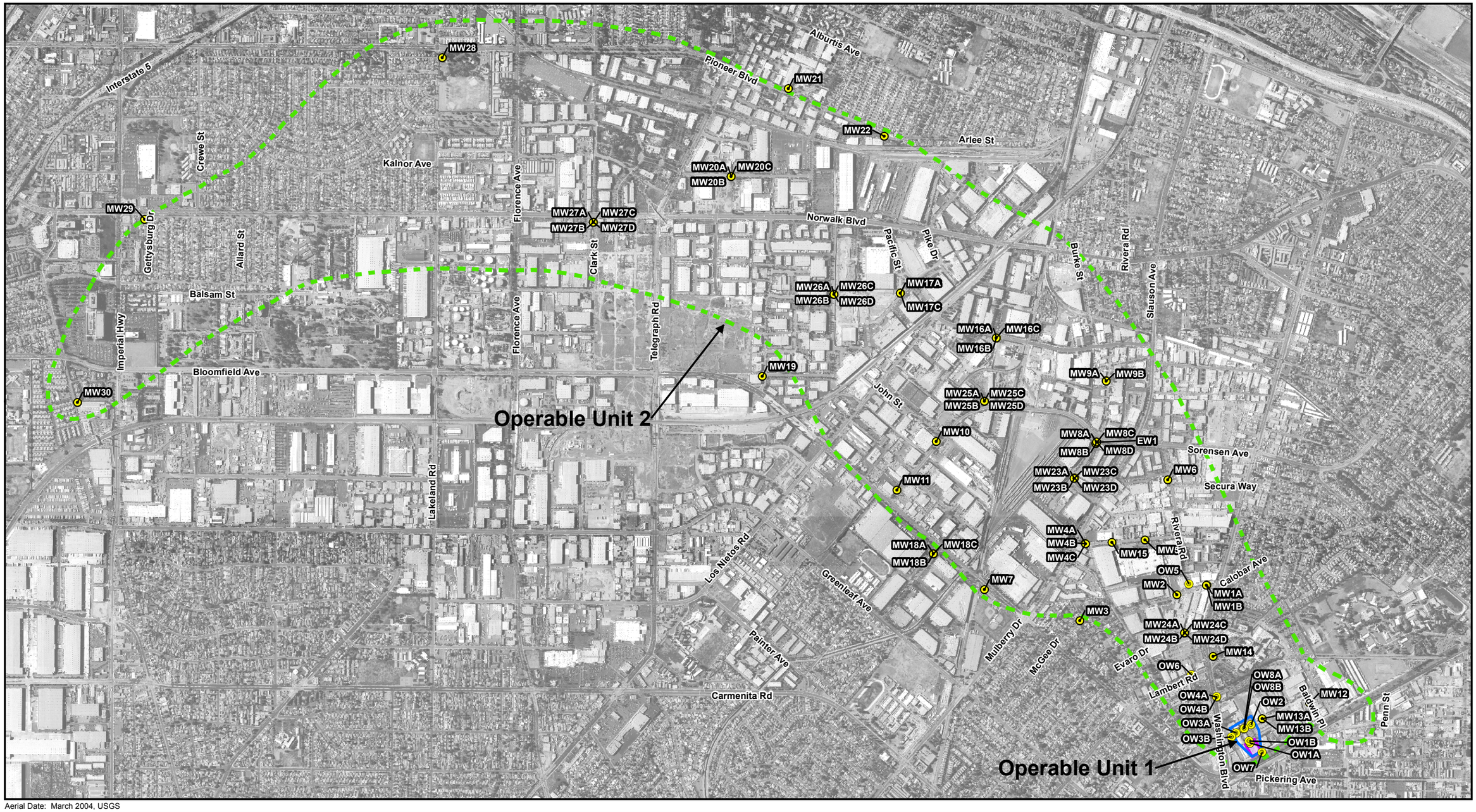

Aerial Date: March 2004, USGS

Legend

- EPA Monitoring Well
- Omega Potentially Responsible Parties Organized Group (OPOG) Monitoring Well
- Operable Unit 1
- Operable Unit 2
- Former Omega Facility

N

0 1,600 3,200 Feet

Figure 2
Operable Unit Location Map
Units 1 and 2
Omega Chemical Superfund Site

CH2MHILL

Date: December 17, 2007

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2. Summary of the Human Health Risk Assessment for OU1 Onsite Soils

Following is a brief summary of the HHRA for OU1 onsite soils (Camp, Dresser & McKee, 2007). The risk assessment presents an evaluation of potential cancer risks and non-cancer health hazards associated with exposure to residual soil and groundwater contamination (via soil gas vapor intrusion to indoor air) at the Omega Site. The HHRA was prepared in accordance with Task 2 of the CD-SOW, No. 00-12471, between EPA and OPOG.

The most prevalent contaminants detected in OU1 soil and groundwater were volatile organic compounds (VOCs), primarily tetrachloroethene (PCE) and related compounds, trichloroethene (TCE), and freons. Chlorinated compounds, including methylene chloride and chloroform, as well as acetone and toluene, also were detected at the downgradient site boundary and offsite. The principal VOCs detected in the soil gas at OU1, and at the highest concentrations, were Freon 113, Freon 11, 1,1,1-trichloroethane, and PCE.

Potentially exposed populations evaluated in the HHRA include future onsite residents, current and future onsite and offsite indoor industrial workers, future onsite outdoor industrial workers, and future onsite construction workers.

Potential exposure pathways evaluated in the HHRA include:

- Oral/dermal contact with surface soil and inhalation of fugitive dust—current industrial workers
- Inhalation of VOCs in indoor air—current industrial workers
- Inhalation of VOCs in ambient air—current industrial workers
- Oral/dermal contact with regraded surface/subsurface soil and inhalation of fugitive dust—future residents, future industrial indoor and outdoor workers, future construction workers
- Inhalation of VOCs in indoor air—future residents and future industrial indoor workers
- Inhalation of VOCs in ambient air—future residents, future industrial indoor workers, future construction workers, and future industrial outdoor workers

The OU1 HHRA addresses potential health risks and hazards associated with residual soil contamination at the Omega Site. The HHRA evaluates the current and future use of the site for commercial purposes. The site is currently occupied by two businesses: Three Kings Construction and Star City Auto Body. Risk issues at the site also include partitioning of VOCs from the soil matrix into soil gas, and subsequently into ambient and indoor air. Risks from contaminated groundwater could result from volatilization of groundwater contaminants into ambient and indoor air. Because soil-gas-related VOCs may accumulate indoors, inhalation of indoor air is quantitatively evaluated in the HHRA using measured indoor air concentrations for current industrial workers. In addition to the Omega Site, the

potential for vapor intrusion is evaluated for existing buildings using indoor air data at the following adjacent and nearby locations:

- The parcel immediately to the north currently occupied by Medlin & Sons
- The parcel immediately to the west currently occupied by TerraPave
- The parcel to the south and west of the site (currently the occupied by the Bishop Company)
- The parcel south of Bishop Company currently occupied by LA Carts and Oncology Care

Current City of Whittier zoning will allow commercial and retail redevelopment of this site with the construction of multi-level buildings. The zoning of the Omega Site as part of the Whittier Boulevard Specific Plan-Workplace District allows for Live/Work units and multi-family housing.

Total cancer risk estimates for a current commercial/industrial worker at Three Kings Construction and Star City Auto Body are primarily attributable to inhalation of indoor air.

Cancer risks for the future industrial/commercial indoor worker (all parcels) exceed 1E-04 and are primarily attributable to inhalation of indoor air.

Total cancer risk estimates for future residents on the Omega Site parcel and on the other parcels exceed 1E-04. Cancer risks for future residents are primarily attributable to inhalation of indoor air. Inhalation of PCE in soil gas accounts for 90 to 95 percent of the total inhalation risk.

Chronic non-cancer hazards for the current commercial/industrial worker (Three Kings and Star City Auto) exceed a hazard index (HI) of 1. HIs for the current commercial/industrial worker are primarily attributable to inhalation of indoor air.

Total HIs for future residents (Omega Site parcel; and other parcels) exceed an HI of 1. These HIs are attributable to inhalation exposure to PCE and 1,1-dichloroethene (1,1-DCE). Total HIs for future commercial/industrial indoor workers based on data from all parcels exceed 1. Inhalation of PCE and 1,1-DCE in indoor air are the main contributors to this hazard.

The results of the OU1 HHRA suggest that contaminated soils at the site could present a significant threat to current and future commercial/industrial workers, future construction workers, and hypothetical future residents. Cancer risk estimates ranged from 4E-07 to greater than 1E-04. HIs slightly exceeded 1 for current commercial/industrial workers at parcels other than the Omega Site parcel and were greater than 1 for future commercial/industrial workers, future construction workers, and future residents. Exposures to soil are unlikely under current conditions because most of the site surface soil is covered with improvements (buildings, concrete, and asphalt). However, future development could result in the removal of existing improvements resulting in complete exposure pathways for future receptors. Risks and hazards are primarily attributable to inhalation of indoor air for current and future commercial/industrial indoor workers and future residents, and inhalation of ambient air for future outdoor commercial/industrial workers.

Potential risks associated with exposure to vapors intruding into indoor air spaces for current commercial/industrial workers range from 9E-06 to 1E-04. HI estimates associated with current exposure for vapors intruding into indoor air spaces range from less than 1 to about 8. Possible risks associated with exposure to vapors intruding into indoor air spaces for future commercial/industrial workers range from 8E-07 to 5E-04. HI estimates for vapors intruding into indoor air spaces for these receptors are in the range of less than 1 to about 7. Risks associated with exposure to vapors intruding into indoor air spaces were highest for hypothetical future residents with risks ranging from 1E-06 to 5E-03. HI estimates for vapors intruding into indoor air spaces for these residents ranged from less than 1 to 1,089.

Conclusions of the OU1 HHRA can be summarized as follows:

- Among receptors potentially exposed to site-related contaminants, the highest cancer risks and non-cancer hazards are associated with exposure to hypothetical future residents, with cancer risks above 1E-04 and HIs above 1.
- The pathway with the highest potential for exposure involves intrusion of vapors into indoor air spaces. Inhalation of these vapors indoors results in the highest estimates of potential cancer risk and non-cancer hazard.
- PCE is the primary COPC at the Omega Site. For example, inhalation of indoor air suggests potential total inhalation cancer risks for current industrial workers ranging from 8E-06 to 7E-05. The cancer risk associated with inhalation exposure to PCE alone ranges from 5E-07 to 4E-05. Estimated HIs for PCE were relatively low however. HIs for exposure to indoor air for PCE ranged from 0.01 to 2 compared to total inhalation HIs ranging from 0.065 to 8.

3. Organization and Components of the OU2 Baseline Human Health Risk Assessment

This OU2 groundwater baseline HHRA evaluates potential risks and hazards from exposure to groundwater and soil gas associated with OU2 groundwater contaminants. The HHRA is organized into the following sections:

- Section 1—Introduction
- Section 2—Summary of the Human Health Risk Assessment for OU1 Onsite Soils
- Section 3—Organization and Components of the OU2 Baseline Human Health Risk Assessment
- Section 4—Current and Potential Future Uses of Groundwater
- Section 5—Introduction and Human Risk Summary
- Section 6—Human Health Risk Assessment Approach
  - Data Evaluation/Hazard Identification
  - Toxicity Assessment /Dose-Response Assessment
  - Exposure Assessment
  - Risk Characterization
  - Results
- Section 7—Uncertainty Analysis
- Section 8—Conclusions
- Section 9—References

Risk Assessment Guidance for Superfund (RAGS) Part D Tables (EPA, 2001a) are used to organize and present compiled groundwater data as well as cancer risk and non-cancer health hazard calculations, and to summarize the results of the risk evaluation. The RAGS Part D tables prepared for this HHRA are presented in Appendix A, and include the following:

- Table 0—Site Risk Assessment Identification
- Table 1—Selection of Exposure Pathways
- Table 2.1—Occurrence, Distribution and Selection of COPCS
- Table 3.1—Exposure Point Concentrations
- Table 4.1 through 4.3—Values Used for Intake Calculations
- Table 5.1 through 5.2—Non-cancer Toxicity Data
- Table 6.1 through 6.2—Cancer Toxicity Data
- Table 7a.1.1 through 7a.1.3—Calculation of Chemical Cancer Risks
- Table 7b.1.1 through 7b.1.2—Calculation of Chemical Non-cancer Hazards
- Table 7.1 Supplement and 7.2 Supplement—Model for Estimating Dermal Exposure
- Table 9.1.1 through 9.1.3—Summary of Receptor Risks and Hazards
- Table 10.1.1 through 10.1.3—Risk Summary

Appendix A also presents the OU2 groundwater dataset.

EPA vapor intrusion guidance (Johnson and Ettinger [J&E] model; EPA, 2004c) is used to evaluate exposure due to soil gas vapor intrusion into indoor air, to perform screening-level exposure and cancer risk and non-cancer health hazard calculations, and to summarize the results of the risk evaluation.

The screening-level risk evaluation of soil vapor intrusion into indoor air for the Whispering Fountains Apartments is presented in Appendix B; tables include the following:

- Table B-1—Soil and Building Parameters used in the J&E Model
- Table B-2—Onsite Soil Physical Properties used in the J&E Model
- Table B-3—VOCs Soil Gas Concentrations used in J&E Model
- Tables B-4 through B-13—Risk and Hazard Results and Summary

Appendix B also presents supporting materials for the screening-level soil gas evaluation, including:

- Soil gas sampling results
- HydroPunch groundwater sampling results
- J&E model input and output sheets

The following figures are included in this document to support this baseline HHRA:

- Figure 1—Site Location Map
- Figure 2—Operable Unit Location Map, Units 1 and 2
- Figure 3—PCE Plume Extent and Monitoring Well Location Map
- Figure 4—Soil Gas Investigation Sample Location Map
- Figure 5—Human Health Conceptual Site Model Diagram

4. Current and Potential Future Uses of Groundwater

Currently, groundwater from deep production wells adjacent to the sitewide groundwater OU2 study area is used for drinking and domestic purposes. Contaminated groundwater found at shallow depth at OU2 is not used for any purpose. Potential future use of this OU1 and OU2 groundwater resource can include drinking water and other domestic purposes. Because OU2 is located in a recharge area of the Central Basin, there is potential for contamination in shallow groundwater to reach deeper, drinking water aquifers.

5. Introduction and Human Risk Summary

This baseline HHRA evaluates whether groundwater contamination in OU2 poses a current or potential future risk to human health. This risk assessment supports the evaluation of potential public health impacts from the contamination of OU2 groundwater used as drinking water. This HHRA evaluates current and potential future health risks from residential exposures to contaminants observed in groundwater at OU2 and in soil gas at Whispering Fountains Apartments. This HHRA evaluates groundwater data collected from EPA and OPOG monitoring wells. Soil gas data were collected from EPA's temporary wells.

This risk assessment evaluates potential future cancer risks and non-cancer health hazards from exposure to OU2 groundwater used as tap water by adult and child residents. The results of this evaluation include:

Cancer Risks. Total adult plus child cancer risks from potential exposure through ingestion, inhalation and dermal contact to untreated groundwater at EPA and OPOG monitoring wells are 9E-01, with PCE contributing 98 percent of cancer risk. PCE, 1,2-dichloroethane, 1,4-dioxane, chloroform, 1,2-dibromo-3-chloropropane, arsenic, methylene chloride, TCE, 1,1,2-trichloroethane, benzene, tetrahydrofuran, and n-nitrosodimethylamine (NDMA) are the primary contributors to total cancer risks for groundwater monitoring wells; each of these contributes more than 1E-04 risk.

Non-cancer Health Hazards. The total estimated HI for child exposure from potential ingestion, inhalation, and dermal exposure to untreated groundwater at EPA and OPOG monitoring wells is 3,236. PCE and TCE are the major contributors to non-cancer hazards for all monitoring wells, followed by 1,2-dichloroethane, 1,2-dibromo-3-chloropropane, chloroform, 1,1-dichloroethene, and 1,1,2-trichloroethane.

Additionally, potential future carcinogenic risks and non-carcinogenic hazards are estimated from inhalation of indoor air that can be contaminated due to soil gas vapor intrusion from OU2-contaminated groundwater beneath the nearby Whispering Fountains Apartments. Estimated cancer risk from potential exposure through inhalation of indoor air for the Whispering Fountains residents is less than 1E-06. The estimated non-cancer hazard from potential exposure through inhalation of indoor air for the Whispering Fountains residents is far less than 1. Based on these results, inhalation exposure due to soil gas vapor intrusion into indoor air does not appear to pose a significant risk to the residents of Whispering Fountains Apartments.

The results of the OU2 HHRA confirm that groundwater resources have been significantly contaminated by VOCs in groundwater, and it is unsuitable as a source of tap water for domestic use. Continued action needs to be taken to protect potential receptors in OU2 from exposure to the contaminated groundwater in OU2, as well as to protect and restore the groundwater resources. This HHRA provides EPA with a human health risk basis for evaluating whether mitigation, remediation, or a removal action is warranted to mitigate the potential health effects from the VOCs, semivolatile organic compounds (SVOCs), selected inorganic ions, and metals in OU2 groundwater.

6. Human Health Risk Assessment Approach

This section presents the approach, methodology, and results of the OU2 HHRA. This HHRA evaluates existing and potential future cancer risks and non-cancer health hazards from residential (adults and children) exposures to VOCs, SVOCs, selected inorganic ions, and metals observed in OU2 sitewide groundwater. The HHRA assumes the use of untreated groundwater for drinking water or for other domestic purposes.

This HHRA also includes a screening-level evaluation of potential future cancer risks and non-cancer health hazards from residential exposure to soil gas vapor intrusion into indoor air for residents of the Whispering Fountains Apartments.

The results and conclusions of this HHRA provide EPA with a health-risk basis for evaluating whether action is warranted to mitigate potential health effects. This HHRA evaluates "baseline conditions." Baseline conditions assume that no treatment is implemented for VOCs, SVOCs, selected inorganic ions, and metals observed in OU2 groundwater. This allows EPA to decide whether action is necessary to protect human health.

The methods used to conduct this HHRA are consistent with the following EPA and California Environmental Protection Agency (Cal-EPA) regulatory guidelines:

- Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part A) (EPA, 1989)
- Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part D) (EPA, 2001a)
- Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual (Part E) (EPA, 2004a)
- Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities (Department of Toxic Substances Control [DTSC], 1992)
- User's Guide for Evaluating Subsurface Vapor Intrusion into Buildings (EPA, 2004c)
- Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions, Memorandum (EPA, 1991a)
- Risk Assessment Guidance for Superfund, Human Health Evaluation Manual, Supplemental Guidance for Default Exposure Factors (EPA, 1991b)
- Preliminary Endangerment Assessment Guidance Manual (DTSC, 1994)

The EPA and DTSC risk assessment framework consists of the following basic steps:

- Data evaluation/hazard identification
- Exposure assessment
- Toxicity assessment
- Risk characterization
- Uncertainty analysis

Evaluation of exposures, risks, and hazards was performed using the *Risk Assessment Guidance for Superfund* (EPA, 2001), RAGS Part D tables, risk calculations, methodology, and summary tables to support EPA RI report documentation. Exposure routes considered include ingestion, inhalation of VOCs, and dermal contact with groundwater. The OU2 HHRA is conducted for the following receptors:

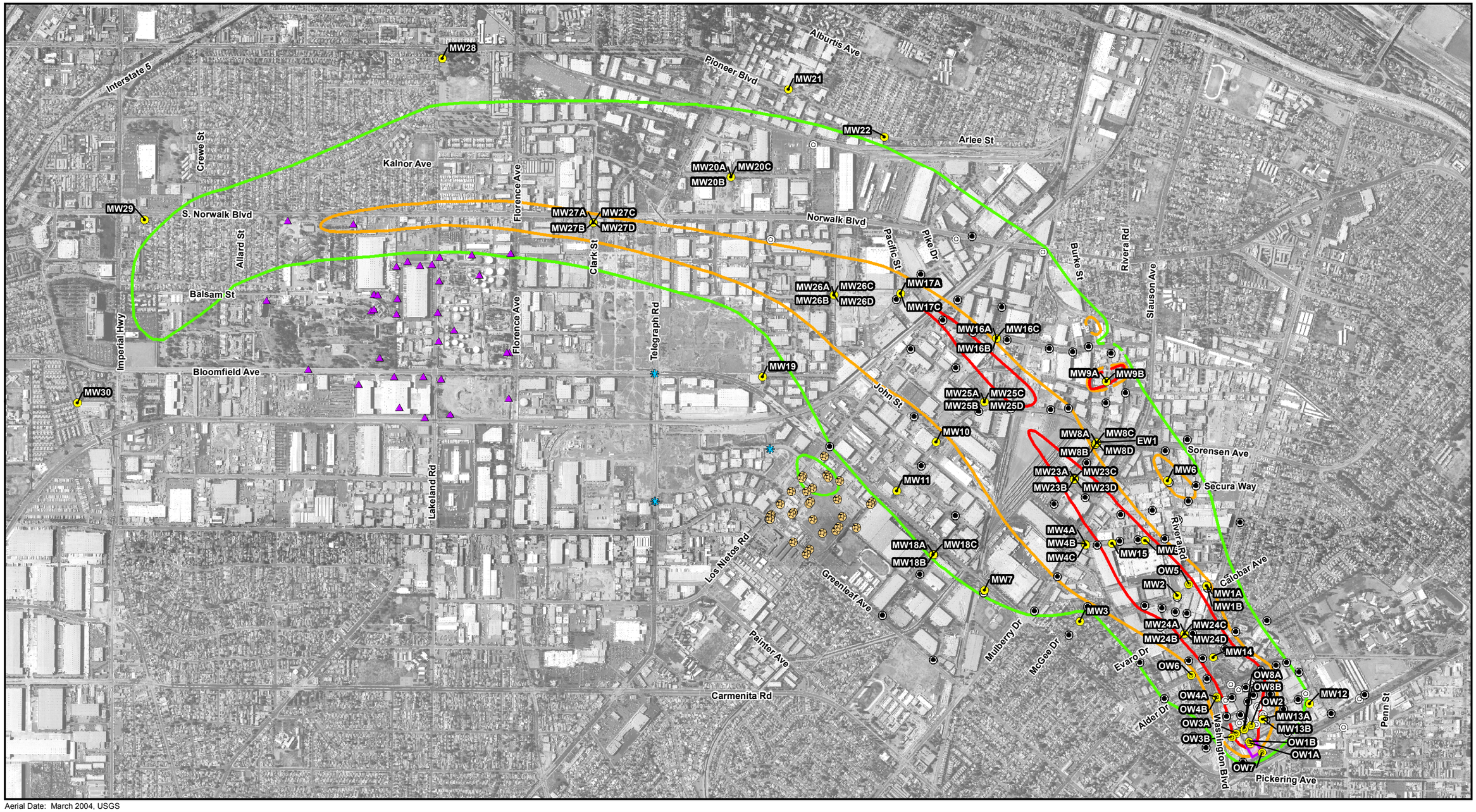
- Adult – reasonable maximum exposure (RME)
- Child – RME

The screening evaluation of exposures, and the assessment of risk and hazards from soil gas vapor intrusion to indoor air exposure for residents at Whispering Fountains Apartments follow EPA's *Guide for Evaluating Subsurface Vapor Intrusion into Buildings* (EPA, 2004c). Exposure routes include inhalation of VOCs from indoor air. The Whispering Fountains HHRA is conducted for adult residential receptors.

6.1 Data Evaluation/Hazard Identification

PCE is the major groundwater contaminant from the Omega Property; it has the largest groundwater plume footprint and the highest groundwater contour concentrations. The PCE groundwater contamination starting from and including the Omega Property and extending downgradient approximately 1 mile southwest, with a groundwater PCE concentration at least 500 micrograms per liter (µg/L) defines the extent of the groundwater contour that is evaluated in the OU2 sitewide groundwater HHRA (Figure 3). EPA and OPOG groundwater wells inside the 500-µg/L contour (including wells used to construct the 500-µg/L contour) are evaluated in the OU2 HHRA.

This step consists of reviewing, evaluating, and compiling available groundwater analytical results for all detected VOCs, SVOCs, selected inorganic ions, and metals in OU2. This HHRA evaluates chemical contaminants that were detected in groundwater during the last 2 years (March 2004 to September 2006) of quarterly and semiannual groundwater sample collection from 13 wells (7 EPA monitoring wells and 6 OPOG wells, Figure 3). Soil gas data collected from four temporary wells in the Whispering Fountains area of OU2 in early 2007 also were reviewed, evaluated, and compiled (Figure 4).



Aerial Date: March 2004, USGS

Legend

- EPA Monitoring Well
- Omega Potentially Responsible Parties Organized Group (OPOG) Monitoring Well
- Oil Field Reclamation Project (OFRP) Well
- Waste Disposal, Inc. (WDI) Well (4th Quarter, 2002)
- CENCO Wells (November 2006)
- Production Well

Historical Boring Locations

- Auger Boring
- CPT Boring

- Former Omega Facility

Composite PCE Plume Extent

- 5 ug/L (Dashed where Approximate)
- 100 ug/L (Dashed where Approximate)
- 500 ug/L (Dashed where Approximate)

N

0 1,600 3,200 Feet

Figure 3
PCE Plume Extent and Monitoring Well Location Map
Omega Chemical Superfund Site

CH2MHILL

Date: December 18, 2007

\\galt\proj\Omega\2007\MapFiles\11x17_OperableLoc_v1.mxd

LEGEND

- Hydropunch
- Soil Gas Probe
- Soil Sample
- EPA Monitoring Well
- Approximate Residential Area Boundary
- 32-35 Depth of Hydropunch Sample (Feet below ground surface)

N

0 50 100 Feet

Figure 4
Soil Gas Investigation Sample Location Map
Omega Chemical Superfund Site

Date: 12/18/2007

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Analytical results from the 13 monitoring wells represent the OU2 groundwater data used to characterize the potential health risks and hazards from groundwater contamination in OU2.

EPA Monitoring Wells – The HHRA evaluates the groundwater data collected from seven EPA monitoring wells to estimate cumulative cancer risks and non-cancer hazards from contaminants in groundwater at locations of interest in OU2. The seven EPA wells are identified as:

- MW-2
- MW-4A
- MW-4B
- MW-5
- MW-14
- MW-15
- MW-23C

OPOG Monitoring Wells – The HHRA also uses the groundwater data collected from six OPOG monitoring wells to estimate cumulative cancer risks and non-cancer hazards from contaminants in groundwater at locations of interest in OU2. The OPOG wells are identified as:

- OW-1A
- OW-2
- OW-3
- OW-4A
- OW-5
- OW-8A

Temporary Soil Gas Sampling Wells – Data from four EPA temporary soil gas monitoring wells provide the soil gas data used to estimate potential health risks and hazards from soil gas contamination in the area surrounding the Whispering Fountains Apartment complex. The soil gas wells are identified as:

- SGRA-1
- SGRA-2
- SGRA-3
- SGRA-4

Soil gas samples were collected and analyzed by EPA Method TO-15 (VOCs) at three depth intervals from each location. Soil samples also were collected for each soil gas well location and depth interval to determine site-specific soil physical properties to support the soil gas risk evaluation. The soil gas monitoring data are used to estimate screening-level cancer risk and non-cancer hazards from soil gas vapor intrusion into indoor air for residents at the Whispering Fountains Apartment complex.

Classes of groundwater contaminants evaluated in this HHRA include:

- VOCs
- SVOCs
- Emergent compounds (1,2,3-trichloropropane, 1,4-dioxane, NDMA, and perchlorate)
- Metals

Detected chemicals in groundwater and soil gas are evaluated for risks and hazards. Background metals concentrations in groundwater from wells upgradient/cross-gradient of the Omega Site are used for screening of metals in groundwater. Only metals with concentrations above background levels in groundwater, including arsenic, hexavalent chromium, and nickel, are evaluated for risks and hazards.

COPCs in groundwater are presented in Appendix A, RAGS Part D Table 2.1.

The selection criteria for COPCs, designed to be conservative and health-protective, are described as follows:

Analytical results reviewed to date at EPA and OPOG monitoring wells are very consistent among sampling events; therefore, data from the most recent sampling events (last 2 years) are used in the HHRA to represent current conditions. The groundwater analytical results for EPA and OPOG monitoring wells are presented in Appendix A.

The 95 percent upper confidence level (UCL) of the mean of the COPC concentrations for EPA and OPOG monitoring wells in the subject groundwater plume were calculated using EPA's ProUCL 4 software. The 95 percent UCL was compared to the maximum detected concentration, and the lesser COPC concentration is used as the exposure point concentration (EPC) to represent RME conditions for this baseline risk assessment. The groundwater EPC for COPCs evaluated in the HHRA is presented in Appendix A, RAGS Part D Table 3.1.

All COPCs detected in soil gas samples at various depths were evaluated for screening-level exposure estimation using the J&E soil gas model. Soil gas concentrations used in the J&E model are presented in Appendix B, Table B-3.

6.2 Toxicity Assessment/Dose-Response Assessment

Several EPA and Cal-EPA sources are used to obtain toxicity criteria (that is, cancer slope factors and non-carcinogenic reference doses) used in the evaluation of cancer risks and non-cancer health hazards for the VOCs, SVOCs, selected inorganic ions, and metals observed in OU2 groundwater and soil gas samples. The list of sources includes:

- Integrated Risk Information System (IRIS) (EPA, 2007)
- Health Effects Assessment Summary Tables (HEAST) (EPA, 1997a)
- Provisional National Center for Environmental Assessment, TCE Toxicity Value (from the Region 9 preliminary remediation goal [PRG] tables) (EPA, 2004b)
- Office of Environmental Health Hazard Assessment (OEHHA), Toxicity Criteria Database (Cal-EPA, 2007)

The use of EPA and Cal-EPA toxicity values is in accordance with EPA Office of Solid Waste and Emergency Response Directive 9285.7-53 (EPA, 2003), which defines the EPA hierarchy of human health toxicity values for use in HHRAs and ensures the use of high-quality toxicity criteria for the estimation of risks and hazards during the HHRA process. When EPA and Cal-EPA have toxicity criteria, this HHRA uses the more conservative toxicity value comparing both Cal-EPA and EPA.

Because of the ongoing EPA assessment of the TCE toxicity criteria, this HHRA uses the TCE toxicity value from OEHHA (Cal-EPA, 2007).

Appendix A, RAGS Part D Tables 5.1, 5.2, 6.1, and 6.2 provide the toxicity criteria used for the VOCs, SVOCs, selected inorganic ions, and metals observed in OU2 groundwater.

6.3 Exposure Assessment

The exposure assessment component of the HHRA describes how individuals in or near OU2 could come in contact with chemicals in groundwater. The assessment addresses exposures that could result under existing conditions in OU2 and from reasonably anticipated potential land uses of OU2 and surrounding areas in the future. The exposure assessment contributes to the HHRA by describing the following:

- Populations that might be exposed
- Routes and exposure pathways by which individuals could become exposed
- Magnitude, frequency, and duration of potential exposures

6.3.1 Site and Potential Receptors

For OU2, this HHRA evaluates exposures and cancer risks (and non-cancer health hazards) from groundwater used as domestic tap water. For groundwater exposure, adult and child residents are evaluated as potential receptors.

Exposures and risks (and health hazards) from soil gas vapor intrusion are evaluated at one representative location. The screening-level risk assessment for soil gas exposure evaluates residents at the Whispering Fountains Apartment complex as potential receptors, because they are the closest residential receptors to the groundwater plume.

6.3.2 Conceptual Exposure/Pathway Analysis

Groundwater exposure routes include:

- Ingestion (primary exposure route for VOCs, SVOCs, and metals): Potential use of groundwater for potable use can expose people to the contaminants through ingestion as drinking water and use in food.

- Inhalation (primary exposure route for VOCs): Potential use of groundwater for domestic purposes can expose people to VOCs through inhalation during activities such as bathing and dishwashing.

- Dermal (not a primary exposure pathway for VOCs): Potential use of groundwater for domestic purposes can also expose people to VOCs, SVOCs, and metals through skin during activities such as bathing.

Exposure route for soil gas vapor intrusion to indoor air:

- Inhalation of Indoor Air: Volatile contaminants from contaminated soil and groundwater are released into soil gas. Contaminants in soil gas at shallow depths can be transported below buildings and enter into indoor air through cracks between the foundation and basement slab floor. These contaminants can accumulate in indoor air if there is poor ventilation. Building heating (and other associated heating, ventilation, and air conditioning [HVAC] system operations) can create negative pressure that can enhance the flow of soil gas into indoor air. Since VOCs at OU2 are found in shallow soil gas samples at the Whispering Fountains Apartments in close proximity to the OU2 PCE groundwater plume, exposure due to inhalation of indoor air is evaluated for the residents of the Whispering Fountains Apartments.

6.3.3 Reasonable Maximum Exposure

The assumptions used in this HHRA provide an RME estimate for adult and child residents. The RME scenario includes the assumptions in Table 1 for adult and child residents (EPA, 1989; EPA 1997b).

TABLE 1
Reasonable Maximum Exposure Assumptions

Assumption	Adult	Child
Exposure Duration	30 years	6 years
Exposure Frequency	350 days/year	350 days/year
Groundwater Ingestion Rate	2 liters/day	1 liter/day
Inhalation Rate	20 m^3/day	10 m^3/day
Body Weight	70 kg	15 kg
Averaging Time (Cancer)	25,550 days	25,550 days
Averaging Time (Non-cancer)	8,760 days	2,190 days

m^3 – cubic meters
kg – kilograms

This combination of several upper-bound assumptions provides assurance that the estimated risks presented under the RME scenario represent the high end of plausible exposure. In Appendix A, RAGS Part D Tables 4.1, 4.2, and 4.3 present a complete list of exposure assumptions used to estimate potential hazards and risks for adult and child residents.

6.3.4 Site Conceptual Model

The human health conceptual site model diagram shown in Figure 5 summarizes information about contamination and transport through the environment to potential human receptors in a schematic presentation (EPA, 1989). The human health conceptual site model consists of the following components:

- Potential primary contamination sources (Omega Site)
- Contamination release mechanisms (spills and leaks)
- Potential secondary contamination sources (contaminated soil)
- Contaminant transport mechanisms (for example, infiltration to groundwater)
- Contaminated exposure media (for example, groundwater, soil gas to indoor air)
- Exposure routes (ingestion, direct dermal contact, inhalation of VOCs during domestic water use, and inhalation of VOCs from indoor air)
- Potentially exposed receptors (for example, residents)

Based on an evaluation of potential human exposures and health risks from OU2 groundwater used as tap water or for other domestic uses by residents (adult and child), the exposure routes shown in Table 2 are determined to have potentially complete exposure pathways.

TABLE 2
Potential Exposure Routes

Receptor	Exposure-Related Activities	Exposure Route
Residential Adult and Child	Consumption of drinking water	Ingestion
	Showering/bathing	Dermal contact
	Typical domestic activities (e.g., dishwashing and laundering)	Inhalation (VOCs only)
Residential Adult	Inhalation of indoor air	Inhalation (indoor vapor intrusion, VOCs only)

6.3.5 Exposure Assessment

OU2 consists of residential areas and industrial/commercial areas. However, residential exposures represent the maximally exposed population; therefore, quantitative risk evaluation for groundwater exposures uses residential exposures for adult and child receptors.

The equations presented below are used to calculate chemical intake associated with exposure to carcinogenic and non-carcinogenic constituents in groundwater.

6.3.5.1 Exposure Parameters and Equations

Ingestion of Groundwater

To calculate intake by ingestion of groundwater, groundwater ingestion rates are applied (Appendix A, RAGS Part D Table 4). The groundwater ingestion rates identified for assessing a residential exposure are 2 liters per day (L/day) for an adult and 1 L/day for a child (EPA, 1989):

$$Intake = \frac{C_{gw} \times IR_w \times EF \times ED}{BW \times AT}$$

Where:

Intake	=	Constituent daily intake (milligrams per kilogram [mg/kg] body weight/day)
C_{gw}	=	Chemical concentration in groundwater (milligrams per liter [mg/L])
IngR	=	Groundwater ingestion rate (L/day)
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years)
BW	=	Body weight (kg)
AT	=	Averaging time (days)

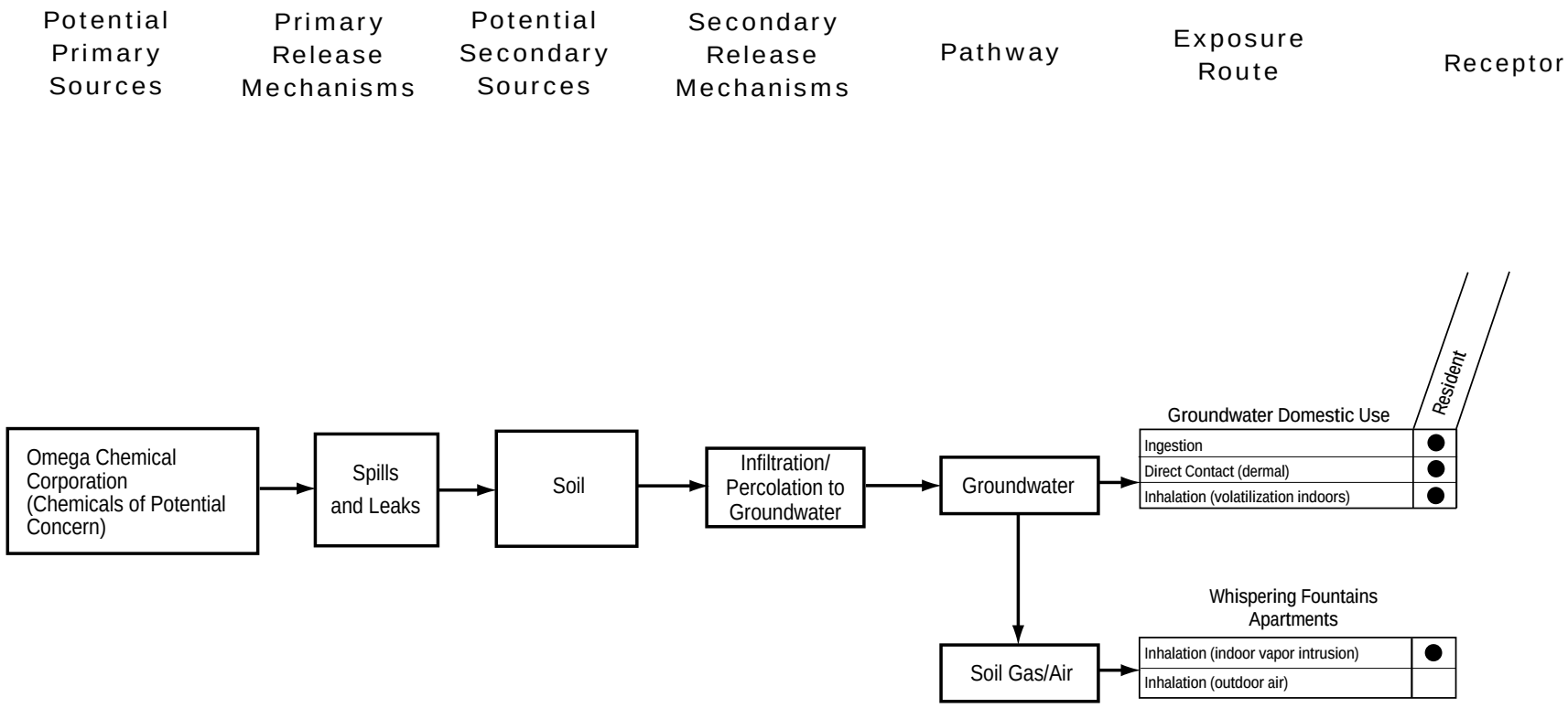
Dermal Contact with Groundwater

Exposure assumptions used in the intake calculations for the dermal contact with groundwater include body surface area and absorbed dose per exposure event per area of skin exposed (DA_event) (Appendix A, RAGS Part D, Table 4). These parameters are presented below:

- **Skin Surface Area –** The body surface area is the total amount of skin surface that can be exposed to contaminated groundwater. The resident is assumed to be exposed for a bathing scenario. The recommended exposed skin surface area is the total body surface area, which is 18,000 square centimeters (cm^2) for an adult and 6,600 cm^2 for a child (Cal-EPA, 2005b).
- **Absorbed Dose per Event (DA_event) –** The absorbed dose of a chemical per event of exposure is the total estimated dose dissolved in the skin at the end of exposure (EPA, 2004a). A chemical-specific DA_event (milligrams per cubic centimeter [mg/cm^3]-event) is applied. For organic chemical compounds, the DA_event is:

If $t_{event} > t^*$

$$DA_{event} = FA \times K_p \times C_{gw} \left[\frac{t_{event}}{1+B} + 2t\tau \times \left(\frac{1+3B+3B^2}{(1+B)^2} \right) \right]$$



LEGEND:

● = Potentially Complete Pathway

Figure 5
Human Health Conceptual Site Model Diagram
Omega Chemical Superfund Site

CH2MHILL

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If $t_{event} \leq t^*$

$$DA_{event} = 2\ FA \times K_p \times C_{gw} \sqrt{\frac{6\tau \times t_{event}}{\Pi}}$$

For inorganic chemical compounds, the DA_event is:

$$DA_{event} = K_p \times C_{gw} \times t_{event}$$

Where:

t_{event}	=	Exposure time (hours)
t*	=	Time to reach steady state (hours)
τ	=	Lag time per event
π	=	Pi
B	=	Dimensionless coefficient (centimeters per hour [cm/hr])
FA	=	Fraction absorbed (unitless)
Kp	=	Dermal permeability coefficient (cm/hr); (presented in Appendix A, RAGS Part D Tables 7c.1.1 and Table 7c.1.2)

Chemical intake via dermal contact with groundwater was estimated according to the following equation (EPA, 1989):

$$Intake = \frac{DAevent \times SA \times EF \times ED}{BW \times AT}$$

Where:

Intake	=	Constituent daily intake (mg/kg body weight/day)
C_{gw}	=	Chemical concentration in groundwater (mg/L)
SA	=	Exposed skin surface area
ET	=	Exposure time (hours/day)
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years)
BW	=	Body weight (kg)
AT	=	Averaging time (days)

Inhalation of Volatile Constituents in Groundwater

Residents may be exposed to volatile COPCs in groundwater, which travel from tap water to indoor air during showers, baths, dishwashing, laundry, and cooking.

The following equation is used to calculate intake associated with the inhalation of volatile carcinogenic and non-carcinogenic constituents in groundwater:

$$Intake = \frac{C_{gw} \times InhR \times VF \times EF \times ED \times ET}{BW \times AT}$$

Where:

Intake	=	Constituent daily intake (mg/kg body weight/day)
C_w	=	Constituent concentration in groundwater (mg/L)
InhR	=	Inhalation rate (cubic meters per hour [m^3/hr])
VF	=	Volatilization Factor (liters per cubic meter [L/m^3])
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years)
ET	=	Exposure time (hours/day)
BW	=	Body weight (kg)
AT	=	Averaging time (days [years * 365 days/year])

Volatilization Factor – The volatilization factor represents the amount of chemical that can be transferred into air from water. EPA (2004b) suggests a default value of 0.5, assuming the volume of water used in a residence for a family of four is 720 L/day, the volume of the dwelling is 150,000 L, and the air exchange rate is 0.25 m^3/hr (EPA, 1991c).

Soil Vapor Intrusion into Indoor Air

Soil gas exposures are estimated for adults based on the onsite soil gas values and supporting soil parameters data using the soil gas screening-level version of the J&E model (Version 3.1; EPA, 2004c).

The J&E (1991) model is used to estimate the concentration in indoor air from a contaminant vapor source located some distance below the floor of an enclosed building constructed with a basement or constructed slab-on-grade. The source of contamination is either a soil-incorporated VOC or a VOC in solution with groundwater below the top of the water table.

The source of contamination is assumed to be incorporated in soil and located some distance below the enclosed space floor. At the top boundary of contamination, the contaminant vapors move by molecular diffusion toward the soil surface until they reach the zone of influence of the building. Here, convective air movement within the soil column transports the vapors through cracks between the foundation and the basement slab floor. This convective sweep effect is induced by a negative pressure within the structure caused by a combination of wind effects and stack effects due to building heating and mechanical ventilation. The rate of soil gas entry is a function solely of convection; however, the VOC concentration entering the structure may be limited by either convection or diffusion, depending upon the magnitude of the source-building separation.

The concentration in indoor air resulting from VOC intrusion into a structure from pressure-driven airflow is calculated from the building volume (length, width, and height) and the building ventilation rate (numbers of air changes per hour).

The following list represents the major assumptions/limitations of the J&E (1991) model:

- The initial concentration of VOCs in soil does not contain a residual-phase (e.g., nonaqueous-phase liquid or solid), and the initial concentration of VOCs in groundwater is less than the aqueous solubility limit.
- Contaminant vapors enter the structure primarily through cracks and openings in the walls and foundation.
- Convective transport occurs primarily within the building zone of influence, and vapor velocities decrease rapidly with increasing distance from the structure.
- Diffusion dominates vapor transport between the source of contamination and the building zone of influence.
- All vapors originating from below the building will enter the building unless the floors and walls are perfect vapor barriers.
- All soil properties in any horizontal plane are homogeneous.
- The contaminant is homogeneously distributed within the zone of contamination.
- The areal extent of contamination is greater than that of the building floor in contact with the soil.
- Vapor transport occurs in the absence of convective water movement within the soil column (i.e., evaporation or infiltration), and in the absence of mechanical dispersion.
- The model does not account for transformation processes (e.g., biodegradation, hydrolysis, etc.).
- The soil layer in contact with the structure floor and walls is isotropic with respect to permeability.
- Both the building ventilation rate and the difference in dynamic pressure between the interior of the structure and the soil surface are constant values.

To estimate worst-case conditions, maximum soil gas concentrations are used as the initial concentrations at the source. Onsite soil physical parameters for use in the J&E model were determined for each soil gas sample collected. The soil and building parameters used in the J&E model are presented in Appendix B, Table B-2.

6.4 Risk Characterization

This HHRA follows EPA guidance to estimate future potential residential health hazards and risks from exposure to untreated groundwater used for drinking water and other domestic use (EPA, 1989, 1991a, 1991b, and 1991c). Exposures, potential cancer risks, and non-cancer hazards are estimated assuming residents are the most likely receptors to be exposed to contaminants in groundwater on a daily basis. The HHRA assumes continued, unrestricted use of groundwater in the future.

6.4.1 Risk Quantification Equations

In the risk characterization step, results of the exposure assessment (estimated chemical intakes) are combined with the results of the dose-response assessment (toxicity values identified in the toxicity assessment) to provide numerical estimates of potential cancer and non-cancer health effects. The quantification approach differs for potential non-cancer and cancer effects.

6.4.1.1 Cancer Effects

The potential for cancer effects is evaluated by estimating excess lifetime cancer risk (ELCR), the incremental increase in the probability of developing cancer during one's lifetime in addition to the background probability of developing cancer (that is, if no exposure to chemicals occurs). For example, a 2E-06 ELCR means that, for every 1 million people exposed to OU2-related carcinogens throughout their lifetimes, the average incidence of cancer might increase by two cases of cancer.

EPA developed cancer slope factors that represent upper-boundary estimates; therefore, cancer risk estimates in this assessment should be regarded as an upper boundary of the potential cancer risks rather than a representation of true cancer risk. The actual cancer risk is likely to be less than that predicted in the HHRA (EPA, 1989).

ELCRs for OU2 are estimated by using the following equation:

$$ELCR = CSF \times Intake$$

Where:

ELCR	=	Excess lifetime cancer risk
CSF	=	Cancer slope factor (risk per milligram per kilogram per day [mg/kg-day]) or $(mg/kg\text{-}day)^{-1}$
Intake	=	Chronic daily intake averaged over a lifetime (mg/kg-day)

Although synergistic or antagonistic interactions might occur between cancer-causing chemicals and other chemicals, information to predict quantitatively the effects of these potential interactions is generally unavailable in toxicological literature. Therefore, in this HHRA, the total cancer risk for an exposure route is calculated by adding cancer risks for individual chemicals for that exposure route, which is consistent with the EPA guidelines on chemical mixtures (EPA, 1989). The following equation is used to sum risks to estimate the cancer risks from exposure to multiple carcinogens from a single exposure route:

$$Risk_T = \sum_1^N Risk_i$$

Where:

$Risk_T$	=	Total cancer risk from route of exposure
$Risk_i$	=	Cancer risk for the ith chemical
N	=	Number of chemicals

EPA (2004c) guidance for the J&E model is used to calculate the screening-level ELCR associated with each VOC detected in soil gas. The following equation is used to estimate the ELCR for carcinogenic chemicals:

$$ELCR = \frac{URF \times EF \times ED \times C_{building}}{ATC \times 365\ days/year}$$

Where:

URF = Unit risk factor (micrograms per cubic meter [$\mu g/m^3$])$^{-1}$
EF = Exposure frequency (days/year)
ED = Exposure duration (years)
ATC = Averaging time – carcinogenic (years)
$C_{building}$= Vapor concentration in the building ($\mu g/m^3$)

6.4.1.2 Non-cancer Effects

For non-cancer effects, the likelihood that a receptor will develop an adverse effect is estimated by comparing the predicted level of exposure for a particular chemical (chronic daily intake) with the highest level of exposure that is considered protective (that is, its reference dose [RfD]).

The following ratio of the chronic daily intake divided by RfD is termed the hazard quotient (HQ).

$$HQ = \frac{Intake}{RfD}$$

Where:

HQ = Hazard quotient
RfD = Reference dose (mg/kg-day)
Intake = Chronic daily intake (mg/kg-day)

An HQ greater than 1 (that is, exposure that exceeds the RfD) indicates potential non-cancer health effects. To assess the potential for non-cancer health effects posed by exposure to multiple chemicals, an HI approach is used according to EPA guidance (EPA, 1989). This approach assumes that the non-cancer hazard associated with exposure to more than one chemical is additive; therefore, synergistic or antagonistic interactions between chemicals will not occur.

The HI could exceed 1 even if all the individual HQs are less than 1. In this case, similar mechanisms of toxicity and toxicological effects could be criteria to segregate the chemicals. Separate HIs then could be derived based on mechanism and effect.

The HI is calculated as follows:

$$HI = \sum_{1}^{N} E_i \Big/ RfD_i$$

Where:

HI	=	Hazard index
E_i	=	Daily intake of the ith chemical (mg/kg-day)
RfD_i	=	Reference dose of the ith chemical (mg/kg-day)
N	=	Number of chemicals

Additionally, for each receptor, cumulative cancer risks across all relevant exposure routes are evaluated. Risks for oral, inhalation of VOCs, and dermal contact routes of exposure are summed, as available. In a similar manner, cumulative non-cancer health hazards are summed across routes.

EPA (2004c) guidance for the J&E model is used to calculate the HQ associated with each VOC detected in soil gas.

The following equation is used to estimate the HQ for non-carcinogenic chemicals:

$$HQ = \frac{EF \times ED \times \frac{1}{RfC} \times C_{buildihng}}{ATNC \times 365\ days/year}$$

Where:

RfC	=	Reference concentration (milligrams per cubic meter [mg/m^3])
EF	=	Exposure frequency (days/year)
ED	=	Exposure duration (years)
ATNC	=	Averaging time – non-carcinogenic (years)
$C_{building}$	=	Vapor concentration in the building (mg/m^3)

6.5 Results

This section presents the results from the estimation of potential cancer risks and non-cancer health hazards from the domestic use of untreated groundwater from OU2. The results from the estimation of potential cancer risks and non-cancer hazards due to inhalation exposure from soil gas vapor intrusion to indoor air at the Whispering Fountains Apartments are also presented. For this baseline HHRA, the potential for unacceptable cancer risks and non-cancer health hazards is identified using the following criteria:

- ELCR values are compared to a risk management range of one-in-a-million (10^{-6} or 1E-06) to one-in-ten thousand (10^{-4} or 1E-04) (EPA, 2004b). ELCR values within or exceeding this range are actionable. This can then lead to a risk management decision that includes evaluating site-specific characteristics and exposure scenario factors to assess whether remedial action is warranted.

- An HI (the ratio of chemical intake to the RfD) greater than 1 indicates that there may be concern for potential non-cancer health effects associated with exposure to the contaminants of concern (EPA, 1989).

6.5.1 Carcinogenic Risks

Potential future carcinogenic risks are estimated for the domestic use of untreated groundwater from EPA and OPOG monitoring wells in OU2. The HHRA evaluates a scenario of RME for an adult, child, and adult plus child resident. Appendix A, RAGS Part D Table 3.1presents groundwater exposure point concentrations; RAGS Part D Tables 7a.1.1 through 7a.1.3 present risk calculation worksheets; and RAGS Part D Tables 9.1.1 through 9.1.3 present a detailed summary of risk results for each receptor due to exposure to OU2-related COPCs. A summary of the risks and hazards from exposure to groundwater from EPA and OPOG monitoring wells is presented in RAGS Part D Tables 10.1.1, 10.1.2, and 10.1.3.

To provide an estimate of maximum potential cancer risk, the total adult plus child risk due to ingestion, inhalation, and dermal exposure of chemicals in groundwater is estimated and presented in Table 3.

TABLE 3
Estimate of Potential Cancer Risk

Chemical of Potential Concern	Cancer Risk	Percent Contribution
1,2-Dichloroethane	2E-03	<0.5
1,4-Dioxane	1E-03	<0.5
Chloroform	4E-03	<0.5
Methylene Chloride	9E-04	<0.5
Tetrachloroethene (PCE)	9E-01	98
Trichloroethene (TCE)	1E-03	<0.5
1,1,1,2-Tetrachloroethane	9E-06	<0.5
1,1,2,2-Tetrachloroethane	1E-05	<0.5
1,1,2-Trichloroethane	1E-03	<0.5
1,1-Dichloroethane	2E-05	<0.5
1,2,4-Trichlorobenzene	7E-08	<0.5
1,2-Dibromo-3-chloropropane	4E-03	<0.5
1,2-Dichloropropane	1E-05	<0.5
1,4-Dichlorobenzene	3E-06	<0.5
Benzene	2E-04	<0.5
Bromodichloromethane	5E-06	<0.5
Bromoform	4E-07	<0.5
Carbon Tetrachloride	4E-06	<0.5
Chloroethane	5E-08	<0.5
Dibromochloromethane	1E-05	<0.5
Methyl Tertiary Butyl Ether (MTBE)	4E-07	<0.5
Naphthalene	5E-06	<0.5
Tetrahydrofuran	4E-04	<0.5

TABLE 3
Estimate of Potential Cancer Risk

Chemical of Potential Concern	Cancer Risk	Percent Contribution
Vinyl Chloride	3E-05	<0.5
1,2,3-Trichloropropane	3E-06	<0.5
Bis(2-ethylhexyl)phthalate (DEHP)	7E-06	<0.5
Isophorone	7E-08	<0.5
N-Nitrosodimethylamine (NDMA)	1E-04	<0.5
Pentachlorophenol	7E-06	<0.5
Arsenic	2E-03	<0.5
Total	**9E-01**	**100**

6.5.1.1 Summary Results and Key Findings

- Total adult plus child cancer risk from potential exposure through ingestion, inhalation, and dermal contact to untreated groundwater from the EPA and OPOG OU2 monitoring wells is 0.9E-01, with PCE contributing 98 percent of the cancer risk.
- Ingestion (56 percent) is the major contributor route of exposure to total cancer risk.
- PCE, 1,2-dichloroethane, 1,4-dioxane, chloroform, 1,2-dibromo-3-chloropropane, arsenic, methylene chloride, TCE, 1,1,2-trichloroethane, benzene, tetrahydrofuran, and NDMA are the primary contributors to total cancer risks for the OU2 groundwater monitoring wells, and each contributes 1E-04 or more risk.

6.5.2 Non-carcinogenic Health Hazards

Potential future non-carcinogenic health hazards are estimated for the domestic use of untreated groundwater at EPA and OPOG monitoring wells in OU2. The HHRA evaluates a scenario of RME for an adult and child resident. Appendix A, RAGS Part D Table 3.1 presents groundwater exposure point concentrations; RAGS Part D Tables 7b.1.1, 7b.1.2, 9.1.1, and 9.1.2 present hazard calculation worksheets and a detailed summary of hazard results for each receptor by chemical. A summary of the hazards from exposure to groundwater for EPA and OPOG monitoring wells is presented in RAGS Part D Tables 10.1.1, and 10.1.2 for monitoring wells.

Chemicals that showed a total HQ equal to or greater than 1 for the child receptor due to ingestion, inhalation, and dermal exposure of chemicals in groundwater are presented in Table 4.

6.5.2.1 Summary Results and Key Findings

- Total estimated HIs for child receptors from potential ingestion, inhalation, and dermal exposure to untreated groundwater from EPA and OPOG monitoring wells are a total of 3,236.
- Inhalation (69 percent contribution) is the major contributor route of exposure to non-cancer hazards.

- PCE (84 percent contribution) and TCE (10 percent contribution) are the major contributors to non-cancer hazards for all monitoring wells, followed by 1,2-dichloroethane, 1,2-dibromo-3-chloropropane, chloroform, 1,1-dichloroethene, and 1,1,2-trichloroethane.

TABLE 4
Chemicals with an HQ Equal to or Greater than 1 for Child Receptor

Chemical of Potential Concern	Non-cancer HQ	Percent Contribution
1,1-Dichloroethene	18	0.6
1,2-Dichloroethane	57	2
Chloroform	17	0.5
Methylene Chloride	3	<0.5
Tetrachloroethene (PCE)	2700	84
Trichloroethene (TCE)	330	10
1,1,2-Trichloroethane	17	0.5
1,2,4-Trimethylbenzene	1	<0.5
1,2-Diboromo-3-chloropropane	38	1
Benzene	1	<0.5
Bromomethane	7	<0.5
Tetrahydrofuran	3	<0.5
N-Nitrosodimethylamine (NDMA)	2	<0.5
Arsenic	3	<0.5
Total	**3,236**	

6.5.3 Soil Gas Screening Risk Evaluation

A soil gas screening risk evaluation was conducted for the nearby Whispering Fountains Apartment complex to evaluate potential future carcinogenic risks and non-carcinogenic hazards from the inhalation exposure to VOCs in indoor air due to vapor intrusion from the subsurface. Soil gas samples were collected from four locations at three depth intervals.

Screening level cancer risks and non-cancer health hazards are evaluated for the following contaminants detected in soil gas samples: benzene, chloroform, ethylbenzene, PCE, toluene, TCE, Freon 11, Freon 113, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, m,p-xylene, and o-xylene. Except for 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, ethylbenzene, toluene, m,p-xylene, and o-xylene, these contaminants were also detected in HydroPunch groundwater samples collected at the same locations as the soil gas samples. The results of these collocated samples (soil gas and groundwater) support the connection between the OU2 groundwater VOC contamination and potential indoor air vapor intrusion. However, the soil gas COPCs not detected in the HydroPunch groundwater samples are also OU2 groundwater COPCs and were evaluated in the soil gas screening-level evaluation for completeness.

The screening-level soil gas evaluation using EPA's J&E soil gas screening model evaluates soil gas exposures in indoor air and the subsequent cancer risk and non-cancer health hazards for adult receptors. The screening-level soil gas risk assessment was performed on each soil gas sample for all COPCs detected in the samples. A summary of risks and

hazards from soil gas exposure due to inhalation of indoor air is presented in Appendix B, Tables B-1 to B-13, for EPA's temporary soil gas sampling wells in OU2.

6.5.3.1 Summary Results and Key Findings

- The estimated cancer risk from potential exposure to chemicals detected in soil gas through inhalation of indoor air for the Whispering Fountains residents is less than 1E-06. The estimated potential cancer risk for the four locations evaluated ranges from 3E-08 to 3E-07.
- The estimated non-cancer hazard from potential exposure to all the chemicals detected in soil gas through inhalation of indoor air for the Whispering Fountains residents is less than 1. The potential estimated non-cancer hazard for the four locations evaluated ranges from 0.0002 to 0.004.

7. Uncertainty Analysis

This HHRA presents quantitative estimates of potential future cancer risks and health hazards; however, these numbers do not predict actual health outcomes. Using approaches and methodologies based on EPA and Cal-EPA guidance documents, the health risks and hazards are calculated in a conservative, public-health-protective manner that tends to overestimate risks. Thus, any actual health impacts are likely to be lower than these estimates. Assumptions regarding domestic water consumption used in this HHRA tend to be high-biased (that is, based on the use of RME water consumption exposure factors) and, therefore, are likely to overestimate actual exposures and risks.

The EPA risk assessment paradigm includes an uncertainty analysis (EPA, 1989). The goal of the uncertainty analysis is to inform risk managers about the type of uncertainties that affect the range of potential risks and hazards estimated in the HHRA, which helps to maximize confidence in EPA decisions based on the results of the HHRA. Sources of uncertainty in the development of the OU2 HHRA are identified in this section. The potential effects of the uncertainties identified are qualitatively analyzed and discussed.

The uncertainty analysis can minimize decision making errors by identifying methods or approaches that could lead to incorrect conclusions based on the results of the HHRA. This is accomplished by evaluating the sources of uncertainty associated with key data and assumptions used to develop the HHRA. By evaluating the sources of uncertainty and reducing uncertainty in the results of the HHRA, the uncertainty analysis serves to increase confidence in the outcome and decisions made based on the HHRA.

Uncertainties associated with the HHRA can be classified into the following categories:

1. Specific uncertainties in characterizing OU2
2. Uncertainties associated with describing exposures
3. Uncertainties in the risk assessment process in general (that is, the toxicity values used to estimate risks and hazards)

Uncertainties associated with the HHRA could arise from a variety of sources as summarized in Table 5 and described in detail below.

7.1 Selection of COPCs

COPCs consisting of VOCs, SVOCs, inorganic ions, and metals are selected based on the detection of these chemicals in groundwater at EPA and OPOG monitoring wells installed as part of site investigations at OU2. COPCs are identified by reviewing all available groundwater data and compiling data for all detected chemicals for the past 2 years. Thus, unless new regulatory limits are promulgated or new toxicity criteria are identified by the State of California or EPA, it is unlikely that major new COPCs will be identified for OU2. The comprehensive nature of COPCs identified in OU2 should thus maximize confidence in decision making during the HHRA.

TABLE 5
Uncertainties Associated with the Human Health Risk Assessment

Sources of Uncertainty	Category of Uncertainty (See Notes)		
	1	2	3
Selection of COPCs	x		
Environmental data quality	x		
Sampling and analysis	x		
Fate and transport estimation	x		
Exposure estimation		x	
Toxicological data			x
Risk characterization			x

Notes:
1. Specific uncertainties in characterizing OU2
2. Uncertainties associated with describing exposures
3. Uncertainties in the risk assessment process in general (that is, the toxicity values used to estimate risks and hazards)

7.2 Environmental Data Quality

The groundwater data for OU2 come from two sources: EPA and OPOG. The soil gas data come from the EPA RI investigation. Both sources provide high-quality data, which are collected according to the EPA-approved Sampling and Analysis Plan (SAP) and Quality Assurance Project Plan (QAPP). Quality assurance/quality control (QA/QC) documentation from all sources can be obtained and reviewed, as needed. All samples are analyzed by EPA-approved analytical methods. Detection limits for each analysis are also considered for purposes of data usability for risk assessment purposes.

Groundwater data from both EPA and OPOG sources are generally compiled from multiple periodic groundwater sampling events. The data from each well are reviewed to confirm that the data present a consistent and reasonable picture of groundwater conditions. Any wide fluctuations in chemicals identified or concentrations observed are considered an indication of potential problems with that portion of the dataset.

The data evaluations performed to support the assessment of data usability document the adequacy of the groundwater data by evaluating data quality, quantity, and data comparability for the two sources (EPA and OPOG). This resulted in the use of data of known quality in the HHRA and maximizes confidence in the decisions made.

7.3 Sampling and Analysis

Uncertainty associated with sampling and analysis includes the inherent variability (standard error) in the analyses, representativeness of the samples, sampling errors, and the heterogeneous nature of the sample matrix. The QA/QC program serves to reduce errors associated with sampling and analysis of groundwater samples collected at OU2.

7.4 Fate and Transport Estimation

The risk assessment for residential uses of groundwater makes simplifying assumptions about the environmental fate and transport of OU2 contaminants. Specifically, it assumes that no dilution or reduction in chemical concentration occurs during the assessed exposure duration of 30 years.

The evaluation of future residential use of groundwater in this HHRA is a hypothetical scenario used to provide a conservative frame of reference for OU2 decision making. It assumes that the contaminant concentrations currently observed at wells would be consumed by the potential future resident under the same exposure conditions for the full 30-year exposure duration (that is, over time, no dilution or reduction in chemical concentrations occurs). This assumption is highly conservative and, therefore, likely to contribute to an overestimation of exposure to COPCs.

7.5 Exposure Estimation

The estimation of exposure requires numerous assumptions to describe potential exposure routes. A number of uncertainties exist regarding the likelihood of exposure, frequency of contact with contaminated media, the concentration of contaminants at exposure points, and the period of exposure. Assumptions used in this HHRA tend to simplify and conservatively approximate actual site conditions, thereby serving to maximize confidence in decision making during the HHRA. For instance, assumptions regarding domestic water consumption used in this HHRA tend to be high-biased (that is, based on RME water consumption exposure factors) and, thus, likely to overestimate exposures and risks.

Non-cancer and cancer risks for residential use of groundwater based estimates on typical conservative exposure assumptions for adults and children. For non-carcinogens, the estimated HI based on a child's exposure may be up to 2 times higher than the HI based on an adult's exposure due to a higher daily dose per body weight. For carcinogens, the longer length of exposure for adults offsets the higher daily dose for children. Residents could be exposed to volatile COPCs in groundwater transferred from tap water to the air from showers, baths, dishwashers, washing machines, and cooking. The assumptions used to calculate intake associated with the inhalation of volatile carcinogenic and non-carcinogenic constituents in groundwater are conservative (health protective). Thus, exposures and health impacts might be overestimated, especially in Southern California, where windows can be opened year-round to ventilate bathrooms, kitchens, and laundry rooms and to quickly exchange humid indoor air with outside air.

7.6 Johnson and Ettinger Model

Site-specific soil gas concentrations and soil physical parameters were used for the J&E soil gas modeling utilized to evaluate vapor intrusion risks at Whispering Fountains Apartments. Soil gas and soil samples for soil physical properties were measured from samples collected at four different locations and three different depth intervals at each sampling location. This approach results in the use of location-specific soil vapor attenuation factors to estimate onsite exposure and risks. This reduces the uncertainty

associated with the use of standardized soil gas screening levels such as the California Human Health Screening Levels (CHHSLs) from Cal-EPA DTSC, which are based on conservative generic soil vapor attenuation factors (Cal-EPA, 2005a and 2005c).

7.7 Toxicological Data

The use of toxicological data derived primarily from animal studies presents inherent uncertainties. General uncertainties associated with such data include extrapolation from high to low dose and from animals to humans. In laboratory studies, potential sources of uncertainty can include use of modeled animal species, gender differences, age, and strain differences in uptake, metabolism, organ distribution, and target site susceptibility. These uncertainties could be compounded when the data are used to assess risk and hazards to human populations, due to differences in diet, environment, activity patterns, and cultural factors. Specific uncertainty associated with this HHRA includes the factors described in the following subsections.

7.7.1 Dermal Toxicological Factors

The availability of dermal toxicological factors is limited. EPA has not published dermal RfDs or slope factors. Therefore, oral toxicity factors are used to estimate health impacts from dermal exposures. Dermal exposures can differ significantly from oral exposures. For example, not all of the chemical that comes into contact with a person's skin will travel across the various layers of epidermal tissue, and the toxic effects produced from this route of exposure might not be the same as when the chemical is ingested. The effect of using oral toxicity values to estimate dermal exposures could result in either underestimation or overestimation of risks, depending on whether a chemical is more or less toxic by the dermal route versus ingestion.

7.7.2 Trichloroethene

The carcinogenic toxicity values associated with TCE are a source of considerable uncertainty. Cal-EPA has established a cancer toxicity value for TCE; whereas, EPA uses a provisional TCE cancer toxicity value.

EPA's most current toxicity assessment of TCE is contained in EPA's Office of Research and Development (ORD) draft *Trichloroethylene Health Risk Assessment: Synthesis and Characterization* (draft TCE Health Risk Assessment; EPA, 2001b) released for external peer review. The draft TCE Health Risk Assessment takes into account recent scientific studies of the health risks posed by TCE.

According to the draft TCE Health Risk Assessment, for those who have increased susceptibility and/or higher background exposures, TCE could pose a higher risk through inhalation than previously considered. (The draft TCE Health Risk Assessment is available online at http://cfpub.epa.gov/ncea/cfm/recordisplay.cfm?deid=23249. The Science Advisory Board, a team of outside experts convened by EPA, reviewed the draft TCE Health Risk Assessment in 2002. The Science Advisory Board review of the draft TCE Health Risk Assessment is available at http://www.epa.gov/sab/pdf/ehc03002.pdf.)

The release of the draft TCE Health Risk Assessment preceded much debate about the quality of evidence on TCE and how that evidence should be assessed. This prompted an interagency group to request that a National Academy of Sciences (NAS) committee (National Research Council) review specific issues related to assessing the health risks from exposure to TCE.

The new report from the NAS committee (published July 27, 2006) concludes that evidence on cancer and other health risks from TCE exposure has strengthened since 2001 (National Research Council, 2006). Although the report recommends additional research to improve scientists' understanding of how the environmental contaminant TCE causes cancer and other adverse health effects, the report notes that sufficient information is available for EPA to complete the draft TCE Health Risk Assessment now. EPA is currently incorporating recommendations in the revised draft TCE Health Risk Assessment. The revised draft TCE Health Risk Assessment is likely to undergo further peer review and public comment prior to being finalized. It is likely to take several years until final TCE toxicity values (cancer slope factors) are on the IRIS.

In the HHRA for OU2, cancer risks in groundwater are evaluated using the Cal-EPA cancer toxicity values for TCE, thus providing lower values for TCE risk evaluation for groundwater than the provisional EPA value.

The EPA and Cal-EPA toxicological databases, from which toxicity values for the estimation of risks and hazards are obtained, are also a source of uncertainty. Considered collectively and based on the public health protective manner in which EPA and Cal-EPA develop the toxicity values, the factors contributing to uncertainty in toxicity values are likely to yield risk and health hazard estimates that are expected to be conservative and protective of public health. Uncertainty related to use of EPA and Cal-EPA cancer slope factors or non-cancer RfDs in this HHRA is consistent with comparable HHRAs conducted in EPA Region 9 and in the State of California.

7.8 Risk Characterization

The risk characterization assumes that the total potential risk of developing cancer from exposure to site contaminants is the sum of the risk attributed to each individual contaminant. Likewise, the potential for the development of non-cancer adverse effects is assumed to be the sum of the HQs estimated for exposure to each individual contaminant. This approach is consistent with EPA guidance; however, it does not account for the possibility of constituents interacting synergistically or antagonistically. The possibility of nonadditive interactions among COPCs results in uncertainty associated with the cumulative risks for carcinogens and HIs for non-carcinogens.

Considered collectively, the factors contributing to uncertainty are likely to yield health hazards and risk estimates that are expected to be health-conservative and protective of public health.

Cancer risk is estimated in this HHRA using a linear equation (RAGS Part A, 1989):

$$ELCR = CSF \times Intake.$$

This linear equation is valid only at low risk levels below estimated risks of 1E-02 (EPA, 1989). This HHRA estimates a total cancer risk of 9E-01, which is greater than 1E-02, using the linear equation. One contaminant, PCE contributes 98 percent of this risk. Since the estimated risk is far greater than the upper value of the risk management range one-in-ten thousand (10^{-04} or 1E-04), any risk estimation uncertainty associated with the linear equation would not have any impact on the conclusions of this HHRA.

8. Conclusions

This section presents the conclusions of the HHRA. The HHRA results will help determine if contaminants at OU2 pose a current or potential risk to human health and the environment in the absence of any remedial action. The risk assessment will assist EPA in the following areas:

- Evaluating the need for a comprehensive remedial action to address contaminated groundwater throughout OU2
- Providing justification for performing a remedial action
- Determining what exposure pathways need to be remediated

This baseline HHRA uses an approach for assessing risks that optimizes the available data set. Total baseline risk was estimated using data from all the groundwater wells within a 500-µg/L contour of PCE for groundwater exposure. A screening-level approach was used to estimate total risk for soil gas vapor intrusion to indoor air from monitoring wells impacted by VOCs identified in OU2 groundwater in the Whispering Fountains Apartment complex. The HHRA evaluates the need for a comprehensive remedial action for the entire OU2, rather than discrete actions at individual wells.

As appropriate, remedial actions could include restoring currently contaminated portions of the drinking water aquifers and/or protecting portions of the drinking water aquifers that are unaffected, so that unimpeded future use of these aquifers is possible. Thus, the HHRA will help EPA in its effort to protect groundwater at and outside OU2 as a resource and for potential use of the groundwater as a source of domestic water.

For this baseline HHRA, the potential for unacceptable cancer risks and non-cancer health hazards is identified using the following criteria:

- ELCR values are compared to a risk management range of one-in-a-million (10^{-6} or 1E-06) to one-in-ten thousand (10^{-4} or 1E-04) (EPA, 2004b). ELCR values within or exceeding this range are actionable. This can then lead to a risk management decision that includes evaluating site-specific characteristics and exposure scenario factors to assess whether remedial action is warranted.
- An HI (the ratio of chemical intake to the RfD) greater than 1 indicates that there may be concern for potential non-cancer health effects associated with exposure to the COPCs (EPA, 1989).

This baseline HHRA for the Omega Site OU2 RI confirms that VOCs have adversely impacted the groundwater resources in OU2. The VOCs most commonly encountered during this assessment, and which serve as potential risk drivers, are PCE and TCE.

8.1 Key Findings

- The estimated potential future cumulative cancer risk of 9E-01 from exposure to untreated OU2 groundwater used as residential tap water greatly exceeds the cancer risk management range of one-in-a-million (10^{-6} or 1E-06) to one-in-ten thousand (10^{-4} or 1E-04).
- PCE, 1,2-dichloroethane, 1,4-dioxane, chloroform, 1,2-dibromo-3-chloropropane, TCE, 1,1,2-trichloroethane, and arsenic are the primary contributors to cancer risks for all routes of exposure and contribute cancer risks of 1E-03, or greater.
- The estimated potential future cumulative health HI of 3,236 for child receptors greatly exceeds an HI of 1. PCE and TCE are the primary contributors to the HI for all three routes of exposure.
- Inhalation exposure due to soil gas vapor intrusion into indoor air does not pose significant risk to the residents of Whispering Fountains Apartments.

8.2 Recommendations

This HHRA provides EPA with a human health risk basis for evaluating whether mitigation, remediation, or a removal action is warranted to mitigate potential health effects from the VOCs, SVOCs, selected inorganic ions, and metals in OU2 groundwater.

Results of the OU2 HHRA confirm that groundwater resources have been significantly contaminated by VOCs in groundwater and it is unsuitable as a source of tap water for domestic use. It is recommended that further action be taken to protect potential receptors in OU2, as well as to protect and restore the groundwater resources.

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Appendix A
Groundwater Risk Evaluation

Appendix A – Groundwater Risk Evaluation

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- Percent Contribution Tables
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TABLE 0

SITE RISK ASSESSMENT IDENTIFICATION INFORMATION

Omega Chemical Superfund Site

Site Name/OU:	Omega Chemical Superfund Site Operable Unit 2
Region:	US EPA Region 9
EPA ID Number:	CAD042245001
State:	California
Status:	Remedial Investigation
Federal Facility (Y/N):	N
EPA Project Manager:	Christopher Lichens
EPA Risk Assessor:	Stanford Smucker, Ph.D.
Prepared by (Organization):	CH2M HILL, 2280 Market Street, Suite 200, Riverside, California, 92501
Prepared for (Organization):	EPA
Document Title:	Baseline Human Health Risk Assessment, Omega Chemical Superfund Site Operable Unit 2
Document Date:	January 2008
Probabilistic Risk Assessment (Y/N):	N
Comments:	

TABLE 1

SELECTION OF EXPOSURE PATHWAYS

Omega Chemical Superfund Site

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Current/Future	Groundwater	Groundwater	Groundwater	Resident	Adult	Ingestion	Quantitative	Facility is bordered by residential properties
						Dermal	Quantitative	
						Inhalation	Quantitative	
					Child	Ingestion	Quantitative	Facility is bordered by residential properties
						Dermal	Quantitative	
						Inhalation	Quantitative	
					Child/Adult	Ingestion	Quantitative	Facility is bordered by residential properties
						Dermal	Quantitative	
						Inhalation	Quantitative	

TABLE 2.1

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier)	Maximum Concentration (Qualifier)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (1)	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (N/C)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)
Groundwater	71-55-6	1,1,1-Trichloroethane	2.0E-04 J	1.4E+01	mg/L	OW1A	61/88	5.0E-04 - 2.0E-01	NA	NA	NA	NA	NA	Y	NA
	76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.1E-02	2.8E+00	mg/L	OW8A	83/88	1.0E+00 - 6.3E+00	NA	NA	NA	NA	NA	Y	NA
	75-35-4	1,1-Dichloroethene	1.4E-02	5.1E+00	mg/L	OW1A	88/88	NA - NA	NA	NA	NA	NA	NA	Y	NA
	107-06-2	1,2-Dichloroethane	2.7E-04 J	1.3E+00	mg/L	OW8A	59/88	2.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	123-91-1	1,4-Dioxane (p-dioxane)	5.0E-04 J	2.6E+01	mg/L	OW1A	79/88	4.7E-04 - 1.0E-03	NA	NA	NA	NA	NA	Y	NA
	67-64-1	Acetone	1.1E-02	1.1E+01	mg/L	OW8A	23/88	2.0E-03 - 1.3E+01	NA	NA	NA	NA	NA	Y	NA
	67-66-3	Chloroform	2.9E-03 J	2.8E+00	mg/L	OW8A	85/88	2.0E-02 - 6.3E-01	NA	NA	NA	NA	NA	Y	NA
	75-09-2	Methylene chloride	3.0E-04 J	1.1E+01	mg/L	OW8A	25/88	1.7E-04 - 1.3E+01	NA	NA	NA	NA	NA	Y	NA
	127-18-4	Tetrachloroethene	1.2E-02	2.1E+02 J	mg/L	OW1A	88/88	NA - NA	NA	NA	NA	NA	NA	Y	NA
	108-88-3	Toluene	1.4E-04 J	1.3E+00	mg/L	OW8A	18/87	5.0E-04 - 6.3E-01	NA	NA	NA	NA	NA	Y	NA
	79-01-6	Trichloroethene (TCE)	8.4E-03	1.0E+01	mg/L	OW1A	88/88	NA - NA	NA	NA	NA	NA	NA	Y	NA
	75-69-4	Trichlorofluoromethane (Freon 11)	7.0E-03	1.0E+00	mg/L	OW2	83/88	2.0E-01 - 1.3E+00	NA	NA	NA	NA	NA	Y	NA
	630-20-6	1,1,1,2-Tetrachloroethane	1.4E-03	2.2E-02	mg/L	OW1A	6/52	5.0E-04 - 6.3E-01	NA	NA	NA	NA	NA	Y	NA
	79-34-5	1,1,2,2-Tetrachloroethane	6.7E-04 J	6.7E-04 J	mg/L	OW1A	1/87	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	79-00-5	1,1,2-Trichloroethane	1.2E-04 J	2.0E+00	mg/L	OW1A	35/87	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	75-34-3	1,1-Dichloroethane	3.7E-04 J	1.5E-01 J	mg/L	OW8A	62/88	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	120-82-1	1,2,4-Trichlorobenzene	5.3E-04 J	5.3E-04 J	mg/L	OW8A	1/87	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	95-63-6	1,2,4-Trimethylbenzene	4.2E-03	5.2E-02 J	mg/L	OW8A	3/52	5.0E-04 - 6.3E-01	NA	NA	NA	NA	NA	Y	NA
	96-12-8	1,2-Dibromo-3-chloropropane	5.5E-03	5.5E-03	mg/L	OW4A	1/77	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	95-50-1	1,2-Dichlorobenzene	2.0E-04 J	2.8E-02	mg/L	OW8A	8/87	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	78-87-5	1,2-Dichloropropane	1.6E-03 J	1.6E-03 J	mg/L	OW4A	1/87	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	108-67-8	1,3,5-Trimethylbenzene	9.6E-04 J	3.2E-03 J	mg/L	OW8A	2/52	5.0E-04 - 6.3E-01	NA	NA	NA	NA	NA	Y	NA
	541-73-1	1,3-Dichlorobenzene	3.0E-04 J	1.4E-03	mg/L	OW8A	5/87	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	106-46-7	1,4-Dichlorobenzene	6.0E-04 J	1.7E-03	mg/L	OW1A	4/87	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	78-93-3	2-Butanone	2.9E-01	7.7E-01	mg/L	OW8A	4/60	2.0E-03 - 1.3E+01	NA	NA	NA	NA	NA	Y	NA
	95-49-8	2-Chlorotoluene	2.0E-04 J	6.0E-04 J	mg/L	OW1A	5/52	5.0E-04 - 6.3E-01	NA	NA	NA	NA	NA	Y	NA
	106-43-4	4-Chlorotoluene	4.6E-04 J	4.6E-04 J	mg/L	OW1A	1/52	5.0E-04 - 6.3E-01	NA	NA	NA	NA	NA	Y	NA
	108-10-1	4-Methyl-2-pentanone	7.8E-02 J	7.8E-02 J	mg/L	OW8A	1/45	4.0E-03 - 1.3E+01	NA	NA	NA	NA	NA	Y	NA
	71-43-2	Benzene	1.4E-04 J	1.8E-01 J	mg/L	OW1A	44/88	5.0E-04 - 6.3E-01	NA	NA	NA	NA	NA	Y	NA
	74-97-5	Bromochloromethane	1.2E-02 J	1.2E-02 J	mg/L	OW8A	1/87	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	75-27-4	Bromodichloromethane	4.0E-04 J	1.0E-03	mg/L	OW5	2/87	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	75-25-2	Bromoform	2.8E-03	2.8E-03	mg/L	OW3A	1/87	5.0E-04 - 1.3E+00	NA	NA	NA	NA	NA	Y	NA
	74-83-9	Bromomethane	5.6E-03 J	1.8E-01 J	mg/L	OW1A	2/86	5.0E-04 - 1.3E+00	NA	NA	NA	NA	NA	Y	NA
	75-15-0	Carbon disulfide	2.4E-01 J	2.4E-01 J	mg/L	OW1A	1/43	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	56-23-5	Carbon tetrachloride	1.4E-04 J	1.0E-03	mg/L	OW1A	16/88	2.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	108-90-7	Chlorobenzene	2.0E-03	5.0E-01 J	mg/L	OW1A	9/87	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA

TABLE 2.1

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier)	Maximum Concentration (Qualifier)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (1)	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (N/C)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)
	75-00-3	Chloroethane	2.0E-04 J	2.0E-04 J	mg/L	OW1A	1/86	5.0E-04 - 1.3E+00	NA	NA	NA	NA	NA	Y	NA
	74-87-3	Chloromethane	4.0E-04 J	4.6E-03 J	mg/L	MW4A	10/86	5.0E-04 - 1.3E+00	NA	NA	NA	NA	NA	Y	NA
	156-59-2	cis-1,2-Dichloroethene	4.0E-04 J	4.8E-02	mg/L	OW5	54/88	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	110-82-7	Cyclohexane	6.3E-04	6.3E-04	mg/L	OW4A	1/35	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	124-48-1	Dibromochloromethane	5.4E-04 J	1.6E-02	mg/L	OW5	4/87	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	75-43-4	Dichlorofluoromethane (Freon 21)	1.6E-03 J	9.7E-03 J	mg/L	MW2	6/6	NA - NA	NA	NA	NA	NA	NA	Y	NA
	75-71-8	Dichlorodifluoromethane (Freon 12)	3.0E-04 J	4.7E-03	mg/L	MW15	34/87	5.0E-04 - 1.3E+00	NA	NA	NA	NA	NA	Y	NA
	100-41-4	Ethylbenzene	9.4E-05 J	1.5E-02 J	mg/L	OW8A	7/87	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	98-82-8	Isopropylbenzene	1.8E-04 J	2.4E-03	mg/L	OW1A	7/87	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	1634-04-4	Methyl tert-butyl ether (MTBE)	3.0E-04 J	3.4E-02 J	mg/L	MW4B	45/88	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	108-87-2	Methylcyclohexane	8.5E-04	8.5E-04	mg/L	OW4A	1/35	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	91-20-3	Naphthalene	2.1E-04 J	1.9E-03 J	mg/L	OW4A	10/79	5.0E-04 - 2.0E-01	NA	NA	NA	NA	NA	Y	NA
	103-65-1	n-Propylbenzene	3.5E-04 J	1.2E-03 J	mg/L	OW8A	5/52	5.0E-04 - 6.3E-01	NA	NA	NA	NA	NA	Y	NA
	99-87-6	p-Isopropyltoluene	2.9E-04 J	8.6E-04 J	mg/L	OW8A	5/52	5.0E-04 - 6.3E-01	NA	NA	NA	NA	NA	Y	NA
	135-98-8	sec-Butylbenzene	2.6E-04 J	3.9E-04 J	mg/L	OW8A	4/52	5.0E-04 - 6.3E-01	NA	NA	NA	NA	NA	Y	NA
	109-99-9	Tetrahydrofuran	5.6E-01	6.5E-01	mg/L	OW8A	2/2	NA - NA	NA	NA	NA	NA	NA	Y	NA
	156-60-5	trans-1,2-Dichloroethene	2.5E-04 J	1.3E-01 J	mg/L	OW8A	50/87	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	75-01-4	Vinyl chloride	6.4E-04	1.1E-03 J	mg/L	OW8A	4/87	2.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	1330-20-7	m,p-Xylenes	3.0E-04 J	1.3E-01 J	mg/L	OW8A	6/52	5.0E-04 - 6.3E-01	NA	NA	NA	NA	NA	Y	NA
	95-47-6	o-Xylene	2.5E-04 J	8.1E-02	mg/L	OW8A	9/52	5.0E-04 - 6.3E-01	NA	NA	NA	NA	NA	Y	NA
	1330-20-7	Xylenes, total	1.5E-03	7.5E-02	mg/L	OW8A	2/35	5.0E-04 - 1.0E+00	NA	NA	NA	NA	NA	Y	NA
	92-52-4	1,1-Biphenyl	8.0E-04 J	8.0E-04 J	mg/L	OW4A	1/27	5.0E-03 - 5.0E-03	NA	NA	NA	NA	NA	Y	NA
	96-18-4	1,2,3-Trichloropropane	2.7E-06 J	8.7E-05	mg/L	OW8A	7/83	2.0E-06 - 6.3E-01	NA	NA	NA	NA	NA	Y	NA
	91-57-6	2-Methylnaphthalene	2.8E-03 J	2.8E-03 J	mg/L	OW4A	1/29	5.0E-03 - 1.0E-02	NA	NA	NA	NA	NA	Y	NA
	98-86-2	Acetophenone	2.2E-03 J	6.9E-03	mg/L	OW8A	2/27	5.0E-03 - 5.0E-03	NA	NA	NA	NA	NA	Y	NA
	117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)	4.5E-04 J	8.0E-02	mg/L	MW5	16/29	5.0E-03 - 1.0E-02	NA	NA	NA	NA	NA	Y	NA
	105-60-2	Caprolactam	1.5E-04 J	2.8E-02	mg/L	OW1A	3/27	5.0E-03 - 5.0E-03	NA	NA	NA	NA	NA	Y	NA
	131-11-3	Dimethyl phthalate	6.8E-04 J	6.8E-04 J	mg/L	OW8A	1/29	5.0E-03 - 1.0E-02	NA	NA	NA	NA	NA	Y	NA
	84-74-2	Di-n-butyl phthalate	1.0E-03 J	1.0E-03 J	mg/L	MW5	2/29	5.0E-03 - 1.0E-02	NA	NA	NA	NA	NA	Y	NA
	78-59-1	Isophorone	2.2E-03 J	4.9E-03 J	mg/L	OW8A	2/29	5.0E-03 - 1.0E-02	NA	NA	NA	NA	NA	Y	NA

TABLE 2.1

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier)	Maximum Concentration (Qualifier)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (1)	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (N/C)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)
	62-75-9	N-Nitrosodimethylamine	1.9E-06 J	9.0E-04	mg/L	OW8A	31/50	2.0E-06 - 1.0E-02	NA	NA	NA	NA	NA	Y	NA
	87-86-5	Pentachlorophenol	3.0E-04 J	3.0E-04 J	mg/L	OW8A	1/29	5.0E-03 - 2.0E-02	NA	NA	NA	NA	NA	Y	NA
	85-01-8	Phenanthrene	6.9E-05 J	6.9E-05 J	mg/L	OW8A	1/29	5.0E-03 - 1.0E-02	NA	NA	NA	NA	NA	Y	NA
	108-95-2	Phenol	8.5E-03 J	2.0E-02	mg/L	OW8A	3/29	5.0E-03 - 1.0E-02	NA	NA	NA	NA	NA	Y	NA
	14797-73-0	Perchlorate	1.3E-03 J	5.6E-03	mg/L	OW5	42/44	2.0E-03 - 2.0E-03	NA	NA	NA	NA	NA	Y	NA
	57-12-5	Cyanide (total)	2.0E-03 J	3.4E-03 J	mg/L	OW1A	2/27	1.0E-02 - 1.0E-02	NA	NA	NA	NA	NA	Y	NA
	7440-38-2	Arsenic	6.4E-04 J-	6.5E-02 J	mg/L	OW8A	26/30	1.0E-03 - 5.0E-03	NA	NA	NA	NA	NA	Y	ABL
	18540299	Hexavalent chromium	5.7E-04	2.3E-02	mg/L	MW4A	45/49	1.0E-03 - 1.0E-03	NA	NA	NA	NA	NA	Y	ABL
	7440-02-0	Nickel	1.0E-03	1.1E-01 J+	mg/L	OW5	26/30	2.0E-03 - 2.0E-02	NA	NA	NA	NA	NA	Y	ABL
	7429-90-5	Aluminum	3.3E-01	3.3E-01	mg/L	OW5	1/25	2.0E-02 - 2.0E-01	NA	NA	NA	NA	NA	N	BBL
	7440-36-0	Antimony	1.6E-03 J	1.9E-03 J	mg/L	MW5	9/27	2.0E-03 - 6.0E-02	NA	NA	NA	NA	NA	N	BBL
	7440-39-3	Barium	1.3E-02 J	7.3E-02 J	mg/L	OW8A	28/29	2.0E-03 - 2.0E-03	NA	NA	NA	NA	NA	N	BBL
	7440-42-8	Boron	2.9E-01	3.9E-01	mg/L	MW2	6/6	NA - NA	NA	NA	NA	NA	NA	N	BBL
	7440-43-9	Cadmium	7.0E-05 J	1.0E-04 J	mg/L	OW5	4/28	1.0E-03 - 5.0E-03	NA	NA	NA	NA	NA	N	BBL
	7440-70-2	Calcium	1.4E+02	2.9E+02	mg/L	OW8A	28/28	NA - NA	NA	NA	NA	NA	NA	N	BBL
	7440-47-3	Chromium	7.5E-04 J	9.8E-02 J	mg/L	OW5	23/30	2.0E-03 - 1.0E-02	NA	NA	NA	NA	NA	N	BBL
	7440-48-4	Cobalt	8.0E-05 J	5.0E-03	mg/L	OW4A	23/30	1.0E-03 - 2.0E-02	NA	NA	NA	NA	NA	N	BBL
	7440-50-8	Copper	4.1E-04 J	6.8E-03 J+	mg/L	OW5	21/30	4.0E-03 - 2.5E-02	NA	NA	NA	NA	NA	N	BBL
	7439-89-6	Iron	3.5E-02 J	2.6E+00	mg/L	OW8A	12/30	1.0E-01 - 1.0E-01	NA	NA	NA	NA	NA	N	BBL
	7439-92-1	Lead	4.0E-05 J	3.8E-04 J	mg/L	OW4A	15/28	1.0E-03 - 1.0E-02	NA	NA	NA	NA	NA	N	BBL
	7439-95-4	Magnesium	4.0E+01	1.0E+02	mg/L	OW8A	27/28	4.9E+01 - 4.9E+01	NA	NA	NA	NA	NA	N	BBL
	7439-96-5	Manganese	3.7E-04 J	4.0E+00	mg/L	OW8A	18/28	5.0E-04 - 1.5E-02	NA	NA	NA	NA	NA	N	BBL
	7439-97-6	Mercury	2.0E-05 J	2.2E-04	mg/L	OW8A	11/29	3.0E-05 - 2.0E-04	NA	NA	NA	NA	NA	N	BBL
	7439-98-7	Molybdenum	4.5E-03	9.5E-03	mg/L	MW2	3/7	1.0E-03 - 2.0E-02	NA	NA	NA	NA	NA	N	BBL
	7440-09-7	Potassium	1.9E+00 J	5.3E+00	mg/L	OW1A	12/28	5.0E+00 - 5.0E+00	NA	NA	NA	NA	NA	N	BBL
	7782-49-2	Selenium	1.0E-03 J	2.3E-01 J	mg/L	OW8A	26/29	2.0E-03 - 5.0E-03	NA	NA	NA	NA	NA	N	BBL
	7631-86-9	Silica (SiO2)	3.8E+01 J	4.6E+01 J	mg/L	MW2	4/4	NA - NA	NA	NA	NA	NA	NA	N	BBL
	7440-23-5	Sodium	7.2E+01	1.3E+02	mg/L	MW4A	28/28	NA - NA	NA	NA	NA	NA	NA	N	BBL
	7440-28-0	Thallium	1.0E-04 J	2.8E-02	mg/L	OW8A	3/24	1.0E-03 - 2.5E-02	NA	NA	NA	NA	NA	N	BBL
	7440-62-2	Vanadium	4.1E-04 J	5.1E-03	mg/L	OW5	22/29	1.0E-02 - 2.0E-02	NA	NA	NA	NA	NA	N	BBL
	7440-66-6	Zinc	4.7E-04 J	1.5E-02 J-	mg/L	OW1A	23/30	1.0E-02 - 2.0E-02	NA	NA	NA	NA	NA	N	BBL

TABLE 2.1

OCCURRENCE, DISTRIBUTION, AND SELECTION OF CHEMICALS OF POTENTIAL CONCERN

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Point	CAS Number	Chemical	Minimum Concentration (Qualifier)	Maximum Concentration (Qualifier)	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits (1)	Concentration Used for Screening (2)	Background Value (3)	Screening Toxicity Value (N/C)	Potential ARAR/TBC Value	Potential ARAR/TBC Source	COPC Flag (Y/N)	Rationale for Selection or Deletion (4)

Notes:

(1) Range of detection limits is for non-detected sample results only.

(2) Screening concentrations were not used.

(3) Background values SRC

(4) Rationale Codes:

Selection Reason: Above Background Level (ABL)

Deletion Reason: Below Background Level (BBL)

Definitions:

NA = Not applicable

TABLE 3.1.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic (1)	Rationale
Groundwater	1,1,1-Trichloroethane	mg/L	7.8E-01	2.5E+00	1.4E+01	2.47E+00	mg/L	97.5% KM (Chebyshev) UCL	ProUCL recommended
	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	mg/L	7.5E-01	9.9E-01	2.8E+00	9.92E-01	mg/L	95% KM (Chebyshev) UCL	ProUCL recommended
	1,1-Dichloroethene	mg/L	9.0E-01	1.0E+00	5.1E+00	1.04E+00	mg/L	95% Approximate Gamma UCL	ProUCL recommended
	1,2-Dichloroethane	mg/L	9.8E-02	2.5E-01	1.3E+00	2.45E-01	mg/L	97.5% KM (Chebyshev) UCL	ProUCL recommended
	1,4-Dioxane (p-dioxane)	mg/L	1.2E+00	3.6E+00	2.6E+01	3.56E+00	mg/L	97.5% KM (Chebyshev) UCL	ProUCL recommended
	Acetone	mg/L	8.2E-01	2.0E+00	1.1E+01	2.01E+00	mg/L	97.5% KM (Chebyshev) UCL	ProUCL recommended
	Chloroform	mg/L	2.4E-01	5.8E-01	2.8E+00	5.82E-01	mg/L	97.5% KM (Chebyshev) UCL	ProUCL recommended
	Methylene chloride	mg/L	6.9E-01	1.9E+00	1.1E+01	1.93E+00	mg/L	97.5% KM (Chebyshev) UCL	ProUCL recommended
	Tetrachloroethene	mg/L	1.8E+01	6.5E+01	2.1E+02 J	6.50E+01	mg/L	99% Chebyshev (Mean, Sd) UCL	ProUCL recommended
	Toluene	mg/L	5.0E-02	7.1E-02	1.3E+00	7.14E-02	mg/L	95% KM (t) UCL	ProUCL recommended
	Trichloroethene (TCE)	mg/L	7.6E-01	1.3E+00	1.0E+01	1.32E+00	mg/L	95% H-UCL	ProUCL recommended
	Trichlorofluoromethane (Freon 11)	mg/L	2.7E-01	3.6E-01	1.0E+00	3.58E-01	mg/L	95% KM (Chebyshev) UCL	ProUCL recommended
	1,1,1,2-Tetrachloroethane	mg/L	1.7E-02	3.6E-03	2.2E-02	3.59E-03	mg/L	95% KM (t) UCL	ProUCL recommended
	1,1,2,2-Tetrachloroethane	mg/L	2.1E-02	5.9E-02	6.7E-04 J	6.70E-04	mg/L	Maximum Result	Max < 95% UCL
	1,1,2-Trichloroethane	mg/L	4.5E-02	1.8E-01	2.0E+00	1.79E-01	mg/L	97.5% KM (Chebyshev) UCL	ProUCL recommended
	1,1-Dichloroethane	mg/L	3.4E-02	3.8E-02	1.5E-01 J	3.78E-02	mg/L	97.5% KM (Chebyshev) UCL	ProUCL recommended
	1,2,4-Trichlorobenzene	mg/L	1.6E-02	5.1E-02	5.3E-04 J	5.30E-04	mg/L	Maximum Result	Max < 95% UCL
	1,2,4-Trimethylbenzene	mg/L	1.4E-02	7.5E-03	5.2E-02 J	7.53E-03	mg/L	95% KM (t) UCL	ProUCL recommended
	1,2-Dibromo-3-chloropropane	mg/L	2.7E-02	7.3E-02	5.5E-03	5.50E-03	mg/L	Maximum Result	Max < 95% UCL
	1,2-Dichlorobenzene	mg/L	2.0E-02	1.8E-03	2.8E-02	1.80E-03	mg/L	95% KM (t) UCL	ProUCL recommended
	1,2-Dichloropropane	mg/L	2.1E-02	5.9E-02	1.6E-03 J	1.60E-03	mg/L	Maximum Result	Max < 95% UCL
	1,3,5-Trimethylbenzene	mg/L	1.5E-02	1.2E-03	3.2E-03 J	1.17E-03	mg/L	95% KM (t) UCL	ProUCL recommended
	1,3-Dichlorobenzene	mg/L	1.8E-02	4.2E-04	1.4E-03	4.24E-04	mg/L	95% KM (t) UCL	ProUCL recommended
	1,4-Dichlorobenzene	mg/L	2.0E-02	7.1E-04	1.7E-03	7.09E-04	mg/L	95% KM (t) UCL	ProUCL recommended
	2-Butanone	mg/L	3.7E-01	3.3E-01	7.7E-01	3.27E-01	mg/L	95% KM (t) UCL	ProUCL recommended
	2-Chlorotoluene	mg/L	1.2E-02	4.5E-04	6.0E-04 J	4.50E-04	mg/L	95% KM (t) UCL	ProUCL recommended

TABLE 3.1.RME
EXPOSURE POINT CONCENTRATION SUMMARY
REASONABLE MAXIMUM EXPOSURE
Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic (1)	Rationale
	4-Chlorotoluene	mg/L	1.2E-02	4.1E-02	4.6E-04 J	4.60E-04	mg/L	Maximum Result	Max < 95% UCL
	4-Methyl-2-pentanone	mg/L	4.5E-01	1.4E+00	7.8E-02 J	7.80E-02	mg/L	Maximum Result	Max < 95% UCL
	Benzene	mg/L	1.3E-02	1.9E-02	1.8E-01 J	1.92E-02	mg/L	97.5% KM (Chebyshev) UCL	ProUCL recommended
	Bromochloromethane	mg/L	2.1E-02	5.9E-02	1.2E-02 J	1.20E-02	mg/L	Maximum Result	Max < 95% UCL
	Bromodichloromethane	mg/L	2.1E-02	4.4E-04	1.0E-03	4.42E-04	mg/L	95% KM (t) UCL	ProUCL recommended
	Bromoform	mg/L	2.6E-02	7.4E-02	2.8E-03	2.80E-03	mg/L	Maximum Result	Max < 95% UCL
	Bromomethane	mg/L	2.2E-02	2.6E-02	1.8E-01 J	2.64E-02	mg/L	97.5% KM (Chebyshev) UCL	ProUCL recommended
	Carbon disulfide	mg/L	3.0E-02	9.4E-02	2.4E-01 J	9.36E-02	mg/L	Too Few Unique Detected Values	ProUCL recommended
	Carbon tetrachloride	mg/L	1.9E-02	3.1E-04	1.0E-03	3.14E-04	mg/L	95% KM (t) UCL	ProUCL recommended
	Chlorobenzene	mg/L	2.4E-02	3.5E-02	5.0E-01 J	3.51E-02	mg/L	95% KM (Chebyshev) UCL	ProUCL recommended
	Chloroethane	mg/L	2.6E-02	7.5E-02	2.0E-04 J	2.00E-04	mg/L	Maximum Result	Max < 95% UCL
	Chloromethane	mg/L	2.6E-02	9.7E-04	4.6E-03 J	9.72E-04	mg/L	95% KM (t) UCL	ProUCL recommended
	cis-1,2-Dichloroethene	mg/L	3.0E-02	1.4E-02	4.8E-02	1.44E-02	mg/L	95% KM (Chebyshev) UCL	ProUCL recommended
	Cyclohexane	mg/L	3.3E-02	1.2E-01	6.3E-04	6.30E-04	mg/L	Maximum Result	Max < 95% UCL
	Dibromochloromethane	mg/L	2.1E-02	1.2E-03	1.6E-02	1.19E-03	mg/L	95% KM (t) UCL	ProUCL recommended
	Dichlorofluoromethane (Freon 21)	mg/L	5.7E-03	8.6E-03	9.7E-03 J	8.57E-03	mg/L	95% Student's-t UCL	ProUCL recommended
	Dichlorodifluoromethane (Freon 12)	mg/L	4.2E-02	1.6E-03	4.7E-03	1.56E-03	mg/L	95% KM (t) UCL	ProUCL recommended
	Ethylbenzene	mg/L	2.5E-02	1.2E-03	1.5E-02 J	1.16E-03	mg/L	95% KM (t) UCL	ProUCL recommended
	Isopropylbenzene	mg/L	2.4E-02	5.3E-04	2.4E-03	5.30E-04	mg/L	95% KM (t) UCL	ProUCL recommended
	Methyl tert-butyl ether (MTBE)	mg/L	2.4E-02	4.7E-03	3.4E-02 J	4.68E-03	mg/L	95% KM (BCA) UCL	ProUCL recommended
	Methylcyclohexane	mg/L	3.3E-02	1.2E-01	8.5E-04	8.50E-04	mg/L	Maximum Result	Max < 95% UCL
	Naphthalene	mg/L	4.4E-03	5.6E-04	1.9E-03 J	5.57E-04	mg/L	95% KM (t) UCL	ProUCL recommended
	n-Propylbenzene	mg/L	1.9E-02	5.2E-04	1.2E-03 J	5.17E-04	mg/L	95% KM (t) UCL	ProUCL recommended
	p-Isopropyltoluene	mg/L	1.7E-02	4.8E-04	8.6E-04 J	4.78E-04	mg/L	95% KM (t) UCL	ProUCL recommended
	sec-Butylbenzene	mg/L	1.3E-02	3.6E-04	3.9E-04 J	3.57E-04	mg/L	95% KM (t) UCL	ProUCL recommended
	Tetrahydrofuran	mg/L	6.1E-01	.	6.5E-01	6.50E-01	mg/L	Maximum Result	Max < 95% UCL

TABLE 3.1.RME

EXPOSURE POINT CONCENTRATION SUMMARY

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Point	Chemical of Potential Concern	Units	Arithmetic Mean	95% UCL (Distribution)	Maximum Concentration (Qualifier)	Exposure Point Concentration			
						Value	Units	Statistic (1)	Rationale
	trans-1,2-Dichloroethene	mg/L	3.1E-02	3.1E-02	1.3E-01 J	3.08E-02	mg/L	97.5% KM (Chebyshev) UCL	ProUCL recommended
	Vinyl chloride	mg/L	2.0E-02	6.8E-04	1.1E-03 J	6.80E-04	mg/L	95% KM (t) UCL	ProUCL recommended
	m,p-Xylenes	mg/L	1.7E-02	1.0E-02	1.3E-01 J	1.01E-02	mg/L	95% KM (t) UCL	ProUCL recommended
	o-Xylene	mg/L	1.9E-02	8.1E-03	8.1E-02	8.12E-03	mg/L	95% KM (t) UCL	ProUCL recommended
	Xylenes, total	mg/L	3.4E-02	3.6E-02	7.5E-02	3.56E-02	mg/L	99% KM (Chebyshev) UCL	ProUCL recommended
	1,1-Biphenyl	mg/L	2.4E-03	2.7E-03	8.0E-04 J	8.00E-04	mg/L	Maximum Result	Max < 95% UCL
	1,2,3-Trichloropropane	mg/L	7.7E-03	1.4E-05	8.7E-05	1.36E-05	mg/L	95% KM (BCA) UCL	ProUCL recommended
	2-Methylnaphthalene	mg/L	2.7E-03	3.2E-03	2.8E-03 J	2.80E-03	mg/L	Maximum Result	Max < 95% UCL
	Acetophenone	mg/L	2.7E-03	2.8E-03	6.9E-03	2.79E-03	mg/L	95% KM (t) UCL	ProUCL recommended
	Bis(2-ethylhexyl)phthalate (DEHP)	mg/L	6.2E-03	1.2E-02	8.0E-02	1.15E-02	mg/L	95% KM (BCA) UCL	ProUCL recommended
	Caprolactam	mg/L	3.7E-03	3.8E-03	2.8E-02	3.82E-03	mg/L	95% KM (t) UCL	ProUCL recommended
	Dimethyl phthalate	mg/L	2.6E-03	3.2E-03	6.8E-04 J	6.80E-04	mg/L	Maximum Result	Max < 95% UCL
	Di-n-butyl phthalate	mg/L	2.6E-03	3.2E-03	1.0E-03 J	1.00E-03	mg/L	Maximum Result	Max < 95% UCL
	Isophorone	mg/L	2.7E-03	5.9E-03	4.9E-03 J	4.90E-03	mg/L	Maximum Result	Max < 95% UCL
	N-Nitrosodimethylamine	mg/L	2.4E-04	1.9E-04	9.0E-04	1.89E-04	mg/L	97.5% KM (Chebyshev) UCL	ProUCL recommended
	Pentachlorophenol	mg/L	2.9E-03	4.6E-03	3.0E-04 J	3.00E-04	mg/L	Maximum Result	Max < 95% UCL
	Phenanthrene	mg/L	2.6E-03	3.2E-03	6.9E-05 J	6.90E-05	mg/L	Maximum Result	Max < 95% UCL
	Phenol	mg/L	3.7E-03	9.8E-03	2.0E-02	9.81E-03	mg/L	95% KM (t) UCL	ProUCL recommended
	Perchlorate	mg/L	3.0E-03	3.2E-03	5.6E-03	3.24E-03	mg/L	95% KM (BCA) UCL	ProUCL recommended
	Cyanide (total)	mg/L	4.8E-03	3.9E-03	3.4E-03 J	3.40E-03	mg/L	Maximum Result	Max < 95% UCL
	Arsenic	mg/L	4.1E-03	1.4E-02	6.5E-02 J	1.35E-02	mg/L	95% KM (Chebyshev) UCL	ProUCL recommended
	Hexavalent chromium	mg/L	7.8E-03	9.3E-03	2.3E-02	9.29E-03	mg/L	95% KM (BCA) UCL	ProUCL recommended
	Nickel	mg/L	1.0E-02	3.4E-02	1.1E-01 J+	3.36E-02	mg/L	97.5% KM (Chebyshev) UCL	ProUCL recommended

Notes:

(1) UCL = Upper Confidence Limit on the mean

TABLE 4.1.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference (1)	Intake Equation/ Model Name
Ingestion	Resident	Adult	Groundwater	Cgw	Chemical Concentration in Groundwater	Chemical-specific	mg/L	Table 3.1	$\frac{C_{gw} \times IngR \times EF \times ED}{BW \times AT}$
				IngR	Ingestion Rate of Groundwater	2	L/day	EPA, 1989	
				FI	Fraction Ingested	1	unitless	EPA, 1989	
				EF	Exposure Frequency	350	days/year	EPA, 1989	
				ED	Exposure Duration	24	years	EPA, 1989	
				BW	Body Weight	70	kg	EPA, 1989	
				AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
				AT_N	Averaging Time (Non-Cancer)	8,760	days	EPA, 1989	
Dermal	Resident	Adult	Groundwater	Cgw	Chemical Concentration in Groundwater	Chemical-specific	mg/L	Table 3.1	Where for Organics: $\frac{DA_{event} \times SA \times EF \times ED}{BW \times AT}$
				DA_{event}	Absorbed dose per event per area of skin exposed	Chemical-specific	mg/cm^2-event	EPA, 2004a	If $t_{event} > t^*$
				SA	Skin Surface Area Available for Contact	18,000	cm^2	CalEPA, 2005	$DA_{event} = FA \times K_p \times C_{gw} \left[\frac{t_{event}}{1+B} + 2\tau \times \left(\frac{1+3B+3B^2}{(1+B)^2}\right)\right]$
				EF	Exposure Frequency	350	days/year	EPA, 1989	If $t_{event} \leq t^*$
				ED	Exposure Duration	24	years	EPA, 1989	$DA_{event} = 2\ FA \times K_p \times C_{gw} \sqrt{\frac{6\tau \times t_{event}}{\Pi}}$
				ET	Exposure Time	0.58	hrs/day	EPA, 2004a	For Inorganics
				BW	Body Weight	70	kg	EPA, 1989	$DA_{event} = K_p \times C_{gw} \times t_{event}$
				AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
				AT_N	Averaging Time (Non-Cancer)	8,760	days	EPA, 1989	
Inhalation	Resident	Adult	Groundwater	Cgw	Chemical Concentration in Groundwater	Chemical-specific	mg/L	Table 3.1	$\frac{C_{gw} \times InhR \times VF \times EF \times ED}{BW \times AT}$
				InhR	Inhalation Rate	20	m^3/day	EPA, 1989	
				VF	Volatilization Factor	0.5	L/m^3	EPA, 2004b	
				EF	Exposure Frequency	350	days/year	EPA, 1989	
				ED	Exposure Duration	24	years	EPA, 1989	
				BW	Body Weight	70	kg	EPA, 1989	
				ATC	Averaging Time (Cancer)	25,550	days	EPA, 1989	
				ATNC	Averaging Time (Non-Cancer)	8,760	days	EPA, 1989	

TABLE 4.1.RME

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference (1)	Intake Equation/ Model Name

Notes:

(1) CalEPA, 2005: Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Military Facilities.

EPA, 1989: Risk Assessment Guidance for Superfund (RAGS) Volume I Human Health Evaluation Manual Part A.

EPA, 2004a: Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual. (Part E, Supplemental Guidance for Dermal Risk Assessment, Final). July.

EPA, 2004b: User's Guide and Background Technical Document for Preliminary Remediation Goals Table. Region 9. October.

Table 4.2

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference (1)	Intake Equation/ Model Name
Ingestion	Resident	Child	Groundwater	Cgw	Chemical Concentration in Groundwater	Chemical-specific	mg/kg	Table 3.1	$\frac{C_{gw} \times IngR \times EF \times ED}{BW \times AT}$
				IngR	Ingestion Rate of Groundwater	1	L/day	EPA, 1989	
				FI	Fraction Ingested	1	unitless	EPA, 1989	
				EF	Exposure Frequency	350	days/year	EPA, 1989	
				ED	Exposure Duration	6	years	EPA, 1989	
				BW	Body Weight	15	kg	EPA, 1989	
				AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
				AT_N	Averaging Time (Non-Cancer)	2,190	days	EPA, 1989	
Dermal	Resident	Child	Groundwater	Cgw	Chemical Concentration in Groundwater	Chemical-specific	mg/L	Table 3.1	Where for Organics: $\frac{DA_{event} \times SA \times EF \times ED}{BW \times AT}$
				DA_{event}	Absorbed dose per event per area of skin exposed	Chemical-specific	mg/cm^2-event	EPA, 2004a	If $t_{event} > t^*$
				SA	Skin Surface Area Available for Contact	6,600	cm^2	CalEPA, 2005	$DA_{event} = FA \times K_p \times C_{gw}\left[\frac{t_{event}}{1+B} + 2\tau \times \left(\frac{1+3B+3B^2}{(1+B)^2}\right)\right]$
				EF	Exposure Frequency	350	days/year	EPA, 1989	
				ED	Exposure Duration	6	years	EPA, 1989	If $t_{event} \leq t^*$
				ET	Exposure Time	1.0	hrs/day	EPA, 2004a	$DA_{event} = 2\ FA \times K_p \times C_{gw}\sqrt{\frac{6\tau \times t_{event}}{\Pi}}$
				BW	Body Weight	15	kg	EPA, 1989	
				AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	For Inorganics
				AT_N	Averaging Time (Non-Cancer)	2,190	days	EPA, 1989	$DA_{event} = K_p \times C_{gw} \times t_{event}$
Inhalation	Resident	Child	Groundwater	Cs	Chemical Concentration in Soil	Chemical-specific	mg/kg	Table 3.1	$\frac{C_{gw} \times InhR \times VF \times EF \times ED}{BW \times AT}$
				InhR	Inhalation Rate	10	m^3/day	EPA, 1989	
				VF	Volatilization Factor	0.5	L/m3	EPA, 2004b	
				EF	Exposure Frequency	350	days/year	EPA, 1989	
				ED	Exposure Duration	6	years	EPA, 1989	
				BW	Body Weight	15	kg	EPA, 1989	
				AT_C	Averaging Time (Cancer)	25,550	days	EPA, 1989	
				AT_N	Averaging Time (Non-Cancer)	2,190	days	EPA, 1989	

Table 4.2

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference (1)	Intake Equation/ Model Name

Notes:

(1) CalEPA, 2005: Recommended DTSC Default Exposure Factors for Use in Risk Assessment at California Military Facilities.
EPA, 1989: Risk Assessment Guidance for Superfund (RAGS) Volume I Human Health Evaluation Manual Part A.
EPA, 2004a: Risk Assessment Guidance for Superfund: Volume I Human Health Evaluation Manual. (Part E, Supplemental Guidance for Dermal Risk Assessment, Final). July.
EPA, 2004b: User's Guide and Background Technical Document for Preliminary Remediation Goals Table. Region 9. October.

Table 4.3

VALUES USED FOR DAILY INTAKE CALCULATIONS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Medium:	Groundwater
Exposure Medium:	Groundwater

Exposure Route	Receptor Population	Receptor Age	Exposure Point	Parameter Code	Parameter Definition	Value	Units	Rationale/ Reference	Intake Equation/ Model Name
Ingestion	Resident	Child/Adult	Groundwater	--	--	--	--	--	Child/Adult cancer risks will be calculated as the sum of the Child cancer risk and the Adult cancer risk.
Dermal	Resident	Child/Adult	Groundwater	--	--	--	--	--	Child/Adult cancer risks will be calculated as the sum of the Child cancer risk and the Adult cancer risk.
Inhalation	Resident	Child/Adult	Groundwater	--	--	--	--	--	Child/Adult cancer risks will be calculated as the sum of the Child cancer risk and the Adult cancer risk.

TABLE 5.1

NON-CANCER TOXICITY DATA -- ORAL/DERMAL

Omega Chemical Superfund Site

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD		Oral Absorption Efficiency for Dermal	Absorbed RfD for Dermal		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfD:Target Organ(s)	
		Value	Units	(1)	Value	Units		(2)	Source(s)	Date(s) (MM/DD/YYYY)
1,1,1-Trichloroethane	Chronic	2.0E+00	mg/kg/day	100%	2.0E+00	mg/kg/day	Decreased body weight	1000/1	IRIS	11/12/2007
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	Chronic	3.0E+01	mg/kg/day	100%	3.0E+01	mg/kg/day	Neurological	10/1	IRIS	8/27/2007
1,1-Dichloroethene	Chronic	5.0E-02	mg/kg/day	100%	5.0E-02	mg/kg/day	Liver	100/1	IRIS	9/13/2007
1,2-Dichloroethane	Chronic	2.0E-02	mg/kg/day	100%	2.0E-02	mg/kg/day	Decreased survival	NA	NCEA	10/20/2004
1,4-Dioxane (p-dioxane)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acetone	Chronic	9.0E-01	mg/kg/day	100%	9.0E-01	mg/kg/day	Kidney	1000/1	IRIS	8/27/2007
Chloroform	Chronic	1.0E-02	mg/kg/day	100%	1.0E-02	mg/kg/day	Liver	1000/1	IRIS	8/27/2007
Methylene chloride	Chronic	6.0E-02	mg/kg/day	100%	6.0E-02	mg/kg/day	Liver	100/1	IRIS	8/27/2007
Tetrachloroethene	Chronic	1.0E-02	mg/kg/day	100%	1.0E-02	mg/kg/day	Liver	1000/1	IRIS	8/27/2007
Toluene	Chronic	8.0E-02	mg/kg/day	100%	8.0E-02	mg/kg/day	Kidney	3000	IRIS	8/27/2007
Trichloroethene (TCE)	Chronic	3.0E-04	mg/kg/day	100%	3.0E-04	mg/kg/day	Liver	NA	NCEA	10/20/2004
Trichlorofluoromethane (Freon 11)	Chronic	3.0E-01	mg/kg/day	100%	3.0E-01	mg/kg/day	General	1000/1	IRIS	8/27/2007
1,1,1,2-Tetrachloroethane	Chronic	3.0E-02	mg/kg/day	100%	3.0E-02	mg/kg/day	Kidney	3000/1	IRIS	8/24/2007
1,1,2,2-Tetrachloroethane	Chronic	6.0E-02	mg/kg/day	100%	6.0E-02	mg/kg/day	NA	NA	PPRTV	10/20/2004
1,1,2-Trichloroethane	Chronic	4.0E-03	mg/kg/day	100%	4.0E-03	mg/kg/day	Blood	1000/1	IRIS	8/27/2007
1,1-Dichloroethane	Chronic	1.0E-01	mg/kg/day	100%	1.0E-01	mg/kg/day	NOEL	NA	HEAST	7/31/1997
1,2,4-Trichlorobenzene	Chronic	1.0E-02	mg/kg/day	100%	1.0E-02	mg/kg/day	Adrenal Glands	1000/1	IRIS	8/27/2007
1,2,4-Trimethylbenzene	Chronic	5.0E-02	mg/kg/day	100%	5.0E-02	mg/kg/day	NA	NA	PPRTV	10/20/2004
1,2-Dibromo-3-chloropropane	Chronic	5.7E-05	mg/kg/day	100%	5.7E-05	mg/kg/day	Decreased survival	1000/1	Route Extrapolation	10/20/2004
1,2-Dichlorobenzene	Chronic	9.0E-02	mg/kg/day	100%	9.0E-02	mg/kg/day	NOAEL	1000/1	IRIS	8/27/2007
1,2-Dichloropropane	Chronic	1.1E-03	mg/kg/day	100%	1.1E-03	mg/kg/day	Decreased body weight	300/1	Route Extrapolation	10/20/2004
1,3,5-Trimethylbenzene	Chronic	5.0E-02	mg/kg/day	100%	5.0E-02	mg/kg/day	NA	NA	PPRTV	10/20/2004
1,3-Dichlorobenzene	Chronic	3.0E-02	mg/kg/day	100%	3.0E-02	mg/kg/day	NA	NA	NCEA	10/20/2004
1,4-Dichlorobenzene	Chronic	3.0E-02	mg/kg/day	100%	3.0E-02	mg/kg/day	Liver	NA	NCEA	10/20/2004
2-Butanone	Chronic	6.0E-01	mg/kg/day	100%	6.0E-01	mg/kg/day	Reduced birth weight	1000/1	IRIS	8/27/2007
2-Chlorotoluene	Chronic	2.0E-02	mg/kg/day	100%	2.0E-02	mg/kg/day	Decreased body weight	1000/1	IRIS	8/24/2007
4-Chlorotoluene	Chronic	2.0E-02	mg/kg/day	100%	2.0E-02	mg/kg/day	Decreased body weight	Surrogate	Surrogate	NA
4-Methyl-2-pentanone	Chronic	8.0E-02	mg/kg/day	100%	8.0E-02	mg/kg/day	Reduced birth weight	300/1	HEAST	7/31/1997

TABLE 5.1

NON-CANCER TOXICITY DATA -- ORAL/DERMAL

Omega Chemical Superfund Site

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD		Oral Absorption Efficiency for Dermal	Absorbed RfD for Dermal		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfD:Target Organ(s)	
		Value	Units	(1)	Value	Units		(2)	Source(s)	Date(s) (MM/DD/YYYY)
Benzene	Chronic	4.0E-03	mg/kg/day	100%	4.0E-03	mg/kg/day	Immune system	300/1	IRIS	8/27/2007
Bromochloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	Chronic	2.0E-02	mg/kg/day	100%	2.0E-02	mg/kg/day	Kidney	1000/1	IRIS	8/27/2007
Bromoform	Chronic	2.0E-02	mg/kg/day	100%	2.0E-02	mg/kg/day	Liver	1000/1	IRIS	8/27/2007
Bromomethane	Chronic	1.4E-03	mg/kg/day	100%	1.4E-03	mg/kg/day	GI	1000/1	IRIS	8/27/2007
Carbon disulfide	Chronic	1.0E-01	mg/kg/day	100%	1.0E-01	mg/kg/day	Teratogenicity	100/1	IRIS	8/27/2007
Carbon tetrachloride	Chronic	7.0E-04	mg/kg/day	100%	7.0E-04	mg/kg/day	Liver	1000/1	IRIS	8/27/2007
Chlorobenzene	Chronic	2.0E-02	mg/kg/day	100%	2.0E-02	mg/kg/day	Liver	NA	IRIS	8/27/2007
Chloroethane	Chronic	4.0E-01	mg/kg/day	100%	4.0E-01	mg/kg/day	Reproductive	300/1	NCEA	10/20/2004
Chloromethane	Chronic	2.6E-02	mg/kg/day	100%	2.6E-02	mg/kg/day	Brain	NA	Route Extrapolation	8/27/2007
cis-1,2-Dichloroethene	Chronic	1.0E-02	mg/kg/day	100%	1.0E-02	mg/kg/day	Liver	NA	PPRTV	10/20/2004
Cyclohexane	Chronic	1.7E+00	mg/kg/day	100%	1.7E+00	mg/kg/day	Reduced birth weight	300/1	Route Extrapolation	10/20/2004
Dibromochloromethane	Chronic	2.0E-02	mg/kg/day	100%	2.0E-02	mg/kg/day	Liver	1000/1	IRIS	8/27/2007
Dichlorofluoromethane (Freon 21)	Chronic	2.0E-01	mg/kg/day	100%	2.0E-01	mg/kg/day	Decreased body weight	100	Surrogate	8/27/2007
Dichlorodifluoromethane (Freon 12)	Chronic	2.0E-01	mg/kg/day	100%	2.0E-01	mg/kg/day	Decreased body weight	100/1	IRIS	8/27/2007
Ethylbenzene	Chronic	1.0E-01	mg/kg/day	100%	1.0E-01	mg/kg/day	Liver	1000/1	IRIS	8/27/2007
Isopropylbenzene	Chronic	1.0E-01	mg/kg/day	100%	1.0E-01	mg/kg/day	Kidney	1000/1	IRIS	8/27/2007
Methyl tert-butyl ether (MTBE)	Chronic	8.6E-01	mg/kg/day	100%	8.6E-01	mg/kg/day	Liver	100/1	Route Extrapolation	10/20/2004
Methylcyclohexane	Chronic	8.6E-01	mg/kg/day	100%	8.6E-01	mg/kg/day	Kidney	NA	Route Extrapolation	10/20/2004
Naphthalene	Chronic	2.0E-02	mg/kg/day	100%	2.0E-02	mg/kg/day	Decreased body weight	3000/1	IRIS	8/27/2007
n-Propylbenzene	Chronic	4.0E-02	mg/kg/day	100%	4.0E-02	mg/kg/day	NA	NA	NCEA	10/20/2004
p-Isopropyltoluene	Chronic	1.0E-01	mg/kg/day	100%	1.0E-01	mg/kg/day	NA	NA	Surrogate	NA
sec-Butylbenzene	Chronic	4.0E-02	mg/kg/day	100%	4.0E-02	mg/kg/day	NA	NA	NCEA	10/20/2004
Tetrahydrofuran	Chronic	2.1E-01	mg/kg/day	100%	2.1E-01	mg/kg/day	NA	NA	NCEA	10/20/2004
trans-1,2-Dichloroethene	Chronic	2.0E-02	mg/kg/day	100%	2.0E-02	mg/kg/day	Liver	1000	IRIS	8/27/2007
Vinyl chloride	Chronic	3.0E-03	mg/kg/day	100%	3.0E-03	mg/kg/day	Liver	30	IRIS	8/27/2007

TABLE 5.1

NON-CANCER TOXICITY DATA -- ORAL/DERMAL

Omega Chemical Superfund Site

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD		Oral Absorption Efficiency for Dermal	Absorbed RfD for Dermal		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfD:Target Organ(s)	
		Value	Units	(1)	Value	Units		(2)	Source(s)	Date(s) (MM/DD/YYYY)
m,p-Xylenes	Chronic	2.0E-01	mg/kg/day	100%	2.0E-01	mg/kg/day	Decreased body weight	1000	IRIS	8/27/2007
o-Xylene	Chronic	2.0E-01	mg/kg/day	100%	2.0E-01	mg/kg/day	Decreased body weight	1000	IRIS	8/27/2007
Xylenes, total	Chronic	2.0E-01	mg/kg/day	100%	2.0E-01	mg/kg/day	Decreased body weight	1000	IRIS	8/27/2007
1,1-Biphenyl	Chronic	5.0E-02	mg/kg/day	100%	5.0E-02	mg/kg/day	Kidney	100/10	IRIS	8/27/2007
1,2,3-Trichloropropane	Chronic	6.0E-03	mg/kg/day	100%	6.0E-03	mg/kg/day	Blood	NA	IRIS	8/27/2007
2-Methylnaphthalene	Chronic	4.0E-03	mg/kg/day	100%	4.0E-03	mg/kg/day	Lungs	1000/1	IRIS	8/27/2007
Acetophenone	Chronic	1.0E-01	mg/kg/day	100%	1.0E-01	mg/kg/day	NOAEL	3000/1	IRIS	8/27/2007
Bis(2-ethylhexyl)phthalate (DEHP)	Chronic	2.0E-02	mg/kg/day	100%	2.0E-02	mg/kg/day	Liver	1000/1	IRIS	8/27/2007
Caprolactam	Chronic	5.0E-01	mg/kg/day	100%	5.0E-01	mg/kg/day	Reproductive	100/1	IRIS	8/27/2007
Dimethyl phthalate	Chronic	1.0E+01	mg/kg/day	100%	1.0E+01	mg/kg/day	NA	NA	HEAST/R9	10/20/2004
Di-n-butyl phthalate	Chronic	1.0E-01	mg/kg/day	100%	1.0E-01	mg/kg/day	Decreased survival	1000/1	IRIS	8/27/2007
Isophorone	Chronic	2.0E-01	mg/kg/day	100%	2.0E-01	mg/kg/day	Kidney	1000/1	IRIS	8/27/2007
N-Nitrosodimethylamine	Chronic	8.0E-06	mg/kg/day	100%	8.0E-06	mg/kg/day	NA	NA	PPRTV	10/20/2004
Pentachlorophenol	Chronic	3.0E-02	mg/kg/day	100%	3.0E-02	mg/kg/day	Liver, Kidney	100/1	IRIS	8/27/2007
Phenanthrene	Chronic	3.0E-02	mg/kg/day	100%	3.0E-02	mg/kg/day	NA	0	Surrogate	NA
Phenol	Chronic	3.0E-01	mg/kg/day	100%	3.0E-01	mg/kg/day	Decreased body weight	300/1	IRIS	8/27/2007
Perchlorate	Chronic	7.0E-04	mg/kg/day	100%	7.0E-04	mg/kg/day	Thyroid	10/NA	IRIS	8/24/2007
Cyanide (total)	Chronic	2.0E-02	mg/kg/day	100%	2.0E-02	mg/kg/day	Decreased body weight	100/5	IRIS	8/24/2007
Arsenic	Chronic	3.0E-04	mg/kg/day	100%	3.0E-04	mg/kg/day	Skin	3/1	IRIS	8/27/2007
Hexavalent chromium	Chronic	3.0E-03	mg/kg/day	100%	3.0E-03	mg/kg/day	NOAEL	300/3	IRIS	8/27/2007
Nickel	Chronic	2.0E-02	mg/kg/day	100%	2.0E-02	mg/kg/day	Decreased body weight	300/1	IRIS	8/27/2007

TABLE 5.1

NON-CANCER TOXICITY DATA -- ORAL/DERMAL

Omega Chemical Superfund Site

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD		Oral Absorption Efficiency for Dermal (1)	Absorbed RfD for Dermal		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors (2)	RfD:Target Organ(s)	
		Value	Units		Value	Units			Source(s)	Date(s) (MM/DD/YYYY)

Notes:

(1) Source: Risk Assessment Guidance for Superfund. Volume 1: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim. Section 4.2 and Exhibit 4-1.

(2) Source: IRIS

Surrogates: Toxicity values for isopropylbenzene were used for p-Isopropyltoluene

Toxicity values for pyrene were used for phenanthrene

NA = Not available or not applicable

IRIS = Integrated Risk Information System; available at http://www.epa.gov/iris/

NCEA = National Center for Environmental Assessment; Values from EPA Region 9 PRG Table, October 2004

OEHHA = Office of Environmental Health and Hazard Assessment

TABLE 5.2

NON-CANCER TOXICITY DATA -- INHALATION

Omega Chemical Superfund Site

Chemical of Potential Concern	Chronic/ Subchronic	Inhalation RfD		Extrapolated RfD		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfD: Target Organ(s)	
		Value	Units	Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
1,1,1-Trichloroethane	Chronic	1.4E+00	mg/kg/day	NA	NA	Decreased body weight	1000/1	IRIS	11/12/2007
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	Chronic	8.6E+00	mg/kg/day	NA	NA	Neurological	10/1	HEAST	7/31/1997
1,1-Dichloroethene	Chronic	2.0E-02	mg/kg/day	NA	NA	Liver	100/1	OEHHA	6/12/2007
1,2-Dichloroethane	Chronic	1.4E-03	mg/kg/day	NA	NA	Decreased survival	NA	NCEA	10/20/2004
1,4-Dioxane (p-dioxane)	NA	8.6E-01	mg/kg/day	NA	NA	NA	NA	OEHHA	Cal
Acetone	Chronic	9.0E-01	mg/kg/day	NA	NA	Kidney	1000/1	Route Extrapolation	10/20/2004
Chloroform	Chronic	1.4E-02	mg/kg/day	NA	NA	Liver	1000/1	NCEA	10/20/2004
Methylene chloride	Chronic	8.6E-01	mg/kg/day	NA	NA	Liver	100/1	HEAST	Cal
Tetrachloroethene	Chronic	1.0E-02	mg/kg/day	NA	NA	Liver	1000/1	OEHHA	Cal
Toluene	Chronic	8.6E-02	mg/kg/day	NA	NA	Kidney	3000	OEHHA	Cal
Trichloroethene (TCE)	Chronic	1.7E-01	mg/kg/day	NA	NA	Liver	NA	OEHHA	6/12/2007
Trichlorofluoromethane (Freon 11)	Chronic	2.0E-01	mg/kg/day	NA	NA	General	1000/1	HEAST	7/31/1997
1,1,1,2-Tetrachloroethane	Chronic	3.0E-02	mg/kg/day	NA	NA	Kidney	3000/1	Route Extrapolation	10/20/2004
1,1,2,2-Tetrachloroethane	Chronic	6.0E-02	mg/kg/day	NA	NA	NA	NA	Route Extrapolation	10/20/2004
1,1,2-Trichloroethane	Chronic	4.0E-03	mg/kg/day	NA	NA	Blood	1000/1	Route Extrapolation	10/20/2004
1,1-Dichloroethane	Chronic	1.4E-01	mg/kg/day	NA	NA	NOEL	NA	HEAST	7/31/1997
1,2,4-Trichlorobenzene	Chronic	1.0E-03	mg/kg/day	NA	NA	Adrenal Glands	1000/1	PPRTV	10/20/2004
1,2,4-Trimethylbenzene	Chronic	1.7E-03	mg/kg/day	NA	NA	NA	NA	PPRTV	10/20/2004
1,2-Dibromo-3-chloropropane	Chronic	5.7E-05	mg/kg/day	NA	NA	Decreased survival	1000/1	IRIS	8/27/2007
1,2-Dichlorobenzene	Chronic	5.7E-02	mg/kg/day	NA	NA	NOAEL	1000/1	HEAST	7/31/1997
1,2-Dichloropropane	Chronic	1.1E-03	mg/kg/day	NA	NA	Decreased body weight	300/1	IRIS	8/27/2007
1,3,5-Trimethylbenzene	Chronic	1.7E-03	mg/kg/day	NA	NA	NA	NA	PPRTV	10/20/2004
1,3-Dichlorobenzene	Chronic	3.0E-02	mg/kg/day	NA	NA	NA	NA	Route Extrapolation	10/20/2004
1,4-Dichlorobenzene	Chronic	2.3E-01	mg/kg/day	NA	NA	Liver	NA	IRIS	8/27/2007
2-Butanone	Chronic	1.4E+00	mg/kg/day	NA	NA	Reduced birth weight	1000/1	IRIS	8/27/2007

TABLE 5.2

NON-CANCER TOXICITY DATA -- INHALATION

Omega Chemical Superfund Site

Chemical of Potential Concern	Chronic/ Subchronic	Inhalation RfD		Extrapolated RfD		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfD: Target Organ(s)	
		Value	Units	Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
2-Chlorotoluene	Chronic	2.0E-02	mg/kg/day	NA	NA	Decreased body weight	1000/1	Route Extrapolation	8/24/2007
4-Chlorotoluene	Chronic	2.0E-02	mg/kg/day	NA	NA	Decreased body weight	Surrogate	Surrogate	NA
4-Methyl-2-pentanone	Chronic	8.6E-01	mg/kg/day	NA	NA	Reduced birth weight	300/1	IRIS	8/27/2007
Benzene	Chronic	8.6E-03	mg/kg/day	NA	NA	Immune system	300/1	IRIS	8/27/2007
Bromochloromethane	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	Chronic	2.0E-02	mg/kg/day	NA	NA	Kidney	1000/1	Route Extrapolation	10/20/2004
Bromoform	Chronic	2.0E-02	mg/kg/day	NA	NA	Liver	1000/1	Route Extrapolation	10/20/2004
Bromomethane	Chronic	1.4E-03	mg/kg/day	NA	NA	GI	1000/1	IRIS	8/27/2007
Carbon disulfide	Chronic	2.0E-01	mg/kg/day	NA	NA	Teratogenicity	100/1	IRIS	8/27/2007
Carbon tetrachloride	Chronic	7.0E-04	mg/kg/day	NA	NA	Liver	1000/1	Route Extrapolation	10/20/2004
Chlorobenzene	Chronic	1.7E-02	mg/kg/day	NA	NA	Liver	NA	NCEA	10/20/2004
Chloroethane	Chronic	2.9E+00	mg/kg/day	NA	NA	Reproductive	300/1	IRIS	8/27/2007
Chloromethane	Chronic	2.6E-02	mg/kg/day	NA	NA	Brain	NA	IRIS	8/27/2007
cis-1,2-Dichloroethene	Chronic	1.0E-02	mg/kg/day	NA	NA	Liver	NA	Route Extrapolation	10/20/2004
Cyclohexane	Chronic	1.7E+00	mg/kg/day	NA	NA	Reduced birth weight	300/1	IRIS	8/27/2007
Dibromochloromethane	Chronic	2.0E-02	mg/kg/day	NA	NA	Liver	1000/1	Route Extrapolation	10/20/2004
Dichlorofluoromethane (Freon 21)	Chronic	5.7E-02	mg/kg/day	NA	NA	Decreased body weight	100	Surrogate	7/31/1997
Dichlorodifluoromethane (Freon 12)	Chronic	5.7E-02	mg/kg/day	NA	NA	Decreased body weight	100/1	HEAST	7/31/1997
Ethylbenzene	Chronic	2.9E-01	mg/kg/day	NA	NA	Liver	1000/1	IRIS	8/27/2007
Isopropylbenzene	Chronic	1.1E-01	mg/kg/day	NA	NA	Kidney	1000/1	IRIS	8/27/2007
Methyl tert-butyl ether (MTBE)	Chronic	8.6E-01	mg/kg/day	NA	NA	Liver	100/1	IRIS	8/27/2007
Methylcyclohexane	Chronic	8.6E-01	mg/kg/day	NA	NA	Kidney	NA	HEAST	7/31/1997

TABLE 5.2

NON-CANCER TOXICITY DATA -- INHALATION

Omega Chemical Superfund Site

Chemical of Potential Concern	Chronic/ Subchronic	Inhalation RfD		Extrapolated RfD		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfD: Target Organ(s)	
		Value	Units	Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
Naphthalene	Chronic	8.6E-04	mg/kg/day	NA	NA	Decreased body weight	3000/1	IRIS	8/27/2007
n-Propylbenzene	Chronic	4.0E-02	mg/kg/day	NA	NA	NA	NA	Route Extrapolation	10/20/2004
p-Isopropyltoluene	Chronic	1.1E-01	mg/kg/day	NA	NA	NA	NA	IRIS	NA
sec-Butylbenzene	Chronic	4.0E-02	mg/kg/day	NA	NA	NA	NA	Route Extrapolation	10/20/2004
Tetrahydrofuran	Chronic	8.6E-02	mg/kg/day	NA	NA	NA	NA	NCEA	10/20/2004
trans-1,2-Dichloroethene	Chronic	2.0E-02	mg/kg/day	NA	NA	Liver	1000	Route Extrapolation	10/20/2004
Vinyl chloride	Chronic	2.9E-02	mg/kg/day	NA	NA	Liver	30	IRIS	8/27/2007
m,p-Xylenes	Chronic	2.9E-02	mg/kg/day	NA	NA	Decreased body weight	1000	IRIS	8/27/2007
o-Xylene	Chronic	2.9E-02	mg/kg/day	NA	NA	Decreased body weight	1000	IRIS	8/27/2007
Xylenes, total	Chronic	2.9E-02	mg/kg/day	NA	NA	Decreased body weight	1000	IRIS	8/27/2007
1,1-Biphenyl	Chronic	5.0E-02	mg/kg/day	NA	NA	Kidney	100/10	Route Extrapolation	10/20/2004
1,2,3-Trichloropropane	Chronic	1.4E-03	mg/kg/day	NA	NA	Blood	NA	NCEA	10/20/2004
2-Methylnaphthalene	Chronic	4.0E-03	mg/kg/day	NA	NA	Lungs	1000/1	Route Extrapolation	10/20/2004
Acetophenone	Chronic	NA	NA	NA	NA	NOAEL	3000/1	NA	NA
Bis(2-ethylhexyl)phthalate (DEHP)	Chronic	2.0E-02	mg/kg/day	NA	NA	Liver	1000/1	Route Extrapolation	10/20/2004
Caprolactam	Chronic	5.0E-01	mg/kg/day	NA	NA	Reproductive	100/1	Route Extrapolation	10/20/2004
Dimethyl phthalate	Chronic	1.0E+01	mg/kg/day	NA	NA	NA	NA	Route Extrapolation	10/20/2004
Di-n-butyl phthalate	Chronic	1.0E-01	mg/kg/day	NA	NA	Decreased survival	1000/1	Route Extrapolation	10/20/2004
Isophorone	Chronic	2.0E-01	mg/kg/day	NA	NA	Kidney	1000/1	Route Extrapolation	10/20/2004
N-Nitrosodimethylamine	Chronic	8.0E-06	mg/kg/day	NA	NA	NA	NA	Route Extrapolation	10/20/2004
Pentachlorophenol	Chronic	3.0E-02	mg/kg/day	NA	NA	Liver, Kidney	100/1	Route Extrapolation	10/20/2004
Phenanthrene	Chronic	3.0E-02	mg/kg/day	NA	NA	NA	0	Route Extrapolation	NA

TABLE 5.2

NON-CANCER TOXICITY DATA -- INHALATION

Omega Chemical Superfund Site

Chemical of Potential Concern	Chronic/ Subchronic	Inhalation RfD		Extrapolated RfD		Primary Target Organ(s)	Combined Uncertainty/Modifying Factors	RfD: Target Organ(s)	
		Value	Units	Value	Units			Source(s)	Date(s) (MM/DD/YYYY)
Phenol	Chronic	5.7E-02	mg/kg/day	NA	NA	Decreased body weight	300/1	OEHHA	Cal
Perchlorate	Chronic	NA	NA	NA	NA	Thyroid	10/NA	IRIS	8/24/2007
Cyanide (total)	Chronic	NA	NA	NA	NA	Decreased body weight	100/5	IRIS	8/24/2007
Arsenic	Chronic	8.6E-06	mg/kg/day	NA	NA	Skin	3/1	OEHHA	8/27/2007
Hexavalent chromium	Chronic	2.2E-06	mg/kg/day	NA	NA	NOAEL	300/3	IRIS	8/27/2007
Nickel	Chronic	1.4E-05	mg/kg/day	NA	NA	Decreased body weight	300/1	OEHHA	Cal

Notes:

NA = Not available or not applicable

IRIS = Integrated Risk Information System; available at http://www.epa.gov/iris/

Route extrapolation: Values from EPA Region 9 PRG Table, October 2004

TABLE 6.1

CANCER TOXICITY DATA -- ORAL/DERMAL

Omega Chemical Superfund Site

Chemical of Potential Concern	Oral Cancer Slope Factor		Oral Absorption Efficiency for Dermal	Absorbed Cancer Slope Factor for Dermal		Weight of Evidence/ Cancer Guideline Description	Oral CSF	
	Value	Units	(1)	Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
1,1,1-Trichloroethane	NA	NA	NA	NA	NA	NA	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	8/27/2007
1,2-Dichloroethane	9.1E-02	1/mg/kg/day	100%	9.1E-02	1/mg/kg/day	B2	IRIS	8/27/2007
1,4-Dioxane (p-dioxane)	2.7E-02	1/mg/kg/day	100%	2.7E-02	1/mg/kg/day	NA	OEHHA	Cal
Acetone	NA	NA	NA	NA	NA	NA	NA	NA
Chloroform	3.1E-02	1/mg/kg/day	100%	3.1E-02	1/mg/kg/day	B2	OEHHA	Cal
Methylene chloride	1.4E-02	1/mg/kg/day	100%	1.4E-02	1/mg/kg/day	B2	OEHHA	Cal
Tetrachloroethene	5.4E-01	1/mg/kg/day	100%	5.4E-01	1/mg/kg/day	NA	OEHHA	Cal
Toluene	NA	NA	NA	NA	NA	NA	NA	NA
Trichloroethene (TCE)	1.3E-02	1/mg/kg/day	100%	1.3E-02	1/mg/kg/day	B2	OEHHA	6/12/2007
Trichlorofluoromethane (Freon 11)	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1,2-Tetrachloroethane	2.6E-02	1/mg/kg/day	100%	2.6E-02	1/mg/kg/day	C	IRIS	8/24/2007
1,1,2,2-Tetrachloroethane	2.7E-01	1/mg/kg/day	100%	2.7E-01	1/mg/kg/day	C	OEHHA	Cal
1,1,2-Trichloroethane	7.2E-02	1/mg/kg/day	100%	7.2E-02	1/mg/kg/day	NA	OEHHA	Cal
1,1-Dichloroethane	5.7E-03	1/mg/kg/day	100%	5.7E-03	1/mg/kg/day	C	OEHHA	Cal
1,2,4-Trichlorobenzene	3.6E-03	1/mg/kg/day	100%	3.6E-03	1/mg/kg/day	D	OEHHA	Cal
1,2,4-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	7.0E+00	1/mg/kg/day	100%	7.0E+00	1/mg/kg/day	NA	OEHHA	Cal
1,2-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	6.8E-02	1/mg/kg/day	100%	6.8E-02	1/mg/kg/day	NA	HEAST	7/31/1997
1,3,5-Trimethylbenzene	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	2.4E-02	1/mg/kg/day	100%	2.4E-02	1/mg/kg/day	NA	HEAST	10/20/2004
2-Butanone	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorotoluene	NA	NA	NA	NA	NA	NA	IRIS	8/24/2007
4-Chlorotoluene	NA	NA	NA	NA	NA	NA	Surrogate	NA
4-Methyl-2-pentanone	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	1.0E-01	1/mg/kg/day	100%	1.0E-01	1/mg/kg/day	A	OEHHA	Cal
Bromochloromethane	NA	NA	NA	NA	NA	NA	IRIS	NA

TABLE 6.1

CANCER TOXICITY DATA -- ORAL/DERMAL

Omega Chemical Superfund Site

Chemical of Potential Concern	Oral Cancer Slope Factor		Oral Absorption Efficiency for Dermal	Absorbed Cancer Slope Factor for Dermal		Weight of Evidence/ Cancer Guideline Description	Oral CSF	
	Value	Units	(1)	Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
Bromodichloromethane	1.3E-01	1/mg/kg/day	100%	1.3E-01	1/mg/kg/day	D	OEHHA	Cal
Bromoform	7.9E-03	1/mg/kg/day	100%	7.9E-03	1/mg/kg/day	B2	IRIS	8/27/2007
Bromomethane	NA	NA	NA	NA	NA	NA	NA	NA
Carbon disulfide	NA	NA	NA	NA	NA	NA	NA	NA
Carbon tetrachloride	1.5E-01	1/mg/kg/day	100%	1.5E-01	1/mg/kg/day	B2	OEHHA	Cal
Chlorobenzene	NA	NA	NA	NA	NA	NA	NA	NA
Chloroethane	2.9E-03	1/mg/kg/day	100%	2.9E-03	1/mg/kg/day	NA	NCEA	10/20/2004
Chloromethane	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	NA	NA	NA	NA	NA	NA	NA	NA
Dibromochloromethane	9.4E-02	1/mg/kg/day	100%	9.4E-02	1/mg/kg/day	C	OEHHA	Cal
Dichlorofluoromethane (Freon 21)	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane (Freon 12)	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	1.1E-02	1/mg/kg/day	100%	1.1E-02	1/mg/kg/day	2B	OEHHA	11/15/2007
Isopropylbenzene	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert-butyl ether (MTBE)	1.8E-03	1/mg/kg/day	100%	1.8E-03	1/mg/kg/day	NA	OEHHA	Cal
Methylcyclohexane	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA
n-Propylbenzene	NA	NA	NA	NA	NA	NA	NA	NA
p-Isopropyltoluene	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	NA	NA	NA	NA	NA	NA	NA	NA
Tetrahydrofuran	7.6E-03	1/mg/kg/day	100%	7.6E-03	1/mg/kg/day	NA	NCEA	10/20/2004
trans-1,2-Dichloroethene	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	1.5E+00	1/mg/kg/day	100%	1.5E+00	1/mg/kg/day	A	IRIS	8/27/2007
m,p-Xylenes	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	NA	NA	NA	NA	NA	NA	NA	NA
Xylenes, total	NA	NA	NA	NA	NA	NA	NA	NA
1,1-Biphenyl	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	2.0E+00	1/mg/kg/day	100%	2.0E+00	1/mg/kg/day	NA	NCEA	10/20/2004
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA
Acetophenone	NA	NA	NA	NA	NA	NA	NA	NA

TABLE 6.1

CANCER TOXICITY DATA -- ORAL/DERMAL

Omega Chemical Superfund Site

Chemical of Potential Concern	Oral Cancer Slope Factor		Oral Absorption Efficiency for Dermal	Absorbed Cancer Slope Factor for Dermal		Weight of Evidence/ Cancer Guideline Description	Oral CSF	
	Value	Units	(1)	Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
Bis(2-ethylhexyl)phthalate (DEHP)	1.4E-02	1/mg/kg/day	100%	1.4E-02	1/mg/kg/day	B2	IRIS	8/27/2007
Caprolactam	NA	NA	NA	NA	NA	NA	NA	NA
Dimethyl phthalate	NA	NA	NA	NA	NA	NA	IRIS	8/27/2007
Di-n-butyl phthalate	NA	NA	NA	NA	NA	NA	NA	NA
Isophorone	9.5E-04	1/mg/kg/day	100%	9.5E-04	1/mg/kg/day	C	IRIS	8/27/2007
N-Nitrosodimethylamine	5.1E+01	1/mg/kg/day	100%	5.1E+01	1/mg/kg/day	B2	IRIS	10/20/2004
Pentachlorophenol	1.2E-01	1/mg/kg/day	100%	1.2E-01	1/mg/kg/day	B2	IRIS	8/27/2007
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA
Phenol	NA	NA	NA	NA	NA	NA	NA	NA
Perchlorate	NA	NA	NA	NA	NA	NA	IRIS	8/24/2007
Cyanide (total)	NA	NA	NA	NA	NA	NA	IRIS	8/24/2007
Arsenic	9.5E+00	1/mg/kg/day	100%	9.5E+00	1/mg/kg/day	A	OEHHA	8/27/2007
Hexavalent chromium	NA	NA	NA	NA	NA	NA	NA	NA
Nickel	NA	NA	NA	NA	NA	NA	NA	NA

Notes:

NA = Not available or not applicable

IRIS = Integrated Risk Information System; available at http://www.epa.gov/iris/

HEAST = Health Effects Assessment Summary Table(s); Values from EPA Region 9 PRG Table, October 2004

OEHHA = Office of Environmental Health and Hazard Assessment; Online database http://www.oehha.ca.gov/risk/ChemicalDB/index.asp

Route extrapolation: Values from EPA Region 9 PRG Table, October 2004

TABLE 6.2

CANCER TOXICITY DATA -- INHALATION

Omega Chemical Superfund Site

Chemical of Potential Concern	Unit Risk		Inhalation Cancer Slope Factor		Weight of Evidence/ Cancer Guideline Description	Unit Risk : Inhalation CSF	
	Value	Units	Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
1,1,1-Trichloroethane	NA		NA	NA	D	NA	NA
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NA		NA	NA	NA	NA	NA
1,1-Dichloroethene	NA		NA	NA	C	IRIS	8/27/2007
1,2-Dichloroethane	2.6E-05	ug/m3	9.1E-02	1/mg/kg/day	B2	IRIS	8/27/2007
1,4-Dioxane (p-dioxane)	7.7E-06	ug/m3	2.7E-02	1/mg/kg/day	NA	OEHHA	Cal
Acetone	NA		NA	NA	D	NA	NA
Chloroform	NA		8.1E-02	1/mg/kg/day	B2	IRIS	8/27/2007
Methylene chloride	1.0E-06	ug/m3	3.5E-03	1/mg/kg/day	B2	OEHHA	Cal
Tetrachloroethene	5.9E-06	ug/m3	2.1E-02	1/mg/kg/day	NA	OEHHA	Cal
Toluene	NA		NA	NA	D	NA	NA
Trichloroethene (TCE)	2.0E-06	ug/m3	7.0E-03	1/mg/kg/day	B2	OEHHA	6/12/2007
Trichlorofluoromethane (Freon 11)	NA		NA	NA	D	NA	NA
1,1,1,2-Tetrachloroethane	7.4E-06	ug/m3	2.6E-02	1/mg/kg/day	C	IRIS	8/24/2007
1,1,2,2-Tetrachloroethane	5.8E-05	ug/m3	2.0E-01	1/mg/kg/day	C	OEHHA	8/27/2007
1,1,2-Trichloroethane	1.6E-05	ug/m3	5.7E-02	1/mg/kg/day	NA	OEHHA	Cal
1,1-Dichloroethane	1.6E-06	ug/m3	5.7E-03	1/mg/kg/day	C	OEHHA	Cal
1,2,4-Trichlorobenzene	NA		NA	NA	D	NA	NA
1,2,4-Trimethylbenzene	NA		NA	NA	NA	NA	NA
1,2-Dibromo-3-chloropropane	1.9E-03	ug/m3	7.0E+00	1/mg/kg/day	NA	OEHHA	Cal
1,2-Dichlorobenzene	NA		NA	NA	D	NA	NA
1,2-Dichloropropane	NA		6.8E-02	1/mg/kg/day	NA	Route Extrapolation	10/20/2004
1,3,5-Trimethylbenzene	NA		NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NA		NA	NA	D	NA	NA
1,4-Dichlorobenzene	1.1E-05	ug/m3	4.0E-02	1/mg/kg/day	NA	OEHHA	6/12/2007
2-Butanone	NA		NA	NA	NA	NA	NA
2-Chlorotoluene	NA		NA	NA	NA	IRIS	8/24/2007
4-Chlorotoluene	NA		NA	NA	NA	Surrogate	NA
4-Methyl-2-pentanone	NA		NA	NA	NA	NA	NA

TABLE 6.2

CANCER TOXICITY DATA -- INHALATION

Omega Chemical Superfund Site

Chemical of Potential Concern	Unit Risk		Inhalation Cancer Slope Factor		Weight of Evidence/ Cancer Guideline Description	Unit Risk : Inhalation CSF	
	Value	Units	Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
Benzene	2.9E-05	ug/m3	1.0E-01	1/mg/kg/day	A	OEHHA	Cal
Bromochloromethane	NA		NA	NA	D	NA	NA
Bromodichloromethane	3.7E-05	ug/m3	1.3E-01	1/mg/kg/day	D	OEHHA	Cal
Bromoform	1.1E-06	ug/m3	3.9E-03	1/mg/kg/day	B2	IRIS	8/27/2007
Bromomethane	NA		NA	NA	D	NA	NA
Carbon disulfide	NA		NA	NA	NA	NA	NA
Carbon tetrachloride	4.2E-05	ug/m3	1.5E-01	1/mg/kg/day	B2	OEHHA	Cal
Chlorobenzene	NA		NA	NA	D	NA	NA
Chloroethane	NA		2.9E-03	1/mg/kg/day	NA	Route Extrapolation	10/20/2004
Chloromethane	NA		NA	NA	D	IRIS	NA
cis-1,2-Dichloroethene	NA		NA	NA	D	IRIS	NA
Cyclohexane	NA		NA	NA	NA	NA	NA
Dibromochloromethane	2.7E-05	ug/m3	9.4E-02	1/mg/kg/day	C	OEHHA	Cal
Dichlorofluoromethane (Freon 21)	NA		NA	NA	D	NA	NA
Dichlorodifluoromethane (Freon 12)	NA		NA	NA	NA	NA	NA
Ethylbenzene	2.5E-06	ug/m3	8.7E-03	1/mg/kg/day	2B	OEHHA	11/15/2007
Isopropylbenzene	NA		NA	NA	D	NA	NA
Methyl tert-butyl ether (MTBE)	2.6E-07	ug/m3	9.1E-04	1/mg/kg/day	NA	OEHHA	Cal
Methylcyclohexane	NA		NA	NA	NA	NA	NA
Naphthalene	3.4E-05	ug/m3	1.2E-01	1/mg/kg/day	C	OEHHA	Cal
n-Propylbenzene	NA		NA	NA	NA	NA	NA
p-Isopropyltoluene	NA		NA	NA	NA	NA	NA
sec-Butylbenzene	NA		NA	NA	NA	NA	NA
Tetrahydrofuran	NA		6.8E-03	1/mg/kg/day	NA	NCEA	10/20/2004
trans-1,2-Dichloroethene	NA		NA	NA	NA	NA	NA
Vinyl chloride	7.8E-05	ug/m3	2.7E-01	1/mg/kg/day	A	OEHHA	Cal
m,p-Xylenes	NA		NA	NA	NA	NA	NA
o-Xylene	NA		NA	NA	E	NA	NA

TABLE 6.2

CANCER TOXICITY DATA -- INHALATION

Omega Chemical Superfund Site

Chemical of Potential Concern	Unit Risk		Inhalation Cancer Slope Factor		Weight of Evidence/ Cancer Guideline Description	Unit Risk : Inhalation CSF	
	Value	Units	Value	Units		Source(s)	Date(s) (MM/DD/YYYY)
Xylenes, total	NA		NA	NA	NA	NA	NA
1,1-Biphenyl	NA		NA	NA	D	NA	NA
1,2,3-Trichloropropane	NA		2.0E+00	1/mg/kg/day	NA	NA	NA
2-Methylnaphthalene	NA		NA	NA	NA	NA	NA
Acetophenone	NA		NA	NA	D	NA	NA
Bis(2-ethylhexyl)phthalate (DEHP)	NA		1.4E-02	1/mg/kg/day	B2	Route Extrapolation	10/20/2004
Caprolactam	NA		NA	NA	NA	NA	NA
Dimethyl phthalate	NA		NA	NA	D	NA	NA
Di-n-butyl phthalate	NA		NA	NA	NA	NA	NA
Isophorone	NA		9.5E-04	1/mg/kg/day	C	Route Extrapolation	10/20/2004
N-Nitrosodimethylamine	4.6E-03	ug/m3	1.6E+01	1/mg/kg/day	B2	OEHHA	6/12/2007
Pentachlorophenol	NA		1.2E-01	1/mg/kg/day	B2	Route Extrapolation	10/20/2004
Phenanthrene	NA		NA	NA	D	NA	NA
Phenol	NA		NA	NA	D	NA	NA
Perchlorate	NA		NA	NA	D	IRIS	8/24/2007
Cyanide (total)	NA		NA	NA	D	IRIS	8/24/2007
Arsenic	4.3E-03	ug/m3	1.5E+01	1/mg/kg/day	A	IRIS	8/27/2007
Hexavalent chromium	1.5E-01	ug/m3	5.1E+02	1/mg/kg/day	D	OEHHA	8/27/2007
Nickel	2.6E-04	ug/m3	9.1E-01	1/mg/kg/day	B2	OEHHA	Cal

Notes:

NA = Not available or not applicable

IRIS = Integrated Risk Information System; available at http://www.epa.gov/iris/

OEHHA = Office of Environmental Health and Hazard Assessment

Route extrapolation: Values from EPA Region 9 PRG Table, October 2004

Table 7a.1.1

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Ingestion	1,1,1-Trichloroethane	2.5E+00	mg/L	2.3E-02	mg/kg/day	NA	NA	--
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	9.3E-03	mg/kg/day	NA	NA	--
				1,1-Dichloroethene	1.0E+00	mg/L	9.8E-03	mg/kg/day	NA	NA	--
				1,2-Dichloroethane	2.5E-01	mg/L	2.3E-03	mg/kg/day	9.1E-02	1/mg/kg/day	2.1E-04
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	3.3E-02	mg/kg/day	2.7E-02	1/mg/kg/day	9.0E-04
				Acetone	2.0E+00	mg/L	1.9E-02	mg/kg/day	NA	NA	--
				Chloroform	5.8E-01	mg/L	5.5E-03	mg/kg/day	3.1E-02	1/mg/kg/day	1.7E-04
				Methylene chloride	1.9E+00	mg/L	1.8E-02	mg/kg/day	1.4E-02	1/mg/kg/day	2.5E-04
				Tetrachloroethene	6.5E+01	mg/L	6.1E-01	mg/kg/day	5.4E-01	1/mg/kg/day	3.3E-01
				Toluene	7.1E-02	mg/L	6.7E-04	mg/kg/day	NA	NA	--
				Trichloroethene (TCE)	1.3E+00	mg/L	1.2E-02	mg/kg/day	1.3E-02	1/mg/kg/day	1.6E-04
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	3.4E-03	mg/kg/day	NA	NA	--
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	3.4E-05	mg/kg/day	2.6E-02	1/mg/kg/day	8.8E-07
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	6.3E-06	mg/kg/day	2.7E-01	1/mg/kg/day	1.7E-06
				1,1,2-Trichloroethane	1.8E-01	mg/L	1.7E-03	mg/kg/day	7.2E-02	1/mg/kg/day	1.2E-04
				1,1-Dichloroethane	3.8E-02	mg/L	3.6E-04	mg/kg/day	5.7E-03	1/mg/kg/day	2.0E-06
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	5.0E-06	mg/kg/day	3.6E-03	1/mg/kg/day	1.8E-08
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	7.1E-05	mg/kg/day	NA	NA	--
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	5.2E-05	mg/kg/day	7.0E+00	1/mg/kg/day	3.6E-04
				1,2-Dichlorobenzene	1.8E-03	mg/L	1.7E-05	mg/kg/day	NA	NA	--
				1,2-Dichloropropane	1.6E-03	mg/L	1.5E-05	mg/kg/day	6.8E-02	1/mg/kg/day	1.0E-06
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	1.1E-05	mg/kg/day	NA	NA	--
				1,3-Dichlorobenzene	4.2E-04	mg/L	4.0E-06	mg/kg/day	NA	NA	--
				1,4-Dichlorobenzene	7.1E-04	mg/L	6.7E-06	mg/kg/day	2.4E-02	1/mg/kg/day	1.6E-07
				2-Butanone	3.3E-01	mg/L	3.1E-03	mg/kg/day	NA	NA	--
				2-Chlorotoluene	4.5E-04	mg/L	4.2E-06	mg/kg/day	NA	NA	--
				4-Chlorotoluene	4.6E-04	mg/L	4.3E-06	mg/kg/day	NA	NA	--
				4-Methyl-2-pentanone	7.8E-02	mg/L	7.3E-04	mg/kg/day	NA	NA	--
				Benzene	1.9E-02	mg/L	1.8E-04	mg/kg/day	1.0E-01	1/mg/kg/day	1.8E-05

Table 7a.1.1

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	1.1E-04	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	4.1E-06	mg/kg/day	1.3E-01	1/mg/kg/day	5.4E-07
				Bromoform	2.8E-03	mg/L	2.6E-05	mg/kg/day	7.9E-03	1/mg/kg/day	2.1E-07
				Bromomethane	2.6E-02	mg/L	2.5E-04	mg/kg/day	NA	NA	--
				Carbon disulfide	9.4E-02	mg/L	8.8E-04	mg/kg/day	NA	NA	--
				Carbon tetrachloride	3.1E-04	mg/L	2.9E-06	mg/kg/day	1.5E-01	1/mg/kg/day	4.4E-07
				Chlorobenzene	3.5E-02	mg/L	3.3E-04	mg/kg/day	NA	NA	--
				Chloroethane	2.0E-04	mg/L	1.9E-06	mg/kg/day	2.9E-03	1/mg/kg/day	5.4E-09
				Chloromethane	9.7E-04	mg/L	9.1E-06	mg/kg/day	NA	NA	--
				cis-1,2-Dichloroethene	1.4E-02	mg/L	1.4E-04	mg/kg/day	NA	NA	--
				Cyclohexane	6.3E-04	mg/L	5.9E-06	mg/kg/day	NA	NA	--
				Dibromochloromethane	1.2E-03	mg/L	1.1E-05	mg/kg/day	9.4E-02	1/mg/kg/day	1.1E-06
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	8.1E-05	mg/kg/day	NA	NA	--
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	1.5E-05	mg/kg/day	NA	NA	--
				Ethylbenzene	1.2E-03	mg/L	1.1E-05	mg/kg/day	1.1E-02	1/mg/kg/day	1.2E-07
				Isopropylbenzene	5.3E-04	mg/L	5.0E-06	mg/kg/day	NA	NA	--
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	4.4E-05	mg/kg/day	1.8E-03	1/mg/kg/day	7.9E-08
				Methylcyclohexane	8.5E-04	mg/L	8.0E-06	mg/kg/day	NA	NA	--
				Naphthalene	5.6E-04	mg/L	5.2E-06	mg/kg/day	NA	NA	--
				n-Propylbenzene	5.2E-04	mg/L	4.9E-06	mg/kg/day	NA	NA	--
				p-Isopropyltoluene	4.8E-04	mg/L	4.5E-06	mg/kg/day	NA	NA	--
				sec-Butylbenzene	3.6E-04	mg/L	3.4E-06	mg/kg/day	NA	NA	--
				Tetrahydrofuran	6.5E-01	mg/L	6.1E-03	mg/kg/day	7.6E-03	1/mg/kg/day	4.6E-05
				trans-1,2-Dichloroethene	3.1E-02	mg/L	2.9E-04	mg/kg/day	NA	NA	--
				Vinyl chloride	6.8E-04	mg/L	6.4E-06	mg/kg/day	1.5E+00	1/mg/kg/day	9.6E-06
				m,p-Xylenes	1.0E-02	mg/L	9.5E-05	mg/kg/day	NA	NA	--
				o-Xylene	8.1E-03	mg/L	7.6E-05	mg/kg/day	NA	NA	--
				Xylenes, total	3.6E-02	mg/L	3.3E-04	mg/kg/day	NA	NA	--

Table 7a.1.1

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	7.5E-06	mg/kg/day	NA	NA	--
				1,2,3-Trichloropropane	1.4E-05	mg/L	1.3E-07	mg/kg/day	2.0E+00	1/mg/kg/day	2.6E-07
				2-Methylnaphthalene	2.8E-03	mg/L	2.6E-05	mg/kg/day	NA	NA	--
				Acetophenone	2.8E-03	mg/L	2.6E-05	mg/kg/day	NA	NA	--
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	1.1E-04	mg/kg/day	1.4E-02	1/mg/kg/day	1.5E-06
				Caprolactam	3.8E-03	mg/L	3.6E-05	mg/kg/day	NA	NA	--
				Dimethyl phthalate	6.8E-04	mg/L	6.4E-06	mg/kg/day	NA	NA	--
				Di-n-butyl phthalate	1.0E-03	mg/L	9.4E-06	mg/kg/day	NA	NA	--
				Isophorone	4.9E-03	mg/L	4.6E-05	mg/kg/day	9.5E-04	1/mg/kg/day	4.4E-08
				N-Nitrosodimethylamine	1.9E-04	mg/L	1.8E-06	mg/kg/day	5.1E+01	1/mg/kg/day	9.1E-05
				Pentachlorophenol	3.0E-04	mg/L	2.8E-06	mg/kg/day	1.2E-01	1/mg/kg/day	3.4E-07
				Phenanthrene	6.9E-05	mg/L	6.5E-07	mg/kg/day	NA	NA	--
				Phenol	9.8E-03	mg/L	9.2E-05	mg/kg/day	NA	NA	--
				Perchlorate	3.2E-03	mg/L	3.0E-05	mg/kg/day	NA	NA	--
				Cyanide (total)	3.4E-03	mg/L	3.2E-05	mg/kg/day	NA	NA	--
				Arsenic	1.4E-02	mg/L	1.3E-04	mg/kg/day	9.5E+00	1/mg/kg/day	1.2E-03
				Hexavalent chromium	9.3E-03	mg/L	8.7E-05	mg/kg/day	NA	NA	--
				Nickel	3.4E-02	mg/L	3.2E-04	mg/kg/day	NA	NA	--
			Exp. Route Total								3.3E-01

Table 7a.1.1

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Dermal	1,1,1-Trichloroethane	2.5E+00	mg/L	4.4E-03	mg/kg/day	NA	NA	--
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	3.3E-03	mg/kg/day	NA	NA	--
				1,1-Dichloroethene	1.0E+00	mg/L	1.4E-03	mg/kg/day	NA	NA	--
				1,2-Dichloroethane	2.5E-01	mg/L	1.8E-04	mg/kg/day	9.1E-02	1/mg/kg/day	1.6E-05
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	1.2E-04	mg/kg/day	2.7E-02	1/mg/kg/day	3.2E-06
				Acetone	2.0E+00	mg/L	9.1E-05	mg/kg/day	NA	NA	--
				Chloroform	5.8E-01	mg/L	4.9E-04	mg/kg/day	3.1E-02	1/mg/kg/day	1.5E-05
				Methylene chloride	1.9E+00	mg/L	6.7E-04	mg/kg/day	1.4E-02	1/mg/kg/day	9.4E-06
				Tetrachloroethene	6.5E+01	mg/L	3.6E-01	mg/kg/day	5.4E-01	1/mg/kg/day	1.9E-01
				Toluene	7.1E-02	mg/L	2.3E-04	mg/kg/day	NA	NA	--
				Trichloroethene (TCE)	1.3E+00	mg/L	2.1E-03	mg/kg/day	1.3E-02	1/mg/kg/day	2.8E-05
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	6.3E-04	mg/kg/day	NA	NA	--
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	1.3E-05	mg/kg/day	2.6E-02	1/mg/kg/day	3.5E-07
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	7.9E-07	mg/kg/day	2.7E-01	1/mg/kg/day	2.1E-07
				1,1,2-Trichloroethane	1.8E-01	mg/L	1.6E-04	mg/kg/day	7.2E-02	1/mg/kg/day	1.1E-05
				1,1-Dichloroethane	3.8E-02	mg/L	2.8E-05	mg/kg/day	5.7E-03	1/mg/kg/day	1.6E-07
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	6.5E-06	mg/kg/day	3.6E-03	1/mg/kg/day	2.3E-08
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	7.9E-05	mg/kg/day	NA	NA	--
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	9.9E-06	mg/kg/day	7.0E+00	1/mg/kg/day	6.9E-05
				1,2-Dichlorobenzene	1.8E-03	mg/L	1.1E-05	mg/kg/day	NA	NA	--
				1,2-Dichloropropane	1.6E-03	mg/L	1.5E-06	mg/kg/day	6.8E-02	1/mg/kg/day	1.0E-07
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	8.9E-06	mg/kg/day	NA	NA	--
				1,3-Dichlorobenzene	4.2E-04	mg/L	3.7E-06	mg/kg/day	NA	NA	--
				1,4-Dichlorobenzene	7.1E-04	mg/L	4.4E-06	mg/kg/day	2.4E-02	1/mg/kg/day	1.1E-07
				2-Butanone	3.3E-01	mg/L	2.9E-05	mg/kg/day	NA	NA	--
				2-Chlorotoluene	4.5E-04	mg/L	5.1E-06	mg/kg/day	NA	NA	--
				4-Chlorotoluene	4.6E-04	mg/L	6.2E-07	mg/kg/day	NA	NA	--
				4-Methyl-2-pentanone	7.8E-02	mg/L	2.3E-05	mg/kg/day	NA	NA	--
				Benzene	1.9E-02	mg/L	2.7E-05	mg/kg/day	1.0E-01	1/mg/kg/day	2.7E-06

Table 7a.1.1

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	4.9E-06	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	3.4E-07	mg/kg/day	1.3E-01	1/mg/kg/day	4.4E-08
				Bromoform	2.8E-03	mg/L	1.8E-06	mg/kg/day	7.9E-03	1/mg/kg/day	1.4E-08
				Bromomethane	2.6E-02	mg/L	7.9E-06	mg/kg/day	NA	NA	--
				Carbon disulfide	9.4E-02	mg/L	1.5E-04	mg/kg/day	NA	NA	--
				Carbon tetrachloride	3.1E-04	mg/L	7.8E-07	mg/kg/day	1.5E-01	1/mg/kg/day	1.2E-07
				Chlorobenzene	3.5E-02	mg/L	1.2E-04	mg/kg/day	NA	NA	--
				Chloroethane	2.0E-04	mg/L	1.1E-07	mg/kg/day	2.9E-03	1/mg/kg/day	3.2E-10
				Chloromethane	9.7E-04	mg/L	2.7E-07	mg/kg/day	NA	NA	--
				cis-1,2-Dichloroethene	1.4E-02	mg/L	1.7E-05	mg/kg/day	NA	NA	--
				Cyclohexane	6.3E-04	mg/L	6.2E-06	mg/kg/day	NA	NA	--
				Dibromochloromethane	1.2E-03	mg/L	7.6E-07	mg/kg/day	9.4E-02	1/mg/kg/day	7.1E-08
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	1.1E-05	mg/kg/day	NA	NA	--
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	1.7E-06	mg/kg/day	NA	NA	--
				Ethylbenzene	1.2E-03	mg/L	6.5E-06	mg/kg/day	1.1E-02	1/mg/kg/day	7.2E-08
				Isopropylbenzene	5.3E-04	mg/L	5.8E-06	mg/kg/day	NA	NA	--
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	1.0E-06	mg/kg/day	1.8E-03	1/mg/kg/day	1.8E-09
				Methylcyclohexane	8.5E-04	mg/L	1.0E-05	mg/kg/day	NA	NA	--
				Naphthalene	5.6E-04	mg/L	3.5E-06	mg/kg/day	NA	NA	--
				n-Propylbenzene	5.2E-04	mg/L	4.6E-06	mg/kg/day	NA	NA	--
				p-Isopropyltoluene	4.8E-04	mg/L	8.0E-06	mg/kg/day	NA	NA	--
				sec-Butylbenzene	3.6E-04	mg/L	5.5E-06	mg/kg/day	NA	NA	--
				Tetrahydrofuran	6.5E-01	mg/L	1.6E-04	mg/kg/day	7.6E-03	1/mg/kg/day	1.2E-06
				trans-1,2-Dichloroethene	3.1E-02	mg/L	2.6E-05	mg/kg/day	NA	NA	--
				Vinyl chloride	6.8E-04	mg/L	3.4E-07	mg/kg/day	1.5E+00	1/mg/kg/day	5.1E-07
				m,p-Xylenes	1.0E-02	mg/L	6.1E-05	mg/kg/day	NA	NA	--
				o-Xylene	8.1E-03	mg/L	6.5E-05	mg/kg/day	NA	NA	--
				Xylenes, total	3.6E-02	mg/L	2.2E-04	mg/kg/day	NA	NA	--

Table 7a.1.1

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	1.1E-05	mg/kg/day	NA	NA	--
				1,2,3-Trichloropropane	1.4E-05	mg/L	2.0E-08	mg/kg/day	2.0E+00	1/mg/kg/day	4.0E-08
				2-Methylnaphthalene	2.8E-03	mg/L	3.6E-05	mg/kg/day	NA	NA	--
				Acetophenone	2.8E-03	mg/L	1.6E-06	mg/kg/day	NA	NA	--
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	2.1E-04	mg/kg/day	1.4E-02	1/mg/kg/day	2.9E-06
				Caprolactam	3.8E-03	mg/L	4.6E-07	mg/kg/day	NA	NA	--
				Dimethyl phthalate	6.8E-04	mg/L	2.3E-07	mg/kg/day	NA	NA	--
				Di-n-butyl phthalate	1.0E-03	mg/L	7.5E-06	mg/kg/day	NA	NA	--
				Isophorone	4.9E-03	mg/L	2.3E-06	mg/kg/day	9.5E-04	1/mg/kg/day	2.2E-09
				N-Nitrosodimethylamine	1.9E-04	mg/L	4.7E-09	mg/kg/day	5.1E+01	1/mg/kg/day	2.4E-07
				Pentachlorophenol	3.0E-04	mg/L	3.4E-05	mg/kg/day	1.2E-01	1/mg/kg/day	4.1E-06
				Phenanthrene	6.9E-05	mg/L	1.8E-06	mg/kg/day	NA	NA	--
				Phenol	9.8E-03	mg/L	4.5E-06	mg/kg/day	NA	NA	--
				Perchlorate	3.2E-03	mg/L	1.6E-07	mg/kg/day	NA	NA	--
				Cyanide (total)	3.4E-03	mg/L	1.7E-07	mg/kg/day	NA	NA	--
				Arsenic	1.4E-02	mg/L	6.6E-07	mg/kg/day	9.5E+00	1/mg/kg/day	6.3E-06
				Hexavalent chromium	9.3E-03	mg/L	9.1E-07	mg/kg/day	NA	NA	--
				Nickel	3.4E-02	mg/L	3.3E-07	mg/kg/day	NA	NA	--
			Exp. Route Total								1.9E-01

Table 7a.1.1

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Inhalation	1,1,1-Trichloroethane	2.5E+00	mg/L	1.2E-01	mg/kg/day	NA	NA	--
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	4.7E-02	mg/kg/day	NA	NA	--
				1,1-Dichloroethene	1.0E+00	mg/L	4.9E-02	mg/kg/day	NA	NA	--
				1,2-Dichloroethane	2.5E-01	mg/L	1.2E-02	mg/kg/day	9.1E-02	1/mg/kg/day	1.0E-03
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	NV	NA	2.7E-02	1/mg/kg/day	--
				Acetone	2.0E+00	mg/L	9.5E-02	mg/kg/day	NA	NA	--
				Chloroform	5.8E-01	mg/L	2.7E-02	mg/kg/day	8.1E-02	1/mg/kg/day	2.2E-03
				Methylene chloride	1.9E+00	mg/L	9.1E-02	mg/kg/day	3.5E-03	1/mg/kg/day	3.2E-04
				Tetrachloroethene	6.5E+01	mg/L	3.1E+00	mg/kg/day	2.1E-02	1/mg/kg/day	6.3E-02
				Toluene	7.1E-02	mg/L	3.4E-03	mg/kg/day	NA	NA	--
				Trichloroethene (TCE)	1.3E+00	mg/L	6.2E-02	mg/kg/day	7.0E-03	1/mg/kg/day	4.3E-04
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	1.7E-02	mg/kg/day	NA	NA	--
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	1.7E-04	mg/kg/day	2.6E-02	1/mg/kg/day	4.4E-06
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	3.1E-05	mg/kg/day	2.0E-01	1/mg/kg/day	6.4E-06
				1,1,2-Trichloroethane	1.8E-01	mg/L	8.4E-03	mg/kg/day	5.7E-02	1/mg/kg/day	4.8E-04
				1,1-Dichloroethane	3.8E-02	mg/L	1.8E-03	mg/kg/day	5.7E-03	1/mg/kg/day	1.0E-05
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	2.5E-05	mg/kg/day	NA	NA	--
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	3.5E-04	mg/kg/day	NA	NA	--
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	2.6E-04	mg/kg/day	7.0E+00	1/mg/kg/day	1.8E-03
				1,2-Dichlorobenzene	1.8E-03	mg/L	8.5E-05	mg/kg/day	NA	NA	--
				1,2-Dichloropropane	1.6E-03	mg/L	7.5E-05	mg/kg/day	6.8E-02	1/mg/kg/day	5.1E-06
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	5.5E-05	mg/kg/day	NA	NA	--
				1,3-Dichlorobenzene	4.2E-04	mg/L	2.0E-05	mg/kg/day	NA	NA	--
				1,4-Dichlorobenzene	7.1E-04	mg/L	3.3E-05	mg/kg/day	4.0E-02	1/mg/kg/day	1.3E-06
				2-Butanone	3.3E-01	mg/L	1.5E-02	mg/kg/day	NA	NA	--
				2-Chlorotoluene	4.5E-04	mg/L	2.1E-05	mg/kg/day	NA	NA	--
				4-Chlorotoluene	4.6E-04	mg/L	2.2E-05	mg/kg/day	NA	NA	--
				4-Methyl-2-pentanone	7.8E-02	mg/L	3.7E-03	mg/kg/day	NA	NA	--
				Benzene	1.9E-02	mg/L	9.0E-04	mg/kg/day	1.0E-01	1/mg/kg/day	9.2E-05

Table 7a.1.1

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	5.6E-04	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	2.1E-05	mg/kg/day	1.3E-01	1/mg/kg/day	2.7E-06
				Bromoform	2.8E-03	mg/L	NV	NA	3.9E-03	1/mg/kg/day	--
				Bromomethane	2.6E-02	mg/L	1.2E-03	mg/kg/day	NA	NA	--
				Carbon disulfide	9.4E-02	mg/L	4.4E-03	mg/kg/day	NA	NA	--
				Carbon tetrachloride	3.1E-04	mg/L	1.5E-05	mg/kg/day	1.5E-01	1/mg/kg/day	2.2E-06
				Chlorobenzene	3.5E-02	mg/L	1.6E-03	mg/kg/day	NA	NA	--
				Chloroethane	2.0E-04	mg/L	9.4E-06	mg/kg/day	2.9E-03	1/mg/kg/day	2.7E-08
				Chloromethane	9.7E-04	mg/L	4.6E-05	mg/kg/day	NA	NA	--
				cis-1,2-Dichloroethene	1.4E-02	mg/L	6.8E-04	mg/kg/day	NA	NA	--
				Cyclohexane	6.3E-04	mg/L	3.0E-05	mg/kg/day	NA	NA	--
				Dibromochloromethane	1.2E-03	mg/L	5.6E-05	mg/kg/day	9.4E-02	1/mg/kg/day	5.3E-06
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	4.0E-04	mg/kg/day	NA	NA	--
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	7.3E-05	mg/kg/day	NA	NA	--
				Ethylbenzene	1.2E-03	mg/L	5.5E-05	mg/kg/day	8.7E-03	1/mg/kg/day	4.8E-07
				Isopropylbenzene	5.3E-04	mg/L	2.5E-05	mg/kg/day	NA	NA	--
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	2.2E-04	mg/kg/day	9.1E-04	1/mg/kg/day	2.0E-07
				Methylcyclohexane	8.5E-04	mg/L	4.0E-05	mg/kg/day	NA	NA	--
				Naphthalene	5.6E-04	mg/L	2.6E-05	mg/kg/day	1.2E-01	1/mg/kg/day	3.1E-06
				n-Propylbenzene	5.2E-04	mg/L	2.4E-05	mg/kg/day	NA	NA	--
				p-Isopropyltoluene	4.8E-04	mg/L	2.2E-05	mg/kg/day	NA	NA	--
				sec-Butylbenzene	3.6E-04	mg/L	1.7E-05	mg/kg/day	NA	NA	--
				Tetrahydrofuran	6.5E-01	mg/L	3.1E-02	mg/kg/day	6.8E-03	1/mg/kg/day	2.1E-04
				trans-1,2-Dichloroethene	3.1E-02	mg/L	1.4E-03	mg/kg/day	NA	NA	--
				Vinyl chloride	6.8E-04	mg/L	3.2E-05	mg/kg/day	2.7E-01	1/mg/kg/day	8.7E-06
				m,p-Xylenes	1.0E-02	mg/L	4.7E-04	mg/kg/day	NA	NA	--
				o-Xylene	8.1E-03	mg/L	3.8E-04	mg/kg/day	NA	NA	--
				Xylenes, total	3.6E-02	mg/L	1.7E-03	mg/kg/day	NA	NA	--

Table 7a.1.1

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	3.8E-05	mg/kg/day	NA	NA	--
				1,2,3-Trichloropropane	1.4E-05	mg/L	6.4E-07	mg/kg/day	2.0E+00	1/mg/kg/day	1.3E-06
				2-Methylnaphthalene	2.8E-03	mg/L	1.3E-04	mg/kg/day	NA	NA	--
				Acetophenone	2.8E-03	mg/L	NV	NA	NA	NA	--
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	NV	NA	1.4E-02	1/mg/kg/day	--
				Caprolactam	3.8E-03	mg/L	NV	NA	NA	NA	--
				Dimethyl phthalate	6.8E-04	mg/L	NV	NA	NA	NA	--
				Di-n-butyl phthalate	1.0E-03	mg/L	NV	NA	NA	NA	--
				Isophorone	4.9E-03	mg/L	NV	NA	9.5E-04	1/mg/kg/day	--
				N-Nitrosodimethylamine	1.9E-04	mg/L	NV	NA	1.6E+01	1/mg/kg/day	--
				Pentachlorophenol	3.0E-04	mg/L	NV	NA	1.2E-01	1/mg/kg/day	--
				Phenanthrene	6.9E-05	mg/L	3.2E-06	mg/kg/day	NA	NA	--
				Phenol	9.8E-03	mg/L	NV	NA	NA	NA	--
				Perchlorate	3.2E-03	mg/L	NV	NA	NA	NA	--
				Cyanide (total)	3.4E-03	mg/L	1.6E-04	mg/kg/day	NA	NA	--
				Arsenic	1.4E-02	mg/L	NV	NA	1.5E+01	1/mg/kg/day	--
				Hexavalent chromium	9.3E-03	mg/L	NV	NA	5.1E+02	1/mg/kg/day	--
				Nickel	3.4E-02	mg/L	NV	NA	9.1E-01	1/mg/kg/day	--
			Exp. Route Total								7.0E-02
		Exposure Point Total									6.0E-01
	Exposure Medium Total										6.0E-01
Medium Total											6.0E-01
										Total of Receptor Risks Across All Media	6E-01

Table 7a.1.2

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Ingestion	1,1,1-Trichloroethane	2.5E+00	mg/L	1.4E-02	mg/kg/day	NA	NA	--
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	5.4E-03	mg/kg/day	NA	NA	--
				1,1-Dichloroethene	1.0E+00	mg/L	5.7E-03	mg/kg/day	NA	NA	--
				1,2-Dichloroethane	2.5E-01	mg/L	1.3E-03	mg/kg/day	9.1E-02	1/mg/kg/day	1.2E-04
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	2.0E-02	mg/kg/day	2.7E-02	1/mg/kg/day	5.3E-04
				Acetone	2.0E+00	mg/L	1.1E-02	mg/kg/day	NA	NA	--
				Chloroform	5.8E-01	mg/L	3.2E-03	mg/kg/day	3.1E-02	1/mg/kg/day	9.9E-05
				Methylene chloride	1.9E+00	mg/L	1.1E-02	mg/kg/day	1.4E-02	1/mg/kg/day	1.5E-04
				Tetrachloroethene	6.5E+01	mg/L	3.6E-01	mg/kg/day	5.4E-01	1/mg/kg/day	1.9E-01
				Toluene	7.1E-02	mg/L	3.9E-04	mg/kg/day	NA	NA	--
				Trichloroethene (TCE)	1.3E+00	mg/L	7.2E-03	mg/kg/day	1.3E-02	1/mg/kg/day	9.4E-05
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	2.0E-03	mg/kg/day	NA	NA	--
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	2.0E-05	mg/kg/day	2.6E-02	1/mg/kg/day	5.1E-07
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	3.7E-06	mg/kg/day	2.7E-01	1/mg/kg/day	9.9E-07
				1,1,2-Trichloroethane	1.8E-01	mg/L	9.8E-04	mg/kg/day	7.2E-02	1/mg/kg/day	7.1E-05
				1,1-Dichloroethane	3.8E-02	mg/L	2.1E-04	mg/kg/day	5.7E-03	1/mg/kg/day	1.2E-06
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	2.9E-06	mg/kg/day	3.6E-03	1/mg/kg/day	1.0E-08
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	4.1E-05	mg/kg/day	NA	NA	--
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	3.0E-05	mg/kg/day	7.0E+00	1/mg/kg/day	2.1E-04
				1,2-Dichlorobenzene	1.8E-03	mg/L	9.9E-06	mg/kg/day	NA	NA	--
				1,2-Dichloropropane	1.6E-03	mg/L	8.8E-06	mg/kg/day	6.8E-02	1/mg/kg/day	6.0E-07
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	6.4E-06	mg/kg/day	NA	NA	--
				1,3-Dichlorobenzene	4.2E-04	mg/L	2.3E-06	mg/kg/day	NA	NA	--
				1,4-Dichlorobenzene	7.1E-04	mg/L	3.9E-06	mg/kg/day	2.4E-02	1/mg/kg/day	9.3E-08
				2-Butanone	3.3E-01	mg/L	1.8E-03	mg/kg/day	NA	NA	--
				2-Chlorotoluene	4.5E-04	mg/L	2.5E-06	mg/kg/day	NA	NA	--
				4-Chlorotoluene	4.6E-04	mg/L	2.5E-06	mg/kg/day	NA	NA	--
				4-Methyl-2-pentanone	7.8E-02	mg/L	4.3E-04	mg/kg/day	NA	NA	--
				Benzene	1.9E-02	mg/L	1.1E-04	mg/kg/day	1.0E-01	1/mg/kg/day	1.1E-05

Table 7a.1.2

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	6.6E-05	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	2.4E-06	mg/kg/day	1.3E-01	1/mg/kg/day	3.1E-07
				Bromoform	2.8E-03	mg/L	1.5E-05	mg/kg/day	7.9E-03	1/mg/kg/day	1.2E-07
				Bromomethane	2.6E-02	mg/L	1.4E-04	mg/kg/day	NA	NA	--
				Carbon disulfide	9.4E-02	mg/L	5.1E-04	mg/kg/day	NA	NA	--
				Carbon tetrachloride	3.1E-04	mg/L	1.7E-06	mg/kg/day	1.5E-01	1/mg/kg/day	2.6E-07
				Chlorobenzene	3.5E-02	mg/L	1.9E-04	mg/kg/day	NA	NA	--
				Chloroethane	2.0E-04	mg/L	1.1E-06	mg/kg/day	2.9E-03	1/mg/kg/day	3.2E-09
				Chloromethane	9.7E-04	mg/L	5.3E-06	mg/kg/day	NA	NA	--
				cis-1,2-Dichloroethene	1.4E-02	mg/L	7.9E-05	mg/kg/day	NA	NA	--
				Cyclohexane	6.3E-04	mg/L	3.5E-06	mg/kg/day	NA	NA	--
				Dibromochloromethane	1.2E-03	mg/L	6.5E-06	mg/kg/day	9.4E-02	1/mg/kg/day	6.1E-07
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	4.7E-05	mg/kg/day	NA	NA	--
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	8.5E-06	mg/kg/day	NA	NA	--
				Ethylbenzene	1.2E-03	mg/L	6.4E-06	mg/kg/day	1.1E-02	1/mg/kg/day	7.0E-08
				Isopropylbenzene	5.3E-04	mg/L	2.9E-06	mg/kg/day	NA	NA	--
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	2.6E-05	mg/kg/day	1.8E-03	1/mg/kg/day	4.6E-08
				Methylcyclohexane	8.5E-04	mg/L	4.7E-06	mg/kg/day	NA	NA	--
				Naphthalene	5.6E-04	mg/L	3.1E-06	mg/kg/day	NA	NA	--
				n-Propylbenzene	5.2E-04	mg/L	2.8E-06	mg/kg/day	NA	NA	--
				p-Isopropyltoluene	4.8E-04	mg/L	2.6E-06	mg/kg/day	NA	NA	--
				sec-Butylbenzene	3.6E-04	mg/L	2.0E-06	mg/kg/day	NA	NA	--
				Tetrahydrofuran	6.5E-01	mg/L	3.6E-03	mg/kg/day	7.6E-03	1/mg/kg/day	2.7E-05
				trans-1,2-Dichloroethene	3.1E-02	mg/L	1.7E-04	mg/kg/day	NA	NA	--
				Vinyl chloride	6.8E-04	mg/L	3.7E-06	mg/kg/day	1.5E+00	1/mg/kg/day	5.6E-06
				m,p-Xylenes	1.0E-02	mg/L	5.5E-05	mg/kg/day	NA	NA	--
				o-Xylene	8.1E-03	mg/L	4.4E-05	mg/kg/day	NA	NA	--
				Xylenes, total	3.6E-02	mg/L	2.0E-04	mg/kg/day	NA	NA	--

Table 7a.1.2

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	4.4E-06	mg/kg/day	NA	NA	--
				1,2,3-Trichloropropane	1.4E-05	mg/L	7.5E-08	mg/kg/day	2.0E+00	1/mg/kg/day	1.5E-07
				2-Methylnaphthalene	2.8E-03	mg/L	1.5E-05	mg/kg/day	NA	NA	--
				Acetophenone	2.8E-03	mg/L	1.5E-05	mg/kg/day	NA	NA	--
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	6.3E-05	mg/kg/day	1.4E-02	1/mg/kg/day	8.8E-07
				Caprolactam	3.8E-03	mg/L	2.1E-05	mg/kg/day	NA	NA	--
				Dimethyl phthalate	6.8E-04	mg/L	3.7E-06	mg/kg/day	NA	NA	--
				Di-n-butyl phthalate	1.0E-03	mg/L	5.5E-06	mg/kg/day	NA	NA	--
				Isophorone	4.9E-03	mg/L	2.7E-05	mg/kg/day	9.5E-04	1/mg/kg/day	2.6E-08
				N-Nitrosodimethylamine	1.9E-04	mg/L	1.0E-06	mg/kg/day	5.1E+01	1/mg/kg/day	5.3E-05
				Pentachlorophenol	3.0E-04	mg/L	1.6E-06	mg/kg/day	1.2E-01	1/mg/kg/day	2.0E-07
				Phenanthrene	6.9E-05	mg/L	3.8E-07	mg/kg/day	NA	NA	--
				Phenol	9.8E-03	mg/L	5.4E-05	mg/kg/day	NA	NA	--
				Perchlorate	3.2E-03	mg/L	1.8E-05	mg/kg/day	NA	NA	--
				Cyanide (total)	3.4E-03	mg/L	1.9E-05	mg/kg/day	NA	NA	--
				Arsenic	1.4E-02	mg/L	7.4E-05	mg/kg/day	9.5E+00	1/mg/kg/day	7.0E-04
				Hexavalent chromium	9.3E-03	mg/L	5.1E-05	mg/kg/day	NA	NA	--
				Nickel	3.4E-02	mg/L	1.8E-04	mg/kg/day	NA	NA	--
			Exp. Route Total								1.9E-01

Table 7a.1.2

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Dermal	1,1,1-Trichloroethane	2.5E+00	mg/L	2.5E-03	mg/kg/day	NA	NA	--
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	1.9E-03	mg/kg/day	NA	NA	--
				1,1-Dichloroethene	1.0E+00	mg/L	7.8E-04	mg/kg/day	NA	NA	--
				1,2-Dichloroethane	2.5E-01	mg/L	1.0E-04	mg/kg/day	9.1E-02	1/mg/kg/day	9.4E-06
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	7.0E-05	mg/kg/day	2.7E-02	1/mg/kg/day	1.9E-06
				Acetone	2.0E+00	mg/L	5.5E-05	mg/kg/day	NA	NA	--
				Chloroform	5.8E-01	mg/L	2.8E-04	mg/kg/day	3.1E-02	1/mg/kg/day	8.6E-06
				Methylene chloride	1.9E+00	mg/L	4.0E-04	mg/kg/day	1.4E-02	1/mg/kg/day	5.6E-06
				Tetrachloroethene	6.5E+01	mg/L	2.0E-01	mg/kg/day	5.4E-01	1/mg/kg/day	1.1E-01
				Toluene	7.1E-02	mg/L	1.3E-04	mg/kg/day	NA	NA	--
				Trichloroethene (TCE)	1.3E+00	mg/L	1.2E-03	mg/kg/day	1.3E-02	1/mg/kg/day	1.6E-05
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	3.6E-04	mg/kg/day	NA	NA	--
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	7.5E-06	mg/kg/day	2.6E-02	1/mg/kg/day	1.9E-07
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	4.4E-07	mg/kg/day	2.7E-01	1/mg/kg/day	1.2E-07
				1,1,2-Trichloroethane	1.8E-01	mg/L	8.8E-05	mg/kg/day	7.2E-02	1/mg/kg/day	6.3E-06
				1,1-Dichloroethane	3.8E-02	mg/L	1.6E-05	mg/kg/day	5.7E-03	1/mg/kg/day	9.1E-08
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	3.7E-06	mg/kg/day	3.6E-03	1/mg/kg/day	1.3E-08
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	4.4E-05	mg/kg/day	NA	NA	--
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	5.5E-06	mg/kg/day	7.0E+00	1/mg/kg/day	3.9E-05
				1,2-Dichlorobenzene	1.8E-03	mg/L	6.2E-06	mg/kg/day	NA	NA	--
				1,2-Dichloropropane	1.6E-03	mg/L	8.4E-07	mg/kg/day	6.8E-02	1/mg/kg/day	5.7E-08
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	5.0E-06	mg/kg/day	NA	NA	--
				1,3-Dichlorobenzene	4.2E-04	mg/L	2.1E-06	mg/kg/day	NA	NA	--
				1,4-Dichlorobenzene	7.1E-04	mg/L	2.5E-06	mg/kg/day	2.4E-02	1/mg/kg/day	6.0E-08
				2-Butanone	3.3E-01	mg/L	1.7E-05	mg/kg/day	NA	NA	--
				2-Chlorotoluene	4.5E-04	mg/L	2.8E-06	mg/kg/day	NA	NA	--
				4-Chlorotoluene	4.6E-04	mg/L	3.5E-07	mg/kg/day	NA	NA	--
				4-Methyl-2-pentanone	7.8E-02	mg/L	1.3E-05	mg/kg/day	NA	NA	--
				Benzene	1.9E-02	mg/L	1.6E-05	mg/kg/day	1.0E-01	1/mg/kg/day	1.6E-06

Table 7a.1.2

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	2.8E-06	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	1.9E-07	mg/kg/day	1.3E-01	1/mg/kg/day	2.5E-08
				Bromoform	2.8E-03	mg/L	1.0E-06	mg/kg/day	7.9E-03	1/mg/kg/day	8.0E-09
				Bromomethane	2.6E-02	mg/L	4.6E-06	mg/kg/day	NA	NA	--
				Carbon disulfide	9.4E-02	mg/L	9.0E-05	mg/kg/day	NA	NA	--
				Carbon tetrachloride	3.1E-04	mg/L	4.4E-07	mg/kg/day	1.5E-01	1/mg/kg/day	6.6E-08
				Chlorobenzene	3.5E-02	mg/L	6.6E-05	mg/kg/day	NA	NA	--
				Chloroethane	2.0E-04	mg/L	6.5E-08	mg/kg/day	2.9E-03	1/mg/kg/day	1.9E-10
				Chloromethane	9.7E-04	mg/L	1.6E-07	mg/kg/day	NA	NA	--
				cis-1,2-Dichloroethene	1.4E-02	mg/L	9.8E-06	mg/kg/day	NA	NA	--
				Cyclohexane	6.3E-04	mg/L	3.6E-06	mg/kg/day	NA	NA	--
				Dibromochloromethane	1.2E-03	mg/L	4.3E-07	mg/kg/day	9.4E-02	1/mg/kg/day	4.0E-08
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	6.2E-06	mg/kg/day	NA	NA	--
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	9.8E-07	mg/kg/day	NA	NA	--
				Ethylbenzene	1.2E-03	mg/L	3.8E-06	mg/kg/day	1.1E-02	1/mg/kg/day	4.1E-08
				Isopropylbenzene	5.3E-04	mg/L	3.3E-06	mg/kg/day	NA	NA	--
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	5.9E-07	mg/kg/day	1.8E-03	1/mg/kg/day	1.1E-09
				Methylcyclohexane	8.5E-04	mg/L	5.8E-06	mg/kg/day	NA	NA	--
				Naphthalene	5.6E-04	mg/L	1.9E-06	mg/kg/day	NA	NA	--
				n-Propylbenzene	5.2E-04	mg/L	2.6E-06	mg/kg/day	NA	NA	--
				p-Isopropyltoluene	4.8E-04	mg/L	4.5E-06	mg/kg/day	NA	NA	--
				sec-Butylbenzene	3.6E-04	mg/L	3.1E-06	mg/kg/day	NA	NA	--
				Tetrahydrofuran	6.5E-01	mg/L	9.3E-05	mg/kg/day	7.6E-03	1/mg/kg/day	7.1E-07
				trans-1,2-Dichloroethene	3.1E-02	mg/L	1.5E-05	mg/kg/day	NA	NA	--
				Vinyl chloride	6.8E-04	mg/L	2.0E-07	mg/kg/day	1.5E+00	1/mg/kg/day	3.0E-07
				m,p-Xylenes	1.0E-02	mg/L	3.5E-05	mg/kg/day	NA	NA	--
				o-Xylene	8.1E-03	mg/L	3.8E-05	mg/kg/day	NA	NA	--
				Xylenes, total	3.6E-02	mg/L	1.2E-04	mg/kg/day	NA	NA	--

Table 7a.1.2

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	6.4E-06	mg/kg/day	NA	NA	--
				1,2,3-Trichloropropane	1.4E-05	mg/L	1.1E-08	mg/kg/day	2.0E+00	1/mg/kg/day	2.2E-08
				2-Methylnaphthalene	2.8E-03	mg/L	2.0E-05	mg/kg/day	NA	NA	--
				Acetophenone	2.8E-03	mg/L	9.2E-07	mg/kg/day	NA	NA	--
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	1.2E-04	mg/kg/day	1.4E-02	1/mg/kg/day	1.6E-06
				Caprolactam	3.8E-03	mg/L	2.6E-07	mg/kg/day	NA	NA	--
				Dimethyl phthalate	6.8E-04	mg/L	1.3E-07	mg/kg/day	NA	NA	--
				Di-n-butyl phthalate	1.0E-03	mg/L	4.2E-06	mg/kg/day	NA	NA	--
				Isophorone	4.9E-03	mg/L	1.3E-06	mg/kg/day	9.5E-04	1/mg/kg/day	1.3E-09
				N-Nitrosodimethylamine	1.9E-04	mg/L	2.8E-09	mg/kg/day	5.1E+01	1/mg/kg/day	1.4E-07
				Pentachlorophenol	3.0E-04	mg/L	1.9E-05	mg/kg/day	1.2E-01	1/mg/kg/day	2.3E-06
				Phenanthrene	6.9E-05	mg/L	9.9E-07	mg/kg/day	NA	NA	--
				Phenol	9.8E-03	mg/L	2.6E-06	mg/kg/day	NA	NA	--
				Perchlorate	3.2E-03	mg/L	1.2E-07	mg/kg/day	NA	NA	--
				Cyanide (total)	3.4E-03	mg/L	1.2E-07	mg/kg/day	NA	NA	--
				Arsenic	1.4E-02	mg/L	4.9E-07	mg/kg/day	9.5E+00	1/mg/kg/day	4.6E-06
				Hexavalent chromium	9.3E-03	mg/L	6.7E-07	mg/kg/day	NA	NA	--
				Nickel	3.4E-02	mg/L	2.4E-07	mg/kg/day	NA	NA	--
			Exp. Route Total								1.1E-01

Table 7a.1.2

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Inhalation	1,1,1-Trichloroethane	2.5E+00	mg/L	6.8E-02	mg/kg/day	NA	NA	--
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	2.7E-02	mg/kg/day	NA	NA	--
				1,1-Dichloroethene	1.0E+00	mg/L	2.9E-02	mg/kg/day	NA	NA	--
				1,2-Dichloroethane	2.5E-01	mg/L	6.7E-03	mg/kg/day	9.1E-02	1/mg/kg/day	6.1E-04
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	NV	NA	2.7E-02	1/mg/kg/day	--
				Acetone	2.0E+00	mg/L	5.5E-02	mg/kg/day	NA	NA	--
				Chloroform	5.8E-01	mg/L	1.6E-02	mg/kg/day	8.1E-02	1/mg/kg/day	1.3E-03
				Methylene chloride	1.9E+00	mg/L	5.3E-02	mg/kg/day	3.5E-03	1/mg/kg/day	1.9E-04
				Tetrachloroethene	6.5E+01	mg/L	1.8E+00	mg/kg/day	2.1E-02	1/mg/kg/day	3.7E-02
				Toluene	7.1E-02	mg/L	2.0E-03	mg/kg/day	NA	NA	--
				Trichloroethene (TCE)	1.3E+00	mg/L	3.6E-02	mg/kg/day	7.0E-03	1/mg/kg/day	2.5E-04
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	9.8E-03	mg/kg/day	NA	NA	--
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	9.8E-05	mg/kg/day	2.6E-02	1/mg/kg/day	2.6E-06
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	1.8E-05	mg/kg/day	2.0E-01	1/mg/kg/day	3.7E-06
				1,1,2-Trichloroethane	1.8E-01	mg/L	4.9E-03	mg/kg/day	5.7E-02	1/mg/kg/day	2.8E-04
				1,1-Dichloroethane	3.8E-02	mg/L	1.0E-03	mg/kg/day	5.7E-03	1/mg/kg/day	5.9E-06
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	1.5E-05	mg/kg/day	NA	NA	--
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	2.1E-04	mg/kg/day	NA	NA	--
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	1.5E-04	mg/kg/day	7.0E+00	1/mg/kg/day	1.1E-03
				1,2-Dichlorobenzene	1.8E-03	mg/L	4.9E-05	mg/kg/day	NA	NA	--
				1,2-Dichloropropane	1.6E-03	mg/L	4.4E-05	mg/kg/day	6.8E-02	1/mg/kg/day	3.0E-06
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	3.2E-05	mg/kg/day	NA	NA	--
				1,3-Dichlorobenzene	4.2E-04	mg/L	1.2E-05	mg/kg/day	NA	NA	--
				1,4-Dichlorobenzene	7.1E-04	mg/L	1.9E-05	mg/kg/day	4.0E-02	1/mg/kg/day	7.8E-07
				2-Butanone	3.3E-01	mg/L	9.0E-03	mg/kg/day	NA	NA	--
				2-Chlorotoluene	4.5E-04	mg/L	1.2E-05	mg/kg/day	NA	NA	--
				4-Chlorotoluene	4.6E-04	mg/L	1.3E-05	mg/kg/day	NA	NA	--
				4-Methyl-2-pentanone	7.8E-02	mg/L	2.1E-03	mg/kg/day	NA	NA	--
				Benzene	1.9E-02	mg/L	5.3E-04	mg/kg/day	1.0E-01	1/mg/kg/day	5.3E-05

Table 7a.1.2

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	3.3E-04	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	1.2E-05	mg/kg/day	1.3E-01	1/mg/kg/day	1.6E-06
				Bromoform	2.8E-03	mg/L	NV	NA	3.9E-03	1/mg/kg/day	--
				Bromomethane	2.6E-02	mg/L	7.2E-04	mg/kg/day	NA	NA	--
				Carbon disulfide	9.4E-02	mg/L	2.6E-03	mg/kg/day	NA	NA	--
				Carbon tetrachloride	3.1E-04	mg/L	8.6E-06	mg/kg/day	1.5E-01	1/mg/kg/day	1.3E-06
				Chlorobenzene	3.5E-02	mg/L	9.6E-04	mg/kg/day	NA	NA	--
				Chloroethane	2.0E-04	mg/L	5.5E-06	mg/kg/day	2.9E-03	1/mg/kg/day	1.6E-08
				Chloromethane	9.7E-04	mg/L	2.7E-05	mg/kg/day	NA	NA	--
				cis-1,2-Dichloroethene	1.4E-02	mg/L	3.9E-04	mg/kg/day	NA	NA	--
				Cyclohexane	6.3E-04	mg/L	1.7E-05	mg/kg/day	NA	NA	--
				Dibromochloromethane	1.2E-03	mg/L	3.3E-05	mg/kg/day	9.4E-02	1/mg/kg/day	3.1E-06
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	2.3E-04	mg/kg/day	NA	NA	--
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	4.3E-05	mg/kg/day	NA	NA	--
				Ethylbenzene	1.2E-03	mg/L	3.2E-05	mg/kg/day	8.7E-03	1/mg/kg/day	2.8E-07
				Isopropylbenzene	5.3E-04	mg/L	1.5E-05	mg/kg/day	NA	NA	--
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	1.3E-04	mg/kg/day	9.1E-04	1/mg/kg/day	1.2E-07
				Methylcyclohexane	8.5E-04	mg/L	2.3E-05	mg/kg/day	NA	NA	--
				Naphthalene	5.6E-04	mg/L	1.5E-05	mg/kg/day	1.2E-01	1/mg/kg/day	1.8E-06
				n-Propylbenzene	5.2E-04	mg/L	1.4E-05	mg/kg/day	NA	NA	--
				p-Isopropyltoluene	4.8E-04	mg/L	1.3E-05	mg/kg/day	NA	NA	--
				sec-Butylbenzene	3.6E-04	mg/L	9.8E-06	mg/kg/day	NA	NA	--
				Tetrahydrofuran	6.5E-01	mg/L	1.8E-02	mg/kg/day	6.8E-03	1/mg/kg/day	1.2E-04
				trans-1,2-Dichloroethene	3.1E-02	mg/L	8.4E-04	mg/kg/day	NA	NA	--
				Vinyl chloride	6.8E-04	mg/L	1.9E-05	mg/kg/day	2.7E-01	1/mg/kg/day	5.1E-06
				m,p-Xylenes	1.0E-02	mg/L	2.8E-04	mg/kg/day	NA	NA	--
				o-Xylene	8.1E-03	mg/L	2.2E-04	mg/kg/day	NA	NA	--
				Xylenes, total	3.6E-02	mg/L	9.8E-04	mg/kg/day	NA	NA	--

Table 7a.1.2

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF		Cancer Risk
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	2.2E-05	mg/kg/day	NA	NA	--
				1,2,3-Trichloropropane	1.4E-05	mg/L	3.7E-07	mg/kg/day	2.0E+00	1/mg/kg/day	7.5E-07
				2-Methylnaphthalene	2.8E-03	mg/L	7.7E-05	mg/kg/day	NA	NA	--
				Acetophenone	2.8E-03	mg/L	NV	NA	NA	NA	--
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	NV	NA	1.4E-02	1/mg/kg/day	--
				Caprolactam	3.8E-03	mg/L	NV	NA	NA	NA	--
				Dimethyl phthalate	6.8E-04	mg/L	NV	NA	NA	NA	--
				Di-n-butyl phthalate	1.0E-03	mg/L	NV	NA	NA	NA	--
				Isophorone	4.9E-03	mg/L	NV	NA	9.5E-04	1/mg/kg/day	--
				N-Nitrosodimethylamine	1.9E-04	mg/L	NV	NA	1.6E+01	1/mg/kg/day	--
				Pentachlorophenol	3.0E-04	mg/L	NV	NA	1.2E-01	1/mg/kg/day	--
				Phenanthrene	6.9E-05	mg/L	1.9E-06	mg/kg/day	NA	NA	--
				Phenol	9.8E-03	mg/L	NV	NA	NA	NA	--
				Perchlorate	3.2E-03	mg/L	NV	NA	NA	NA	--
				Cyanide (total)	3.4E-03	mg/L	9.3E-05	mg/kg/day	NA	NA	--
				Arsenic	1.4E-02	mg/L	NV	NA	1.5E+01	1/mg/kg/day	--
				Hexavalent chromium	9.3E-03	mg/L	NV	NA	5.1E+02	1/mg/kg/day	--
				Nickel	3.4E-02	mg/L	NV	NA	9.1E-01	1/mg/kg/day	--
			Exp. Route Total								4.1E-02
		Exposure Point Total									3.4E-01
	Exposure Medium Total										3.4E-01
Medium Total											3.4E-01
										Total of Receptor Risks Across All Media	3E-01

Table 7a.1.3

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Ingestion	1,1,1-Trichloroethane	2.5E+00	mg/L	3.7E-02	mg/kg/day	NA	NA	--
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	1.5E-02	mg/kg/day	NA	NA	--
				1,1-Dichloroethene	1.0E+00	mg/L	1.6E-02	mg/kg/day	NA	NA	--
				1,2-Dichloroethane	2.5E-01	mg/L	3.6E-03	mg/kg/day	9.1E-02	1/mg/kg/day	3.3E-04
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	5.3E-02	mg/kg/day	2.7E-02	1/mg/kg/day	1.4E-03
				Acetone	2.0E+00	mg/L	3.0E-02	mg/kg/day	NA	NA	--
				Chloroform	5.8E-01	mg/L	8.7E-03	mg/kg/day	3.1E-02	1/mg/kg/day	2.7E-04
				Methylene chloride	1.9E+00	mg/L	2.9E-02	mg/kg/day	1.4E-02	1/mg/kg/day	4.0E-04
				Tetrachloroethene	6.5E+01	mg/L	9.7E-01	mg/kg/day	5.4E-01	1/mg/kg/day	5.2E-01
				Toluene	7.1E-02	mg/L	1.1E-03	mg/kg/day	NA	NA	--
				Trichloroethene (TCE)	1.3E+00	mg/L	2.0E-02	mg/kg/day	1.3E-02	1/mg/kg/day	2.6E-04
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	5.3E-03	mg/kg/day	NA	NA	--
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	5.3E-05	mg/kg/day	2.6E-02	1/mg/kg/day	1.4E-06
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	1.0E-05	mg/kg/day	2.7E-01	1/mg/kg/day	2.7E-06
				1,1,2-Trichloroethane	1.8E-01	mg/L	2.7E-03	mg/kg/day	7.2E-02	1/mg/kg/day	1.9E-04
				1,1-Dichloroethane	3.8E-02	mg/L	5.6E-04	mg/kg/day	5.7E-03	1/mg/kg/day	3.2E-06
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	7.9E-06	mg/kg/day	3.6E-03	1/mg/kg/day	2.8E-08
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	1.1E-04	mg/kg/day	NA	NA	--
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	8.2E-05	mg/kg/day	7.0E+00	1/mg/kg/day	5.7E-04
				1,2-Dichlorobenzene	1.8E-03	mg/L	2.7E-05	mg/kg/day	NA	NA	--
				1,2-Dichloropropane	1.6E-03	mg/L	2.4E-05	mg/kg/day	6.8E-02	1/mg/kg/day	1.6E-06
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	1.7E-05	mg/kg/day	NA	NA	--
				1,3-Dichlorobenzene	4.2E-04	mg/L	6.3E-06	mg/kg/day	NA	NA	--
				1,4-Dichlorobenzene	7.1E-04	mg/L	1.1E-05	mg/kg/day	2.4E-02	1/mg/kg/day	2.5E-07
				2-Butanone	3.3E-01	mg/L	4.9E-03	mg/kg/day	NA	NA	--
				2-Chlorotoluene	4.5E-04	mg/L	6.7E-06	mg/kg/day	NA	NA	--
				4-Chlorotoluene	4.6E-04	mg/L	6.8E-06	mg/kg/day	NA	NA	--
				4-Methyl-2-pentanone	7.8E-02	mg/L	1.2E-03	mg/kg/day	NA	NA	--
				Benzene	1.9E-02	mg/L	2.9E-04	mg/kg/day	1.0E-01	1/mg/kg/day	2.9E-05

Table 7a.1.3

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	1.8E-04	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	6.6E-06	mg/kg/day	1.3E-01	1/mg/kg/day	8.5E-07
				Bromoform	2.8E-03	mg/L	4.2E-05	mg/kg/day	7.9E-03	1/mg/kg/day	3.3E-07
				Bromomethane	2.6E-02	mg/L	3.9E-04	mg/kg/day	NA	NA	--
				Carbon disulfide	9.4E-02	mg/L	1.4E-03	mg/kg/day	NA	NA	--
				Carbon tetrachloride	3.1E-04	mg/L	4.7E-06	mg/kg/day	1.5E-01	1/mg/kg/day	7.0E-07
				Chlorobenzene	3.5E-02	mg/L	5.2E-04	mg/kg/day	NA	NA	--
				Chloroethane	2.0E-04	mg/L	3.0E-06	mg/kg/day	2.9E-03	1/mg/kg/day	8.6E-09
				Chloromethane	9.7E-04	mg/L	1.4E-05	mg/kg/day	NA	NA	--
				cis-1,2-Dichloroethene	1.4E-02	mg/L	2.1E-04	mg/kg/day	NA	NA	--
				Cyclohexane	6.3E-04	mg/L	9.4E-06	mg/kg/day	NA	NA	--
				Dibromochloromethane	1.2E-03	mg/L	1.8E-05	mg/kg/day	9.4E-02	1/mg/kg/day	1.7E-06
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	1.3E-04	mg/kg/day	NA	NA	--
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	2.3E-05	mg/kg/day	NA	NA	--
				Ethylbenzene	1.2E-03	mg/L	1.7E-05	mg/kg/day	1.1E-02	1/mg/kg/day	1.9E-07
				Isopropylbenzene	5.3E-04	mg/L	7.9E-06	mg/kg/day	NA	NA	--
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	7.0E-05	mg/kg/day	1.8E-03	1/mg/kg/day	1.3E-07
				Methylcyclohexane	8.5E-04	mg/L	1.3E-05	mg/kg/day	NA	NA	--
				Naphthalene	5.6E-04	mg/L	8.3E-06	mg/kg/day	NA	NA	--
				n-Propylbenzene	5.2E-04	mg/L	7.7E-06	mg/kg/day	NA	NA	--
				p-Isopropyltoluene	4.8E-04	mg/L	7.1E-06	mg/kg/day	NA	NA	--
				sec-Butylbenzene	3.6E-04	mg/L	5.3E-06	mg/kg/day	NA	NA	--
				Tetrahydrofuran	6.5E-01	mg/L	9.7E-03	mg/kg/day	7.6E-03	1/mg/kg/day	7.3E-05
				trans-1,2-Dichloroethene	3.1E-02	mg/L	4.6E-04	mg/kg/day	NA	NA	--
				Vinyl chloride	6.8E-04	mg/L	1.0E-05	mg/kg/day	1.5E+00	1/mg/kg/day	1.5E-05
				m,p-Xylenes	1.0E-02	mg/L	1.5E-04	mg/kg/day	NA	NA	--
				o-Xylene	8.1E-03	mg/L	1.2E-04	mg/kg/day	NA	NA	--
				Xylenes, total	3.6E-02	mg/L	5.3E-04	mg/kg/day	NA	NA	--

Table 7a.1.3

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	1.2E-05	mg/kg/day	NA	NA	--
				1,2,3-Trichloropropane	1.4E-05	mg/L	2.0E-07	mg/kg/day	2.0E+00	1/mg/kg/day	4.0E-07
				2-Methylnaphthalene	2.8E-03	mg/L	4.2E-05	mg/kg/day	NA	NA	--
				Acetophenone	2.8E-03	mg/L	4.1E-05	mg/kg/day	NA	NA	--
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	1.7E-04	mg/kg/day	1.4E-02	1/mg/kg/day	2.4E-06
				Caprolactam	3.8E-03	mg/L	5.7E-05	mg/kg/day	NA	NA	--
				Dimethyl phthalate	6.8E-04	mg/L	1.0E-05	mg/kg/day	NA	NA	--
				Di-n-butyl phthalate	1.0E-03	mg/L	1.5E-05	mg/kg/day	NA	NA	--
				Isophorone	4.9E-03	mg/L	7.3E-05	mg/kg/day	9.5E-04	1/mg/kg/day	6.9E-08
				N-Nitrosodimethylamine	1.9E-04	mg/L	2.8E-06	mg/kg/day	5.1E+01	1/mg/kg/day	1.4E-04
				Pentachlorophenol	3.0E-04	mg/L	4.5E-06	mg/kg/day	1.2E-01	1/mg/kg/day	5.4E-07
				Phenanthrene	6.9E-05	mg/L	1.0E-06	mg/kg/day	NA	NA	--
				Phenol	9.8E-03	mg/L	1.5E-04	mg/kg/day	NA	NA	--
				Perchlorate	3.2E-03	mg/L	4.8E-05	mg/kg/day	NA	NA	--
				Cyanide (total)	3.4E-03	mg/L	5.1E-05	mg/kg/day	NA	NA	--
				Arsenic	1.4E-02	mg/L	2.0E-04	mg/kg/day	9.5E+00	1/mg/kg/day	1.9E-03
				Hexavalent chromium	9.3E-03	mg/L	1.4E-04	mg/kg/day	NA	NA	--
				Nickel	3.4E-02	mg/L	5.0E-04	mg/kg/day	NA	NA	--
			Exp. Route Total								5.3E-01

Table 7a.1.3

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Dermal	1,1,1-Trichloroethane	2.5E+00	mg/L	6.8E-03	mg/kg/day	NA	NA	--
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	5.2E-03	mg/kg/day	NA	NA	--
				1,1-Dichloroethene	1.0E+00	mg/L	2.1E-03	mg/kg/day	NA	NA	--
				1,2-Dichloroethane	2.5E-01	mg/L	2.8E-04	mg/kg/day	9.1E-02	1/mg/kg/day	2.6E-05
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	1.9E-04	mg/kg/day	2.7E-02	1/mg/kg/day	5.1E-06
				Acetone	2.0E+00	mg/L	1.5E-04	mg/kg/day	NA	NA	--
				Chloroform	5.8E-01	mg/L	7.7E-04	mg/kg/day	3.1E-02	1/mg/kg/day	2.4E-05
				Methylene chloride	1.9E+00	mg/L	1.1E-03	mg/kg/day	1.4E-02	1/mg/kg/day	1.5E-05
				Tetrachloroethene	6.5E+01	mg/L	5.6E-01	mg/kg/day	5.4E-01	1/mg/kg/day	3.0E-01
				Toluene	7.1E-02	mg/L	3.6E-04	mg/kg/day	NA	NA	--
				Trichloroethene (TCE)	1.3E+00	mg/L	3.3E-03	mg/kg/day	1.3E-02	1/mg/kg/day	4.3E-05
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	9.9E-04	mg/kg/day	NA	NA	--
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	2.1E-05	mg/kg/day	2.6E-02	1/mg/kg/day	5.4E-07
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	1.2E-06	mg/kg/day	2.7E-01	1/mg/kg/day	3.3E-07
				1,1,2-Trichloroethane	1.8E-01	mg/L	2.4E-04	mg/kg/day	7.2E-02	1/mg/kg/day	1.8E-05
				1,1-Dichloroethane	3.8E-02	mg/L	4.4E-05	mg/kg/day	5.7E-03	1/mg/kg/day	2.5E-07
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	1.0E-05	mg/kg/day	3.6E-03	1/mg/kg/day	3.7E-08
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	1.2E-04	mg/kg/day	NA	NA	--
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	1.5E-05	mg/kg/day	7.0E+00	1/mg/kg/day	1.1E-04
				1,2-Dichlorobenzene	1.8E-03	mg/L	1.7E-05	mg/kg/day	NA	NA	--
				1,2-Dichloropropane	1.6E-03	mg/L	2.3E-06	mg/kg/day	6.8E-02	1/mg/kg/day	1.6E-07
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	1.4E-05	mg/kg/day	NA	NA	--
				1,3-Dichlorobenzene	4.2E-04	mg/L	5.7E-06	mg/kg/day	NA	NA	--
				1,4-Dichlorobenzene	7.1E-04	mg/L	6.9E-06	mg/kg/day	2.4E-02	1/mg/kg/day	1.7E-07
				2-Butanone	3.3E-01	mg/L	4.6E-05	mg/kg/day	NA	NA	--
				2-Chlorotoluene	4.5E-04	mg/L	7.9E-06	mg/kg/day	NA	NA	--
				4-Chlorotoluene	4.6E-04	mg/L	9.7E-07	mg/kg/day	NA	NA	--
				4-Methyl-2-pentanone	7.8E-02	mg/L	3.7E-05	mg/kg/day	NA	NA	--
				Benzene	1.9E-02	mg/L	4.4E-05	mg/kg/day	1.0E-01	1/mg/kg/day	4.4E-06

Table 7a.1.3

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	7.7E-06	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	5.3E-07	mg/kg/day	1.3E-01	1/mg/kg/day	6.9E-08
				Bromoform	2.8E-03	mg/L	2.8E-06	mg/kg/day	7.9E-03	1/mg/kg/day	2.2E-08
				Bromomethane	2.6E-02	mg/L	1.2E-05	mg/kg/day	NA	NA	--
				Carbon disulfide	9.4E-02	mg/L	2.4E-04	mg/kg/day	NA	NA	--
				Carbon tetrachloride	3.1E-04	mg/L	1.2E-06	mg/kg/day	1.5E-01	1/mg/kg/day	1.8E-07
				Chlorobenzene	3.5E-02	mg/L	1.8E-04	mg/kg/day	NA	NA	--
				Chloroethane	2.0E-04	mg/L	1.7E-07	mg/kg/day	2.9E-03	1/mg/kg/day	5.1E-10
				Chloromethane	9.7E-04	mg/L	4.3E-07	mg/kg/day	NA	NA	--
				cis-1,2-Dichloroethene	1.4E-02	mg/L	2.7E-05	mg/kg/day	NA	NA	--
				Cyclohexane	6.3E-04	mg/L	9.8E-06	mg/kg/day	NA	NA	--
				Dibromochloromethane	1.2E-03	mg/L	1.2E-06	mg/kg/day	9.4E-02	1/mg/kg/day	1.1E-07
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	1.7E-05	mg/kg/day	NA	NA	--
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	2.7E-06	mg/kg/day	NA	NA	--
				Ethylbenzene	1.2E-03	mg/L	1.0E-05	mg/kg/day	1.1E-02	1/mg/kg/day	1.1E-07
				Isopropylbenzene	5.3E-04	mg/L	9.1E-06	mg/kg/day	NA	NA	--
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	1.6E-06	mg/kg/day	1.8E-03	1/mg/kg/day	2.9E-09
				Methylcyclohexane	8.5E-04	mg/L	1.6E-05	mg/kg/day	NA	NA	--
				Naphthalene	5.6E-04	mg/L	5.4E-06	mg/kg/day	NA	NA	--
				n-Propylbenzene	5.2E-04	mg/L	7.2E-06	mg/kg/day	NA	NA	--
				p-Isopropyltoluene	4.8E-04	mg/L	1.2E-05	mg/kg/day	NA	NA	--
				sec-Butylbenzene	3.6E-04	mg/L	8.6E-06	mg/kg/day	NA	NA	--
				Tetrahydrofuran	6.5E-01	mg/L	2.5E-04	mg/kg/day	7.6E-03	1/mg/kg/day	1.9E-06
				trans-1,2-Dichloroethene	3.1E-02	mg/L	4.0E-05	mg/kg/day	NA	NA	--
				Vinyl chloride	6.8E-04	mg/L	5.4E-07	mg/kg/day	1.5E+00	1/mg/kg/day	8.1E-07
				m,p-Xylenes	1.0E-02	mg/L	9.7E-05	mg/kg/day	NA	NA	--
				o-Xylene	8.1E-03	mg/L	1.0E-04	mg/kg/day	NA	NA	--
				Xylenes, total	3.6E-02	mg/L	3.4E-04	mg/kg/day	NA	NA	--

Table 7a.1.3

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	1.8E-05	mg/kg/day	NA	NA	--
				1,2,3-Trichloropropane	1.4E-05	mg/L	3.1E-08	mg/kg/day	2.0E+00	1/mg/kg/day	6.2E-08
				2-Methylnaphthalene	2.8E-03	mg/L	5.6E-05	mg/kg/day	NA	NA	--
				Acetophenone	2.8E-03	mg/L	2.5E-06	mg/kg/day	NA	NA	--
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	3.2E-04	mg/kg/day	1.4E-02	1/mg/kg/day	4.5E-06
				Caprolactam	3.8E-03	mg/L	7.2E-07	mg/kg/day	NA	NA	--
				Dimethyl phthalate	6.8E-04	mg/L	3.6E-07	mg/kg/day	NA	NA	--
				Di-n-butyl phthalate	1.0E-03	mg/L	1.2E-05	mg/kg/day	NA	NA	--
				Isophorone	4.9E-03	mg/L	3.7E-06	mg/kg/day	9.5E-04	1/mg/kg/day	3.5E-09
				N-Nitrosodimethylamine	1.9E-04	mg/L	7.5E-09	mg/kg/day	5.1E+01	1/mg/kg/day	3.8E-07
				Pentachlorophenol	3.0E-04	mg/L	5.3E-05	mg/kg/day	1.2E-01	1/mg/kg/day	6.3E-06
				Phenanthrene	6.9E-05	mg/L	2.7E-06	mg/kg/day	NA	NA	--
				Phenol	9.8E-03	mg/L	7.1E-06	mg/kg/day	NA	NA	--
				Perchlorate	3.2E-03	mg/L	2.8E-07	mg/kg/day	NA	NA	--
				Cyanide (total)	3.4E-03	mg/L	2.9E-07	mg/kg/day	NA	NA	--
				Arsenic	1.4E-02	mg/L	1.2E-06	mg/kg/day	9.5E+00	1/mg/kg/day	1.1E-05
				Hexavalent chromium	9.3E-03	mg/L	1.6E-06	mg/kg/day	NA	NA	--
				Nickel	3.4E-02	mg/L	5.7E-07	mg/kg/day	NA	NA	--
			Exp. Route Total								3.0E-01

Table 7a.1.3

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Inhalation	1,1,1-Trichloroethane	2.5E+00	mg/L	1.8E-01	mg/kg/day	NA	NA	--
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	7.4E-02	mg/kg/day	NA	NA	--
				1,1-Dichloroethene	1.0E+00	mg/L	7.8E-02	mg/kg/day	NA	NA	--
				1,2-Dichloroethane	2.5E-01	mg/L	1.8E-02	mg/kg/day	9.1E-02	1/mg/kg/day	1.7E-03
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	NV	NA	2.7E-02	1/mg/kg/day	--
				Acetone	2.0E+00	mg/L	1.5E-01	mg/kg/day	NA	NA	--
				Chloroform	5.8E-01	mg/L	4.3E-02	mg/kg/day	8.1E-02	1/mg/kg/day	3.5E-03
				Methylene chloride	1.9E+00	mg/L	1.4E-01	mg/kg/day	3.5E-03	1/mg/kg/day	5.0E-04
				Tetrachloroethene	6.5E+01	mg/L	4.8E+00	mg/kg/day	2.1E-02	1/mg/kg/day	1.0E-01
				Toluene	7.1E-02	mg/L	5.3E-03	mg/kg/day	NA	NA	--
				Trichloroethene (TCE)	1.3E+00	mg/L	9.8E-02	mg/kg/day	7.0E-03	1/mg/kg/day	6.9E-04
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	2.7E-02	mg/kg/day	NA	NA	--
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	2.7E-04	mg/kg/day	2.6E-02	1/mg/kg/day	6.9E-06
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	5.0E-05	mg/kg/day	2.0E-01	1/mg/kg/day	1.0E-05
				1,1,2-Trichloroethane	1.8E-01	mg/L	1.3E-02	mg/kg/day	5.7E-02	1/mg/kg/day	7.6E-04
				1,1-Dichloroethane	3.8E-02	mg/L	2.8E-03	mg/kg/day	5.7E-03	1/mg/kg/day	1.6E-05
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	3.9E-05	mg/kg/day	NA	NA	--
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	5.6E-04	mg/kg/day	NA	NA	--
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	4.1E-04	mg/kg/day	7.0E+00	1/mg/kg/day	2.9E-03
				1,2-Dichlorobenzene	1.8E-03	mg/L	1.3E-04	mg/kg/day	NA	NA	--
				1,2-Dichloropropane	1.6E-03	mg/L	1.2E-04	mg/kg/day	6.8E-02	1/mg/kg/day	8.1E-06
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	8.7E-05	mg/kg/day	NA	NA	--
				1,3-Dichlorobenzene	4.2E-04	mg/L	3.2E-05	mg/kg/day	NA	NA	--
				1,4-Dichlorobenzene	7.1E-04	mg/L	5.3E-05	mg/kg/day	4.0E-02	1/mg/kg/day	2.1E-06
				2-Butanone	3.3E-01	mg/L	2.4E-02	mg/kg/day	NA	NA	--
				2-Chlorotoluene	4.5E-04	mg/L	3.3E-05	mg/kg/day	NA	NA	--
				4-Chlorotoluene	4.6E-04	mg/L	3.4E-05	mg/kg/day	NA	NA	--
				4-Methyl-2-pentanone	7.8E-02	mg/L	5.8E-03	mg/kg/day	NA	NA	--
				Benzene	1.9E-02	mg/L	1.4E-03	mg/kg/day	1.0E-01	1/mg/kg/day	1.4E-04

Table 7a.1.3

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	8.9E-04	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	3.3E-05	mg/kg/day	1.3E-01	1/mg/kg/day	4.3E-06
				Bromoform	2.8E-03	mg/L	NV	NA	3.9E-03	1/mg/kg/day	--
				Bromomethane	2.6E-02	mg/L	2.0E-03	mg/kg/day	NA	NA	--
				Carbon disulfide	9.4E-02	mg/L	7.0E-03	mg/kg/day	NA	NA	--
				Carbon tetrachloride	3.1E-04	mg/L	2.3E-05	mg/kg/day	1.5E-01	1/mg/kg/day	3.4E-06
				Chlorobenzene	3.5E-02	mg/L	2.6E-03	mg/kg/day	NA	NA	--
				Chloroethane	2.0E-04	mg/L	1.5E-05	mg/kg/day	2.9E-03	1/mg/kg/day	4.3E-08
				Chloromethane	9.7E-04	mg/L	7.2E-05	mg/kg/day	NA	NA	--
				cis-1,2-Dichloroethene	1.4E-02	mg/L	1.1E-03	mg/kg/day	NA	NA	--
				Cyclohexane	6.3E-04	mg/L	4.7E-05	mg/kg/day	NA	NA	--
				Dibromochloromethane	1.2E-03	mg/L	8.8E-05	mg/kg/day	9.4E-02	1/mg/kg/day	8.3E-06
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	6.4E-04	mg/kg/day	NA	NA	--
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	1.2E-04	mg/kg/day	NA	NA	--
				Ethylbenzene	1.2E-03	mg/L	8.7E-05	mg/kg/day	8.7E-03	1/mg/kg/day	7.5E-07
				Isopropylbenzene	5.3E-04	mg/L	3.9E-05	mg/kg/day	NA	NA	--
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	3.5E-04	mg/kg/day	9.1E-04	1/mg/kg/day	3.2E-07
				Methylcyclohexane	8.5E-04	mg/L	6.3E-05	mg/kg/day	NA	NA	--
				Naphthalene	5.6E-04	mg/L	4.1E-05	mg/kg/day	1.2E-01	1/mg/kg/day	4.9E-06
				n-Propylbenzene	5.2E-04	mg/L	3.8E-05	mg/kg/day	NA	NA	--
				p-Isopropyltoluene	4.8E-04	mg/L	3.6E-05	mg/kg/day	NA	NA	--
				sec-Butylbenzene	3.6E-04	mg/L	2.7E-05	mg/kg/day	NA	NA	--
				Tetrahydrofuran	6.5E-01	mg/L	4.8E-02	mg/kg/day	6.8E-03	1/mg/kg/day	3.3E-04
				trans-1,2-Dichloroethene	3.1E-02	mg/L	2.3E-03	mg/kg/day	NA	NA	--
				Vinyl chloride	6.8E-04	mg/L	5.1E-05	mg/kg/day	2.7E-01	1/mg/kg/day	1.4E-05
				m,p-Xylenes	1.0E-02	mg/L	7.5E-04	mg/kg/day	NA	NA	--
				o-Xylene	8.1E-03	mg/L	6.0E-04	mg/kg/day	NA	NA	--
				Xylenes, total	3.6E-02	mg/L	2.6E-03	mg/kg/day	NA	NA	--

Table 7a.1.3

CALCULATION OF CHEMICAL CANCER RISKS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Cancer Risk Calculations				
					Value	Units	Intake/Exposure Concentration		CSF/Unit Risk		Cancer Risk
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	5.9E-05	mg/kg/day	NA	NA	--
				1,2,3-Trichloropropane	1.4E-05	mg/L	1.0E-06	mg/kg/day	2.0E+00	1/mg/kg/day	2.0E-06
				2-Methylnaphthalene	2.8E-03	mg/L	2.1E-04	mg/kg/day	NA	NA	--
				Acetophenone	2.8E-03	mg/L	NV	NA	NA	NA	--
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	NV	NA	1.4E-02	1/mg/kg/day	--
				Caprolactam	3.8E-03	mg/L	NV	NA	NA	NA	--
				Dimethyl phthalate	6.8E-04	mg/L	NV	NA	NA	NA	--
				Di-n-butyl phthalate	1.0E-03	mg/L	NV	NA	NA	NA	--
				Isophorone	4.9E-03	mg/L	NV	NA	9.5E-04	1/mg/kg/day	--
				N-Nitrosodimethylamine	1.9E-04	mg/L	NV	NA	1.6E+01	1/mg/kg/day	--
				Pentachlorophenol	3.0E-04	mg/L	NV	NA	1.2E-01	1/mg/kg/day	--
				Phenanthrene	6.9E-05	mg/L	5.1E-06	mg/kg/day	NA	NA	--
				Phenol	9.8E-03	mg/L	NV	NA	NA	NA	--
				Perchlorate	3.2E-03	mg/L	NV	NA	NA	NA	--
				Cyanide (total)	3.4E-03	mg/L	2.5E-04	mg/kg/day	NA	NA	--
				Arsenic	1.4E-02	mg/L	NV	NA	1.5E+01	1/mg/kg/day	--
				Hexavalent chromium	9.3E-03	mg/L	NV	NA	5.1E+02	1/mg/kg/day	--
				Nickel	3.4E-02	mg/L	NV	NA	9.1E-01	1/mg/kg/day	--
			Exp. Route Total								1.1E-01
		Exposure Point Total									9.4E-01
	Exposure Medium Total										9.4E-01
Medium Total											9.4E-01
										Total of Receptor Risks Across All Media	9E-01

Table 7b.1.1

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Ingestion	1,1,1-Trichloroethane	2.5E+00	mg/L	6.8E-02	mg/kg/day	2.0E+00	mg/kg/day	3.4E-02
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	2.7E-02	mg/kg/day	3.0E+01	mg/kg/day	9.1E-04
				1,1-Dichloroethene	1.0E+00	mg/L	2.9E-02	mg/kg/day	5.0E-02	mg/kg/day	5.7E-01
				1,2-Dichloroethane	2.5E-01	mg/L	6.7E-03	mg/kg/day	2.0E-02	mg/kg/day	3.4E-01
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	9.8E-02	mg/kg/day	NA	NA	--
				Acetone	2.0E+00	mg/L	5.5E-02	mg/kg/day	9.0E-01	mg/kg/day	6.1E-02
				Chloroform	5.8E-01	mg/L	1.6E-02	mg/kg/day	1.0E-02	mg/kg/day	1.6E+00
				Methylene chloride	1.9E+00	mg/L	5.3E-02	mg/kg/day	6.0E-02	mg/kg/day	8.8E-01
				Tetrachloroethene	6.5E+01	mg/L	1.8E+00	mg/kg/day	1.0E-02	mg/kg/day	1.8E+02
				Toluene	7.1E-02	mg/L	2.0E-03	mg/kg/day	8.0E-02	mg/kg/day	2.4E-02
				Trichloroethene (TCE)	1.3E+00	mg/L	3.6E-02	mg/kg/day	3.0E-04	mg/kg/day	1.2E+02
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	9.8E-03	mg/kg/day	3.0E-01	mg/kg/day	3.3E-02
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	9.8E-05	mg/kg/day	3.0E-02	mg/kg/day	3.3E-03
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	1.8E-05	mg/kg/day	6.0E-02	mg/kg/day	3.1E-04
				1,1,2-Trichloroethane	1.8E-01	mg/L	4.9E-03	mg/kg/day	4.0E-03	mg/kg/day	1.2E+00
				1,1-Dichloroethane	3.8E-02	mg/L	1.0E-03	mg/kg/day	1.0E-01	mg/kg/day	1.0E-02
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	1.5E-05	mg/kg/day	1.0E-02	mg/kg/day	1.5E-03
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	2.1E-04	mg/kg/day	5.0E-02	mg/kg/day	4.1E-03
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	1.5E-04	mg/kg/day	5.7E-05	mg/kg/day	2.6E+00
				1,2-Dichlorobenzene	1.8E-03	mg/L	4.9E-05	mg/kg/day	9.0E-02	mg/kg/day	5.5E-04
				1,2-Dichloropropane	1.6E-03	mg/L	4.4E-05	mg/kg/day	1.1E-03	mg/kg/day	4.0E-02
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	3.2E-05	mg/kg/day	5.0E-02	mg/kg/day	6.4E-04
				1,3-Dichlorobenzene	4.2E-04	mg/L	1.2E-05	mg/kg/day	3.0E-02	mg/kg/day	3.9E-04
				1,4-Dichlorobenzene	7.1E-04	mg/L	1.9E-05	mg/kg/day	3.0E-02	mg/kg/day	6.5E-04
				2-Butanone	3.3E-01	mg/L	9.0E-03	mg/kg/day	6.0E-01	mg/kg/day	1.5E-02
				2-Chlorotoluene	4.5E-04	mg/L	1.2E-05	mg/kg/day	2.0E-02	mg/kg/day	6.2E-04
				4-Chlorotoluene	4.6E-04	mg/L	1.3E-05	mg/kg/day	2.0E-02	mg/kg/day	6.3E-04
				4-Methyl-2-pentanone	7.8E-02	mg/L	2.1E-03	mg/kg/day	8.0E-02	mg/kg/day	2.7E-02
				Benzene	1.9E-02	mg/L	5.3E-04	mg/kg/day	4.0E-03	mg/kg/day	1.3E-01

Table 7b.1.1

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	3.3E-04	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	1.2E-05	mg/kg/day	2.0E-02	mg/kg/day	6.0E-04
				Bromoform	2.8E-03	mg/L	7.7E-05	mg/kg/day	2.0E-02	mg/kg/day	3.8E-03
				Bromomethane	2.6E-02	mg/L	7.2E-04	mg/kg/day	1.4E-03	mg/kg/day	5.2E-01
				Carbon disulfide	9.4E-02	mg/L	2.6E-03	mg/kg/day	1.0E-01	mg/kg/day	2.6E-02
				Carbon tetrachloride	3.1E-04	mg/L	8.6E-06	mg/kg/day	7.0E-04	mg/kg/day	1.2E-02
				Chlorobenzene	3.5E-02	mg/L	9.6E-04	mg/kg/day	2.0E-02	mg/kg/day	4.8E-02
				Chloroethane	2.0E-04	mg/L	5.5E-06	mg/kg/day	4.0E-01	mg/kg/day	1.4E-05
				Chloromethane	9.7E-04	mg/L	2.7E-05	mg/kg/day	2.6E-02	mg/kg/day	1.0E-03
				cis-1,2-Dichloroethene	1.4E-02	mg/L	3.9E-04	mg/kg/day	1.0E-02	mg/kg/day	3.9E-02
				Cyclohexane	6.3E-04	mg/L	1.7E-05	mg/kg/day	1.7E+00	mg/kg/day	1.0E-05
				Dibromochloromethane	1.2E-03	mg/L	3.3E-05	mg/kg/day	2.0E-02	mg/kg/day	1.6E-03
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	2.3E-04	mg/kg/day	2.0E-01	mg/kg/day	1.2E-03
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	4.3E-05	mg/kg/day	2.0E-01	mg/kg/day	2.1E-04
				Ethylbenzene	1.2E-03	mg/L	3.2E-05	mg/kg/day	1.0E-01	mg/kg/day	3.2E-04
				Isopropylbenzene	5.3E-04	mg/L	1.5E-05	mg/kg/day	1.0E-01	mg/kg/day	1.5E-04
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	1.3E-04	mg/kg/day	8.6E-01	mg/kg/day	1.5E-04
				Methylcyclohexane	8.5E-04	mg/L	2.3E-05	mg/kg/day	8.6E-01	mg/kg/day	2.7E-05
				Naphthalene	5.6E-04	mg/L	1.5E-05	mg/kg/day	2.0E-02	mg/kg/day	7.6E-04
				n-Propylbenzene	5.2E-04	mg/L	1.4E-05	mg/kg/day	4.0E-02	mg/kg/day	3.5E-04
				p-Isopropyltoluene	4.8E-04	mg/L	1.3E-05	mg/kg/day	1.0E-01	mg/kg/day	1.3E-04
				sec-Butylbenzene	3.6E-04	mg/L	9.8E-06	mg/kg/day	4.0E-02	mg/kg/day	2.4E-04
				Tetrahydrofuran	6.5E-01	mg/L	1.8E-02	mg/kg/day	2.1E-01	mg/kg/day	8.5E-02
				trans-1,2-Dichloroethene	3.1E-02	mg/L	8.4E-04	mg/kg/day	2.0E-02	mg/kg/day	4.2E-02
				Vinyl chloride	6.8E-04	mg/L	1.9E-05	mg/kg/day	3.0E-03	mg/kg/day	6.2E-03
				m,p-Xylenes	1.0E-02	mg/L	2.8E-04	mg/kg/day	2.0E-01	mg/kg/day	1.4E-03
				o-Xylene	8.1E-03	mg/L	2.2E-04	mg/kg/day	2.0E-01	mg/kg/day	1.1E-03
				Xylenes, total	3.6E-02	mg/L	9.8E-04	mg/kg/day	2.0E-01	mg/kg/day	4.9E-03

Table 7b.1.1

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	2.2E-05	mg/kg/day	5.0E-02	mg/kg/day	4.4E-04
				1,2,3-Trichloropropane	1.4E-05	mg/L	3.7E-07	mg/kg/day	6.0E-03	mg/kg/day	6.2E-05
				2-Methylnaphthalene	2.8E-03	mg/L	7.7E-05	mg/kg/day	4.0E-03	mg/kg/day	1.9E-02
				Acetophenone	2.8E-03	mg/L	7.6E-05	mg/kg/day	1.0E-01	mg/kg/day	7.6E-04
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	3.2E-04	mg/kg/day	2.0E-02	mg/kg/day	1.6E-02
				Caprolactam	3.8E-03	mg/L	1.0E-04	mg/kg/day	5.0E-01	mg/kg/day	2.1E-04
				Dimethyl phthalate	6.8E-04	mg/L	1.9E-05	mg/kg/day	1.0E+01	mg/kg/day	1.9E-06
				Di-n-butyl phthalate	1.0E-03	mg/L	2.7E-05	mg/kg/day	1.0E-01	mg/kg/day	2.7E-04
				Isophorone	4.9E-03	mg/L	1.3E-04	mg/kg/day	2.0E-01	mg/kg/day	6.7E-04
				N-Nitrosodimethylamine	1.9E-04	mg/L	5.2E-06	mg/kg/day	8.0E-06	mg/kg/day	6.5E-01
				Pentachlorophenol	3.0E-04	mg/L	8.2E-06	mg/kg/day	3.0E-02	mg/kg/day	2.7E-04
				Phenanthrene	6.9E-05	mg/L	1.9E-06	mg/kg/day	3.0E-02	mg/kg/day	6.3E-05
				Phenol	9.8E-03	mg/L	2.7E-04	mg/kg/day	3.0E-01	mg/kg/day	9.0E-04
				Perchlorate	3.2E-03	mg/L	8.9E-05	mg/kg/day	7.0E-04	mg/kg/day	1.3E-01
				Cyanide (total)	3.4E-03	mg/L	9.3E-05	mg/kg/day	2.0E-02	mg/kg/day	4.7E-03
				Arsenic	1.4E-02	mg/L	3.7E-04	mg/kg/day	3.0E-04	mg/kg/day	1.2E+00
				Hexavalent chromium	9.3E-03	mg/L	2.5E-04	mg/kg/day	3.0E-03	mg/kg/day	8.5E-02
				Nickel	3.4E-02	mg/L	9.2E-04	mg/kg/day	2.0E-02	mg/kg/day	4.6E-02
			Exp. Route Total								3.1E+02

Table 7b.1.1

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Dermal	1,1,1-Trichloroethane	2.5E+00	mg/L	1.3E-02	mg/kg/day	2.0E+00	mg/kg/day	6.4E-03
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	9.7E-03	mg/kg/day	3.0E+01	mg/kg/day	3.2E-04
				1,1-Dichloroethene	1.0E+00	mg/L	3.9E-03	mg/kg/day	5.0E-02	mg/kg/day	7.9E-02
				1,2-Dichloroethane	2.5E-01	mg/L	5.2E-04	mg/kg/day	2.0E-02	mg/kg/day	2.6E-02
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	3.5E-04	mg/kg/day	NA	NA	--
				Acetone	2.0E+00	mg/L	2.6E-04	mg/kg/day	9.0E-01	mg/kg/day	2.9E-04
				Chloroform	5.8E-01	mg/L	1.4E-03	mg/kg/day	1.0E-02	mg/kg/day	1.4E-01
				Methylene chloride	1.9E+00	mg/L	2.0E-03	mg/kg/day	6.0E-02	mg/kg/day	3.3E-02
				Tetrachloroethene	6.5E+01	mg/L	1.1E+00	mg/kg/day	1.0E-02	mg/kg/day	1.1E+02
				Toluene	7.1E-02	mg/L	6.7E-04	mg/kg/day	8.0E-02	mg/kg/day	8.4E-03
				Trichloroethene (TCE)	1.3E+00	mg/L	6.2E-03	mg/kg/day	3.0E-04	mg/kg/day	2.1E+01
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	1.8E-03	mg/kg/day	3.0E-01	mg/kg/day	6.2E-03
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	3.9E-05	mg/kg/day	3.0E-02	mg/kg/day	1.3E-03
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	2.3E-06	mg/kg/day	6.0E-02	mg/kg/day	3.8E-05
				1,1,2-Trichloroethane	1.8E-01	mg/L	4.6E-04	mg/kg/day	4.0E-03	mg/kg/day	1.1E-01
				1,1-Dichloroethane	3.8E-02	mg/L	8.1E-05	mg/kg/day	1.0E-01	mg/kg/day	8.1E-04
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	1.9E-05	mg/kg/day	1.0E-02	mg/kg/day	1.9E-03
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	2.3E-04	mg/kg/day	5.0E-02	mg/kg/day	4.6E-03
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	2.9E-05	mg/kg/day	5.7E-05	mg/kg/day	5.0E-01
				1,2-Dichlorobenzene	1.8E-03	mg/L	3.2E-05	mg/kg/day	9.0E-02	mg/kg/day	3.6E-04
				1,2-Dichloropropane	1.6E-03	mg/L	4.4E-06	mg/kg/day	1.1E-03	mg/kg/day	4.0E-03
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	2.6E-05	mg/kg/day	5.0E-02	mg/kg/day	5.2E-04
				1,3-Dichlorobenzene	4.2E-04	mg/L	1.1E-05	mg/kg/day	3.0E-02	mg/kg/day	3.6E-04
				1,4-Dichlorobenzene	7.1E-04	mg/L	1.3E-05	mg/kg/day	3.0E-02	mg/kg/day	4.3E-04
				2-Butanone	3.3E-01	mg/L	8.4E-05	mg/kg/day	6.0E-01	mg/kg/day	1.4E-04
				2-Chlorotoluene	4.5E-04	mg/L	1.5E-05	mg/kg/day	2.0E-02	mg/kg/day	7.4E-04
				4-Chlorotoluene	4.6E-04	mg/L	1.8E-06	mg/kg/day	2.0E-02	mg/kg/day	9.0E-05
				4-Methyl-2-pentanone	7.8E-02	mg/L	6.8E-05	mg/kg/day	8.0E-02	mg/kg/day	8.4E-04
				Benzene	1.9E-02	mg/L	8.0E-05	mg/kg/day	4.0E-03	mg/kg/day	2.0E-02

Table 7b.1.1

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	1.4E-05	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	9.8E-07	mg/kg/day	2.0E-02	mg/kg/day	4.9E-05
				Bromoform	2.8E-03	mg/L	5.3E-06	mg/kg/day	2.0E-02	mg/kg/day	2.6E-04
				Bromomethane	2.6E-02	mg/L	2.3E-05	mg/kg/day	1.4E-03	mg/kg/day	1.6E-02
				Carbon disulfide	9.4E-02	mg/L	4.5E-04	mg/kg/day	1.0E-01	mg/kg/day	4.5E-03
				Carbon tetrachloride	3.1E-04	mg/L	2.3E-06	mg/kg/day	7.0E-04	mg/kg/day	3.3E-03
				Chlorobenzene	3.5E-02	mg/L	3.4E-04	mg/kg/day	2.0E-02	mg/kg/day	1.7E-02
				Chloroethane	2.0E-04	mg/L	3.2E-07	mg/kg/day	4.0E-01	mg/kg/day	8.0E-07
				Chloromethane	9.7E-04	mg/L	7.8E-07	mg/kg/day	2.6E-02	mg/kg/day	3.0E-05
				cis-1,2-Dichloroethene	1.4E-02	mg/L	4.9E-05	mg/kg/day	1.0E-02	mg/kg/day	4.9E-03
				Cyclohexane	6.3E-04	mg/L	1.8E-05	mg/kg/day	1.7E+00	mg/kg/day	1.1E-05
				Dibromochloromethane	1.2E-03	mg/L	2.2E-06	mg/kg/day	2.0E-02	mg/kg/day	1.1E-04
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	3.1E-05	mg/kg/day	2.0E-01	mg/kg/day	1.6E-04
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	5.1E-06	mg/kg/day	2.0E-01	mg/kg/day	2.5E-05
				Ethylbenzene	1.2E-03	mg/L	1.9E-05	mg/kg/day	1.0E-01	mg/kg/day	1.9E-04
				Isopropylbenzene	5.3E-04	mg/L	1.7E-05	mg/kg/day	1.0E-01	mg/kg/day	1.7E-04
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	3.0E-06	mg/kg/day	8.6E-01	mg/kg/day	3.4E-06
				Methylcyclohexane	8.5E-04	mg/L	2.9E-05	mg/kg/day	8.6E-01	mg/kg/day	3.4E-05
				Naphthalene	5.6E-04	mg/L	1.0E-05	mg/kg/day	2.0E-02	mg/kg/day	5.0E-04
				n-Propylbenzene	5.2E-04	mg/L	1.3E-05	mg/kg/day	4.0E-02	mg/kg/day	3.4E-04
				p-Isopropyltoluene	4.8E-04	mg/L	2.3E-05	mg/kg/day	1.0E-01	mg/kg/day	2.3E-04
				sec-Butylbenzene	3.6E-04	mg/L	1.6E-05	mg/kg/day	4.0E-02	mg/kg/day	4.0E-04
				Tetrahydrofuran	6.5E-01	mg/L	4.5E-04	mg/kg/day	2.1E-01	mg/kg/day	2.2E-03
				trans-1,2-Dichloroethene	3.1E-02	mg/L	7.5E-05	mg/kg/day	2.0E-02	mg/kg/day	3.7E-03
				Vinyl chloride	6.8E-04	mg/L	9.9E-07	mg/kg/day	3.0E-03	mg/kg/day	3.3E-04
				m,p-Xylenes	1.0E-02	mg/L	1.8E-04	mg/kg/day	2.0E-01	mg/kg/day	8.9E-04
				o-Xylene	8.1E-03	mg/L	1.9E-04	mg/kg/day	2.0E-01	mg/kg/day	9.5E-04
				Xylenes, total	3.6E-02	mg/L	6.3E-04	mg/kg/day	2.0E-01	mg/kg/day	3.1E-03

Table 7b.1.1

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	3.3E-05	mg/kg/day	5.0E-02	mg/kg/day	6.7E-04
				1,2,3-Trichloropropane	1.4E-05	mg/L	5.8E-08	mg/kg/day	6.0E-03	mg/kg/day	9.7E-06
				2-Methylnaphthalene	2.8E-03	mg/L	1.1E-04	mg/kg/day	4.0E-03	mg/kg/day	2.6E-02
				Acetophenone	2.8E-03	mg/L	4.8E-06	mg/kg/day	1.0E-01	mg/kg/day	4.8E-05
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	6.0E-04	mg/kg/day	2.0E-02	mg/kg/day	3.0E-02
				Caprolactam	3.8E-03	mg/L	1.3E-06	mg/kg/day	5.0E-01	mg/kg/day	2.7E-06
				Dimethyl phthalate	6.8E-04	mg/L	6.8E-07	mg/kg/day	1.0E+01	mg/kg/day	6.8E-08
				Di-n-butyl phthalate	1.0E-03	mg/L	2.2E-05	mg/kg/day	1.0E-01	mg/kg/day	2.2E-04
				Isophorone	4.9E-03	mg/L	6.8E-06	mg/kg/day	2.0E-01	mg/kg/day	3.4E-05
				N-Nitrosodimethylamine	1.9E-04	mg/L	1.4E-08	mg/kg/day	8.0E-06	mg/kg/day	1.7E-03
				Pentachlorophenol	3.0E-04	mg/L	9.9E-05	mg/kg/day	3.0E-02	mg/kg/day	3.3E-03
				Phenanthrene	6.9E-05	mg/L	5.1E-06	mg/kg/day	3.0E-02	mg/kg/day	1.7E-04
				Phenol	9.8E-03	mg/L	1.3E-05	mg/kg/day	3.0E-01	mg/kg/day	4.3E-05
				Perchlorate	3.2E-03	mg/L	4.6E-07	mg/kg/day	7.0E-04	mg/kg/day	6.6E-04
				Cyanide (total)	3.4E-03	mg/L	4.9E-07	mg/kg/day	2.0E-02	mg/kg/day	2.4E-05
				Arsenic	1.4E-02	mg/L	1.9E-06	mg/kg/day	3.0E-04	mg/kg/day	6.4E-03
				Hexavalent chromium	9.3E-03	mg/L	2.7E-06	mg/kg/day	3.0E-03	mg/kg/day	8.9E-04
				Nickel	3.4E-02	mg/L	9.6E-07	mg/kg/day	2.0E-02	mg/kg/day	4.8E-05
			Exp. Route Total								1.3E+02

Table 7b.1.1

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Inhalation	1,1,1-Trichloroethane	2.5E+00	mg/L	3.4E-01	mg/kg/day	1.4E+00	mg/kg/day	2.4E-01
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	1.4E-01	mg/kg/day	8.6E+00	mg/kg/day	1.6E-02
				1,1-Dichloroethene	1.0E+00	mg/L	1.4E-01	mg/kg/day	2.0E-02	mg/kg/day	7.2E+00
				1,2-Dichloroethane	2.5E-01	mg/L	3.4E-02	mg/kg/day	1.4E-03	mg/kg/day	2.4E+01
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	NV	NA	8.6E-01	mg/kg/day	--
				Acetone	2.0E+00	mg/L	2.8E-01	mg/kg/day	9.0E-01	mg/kg/day	3.1E-01
				Chloroform	5.8E-01	mg/L	8.0E-02	mg/kg/day	1.4E-02	mg/kg/day	5.7E+00
				Methylene chloride	1.9E+00	mg/L	2.6E-01	mg/kg/day	8.6E-01	mg/kg/day	3.1E-01
				Tetrachloroethene	6.5E+01	mg/L	8.9E+00	mg/kg/day	1.0E-02	mg/kg/day	8.9E+02
				Toluene	7.1E-02	mg/L	9.8E-03	mg/kg/day	8.6E-02	mg/kg/day	1.1E-01
				Trichloroethene (TCE)	1.3E+00	mg/L	1.8E-01	mg/kg/day	1.7E-01	mg/kg/day	1.1E+00
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	4.9E-02	mg/kg/day	2.0E-01	mg/kg/day	2.5E-01
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	4.9E-04	mg/kg/day	3.0E-02	mg/kg/day	1.6E-02
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	9.2E-05	mg/kg/day	6.0E-02	mg/kg/day	1.5E-03
				1,1,2-Trichloroethane	1.8E-01	mg/L	2.5E-02	mg/kg/day	4.0E-03	mg/kg/day	6.1E+00
				1,1-Dichloroethane	3.8E-02	mg/L	5.2E-03	mg/kg/day	1.4E-01	mg/kg/day	3.6E-02
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	7.3E-05	mg/kg/day	1.0E-03	mg/kg/day	7.3E-02
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	1.0E-03	mg/kg/day	1.7E-03	mg/kg/day	6.1E-01
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	7.5E-04	mg/kg/day	5.7E-05	mg/kg/day	1.3E+01
				1,2-Dichlorobenzene	1.8E-03	mg/L	2.5E-04	mg/kg/day	5.7E-02	mg/kg/day	4.3E-03
				1,2-Dichloropropane	1.6E-03	mg/L	2.2E-04	mg/kg/day	1.1E-03	mg/kg/day	2.0E-01
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	1.6E-04	mg/kg/day	1.7E-03	mg/kg/day	9.4E-02
				1,3-Dichlorobenzene	4.2E-04	mg/L	5.8E-05	mg/kg/day	3.0E-02	mg/kg/day	1.9E-03
				1,4-Dichlorobenzene	7.1E-04	mg/L	9.7E-05	mg/kg/day	2.3E-01	mg/kg/day	4.2E-04
				2-Butanone	3.3E-01	mg/L	4.5E-02	mg/kg/day	1.4E+00	mg/kg/day	3.2E-02
				2-Chlorotoluene	4.5E-04	mg/L	6.2E-05	mg/kg/day	2.0E-02	mg/kg/day	3.1E-03
				4-Chlorotoluene	4.6E-04	mg/L	6.3E-05	mg/kg/day	2.0E-02	mg/kg/day	3.2E-03
				4-Methyl-2-pentanone	7.8E-02	mg/L	1.1E-02	mg/kg/day	8.6E-01	mg/kg/day	1.2E-02
				Benzene	1.9E-02	mg/L	2.6E-03	mg/kg/day	8.6E-03	mg/kg/day	3.1E-01

Table 7b.1.1

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	1.6E-03	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	6.0E-05	mg/kg/day	2.0E-02	mg/kg/day	3.0E-03
				Bromoform	2.8E-03	mg/L	NV	NA	2.0E-02	mg/kg/day	--
				Bromomethane	2.6E-02	mg/L	3.6E-03	mg/kg/day	1.4E-03	mg/kg/day	2.6E+00
				Carbon disulfide	9.4E-02	mg/L	1.3E-02	mg/kg/day	2.0E-01	mg/kg/day	6.4E-02
				Carbon tetrachloride	3.1E-04	mg/L	4.3E-05	mg/kg/day	7.0E-04	mg/kg/day	6.1E-02
				Chlorobenzene	3.5E-02	mg/L	4.8E-03	mg/kg/day	1.7E-02	mg/kg/day	2.8E-01
				Chloroethane	2.0E-04	mg/L	2.7E-05	mg/kg/day	2.9E+00	mg/kg/day	9.6E-06
				Chloromethane	9.7E-04	mg/L	1.3E-04	mg/kg/day	2.6E-02	mg/kg/day	5.1E-03
				cis-1,2-Dichloroethene	1.4E-02	mg/L	2.0E-03	mg/kg/day	1.0E-02	mg/kg/day	2.0E-01
				Cyclohexane	6.3E-04	mg/L	8.6E-05	mg/kg/day	1.7E+00	mg/kg/day	5.1E-05
				Dibromochloromethane	1.2E-03	mg/L	1.6E-04	mg/kg/day	2.0E-02	mg/kg/day	8.2E-03
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	1.2E-03	mg/kg/day	5.7E-02	mg/kg/day	2.1E-02
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	2.1E-04	mg/kg/day	5.7E-02	mg/kg/day	3.7E-03
				Ethylbenzene	1.2E-03	mg/L	1.6E-04	mg/kg/day	2.9E-01	mg/kg/day	5.5E-04
				Isopropylbenzene	5.3E-04	mg/L	7.3E-05	mg/kg/day	1.1E-01	mg/kg/day	6.6E-04
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	6.4E-04	mg/kg/day	8.6E-01	mg/kg/day	7.5E-04
				Methylcyclohexane	8.5E-04	mg/L	1.2E-04	mg/kg/day	8.6E-01	mg/kg/day	1.4E-04
				Naphthalene	5.6E-04	mg/L	7.6E-05	mg/kg/day	8.6E-04	mg/kg/day	8.9E-02
				n-Propylbenzene	5.2E-04	mg/L	7.1E-05	mg/kg/day	4.0E-02	mg/kg/day	1.8E-03
				p-Isopropyltoluene	4.8E-04	mg/L	6.6E-05	mg/kg/day	1.1E-01	mg/kg/day	6.0E-04
				sec-Butylbenzene	3.6E-04	mg/L	4.9E-05	mg/kg/day	4.0E-02	mg/kg/day	1.2E-03
				Tetrahydrofuran	6.5E-01	mg/L	8.9E-02	mg/kg/day	8.6E-02	mg/kg/day	1.0E+00
				trans-1,2-Dichloroethene	3.1E-02	mg/L	4.2E-03	mg/kg/day	2.0E-02	mg/kg/day	2.1E-01
				Vinyl chloride	6.8E-04	mg/L	9.3E-05	mg/kg/day	2.9E-02	mg/kg/day	3.3E-03
				m,p-Xylenes	1.0E-02	mg/L	1.4E-03	mg/kg/day	2.9E-02	mg/kg/day	4.8E-02
				o-Xylene	8.1E-03	mg/L	1.1E-03	mg/kg/day	2.9E-02	mg/kg/day	3.8E-02
				Xylenes, total	3.6E-02	mg/L	4.9E-03	mg/kg/day	2.9E-02	mg/kg/day	1.7E-01

Table 7b.1.1

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	1.1E-04	mg/kg/day	5.0E-02	mg/kg/day	2.2E-03
				1,2,3-Trichloropropane	1.4E-05	mg/L	1.9E-06	mg/kg/day	1.4E-03	mg/kg/day	1.3E-03
				2-Methylnaphthalene	2.8E-03	mg/L	3.8E-04	mg/kg/day	4.0E-03	mg/kg/day	9.6E-02
				Acetophenone	2.8E-03	mg/L	NV	NA	NA	NA	--
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	NV	NA	2.0E-02	mg/kg/day	--
				Caprolactam	3.8E-03	mg/L	NV	NA	5.0E-01	mg/kg/day	--
				Dimethyl phthalate	6.8E-04	mg/L	NV	NA	1.0E+01	mg/kg/day	--
				Di-n-butyl phthalate	1.0E-03	mg/L	NV	NA	1.0E-01	mg/kg/day	--
				Isophorone	4.9E-03	mg/L	NV	NA	2.0E-01	mg/kg/day	--
				N-Nitrosodimethylamine	1.9E-04	mg/L	NV	NA	8.0E-06	mg/kg/day	--
				Pentachlorophenol	3.0E-04	mg/L	NV	NA	3.0E-02	mg/kg/day	--
				Phenanthrene	6.9E-05	mg/L	9.5E-06	mg/kg/day	3.0E-02	mg/kg/day	3.2E-04
				Phenol	9.8E-03	mg/L	NV	NA	5.7E-02	mg/kg/day	--
				Perchlorate	3.2E-03	mg/L	NV	NA	NA	NA	--
				Cyanide (total)	3.4E-03	mg/L	4.7E-04	mg/kg/day	NA	NA	--
				Arsenic	1.4E-02	mg/L	NV	NA	8.6E-06	mg/kg/day	--
				Hexavalent chromium	9.3E-03	mg/L	NV	NA	2.2E-06	mg/kg/day	--
				Nickel	3.4E-02	mg/L	NV	NA	1.4E-05	mg/kg/day	--
			Exp. Route Total								9.6E+02
		Exposure Point Total									1.4E+03
	Exposure Medium Total										1.4E+03
Medium Total											1.4E+03
										Total of Receptor Hazards Across All Media	1392

Table 7b.1.2

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Ingestion	1,1,1-Trichloroethane	2.5E+00	mg/L	1.6E-01	mg/kg/day	2.0E+00	mg/kg/day	7.9E-02
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	6.3E-02	mg/kg/day	3.0E+01	mg/kg/day	2.1E-03
				1,1-Dichloroethene	1.0E+00	mg/L	6.7E-02	mg/kg/day	5.0E-02	mg/kg/day	1.3E+00
				1,2-Dichloroethane	2.5E-01	mg/L	1.6E-02	mg/kg/day	2.0E-02	mg/kg/day	7.8E-01
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	2.3E-01	mg/kg/day	NA	NA	--
				Acetone	2.0E+00	mg/L	1.3E-01	mg/kg/day	9.0E-01	mg/kg/day	1.4E-01
				Chloroform	5.8E-01	mg/L	3.7E-02	mg/kg/day	1.0E-02	mg/kg/day	3.7E+00
				Methylene chloride	1.9E+00	mg/L	1.2E-01	mg/kg/day	6.0E-02	mg/kg/day	2.1E+00
				Tetrachloroethene	6.5E+01	mg/L	4.2E+00	mg/kg/day	1.0E-02	mg/kg/day	4.2E+02
				Toluene	7.1E-02	mg/L	4.6E-03	mg/kg/day	8.0E-02	mg/kg/day	5.7E-02
				Trichloroethene (TCE)	1.3E+00	mg/L	8.4E-02	mg/kg/day	3.0E-04	mg/kg/day	2.8E+02
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	2.3E-02	mg/kg/day	3.0E-01	mg/kg/day	7.6E-02
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	2.3E-04	mg/kg/day	3.0E-02	mg/kg/day	7.6E-03
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	4.3E-05	mg/kg/day	6.0E-02	mg/kg/day	7.1E-04
				1,1,2-Trichloroethane	1.8E-01	mg/L	1.1E-02	mg/kg/day	4.0E-03	mg/kg/day	2.9E+00
				1,1-Dichloroethane	3.8E-02	mg/L	2.4E-03	mg/kg/day	1.0E-01	mg/kg/day	2.4E-02
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	3.4E-05	mg/kg/day	1.0E-02	mg/kg/day	3.4E-03
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	4.8E-04	mg/kg/day	5.0E-02	mg/kg/day	9.6E-03
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	3.5E-04	mg/kg/day	5.7E-05	mg/kg/day	6.2E+00
				1,2-Dichlorobenzene	1.8E-03	mg/L	1.2E-04	mg/kg/day	9.0E-02	mg/kg/day	1.3E-03
				1,2-Dichloropropane	1.6E-03	mg/L	1.0E-04	mg/kg/day	1.1E-03	mg/kg/day	9.3E-02
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	7.5E-05	mg/kg/day	5.0E-02	mg/kg/day	1.5E-03
				1,3-Dichlorobenzene	4.2E-04	mg/L	2.7E-05	mg/kg/day	3.0E-02	mg/kg/day	9.0E-04
				1,4-Dichlorobenzene	7.1E-04	mg/L	4.5E-05	mg/kg/day	3.0E-02	mg/kg/day	1.5E-03
				2-Butanone	3.3E-01	mg/L	2.1E-02	mg/kg/day	6.0E-01	mg/kg/day	3.5E-02
				2-Chlorotoluene	4.5E-04	mg/L	2.9E-05	mg/kg/day	2.0E-02	mg/kg/day	1.4E-03
				4-Chlorotoluene	4.6E-04	mg/L	2.9E-05	mg/kg/day	2.0E-02	mg/kg/day	1.5E-03
				4-Methyl-2-pentanone	7.8E-02	mg/L	5.0E-03	mg/kg/day	8.0E-02	mg/kg/day	6.2E-02
				Benzene	1.9E-02	mg/L	1.2E-03	mg/kg/day	4.0E-03	mg/kg/day	3.1E-01

Table 7b.1.2

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	7.7E-04	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	2.8E-05	mg/kg/day	2.0E-02	mg/kg/day	1.4E-03
				Bromoform	2.8E-03	mg/L	1.8E-04	mg/kg/day	2.0E-02	mg/kg/day	8.9E-03
				Bromomethane	2.6E-02	mg/L	1.7E-03	mg/kg/day	1.4E-03	mg/kg/day	1.2E+00
				Carbon disulfide	9.4E-02	mg/L	6.0E-03	mg/kg/day	1.0E-01	mg/kg/day	6.0E-02
				Carbon tetrachloride	3.1E-04	mg/L	2.0E-05	mg/kg/day	7.0E-04	mg/kg/day	2.9E-02
				Chlorobenzene	3.5E-02	mg/L	2.2E-03	mg/kg/day	2.0E-02	mg/kg/day	1.1E-01
				Chloroethane	2.0E-04	mg/L	1.3E-05	mg/kg/day	4.0E-01	mg/kg/day	3.2E-05
				Chloromethane	9.7E-04	mg/L	6.2E-05	mg/kg/day	2.6E-02	mg/kg/day	2.4E-03
				cis-1,2-Dichloroethene	1.4E-02	mg/L	9.2E-04	mg/kg/day	1.0E-02	mg/kg/day	9.2E-02
				Cyclohexane	6.3E-04	mg/L	4.0E-05	mg/kg/day	1.7E+00	mg/kg/day	2.4E-05
				Dibromochloromethane	1.2E-03	mg/L	7.6E-05	mg/kg/day	2.0E-02	mg/kg/day	3.8E-03
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	5.5E-04	mg/kg/day	2.0E-01	mg/kg/day	2.7E-03
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	1.0E-04	mg/kg/day	2.0E-01	mg/kg/day	5.0E-04
				Ethylbenzene	1.2E-03	mg/L	7.4E-05	mg/kg/day	1.0E-01	mg/kg/day	7.4E-04
				Isopropylbenzene	5.3E-04	mg/L	3.4E-05	mg/kg/day	1.0E-01	mg/kg/day	3.4E-04
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	3.0E-04	mg/kg/day	8.6E-01	mg/kg/day	3.5E-04
				Methylcyclohexane	8.5E-04	mg/L	5.4E-05	mg/kg/day	8.6E-01	mg/kg/day	6.3E-05
				Naphthalene	5.6E-04	mg/L	3.6E-05	mg/kg/day	2.0E-02	mg/kg/day	1.8E-03
				n-Propylbenzene	5.2E-04	mg/L	3.3E-05	mg/kg/day	4.0E-02	mg/kg/day	8.3E-04
				p-Isopropyltoluene	4.8E-04	mg/L	3.1E-05	mg/kg/day	1.0E-01	mg/kg/day	3.1E-04
				sec-Butylbenzene	3.6E-04	mg/L	2.3E-05	mg/kg/day	4.0E-02	mg/kg/day	5.7E-04
				Tetrahydrofuran	6.5E-01	mg/L	4.2E-02	mg/kg/day	2.1E-01	mg/kg/day	2.0E-01
				trans-1,2-Dichloroethene	3.1E-02	mg/L	2.0E-03	mg/kg/day	2.0E-02	mg/kg/day	9.8E-02
				Vinyl chloride	6.8E-04	mg/L	4.3E-05	mg/kg/day	3.0E-03	mg/kg/day	1.4E-02
				m,p-Xylenes	1.0E-02	mg/L	6.5E-04	mg/kg/day	2.0E-01	mg/kg/day	3.2E-03
				o-Xylene	8.1E-03	mg/L	5.2E-04	mg/kg/day	2.0E-01	mg/kg/day	2.6E-03
				Xylenes, total	3.6E-02	mg/L	2.3E-03	mg/kg/day	2.0E-01	mg/kg/day	1.1E-02

Table 7b.1.2

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	5.1E-05	mg/kg/day	5.0E-02	mg/kg/day	1.0E-03
				1,2,3-Trichloropropane	1.4E-05	mg/L	8.7E-07	mg/kg/day	6.0E-03	mg/kg/day	1.4E-04
				2-Methylnaphthalene	2.8E-03	mg/L	1.8E-04	mg/kg/day	4.0E-03	mg/kg/day	4.5E-02
				Acetophenone	2.8E-03	mg/L	1.8E-04	mg/kg/day	1.0E-01	mg/kg/day	1.8E-03
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	7.4E-04	mg/kg/day	2.0E-02	mg/kg/day	3.7E-02
				Caprolactam	3.8E-03	mg/L	2.4E-04	mg/kg/day	5.0E-01	mg/kg/day	4.9E-04
				Dimethyl phthalate	6.8E-04	mg/L	4.3E-05	mg/kg/day	1.0E+01	mg/kg/day	4.3E-06
				Di-n-butyl phthalate	1.0E-03	mg/L	6.4E-05	mg/kg/day	1.0E-01	mg/kg/day	6.4E-04
				Isophorone	4.9E-03	mg/L	3.1E-04	mg/kg/day	2.0E-01	mg/kg/day	1.6E-03
				N-Nitrosodimethylamine	1.9E-04	mg/L	1.2E-05	mg/kg/day	8.0E-06	mg/kg/day	1.5E+00
				Pentachlorophenol	3.0E-04	mg/L	1.9E-05	mg/kg/day	3.0E-02	mg/kg/day	6.4E-04
				Phenanthrene	6.9E-05	mg/L	4.4E-06	mg/kg/day	3.0E-02	mg/kg/day	1.5E-04
				Phenol	9.8E-03	mg/L	6.3E-04	mg/kg/day	3.0E-01	mg/kg/day	2.1E-03
				Perchlorate	3.2E-03	mg/L	2.1E-04	mg/kg/day	7.0E-04	mg/kg/day	3.0E-01
				Cyanide (total)	3.4E-03	mg/L	2.2E-04	mg/kg/day	2.0E-02	mg/kg/day	1.1E-02
				Arsenic	1.4E-02	mg/L	8.6E-04	mg/kg/day	3.0E-04	mg/kg/day	2.9E+00
				Hexavalent chromium	9.3E-03	mg/L	5.9E-04	mg/kg/day	3.0E-03	mg/kg/day	2.0E-01
				Nickel	3.4E-02	mg/L	2.1E-03	mg/kg/day	2.0E-02	mg/kg/day	1.1E-01
			Exp. Route Total								7.2E+02

Table 7b.1.2

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Dermal	1,1,1-Trichloroethane	2.5E+00	mg/L	2.9E-02	mg/kg/day	2.0E+00	mg/kg/day	1.4E-02
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	2.2E-02	mg/kg/day	3.0E+01	mg/kg/day	7.2E-04
				1,1-Dichloroethene	1.0E+00	mg/L	9.1E-03	mg/kg/day	5.0E-02	mg/kg/day	1.8E-01
				1,2-Dichloroethane	2.5E-01	mg/L	1.2E-03	mg/kg/day	2.0E-02	mg/kg/day	6.1E-02
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	8.2E-04	mg/kg/day	NA	NA	--
				Acetone	2.0E+00	mg/L	6.4E-04	mg/kg/day	9.0E-01	mg/kg/day	7.1E-04
				Chloroform	5.8E-01	mg/L	3.2E-03	mg/kg/day	1.0E-02	mg/kg/day	3.2E-01
				Methylene chloride	1.9E+00	mg/L	4.6E-03	mg/kg/day	6.0E-02	mg/kg/day	7.7E-02
				Tetrachloroethene	6.5E+01	mg/L	2.4E+00	mg/kg/day	1.0E-02	mg/kg/day	2.4E+02
				Toluene	7.1E-02	mg/L	1.6E-03	mg/kg/day	8.0E-02	mg/kg/day	1.9E-02
				Trichloroethene (TCE)	1.3E+00	mg/L	1.4E-02	mg/kg/day	3.0E-04	mg/kg/day	4.7E+01
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	4.1E-03	mg/kg/day	3.0E-01	mg/kg/day	1.4E-02
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	8.7E-05	mg/kg/day	3.0E-02	mg/kg/day	2.9E-03
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	5.2E-06	mg/kg/day	6.0E-02	mg/kg/day	8.6E-05
				1,1,2-Trichloroethane	1.8E-01	mg/L	1.0E-03	mg/kg/day	4.0E-03	mg/kg/day	2.6E-01
				1,1-Dichloroethane	3.8E-02	mg/L	1.9E-04	mg/kg/day	1.0E-01	mg/kg/day	1.9E-03
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	4.3E-05	mg/kg/day	1.0E-02	mg/kg/day	4.3E-03
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	5.2E-04	mg/kg/day	5.0E-02	mg/kg/day	1.0E-02
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	6.5E-05	mg/kg/day	5.7E-05	mg/kg/day	1.1E+00
				1,2-Dichlorobenzene	1.8E-03	mg/L	7.2E-05	mg/kg/day	9.0E-02	mg/kg/day	8.0E-04
				1,2-Dichloropropane	1.6E-03	mg/L	9.8E-06	mg/kg/day	1.1E-03	mg/kg/day	8.9E-03
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	5.8E-05	mg/kg/day	5.0E-02	mg/kg/day	1.2E-03
				1,3-Dichlorobenzene	4.2E-04	mg/L	2.4E-05	mg/kg/day	3.0E-02	mg/kg/day	8.0E-04
				1,4-Dichlorobenzene	7.1E-04	mg/L	2.9E-05	mg/kg/day	3.0E-02	mg/kg/day	9.7E-04
				2-Butanone	3.3E-01	mg/L	2.0E-04	mg/kg/day	6.0E-01	mg/kg/day	3.4E-04
				2-Chlorotoluene	4.5E-04	mg/L	3.3E-05	mg/kg/day	2.0E-02	mg/kg/day	1.7E-03
				4-Chlorotoluene	4.6E-04	mg/L	4.1E-06	mg/kg/day	2.0E-02	mg/kg/day	2.0E-04
				4-Methyl-2-pentanone	7.8E-02	mg/L	1.6E-04	mg/kg/day	8.0E-02	mg/kg/day	2.0E-03
				Benzene	1.9E-02	mg/L	1.9E-04	mg/kg/day	4.0E-03	mg/kg/day	4.7E-02

Table 7b.1.2

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	3.2E-05	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	2.2E-06	mg/kg/day	2.0E-02	mg/kg/day	1.1E-04
				Bromoform	2.8E-03	mg/L	1.2E-05	mg/kg/day	2.0E-02	mg/kg/day	5.9E-04
				Bromomethane	2.6E-02	mg/L	5.3E-05	mg/kg/day	1.4E-03	mg/kg/day	3.8E-02
				Carbon disulfide	9.4E-02	mg/L	1.1E-03	mg/kg/day	1.0E-01	mg/kg/day	1.1E-02
				Carbon tetrachloride	3.1E-04	mg/L	5.1E-06	mg/kg/day	7.0E-04	mg/kg/day	7.3E-03
				Chlorobenzene	3.5E-02	mg/L	7.7E-04	mg/kg/day	2.0E-02	mg/kg/day	3.8E-02
				Chloroethane	2.0E-04	mg/L	7.6E-07	mg/kg/day	4.0E-01	mg/kg/day	1.9E-06
				Chloromethane	9.7E-04	mg/L	1.9E-06	mg/kg/day	2.6E-02	mg/kg/day	7.3E-05
				cis-1,2-Dichloroethene	1.4E-02	mg/L	1.1E-04	mg/kg/day	1.0E-02	mg/kg/day	1.1E-02
				Cyclohexane	6.3E-04	mg/L	4.2E-05	mg/kg/day	1.7E+00	mg/kg/day	2.4E-05
				Dibromochloromethane	1.2E-03	mg/L	5.0E-06	mg/kg/day	2.0E-02	mg/kg/day	2.5E-04
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	7.2E-05	mg/kg/day	2.0E-01	mg/kg/day	3.6E-04
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	1.1E-05	mg/kg/day	2.0E-01	mg/kg/day	5.7E-05
				Ethylbenzene	1.2E-03	mg/L	4.4E-05	mg/kg/day	1.0E-01	mg/kg/day	4.4E-04
				Isopropylbenzene	5.3E-04	mg/L	3.8E-05	mg/kg/day	1.0E-01	mg/kg/day	3.8E-04
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	6.9E-06	mg/kg/day	8.6E-01	mg/kg/day	8.1E-06
				Methylcyclohexane	8.5E-04	mg/L	6.7E-05	mg/kg/day	8.6E-01	mg/kg/day	7.8E-05
				Naphthalene	5.6E-04	mg/L	2.3E-05	mg/kg/day	2.0E-02	mg/kg/day	1.1E-03
				n-Propylbenzene	5.2E-04	mg/L	3.0E-05	mg/kg/day	4.0E-02	mg/kg/day	7.5E-04
				p-Isopropyltoluene	4.8E-04	mg/L	5.2E-05	mg/kg/day	1.0E-01	mg/kg/day	5.2E-04
				sec-Butylbenzene	3.6E-04	mg/L	3.6E-05	mg/kg/day	4.0E-02	mg/kg/day	9.0E-04
				Tetrahydrofuran	6.5E-01	mg/L	1.1E-03	mg/kg/day	2.1E-01	mg/kg/day	5.2E-03
				trans-1,2-Dichloroethene	3.1E-02	mg/L	1.7E-04	mg/kg/day	2.0E-02	mg/kg/day	8.6E-03
				Vinyl chloride	6.8E-04	mg/L	2.3E-06	mg/kg/day	3.0E-03	mg/kg/day	7.8E-04
				m,p-Xylenes	1.0E-02	mg/L	4.1E-04	mg/kg/day	2.0E-01	mg/kg/day	2.1E-03
				o-Xylene	8.1E-03	mg/L	4.4E-04	mg/kg/day	2.0E-01	mg/kg/day	2.2E-03
				Xylenes, total	3.6E-02	mg/L	1.5E-03	mg/kg/day	2.0E-01	mg/kg/day	7.3E-03

Table 7b.1.2

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	7.5E-05	mg/kg/day	5.0E-02	mg/kg/day	1.5E-03
				1,2,3-Trichloropropane	1.4E-05	mg/L	1.3E-07	mg/kg/day	6.0E-03	mg/kg/day	2.2E-05
				2-Methylnaphthalene	2.8E-03	mg/L	2.4E-04	mg/kg/day	4.0E-03	mg/kg/day	5.9E-02
				Acetophenone	2.8E-03	mg/L	1.1E-05	mg/kg/day	1.0E-01	mg/kg/day	1.1E-04
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	1.4E-03	mg/kg/day	2.0E-02	mg/kg/day	6.8E-02
				Caprolactam	3.8E-03	mg/L	3.0E-06	mg/kg/day	5.0E-01	mg/kg/day	6.0E-06
				Dimethyl phthalate	6.8E-04	mg/L	1.5E-06	mg/kg/day	1.0E+01	mg/kg/day	1.5E-07
				Di-n-butyl phthalate	1.0E-03	mg/L	4.9E-05	mg/kg/day	1.0E-01	mg/kg/day	4.9E-04
				Isophorone	4.9E-03	mg/L	1.5E-05	mg/kg/day	2.0E-01	mg/kg/day	7.7E-05
				N-Nitrosodimethylamine	1.9E-04	mg/L	3.3E-08	mg/kg/day	8.0E-06	mg/kg/day	4.1E-03
				Pentachlorophenol	3.0E-04	mg/L	2.2E-04	mg/kg/day	3.0E-02	mg/kg/day	7.4E-03
				Phenanthrene	6.9E-05	mg/L	1.2E-05	mg/kg/day	3.0E-02	mg/kg/day	3.8E-04
				Phenol	9.8E-03	mg/L	3.0E-05	mg/kg/day	3.0E-01	mg/kg/day	1.0E-04
				Perchlorate	3.2E-03	mg/L	1.4E-06	mg/kg/day	7.0E-04	mg/kg/day	2.0E-03
				Cyanide (total)	3.4E-03	mg/L	1.4E-06	mg/kg/day	2.0E-02	mg/kg/day	7.2E-05
				Arsenic	1.4E-02	mg/L	5.7E-06	mg/kg/day	3.0E-04	mg/kg/day	1.9E-02
				Hexavalent chromium	9.3E-03	mg/L	7.8E-06	mg/kg/day	3.0E-03	mg/kg/day	2.6E-03
				Nickel	3.4E-02	mg/L	2.8E-06	mg/kg/day	2.0E-02	mg/kg/day	1.4E-04
			Exp. Route Total								2.9E+02

Table 7b.1.2

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
Groundwater	Groundwater	Groundwater	Inhalation	1,1,1-Trichloroethane	2.5E+00	mg/L	7.9E-01	mg/kg/day	1.4E+00	mg/kg/day	5.5E-01
				1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	mg/L	3.2E-01	mg/kg/day	8.6E+00	mg/kg/day	3.7E-02
				1,1-Dichloroethene	1.0E+00	mg/L	3.3E-01	mg/kg/day	2.0E-02	mg/kg/day	1.7E+01
				1,2-Dichloroethane	2.5E-01	mg/L	7.8E-02	mg/kg/day	1.4E-03	mg/kg/day	5.6E+01
				1,4-Dioxane (p-dioxane)	3.6E+00	mg/L	NV	NA	8.6E-01	mg/kg/day	--
				Acetone	2.0E+00	mg/L	6.4E-01	mg/kg/day	9.0E-01	mg/kg/day	7.1E-01
				Chloroform	5.8E-01	mg/L	1.9E-01	mg/kg/day	1.4E-02	mg/kg/day	1.3E+01
				Methylene chloride	1.9E+00	mg/L	6.2E-01	mg/kg/day	8.6E-01	mg/kg/day	7.2E-01
				Tetrachloroethene	6.5E+01	mg/L	2.1E+01	mg/kg/day	1.0E-02	mg/kg/day	2.1E+03
				Toluene	7.1E-02	mg/L	2.3E-02	mg/kg/day	8.6E-02	mg/kg/day	2.7E-01
				Trichloroethene (TCE)	1.3E+00	mg/L	4.2E-01	mg/kg/day	1.7E-01	mg/kg/day	2.5E+00
				Trichlorofluoromethane (Freon 11)	3.6E-01	mg/L	1.1E-01	mg/kg/day	2.0E-01	mg/kg/day	5.7E-01
				1,1,1,2-Tetrachloroethane	3.6E-03	mg/L	1.1E-03	mg/kg/day	3.0E-02	mg/kg/day	3.8E-02
				1,1,2,2-Tetrachloroethane	6.7E-04	mg/L	2.1E-04	mg/kg/day	6.0E-02	mg/kg/day	3.6E-03
				1,1,2-Trichloroethane	1.8E-01	mg/L	5.7E-02	mg/kg/day	4.0E-03	mg/kg/day	1.4E+01
				1,1-Dichloroethane	3.8E-02	mg/L	1.2E-02	mg/kg/day	1.4E-01	mg/kg/day	8.5E-02
				1,2,4-Trichlorobenzene	5.3E-04	mg/L	1.7E-04	mg/kg/day	1.0E-03	mg/kg/day	1.7E-01
				1,2,4-Trimethylbenzene	7.5E-03	mg/L	2.4E-03	mg/kg/day	1.7E-03	mg/kg/day	1.4E+00
				1,2-Dibromo-3-chloropropane	5.5E-03	mg/L	1.8E-03	mg/kg/day	5.7E-05	mg/kg/day	3.1E+01
				1,2-Dichlorobenzene	1.8E-03	mg/L	5.8E-04	mg/kg/day	5.7E-02	mg/kg/day	1.0E-02
				1,2-Dichloropropane	1.6E-03	mg/L	5.1E-04	mg/kg/day	1.1E-03	mg/kg/day	4.6E-01
				1,3,5-Trimethylbenzene	1.2E-03	mg/L	3.7E-04	mg/kg/day	1.7E-03	mg/kg/day	2.2E-01
				1,3-Dichlorobenzene	4.2E-04	mg/L	1.4E-04	mg/kg/day	3.0E-02	mg/kg/day	4.5E-03
				1,4-Dichlorobenzene	7.1E-04	mg/L	2.3E-04	mg/kg/day	2.3E-01	mg/kg/day	9.9E-04
				2-Butanone	3.3E-01	mg/L	1.0E-01	mg/kg/day	1.4E+00	mg/kg/day	7.5E-02
				2-Chlorotoluene	4.5E-04	mg/L	1.4E-04	mg/kg/day	2.0E-02	mg/kg/day	7.2E-03
				4-Chlorotoluene	4.6E-04	mg/L	1.5E-04	mg/kg/day	2.0E-02	mg/kg/day	7.4E-03
				4-Methyl-2-pentanone	7.8E-02	mg/L	2.5E-02	mg/kg/day	8.6E-01	mg/kg/day	2.9E-02
				Benzene	1.9E-02	mg/L	6.1E-03	mg/kg/day	8.6E-03	mg/kg/day	7.2E-01

Table 7b.1.2

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
				Bromochloromethane	1.2E-02	mg/L	3.8E-03	mg/kg/day	NA	NA	--
				Bromodichloromethane	4.4E-04	mg/L	1.4E-04	mg/kg/day	2.0E-02	mg/kg/day	7.1E-03
				Bromoform	2.8E-03	mg/L	NV	NA	2.0E-02	mg/kg/day	--
				Bromomethane	2.6E-02	mg/L	8.4E-03	mg/kg/day	1.4E-03	mg/kg/day	6.0E+00
				Carbon disulfide	9.4E-02	mg/L	3.0E-02	mg/kg/day	2.0E-01	mg/kg/day	1.5E-01
				Carbon tetrachloride	3.1E-04	mg/L	1.0E-04	mg/kg/day	7.0E-04	mg/kg/day	1.4E-01
				Chlorobenzene	3.5E-02	mg/L	1.1E-02	mg/kg/day	1.7E-02	mg/kg/day	6.6E-01
				Chloroethane	2.0E-04	mg/L	6.4E-05	mg/kg/day	2.9E+00	mg/kg/day	2.2E-05
				Chloromethane	9.7E-04	mg/L	3.1E-04	mg/kg/day	2.6E-02	mg/kg/day	1.2E-02
				cis-1,2-Dichloroethene	1.4E-02	mg/L	4.6E-03	mg/kg/day	1.0E-02	mg/kg/day	4.6E-01
				Cyclohexane	6.3E-04	mg/L	2.0E-04	mg/kg/day	1.7E+00	mg/kg/day	1.2E-04
				Dibromochloromethane	1.2E-03	mg/L	3.8E-04	mg/kg/day	2.0E-02	mg/kg/day	1.9E-02
				Dichlorofluoromethane (Freon 21)	8.6E-03	mg/L	2.7E-03	mg/kg/day	5.7E-02	mg/kg/day	4.8E-02
				Dichlorodifluoromethane (Freon 12)	1.6E-03	mg/L	5.0E-04	mg/kg/day	5.7E-02	mg/kg/day	8.7E-03
				Ethylbenzene	1.2E-03	mg/L	3.7E-04	mg/kg/day	2.9E-01	mg/kg/day	1.3E-03
				Isopropylbenzene	5.3E-04	mg/L	1.7E-04	mg/kg/day	1.1E-01	mg/kg/day	1.5E-03
				Methyl tert-butyl ether (MTBE)	4.7E-03	mg/L	1.5E-03	mg/kg/day	8.6E-01	mg/kg/day	1.7E-03
				Methylcyclohexane	8.5E-04	mg/L	2.7E-04	mg/kg/day	8.6E-01	mg/kg/day	3.2E-04
				Naphthalene	5.6E-04	mg/L	1.8E-04	mg/kg/day	8.6E-04	mg/kg/day	2.1E-01
				n-Propylbenzene	5.2E-04	mg/L	1.7E-04	mg/kg/day	4.0E-02	mg/kg/day	4.1E-03
				p-Isopropyltoluene	4.8E-04	mg/L	1.5E-04	mg/kg/day	1.1E-01	mg/kg/day	1.4E-03
				sec-Butylbenzene	3.6E-04	mg/L	1.1E-04	mg/kg/day	4.0E-02	mg/kg/day	2.9E-03
				Tetrahydrofuran	6.5E-01	mg/L	2.1E-01	mg/kg/day	8.6E-02	mg/kg/day	2.4E+00
				trans-1,2-Dichloroethene	3.1E-02	mg/L	9.8E-03	mg/kg/day	2.0E-02	mg/kg/day	4.9E-01
				Vinyl chloride	6.8E-04	mg/L	2.2E-04	mg/kg/day	2.9E-02	mg/kg/day	7.6E-03
				m,p-Xylenes	1.0E-02	mg/L	3.2E-03	mg/kg/day	2.9E-02	mg/kg/day	1.1E-01
				o-Xylene	8.1E-03	mg/L	2.6E-03	mg/kg/day	2.9E-02	mg/kg/day	8.9E-02
				Xylenes, total	3.6E-02	mg/L	1.1E-02	mg/kg/day	2.9E-02	mg/kg/day	3.9E-01

Table 7b.1.2

CALCULATION OF CHEMICAL NON-CANCER HAZARDS

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Exposure Route	Chemical of Potential Concern	EPC		Non-Cancer Hazard Calculations				
					Value	Units	Intake/Exposure Concentration		RfD		Hazard Quotient
							Value	Units	Value	Units	
				1,1-Biphenyl	8.0E-04	mg/L	2.6E-04	mg/kg/day	5.0E-02	mg/kg/day	5.1E-03
				1,2,3-Trichloropropane	1.4E-05	mg/L	4.3E-06	mg/kg/day	1.4E-03	mg/kg/day	3.1E-03
				2-Methylnaphthalene	2.8E-03	mg/L	8.9E-04	mg/kg/day	4.0E-03	mg/kg/day	2.2E-01
				Acetophenone	2.8E-03	mg/L	NV	NA	NA	NA	--
				Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	mg/L	NV	NA	2.0E-02	mg/kg/day	--
				Caprolactam	3.8E-03	mg/L	NV	NA	5.0E-01	mg/kg/day	--
				Dimethyl phthalate	6.8E-04	mg/L	NV	NA	1.0E+01	mg/kg/day	--
				Di-n-butyl phthalate	1.0E-03	mg/L	NV	NA	1.0E-01	mg/kg/day	--
				Isophorone	4.9E-03	mg/L	NV	NA	2.0E-01	mg/kg/day	--
				N-Nitrosodimethylamine	1.9E-04	mg/L	NV	NA	8.0E-06	mg/kg/day	--
				Pentachlorophenol	3.0E-04	mg/L	NV	NA	3.0E-02	mg/kg/day	--
				Phenanthrene	6.9E-05	mg/L	2.2E-05	mg/kg/day	3.0E-02	mg/kg/day	7.4E-04
				Phenol	9.8E-03	mg/L	NV	NA	5.7E-02	mg/kg/day	--
				Perchlorate	3.2E-03	mg/L	NV	NA	NA	NA	--
				Cyanide (total)	3.4E-03	mg/L	1.1E-03	mg/kg/day	NA	NA	--
				Arsenic	1.4E-02	mg/L	NV	NA	8.6E-06	mg/kg/day	--
				Hexavalent chromium	9.3E-03	mg/L	NV	NA	2.2E-06	mg/kg/day	--
				Nickel	3.4E-02	mg/L	NV	NA	1.4E-05	mg/kg/day	--
			Exp. Route Total								2.2E+03
		Exposure Point Total									3.2E+03
	Exposure Medium Total										3.2E+03
Medium Total											3.2E+03
										Total of Receptor Hazards Across All Media	3236

Table 7-1 Adult Dermal Supplement

MODEL FOR ESTIMATING DERMAL EXPOSURE FROM CONTACT WITH CHEMICALS IN WATER

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

ORGANICS

If tevent > t*:

$$DA_{event} = FA \times K_p \times C_{gw}\left[\frac{t_{event}}{1+B} + 2\tau \times \left(\frac{1+3B+3B^2}{(1+B)^2}\right)\right]$$

If tevent ≤ t*:

$$DA_{event} = 2\,FA \times K_p \times C_{gw}\sqrt{\frac{6\tau \times t_{event}}{\Pi}}$$

INORGANICS

$$DA_{event} = K_p \times C_{gw} \times t_{event}$$

$$\log K_p = -2.8 + 0.66\log K_{ow} - 0.0056MW$$

$$B = K_p\frac{\sqrt{MW}}{2.6}$$

$$If\ B \le 0.6\ then\ t^* = 2.4\tau$$

$$If\ B > 0.6\ then\ t^* = 6\left(b - \sqrt{b^2 - c^2}\right)\tau$$

$$\tau = \frac{l_{sc}^{\ 2}}{6\ D_{sc}}$$

$$b = \frac{2}{\pi}(1+B)^2 - c$$

$$c = \frac{1+3B+3B^2}{3(1+B)}$$

$$\log\frac{D_{sc}}{l_{sc}} = -2.80 - 0.0056MW$$

Dermally-absorbed dose	DAD	calculated	mg/kg-day
Concentration in water	Conc (Cv)	chem-specific	mg/cm3
Permeability coefficient	Kp	calculated	cm/hr
Lag time per event (hours)	*tau (t)*	calculated	hours
Time to reach steady-state (hours)	t*	calculated	hours
Dimensionless coefficient	B	calculated	
Pi	π	3.1416	
Exposure Time	t_event	0.58	hr/event
Number of exposure events	EV	1	event/day
Exposure Duration	ED	24	year
Exposure Frequency	EF	350	days/year
Exposed Skin Surface Area	SA	18000	cm2
Fraction Absorbed	FA	chem-specific	
Body Weight	BW	70	kg
Averaging time - noncarcinogenic	AT_N	24	years
Averaging time - carcinogenic	AT_C	70	years
Conversion Factor	CF	0.001	mg/ug

Thickness of stratum corneum	*lsc (cm)*	0.001
Molecular Weight	g/mol	chem-specific
log octanol-water partition coefficient	Log Kow	chem-specific
log permeability coefficient	log Kp	calculated
Permeability coefficient (cm/hr)	Kp	calculated
Dimensionless ratio of the permeability coefficient of a compound through the stratum corneum relative to its permeability coefficient across the viable epidermis	B	calculated
Effective diffusion coefficient for transfer of a chemical across the stratum corneum (cm2/hr)	Dsc	calculated
Lag time per event (hours)	τ	calculated
Time to reach steady-state (hours)	t*	calculated
Correlation coefficients fitted to data set used in USEPA's methodology (see equations A7 and A8, USEPA, 2001)	b,c	calculated

Table 7-1 Adult Dermal Supplement

MODEL FOR ESTIMATING DERMAL EXPOSURE FROM CONTACT WITH CHEMICALS IN WATER

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Constituent	Conc (mg/L)	Conc (mg/cm3)	MW	FA	Log Kow	Kp (cm/hr) Select	Log Kp	B	Dsc/Isc	Dsc (cm2/hr)	τ (ηουρσ)	b	c	t* (hours)	DA_inorg (mg/cm2-event)	DA_1 (mg/cm2-event)	DA_2 (mg/cm2-event)	Selected DA (mg/cm2-event)
1,1,1-Trichloroethane	2.5E+00	2.5E-03	1.3E+02	1.0	2.5E+00	1.3E-02	-1.9E+00	0.058	2.8E-04	2.8E-07	5.9E-01	0.34	0.37	1.4E+00	NA	5.2E-05	5.8E-05	5.2E-05
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	9.9E-04	1.9E+02	1.0	3.2E+00	1.7E-02	-1.8E+00	0.091	1.4E-04	1.4E-07	1.2E+00	0.36	0.40	2.8E+00	NA	3.9E-05	5.3E-05	3.9E-05
1,1-Dichloroethene	1.0E+00	1.0E-03	9.7E+01	1.0	2.1E+00	1.2E-02	-1.9E+00	0.045	4.5E-04	4.5E-07	3.7E-01	0.33	0.36	8.8E-01	NA	1.6E-05	1.7E-05	1.6E-05
1,2-Dichloroethane	2.5E-01	2.5E-04	9.9E+01	1.0	1.5E+00	6.7E-03	-2.4E+00	0.026	4.4E-04	4.4E-07	3.8E-01	0.32	0.35	9.0E-01	NA	2.1E-06	2.2E-06	2.1E-06
1,4-Dioxane (p-dioxane)	3.6E+00	3.6E-03	8.8E+01	1.0	-2.7E-01	3.3E-04	-3.5E+00	0.0012	5.1E-04	5.1E-07	3.3E-01	0.30	0.33	7.9E-01	NA	1.4E-06	1.5E-06	1.4E-06
Acetone	2.0E+00	2.0E-03	5.8E+01	1.0	-2.4E-01	5.2E-04	-3.3E+00	0.0015	7.5E-04	7.5E-07	2.2E-01	0.30	0.33	5.3E-01	NA	1.0E-06	1.1E-06	1.1E-06
Chloroform	5.8E-01	5.8E-04	1.2E+02	1.0	2.0E+00	6.8E-03	-2.2E+00	0.029	3.4E-04	3.4E-07	4.9E-01	0.32	0.35	1.2E+00	NA	5.8E-06	6.2E-06	5.8E-06
Methylene chloride	1.9E+00	1.9E-03	8.5E+01	1.0	1.3E+00	3.5E-03	-2.5E+00	0.012	5.3E-04	5.3E-07	3.1E-01	0.31	0.34	7.5E-01	NA	8.0E-06	8.2E-06	8.0E-06
Tetrachloroethene	6.5E+01	6.5E-02	1.7E+02	1.0	3.4E+00	3.3E-02	-1.5E+00	0.16	1.9E-04	1.9E-07	8.9E-01	0.41	0.45	2.1E+00	NA	4.3E-03	5.5E-03	4.3E-03
Toluene	7.1E-02	7.1E-05	9.2E+01	1.0	2.7E+00	3.1E-02	-1.5E+00	0.11	4.8E-04	4.8E-07	3.4E-01	0.38	0.41	8.3E-01	NA	2.7E-06	2.9E-06	2.7E-06
Trichloroethene (TCE)	1.3E+00	1.3E-03	1.3E+02	1.0	2.4E+00	1.2E-02	-1.9E+00	0.053	2.9E-04	2.9E-07	5.7E-01	0.34	0.37	1.4E+00	NA	2.5E-05	2.8E-05	2.5E-05
Trichlorofluoromethane (Freon 11)	3.6E-01	3.6E-04	1.4E+02	1.0	2.5E+00	1.3E-02	-1.9E+00	0.057	2.7E-04	2.7E-07	6.2E-01	0.34	0.37	1.5E+00	NA	7.5E-06	8.4E-06	7.5E-06
1,1,1,2-Tetrachloroethane	3.6E-03	3.6E-06	1.7E+02	1.0	2.9E+00	2.2E-02	-1.8E+00	0.11	1.8E-04	1.8E-07	9.2E-01	0.37	0.41	2.2E+00	NA	1.6E-07	2.0E-07	1.6E-07
1,1,2,2-Tetrachloroethane	6.7E-04	6.7E-07	1.7E+02	1.0	2.4E+00	6.9E-03	-2.2E+00	0.034	1.8E-04	1.8E-07	9.2E-01	0.32	0.36	2.2E+00	NA	9.3E-09	1.1E-08	9.3E-09
1,1,2-Trichloroethane	1.8E-01	1.8E-04	1.3E+02	1.0	2.1E+00	6.4E-03	-2.2E+00	0.028	2.8E-04	2.8E-07	5.9E-01	0.32	0.35	1.4E+00	NA	1.8E-06	2.0E-06	1.8E-06
1,1-Dichloroethane	3.8E-02	3.8E-05	9.9E+01	1.0	1.8E+00	6.7E-03	-2.2E+00	0.026	4.4E-04	4.4E-07	3.8E-01	0.32	0.35	9.0E-01	NA	3.3E-07	3.4E-07	3.3E-07
1,2,4-Trichlorobenzene	5.3E-04	5.3E-07	1.8E+02	1.0	4.0E+00	6.6E-02	-1.2E+00	0.34	1.5E-04	1.5E-07	1.1E+00	0.56	0.59	2.6E+00	NA	7.7E-08	1.2E-07	7.7E-08
1,2,4-Trimethylbenzene	7.5E-03	7.5E-06	1.2E+02	1.0	3.6E+00	8.4E-02	-1.1E+00	0.35	3.4E-04	3.4E-07	5.0E-01	0.57	0.60	1.2E+00	NA	9.3E-07	1.1E-06	9.3E-07
1,2-Dibromo-3-chloropropane	5.5E-03	5.5E-06	2.4E+02	1.0	3.0E+00	6.8E-03	-2.2E+00	0.040	7.5E-05	7.5E-08	2.2E+00	0.33	0.36	5.3E+00	NA	1.2E-07	1.9E-07	1.2E-07
1,2-Dichlorobenzene	1.8E-03	1.8E-06	1.5E+02	1.0	3.4E+00	4.1E-02	-1.4E+00	0.19	2.4E-04	2.4E-07	7.0E-01	0.43	0.47	1.7E+00	NA	1.3E-07	1.6E-07	1.3E-07
1,2-Dichloropropane	1.6E-03	1.6E-06	1.1E+02	1.0	2.0E+00	7.8E-03	-2.1E+00	0.032	3.7E-04	3.7E-07	4.5E-01	0.32	0.35	1.1E+00	NA	1.8E-08	1.9E-08	1.8E-08
1,3,5-Trimethylbenzene	1.2E-03	1.2E-06	1.2E+02	1.0	3.4E+00	6.1E-02	-1.2E+00	0.26	3.4E-04	3.4E-07	5.0E-01	0.48	0.52	1.2E+00	NA	1.1E-07	1.2E-07	1.1E-07
1,3-Dichlorobenzene	4.2E-04	4.2E-07	1.5E+02	1.0	3.6E+00	5.8E-02	-1.2E+00	0.27	2.4E-04	2.4E-07	7.0E-01	0.49	0.53	1.7E+00	NA	4.3E-08	5.5E-08	4.3E-08
1,4-Dichlorobenzene	7.1E-04	7.1E-07	1.5E+02	1.0	3.4E+00	4.2E-02	-1.4E+00	0.20	2.4E-04	2.4E-07	7.0E-01	0.44	0.47	1.7E+00	NA	5.2E-08	6.4E-08	5.2E-08
2-Butanone	3.3E-01	3.3E-04	7.2E+01	1.0	2.9E-01	9.6E-04	-3.0E+00	0.0031	6.3E-04	6.3E-07	2.7E-01	0.31	0.34	6.4E-01	NA	3.4E-07	3.5E-07	3.4E-07
2-Chlorotoluene	4.5E-04	4.5E-07	1.3E+02	1.0	3.4E+00	8.6E-02	-1.3E+00	0.37	3.1E-04	3.1E-07	5.4E-01	0.58	0.62	1.3E+00	NA	6.0E-08	7.3E-08	6.0E-08
4-Chlorotoluene	4.6E-04	4.6E-07	1.3E+02	1.0	2.0E+00	1.0E-02	-2.2E+00	0.045	3.1E-04	3.1E-07	5.4E-01	0.33	0.36	1.3E+00	NA	7.3E-09	8.0E-09	7.3E-09
4-Methyl-2-pentanone	7.8E-02	7.8E-05	1.0E+02	1.0	1.2E+00	2.7E-03	-2.6E+00	0.010	4.4E-04	4.4E-07	3.8E-01	0.31	0.34	9.2E-01	NA	2.7E-07	2.8E-07	2.7E-07
Benzene	1.9E-02	1.9E-05	7.8E+01	1.0	2.1E+00	1.5E-02	-1.8E+00	0.051	5.8E-04	5.8E-07	2.9E-01	0.34	0.37	6.9E-01	NA	3.3E-07	3.3E-07	3.3E-07
Bromochloromethane	1.2E-02	1.2E-05	1.3E+02	1.0	1.4E+00	3.1E-03	-2.6E+00	0.014	3.0E-04	3.0E-07	5.6E-01	0.31	0.34	1.3E+00	NA	5.8E-08	6.3E-08	5.8E-08
Bromodichloromethane	4.4E-04	4.4E-07	1.6E+02	1.0	2.0E+00	4.6E-03	-2.4E+00	0.023	1.9E-04	1.9E-07	8.7E-01	0.32	0.35	2.1E+00	NA	4.0E-09	4.8E-09	4.0E-09
Bromoform	2.8E-03	2.8E-06	2.5E+02	1.0	2.4E+00	2.2E-03	-2.6E+00	0.013	6.1E-05	6.1E-08	2.7E+00	0.31	0.34	6.6E+00	NA	2.1E-08	3.8E-08	2.1E-08
Bromomethane	2.6E-02	2.6E-05	9.5E+01	1.0	1.2E+00	2.8E-03	-2.5E+00	0.010	4.7E-04	4.7E-07	3.6E-01	0.31	0.34	8.6E-01	NA	9.3E-08	9.6E-08	9.3E-08
Carbon disulfide	9.4E-02	9.4E-05	8.0E+01	1.0	2.2E+00	1.7E-02	-1.8E+00	0.058	5.6E-04	5.6E-07	3.0E-01	0.34	0.37	7.1E-01	NA	1.8E-06	1.9E-06	1.8E-06
Carbon tetrachloride	3.1E-04	3.1E-07	1.5E+02	1.0	2.8E+00	1.6E-02	-1.8E+00	0.076	2.2E-04	2.2E-07	7.6E-01	0.35	0.39	1.8E+00	NA	9.2E-09	1.1E-08	9.2E-09
Chlorobenzene	3.5E-02	3.5E-05	1.1E+02	1.0	2.8E+00	2.8E-02	-1.6E+00	0.11	3.7E-04	3.7E-07	4.5E-01	0.38	0.41	1.1E+00	NA	1.4E-06	1.5E-06	1.4E-06
Chloroethane	2.0E-04	2.0E-07	6.5E+01	1.0	1.4E+00	6.1E-03	-2.2E+00	0.019	6.9E-04	6.9E-07	2.4E-01	0.31	0.35	5.8E-01	NA	1.3E-09	1.3E-09	1.3E-09
Chloromethane	9.7E-04	9.7E-07	5.1E+01	1.0	9.1E-01	3.3E-03	-2.5E+00	0.0090	8.3E-04	8.3E-07	2.0E-01	0.31	0.34	4.8E-01	NA	3.0E-09	3.1E-09	3.1E-09
cis-1,2-Dichloroethene	1.4E-02	1.4E-05	9.7E+01	1.0	2.1E+00	1.1E-02	-2.0E+00	0.041	4.5E-04	4.5E-07	3.7E-01	0.33	0.36	8.8E-01	NA	2.0E-07	2.1E-07	2.0E-07
Cyclohexane	6.3E-04	6.3E-07	8.4E+01	1.0	3.4E+00	1.0E-01	-1.0E+00	0.35	5.4E-04	5.4E-07	3.1E-01	0.57	0.60	7.5E-01	NA	7.4E-08	7.9E-08	7.4E-08
Dibromochloromethane	1.2E-03	1.2E-06	2.1E+02	1.0	2.2E+00	2.9E-03	-2.5E+00	0.016	1.1E-04	1.1E-07	1.5E+00	0.31	0.34	3.7E+00	NA	9.0E-09	1.3E-08	9.0E-09
Dichlorofluoromethane (Freon 21)	8.6E-03	8.6E-06	1.0E+02	1.0	2.2E+00	1.1E-02	-2.0E+00	0.044	4.2E-04	4.2E-07	4.0E-01	0.33	0.36	9.5E-01	NA	1.3E-07	1.3E-07	1.3E-07
Dichlorodifluoromethane (Freon 12)	1.6E-03	1.6E-06	1.2E+02	1.0	2.2E+00	8.9E-03	-2.1E+00	0.038	3.3E-04	3.3E-07	5.0E-01	0.33	0.36	1.2E+00	NA	2.1E-08	2.2E-08	2.1E-08
Ethylbenzene	1.2E-03	1.2E-06	1.1E+02	1.0	3.2E+00	4.9E-02	-1.3E+00	0.19	4.0E-04	4.0E-07	4.1E-01	0.43	0.47	9.9E-01	NA	7.7E-08	8.4E-08	7.7E-08
Isopropylbenzene	5.3E-04	5.3E-07	1.2E+02	1.0	3.7E+00	8.8E-02	-1.1E+00	0.37	3.4E-04	3.4E-07	5.0E-01	0.58	0.61	1.2E+00	NA	6.9E-08	8.1E-08	6.9E-08
Methyl tert-butyl ether (MTBE)	4.7E-03	4.7E-06	8.8E+01	1.0	9.4E-01	2.1E-03	-2.7E+00	0.0077	5.1E-04	5.1E-07	3.3E-01	0.31	0.34	7.9E-01	NA	1.2E-08	1.2E-08	1.2E-08
Methylcyclohexane	8.5E-04	8.5E-07	9.8E+01	1.0	3.6E+00	1.1E-01	-9.7E-01	0.41	4.5E-04	4.5E-07	3.7E-01	0.62	0.65	9.0E-01	NA	1.2E-07	1.3E-07	1.2E-07
Naphthalene	5.6E-04	5.6E-07	1.3E+02	1.0	3.3E+00	4.7E-02	-1.3E+00	0.20	3.0E-04	3.0E-07	5.5E-01	0.44	0.48	1.3E+00	NA	4.1E-08	4.7E-08	4.1E-08

Table 7-1 Adult Dermal Supplement

MODEL FOR ESTIMATING DERMAL EXPOSURE FROM CONTACT WITH CHEMICALS IN WATER

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Constituent	Conc (mg/L)	Conc (mg/cm3)	MW	FA	Log Kow	Kp (cm/hr) Select	Log Kp	B	Dsc/Isc	Dsc (cm2/hr)	τ (ηουρσ)	b	c	t* (hours)	DA_inorg (mg/cm2-event)	DA_1 (mg/cm2-event)	DA_2 (mg/cm2-event)	Selected DA (mg/cm2-event)
n-Propylbenzene	5.2E-04	5.2E-07	1.2E+02	1.0	3.5E+00	7.1E-02	-1.1E+00	0.30	3.4E-04	3.4E-07	5.0E-01	0.52	0.56	1.2E+00	NA	5.4E-08	6.3E-08	5.4E-08
p-Isopropyltoluene	4.8E-04	4.8E-07	1.3E+02	1.0	4.0E+00	1.2E-01	-9.1E-01	0.54	2.8E-04	2.8E-07	5.9E-01	0.76	0.76	1.4E+00	NA	9.5E-08	1.2E-07	9.5E-08
sec-Butylbenzene	3.6E-04	3.6E-07	1.3E+02	1.0	3.9E+00	1.1E-01	-9.5E-01	0.50	2.8E-04	2.8E-07	5.9E-01	0.71	0.72	1.4E+00	NA	6.5E-08	8.4E-08	6.5E-08
Tetrahydrofuran	6.5E-01	6.5E-04	7.2E+01	1.0	9.4E-01	2.6E-03	-2.6E+00	0.008	6.3E-04	6.3E-07	2.7E-01	0.31	0.34	6.4E-01	NA	1.8E-06	1.9E-06	1.8E-06
trans-1,2-Dichloroethene	3.1E-02	3.1E-05	9.7E+01	1.0	1.9E+00	7.7E-03	-2.1E+00	0.029	4.5E-04	4.5E-07	3.7E-01	0.32	0.35	8.8E-01	NA	3.0E-07	3.1E-07	3.0E-07
Vinyl chloride	6.8E-04	6.8E-07	6.3E+01	1.0	1.4E+00	5.6E-03	-2.3E+00	0.017	7.1E-04	7.1E-07	2.4E-01	0.31	0.34	5.7E-01	NA	3.9E-09	4.0E-09	4.0E-09
m,p-Xylenes	1.0E-02	1.0E-05	1.1E+02	1.0	3.2E+00	5.3E-02	-1.3E+00	0.21	4.0E-04	4.0E-07	4.1E-01	0.45	0.49	9.9E-01	NA	7.2E-07	7.9E-07	7.2E-07
o-Xylene	8.1E-03	8.1E-06	1.1E+02	1.0	3.1E+00	7.0E-02	-1.3E+00	0.28	4.0E-04	4.0E-07	4.1E-01	0.50	0.54	9.9E-01	NA	7.7E-07	8.6E-07	7.7E-07
Xylenes, total	3.6E-02	3.6E-05	1.1E+02	1.0	3.2E+00	5.3E-02	-1.3E+00	0.21	4.0E-04	4.0E-07	4.1E-01	0.45	0.49	9.9E-01	NA	2.6E-06	2.8E-06	2.6E-06
1,1-Biphenyl	8.0E-04	8.0E-07	1.5E+02	1.0	4.0E+00	9.2E-02	-1.0E+00	0.44	2.2E-04	2.2E-07	7.7E-01	0.65	0.67	1.8E+00	NA	1.4E-07	1.9E-07	1.4E-07
1,2,3-Trichloropropane	1.4E-05	1.4E-08	1.5E+02	1.0	2.3E+00	9.8E-03	-2.1E+00	0.05	2.4E-04	2.4E-07	7.0E-01	0.33	0.36	1.7E+00	NA	2.4E-10	2.7E-10	2.4E-10
2-Methylnaphthalene	2.8E-03	2.8E-06	1.4E+02	1.0	3.9E+00	8.9E-02	-1.0E+00	0.41	2.5E-04	2.5E-07	6.6E-01	0.62	0.65	1.6E+00	NA	4.3E-07	5.6E-07	4.3E-07
Acetophenone	2.8E-03	2.8E-06	1.2E+02	1.0	1.6E+00	4.7E-03	-2.4E+00	0.020	3.4E-04	3.4E-07	5.0E-01	0.32	0.35	1.2E+00	NA	1.9E-08	2.1E-08	1.9E-08
Bis(2-ethylhexyl)phthalate (DEHP)	1.2E-02	1.2E-05	3.9E+02	1.0	5.1E+00	2.5E-02	-1.6E+00	0.19	1.0E-05	1.0E-08	1.6E+01	0.43	0.47	3.9E+01	NA	2.4E-06	1.1E-05	2.4E-06
Caprolactam	3.8E-03	3.8E-06	1.1E+02	1.0	6.6E-01	1.0E-03	-3.0E+00	0.0041	3.7E-04	3.7E-07	4.5E-01	0.31	0.34	1.1E+00	NA	5.4E-09	5.7E-09	5.4E-09
Dimethyl phthalate	6.8E-04	6.8E-07	1.9E+02	1.0	1.6E+00	1.7E-03	-2.8E+00	0.0091	1.3E-04	1.3E-07	1.3E+00	0.31	0.34	3.1E+00	NA	2.8E-09	3.7E-09	2.8E-09
Di-n-butyl phthalate	1.0E-03	1.0E-06	2.8E+02	0.9	4.1E+00	2.4E-02	-1.6E+00	0.15	4.4E-05	4.4E-08	3.8E+00	0.40	0.44	9.1E+00	NA	8.9E-08	2.0E-07	8.9E-08
Isophorone	4.9E-03	4.9E-06	1.4E+02	1.0	1.7E+00	3.4E-03	-2.5E+00	0.015	2.7E-04	2.7E-07	6.2E-01	0.31	0.34	1.5E+00	NA	2.8E-08	3.1E-08	2.8E-08
N-Nitrosodimethylamine	1.9E-04	1.9E-07	7.4E+01	1.0	-5.7E-01	2.7E-04	-3.6E+00	0.00088	6.1E-04	6.1E-07	2.7E-01	0.30	0.33	6.6E-01	NA	5.5E-11	5.6E-11	5.5E-11
Pentachlorophenol	3.0E-04	3.0E-07	2.7E+02	0.9	5.9E+00	3.9E-01	-4.2E-01	2.4	5.1E-05	5.1E-08	3.3E+00	5.0	2.5	1.4E+01	NA	4.0E-07	1.5E-06	4.0E-07
Phenanthrene	6.9E-05	6.9E-08	1.8E+02	1.0	4.5E+00	1.4E-01	-8.5E-01	0.72	1.6E-04	1.6E-07	1.0E+00	1.0	0.91	4.1E+00	NA	2.1E-08	3.5E-08	2.1E-08
Phenol	9.8E-03	9.8E-06	9.4E+01	1.0	1.5E+00	4.3E-03	-2.4E+00	0.016	4.7E-04	4.7E-07	3.5E-01	0.3	0.34	8.5E-01	NA	5.3E-08	5.4E-08	5.3E-08
Perchlorate	3.2E-03	3.2E-06	9.9E+01	1.0	NA	1.0E-03	NA	NA	NA	NA	NA	NA	NA	NA	1.88E-09	NA	NA	1.9E-09
Cyanide (total)	3.4E-03	3.4E-06	NA	1.0	NA	1.0E-03	NA	NA	NA	NA	NA	NA	NA	NA	1.97E-09	NA	NA	2.0E-09
Arsenic	1.4E-02	1.4E-05	NA	1.0	NA	1.0E-03	NA	NA	NA	NA	NA	NA	NA	NA	7.83E-09	NA	NA	7.8E-09
Hexavalent chromium	9.3E-03	9.3E-06	NA	1.0	NA	2.0E-03	NA	NA	NA	NA	NA	NA	NA	NA	1.08E-08	NA	NA	1.1E-08
Nickel	3.4E-02	3.4E-05	NA	1.0	NA	2.0E-04	NA	NA	NA	NA	NA	NA	NA	NA	3.90E-09	NA	NA	3.9E-09

Source: EPA, 2004. RAGS Part E

Table 7-2 Child Dermal Supplement

MODEL FOR ESTIMATING DERMAL EXPOSURE FROM CONTACT WITH CHEMICALS IN WATER

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

ORGANICS

If tevent > t*:

$$DA_{event} = FA \times K_p \times C_{gw} \left[\frac{t_{event}}{1+B} + 2\tau \times \left(\frac{1+3B+3B^2}{(1+B)^2} \right) \right]$$

If tevent ≤ t*:

$$DA_{event} = 2\,FA \times K_p \times C_{gw} \sqrt{\frac{6\tau \times t_{event}}{\Pi}}$$

INORGANICS

$$DA_{event} = K_p \times C_{gw} \times t_{event}$$

$$\log K_p = -2.8 + 0.66 \log K_{ow} - 0.0056 MW$$

$$B = K_p \frac{\sqrt{MW}}{2.6}$$

$$If\ B \le 0.6\ then\ t^* = 2.4\tau$$

$$If\ B > 0.6\ then\ t^* = 6\left(b - \sqrt{b^2 - c^2}\right)\tau$$

$$\tau = \frac{l_{sc}^{\ 2}}{6\ D_{sc}}$$

$$b = \frac{2}{\pi}(1+B)^2 - c$$

$$c = \frac{1+3B+3B^2}{3(1+B)}$$

$$\log \frac{D_{sc}}{l_{sc}} = -2.80 - 0.0056 MW$$

Dermally-absorbed dose	DAD	calculated	mg/kg-day
Concentration in water	Conc (Cv)	chem-specific	mg/cm3
permeability coefficient	Kp	calculated	cm/hr
Lag time per event (hours)	*tau (t)*	calculated	hours
Time to reach steady-state (hours)	t*	calculated	hours
Dimensionless coefficient	B	calculated	
Pi	π	3.1416	
Exposure Time	t_event	1	hr/event
Number of exposure events	EV	1	event/day
Exposure Duration	ED	6	year
Exposure Frequency	EF	350	days/year
Exposed Skin Surface Area	SA	6600	cm2
Fraction Absorbed	FA	chem-specific	
Body Weight	BW	15	kg
Averaging time - noncarcinogenic	AT_N	6	years
Averaging time - carcinogenic	AT_C	70	years
Conversion Factor	CF	0.001	mg/ug

Thickness of stratum corneum	*lsc (cm)*	0.001
Molecular Weight	g/mol	chem-specific
log octanol-water partition coefficient	Log Kow	chem-specific
log permeability coefficient	log Kp	calculated
Permeability coefficient (cm/hr)	Kp	calculated
Dimensionless ratio of the permeability coefficient of a compound through the stratum corneum relative to its permeability coefficient across the viable epidermis	B	calculated
Effective diffusion coefficient for transfer of a chemical across the stratum corneum (cm2/hr)	Dsc	calculated
Lag time per event (hours)	τ	calculated
Time to reach steady-state (hours)	t*	calculated
Correlation coefficients fitted to data set used in USEPA's methodology (see equations A7 and A8, USEPA, 2001)	b,c	calculated

Table 7-2 Child Dermal Supplement

MODEL FOR ESTIMATING DERMAL EXPOSURE FROM CONTACT WITH CHEMICALS IN WATER

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Constituent	Conc (mg/L)	Conc (mg/cm3)	MW	FA	Log Kow	Kp (cm/hr) Select	Log Kp	B	Dsc/Isc	Dsc (cm2/hr)	τ (ηουρσ)	b	c	t* (hours)	DA_inorg (mg/cm2-event)	DA_1 (mg/cm2-event)	DA_2 (mg/cm2-event)	Selected DA (mg/cm2-event)
1,1,1-Trichloroethane	2.5E+00	2.5E-03	1.3E+02	1.0	2.5E+00	1.30E-02	-1.90E+00	5.77E-02	0.000284	2.84E-07	5.87E-01	0.3	0.37	1.41E+00	NA	6.81E-05	7.03E-05	6.81E-05
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.9E-01	9.9E-04	1.9E+02	1.0	3.2E+00	1.73E-02	-1.76E+00	9.11E-02	0.000142	1.42E-07	1.17E+00	0.4	0.40	2.81E+00	NA	5.14E-05	5.97E-05	5.14E-05
1,1-Dichloroethene	1.0E+00	1.0E-03	9.7E+01	1.0	2.1E+00	1.20E-02	-1.94E+00	4.54E-02	0.000454	4.54E-07	3.67E-01	0.3	0.36	8.80E-01	NA	2.10E-05	2.16E-05	2.16E-05
1,2-Dichloroethane	2.5E-01	2.5E-04	9.9E+01	1.0	1.5E+00	6.70E-03	-2.38E+00	2.56E-02	0.000442	4.42E-07	3.77E-01	0.3	0.35	9.05E-01	NA	2.79E-06	2.87E-06	2.87E-06
1,4-Dioxane (p-dioxane)	3.6E+00	3.6E-03	8.8E+01	1.0	-2.7E-01	3.30E-04	-3.47E+00	1.19E-03	0.000509	5.09E-07	3.27E-01	0.3	0.33	7.86E-01	NA	1.86E-06	1.95E-06	1.95E-06
Acetone	2.0E+00	2.0E-03	5.8E+01	1.0	-2.4E-01	5.20E-04	-3.28E+00	1.53E-03	0.000749	7.49E-07	2.22E-01	0.3	0.33	5.34E-01	NA	1.37E-06	1.51E-06	1.51E-06
Chloroform	5.8E-01	5.8E-04	1.2E+02	1.0	2.0E+00	6.80E-03	-2.17E+00	2.86E-02	0.00034	3.40E-07	4.90E-01	0.3	0.35	1.18E+00	NA	7.66E-06	7.84E-06	7.66E-06
Methylene chloride	1.9E+00	1.9E-03	8.5E+01	1.0	1.3E+00	3.50E-03	-2.45E+00	1.24E-02	0.00053	5.30E-07	3.14E-01	0.3	0.34	7.54E-01	NA	1.05E-05	1.10E-05	1.10E-05
Tetrachloroethene	6.5E+01	6.5E-02	1.7E+02	1.0	3.4E+00	3.30E-02	-1.48E+00	1.63E-01	0.000187	1.87E-07	8.92E-01	0.4	0.45	2.14E+00	NA	5.60E-03	6.28E-03	5.60E-03
Toluene	7.1E-02	7.1E-05	9.2E+01	1.0	2.7E+00	3.10E-02	-1.51E+00	1.14E-01	0.000483	4.83E-07	3.45E-01	0.4	0.41	8.28E-01	NA	3.59E-06	3.69E-06	3.69E-06
Trichloroethene (TCE)	1.3E+00	1.3E-03	1.3E+02	1.0	2.4E+00	1.20E-02	-1.94E+00	5.29E-02	0.000291	2.91E-07	5.72E-01	0.3	0.37	1.37E+00	NA	3.31E-05	3.41E-05	3.31E-05
11)	3.6E-01	3.6E-04	1.4E+02	1.0	2.5E+00	1.27E-02	-1.90E+00	5.70E-02	0.000271	2.71E-07	6.15E-01	0.3	0.37	1.48E+00	NA	9.83E-06	1.02E-05	9.83E-06
1,1,1,2-Tetrachloroethane	3.6E-03	3.6E-06	1.7E+02	1.0	2.9E+00	2.18E-02	-1.81E+00	1.09E-01	0.000182	1.82E-07	9.16E-01	0.4	0.41	2.20E+00	NA	2.07E-07	2.29E-07	2.07E-07
1,1,2,2-Tetrachloroethane	6.7E-04	6.7E-07	1.7E+02	1.0	2.4E+00	6.90E-03	-2.16E+00	3.44E-02	0.000182	1.82E-07	9.16E-01	0.3	0.36	2.20E+00	NA	1.22E-08	1.32E-08	1.22E-08
1,1,2-Trichloroethane	1.8E-01	1.8E-04	1.3E+02	1.0	2.1E+00	6.40E-03	-2.19E+00	2.84E-02	0.000284	2.84E-07	5.87E-01	0.3	0.35	1.41E+00	NA	2.43E-06	2.50E-06	2.43E-06
1,1-Dichloroethane	3.8E-02	3.8E-05	9.9E+01	1.0	1.8E+00	6.70E-03	-2.17E+00	2.56E-02	0.000442	4.42E-07	3.77E-01	0.3	0.35	9.05E-01	NA	4.30E-07	4.43E-07	4.43E-07
1,2,4-Trichlorobenzene	5.3E-04	5.3E-07	1.8E+02	1.0	4.0E+00	6.60E-02	-1.19E+00	3.42E-01	0.000153	1.53E-07	1.09E+00	0.6	0.59	2.62E+00	NA	1.01E-07	1.27E-07	1.01E-07
1,2,4-Trimethylbenzene	7.5E-03	7.5E-06	1.2E+02	1.0	3.6E+00	8.37E-02	-1.08E+00	3.53E-01	0.000336	3.36E-07	4.95E-01	0.6	0.60	1.19E+00	NA	1.23E-06	1.30E-06	1.23E-06
1,2-Dibromo-3-chloropropane	5.5E-03	5.5E-06	2.4E+02	1.0	3.0E+00	6.76E-03	-2.17E+00	4.00E-02	7.53E-05	7.53E-08	2.21E+00	0.3	0.36	5.32E+00	NA	1.53E-07	2.07E-07	1.53E-07
1,2-Dichlorobenzene	1.8E-03	1.8E-06	1.5E+02	1.0	3.4E+00	4.10E-02	-1.39E+00	1.91E-01	0.000238	2.38E-07	7.00E-01	0.4	0.47	1.68E+00	NA	1.71E-07	1.85E-07	1.71E-07
1,2-Dichloropropane	1.6E-03	1.6E-06	1.1E+02	1.0	2.0E+00	7.80E-03	-2.11E+00	3.19E-02	0.000369	3.69E-07	4.51E-01	0.3	0.35	1.08E+00	NA	2.32E-08	2.37E-08	2.32E-08
1,3,5-Trimethylbenzene	1.2E-03	1.2E-06	1.2E+02	1.0	3.4E+00	6.08E-02	-1.22E+00	2.56E-01	0.000336	3.36E-07	4.95E-01	0.5	0.52	1.19E+00	NA	1.38E-07	1.44E-07	1.38E-07
1,3-Dichlorobenzene	4.2E-04	4.2E-07	1.5E+02	1.0	3.6E+00	5.80E-02	-1.25E+00	2.70E-01	0.000238	2.38E-07	7.00E-01	0.5	0.53	1.68E+00	NA	5.69E-08	6.27E-08	5.69E-08
1,4-Dichlorobenzene	7.1E-04	7.1E-07	1.5E+02	1.0	3.4E+00	4.20E-02	-1.39E+00	1.96E-01	0.000238	2.38E-07	7.00E-01	0.4	0.47	1.68E+00	NA	6.88E-08	7.45E-08	6.88E-08
2-Butanone	3.3E-01	3.3E-04	7.2E+01	1.0	2.9E-01	9.60E-04	-3.01E+00	3.13E-03	0.000626	6.26E-07	2.66E-01	0.3	0.34	6.39E-01	NA	4.48E-07	4.81E-07	4.81E-07
2-Chlorotoluene	4.5E-04	4.5E-07	1.3E+02	1.0	3.4E+00	8.63E-02	-1.25E+00	3.73E-01	0.00031	3.10E-07	5.38E-01	0.6	0.62	1.29E+00	NA	7.88E-08	8.46E-08	7.88E-08
4-Chlorotoluene	4.6E-04	4.6E-07	1.3E+02	1.0	2.0E+00	1.03E-02	-2.19E+00	4.46E-02	0.00031	3.10E-07	5.38E-01	0.3	0.36	1.29E+00	NA	9.60E-09	9.86E-09	9.60E-09
4-Methyl-2-pentanone	7.8E-02	7.8E-05	1.0E+02	1.0	1.2E+00	2.70E-03	-2.57E+00	1.04E-02	0.000437	4.37E-07	3.82E-01	0.3	0.34	9.16E-01	NA	3.60E-07	3.71E-07	3.71E-07
Benzene	1.9E-02	1.9E-05	7.8E+01	1.0	2.1E+00	1.50E-02	-1.83E+00	5.10E-02	0.000579	5.79E-07	2.88E-01	0.3	0.37	6.91E-01	NA	4.27E-07	4.48E-07	4.48E-07
Bromochloromethane	1.2E-02	1.2E-05	1.3E+02	1.0	1.4E+00	3.10E-03	-2.59E+00	1.36E-02	0.000299	2.99E-07	5.58E-01	0.3	0.34	1.34E+00	NA	7.68E-08	7.88E-08	7.68E-08
Bromodichloromethane	4.4E-04	4.4E-07	1.6E+02	1.0	2.0E+00	4.60E-03	-2.40E+00	2.27E-02	0.000191	1.91E-07	8.71E-01	0.3	0.35	2.09E+00	NA	5.24E-09	5.61E-09	5.24E-09
Bromoform	2.8E-03	2.8E-06	2.5E+02	1.0	2.4E+00	2.20E-03	-2.63E+00	1.35E-02	6.09E-05	6.09E-08	2.74E+00	0.3	0.34	6.56E+00	NA	2.82E-08	4.02E-08	2.82E-08
Bromomethane	2.6E-02	2.6E-05	9.5E+01	1.0	1.2E+00	2.80E-03	-2.54E+00	1.05E-02	0.000466	4.66E-07	3.58E-01	0.3	0.34	8.59E-01	NA	1.22E-07	1.27E-07	1.27E-07
Carbon disulfide	9.4E-02	9.4E-05	8.0E+01	1.0	2.2E+00	1.70E-02	-1.77E+00	5.85E-02	0.000565	5.65E-07	2.95E-01	0.3	0.37	7.08E-01	NA	2.39E-06	2.50E-06	2.50E-06
Carbon tetrachloride	3.1E-04	3.1E-07	1.5E+02	1.0	2.8E+00	1.60E-02	-1.79E+00	7.63E-02	0.000218	2.18E-07	7.64E-01	0.4	0.39	1.83E+00	NA	1.21E-08	1.29E-08	1.21E-08
Chlorobenzene	3.5E-02	3.5E-05	1.1E+02	1.0	2.8E+00	2.80E-02	-1.56E+00	1.14E-01	0.000371	3.71E-07	4.49E-01	0.4	0.41	1.08E+00	NA	1.82E-06	1.86E-06	1.82E-06
Chloroethane	2.0E-04	2.0E-07	6.5E+01	1.0	1.4E+00	6.10E-03	-2.22E+00	1.88E-02	0.00069	6.90E-07	2.42E-01	0.3	0.35	5.80E-01	NA	1.66E-09	1.80E-09	1.80E-09
Chloromethane	9.7E-04	9.7E-07	5.1E+01	1.0	9.1E-01	3.30E-03	-2.48E+00	9.02E-03	0.000826	8.26E-07	2.02E-01	0.3	0.34	4.84E-01	NA	3.98E-09	4.48E-09	4.48E-09
cis-1,2-Dichloroethene	1.4E-02	1.4E-05	9.7E+01	1.0	2.1E+00	1.09E-02	-1.96E+00	4.12E-02	0.000454	4.54E-07	3.67E-01	0.3	0.36	8.81E-01	NA	2.62E-07	2.70E-07	2.70E-07
Cyclohexane	6.3E-04	6.3E-07	8.4E+01	1.0	3.4E+00	9.98E-02	-1.00E+00	3.52E-01	0.000535	5.35E-07	3.11E-01	0.6	0.60	7.47E-01	NA	9.69E-08	9.85E-08	9.85E-08
Dibromochloromethane	1.2E-03	1.2E-06	2.1E+02	1.0	2.2E+00	2.88E-03	-2.54E+00	1.60E-02	0.000108	1.08E-07	1.54E+00	0.3	0.34	3.70E+00	NA	1.18E-08	1.41E-08	1.18E-08
21)	8.6E-03	8.6E-06	1.0E+02	1.0	2.2E+00	1.12E-02	-1.95E+00	4.37E-02	0.00042	4.20E-07	3.96E-01	0.3	0.36	9.52E-01	NA	1.67E-07	1.71E-07	1.71E-07
Dichlorodifluoromethane (Freon 1	1.6E-03	1.6E-06	1.2E+02	1.0	2.2E+00	8.87E-03	-2.05E+00	3.75E-02	0.000333	3.33E-07	5.01E-01	0.3	0.36	1.20E+00	NA	2.71E-08	2.77E-08	2.71E-08
Ethylbenzene	1.2E-03	1.2E-06	1.1E+02	1.0	3.2E+00	4.90E-02	-1.32E+00	1.94E-01	0.000403	4.03E-07	4.14E-01	0.4	0.47	9.93E-01	NA	1.01E-07	1.04E-07	1.04E-07
Isopropylbenzene	5.3E-04	5.3E-07	1.2E+02	1.0	3.7E+00	8.76E-02	-1.06E+00	3.69E-01	0.000336	3.36E-07	4.95E-01	0.6	0.61	1.19E+00	NA	9.03E-08	9.56E-08	9.03E-08
Methyl tert-butyl ether (MTBE)	4.7E-03	4.7E-06	8.8E+01	1.0	9.4E-01	2.12E-03	-2.67E+00	7.66E-03	0.000509	5.09E-07	3.28E-01	0.3	0.34	7.87E-01	NA	1.57E-08	1.64E-08	1.64E-08
Methylcyclohexane	8.5E-04	8.5E-07	9.8E+01	1.0	3.6E+00	1.08E-01	-9.67E-01	4.11E-01	0.000447	4.47E-07	3.73E-01	0.6	0.65	8.95E-01	NA	1.55E-07	1.59E-07	1.59E-07
Naphthalene	5.6E-04	5.6E-07	1.3E+02	1.0	3.3E+00	4.70E-02	-1.34E+00	2.05E-01	0.000303	3.03E-07	5.49E-01	0.4	0.48	1.32E+00	NA	5.37E-08	5.62E-08	5.37E-08

Table 7-2 Child Dermal Supplement

MODEL FOR ESTIMATING DERMAL EXPOSURE FROM CONTACT WITH CHEMICALS IN WATER

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Constituent	Conc (mg/L)	Conc (mg/cm3)	MW	FA	Log Kow	Kp (cm/hr) Select	Log Kp	B	Dsc/Isc	Dsc (cm2/hr)	τ (ηουρσ)	b	c	t* (hours)	DA_inorg (mg/cm2-event)	DA_1 (mg/cm2-event)	DA_2 (mg/cm2-event)	
n-Propylbenzene	5.2E-04	5.2E-07	1.2E+02	1.0	3.5E+00	7.11E-02	-1.15E+00	3.00E-01	0.000336	3.36E-07	4.95E-01	0.5	0.56	1.19E+00	NA	7.14E-08	7.50E-08	7.14E-08
p-Isopropyltoluene	4.8E-04	4.8E-07	1.3E+02	1.0	4.0E+00	1.22E-01	-9.14E-01	5.43E-01	0.000281	2.81E-07	5.94E-01	0.8	0.76	1.42E+00	NA	1.24E-07	1.40E-07	1.24E-07
sec-Butylbenzene	3.6E-04	3.6E-07	1.3E+02	1.0	3.9E+00	1.12E-01	-9.51E-01	4.99E-01	0.000281	2.81E-07	5.94E-01	0.7	0.72	1.42E+00	NA	8.50E-08	9.51E-08	8.50E-08
Tetrahydrofuran	6.5E-01	6.5E-04	7.2E+01	1.0	9.4E-01	2.60E-03	-2.59E+00	8.48E-03	0.000625	6.25E-07	2.66E-01	0.3	0.34	6.40E-01	NA	2.41E-06	2.58E-06	2.58E-06
trans-1,2-Dichloroethene	3.1E-02	3.1E-05	9.7E+01	1.0	1.9E+00	7.70E-03	-2.12E+00	2.92E-02	0.000454	4.54E-07	3.67E-01	0.3	0.35	8.80E-01	NA	3.97E-07	4.10E-07	4.10E-07
Vinyl chloride	6.8E-04	6.8E-07	6.3E+01	1.0	1.4E+00	5.60E-03	-2.25E+00	1.70E-02	0.000708	7.08E-07	2.35E-01	0.3	0.34	5.65E-01	NA	5.11E-09	5.57E-09	5.57E-09
m,p-Xylenes	1.0E-02	1.0E-05	1.1E+02	1.0	3.2E+00	5.30E-02	-1.28E+00	2.10E-01	0.000403	4.03E-07	4.13E-01	0.4	0.49	9.92E-01	NA	9.51E-07	9.75E-07	9.75E-07
o-Xylene	8.1E-03	8.1E-06	1.1E+02	1.0	3.1E+00	7.04E-02	-1.34E+00	2.79E-01	0.000403	4.03E-07	4.13E-01	0.5	0.54	9.92E-01	NA	1.02E-06	1.05E-06	1.05E-06
Xylenes, total	3.6E-02	3.6E-05	1.1E+02	1.0	3.2E+00	5.30E-02	-1.28E+00	2.10E-01	0.000403	4.03E-07	4.14E-01	0.4	0.49	9.93E-01	NA	3.35E-06	3.44E-06	3.44E-06
1,1-Biphenyl	8.0E-04	8.0E-07	1.5E+02	1.0	4.0E+00	9.19E-02	-1.04E+00	4.39E-01	0.000217	2.17E-07	7.68E-01	0.6	0.67	1.84E+00	NA	1.78E-07	2.09E-07	1.78E-07
1,2,3-Trichloropropane	1.4E-05	1.4E-08	1.5E+02	1.0	2.3E+00	9.83E-03	-2.13E+00	4.59E-02	0.000237	2.37E-07	7.04E-01	0.3	0.36	1.69E+00	NA	3.10E-10	3.25E-10	3.10E-10
2-Methylnaphthalene	2.8E-03	2.8E-06	1.4E+02	1.0	3.9E+00	8.94E-02	-1.05E+00	4.10E-01	0.000253	2.53E-07	6.58E-01	0.6	0.65	1.58E+00	NA	5.61E-07	6.30E-07	5.61E-07
Acetophenone	2.8E-03	2.8E-06	1.2E+02	1.0	1.6E+00	4.67E-03	-2.43E+00	1.97E-02	0.000337	3.37E-07	4.95E-01	0.3	0.35	1.19E+00	NA	2.53E-08	2.59E-08	2.53E-08
(DEHP)	1.2E-02	1.2E-05	3.9E+02	1.0	5.1E+00	2.50E-02	-1.62E+00	1.90E-01	1.02E-05	1.02E-08	1.63E+01	0.4	0.47	3.91E+01	NA	3.21E-06	1.13E-05	3.21E-06
Caprolactam	3.8E-03	3.8E-06	1.1E+02	1.0	6.6E-01	1.00E-03	-3.00E+00	4.11E-03	0.000368	3.68E-07	4.52E-01	0.3	0.34	1.09E+00	NA	7.13E-09	7.31E-09	7.13E-09
Dimethyl phthalate	6.8E-04	6.8E-07	1.9E+02	1.0	1.6E+00	1.70E-03	-2.83E+00	9.11E-03	0.00013	1.30E-07	1.29E+00	0.3	0.34	3.09E+00	NA	3.62E-09	4.15E-09	3.62E-09
Di-n-butyl phthalate	1.0E-03	1.0E-06	2.8E+02	0.9	4.1E+00	2.40E-02	-1.63E+00	1.54E-01	4.4E-05	4.40E-08	3.79E+00	0.4	0.44	9.10E+00	NA	1.16E-07	2.07E-07	1.16E-07
Isophorone	4.9E-03	4.9E-06	1.4E+02	1.0	1.7E+00	3.40E-03	-2.47E+00	1.54E-02	0.000267	2.67E-07	6.25E-01	0.3	0.34	1.50E+00	NA	3.64E-08	3.75E-08	3.64E-08
N-Nitrosodimethylamine	1.9E-04	1.9E-07	7.4E+01	1.0	-5.7E-01	2.65E-04	-3.59E+00	8.77E-04	0.00061	6.10E-07	2.73E-01	0.3	0.33	6.56E-01	NA	7.24E-11	7.74E-11	7.74E-11
Pentachlorophenol	3.0E-04	3.0E-07	2.7E+02	0.9	5.9E+00	3.90E-01	-4.24E-01	2.45E+00	5.11E-05	5.11E-08	3.26E+00	5.0	2.54	1.36E+01	NA	5.26E-07	1.55E-06	5.26E-07
Phenanthrene	6.9E-05	6.9E-08	1.8E+02	1.0	4.5E+00	1.40E-01	-8.54E-01	7.19E-01	0.000159	1.59E-07	1.05E+00	1.0	0.91	4.05E+00	NA	2.73E-08	3.78E-08	2.73E-08
Phenol	9.8E-03	9.8E-06	9.4E+01	1.0	1.5E+00	4.30E-03	-2.36E+00	1.60E-02	0.000471	4.71E-07	3.54E-01	0.3	0.34	8.49E-01	NA	6.94E-08	7.19E-08	7.19E-08
Perchlorate	3.2E-03	3.2E-06	9.9E+01	1.0	NA	1.00E-03	NA	NA	NA	NA	NA	NA	NA	NA	3.24E-09	NA	NA	3.24E-09
Cyanide (total)	3.4E-03	3.4E-06	NA	1.0	NA	1.00E-03	NA	NA	NA	NA	NA	NA	NA	NA	3.40E-09	NA	NA	3.40E-09
Arsenic	1.4E-02	1.4E-05	NA	1.0	NA	1.00E-03	NA	NA	NA	NA	NA	NA	NA	NA	1.35E-08	NA	NA	1.35E-08
Hexavalent chromium	9.3E-03	9.3E-06	NA	1.0	NA	2.00E-03	NA	NA	NA	NA	NA	NA	NA	NA	1.86E-08	NA	NA	1.86E-08
Nickel	3.4E-02	3.4E-05	NA	1.0	NA	2.00E-04	NA	NA	NA	NA	NA	NA	NA	NA	6.72E-09	NA	NA	6.72E-09

Source: EPA, 2004. RAGS Part E

Table 9.1.1

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater	Groundwater	Groundwater	1,1,1-Trichloroethane	--	--	--	NA	--	Decreased body weight	3.4E-02	2.4E-01	6.4E-03	2.8E-01
			1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	--	--	--	NA	--	Neurological	9.1E-04	1.6E-02	3.2E-04	1.7E-02
			1,1-Dichloroethene	--	--	--	NA	--	Liver	5.7E-01	7.2E+00	7.9E-02	7.8E+00
			1,2-Dichloroethane	2.1E-04	1.0E-03	1.6E-05	NA	1.3E-03	Decreased survival	3.4E-01	2.4E+01	2.6E-02	2.4E+01
			1,4-Dioxane (p-dioxane)	9.0E-04	--	3.2E-06	NA	9.1E-04	NA	--	--	--	--
			Acetone	--	--	--	NA	--	Kidney	6.1E-02	3.1E-01	2.9E-04	3.7E-01
			Chloroform	1.7E-04	2.2E-03	1.5E-05	NA	2.4E-03	Liver	1.6E+00	5.7E+00	1.4E-01	7.4E+00
			Methylene chloride	2.5E-04	3.2E-04	9.4E-06	NA	5.8E-04	Liver	8.8E-01	3.1E-01	3.3E-02	1.2E+00
			Tetrachloroethene	3.3E-01	6.3E-02	1.9E-01	NA	5.9E-01	Liver	1.8E+02	8.9E+02	1.1E+02	1.2E+03
			Toluene	--	--	--	NA	--	Kidney	2.4E-02	1.1E-01	8.4E-03	1.5E-01
			Trichloroethene (TCE)	1.6E-04	4.3E-04	2.8E-05	NA	6.2E-04	Liver	1.2E+02	1.1E+00	2.1E+01	1.4E+02
			Trichlorofluoromethane (Freon 11)	--	--	--	NA	--	General	3.3E-02	2.5E-01	6.2E-03	2.8E-01
			1,1,1,2-Tetrachloroethane	8.8E-07	4.4E-06	3.5E-07	NA	5.6E-06	Kidney	3.3E-03	1.6E-02	1.3E-03	2.1E-02
			1,1,2,2-Tetrachloroethane	1.7E-06	6.4E-06	2.1E-07	NA	8.3E-06	NA	3.1E-04	1.5E-03	3.8E-05	1.9E-03
			1,1,2-Trichloroethane	1.2E-04	4.8E-04	1.1E-05	NA	6.1E-04	Blood	1.2E+00	6.1E+00	1.1E-01	7.5E+00
			1,1-Dichloroethane	2.0E-06	1.0E-05	1.6E-07	NA	1.2E-05	NOEL	1.0E-02	3.6E-02	8.1E-04	4.7E-02
			1,2,4-Trichlorobenzene	1.8E-08	--	2.3E-08	NA	4.1E-08	Adrenal Glands	1.5E-03	7.3E-02	1.9E-03	7.6E-02
			1,2,4-Trimethylbenzene	--	--	--	NA	--	NA	4.1E-03	6.1E-01	4.6E-03	6.2E-01
			1,2-Dibromo-3-chloropropane	3.6E-04	1.8E-03	6.9E-05	NA	2.2E-03	Decreased survival	2.6E+00	1.3E+01	5.0E-01	1.6E+01
			1,2-Dichlorobenzene	--	--	--	NA	--	NOAEL	5.5E-04	4.3E-03	3.6E-04	5.2E-03
			1,2-Dichloropropane	1.0E-06	5.1E-06	1.0E-07	NA	6.2E-06	Decreased body weight	4.0E-02	2.0E-01	4.0E-03	2.4E-01
			1,3,5-Trimethylbenzene	--	--	--	NA	--	NA	6.4E-04	9.4E-02	5.2E-04	9.5E-02
			1,3-Dichlorobenzene	--	--	--	NA	--	NA	3.9E-04	1.9E-03	3.6E-04	2.7E-03
			1,4-Dichlorobenzene	1.6E-07	1.3E-06	1.1E-07	NA	1.6E-06	Liver	6.5E-04	4.2E-04	4.3E-04	1.5E-03
			2-Butanone	--	--	--	NA	--	Reduced birth weight	1.5E-02	3.2E-02	1.4E-04	4.7E-02
			2-Chlorotoluene	--	--	--	NA	--	Decreased body weight	6.2E-04	3.1E-03	7.4E-04	4.4E-03
			4-Chlorotoluene	--	--	--	NA	--	Decreased body weight	6.3E-04	3.2E-03	9.0E-05	3.9E-03
			4-Methyl-2-pentanone	--	--	--	NA	--	Reduced birth weight	2.7E-02	1.2E-02	8.4E-04	4.0E-02
			Benzene	1.8E-05	9.2E-05	2.7E-06	NA	1.1E-04	Immune system	1.3E-01	3.1E-01	2.0E-02	4.6E-01

Table 9.1.1

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
			Bromochloromethane	--	--	--	NA	--	NA	--	--	--	--
			Bromodichloromethane	5.4E-07	2.7E-06	4.4E-08	NA	3.3E-06	Kidney	6.0E-04	3.0E-03	4.9E-05	3.7E-03
			Bromoform	2.1E-07	--	1.4E-08	NA	2.2E-07	Liver	3.8E-03	--	2.6E-04	4.1E-03
			Bromomethane	--	--	--	NA	--	GI	5.2E-01	2.6E+00	1.6E-02	3.1E+00
			Carbon disulfide	--	--	--	NA	--	Teratogenicity	2.6E-02	6.4E-02	4.5E-03	9.4E-02
			Carbon tetrachloride	4.4E-07	2.2E-06	1.2E-07	NA	2.7E-06	Liver	1.2E-02	6.1E-02	3.3E-03	7.7E-02
			Chlorobenzene	--	--	--	NA	--	Liver	4.8E-02	2.8E-01	1.7E-02	3.5E-01
			Chloroethane	5.4E-09	2.7E-08	3.2E-10	NA	3.3E-08	Reproductive	1.4E-05	9.6E-06	8.0E-07	2.4E-05
			Chloromethane	--	--	--	NA	--	Brain	1.0E-03	5.1E-03	3.0E-05	6.2E-03
			cis-1,2-Dichloroethene	--	--	--	NA	--	Liver	3.9E-02	2.0E-01	4.9E-03	2.4E-01
			Cyclohexane	--	--	--	NA	--	Reduced birth weight	1.0E-05	5.1E-05	1.1E-05	7.2E-05
			Dibromochloromethane	1.1E-06	5.3E-06	7.1E-08	NA	6.4E-06	Liver	1.6E-03	8.2E-03	1.1E-04	9.9E-03
			Dichlorofluoromethane (Freon 21)	--	--	--	NA	--	Decreased body weight	1.2E-03	2.1E-02	1.6E-04	2.2E-02
			Dichlorodifluoromethane (Freon 12)	--	--	--	NA	--	Decreased body weight	2.1E-04	3.7E-03	2.5E-05	4.0E-03
			Ethylbenzene	1.2E-07	4.8E-07	7.2E-08	NA	6.7E-07	Liver	3.2E-04	5.5E-04	1.9E-04	1.1E-03
			Isopropylbenzene	--	--	--	NA	--	Kidney	1.5E-04	6.6E-04	1.7E-04	9.7E-04
			Methyl tert-butyl ether (MTBE)	7.9E-08	2.0E-07	1.8E-09	NA	2.8E-07	Liver	1.5E-04	7.5E-04	3.4E-06	9.0E-04
			Methylcyclohexane	--	--	--	NA	--	Kidney	2.7E-05	1.4E-04	3.4E-05	2.0E-04
			Naphthalene	--	3.1E-06	--	NA	3.1E-06	Decreased body weight	7.6E-04	8.9E-02	5.0E-04	9.0E-02
			n-Propylbenzene	--	--	--	NA	--	NA	3.5E-04	1.8E-03	3.4E-04	2.5E-03
			p-Isopropyltoluene	--	--	--	NA	--	NA	1.3E-04	6.0E-04	2.3E-04	9.6E-04
			sec-Butylbenzene	--	--	--	NA	--	NA	2.4E-04	1.2E-03	4.0E-04	1.9E-03
			Tetrahydrofuran	4.6E-05	2.1E-04	1.2E-06	NA	2.6E-04	NA	8.5E-02	1.0E+00	2.2E-03	1.1E+00
			trans-1,2-Dichloroethene	--	--	--	NA	--	Liver	4.2E-02	2.1E-01	3.7E-03	2.6E-01
			Vinyl chloride	9.6E-06	8.7E-06	5.1E-07	NA	1.9E-05	Liver	6.2E-03	3.3E-03	3.3E-04	9.8E-03
			m,p-Xylenes	--	--	--	NA	--	Decreased body weight	1.4E-03	4.8E-02	8.9E-04	5.0E-02
			o-Xylene	--	--	--	NA	--	Decreased body weight	1.1E-03	3.8E-02	9.5E-04	4.0E-02
			Xylenes, total	--	--	--	NA	--	Decreased body weight	4.9E-03	1.7E-01	3.1E-03	1.8E-01

Table 9.1.1

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
			1,1-Biphenyl	--	--	--	NA	--	Kidney	4.4E-04	2.2E-03	6.7E-04	3.3E-03
			1,2,3-Trichloropropane	2.6E-07	1.3E-06	4.0E-08	NA	1.6E-06	Blood	6.2E-05	1.3E-03	9.7E-06	1.4E-03
			2-Methylnaphthalene	--	--	--	NA	--	Lungs	1.9E-02	9.6E-02	2.6E-02	1.4E-01
			Acetophenone	--	--	--	NA	--	NOAEL	7.6E-04	--	4.8E-05	8.1E-04
			Bis(2-ethylhexyl)phthalate (DEHP)	1.5E-06	--	2.9E-06	NA	4.4E-06	Liver	1.6E-02	--	3.0E-02	4.6E-02
			Caprolactam	--	--	--	NA	--	Reproductive	2.1E-04	--	2.7E-06	2.1E-04
			Dimethyl phthalate	--	--	--	NA	--	NA	1.9E-06	--	6.8E-08	1.9E-06
			Di-n-butyl phthalate	--	--	--	NA	--	Decreased survival	2.7E-04	--	2.2E-04	4.9E-04
			Isophorone	4.4E-08	--	2.2E-09	NA	4.6E-08	Kidney	6.7E-04	--	3.4E-05	7.1E-04
			N-Nitrosodimethylamine	9.1E-05	--	2.4E-07	NA	9.1E-05	NA	6.5E-01	--	1.7E-03	6.5E-01
			Pentachlorophenol	3.4E-07	--	4.1E-06	NA	4.4E-06	Liver, Kidney	2.7E-04	--	3.3E-03	3.6E-03
			Phenanthrene	--	--	--	NA	--	NA	6.3E-05	3.2E-04	1.7E-04	5.5E-04
			Phenol	--	--	--	NA	--	Decreased body weight	9.0E-04	--	4.3E-05	9.4E-04
			Perchlorate	--	--	--	NA	--	Thyroid	1.3E-01	--	6.6E-04	1.3E-01
			Cyanide (total)	--	--	--	NA	--	Decreased body weight	4.7E-03	--	2.4E-05	4.7E-03
			Arsenic	1.2E-03	--	6.3E-06	NA	1.2E-03	Skin	1.2E+00	--	6.4E-03	1.2E+00
			Hexavalent chromium	--	--	--	NA	--	NOAEL	8.5E-02	--	8.9E-04	8.6E-02
			Nickel	--	--	--	NA	--	Decreased body weight	4.6E-02	--	4.8E-05	4.6E-02
			Chemical Total	3.3E-01	7.0E-02	1.9E-01		6.0E-01		3.1E+02	9.6E+02	1.3E+02	1.4E+03
		Exposure Point Total						6.0E-01					1.4E+03
	Exposure Medium Total							6.0E-01					1.4E+03
Receptor Total							Receptor Risk Total	6E-01				Receptor HI Total	1392

Total Liver HI Across All Media =	1334
Total Decreased Survival HI Across All Media =	41
Total Blood HI Across All Media =	7.5
Total GI HI Across All Media =	3.1
Total Skin HI Across All Media =	1.2
Total Decreased Body Weight HI Across All Media =	0.96
Total Kidney HI Across All Media =	0.54

Notes

NA = Not available or not applicable

Table 9.1.1

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total

Total Immune System HI Across All Media =	0.46
Total General HI Across All Media =	0.28
Total Lungs HI Across All Media =	0.14
Total Thyroid HI Across All Media =	0.13
Total Teratogenicity HI Across All Media =	0.09
Total Reduced Birth Weight HI Across All Media =	0.09
Total Adrenal Glands HI Across All Media =	0.08
Total Neurological HI Across All Media =	0.02
Total Brain HI Across All Media =	0.01
Total Reproductive HI Across All Media =	0.00024

Table 9.1.2

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater	Groundwater	Groundwater	1,1,1-Trichloroethane	--	--	--	NA	--	Decreased body weight	7.9E-02	5.5E-01	1.4E-02	6.5E-01
			1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	--	--	--	NA	--	Neurological	2.1E-03	3.7E-02	7.2E-04	4.0E-02
			1,1-Dichloroethene	--	--	--	NA	--	Liver	1.3E+00	1.7E+01	1.8E-01	1.8E+01
			1,2-Dichloroethane	1.2E-04	6.1E-04	9.4E-06	NA	7.4E-04	Decreased survival	7.8E-01	5.6E+01	6.1E-02	5.7E+01
			1,4-Dioxane (p-dioxane)	5.3E-04	--	1.9E-06	NA	5.3E-04	NA	--	--	--	--
			Acetone	--	--	--	NA	--	Kidney	1.4E-01	7.1E-01	7.1E-04	8.6E-01
			Chloroform	9.9E-05	1.3E-03	8.6E-06	NA	1.4E-03	Liver	3.7E+00	1.3E+01	3.2E-01	1.7E+01
			Methylene chloride	1.5E-04	1.9E-04	5.6E-06	NA	3.4E-04	Liver	2.1E+00	7.2E-01	7.7E-02	2.9E+00
			Tetrachloroethene	1.9E-01	3.7E-02	1.1E-01	NA	3.4E-01	Liver	4.2E+02	2.1E+03	2.4E+02	2.7E+03
			Toluene	--	--	--	NA	--	Kidney	5.7E-02	2.7E-01	1.9E-02	3.4E-01
			Trichloroethene (TCE)	9.4E-05	2.5E-04	1.6E-05	NA	3.6E-04	Liver	2.8E+02	2.5E+00	4.7E+01	3.3E+02
			Trichlorofluoromethane (Freon 11)	--	--	--	NA	--	General	7.6E-02	5.7E-01	1.4E-02	6.6E-01
			1,1,1,2-Tetrachloroethane	5.1E-07	2.6E-06	1.9E-07	NA	3.3E-06	Kidney	7.6E-03	3.8E-02	2.9E-03	4.9E-02
			1,1,2,2-Tetrachloroethane	9.9E-07	3.7E-06	1.2E-07	NA	4.8E-06	NA	7.1E-04	3.6E-03	8.6E-05	4.4E-03
			1,1,2-Trichloroethane	7.1E-05	2.8E-04	6.3E-06	NA	3.6E-04	Blood	2.9E+00	1.4E+01	2.6E-01	1.7E+01
			1,1-Dichloroethane	1.2E-06	5.9E-06	9.1E-08	NA	7.2E-06	NOEL	2.4E-02	8.5E-02	1.9E-03	1.1E-01
			1,2,4-Trichlorobenzene	1.0E-08	--	1.3E-08	NA	2.4E-08	Adrenal Glands	3.4E-03	1.7E-01	4.3E-03	1.8E-01
			1,2,4-Trimethylbenzene	--	--	--	NA	--	NA	9.6E-03	1.4E+00	1.0E-02	1.4E+00
			1,2-Dibromo-3-chloropropane	2.1E-04	1.1E-03	3.9E-05	NA	1.3E-03	Decreased survival	6.2E+00	3.1E+01	1.1E+00	3.8E+01
			1,2-Dichlorobenzene	--	--	--	NA	--	NOAEL	1.3E-03	1.0E-02	8.0E-04	1.2E-02
			1,2-Dichloropropane	6.0E-07	3.0E-06	5.7E-08	NA	3.6E-06	Decreased body weight	9.3E-02	4.6E-01	8.9E-03	5.7E-01
			1,3,5-Trimethylbenzene	--	--	--	NA	--	NA	1.5E-03	2.2E-01	1.2E-03	2.2E-01
			1,3-Dichlorobenzene	--	--	--	NA	--	NA	9.0E-04	4.5E-03	8.0E-04	6.2E-03
			1,4-Dichlorobenzene	9.3E-08	7.8E-07	6.0E-08	NA	9.3E-07	Liver	1.5E-03	9.9E-04	9.7E-04	3.5E-03
			2-Butanone	--	--	--	NA	--	Reduced birth weight	3.5E-02	7.5E-02	3.4E-04	1.1E-01
			2-Chlorotoluene	--	--	--	NA	--	Decreased body weight	1.4E-03	7.2E-03	1.7E-03	1.0E-02
			4-Chlorotoluene	--	--	--	NA	--	Decreased body weight	1.5E-03	7.4E-03	2.0E-04	9.0E-03
			4-Methyl-2-pentanone	--	--	--	NA	--	Reduced birth weight	6.2E-02	2.9E-02	2.0E-03	9.3E-02
			Benzene	1.1E-05	5.3E-05	1.6E-06	NA	6.6E-05	Immune system	3.1E-01	7.2E-01	4.7E-02	1.1E+00

Table 9.1.2

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
			Bromochloromethane	--	--	--	NA	--	NA	--	--	--	--
			Bromodichloromethane	3.1E-07	1.6E-06	2.5E-08	NA	1.9E-06	Kidney	1.4E-03	7.1E-03	1.1E-04	8.6E-03
			Bromoform	1.2E-07	--	8.0E-09	NA	1.3E-07	Liver	8.9E-03	--	5.9E-04	9.5E-03
			Bromomethane	--	--	--	NA	--	GI	1.2E+00	6.0E+00	3.8E-02	7.3E+00
			Carbon disulfide	--	--	--	NA	--	Teratogenicity	6.0E-02	1.5E-01	1.1E-02	2.2E-01
			Carbon tetrachloride	2.6E-07	1.3E-06	6.6E-08	NA	1.6E-06	Liver	2.9E-02	1.4E-01	7.3E-03	1.8E-01
			Chlorobenzene	--	--	--	NA	--	Liver	1.1E-01	6.6E-01	3.8E-02	8.1E-01
			Chloroethane	3.2E-09	1.6E-08	1.9E-10	NA	1.9E-08	Reproductive	3.2E-05	2.2E-05	1.9E-06	5.6E-05
			Chloromethane	--	--	--	NA	--	Brain	2.4E-03	1.2E-02	7.3E-05	1.4E-02
			cis-1,2-Dichloroethene	--	--	--	NA	--	Liver	9.2E-02	4.6E-01	1.1E-02	5.6E-01
			Cyclohexane	--	--	--	NA	--	Reduced birth weight	2.4E-05	1.2E-04	2.4E-05	1.7E-04
			Dibromochloromethane	6.1E-07	3.1E-06	4.0E-08	NA	3.7E-06	Liver	3.8E-03	1.9E-02	2.5E-04	2.3E-02
			Dichlorofluoromethane (Freon 21)	--	--	--	NA	--	Decreased body weight	2.7E-03	4.8E-02	3.6E-04	5.1E-02
			Dichlorodifluoromethane (Freon 12	--	--	--	NA	--	Decreased body weight	5.0E-04	8.7E-03	5.7E-05	9.3E-03
			Ethylbenzene	7.0E-08	2.8E-07	4.1E-08	NA	3.9E-07	Liver	7.4E-04	1.3E-03	4.4E-04	2.5E-03
			Isopropylbenzene	--	--	--	NA	--	Kidney	3.4E-04	1.5E-03	3.8E-04	2.3E-03
			Methyl tert-butyl ether (MTBE)	4.6E-08	1.2E-07	1.1E-09	NA	1.6E-07	Liver	3.5E-04	1.7E-03	8.1E-06	2.1E-03
			Methylcyclohexane	--	--	--	NA	--	Kidney	6.3E-05	3.2E-04	7.8E-05	4.6E-04
			Naphthalene	--	1.8E-06	--	NA	1.8E-06	Decreased body weight	1.8E-03	2.1E-01	1.1E-03	2.1E-01
			n-Propylbenzene	--	--	--	NA	--	NA	8.3E-04	4.1E-03	7.5E-04	5.7E-03
			p-Isopropyltoluene	--	--	--	NA	--	NA	3.1E-04	1.4E-03	5.2E-04	2.2E-03
			sec-Butylbenzene	--	--	--	NA	--	NA	5.7E-04	2.9E-03	9.0E-04	4.3E-03
			Tetrahydrofuran	2.7E-05	1.2E-04	7.1E-07	NA	1.5E-04	NA	2.0E-01	2.4E+00	5.2E-03	2.6E+00
			trans-1,2-Dichloroethene	--	--	--	NA	--	Liver	9.8E-02	4.9E-01	8.6E-03	6.0E-01
			Vinyl chloride	5.6E-06	5.1E-06	3.0E-07	NA	1.1E-05	Liver	1.4E-02	7.6E-03	7.8E-04	2.3E-02
			m,p-Xylenes	--	--	--	NA	--	Decreased body weight	3.2E-03	1.1E-01	2.1E-03	1.2E-01
			o-Xylene	--	--	--	NA	--	Decreased body weight	2.6E-03	8.9E-02	2.2E-03	9.4E-02
			Xylenes, total	--	--	--	NA	--	Decreased body weight	1.1E-02	3.9E-01	7.3E-03	4.1E-01

Table 9.1.2

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
			1,1-Biphenyl	--	--	--	NA	--	Kidney	1.0E-03	5.1E-03	1.5E-03	7.6E-03
			1,2,3-Trichloropropane	1.5E-07	7.5E-07	2.2E-08	NA	9.2E-07	Blood	1.4E-04	3.1E-03	2.2E-05	3.3E-03
			2-Methylnaphthalene	--	--	--	NA	--	Lungs	4.5E-02	2.2E-01	5.9E-02	3.3E-01
			Acetophenone	--	--	--	NA	--	NOAEL	1.8E-03	--	1.1E-04	1.9E-03
			Bis(2-ethylhexyl)phthalate (DEHP)	8.8E-07	--	1.6E-06	NA	2.5E-06	Liver	3.7E-02	--	6.8E-02	1.0E-01
			Caprolactam	--	--	--	NA	--	Reproductive	4.9E-04	--	6.0E-06	4.9E-04
			Dimethyl phthalate	--	--	--	NA	--	NA	4.3E-06	--	1.5E-07	4.5E-06
			Di-n-butyl phthalate	--	--	--	NA	--	Decreased survival	6.4E-04	--	4.9E-04	1.1E-03
			Isophorone	2.6E-08	--	1.3E-09	NA	2.7E-08	Kidney	1.6E-03	--	7.7E-05	1.6E-03
			N-Nitrosodimethylamine	5.3E-05	--	1.4E-07	NA	5.3E-05	NA	1.5E+00	--	4.1E-03	1.5E+00
			Pentachlorophenol	2.0E-07	--	2.3E-06	NA	2.5E-06	Liver, Kidney	6.4E-04	--	7.4E-03	8.0E-03
			Phenanthrene	--	--	--	NA	--	NA	1.5E-04	7.4E-04	3.8E-04	1.3E-03
			Phenol	--	--	--	NA	--	Decreased body weight	2.1E-03	--	1.0E-04	2.2E-03
			Perchlorate	--	--	--	NA	--	Thyroid	3.0E-01	--	2.0E-03	3.0E-01
			Cyanide (total)	--	--	--	NA	--	Decreased body weight	1.1E-02	--	7.2E-05	1.1E-02
			Arsenic	7.0E-04	--	4.6E-06	NA	7.0E-04	Skin	2.9E+00	--	1.9E-02	2.9E+00
			Hexavalent chromium	--	--	--	NA	--	NOAEL	2.0E-01	--	2.6E-03	2.0E-01
			Nickel	--	--	--	NA	--	Decreased body weight	1.1E-01	--	1.4E-04	1.1E-01
			Chemical Total	1.9E-01	4.1E-02	1.1E-01		3.4E-01		7.2E+02	2.2E+03	2.9E+02	3.2E+03
		Exposure Point Total						3.4E-01					3.2E+03
	Exposure Medium Total							3.4E-01					3.2E+03
Receptor Total							Receptor Risk Total	3E-01				Receptor HI Total	3236

Notes

NA = Not available or not applicable

Total Liver HI Across All Media =	3101
Total Decreased Survival HI Across All Media =	95
Total Blood HI Across All Media =	17
Total GI HI Across All Media =	7.3
Total Skin HI Across All Media =	3
Total Decreased Body Weight HI Across All Media =	2.2
Total Kidney HI Across All Media =	1.3

Table 9.1.2

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total

Total Immune System HI Across All Media =	1.1
Total General HI Across All Media =	0.66
Total Lungs HI Across All Media =	0.33
Total Thyroid HI Across All Media =	0.30
Total Teratogenicity HI Across All Media =	0.22
Total Reduced Birth Weight HI Across All Media =	0.20
Total Adrenal Glands HI Across All Media =	0.18
Total Neurological HI Across All Media =	0.04
Total Brain HI Across All Media =	0.01
Total Reproductive HI Across All Media =	0.00055

Table 9.1.3

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater	Groundwater	Groundwater	1,1,1-Trichloroethane	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	--	--	--	NA	--	Neurological	NA	NA	NA	NA
			1,1-Dichloroethene	--	--	--	NA	--	Liver	NA	NA	NA	NA
			1,2-Dichloroethane	3.3E-04	1.7E-03	2.6E-05	NA	2.0E-03	Decreased survival	NA	NA	NA	NA
			1,4-Dioxane (p-dioxane)	1.4E-03	--	5.1E-06	NA	1.4E-03	NA	NA	NA	NA	NA
			Acetone	--	--	--	NA	--	Kidney	NA	NA	NA	NA
			Chloroform	2.7E-04	3.5E-03	2.4E-05	NA	3.8E-03	Liver	NA	NA	NA	NA
			Methylene chloride	4.0E-04	5.0E-04	1.5E-05	NA	9.2E-04	Liver	NA	NA	NA	NA
			Tetrachloroethene	5.2E-01	1.0E-01	3.0E-01	NA	9.3E-01	Liver	NA	NA	NA	NA
			Toluene	--	--	--	NA	--	Kidney	NA	NA	NA	NA
			Trichloroethene (TCE)	2.6E-04	6.9E-04	4.3E-05	NA	9.9E-04	Liver	NA	NA	NA	NA
			Trichlorofluoromethane (Freon 11)	--	--	--	NA	--	General	NA	NA	NA	NA
			1,1,1,2-Tetrachloroethane	1.4E-06	6.9E-06	5.4E-07	NA	8.9E-06	Kidney	NA	NA	NA	NA
			1,1,2,2-Tetrachloroethane	2.7E-06	1.0E-05	3.3E-07	NA	1.3E-05	NA	NA	NA	NA	NA
			1,1,2-Trichloroethane	1.9E-04	7.6E-04	1.8E-05	NA	9.7E-04	Blood	NA	NA	NA	NA
			1,1-Dichloroethane	3.2E-06	1.6E-05	2.5E-07	NA	1.9E-05	NOEL	NA	NA	NA	NA
			1,2,4-Trichlorobenzene	2.8E-08	--	3.7E-08	NA	6.5E-08	Adrenal Glands	NA	NA	NA	NA
			1,2,4-Trimethylbenzene	--	--	--	NA	--	NA	NA	NA	NA	NA
			1,2-Dibromo-3-chloropropane	5.7E-04	2.9E-03	1.1E-04	NA	3.5E-03	Decreased survival	NA	NA	NA	NA
			1,2-Dichlorobenzene	--	--	--	NA	--	NOAEL	NA	NA	NA	NA
			1,2-Dichloropropane	1.6E-06	8.1E-06	1.6E-07	NA	9.9E-06	Decreased body weight	NA	NA	NA	NA
			1,3,5-Trimethylbenzene	--	--	--	NA	--	NA	NA	NA	NA	NA
			1,3-Dichlorobenzene	--	--	--	NA	--	NA	NA	NA	NA	NA
			1,4-Dichlorobenzene	2.5E-07	2.1E-06	1.7E-07	NA	2.5E-06	Liver	NA	NA	NA	NA
			2-Butanone	--	--	--	NA	--	Reduced birth weight	NA	NA	NA	NA
			2-Chlorotoluene	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			4-Chlorotoluene	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			4-Methyl-2-pentanone	--	--	--	NA	--	Reduced birth weight	NA	NA	NA	NA
			Benzene	2.9E-05	1.4E-04	4.4E-06	NA	1.8E-04	Immune system	NA	NA	NA	NA

Table 9.1.3

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
			Bromochloromethane	--	--	--	NA	--	NA	NA	NA	NA	NA
			Bromodichloromethane	8.5E-07	4.3E-06	6.9E-08	NA	5.2E-06	Kidney	NA	NA	NA	NA
			Bromoform	3.3E-07	--	2.2E-08	NA	3.5E-07	Liver	NA	NA	NA	NA
			Bromomethane	--	--	--	NA	--	GI	NA	NA	NA	NA
			Carbon disulfide	--	--	--	NA	--	Teratogenicity	NA	NA	NA	NA
			Carbon tetrachloride	7.0E-07	3.4E-06	1.8E-07	NA	4.3E-06	Liver	NA	NA	NA	NA
			Chlorobenzene	--	--	--	NA	--	Liver	NA	NA	NA	NA
			Chloroethane	8.6E-09	4.3E-08	5.1E-10	NA	5.2E-08	Reproductive	NA	NA	NA	NA
			Chloromethane	--	--	--	NA	--	Brain	NA	NA	NA	NA
			cis-1,2-Dichloroethene	--	--	--	NA	--	Liver	NA	NA	NA	NA
			Cyclohexane	--	--	--	NA	--	Reduced birth weight	NA	NA	NA	NA
			Dibromochloromethane	1.7E-06	8.3E-06	1.1E-07	NA	1.0E-05	Liver	NA	NA	NA	NA
			Dichlorofluoromethane (Freon 21)	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			Dichlorodifluoromethane (Freon 12)	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			Ethylbenzene	1.9E-07	7.5E-07	1.1E-07	NA	1.1E-06	Liver	NA	NA	NA	NA
			Isopropylbenzene	--	--	--	NA	--	Kidney	NA	NA	NA	NA
			Methyl tert-butyl ether (MTBE)	1.3E-07	3.2E-07	2.9E-09	NA	4.4E-07	Liver	NA	NA	NA	NA
			Methylcyclohexane	--	--	--	NA	--	Kidney	NA	NA	NA	NA
			Naphthalene	--	4.9E-06	--	NA	4.9E-06	Decreased body weight	NA	NA	NA	NA
			n-Propylbenzene	--	--	--	NA	--	NA	NA	NA	NA	NA
			p-Isopropyltoluene	--	--	--	NA	--	NA	NA	NA	NA	NA
			sec-Butylbenzene	--	--	--	NA	--	NA	NA	NA	NA	NA
			Tetrahydrofuran	7.3E-05	3.3E-04	1.9E-06	NA	4.0E-04	NA	NA	NA	NA	NA
			trans-1,2-Dichloroethene	--	--	--	NA	--	Liver	NA	NA	NA	NA
			Vinyl chloride	1.5E-05	1.4E-05	8.1E-07	NA	3.0E-05	Liver	NA	NA	NA	NA
			m,p-Xylenes	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			o-Xylene	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			Xylenes, total	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA

Table 9.1.3

SUMMARY OF RECEPTOR RISKS AND HAZARDS FOR COPCs

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
			1,1-Biphenyl	--	--	--	NA	--	Kidney	NA	NA	NA	NA
			1,2,3-Trichloropropane	4.0E-07	2.0E-06	6.2E-08	NA	2.5E-06	Blood	NA	NA	NA	NA
			2-Methylnaphthalene	--	--	--	NA	--	Lungs	NA	NA	NA	NA
			Acetophenone	--	--	--	NA	--	NOAEL	NA	NA	NA	NA
			Bis(2-ethylhexyl)phthalate (DEHP)	2.4E-06	--	4.5E-06	NA	6.9E-06	Liver	NA	NA	NA	NA
			Caprolactam	--	--	--	NA	--	Reproductive	NA	NA	NA	NA
			Dimethyl phthalate	--	--	--	NA	--	NA	NA	NA	NA	NA
			Di-n-butyl phthalate	--	--	--	NA	--	Decreased survival	NA	NA	NA	NA
			Isophorone	6.9E-08	--	3.5E-09	NA	7.3E-08	Kidney	NA	NA	NA	NA
			N-Nitrosodimethylamine	1.4E-04	--	3.8E-07	NA	1.4E-04	NA	NA	NA	NA	NA
			Pentachlorophenol	5.4E-07	--	6.3E-06	NA	6.9E-06	Liver, Kidney	NA	NA	NA	NA
			Phenanthrene	--	--	--	NA	--	NA	NA	NA	NA	NA
			Phenol	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			Perchlorate	--	--	--	NA	--	Thyroid	NA	NA	NA	NA
			Cyanide (total)	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			Arsenic	1.9E-03	--	1.1E-05	NA	1.9E-03	Skin	NA	NA	NA	NA
			Hexavalent chromium	--	--	--	NA	--	NOAEL	NA	NA	NA	NA
			Nickel	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			Chemical Total	5.3E-01	1.1E-01	3.0E-01		9.4E-01					NA
		Exposure Point Total						9.4E-01					NA
	Exposure Medium Total							9.4E-01					NA
Receptor Total							Receptor Risk Total	9E-01				Receptor HI Total	NA

Table 10.1.1

RISK SUMMARY

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater	Groundwater	Groundwater	1,1,1-Trichloroethane	--	--	--	NA	--	Decreased body weight	3.4E-02	2.4E-01	6.4E-03	2.8E-01
			1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	--	--	--	NA	--	Neurological	9.1E-04	1.6E-02	3.2E-04	1.7E-02
			1,1-Dichloroethene	--	--	--	NA	--	Liver	5.7E-01	7.2E+00	7.9E-02	7.8E+00
			1,2-Dichloroethane	2.1E-04	1.0E-03	1.6E-05	NA	1.3E-03	Decreased survival	3.4E-01	2.4E+01	2.6E-02	2.4E+01
			1,4-Dioxane (p-dioxane)	9.0E-04	--	3.2E-06	NA	9.1E-04	NA	--	--	--	--
			Acetone	--	--	--	NA	--	Kidney	6.1E-02	3.1E-01	2.9E-04	3.7E-01
			Chloroform	1.7E-04	2.2E-03	1.5E-05	NA	2.4E-03	Liver	1.6E+00	5.7E+00	1.4E-01	7.4E+00
			Methylene chloride	2.5E-04	3.2E-04	9.4E-06	NA	5.8E-04	Liver	8.8E-01	3.1E-01	3.3E-02	1.2E+00
			Tetrachloroethene	3.3E-01	6.3E-02	1.9E-01	NA	5.9E-01	Liver	1.8E+02	8.9E+02	1.1E+02	1.2E+03
			Toluene	--	--	--	NA	--	Kidney	2.4E-02	1.1E-01	8.4E-03	1.5E-01
			Trichloroethene (TCE)	1.6E-04	4.3E-04	2.8E-05	NA	6.2E-04	Liver	1.2E+02	1.1E+00	2.1E+01	1.4E+02
			Trichlorofluoromethane (Freon 11)	--	--	--	NA	--	General	3.3E-02	2.5E-01	6.2E-03	2.8E-01
			1,1,1,2-Tetrachloroethane	8.8E-07	4.4E-06	3.5E-07	NA	5.6E-06	Kidney	3.3E-03	1.6E-02	1.3E-03	2.1E-02
			1,1,2,2-Tetrachloroethane	1.7E-06	6.4E-06	2.1E-07	NA	8.3E-06	NA	3.1E-04	1.5E-03	3.8E-05	1.9E-03
			1,1,2-Trichloroethane	1.2E-04	4.8E-04	1.1E-05	NA	6.1E-04	Blood	1.2E+00	6.1E+00	1.1E-01	7.5E+00
			1,1-Dichloroethane	2.0E-06	1.0E-05	1.6E-07	NA	1.2E-05	NOEL	1.0E-02	3.6E-02	8.1E-04	4.7E-02
			1,2,4-Trichlorobenzene	1.8E-08	--	2.3E-08	NA	4.1E-08	Adrenal Glands	1.5E-03	7.3E-02	1.9E-03	7.6E-02
			1,2,4-Trimethylbenzene	--	--	--	NA	--	NA	4.1E-03	6.1E-01	4.6E-03	6.2E-01
			1,2-Dibromo-3-chloropropane	3.6E-04	1.8E-03	6.9E-05	NA	2.2E-03	Decreased survival	2.6E+00	1.3E+01	5.0E-01	1.6E+01
			1,2-Dichlorobenzene	--	--	--	NA	--	NOAEL	5.5E-04	4.3E-03	3.6E-04	5.2E-03
			1,2-Dichloropropane	1.0E-06	5.1E-06	1.0E-07	NA	6.2E-06	Decreased body weight	4.0E-02	2.0E-01	4.0E-03	2.4E-01
			1,3,5-Trimethylbenzene	--	--	--	NA	--	NA	6.4E-04	9.4E-02	5.2E-04	9.5E-02
			1,3-Dichlorobenzene	--	--	--	NA	--	NA	3.9E-04	1.9E-03	3.6E-04	2.7E-03
			1,4-Dichlorobenzene	1.6E-07	1.3E-06	1.1E-07	NA	1.6E-06	Liver	6.5E-04	4.2E-04	4.3E-04	1.5E-03
			2-Butanone	--	--	--	NA	--	Reduced birth weight	1.5E-02	3.2E-02	1.4E-04	4.7E-02
			2-Chlorotoluene	--	--	--	NA	--	Decreased body weight	6.2E-04	3.1E-03	7.4E-04	4.4E-03
			4-Chlorotoluene	--	--	--	NA	--	Decreased body weight	6.3E-04	3.2E-03	9.0E-05	3.9E-03
			4-Methyl-2-pentanone	--	--	--	NA	--	Reduced birth weight	2.7E-02	1.2E-02	8.4E-04	4.0E-02
			Benzene	1.8E-05	9.2E-05	2.7E-06	NA	1.1E-04	Immune system	1.3E-01	3.1E-01	2.0E-02	4.6E-01

Table 10.1.1

RISK SUMMARY

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
			Bromochloromethane	--	--	--	NA	--	NA	--	--	--	--
			Bromodichloromethane	5.4E-07	2.7E-06	4.4E-08	NA	3.3E-06	Kidney	6.0E-04	3.0E-03	4.9E-05	3.7E-03
			Bromoform	2.1E-07	--	1.4E-08	NA	2.2E-07	Liver	3.8E-03	--	2.6E-04	4.1E-03
			Bromomethane	--	--	--	NA	--	GI	5.2E-01	2.6E+00	1.6E-02	3.1E+00
			Carbon disulfide	--	--	--	NA	--	Teratogenicity	2.6E-02	6.4E-02	4.5E-03	9.4E-02
			Carbon tetrachloride	4.4E-07	2.2E-06	1.2E-07	NA	2.7E-06	Liver	1.2E-02	6.1E-02	3.3E-03	7.7E-02
			Chlorobenzene	--	--	--	NA	--	Liver	4.8E-02	2.8E-01	1.7E-02	3.5E-01
			Chloroethane	5.4E-09	2.7E-08	3.2E-10	NA	3.3E-08	Reproductive	1.4E-05	9.6E-06	8.0E-07	2.4E-05
			Chloromethane	--	--	--	NA	--	Brain	1.0E-03	5.1E-03	3.0E-05	6.2E-03
			cis-1,2-Dichloroethene	--	--	--	NA	--	Liver	3.9E-02	2.0E-01	4.9E-03	2.4E-01
			Cyclohexane	--	--	--	NA	--	Reduced birth weight	1.0E-05	5.1E-05	1.1E-05	7.2E-05
			Dibromochloromethane	1.1E-06	5.3E-06	7.1E-08	NA	6.4E-06	Liver	1.6E-03	8.2E-03	1.1E-04	9.9E-03
			Dichlorofluoromethane (Freon 21)	--	--	--	NA	--	Decreased body weight	1.2E-03	2.1E-02	1.6E-04	2.2E-02
			Dichlorodifluoromethane (Freon 12)	--	--	--	NA	--	Decreased body weight	2.1E-04	3.7E-03	2.5E-05	4.0E-03
			Ethylbenzene	1.2E-07	4.8E-07	7.2E-08	NA	6.7E-07	Liver	3.2E-04	5.5E-04	1.9E-04	1.1E-03
			Isopropylbenzene	--	--	--	NA	--	Kidney	1.5E-04	6.6E-04	1.7E-04	9.7E-04
			Methyl tert-butyl ether (MTBE)	7.9E-08	2.0E-07	1.8E-09	NA	2.8E-07	Liver	1.5E-04	7.5E-04	3.4E-06	9.0E-04
			Methylcyclohexane	--	--	--	NA	--	Kidney	2.7E-05	1.4E-04	3.4E-05	2.0E-04
			Naphthalene	--	3.1E-06	--	NA	3.1E-06	Decreased body weight	7.6E-04	8.9E-02	5.0E-04	9.0E-02
			n-Propylbenzene	--	--	--	NA	--	NA	3.5E-04	1.8E-03	3.4E-04	2.5E-03
			p-Isopropyltoluene	--	--	--	NA	--	NA	1.3E-04	6.0E-04	2.3E-04	9.6E-04
			sec-Butylbenzene	--	--	--	NA	--	NA	2.4E-04	1.2E-03	4.0E-04	1.9E-03
			Tetrahydrofuran	4.6E-05	2.1E-04	1.2E-06	NA	2.6E-04	NA	8.5E-02	1.0E+00	2.2E-03	1.1E+00
			trans-1,2-Dichloroethene	--	--	--	NA	--	Liver	4.2E-02	2.1E-01	3.7E-03	2.6E-01
			Vinyl chloride	9.6E-06	8.7E-06	5.1E-07	NA	1.9E-05	Liver	6.2E-03	3.3E-03	3.3E-04	9.8E-03
			m,p-Xylenes	--	--	--	NA	--	Decreased body weight	1.4E-03	4.8E-02	8.9E-04	5.0E-02
			o-Xylene	--	--	--	NA	--	Decreased body weight	1.1E-03	3.8E-02	9.5E-04	4.0E-02
			Xylenes, total	--	--	--	NA	--	Decreased body weight	4.9E-03	1.7E-01	3.1E-03	1.8E-01

Table 10.1.1

RISK SUMMARY

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
			1,1-Biphenyl	--	--	--	NA	--	Kidney	4.4E-04	2.2E-03	6.7E-04	3.3E-03
			1,2,3-Trichloropropane	2.6E-07	1.3E-06	4.0E-08	NA	1.6E-06	Blood	6.2E-05	1.3E-03	9.7E-06	1.4E-03
			2-Methylnaphthalene	--	--	--	NA	--	Lungs	1.9E-02	9.6E-02	2.6E-02	1.4E-01
			Acetophenone	--	--	--	NA	--	NOAEL	7.6E-04	--	4.8E-05	8.1E-04
			Bis(2-ethylhexyl)phthalate (DEHP)	1.5E-06	--	2.9E-06	NA	4.4E-06	Liver	1.6E-02	--	3.0E-02	4.6E-02
			Caprolactam	--	--	--	NA	--	Reproductive	2.1E-04	--	2.7E-06	2.1E-04
			Dimethyl phthalate	--	--	--	NA	--	NA	1.9E-06	--	6.8E-08	1.9E-06
			Di-n-butyl phthalate	--	--	--	NA	--	Decreased survival	2.7E-04	--	2.2E-04	4.9E-04
			Isophorone	4.4E-08	--	2.2E-09	NA	4.6E-08	Kidney	6.7E-04	--	3.4E-05	7.1E-04
			N-Nitrosodimethylamine	9.1E-05	--	2.4E-07	NA	9.1E-05	NA	6.5E-01	--	1.7E-03	6.5E-01
			Pentachlorophenol	3.4E-07	--	4.1E-06	NA	4.4E-06	Liver, Kidney	2.7E-04	--	3.3E-03	3.6E-03
			Phenanthrene	--	--	--	NA	--	NA	6.3E-05	3.2E-04	1.7E-04	5.5E-04
			Phenol	--	--	--	NA	--	Decreased body weight	9.0E-04	--	4.3E-05	9.4E-04
			Perchlorate	--	--	--	NA	--	Thyroid	1.3E-01	--	6.6E-04	1.3E-01
			Cyanide (total)	--	--	--	NA	--	Decreased body weight	4.7E-03	--	2.4E-05	4.7E-03
			Arsenic	1.2E-03	--	6.3E-06	NA	1.2E-03	Skin	1.2E+00	--	6.4E-03	1.2E+00
			Hexavalent chromium	--	--	--	NA	--	NOAEL	8.5E-02	--	8.9E-04	8.6E-02
			Nickel	--	--	--	NA	--	Decreased body weight	4.6E-02	--	4.8E-05	4.6E-02
			Chemical Total	3.3E-01	7.0E-02	1.9E-01		6.0E-01		3.1E+02	9.6E+02	1.3E+02	1.4E+03
		Exposure Point Total						6.0E-01					1.4E+03
	Exposure Medium Total							6.0E-01					1.4E+03
Receptor Total							Receptor Risk Total	6E-01				Receptor HI Total	1392

Total Liver HI Across All Media =	1.3E+03
Total Decreased Body Weight HI Across All Media =	9.6E-01
Total Kidney HI Across All Media =	5.4E-01
Total Immune System HI Across All Media =	4.6E-01
Total General HI Across All Media =	2.8E-01
Total Teratogenicity HI Across All Media =	9.4E-02
Total Thyroid HI Across All Media =	1.3E-01

Notes

NA = Not available or not applicable

Table 10.1.1

RISK SUMMARY

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
												Total Lungs HI Across All Media =	1.4E-01
												Total Adrenal Glands HI Across All Media =	7.6E-02
												Total Neurological HI Across All Media =	1.7E-02
												Total Brain HI Across All Media =	6.2E-03
												Total Reduced Birth Weight HI Across All Media =	8.7E-02

Table 10.1.2

RISK SUMMARY

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater	Groundwater	Groundwater	1,1,1-Trichloroethane	--	--	--	NA	--	Decreased body weight	7.9E-02	5.5E-01	1.4E-02	6.5E-01
			1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	--	--	--	NA	--	Neurological	2.1E-03	3.7E-02	7.2E-04	4.0E-02
			1,1-Dichloroethene	--	--	--	NA	--	Liver	1.3E+00	1.7E+01	1.8E-01	1.8E+01
			1,2-Dichloroethane	1.2E-04	6.1E-04	9.4E-06	NA	7.4E-04	Decreased survival	7.8E-01	5.6E+01	6.1E-02	5.7E+01
			1,4-Dioxane (p-dioxane)	5.3E-04	--	1.9E-06	NA	5.3E-04	NA	--	--	--	--
			Acetone	--	--	--	NA	--	Kidney	1.4E-01	7.1E-01	7.1E-04	8.6E-01
			Chloroform	9.9E-05	1.3E-03	8.6E-06	NA	1.4E-03	Liver	3.7E+00	1.3E+01	3.2E-01	1.7E+01
			Methylene chloride	1.5E-04	1.9E-04	5.6E-06	NA	3.4E-04	Liver	2.1E+00	7.2E-01	7.7E-02	2.9E+00
			Tetrachloroethene	1.9E-01	3.7E-02	1.1E-01	NA	3.4E-01	Liver	4.2E+02	2.1E+03	2.4E+02	2.7E+03
			Toluene	--	--	--	NA	--	Kidney	5.7E-02	2.7E-01	1.9E-02	3.4E-01
			Trichloroethene (TCE)	9.4E-05	2.5E-04	1.6E-05	NA	3.6E-04	Liver	2.8E+02	2.5E+00	4.7E+01	3.3E+02
			Trichlorofluoromethane (Freon 11)	--	--	--	NA	--	General	7.6E-02	5.7E-01	1.4E-02	6.6E-01
			1,1,1,2-Tetrachloroethane	5.1E-07	2.6E-06	1.9E-07	NA	3.3E-06	Kidney	7.6E-03	3.8E-02	2.9E-03	4.9E-02
			1,1,2,2-Tetrachloroethane	9.9E-07	3.7E-06	1.2E-07	NA	4.8E-06	NA	7.1E-04	3.6E-03	8.6E-05	4.4E-03
			1,1,2-Trichloroethane	7.1E-05	2.8E-04	6.3E-06	NA	3.6E-04	Blood	2.9E+00	1.4E+01	2.6E-01	1.7E+01
			1,1-Dichloroethane	1.2E-06	5.9E-06	9.1E-08	NA	7.2E-06	NOEL	2.4E-02	8.5E-02	1.9E-03	1.1E-01
			1,2,4-Trichlorobenzene	1.0E-08	--	1.3E-08	NA	2.4E-08	Adrenal Glands	3.4E-03	1.7E-01	4.3E-03	1.8E-01
			1,2,4-Trimethylbenzene	--	--	--	NA	--	NA	9.6E-03	1.4E+00	1.0E-02	1.4E+00
			1,2-Dibromo-3-chloropropane	2.1E-04	1.1E-03	3.9E-05	NA	1.3E-03	Decreased survival	6.2E+00	3.1E+01	1.1E+00	3.8E+01
			1,2-Dichlorobenzene	--	--	--	NA	--	NOAEL	1.3E-03	1.0E-02	8.0E-04	1.2E-02
			1,2-Dichloropropane	6.0E-07	3.0E-06	5.7E-08	NA	3.6E-06	Decreased body weight	9.3E-02	4.6E-01	8.9E-03	5.7E-01
			1,3,5-Trimethylbenzene	--	--	--	NA	--	NA	1.5E-03	2.2E-01	1.2E-03	2.2E-01
			1,3-Dichlorobenzene	--	--	--	NA	--	NA	9.0E-04	4.5E-03	8.0E-04	6.2E-03
			1,4-Dichlorobenzene	9.3E-08	7.8E-07	6.0E-08	NA	9.3E-07	Liver	1.5E-03	9.9E-04	9.7E-04	3.5E-03
			2-Butanone	--	--	--	NA	--	Reduced birth weight	3.5E-02	7.5E-02	3.4E-04	1.1E-01
			2-Chlorotoluene	--	--	--	NA	--	Decreased body weight	1.4E-03	7.2E-03	1.7E-03	1.0E-02
			4-Chlorotoluene	--	--	--	NA	--	Decreased body weight	1.5E-03	7.4E-03	2.0E-04	9.0E-03
			4-Methyl-2-pentanone	--	--	--	NA	--	Reduced birth weight	6.2E-02	2.9E-02	2.0E-03	9.3E-02
			Benzene	1.1E-05	5.3E-05	1.6E-06	NA	6.6E-05	Immune system	3.1E-01	7.2E-01	4.7E-02	1.1E+00

Table 10.1.2
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
			Bromochloromethane	--	--	--	NA	--	NA	--	--	--	--
			Bromodichloromethane	3.1E-07	1.6E-06	2.5E-08	NA	1.9E-06	Kidney	1.4E-03	7.1E-03	1.1E-04	8.6E-03
			Bromoform	1.2E-07	--	8.0E-09	NA	1.3E-07	Liver	8.9E-03	--	5.9E-04	9.5E-03
			Bromomethane	--	--	--	NA	--	GI	1.2E+00	6.0E+00	3.8E-02	7.3E+00
			Carbon disulfide	--	--	--	NA	--	Teratogenicity	6.0E-02	1.5E-01	1.1E-02	2.2E-01
			Carbon tetrachloride	2.6E-07	1.3E-06	6.6E-08	NA	1.6E-06	Liver	2.9E-02	1.4E-01	7.3E-03	1.8E-01
			Chlorobenzene	--	--	--	NA	--	Liver	1.1E-01	6.6E-01	3.8E-02	8.1E-01
			Chloroethane	3.2E-09	1.6E-08	1.9E-10	NA	1.9E-08	Reproductive	3.2E-05	2.2E-05	1.9E-06	5.6E-05
			Chloromethane	--	--	--	NA	--	Brain	2.4E-03	1.2E-02	7.3E-05	1.4E-02
			cis-1,2-Dichloroethene	--	--	--	NA	--	Liver	9.2E-02	4.6E-01	1.1E-02	5.6E-01
			Cyclohexane	--	--	--	NA	--	Reduced birth weight	2.4E-05	1.2E-04	2.4E-05	1.7E-04
			Dibromochloromethane	6.1E-07	3.1E-06	4.0E-08	NA	3.7E-06	Liver	3.8E-03	1.9E-02	2.5E-04	2.3E-02
			Dichlorofluoromethane (Freon 21)	--	--	--	NA	--	Decreased body weight	2.7E-03	4.8E-02	3.6E-04	5.1E-02
			Dichlorodifluoromethane (Freon 12)	--	--	--	NA	--	Decreased body weight	5.0E-04	8.7E-03	5.7E-05	9.3E-03
			Ethylbenzene	7.0E-08	2.8E-07	4.1E-08	NA	3.9E-07	Liver	7.4E-04	1.3E-03	4.4E-04	2.5E-03
			Isopropylbenzene	--	--	--	NA	--	Kidney	3.4E-04	1.5E-03	3.8E-04	2.3E-03
			Methyl tert-butyl ether (MTBE)	4.6E-08	1.2E-07	1.1E-09	NA	1.6E-07	Liver	3.5E-04	1.7E-03	8.1E-06	2.1E-03
			Methylcyclohexane	--	--	--	NA	--	Kidney	6.3E-05	3.2E-04	7.8E-05	4.6E-04
			Naphthalene	--	1.8E-06	--	NA	1.8E-06	Decreased body weight	1.8E-03	2.1E-01	1.1E-03	2.1E-01
			n-Propylbenzene	--	--	--	NA	--	NA	8.3E-04	4.1E-03	7.5E-04	5.7E-03
			p-Isopropyltoluene	--	--	--	NA	--	NA	3.1E-04	1.4E-03	5.2E-04	2.2E-03
			sec-Butylbenzene	--	--	--	NA	--	NA	5.7E-04	2.9E-03	9.0E-04	4.3E-03
			Tetrahydrofuran	2.7E-05	1.2E-04	7.1E-07	NA	1.5E-04	NA	2.0E-01	2.4E+00	5.2E-03	2.6E+00
			trans-1,2-Dichloroethene	--	--	--	NA	--	Liver	9.8E-02	4.9E-01	8.6E-03	6.0E-01
			Vinyl chloride	5.6E-06	5.1E-06	3.0E-07	NA	1.1E-05	Liver	1.4E-02	7.6E-03	7.8E-04	2.3E-02
			m,p-Xylenes	--	--	--	NA	--	Decreased body weight	3.2E-03	1.1E-01	2.1E-03	1.2E-01
			o-Xylene	--	--	--	NA	--	Decreased body weight	2.6E-03	8.9E-02	2.2E-03	9.4E-02
			Xylenes, total	--	--	--	NA	--	Decreased body weight	1.1E-02	3.9E-01	7.3E-03	4.1E-01

Table 10.1.2

RISK SUMMARY

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
			1,1-Biphenyl	--	--	--	NA	--	Kidney	1.0E-03	5.1E-03	1.5E-03	7.6E-03
			1,2,3-Trichloropropane	1.5E-07	7.5E-07	2.2E-08	NA	9.2E-07	Blood	1.4E-04	3.1E-03	2.2E-05	3.3E-03
			2-Methylnaphthalene	--	--	--	NA	--	Lungs	4.5E-02	2.2E-01	5.9E-02	3.3E-01
			Acetophenone	--	--	--	NA	--	NOAEL	1.8E-03	--	1.1E-04	1.9E-03
			Bis(2-ethylhexyl)phthalate (DEHP)	8.8E-07	--	1.6E-06	NA	2.5E-06	Liver	3.7E-02	--	6.8E-02	1.0E-01
			Caprolactam	--	--	--	NA	--	Reproductive	4.9E-04	--	6.0E-06	4.9E-04
			Dimethyl phthalate	--	--	--	NA	--	NA	4.3E-06	--	1.5E-07	4.5E-06
			Di-n-butyl phthalate	--	--	--	NA	--	Decreased survival	6.4E-04	--	4.9E-04	1.1E-03
			Isophorone	2.6E-08	--	1.3E-09	NA	2.7E-08	Kidney	1.6E-03	--	7.7E-05	1.6E-03
			N-Nitrosodimethylamine	5.3E-05	--	1.4E-07	NA	5.3E-05	NA	1.5E+00	--	4.1E-03	1.5E+00
			Pentachlorophenol	2.0E-07	--	2.3E-06	NA	2.5E-06	Liver, Kidney	6.4E-04	--	7.4E-03	8.0E-03
			Phenanthrene	--	--	--	NA	--	NA	1.5E-04	7.4E-04	3.8E-04	1.3E-03
			Phenol	--	--	--	NA	--	Decreased body weight	2.1E-03	--	1.0E-04	2.2E-03
			Perchlorate	--	--	--	NA	--	Thyroid	3.0E-01	--	2.0E-03	3.0E-01
			Cyanide (total)	--	--	--	NA	--	Decreased body weight	1.1E-02	--	7.2E-05	1.1E-02
			Arsenic	7.0E-04	--	4.6E-06	NA	7.0E-04	Skin	2.9E+00	--	1.9E-02	2.9E+00
			Hexavalent chromium	--	--	--	NA	--	NOAEL	2.0E-01	--	2.6E-03	2.0E-01
			Nickel	--	--	--	NA	--	weight	1.1E-01	--	1.4E-04	1.1E-01
			Chemical Total	1.9E-01	4.1E-02	1.1E-01		3.4E-01		7.2E+02	2.2E+03	2.9E+02	3.2E+03
		Exposure Point Total						3.4E-01					3.2E+03
	Exposure Medium Total							3.4E-01					3.2E+03
Receptor Total							Receptor Risk Total	3E-01				Receptor HI Total	3236

Notes

NA = Not available or not applicable

Total Liver HI Across All Media =	3.1E+03
Total Decreased Body Weight HI Across All Media =	2.2E+00
Total Kidney HI Across All Media =	1.3E+00
Total Immune System HI Across All Media =	1.1E+00
Total General HI Across All Media =	6.6E-01
Total Teratogenicity HI Across All Media =	2.2E-01
Total Thyroid HI Across All Media =	3.0E-01

Table 10.1.2

RISK SUMMARY

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
												Total Lungs HI Across All Media =	3.3E-01
												Total Adrenal Glands HI Across All Media =	1.8E-01
												Total Neurological HI Across All Media =	4.0E-02
												Total Brain HI Across All Media =	1.4E-02
												Total Reduced Birth Weight HI Across All Media =	2.0E-01

Table 10.1.3

RISK SUMMARY

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
Groundwater	Groundwater	Groundwater	1,1,1-Trichloroethane	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	--	--	--	NA	--	Neurological	NA	NA	NA	NA
			1,1-Dichloroethene	--	--	--	NA	--	Liver	NA	NA	NA	NA
			1,2-Dichloroethane	3.3E-04	1.7E-03	2.6E-05	NA	2.0E-03	Decreased survival	NA	NA	NA	NA
			1,4-Dioxane (p-dioxane)	1.4E-03	--	5.1E-06	NA	1.4E-03	NA	NA	NA	NA	NA
			Acetone	--	--	--	NA	--	Kidney	NA	NA	NA	NA
			Chloroform	2.7E-04	3.5E-03	2.4E-05	NA	3.8E-03	Liver	NA	NA	NA	NA
			Methylene chloride	4.0E-04	5.0E-04	1.5E-05	NA	9.2E-04	Liver	NA	NA	NA	NA
			Tetrachloroethene	5.2E-01	1.0E-01	3.0E-01	NA	9.3E-01	Liver	NA	NA	NA	NA
			Toluene	--	--	--	NA	--	Kidney	NA	NA	NA	NA
			Trichloroethene (TCE)	2.6E-04	6.9E-04	4.3E-05	NA	9.9E-04	Liver	NA	NA	NA	NA
			Trichlorofluoromethane (Freon 11)	--	--	--	NA	--	General	NA	NA	NA	NA
			1,1,1,2-Tetrachloroethane	1.4E-06	6.9E-06	5.4E-07	NA	8.9E-06	Kidney	NA	NA	NA	NA
			1,1,2,2-Tetrachloroethane	2.7E-06	1.0E-05	3.3E-07	NA	1.3E-05	NA	NA	NA	NA	NA
			1,1,2-Trichloroethane	1.9E-04	7.6E-04	1.8E-05	NA	9.7E-04	Blood	NA	NA	NA	NA
			1,1-Dichloroethane	3.2E-06	1.6E-05	2.5E-07	NA	1.9E-05	NOEI	NA	NA	NA	NA
			1,2,4-Trichlorobenzene	2.8E-08	--	3.7E-08	NA	6.5E-08	Adrenal Glands	NA	NA	NA	NA
			1,2,4-Trimethylbenzene	--	--	--	NA	--	NA	NA	NA	NA	NA
			1,2-Dibromo-3-chloropropane	5.7E-04	2.9E-03	1.1E-04	NA	3.5E-03	Decreased survival	NA	NA	NA	NA
			1,2-Dichlorobenzene	--	--	--	NA	--	NOAEL	NA	NA	NA	NA
			1,2-Dichloropropane	1.6E-06	8.1E-06	1.6E-07	NA	9.9E-06	Decreased body weight	NA	NA	NA	NA
			1,3,5-Trimethylbenzene	--	--	--	NA	--	NA	NA	NA	NA	NA
			1,3-Dichlorobenzene	--	--	--	NA	--	NA	NA	NA	NA	NA
			1,4-Dichlorobenzene	2.5E-07	2.1E-06	1.7E-07	NA	2.5E-06	Liver	NA	NA	NA	NA
			2-Butanone	--	--	--	NA	--	Reduced birth weight	NA	NA	NA	NA
			2-Chlorotoluene	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			4-Chlorotoluene	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			4-Methyl-2-pentanone	--	--	--	NA	--	Reduced birth weight	NA	NA	NA	NA
			Benzene	2.9E-05	1.4E-04	4.4E-06	NA	1.8E-04	Immune system	NA	NA	NA	NA

Table 10.1.3
RISK SUMMARY
REASONABLE MAXIMUM EXPOSURE
Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
			Bromochloromethane	--	--	--	NA	--	NA	NA	NA	NA	NA
			Bromodichloromethane	8.5E-07	4.3E-06	6.9E-08	NA	5.2E-06	Kidney	NA	NA	NA	NA
			Bromoform	3.3E-07	--	2.2E-08	NA	3.5E-07	Liver	NA	NA	NA	NA
			Bromomethane	--	--	--	NA	--	GI	NA	NA	NA	NA
			Carbon disulfide	--	--	--	NA	--	Teratogenicity	NA	NA	NA	NA
			Carbon tetrachloride	7.0E-07	3.4E-06	1.8E-07	NA	4.3E-06	Liver	NA	NA	NA	NA
			Chlorobenzene	--	--	--	NA	--	Liver	NA	NA	NA	NA
			Chloroethane	8.6E-09	4.3E-08	5.1E-10	NA	5.2E-08	Reproductive	NA	NA	NA	NA
			Chloromethane	--	--	--	NA	--	Brain	NA	NA	NA	NA
			cis-1,2-Dichloroethene	--	--	--	NA	--	Liver	NA	NA	NA	NA
			Cyclohexane	--	--	--	NA	--	Reduced birth weight	NA	NA	NA	NA
			Dibromochloromethane	1.7E-06	8.3E-06	1.1E-07	NA	1.0E-05	Liver	NA	NA	NA	NA
			Dichlorofluoromethane (Freon 21)	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			Dichlorodifluoromethane (Freon 12)	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			Ethylbenzene	1.9E-07	7.5E-07	1.1E-07	NA	1.1E-06	Liver	NA	NA	NA	NA
			Isopropylbenzene	--	--	--	NA	--	Kidney	NA	NA	NA	NA
			Methyl tert-butyl ether (MTBE)	1.3E-07	3.2E-07	2.9E-09	NA	4.4E-07	Liver	NA	NA	NA	NA
			Methylcyclohexane	--	--	--	NA	--	Kidney	NA	NA	NA	NA
			Naphthalene	--	4.9E-06	--	NA	4.9E-06	Decreased body weight	NA	NA	NA	NA
			n-Propylbenzene	--	--	--	NA	--	NA	NA	NA	NA	NA
			p-Isopropyltoluene	--	--	--	NA	--	NA	NA	NA	NA	NA
			sec-Butylbenzene	--	--	--	NA	--	NA	NA	NA	NA	NA
			Tetrahydrofuran	7.3E-05	3.3E-04	1.9E-06	NA	4.0E-04	NA	NA	NA	NA	NA
			trans-1,2-Dichloroethene	--	--	--	NA	--	Liver	NA	NA	NA	NA
			Vinyl chloride	1.5E-05	1.4E-05	8.1E-07	NA	3.0E-05	Liver	NA	NA	NA	NA
			m,p-Xylenes	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			o-Xylene	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			Xylenes, total	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA

Table 10.1.3

RISK SUMMARY

REASONABLE MAXIMUM EXPOSURE

Omega Chemical Superfund Site

Scenario Timeframe:	Current/Future
Receptor Population:	Resident
Receptor Age:	Child/Adult

Medium	Exposure Medium	Exposure Point	Chemical of Potential Concern	Carcinogenic Risk					Non-Carcinogenic Hazard Quotient				
				Ingestion	Inhalation	Dermal	External (Radiation)	Exposure Routes Total	Primary Target Organ(s)	Ingestion	Inhalation	Dermal	Exposure Routes Total
			1,1-Biphenyl	--	--	--	NA	--	Kidney	NA	NA	NA	NA
			1,2,3-Trichloropropane	4.0E-07	2.0E-06	6.2E-08	NA	2.5E-06	Blood	NA	NA	NA	NA
			2-Methylnaphthalene	--	--	--	NA	--	Lungs	NA	NA	NA	NA
			Acetophenone	--	--	--	NA	--	NOAEL	NA	NA	NA	NA
			Bis(2-ethylhexyl)phthalate (DEHP)	2.4E-06	--	4.5E-06	NA	6.9E-06	Liver	NA	NA	NA	NA
			Caprolactam	--	--	--	NA	--	Reproductive	NA	NA	NA	NA
			Dimethyl phthalate	--	--	--	NA	--	NA	NA	NA	NA	NA
			Di-n-butyl phthalate	--	--	--	NA	--	Decreased survival	NA	NA	NA	NA
			Isophorone	6.9E-08	--	3.5E-09	NA	7.3E-08	Kidney	NA	NA	NA	NA
			N-Nitrosodimethylamine	1.4E-04	--	3.8E-07	NA	1.4E-04	NA	NA	NA	NA	NA
			Pentachlorophenol	5.4E-07	--	6.3E-06	NA	6.9E-06	Liver, Kidney	NA	NA	NA	NA
			Phenanthrene	--	--	--	NA	--	NA	NA	NA	NA	NA
			Phenol	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			Perchlorate	--	--	--	NA	--	Thyroid	NA	NA	NA	NA
			Cyanide (total)	--	--	--	NA	--	Decreased body weight	NA	NA	NA	NA
			Arsenic	1.9E-03	--	1.1E-05	NA	1.9E-03	Skin	NA	NA	NA	NA
			Hexavalent chromium	--	--	--	NA	--	NOAEL	NA	NA	NA	NA
			Nickel	--	--	--	NA	--	weight	NA	NA	NA	NA
			Chemical Total	5.3E-01	1.1E-01	3.0E-01		9.4E-01					NA
		Exposure Point Total						9.4E-01					NA
	Exposure Medium Total							9.4E-01					NA
Receptor Total							Receptor Risk Total	9E-01				Receptor HI Total	NA

Percent Contribution Tables

Cancer Risk Percent Contribution

Percent Contribution for Contaminants in Groundwater - Cancer Risk

Omega Chemical Superfund Site

Chemical	Adult		Child		Child/Adult	
	Total Risk	% Contribution	Total Risk	% Contribution	Total Risk	% Contribution
1,1,1-Trichloroethane	--	--	--	--	--	--
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	--	--	--	--	--	--
1,1-Dichloroethene	--	--	--	--	--	--
1,2-Dichloroethane	1.3E-03	<0.5%	7.4E-04	<0.5%	2.0E-03	<0.5%
1,4-Dioxane (p-dioxane)	9.1E-04	<0.5%	5.3E-04	<0.5%	1.4E-03	<0.5%
Acetone	--	--	--	--	--	--
Chloroform	2.4E-03	<0.5%	1.4E-03	<0.5%	3.8E-03	<0.5%
Methylene chloride	5.8E-04	<0.5%	3.4E-04	<0.5%	9.2E-04	<0.5%
Tetrachloroethene	**5.9E-01**	**98%**	**3.4E-01**	**98%**	**9.3E-01**	**98%**
Toluene	--	--	--	--	--	--
Trichloroethene (TCE)	6.2E-04	<0.5%	3.6E-04	<0.5%	9.9E-04	<0.5%
Trichlorofluoromethane (Freon 11)	--	--	--	--	--	--
1,1,1,2-Tetrachloroethane	5.6E-06	<0.5%	3.3E-06	<0.5%	8.9E-06	<0.5%
1,1,2,2-Tetrachloroethane	8.3E-06	<0.5%	4.8E-06	<0.5%	1.3E-05	<0.5%
1,1,2-Trichloroethane	6.1E-04	<0.5%	3.6E-04	<0.5%	9.7E-04	<0.5%
1,1-Dichloroethane	1.2E-05	<0.5%	7.2E-06	<0.5%	1.9E-05	<0.5%
1,2,4-Trichlorobenzene	4.1E-08	<0.5%	2.4E-08	<0.5%	6.5E-08	<0.5%
1,2,4-Trimethylbenzene	--	--	--	--	--	--
1,2-Dibromo-3-chloropropane	2.2E-03	<0.5%	1.3E-03	<0.5%	3.5E-03	<0.5%
1,2-Dichlorobenzene	--	--	--	--	--	--
1,2-Dichloropropane	6.2E-06	<0.5%	3.6E-06	<0.5%	9.9E-06	<0.5%
1,3,5-Trimethylbenzene	--	--	--	--	--	--
1,3-Dichlorobenzene	--	--	--	--	--	--
1,4-Dichlorobenzene	1.6E-06	<0.5%	9.3E-07	<0.5%	2.5E-06	<0.5%
2-Butanone	--	--	--	--	--	--
2-Chlorotoluene	--	--	--	--	--	--
4-Chlorotoluene	--	--	--	--	--	--
4-Methyl-2-pentanone	--	--	--	--	--	--
Benzene	1.1E-04	<0.5%	6.6E-05	<0.5%	1.8E-04	<0.5%
Bromochloromethane	--	--	--	--	--	--
Bromodichloromethane	3.3E-06	<0.5%	1.9E-06	<0.5%	5.2E-06	<0.5%
Bromoform	2.2E-07	<0.5%	1.3E-07	<0.5%	3.5E-07	<0.5%
Bromomethane	--	--	--	--	--	--
Carbon disulfide	--	--	--	--	--	--
Carbon tetrachloride	2.7E-06	<0.5%	1.6E-06	<0.5%	4.3E-06	<0.5%
Chlorobenzene	--	--	--	--	--	--
Chloroethane	3.3E-08	<0.5%	1.9E-08	<0.5%	5.2E-08	<0.5%
Chloromethane	--	--	--	--	--	--
cis-1,2-Dichloroethene	--	--	--	--	--	--
Cyclohexane	--	--	--	--	--	--
Dibromochloromethane	6.4E-06	<0.5%	3.7E-06	<0.5%	1.0E-05	<0.5%
Dichlorofluoromethane (Freon 21)	--	--	--	--	--	--
Dichlorodifluoromethane (Freon 12)	--	--	--	--	--	--
Ethylbenzene	6.7E-07	<0.5%	3.9E-07	<0.5%	1.1E-06	<0.5%
Isopropylbenzene	--	--	--	--	--	--
Methyl tert-butyl ether (MTBE)	2.8E-07	<0.5%	1.6E-07	<0.5%	4.4E-07	<0.5%
Methylcyclohexane	--	--	--	--	--	--
Naphthalene	3.1E-06	<0.5%	1.8E-06	<0.5%	4.9E-06	<0.5%
n-Propylbenzene	--	--	--	--	--	--
p-Isopropyltoluene	--	--	--	--	--	--
sec-Butylbenzene	--	--	--	--	--	--

Percent Contribution for Contaminants in Groundwater - Cancer Risk

Omega Chemical Superfund Site

Chemical	Adult		Child		Child/Adult	
	Total Risk	% Contribution	Total Risk	% Contribution	Total Risk	% Contribution
Tetrahydrofuran	2.6E-04	<0.5%	1.5E-04	<0.5%	4.0E-04	<0.5%
trans-1,2-Dichloroethene	--	--	--	--	--	--
Vinyl chloride	1.9E-05	<0.5%	1.1E-05	<0.5%	3.0E-05	<0.5%
m,p-Xylenes	--	--	--	--	--	--
o-Xylene	--	--	--	--	--	--
Xylenes, total	--	--	--	--	--	--
1,1-Biphenyl	--	--	--	--	--	--
1,2,3-Trichloropropane	1.6E-06	<0.5%	9.2E-07	<0.5%	2.5E-06	<0.5%
2-Methylnaphthalene	--	--	--	--	--	--
Acetophenone	--	--	--	--	--	--
Bis(2-ethylhexyl)phthalate (DEHP)	4.4E-06	<0.5%	2.5E-06	<0.5%	6.9E-06	<0.5%
Caprolactam	--	--	--	--	--	--
Dimethyl phthalate	--	--	--	--	--	--
Di-n-butyl phthalate	--	--	--	--	--	--
Isophorone	4.6E-08	<0.5%	2.7E-08	<0.5%	7.3E-08	<0.5%
N-Nitrosodimethylamine	9.1E-05	<0.5%	5.3E-05	<0.5%	1.4E-04	<0.5%
Pentachlorophenol	4.4E-06	<0.5%	2.5E-06	<0.5%	6.9E-06	<0.5%
Phenanthrene	--	--	--	--	--	--
Phenol	--	--	--	--	--	--
Perchlorate	--	--	--	--	--	--
Cyanide (total)	--	--	--	--	--	--
Arsenic	1.2E-03	<0.5%	7.0E-04	<0.5%	1.9E-03	<0.5%
Hexavalent chromium	--	--	--	--	--	--
Nickel	--	--	--	--	--	--
Chemical Total	6.0E-01	100%	3.4E-01	100%	9.4E-01	100%

Non-cancer Hazards Percent Contribution

Percent Contribution for Contaminants in Groundwater - Non-cancer Health Hazards
Omega Chemical Superfund Site

	Adult		Child	
Chemical	**Non-cancer Hazard**	**% Contribution**	**Non-cancer Hazard**	**% Contribution**
1,1,1-Trichloroethane	2.8E-01	<0.5%	6.5E-01	<0.5%
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.7E-02	<0.5%	4.0E-02	<0.5%
1,1-Dichloroethene	7.8E+00	<0.5%	1.8E+01	0.6%
1,2-Dichloroethane	2.4E+01	<0.5%	5.7E+01	2%
1,4-Dioxane (p-dioxane)	--	--	--	--
Acetone	3.7E-01	<0.5%	8.6E-01	<0.5%
Chloroform	7.4E+00	<0.5%	1.7E+01	0.5%
Methylene chloride	1.2E+00	<0.5%	2.9E+00	<0.5%
Tetrachloroethene	**1.2E+03**	**84%**	**2.7E+03**	**84%**
Toluene	1.5E-01	<0.5%	3.4E-01	<0.5%
Trichloroethene (TCE)	**1.4E+02**	**10%**	**3.3E+02**	**10%**
Trichlorofluoromethane (Freon 11)	2.8E-01	<0.5%	6.6E-01	<0.5%
1,1,1,2-Tetrachloroethane	2.1E-02	<0.5%	4.9E-02	<0.5%
1,1,2,2-Tetrachloroethane	1.9E-03	<0.5%	4.4E-03	<0.5%
1,1,2-Trichloroethane	7.5E+00	<0.5%	1.7E+01	0.5%
1,1-Dichloroethane	4.7E-02	<0.5%	1.1E-01	<0.5%
1,2,4-Trichlorobenzene	7.6E-02	<0.5%	1.8E-01	<0.5%
1,2,4-Trimethylbenzene	6.2E-01	<0.5%	1.4E+00	<0.5%
1,2-Dibromo-3-chloropropane	1.6E+01	<0.5%	3.8E+01	1%
1,2-Dichlorobenzene	5.2E-03	<0.5%	1.2E-02	<0.5%
1,2-Dichloropropane	2.4E-01	<0.5%	5.7E-01	<0.5%
1,3,5-Trimethylbenzene	9.5E-02	<0.5%	2.2E-01	<0.5%
1,3-Dichlorobenzene	2.7E-03	<0.5%	6.2E-03	<0.5%
1,4-Dichlorobenzene	1.5E-03	<0.5%	3.5E-03	<0.5%
2-Butanone	4.7E-02	<0.5%	1.1E-01	<0.5%
2-Chlorotoluene	4.4E-03	<0.5%	1.0E-02	<0.5%
4-Chlorotoluene	3.9E-03	<0.5%	9.0E-03	<0.5%
4-Methyl-2-pentanone	4.0E-02	<0.5%	9.3E-02	<0.5%
Benzene	4.6E-01	<0.5%	1.1E+00	<0.5%
Bromochloromethane	--	--	--	--
Bromodichloromethane	3.7E-03	<0.5%	8.6E-03	<0.5%
Bromoform	4.1E-03	<0.5%	9.5E-03	<0.5%
Bromomethane	3.1E+00	<0.5%	7.3E+00	<0.5%
Carbon disulfide	9.4E-02	<0.5%	2.2E-01	<0.5%
Carbon tetrachloride	7.7E-02	<0.5%	1.8E-01	<0.5%
Chlorobenzene	3.5E-01	<0.5%	8.1E-01	<0.5%
Chloroethane	2.4E-05	<0.5%	5.6E-05	<0.5%
Chloromethane	6.2E-03	<0.5%	1.4E-02	<0.5%
cis-1,2-Dichloroethene	2.4E-01	<0.5%	5.6E-01	<0.5%
Cyclohexane	7.2E-05	<0.5%	1.7E-04	<0.5%
Dibromochloromethane	9.9E-03	<0.5%	2.3E-02	<0.5%
Dichlorofluoromethane (Freon 21)	2.2E-02	<0.5%	5.1E-02	<0.5%
Dichlorodifluoromethane (Freon 12)	4.0E-03	<0.5%	9.3E-03	<0.5%
Ethylbenzene	1.1E-03	<0.5%	2.5E-03	<0.5%
Isopropylbenzene	9.7E-04	<0.5%	2.3E-03	<0.5%
Methyl tert-butyl ether (MTBE)	9.0E-04	<0.5%	2.1E-03	<0.5%
Methylcyclohexane	2.0E-04	<0.5%	4.6E-04	<0.5%
Naphthalene	9.0E-02	<0.5%	2.1E-01	<0.5%
n-Propylbenzene	2.5E-03	<0.5%	5.7E-03	<0.5%
p-Isopropyltoluene	9.6E-04	<0.5%	2.2E-03	<0.5%
sec-Butylbenzene	1.9E-03	<0.5%	4.3E-03	<0.5%

Percent Contribution for Contaminants in Groundwater - Non-cancer Health Hazards
Omega Chemical Superfund Site

	Adult		Child	
Chemical	Non-cancer Hazard	% Contribution	Non-cancer Hazard	% Contribution
Tetrahydrofuran	1.1E+00	<0.5%	2.6E+00	<0.5%
trans-1,2-Dichloroethene	2.6E-01	<0.5%	6.0E-01	<0.5%
Vinyl chloride	9.8E-03	<0.5%	2.3E-02	<0.5%
m,p-Xylenes	5.0E-02	<0.5%	1.2E-01	<0.5%
o-Xylene	4.0E-02	<0.5%	9.4E-02	<0.5%
Xylenes, total	1.8E-01	<0.5%	4.1E-01	<0.5%
1,1-Biphenyl	3.3E-03	<0.5%	7.6E-03	<0.5%
1,2,3-Trichloropropane	1.4E-03	<0.5%	3.3E-03	<0.5%
2-Methylnaphthalene	1.4E-01	<0.5%	3.3E-01	<0.5%
Acetophenone	8.1E-04	<0.5%	1.9E-03	<0.5%
Bis(2-ethylhexyl)phthalate (DEHP)	4.6E-02	<0.5%	1.0E-01	<0.5%
Caprolactam	2.1E-04	<0.5%	4.9E-04	<0.5%
Dimethyl phthalate	1.9E-06	<0.5%	4.5E-06	<0.5%
Di-n-butyl phthalate	4.9E-04	<0.5%	1.1E-03	<0.5%
Isophorone	7.1E-04	<0.5%	1.6E-03	<0.5%
N-Nitrosodimethylamine	6.5E-01	<0.5%	1.5E+00	<0.5%
Pentachlorophenol	3.6E-03	<0.5%	8.0E-03	<0.5%
Phenanthrene	5.5E-04	<0.5%	1.3E-03	<0.5%
Phenol	9.4E-04	<0.5%	2.2E-03	<0.5%
Perchlorate	1.3E-01	<0.5%	3.0E-01	<0.5%
Cyanide (total)	4.7E-03	<0.5%	1.1E-02	<0.5%
Arsenic	1.2E+00	<0.5%	2.9E+00	<0.5%
Hexavalent chromium	8.6E-02	<0.5%	2.0E-01	<0.5%
Nickel	4.6E-02	<0.5%	1.1E-01	<0.5%
Chemical Total	1392	100%	3.2E+03	100%

Groundwater Monitoring Well Data

OU2 Groundwater Data

Groundwater Data for Operable Unit 2 (OU2)
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Location	Sample Name	Date Sampled	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-chloropropane	1,2-Dibromoethane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene
		Region 9 PRG:	*0.43 ca*	*3200 nc*	*0.055 ca*	*59,000 nc*	*0.2 ca*	*810 nc/ CalEPA 2.0 ca*	*340 nc*			*7.2 nc*	*12 nc*	*0.048 ca/ CalEPA 0.0016 ca*	*0.0056 ca*	*370 nc*	*0.12 ca*	*0.16 ca*	*12 nc*
		EPA MCL:		*200*			*5*		*7*			*70*		*0.2*		*600*	*5*	*5*	
		CalDPH MCL/NL/AL:		*200*	*1*	*1,200*	*5*	*5*	*6*			*5*	*330 NL*	*0.2*		*600*	*0.5*	*5*	*330 NL*
MW2	OC2-MW2A-W-0-4	02-Mar-04	--	2 J	<0.5 J	790 J	0.54 J	2.7 J	690 J	--	<0.50	<0.50	--	<0.5 J	<0.50	<0.50	12 J	<0.5 J	--
	OC2-MW2A-W-0-40	22-Jun-04	--	<2.50	<2.50	320	<2.50	2.2 J	260	--	<2.50	<2.50	--	<2.50	<2.50	<2.50	9.1	<2.50	--
	OC2-MW2A-W-0-64	14-Sep-04	--	<2.50	<2.50	800 J	<2.50	1.4 J	550	--	<2.50	<2.50	--	<2.5 J	<2.50	<2.50	5.1	<2.50	--
	OC2-MW2A-W-0-106	08-Dec-04	--	<2.00	<2.00	600	<2.00	<2.00	370	--	<2.00	<2.00	--	<2 R	<2.00	<2.00	5.1	<2.00	--
	OC2-MW2-W-0-126	02-Mar-05	--	<21.0	<21.0	500	<21.0	<21 J	600	--	<21.0	<21.0	--	<21.0	<21.0	<21.0	<21.0	<21.0	--
	OC2-MW2-W-0-149	02-Sep-05	--	0.53	<0.50	350	<0.50	2.2 J	400	--	<0.50	<0.50	--	<0.50	<0.50	<0.50	10	<0.50	--
	OC2-MW2-W-0-174	08-Mar-06	<0.50	1.2	<0.50	630	1.2	4.6	840	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	25	<0.50	<0.50
	OC2-MW2-W-0-251	07-Sep-06	<0.50	1.3	<0.50	660	1.3	4.4	750	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	0.2 J	24	<0.50	<0.50
MW4A	OC2-MW4A-W-0-5	03-Mar-04	--	2.2	<0.50	840 J	0.35 J	2.5 J	740	--	<0.50	<0.50	--	<0.50	<0.50	<0.50	2.6	<0.50	--
	OC2-MW4A-W-1-6	03-Mar-04	--	2.3	<0.50	680 J	0.39 J	2.6 J	700	--	<0.50	<0.50	--	<0.50	<0.50	<0.50	2.7	<0.50	--
	OC2-MW4A-W-0-36	21-Jun-04	--	<5.00	<5.00	280	<5.00	2.5 J	350	--	<5.00	<5.00	--	<5.00	<5.00	<5.00	1.7 J	<5.00	--
	OC2-MW4A-W-1-37	21-Jun-04	--	<5.00	<5.00	490	<5.00	2.8 J	450	--	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00	<5.00	--
	OC2-MW4A-W-0-58	13-Sep-04	--	<5.00	<5.00	750 J	<5.00	<5.00	770	--	<5.00	<5.00	--	<5 J	<5.00	<5.00	<5.00	<5.00	--
	OC2-MW4A-W-0-92	06-Dec-04	--	<5.00	<5.00	440 J	<5.00	<5.00	400 J	--	<5.00	<5.00	--	<5 R	<5.00	<5.00	<5.00	<5.00	--
	OC2-MW4A-W-0-116	28-Feb-05	--	0.97	<0.50	450	0.24 J	1.8 J	460	--	<0.50	<0.50	--	<0.50	<0.50	<0.50	2.3	<0.50	--
	OC2-MW4A-W-1-112	28-Feb-05	--	0.87	<0.50	820	0.22 J	1.6 J	780	--	<0.50	<0.50	--	<0.50	<0.50	<0.50	2	<0.50	--
	OC2-MW4A-W-0-135	30-Aug-05	--	0.72	<0.50	410	0.21 J	1.4 J	380	--	<0.5 J	<0.50	--	<0.50	<0.50	<0.50	2.1	<0.50	--
	OC2-MW4A-W-0-163	07-Mar-06	<0.50	0.7	<0.50	510	<0.50	1.6	550	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	2.1	<0.50	<0.50
	OC2-MW4A-W-5-217	29-Aug-06	<0.50	0.6	<0.50	680	0.2 J	1.4	610	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	2.2	<0.50	<0.50
MW4B	OC2-MW4B-W-0-7	03-Mar-04	--	3.3	<0.50	1,300 J	0.49 J	3.2 J	1,200	--	<0.50	<0.50	--	<0.50	<0.50	<0.50	5.4	<0.50	--
	OC2-MW4B-W-0-38	21-Jun-04	--	<5.00	<5.00	430	<5.00	<5.00	360	--	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00	<5.00	--
	OC2-MW4B-W-0-59	13-Sep-04	--	<5.00	<5.00	820	<5.00	<5.00	660	--	<5.00	<5.00	--	<5 J	<5.00	<5.00	2.9 J	<5.00	--
	OC2-MW4B-W-1-60	13-Sep-04	--	<5.00	<5.00	730 J	<5.00	<5.00	600	--	<5.00	<5.00	--	<5 J	<5.00	<5.00	2.4 J	<5.00	--
	OC2-MW4B-W-0-93	06-Dec-04	--	<5.00	<5.00	420 J	<5.00	<5.00	340 J	--	<5.00	<5.00	--	<5 R	<5.00	<5.00	<5.00	<5.00	--
	OC2-MW4B-W-1-94	06-Dec-04	--	<2.00	<2.00	500 J	<2.00	<2.00	390 J	--	<2.00	<2.00	--	<2 R	<2.00	<2.00	<2.00	<2.00	--
	OC2-MW4B-W-5-113	28-Feb-05	--	0.54	<0.50	190	0.12 J	0.92 J	190	--	<0.50	<0.50	--	<0.50	<0.50	<0.50	1.5	<0.50	--
	OC2-MW4B-W-0-134	30-Aug-05	--	0.26 J	<0.5 R	240 J	<0.5 R	0.52 J	190 J	--	<0.5 R	<0.5 R	--	<0.5 R	<0.5 R	<0.5 R	1.1 J	<0.5 R	--
	OC2-MW4B-W-0-164	07-Mar-06	<0.50	0.2 J	<0.50	170	<0.50	0.4 J	140	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	1.4	<0.50	<0.50
	OC2-MW4B-W-0-215	29-Aug-06	<0.50	0.7	<0.50	920	0.2 J	1.4	800	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	3.7	<0.50	<0.50
	OC2-MW4B-W-1-216	29-Aug-06	<0.50	0.7	<0.50	930	0.2 J	1.5	790	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	3.7	<0.50	<0.50
MW5	OC2-MW5A-W-0-9	03-Mar-04	--	3	<0.50	1,100 J	0.75	4.3 J	1,100	--	<0.50	<0.50	--	<0.50	<0.50	<0.50	17	<0.50	--
	OC2-MW5A-W-0-41	22-Jun-04	--	<2.50	<2.50	310	<2.50	2.8 J	280	--	<2.50	<2.50	--	<2.50	<2.50	<2.50	12	<2.50	--
	OC2-MW5A-W-0-66	14-Sep-04	--	0.99 J	<5.00	930 J	<5.00	<5.00	820	--	<5.00	<5.00	--	<5 J	<5.00	<5.00	7.4	<5.00	--
	OC2-MW5A-W-0-97	06-Dec-04	--	<4.00	<4.00	290	<4.00	<4.00	250	--	<4.00	<4.00	--	<4 R	<4.00	<4.00	7	<4.00	--
	OC2-MW5-W-0-117	28-Feb-05	--	1.6	<0.50	1,300	0.66	3.7 J	1,400	--	<0.50	<0.50	--	<0.50	<0.50	<0.50	14	<0.50	--
	OC2-MW5-W-5-139	30-Aug-05	--	0.75	<0.5 J	190	0.26 J	1.9 J	300	--	<0.50	<0.50	--	<0.5 J	<0.50	<0.50	5.9	<0.50	--
	OC2-MW5-W-0-167	07-Mar-06	<0.50	0.5	<0.50	470	0.5	2.1	420	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	9.1	<0.50	<0.50
	OC2-MW5-W-1-168	07-Mar-06	<0.50	0.5	<0.50	460	0.5	2.2	410	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	9	<0.50	<0.50
	OC2-MW5-W-0-218	29-Aug-06	<0.50	0.7	<0.50	600	0.9	2.6	560	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	18	<0.50	<0.50
MW14	OC2-MW14-W-0-206	07-Jul-06	<0.50	0.2 J	<0.50	290	<0.50	0.4 J	200	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	2.1	<0.50	<0.50
	OC2-MW14-W-0-263	11-Sep-06	<10.0	<10.0	<10.0	380	<10.0	<10.0	210	<10.0	<10.0	<10.0	<10.0	<40.0	<10.0	<10.0	<10.0	<10.0	<10.0
MW15	OC2-MW15-W-0-198	15-Mar-06	<0.50	2	<0.50	1,400	0.7	5.2	2,000	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	17	<0.50	<0.50
	OC2-MW15-W-1-199	15-Mar-06	<0.50	1.7	<0.50	910	0.8	4.4	1,000	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	17	<0.50	<0.50
	OC2-MW15-W-0-219	29-Aug-06	<0.50	1	<0.50	1,300	0.6	2.3	1,200	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	11	<0.50	<0.50
MW23C	OC2-MW23C-W-0-195	14-Mar-06	<0.50	0.7	<0.50	580	0.5	2.3	450	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	11	<0.50	<0.50
	OC2-MW23C-W-0-261	11-Sep-06	<0.50	0.5	<0.50	790	0.2 J	2.1	600	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	6.4	<0.50	<0.50
	OC2-MW23C-W-1-262	11-Sep-06	<0.50	0.4 J	<0.50	350	0.3 J	1.6	270	<0.50	<0.50	<0.50	<0.50	<1 J	<0.50	<0.50	<0.50	<0.50	<0.50
OW1A	OC1-OW1-W-0-3	24-Feb-04	8.9 J	6,900	<0.5	370 J	<0.5	51	<1500	<0.5	<0.5	<0.5	<0.5	<1	<0.5	6.4	18	<0.5	<0.5
	OC-GW-OW1-022404	24-Feb-04	12	9,600	<1.00	380 J	0.58 J	52	2,100	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	7	22	<1.00	<1.00
	OC2-OW1A-W-0-34	17-Jun-04	--	6,800	<1000	<1000	<1000	<1000	1,600	--	<1000	<1000	--	<1000	<1000	<1000	<1000	<1000	--
	OC1-OW1-W-0-23	27-Aug-04	6.7 J	6,400	<0.50	180	<0.50	54	2,100 J	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	4.3	17	<0.50	<0.50
	OC-GW-OW1-082704	27-Aug-04	<400	8,500	<400	<2000	<400	<400	1,900	<400	<400	<400	<400	<2000	<400	<400	<200	<400	<400
	OC-GW-OW1k-082704	27-Aug-04	5.3	12,000	<1.00	150	0.35 J	45	2,000	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	3.8	12	<1.00	<1.00
	OC2-OW1A-W-0-90	08-Dec-04	--	6,900	<1000	370 J	2,000	<1000	1,900	--	<1000	<1000	--	<1000 R	<1000	<1000	<1000	<1000	--
	OC-GW-OW1-022505	25-Feb-05	5	6,500	<1.00	94	<1.00	41	1,300	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	5.3	7.2	<1.00	<1.00
	OC1-OW1-W-0-47	24-Aug-05	<50.0	5,500	<50.0	170	<50.0	62	2,100	<50.0	<50.0	<50.0	<50.0	<200	<50.0	<50.0	<50.0	<50.0	<50.0
	OC-GW-OW1-082405	24-Aug-05	16	14,000	<5.00	160	<5.00	67	5,100	<5.00	<5.00	<5.00	<5.00	<25.0	<5.00	4.6 J	39	<5.00	<5.00
	OC-GW-OW1-02206	22-Feb-06	<200	4,600	<200	<1000	<200	<200	1,500	<200	<200	<200	<200	<1000	<200	<200	<100	<200	<200
	OW-1	13-Mar-06	<630	3,700	<630	<6300	<630	<630	1,500	<630	<630	<630	<630	<630	<630	<630	<630	<630	<630
	OW-GW-OW-1-082406	24-Aug-06	22	3,200	0.67 J	140	<1.00	48	1,000	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	4.2	25	<1.00	<1.00
OW2	OC1-OW2-W-0-1	24-Feb-04	<0.5	5.5	<0.5	400	<0.5	3.5	680	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.2	<0.5	<0.5
	OC1-OW2-W-5-2	24-Feb-04	<0.5	5	<0.5	460 J	<0.5	3.4	910	<0.5	<0.5	<0.5	<0.5	<1	<0.5	<0.5	<0.2	<0.5	<0.5
	OC-GW-OW2-022404	24-Feb-04	<5.00	4.2 J	<5.00	420	<5.00	2.5 J	930	<5.00	<5.00	<5.00	<5.00	<25.0	<5.00	<5.00	<2.50	<5.00	<5.00
	OC2-OW2-W-0-32	17-Jun-04	--	<20.0	<20.0	600	<20.0	<20.0	1,900	--	<20.0	<20.0	--	<20.0	<20.0	<20.0	<20.0	<20.0	--
	OC-GW-OW2-082404	24-Aug-04	<10.0	3.3 J	<10.0	670	<10.0	2.9 J	1,000	<10.0	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<5.00	<10.0	<10.0
	OC2-OW2-W-0-89	02-Dec-04	--	<10.0	<10.0	320	<10.0	<10.0	330	--	<10.0	<10.0	--	<10 R	<10.0	<10.0	<10.0	<10.0	--
	OC-GW-OW2-022405	24-Feb-05	<10.0	<10.0	<10.0	1,100	<10.0	3.9 J	970	<10.0	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<5.00	<10.0	<10.0
	OC-GW-OW2-082405	24-Aug-05	<5.00	2.6 J	<5.00	1,300	<5.00	5	720	<5.00	<5.00	<5.00	<5.00	<25.0	<5.00	<5.00	<2.50	<5.00	<5.00
	OC-GW-OW2-02206	22-Feb-06	<10.0	5 J	<10.0	1,200	<10.0	12	1,900	<10.0	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<5.00	<10.0	<10.0
	OC-GW-OW-2-082206	22-Aug-06	<5.00	<5.00	<5.00	1,400	<5.00	2.2 J	300	<5.00	<5.00	<5.00	<5.00	<25.0	<5.00	<5.00	<2.50	<5.00	<5.00
OW3	OC1-OW3-W-0-4	25-Feb-04	<10	11 J	<10	330	<10	<10	1,800	<10	<10	<10	<10	<20	<10	<10	<5	<10	<10
	OC-GW-OW3-022504	25-Feb-04	<10.0	11	<10.0	390	<10.0	2.8 J	1,500	<10.0	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<5.00	<10.0	<10.0
	OC2-OW3-W-0-30	17-Jun-04	--	<10.0	<10.0	410	<10.0	<10.0	1,400	--	<10.0	<10.0	--	<10.0	<10.0	<10.0	<10.0	<10.0	--
	OC2-OW3-W-1-31	17-Jun-04	--	<10.0	<10.0	360	<10.0	<10.0	1,400	--	<10.0	<10.0	--	<10.0	<10.0	<10.0	<10.0	<10.0	--
	OC-GW-OW3-082404	24-Aug-04	<5.00	7.4	<5.00	340	<5.00	2.6 J	1,200	<5.00	<5.00	<5.00	<5.00	<25.0	<5.00	<5.00	<2.50	<5.00	<5.00
	OC2-OW3-W-0-85	01-Dec-04	--	2.9 J	<5.00	190	<5.00	<5.00	350	--	<5.00	<5.00	--	<5 R	<5.00	<5.00	<5.00	<5.00	--
	OC-GW-OW3-022305	23-Feb-05	<1.00	6	<1.00	370	<1.00	3	1,400	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<0.50	<1.00	<1.00
	OC-GW-OW3-082405	24-Aug-05	<1.00	4.2	<1.00	380	<1.00	3.4	1,600	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	0.29 J	<1.00	<1.00
	OC1-OW3-W-0-60	21-Feb-06	<0.50	4.9	<0.50	230	<0.50	3.7	1,300	<0.50	<0.50	<0.50	<0.50	<2.00	<0.50	<0.50	<0.50	<0.50	<0.50
	OC-GW-OW3-02106	21-Feb-06	<5.00	5.2	<5.00	280	<5.00	4.5 J	1,200	<5.00	<5.00	<5.00	<5.00	<25.0	<5.00	<5.00	<2.50	<5.00	<5.00
	OW-GW-OW-3-082306	23-Aug-06	<1.00	2.5	<1.00	200	<1.00	2.8	630	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<0.50	<1.00	<1.00
OW4A	OC-GW-OW4A-022704	27-Feb-04	<1.00	<1.00	<1.00	11	<1.00	<1.00	14	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<0.50	<1.00	<1.00
	OC2-MW4A-W-0-25	15-Jun-04	--	<2.50	<2.50	120	<2.50	<2.50	110	--	<2.50	<2.50	--	<2.50	<2.50	<2.50	<2.50	1.6 J	--
	OC-GW-OW4a-082504	25-Aug-04	<1.00	0.3 J	<1.00	230	<1.00	<1.00	140	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	0.45 J	<1.00	<1.00
	OC-GW-OW4ak-082504	25-Aug-04	<1.00	0.32 J	<1.00	230	<1.00	<1.00	130	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	0.43 J	<1.00	<1.00
	OC2-OW4A-W-0-81	30-Nov-04	--	<0.50	<0.50	62	<0.50	<0.50	62	--	<0.5 J	<0.5 J	--	<0.5 R	<0.50	<0.50	0.27 J	<0.50	--
	OC-GW-OW4A-022505	25-Feb-05	<1.00	<1.00	<1.00	310	<1.00	<1.00	110	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	<0.50	<1.00	<1.00
	OC-GW-OW4a-082505	25-Aug-05	<1.00	0.46 J	<1.00	360	<1.00	0.45 J	260	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	1.9	<1.00	<1.00
	OC-GW-OW4A-02206	22-Feb-06	<1.00	<1.00	<1.00	91	<1.00	0.37 J	140	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	1.5	<1.00	<1.00
	OW-GW-OW-4A-082306	23-Aug-06	<1.00	<1.00	<1.00	110	<1.00	0.55 J	120	<1.00	<1.00	<1.00	<1.00	5.5	<1.00	<1.00	2.7	<1.00	<1.00
OW5	OC-GW-OW5-022404	24-Feb-04	<1.00	3.1	<1.00	450	0.91 J	3.8	390	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	26	<1.00	<1.00
	OC2-OW5-W-5-26	16-Jun-04	--	<10.0	<10.0	1,100	<10.0	10	1,400 J	--	<10.0	<10.0	--	<10.0	<10.0	<10.0	55	<10.0	--
	OC-GW-OW5-082504	25-Aug-04	<1.00	2.6	<1.00	900	1.2	5.1	910	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	33	<1.00	<1.00
	OC2-OW5-W-0-86	02-Dec-04	--	0.46 J	<2.50	84	<2.50	<2.50	150	--	<2.50	<2.50	--	<2.5 R	<2.50	<2.50	8	<2.50	--
	OC2-OW5-W-1-87	02-Dec-04	--	<2.50	<2.50	100	<2.5 J	<2.50	160	--	<2.50	<2.50	--	<2.5 R	<2.5 J	<2.50	8.1	<2.50	--
	OC-GW-OW5-022405	24-Feb-05	<1.00	0.38 J	<1.00	240	<1.00	0.69 J	130	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	3.7	<1.00	<1.00
	OC-GW-OW5-082305	22-Aug-05	<5.00	2.8 J	<5.00	930	1.8 J	9.2	1,100	<5.00	<5.00	<5.00	<5.00	<25.0	<5.00	<5.00	53	<5.00	<5.00
	OC-GW-OW5-021706	17-Feb-06	<1.00	1.8	<1.00	950	1.3	7.8	930	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	33	<1.00	<1.00
	OW-GW-OW-5-082406	24-Aug-06	<1.00	1.2	<1.00	750	1.7	6.2	630	<1.00	<1.00	<1.00	<1.00	<5.00	<1.00	<1.00	33	<1.00	<1.00
OW8A	OC-GW-OW8-022404	24-Feb-04	<50.0	35 J	<50.0	2,200	52	56	1,400	<50.0	<50.0	<50.0	<50.0	<250	<50.0	<50.0	350	<50.0	<50.0
	OC2-OW8-W-0-29	16-Jun-04	--	45 J	<50.0	2,800	150	120	1,300	--	<50.0	<50.0	--	<50.0	<50.0	<50.0	730	<50.0	--
	OC-GW-OW8-082404	24-Aug-04	<100	51 J	<100	2,200	130	110	1,300	<100	<100	<100	<100	<500	<100	<100	780	<100	<100
	OC2-OW8-W-0-91	03-Dec-04	--	<100	<100	1,700 J	130	110	2,200 J	--	<100	<100	--	<100 R	<100	<100	690	<100	--
	OC1-OW8A-W-0-40	23-Feb-05	<2.50	450	<2.50	1,100	120	120	1,600	<2.50	<2.50	<2.50	37	<10.0	<2.50	25	1,000	<2.50	8.3
	OC-GW-OW8-022305	23-Feb-05	1.4	400 J	<1.00	2,500	94	130	2,200	<1.00	<1.00	<1.00	52	<5.00	<1.00	39	1,100	<1.00	13
	OC-GW-OW8-K-022305	23-Feb-05	<200	420	<200	2,500	82 J	150 J	2,200	<200	<200	<200	52 J	<1000	<200	<200	1,300	<200	<200
	OC1-OW8A-W-0-48	24-Aug-05	<50.0	390	<50.0	1,600	40 J	120	2,400	<50.0	<50.0	<50.0	<50.0	<200	<50.0	26 J	970	<50.0	<50.0
	OC-GW-OW8a-082405	24-Aug-05	<1.00	450	<1.00	2,400	49	92	2,700	<1.00	<1.00	<1.00	23	<5.00	<1.00	24	1,200	<1.00	5.6
	OC-GW-OW8a-K-082405	24-Aug-05	<1.00	430	<1.00	2,000	55	110	2,500	<1.00	<1.00	0.53 J	25	<5.00	<1.00	28	1,200	<1.00	6.4
	OC1-OW8A-W-5-59	21-Feb-06	<0.50	--	<0.50	1,800	110	94	930	<0.50	<0.50	<0.50	16 J	<2.00	<0.50	8.5	570	<0.50	3.2 J
	OC-GW-OW8-022106	21-Feb-06	<100	50 J	<100	2,200	110	120	1,100	<100	<100	<100	<100	<500	<100	<100	720	<100	<100
	OC-GW-OW8K-022106	21-Feb-06	<50.0	38 J	<50.0	2,200	96	99	1,000	<50.0	<50.0	<50.0	<50.0	<250	<50.0	<50.0	640	<50.0	<50.0
	OW-8	13-Mar-06	<200	<200	<200	<2000	<200	<200	860	<200	<200	<200	<200	<200	<200	<200	450	<200	<200
	OW-GW-OW-8-082406	24-Aug-06	3	17	<1.00	1,700	43	41	450	<1.00	<1.00	<1.00	4.2	<5.00	<1.00	3.3	210	<1.00	0.96 J
	OW-GW-OW-8K-082406	24-Aug-06	0.58 J	21	<1.00	1,800	35	43	370	<1.00	<1.00	<1.00	3.2	<5.00	<1.00	2.7	230	<1.00	0.67 J

Groundwater Data for Operable Unit 2 (OU2)
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Location	Sample Name	Date Sampled	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-dichloropropane	2-Butanone	2-Chlorotoluene	2-Hexanone	4-Chlorotoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Bromomethane	Carbon disulfide
		Region 9 PRG:	*180 nc*	*120 nc*	*0.5 ca*		*7,000 nc*	*120 nc*				*5,500 nc*	*0.35 ca*	*20 nc*		*0.18 ca*	*8.5 ca*	*8.7 nc*	*1000 nc*
		EPA MCL:			*75*								*5*			*80*	*80*		
		CalDPH MCL/NL/AL:			*5*			*140 NL*		*140 NL*			*1*						*160 NL*
MW2	OC2-MW2A-W-0-4	02-Mar-04	<0.50	--	<0.50	--	<5.00	--	<5.00	--	<5.00	<5.00	0.99 J	--	<0.50	<0.5 J	<0.50	<0.5 R	<0.5 R
	OC2-MW2A-W-0-40	22-Jun-04	<2.50	--	<2.50	--	<25.0	--	<25.0	--	<25.0	<25.0	0.74 J	--	<2.50	<2.50	<2.50	<2.50	<2.50
	OC2-MW2A-W-0-64	14-Sep-04	<2.50	--	<2.50	--	<25 J	--	<25 J	--	<25.0	<25 J	<2.5 J	--	<2.50	<2.50	<2.50	<2.5 J	<2.50
	OC2-MW2A-W-0-106	08-Dec-04	<2.00	--	<2.00	--	<20.0	--	<20.0	--	<20.0	88	0.48 J	--	<2.00	<2.00	<2.00	<2.00	<2.00
	OC2-MW2-W-0-126	02-Mar-05	<21.0	--	<21.0	--	<210	--	<210	--	<210	<210	<21.0	--	<21.0	<21.0	<21.0	<21.0	<21 J
	OC2-MW2-W-0-149	02-Sep-05	<0.50	--	<0.50	--	<5.00	--	<5.00	--	<5.00	29	0.3 J	--	<0.50	<0.50	<0.50	<0.50	<0.50
	OC2-MW2-W-0-174	08-Mar-06	<0.50	<0.50	<0.50	<0.50	<4 J	<0.50	--	<0.50	--	<2 J	0.4 J	<0.50	<0.50	<0.50	<0.50	<0.50	--
	OC2-MW2-W-0-251	07-Sep-06	<0.50	<0.50	<0.50	<0.50	<2 J	<0.50	<4.00	<0.50	<4.00	<2 J	0.4 J	<0.50	<0.50	<0.50	<0.50	<0.2 J	<0.50
MW4A	OC2-MW4A-W-0-5	03-Mar-04	<0.50	--	<0.50	--	<5.00	--	<5.00	--	<5.00	120	0.58	--	<0.50	<0.50	<0.50	<0.50	<0.50
	OC2-MW4A-W-1-6	03-Mar-04	<0.50	--	<0.50	--	<5.00	--	<5.00	--	<5.00	120	0.64	--	<0.50	<0.50	<0.50	<0.50	<0.50
	OC2-MW4A-W-0-36	21-Jun-04	<5.00	--	<5.00	--	<50.0	--	<50.0	--	<50.0	<50.0	0.57 J	--	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-1-37	21-Jun-04	<5.00	--	<5.00	--	<50.0	--	<50.0	--	<50.0	<50.0	0.64 J	--	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-0-58	13-Sep-04	<5.00	--	<5.00	--	<50 J	--	<50 J	--	<50.0	<50 J	<5 J	--	<5.00	<5.00	<5.00	<5 J	<5.00
	OC2-MW4A-W-0-92	06-Dec-04	<5.00	--	<5.00	--	<50.0	--	<50.0	--	<50.0	97	<5.00	--	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-0-116	28-Feb-05	<0.50	--	<0.50	--	<5.00	--	<5.00	--	<5.00	<5 J	0.27 J	--	<0.50	<0.50	<0.50	<0.50	<0.50
	OC2-MW4A-W-1-112	28-Feb-05	<0.50	--	<0.50	--	<5.00	--	<5.00	--	<5.00	<5 J	0.26 J	--	<0.50	<0.50	<0.50	<0.50	<0.50
	OC2-MW4A-W-0-135	30-Aug-05	<0.50	--	<0.50	--	<5.00	--	<5.00	--	<5.00	48	0.24 J	--	<0.50	<0.50	<0.50	<0.50	<0.50
	OC2-MW4A-W-0-163	07-Mar-06	<0.50	<0.50	<0.50	<0.50	<4.00	<0.50	--	<0.50	--	<4 J	0.2 J	<0.50	<0.50	<0.50	<0.50	<0.50	--
	OC2-MW4A-W-5-217	29-Aug-06	<0.50	<0.50	<0.50	<0.50	<2 J	<0.50	<4.00	<0.50	<4.00	<2 J	0.2 J	<0.50	<0.50	<0.50	<0.2 J	<0.50	<0.50
MW4B	OC2-MW4B-W-0-7	03-Mar-04	<0.50	--	<0.50	--	<5.00	--	<5.00	--	<5.00	180 J	0.64	--	<0.50	<0.50	<0.50	<0.50	<0.50
	OC2-MW4B-W-0-38	21-Jun-04	<5.00	--	<5.00	--	<50.0	--	<50.0	--	<50.0	<50.0	0.68 J	--	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW4B-W-0-59	13-Sep-04	<5.00	--	<5.00	--	<50 J	--	<50 J	--	<50.0	<50 J	<5.00	--	<5.00	<5.00	<5.00	<5 J	<5.00
	OC2-MW4B-W-1-60	13-Sep-04	<5.00	--	<5.00	--	<7.6 J	--	<50 J	--	<50.0	<50 J	<5.00	--	<5.00	<5.00	<5.00	<5 J	<5.00
	OC2-MW4B-W-0-93	06-Dec-04	<5.00	--	<5.00	--	<50.0	--	<50.0	--	<50.0	80	<5.00	--	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW4B-W-1-94	06-Dec-04	<2.00	--	<2.00	--	<20.0	--	<20.0	--	<20.0	72	<2.00	--	<2.00	<2.00	<2.00	<2.00	<2.00
	OC2-MW4B-W-5-113	28-Feb-05	<0.50	--	<0.50	--	<5.00	--	<5.00	--	<5.00	<5 J	0.17 J	--	<0.50	<0.50	<0.50	<0.50	<0.50
	OC2-MW4B-W-0-134	30-Aug-05	<0.5 R	--	<0.5 R	--	<5 R	--	<5 R	--	<5 R	20 J	0.14 J	--	<0.5 R	<0.5 R	<0.5 R	<0.5 R	<0.5 R
	OC2-MW4B-W-0-164	07-Mar-06	<0.50	<0.50	<0.50	<0.50	<4.00	<0.50	--	<0.50	--	<4 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	--
	OC2-MW4B-W-0-215	29-Aug-06	<0.50	<0.50	<0.50	<0.50	<2 J	<0.50	<4.00	<0.50	<4.00	<2 J	0.2 J	<0.50	<0.50	<0.50	<0.2 J	<0.50	<0.50
	OC2-MW4B-W-1-216	29-Aug-06	<0.50	<0.50	<0.50	<0.50	<2 J	<0.50	<4.00	<0.50	<4.00	<2 J	0.2 J	<0.50	<0.50	<0.50	<0.2 J	<0.50	<0.50
MW5	OC2-MW5A-W-0-9	03-Mar-04	<0.50	--	<0.50	--	<5.00	--	<5.00	--	<5.00	<5.00	0.85	--	<0.50	<0.50	<0.50	<0.5 J	<0.5 J
	OC2-MW5A-W-0-41	22-Jun-04	<2.50	--	<2.50	--	<25.0	--	<25.0	--	<25.0	<25.0	<25 J	--	<2.50	<2.50	<2.50	<2.50	<2.50
	OC2-MW5A-W-0-66	14-Sep-04	<5.00	--	<5.00	--	<50 J	--	<50 J	--	<50.0	<50 J	<5.00	--	<5.00	<5.00	<5.00	<5 J	<5.00
	OC2-MW5A-W-0-97	06-Dec-04	<4.00	--	<4.00	--	<40.0	--	<40.0	--	<40.0	130	<4.00	--	<4.00	<4.00	<4.00	<4.00	<4.00
	OC2-MW5-W-0-117	28-Feb-05	<0.50	--	<0.50	--	<5.00	--	<5.00	--	<5.00	<5 J	0.5	--	<0.50	<0.50	<0.50	<0.50	<0.50
	OC2-MW5-W-5-139	30-Aug-05	<0.50	--	<0.50	--	<5.00	--	<5.00	--	<5.00	41	0.32 J	--	<0.50	<0.50	<0.50	<0.50	<0.50
	OC2-MW5-W-0-167	07-Mar-06	<0.50	<0.50	<0.50	<0.50	<4.00	<0.50	--	<0.50	--	<4 J	0.3 J	<0.50	<0.50	<0.50	<0.50	<0.50	--
	OC2-MW5-W-1-168	07-Mar-06	<0.50	<0.50	<0.50	<0.50	<4.00	<0.50	--	<0.50	--	<4 J	0.3 J	<0.50	<0.50	<0.50	<0.50	<0.50	--
	OC2-MW5-W-0-218	29-Aug-06	<0.50	<0.50	<0.50	<0.50	<2 J	<0.50	<4.00	<0.50	<4.00	<2 J	0.3 J	<0.50	<0.50	0.4 J	<0.2 J	<0.50	<0.50
MW14	OC2-MW14-W-0-206	07-Jul-06	<0.50	<0.50	<0.50	<0.50	<2 J	<0.50	--	<0.50	--	<2 J	<0.50	<0.50	<0.50	<0.50	<0.2 J	<0.50	--
	OC2-MW14-W-0-263	11-Sep-06	<10.0	<10.0	<10.0	<10.0	<40 J	<10.0	<40 J	<10.0	<80.0	<40 J	<10.0	<10.0	<10.0	<10.0	<5 J	<10.0	<10.0
MW15	OC2-MW15-W-0-198	15-Mar-06	<0.50	<0.50	<0.50	<0.50	<4.00	<0.50	--	<0.50	--	<4.00	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	--
	OC2-MW15-W-1-199	15-Mar-06	<0.50	<0.50	<0.50	<0.50	<4.00	<0.50	--	<0.50	--	<4.00	0.5	<0.50	<0.50	<0.50	<0.50	<0.50	--
	OC2-MW15-W-0-219	29-Aug-06	<0.50	<0.50	<0.50	<0.50	<2 J	<0.50	<4.00	<0.50	<4.00	<2 J	0.3 J	<0.50	<0.50	<0.50	<0.2 J	<0.50	<0.50
MW23C	OC2-MW23C-W-0-195	14-Mar-06	<0.50	<0.50	<0.50	<0.50	<4.00	<0.50	--	<0.50	--	<4 J	0.3 J	<0.50	<0.50	<0.50	<0.50	<0.50	--
	OC2-MW23C-W-0-261	11-Sep-06	<0.50	<0.50	<0.50	<0.50	<2 J	<0.50	<4.00	<0.50	<4.00	<2 J	0.3 J	<0.50	<0.50	<0.50	<0.2 J	<0.50	<0.50
	OC2-MW23C-W-1-262	11-Sep-06	<0.50	<0.50	<0.50	<0.50	<4.00	<0.50	<4.00	<0.50	<4.00	<2 J	0.2 J	<0.50	<0.50	<0.50	<0.50	<0.2 J	<0.50
OW1A	OC1-OW1-W-0-3	24-Feb-04	0.7 J	<0.5	1.5	<0.5	<2	0.6 J	--	<0.5	--	<2	10	<0.5	<0.5	<0.5	<0.5	<0.5	--
	OC-GW-OW1-022404	24-Feb-04	0.77 J	<1.00	1.7	<1.00	--	0.44 J	--	<1.00	--	<10.0	8.8	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OC2-OW1A-W-0-34	17-Jun-04	<1000	--	<1000	--	<10000	--	<10000	--	<10000	<10000	88 J	--	<1000	<1000	<1000	<1000	240 J
	OC1-OW1-W-0-23	27-Aug-04	0.6	<0.50	1	<0.50	<4.00	<0.50	--	<0.50	--	11 J	9.3	<0.50	<0.50	<0.50	<0.50	<0.50	--
	OC-GW-OW1-082704	27-Aug-04	<400	<400	<400	<400	--	<400	--	<400	--	<4000	<200	<400	<400	<400	<400	<400	--
	OC-GW-OW1k-082704	27-Aug-04	0.48 J	<1.00	0.89 J	<1.00	--	0.28 J	--	<1.00	--	8.7 J	7	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OC2-OW1A-W-0-90	08-Dec-04	<1000	--	<1000	--	<10000	--	<10000	--	<10000	<10000	180 J	--	<1000	<1000	<1000	180 J	<1000
	OC-GW-OW1-022505	25-Feb-05	0.76 J	<1.00	1.3	<1.00	--	0.41 J	--	<1.00	--	11	7.6	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OC1-OW1-W-0-47	24-Aug-05	<50.0	<50.0	<50.0	<50.0	<400	<50.0	--	<50.0	--	<400	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	--
	OC-GW-OW1-082405	24-Aug-05	<5.00	<5.00	<5.00	<5.00	--	<5.00	--	<5.00	--	<50.0	9.4	<5.00	<5.00	<5.00	<5.00	<5.00	--
	OC-GW-OW1-02206	22-Feb-06	<200	<200	<200	<200	--	<200	--	<200	--	<2000	<100	<200	<200	<200	<200	<200	--
	OW-1	13-Mar-06	<630	<630	<630	<630	<13000	<630	<13000	<630	<13000	<13000	<630	<630	<630	<630	<1300	<1300	<630
	OW-GW-OW-1-082406	24-Aug-06	0.61 J	<1.00	1.1	<1.00	--	0.47 J	--	0.46 J	--	<10.0	10	<1.00	<1.00	<1.00	<1.00	<1.00	--
OW2	OC1-OW2-W-0-1	24-Feb-04	<0.5	<0.5	<0.5	<0.5	<2	<0.5	--	<0.5	--	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	OC1-OW2-W-5-2	24-Feb-04	<0.5	<0.5	<0.5	<0.5	<2	<0.5	--	<0.5	--	<2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--
	OC-GW-OW2-022404	24-Feb-04	<5.00	<5.00	<5.00	<5.00	--	<5.00	--	<5.00	--	<50.0	<2.50	<5.00	<5.00	<5.00	<5.00	<5.00	--
	OC2-OW2-W-0-32	17-Jun-04	<20.0	--	<20.0	--	<200	--	<200	--	<200	<200	<20.0	--	<20.0	<20.0	<20.0	<20.0	<20.0
	OC-GW-OW2-082404	24-Aug-04	<10.0	<10.0	<10.0	<10.0	--	<10.0	--	<10.0	--	<100	<5.00	<10.0	<10.0	<10.0	<10.0	<10.0	--
	OC2-OW2-W-0-89	02-Dec-04	<10.0	--	<10.0	--	<100	--	<100	--	<100	<100	<10.0	--	<10.0	<10.0	<10.0	5.6 J	<10.0
	OC-GW-OW2-022405	24-Feb-05	<10.0	<10.0	<10.0	<10.0	--	<10.0	--	<10.0	--	<100	<5.00	<10.0	<10.0	<10.0	<10.0	<10.0	--
	OC-GW-OW2-082405	24-Aug-05	<5.00	<5.00	<5.00	<5.00	--	<5.00	--	<5.00	--	<50.0	<2.50	<5.00	<5.00	<5.00	<5.00	<5.00	--
	OC-GW-OW2-02206	22-Feb-06	<10.0	<10.0	<10.0	<10.0	--	<10.0	--	<10.0	--	<100	<5.00	<10.0	<10.0	<10.0	<10.0	<10.0	--
	OC-GW-OW-2-082206	22-Aug-06	<5.00	<5.00	<5.00	<5.00	--	<5.00	--	<5.00	--	<50.0	<2.50	<5.00	<5.00	<5.00	<5.00	<5.00	--
OW3	OC1-OW3-W-0-4	25-Feb-04	<10	<10	<10	<10	<40	<10	--	<10	--	<40	<10	<10	<10	<10	<10	<10	--
	OC-GW-OW3-022504	25-Feb-04	<10.0	<10.0	<10.0	<10.0	--	<10.0	--	<10.0	--	<100	<5.00	<10.0	<10.0	<10.0	<10.0	<10.0	--
	OC2-OW3-W-0-30	17-Jun-04	<10.0	--	<10.0	--	<100	--	<100	--	<100	<100	<10.0	--	<10.0	<10.0	<10.0	<10.0	<10.0
	OC2-OW3-W-1-31	17-Jun-04	<10.0	--	<10.0	--	<100	--	<100	--	<100	<100	<10.0	--	<10.0	<10.0	<10.0	<10.0	<10.0
	OC-GW-OW3-082404	24-Aug-04	<5.00	<5.00	<5.00	<5.00	--	<5.00	--	<5.00	--	<50.0	<2.50	<5.00	<5.00	<5.00	<5.00	<5.00	--
	OC2-OW3-W-0-85	01-Dec-04	<5.00	--	<5.00	--	<50.0	--	<50.0	--	<50.0	<50.0	<5.00	--	<5.00	<5.00	<5.00	<5 J	<5.00
	OC-GW-OW3-022305	23-Feb-05	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	<10.0	0.43 J	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OC-GW-OW3-082405	24-Aug-05	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	<10.0	0.41 J	<1.00	<1.00	<1.00	2.8	<1.00	--
	OC1-OW3-W-0-60	21-Feb-06	<0.50	<0.50	<0.50	<0.50	<4.00	<0.50	--	<0.50	--	<4.00	0.4 J	<0.50	<0.50	<0.50	<0.50	<0.50	--
	OC-GW-OW3-02106	21-Feb-06	<5.00	<5.00	<5.00	<5.00	--	<5.00	--	<5.00	--	<50.0	<2.50	<5.00	<5.00	<5.00	<5.00	<5.00	--
	OW-GW-OW-3-082306	23-Aug-06	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	<10.0	0.31 J	<1.00	<1.00	<1.00	<1.00	<1.00	--
OW4A	OC-GW-OW4A-022704	27-Feb-04	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	<10.0	<0.50	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OC2-MW4A-W-0-25	15-Jun-04	<2.50	--	<2.50	--	<25.0	--	<25.0	--	<25.0	<25.0	<2.50	--	<2.50	<2.50	<2.50	<2.50	<2.50
	OC-GW-OW4a-082504	25-Aug-04	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	12	<0.50	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OC-GW-OW4ak-082504	25-Aug-04	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	9 J	<0.50	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OC2-OW4A-W-0-81	30-Nov-04	<0.50	--	<0.50	--	<5.00	--	<5.00	--	<5 J	<5.00	<0.5 J	--	<0.50	<0.50	<0.50	<0.50	<0.50
	OC-GW-OW4A-022505	25-Feb-05	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	<10.0	<0.50	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OC-GW-OW4a-082505	25-Aug-05	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	<10.0	<0.50	<1.00	<1.00	<1.00	<5.00	<1.00	--
	OC-GW-OW4A-02206	22-Feb-06	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	<10.0	<0.50	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OW-GW-OW-4A-082306	23-Aug-06	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	<10.0	<0.50	<1.00	<1.00	<1.00	<1.00	<1.00	--
OW5	OC-GW-OW5-022404	24-Feb-04	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	<10.0	0.89	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OC2-OW5-W-5-26	16-Jun-04	<10.0	--	<10.0	--	<100	--	<100	--	<100	<100	1.9 J	--	<10.0	<10.0	<10.0	<10.0	<10.0
	OC-GW-OW5-082504	25-Aug-04	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	14	0.81	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OC2-OW5-W-0-86	02-Dec-04	<2.50	--	<2.50	--	<25.0	--	<25.0	--	<25.0	54	<2.50	--	<2.50	<2.50	<2.50	<2.5 J	<2.50
	OC2-OW5-W-1-87	02-Dec-04	<2.50	--	<2.50	--	<25.0	--	<25.0	--	<25.0	<25.0	<2.50	--	<2.50	<2.50	<2.5 J	<2.5 J	<2.50
	OC-GW-OW5-022405	24-Feb-05	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	<10.0	<0.50	<1.00	<1.00	1	<1.00	<1.00	--
	OC-GW-OW5-082305	22-Aug-05	<5.00	<5.00	<5.00	<5.00	--	<5.00	--	<5.00	--	<50.0	1.4 J	<5.00	<5.00	<5.00	<5.00	<5.00	--
	OC-GW-OW5-021706	17-Feb-06	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	<10.0	0.78	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OW-GW-OW-5-082406	24-Aug-06	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	<10.0	0.7	<1.00	<1.00	<1.00	<1.00	<1.00	--
OW8A	OC-GW-OW8-022404	24-Feb-04	<50.0	<50.0	<50.0	<50.0	--	<50.0	--	<50.0	--	2,000	<25.0	<50.0	<50.0	<50.0	<50.0	<50.0	--
	OC2-OW8-W-0-29	16-Jun-04	<50.0	--	<50.0	--	770	--	<500	--	<500	11,000	<50.0	--	<50.0	<50.0	<50.0	<50.0	<50.0
	OC-GW-OW8-082404	24-Aug-04	<100	<100	<100	<100	--	<100	--	<100	--	7,400	<50.0	<100	<100	<100	<100	<100	--
	OC2-OW8-W-0-91	03-Dec-04	<100	--	<100	--	<1000	--	<1000	--	<1000	3,300	<100	--	<100	<100	<100	<100	<100
	OC1-OW8A-W-0-40	23-Feb-05	<2.50	<2.50	2.2 J	<2.50	520	<2.50	--	<2.50	--	3,900 J	11	<2.50	<2.50	<2.50	<2.50	<2.50	--
	OC-GW-OW8-022305	23-Feb-05	1.4	<1.00	3.6	<1.00	570	<1.00	--	<1.00	--	10,000	14	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OC-GW-OW8-K-022305	23-Feb-05	<200	<200	<200	<200	--	<200	--	<200	--	10,000	<100	<200	<200	<200	<200	<200	--
	OC1-OW8A-W-0-48	24-Aug-05	<50.0	<50.0	<50.0	<50.0	<400	<50.0	--	<50.0	--	2,400	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	--
	OC-GW-OW8a-082405	24-Aug-05	1.2	<1.00	2.6	<1.00	270	<1.00	--	<1.00	--	1,900	12	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OC-GW-OW8a-K-082405	24-Aug-05	1.4	<1.00	3	<1.00	290	<1.00	--	<1.00	--	1,900	14	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OC1-OW8A-W-5-59	21-Feb-06	0.3 J	<0.50	0.6 J	<0.50	460	0.2 J	--	<0.50	78 J	6,600 J	10	<0.50	12 J	<0.50	<0.50	<0.50	--
	OC-GW-OW8-022106	21-Feb-06	<100	<100	<100	<100	--	<100	--	<100	--	7,700	<50.0	<100	<100	<100	<100	<100	--
	OC-GW-OW8K-022106	21-Feb-06	<50.0	<50.0	<50.0	<50.0	--	<50.0	--	<50.0	--	5,500	<25.0	<50.0	<50.0	<50.0	<50.0	<50.0	--
	OW-8	13-Mar-06	<200	<200	<200	<200	<4000	<200	<4000	<200	<4000	5,700	<200	<200	<200	<200	<400	<400	<200
	OW-GW-OW-8-082406	24-Aug-06	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	1,000	4.9	<1.00	<1.00	<1.00	<1.00	<1.00	--
	OW-GW-OW-8K-082406	24-Aug-06	<1.00	<1.00	<1.00	<1.00	--	<1.00	--	<1.00	--	730	3.9	<1.00	<1.00	<1.00	<1.00	<1.00	--

Groundwater Data for Operable Unit 2 (OU2)
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Location	Sample Name	Date Sampled	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Cyclohexane	Dibromochloromethane	Dibromomethane	Dichlorofluoromethane	Dichlorodifluoromethane	Ethylbenzene	Hexachlorobutadiene	Isopropanol	Isopropylbenzene	Methyl acetate
			Volatile Organics (ug/L)																
		Region 9 PRG:	*0.17 ca*	*110 nc*	*4.6 ca*	*0.17 ca*	*160 nc*	*61 nc*	*0.40 ca*	*10000 nc*	*0.13 ca*	*61 nc*		*390 nc*	*1,300 nc*	*0.86 ca*		*660 nc*	*6100 nc*
		EPA MCL:	*5*	*100*				*70*							*700*				
		CalDPH MCL/NL/AL:	*0.5*	*70*				*6*						*1000 NL*	*300*			*770 NL*	
MW2	OC2-MW2A-W-0-4	02-Mar-04	<0.5 J	<0.50	<0.5 R	110 J	<0.5 R	31 J	<0.5 J	<0.5 J	<0.50	--	--	2.3 J	<0.5 J	--	--	<0.5 J	<0.5 J
	OC2-MW2A-W-0-40	22-Jun-04	<2.50	<2.50	<2.50	110 J	<2.50	24 J	<2.50	<2.50	<2.50	--	--	<2.50	<2.50	--	--	<2.50	<2.50
	OC2-MW2A-W-0-64	14-Sep-04	<2.50	<2.50	<2.50	58	3.4	28 J	<2.50	<2.50	<2.50	--	--	<2.50	<2.50	--	--	<2.50	<2.5 J
	OC2-MW2A-W-0-106	08-Dec-04	<2.00	<2.00	<2.00	55	<2.00	44 J	<2.00	<2.00	<2.00	--	--	1.1 J	<2.00	--	--	<2.00	<2.00
	OC2-MW2-W-0-126	02-Mar-05	<21.0	<21.0	<21.0	140	<21.0	<21.0	<21 J	<21.0	<21.0	--	--	<21.0	<21.0	--	--	<21.0	<21 J
	OC2-MW2-W-0-149	02-Sep-05	<0.50	<0.50	<0.50	86 J	<0.50	2	<0.50	<0.50	<0.50	--	--	<0.50	<0.50	--	--	<0.50	<0.50
	OC2-MW2-W-0-174	08-Mar-06	0	<0.50	<0.50	200	<0.50	3.2	<0.50	--	<0.50	<0.50	0.0097 J	1.6	<0.50	<0.50	--	<0.50	--
	OC2-MW2-W-0-251	07-Sep-06	<0.50	<0.50	<0.50	160	<0.50	5.6	<0.50	--	<0.50	<0.50	--	1.8 J	<0.50	<0.50	--	<0.50	--
MW4A	OC2-MW4A-W-0-5	03-Mar-04	<0.50	<0.50	<0.50	52 J	<0.50	7.9	<0.50	<0.50	<0.50	--	--	1.6	<0.50	--	--	<0.50	<0.50
	OC2-MW4A-W-1-6	03-Mar-04	<0.50	<0.50	<0.50	49 J	<0.50	7.8	<0.50	<0.50	<0.50	--	--	1.5	<0.50	--	--	<0.50	<0.50
	OC2-MW4A-W-0-36	21-Jun-04	<5.00	<5.00	<5.00	64	<5.00	5 J	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	--	<5.00	<5.00
	OC2-MW4A-W-1-37	21-Jun-04	<5.00	<5.00	<5.00	71	2 J	5.2 J	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	--	<5.00	<5.00
	OC2-MW4A-W-0-58	13-Sep-04	<5.00	<5.00	<5.00	40	4.6 J	2.4 J	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	--	<5.00	<5 J
	OC2-MW4A-W-0-92	06-Dec-04	<5.00	<5.00	<5.00	27	<5.00	1.4 J	<5.00	<5.00	<5.00	--	--	<5 J	<5.00	--	--	<5.00	<5.00
	OC2-MW4A-W-0-116	28-Feb-05	0.29 J	<0.50	<0.50	34	<0.50	2.6 J	<0.50	<0.50	<0.50	--	--	0.8 J	<0.50	--	--	<0.50	<0.5 J
	OC2-MW4A-W-1-112	28-Feb-05	0.27 J	<0.50	<0.50	51	<0.50	2.4 J	<0.50	<0.50	<0.50	--	--	0.71	<0.50	--	--	<0.50	<0.5 J
	OC2-MW4A-W-0-135	30-Aug-05	0.14 J	<0.50	<0.50	46	0.5	3.1	<0.50	<0.50	<0.50	--	--	0.47 J	<0.50	--	--	<0.50	<0.50
	OC2-MW4A-W-0-163	07-Mar-06	<0.50	<0.50	<0.50	39	<0.50	2.7	<0.50	--	<0.50	<0.50	0.0045 J	1	<0.50	<0.50	--	<0.50	--
	OC2-MW4A-W-5-217	29-Aug-06	0.2 J	<0.50	<0.50	45	<0.50	3.8	<0.50	--	<0.50	<0.50	--	1	<0.50	<0.50	--	<0.50	--
MW4B	OC2-MW4B-W-0-7	03-Mar-04	0.23 J	<0.50	<0.50	120 J	<0.50	3.6	<0.50	<0.50	<0.50	--	--	3.3	<0.50	--	--	<0.50	<0.50
	OC2-MW4B-W-0-38	21-Jun-04	<5.00	<5.00	<5.00	79	2.6 J	2.1 J	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	--	<5.00	<5.00
	OC2-MW4B-W-0-59	13-Sep-04	<5.00	<5.00	<5.00	57	4 J	1.8 J	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	--	<5.00	<5 J
	OC2-MW4B-W-1-60	13-Sep-04	<5.00	<5 J	<5.00	49	4.4 J	1.5 J	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	--	<5.00	<5 J
	OC2-MW4B-W-0-93	06-Dec-04	<5.00	<5.00	<5.00	31	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5 J	<5.00	--	--	<5.00	<5.00
	OC2-MW4B-W-1-94	06-Dec-04	<2.00	<2.00	<2.00	30	<2.00	<2.00	<2.00	<2.00	<2.00	--	--	<2 J	<2.00	--	--	<2.00	<2.00
	OC2-MW4B-W-5-113	28-Feb-05	0.34 J	<0.50	<0.50	20	<0.50	1.3 J	<0.50	<0.50	<0.50	--	--	0.38 J	<0.50	--	--	<0.50	<0.5 J
	OC2-MW4B-W-0-134	30-Aug-05	0.26 J	<0.5 R	<0.5 R	17 J	<0.5 R	0.66 J	<0.5 R	<0.5 R	<0.5 R	--	--	<0.5 R	<0.5 R	--	--	<0.5 R	<0.5 R
	OC2-MW4B-W-0-164	07-Mar-06	0.2 J	<0.50	<0.50	15	<0.50	0.4 J	<0.50	--	<0.50	<0.50	0.0016 J	0.3 J	<0.50	<0.50	--	<0.50	--
	OC2-MW4B-W-0-215	29-Aug-06	0.2 J	<0.50	<0.50	69	<0.50	1.7	<0.50	--	<0.50	<0.50	--	1.3	<0.50	<0.50	--	<0.50	--
	OC2-MW4B-W-1-216	29-Aug-06	0.3 J	<0.50	<0.50	64	<0.50	1.7	<0.50	--	<0.50	<0.50	--	1.3	<0.50	<0.50	--	<0.50	--
MW5	OC2-MW5A-W-0-9	03-Mar-04	0.2 J	<0.50	<0.5 J	240 J	<0.5 J	21	<0.50	<0.50	<0.50	--	--	3.3 J	<0.50	--	--	<0.50	<0.50
	OC2-MW5A-W-0-41	22-Jun-04	<2.50	<2.50	<2.50	78	<2.50	9.6 J	<2.50	<2.50	<2.50	--	--	<2.50	<2.50	--	--	<2.50	<2.50
	OC2-MW5A-W-0-66	14-Sep-04	<5.00	<5.00	<5.00	100	3.6 J	6 J	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	--	<5.00	<5 J
	OC2-MW5A-W-0-97	06-Dec-04	<4.00	<4.00	<4.00	91	<4.00	6.7 J	<4.00	<4.00	<4.00	--	--	<4 J	<4.00	--	--	<4.00	<4.00
	OC2-MW5-W-0-117	28-Feb-05	0.21 J	<0.50	<0.50	220	<0.50	16 J	<0.50	<0.50	<0.50	--	--	1.5	<0.50	--	--	<0.50	<0.5 J
	OC2-MW5-W-5-139	30-Aug-05	<0.50	<0.50	<0.50	85	<0.50	34	<0.50	<0.50	<0.50	--	--	1 J	<0.50	--	--	<0.50	<0.50
	OC2-MW5-W-0-167	07-Mar-06	<0.50	<0.50	<0.50	82	<0.50	24	<0.50	--	<0.50	<0.50	0.0096 J	1.2	<0.50	<0.50	--	<0.50	--
	OC2-MW5-W-1-168	07-Mar-06	<0.50	<0.50	<0.50	84	<0.50	26	<0.50	--	<0.50	<0.50	0.0097 J	1.2	<0.50	<0.50	--	<0.50	--
	OC2-MW5-W-0-218	29-Aug-06	<0.50	<0.50	<0.50	100	<0.50	14	<0.50	--	<0.50	<0.50	--	0.9	<0.50	<0.50	--	<0.50	--
MW14	OC2-MW14-W-0-206	07-Jul-06	<0.50	<0.50	<0.50	18	<0.50	0.7	<0.50	--	<0.50	<0.50	--	0.8 J	<0.50	<0.50	--	<0.50	--
	OC2-MW14-W-0-263	11-Sep-06	<10.0	<10.0	<10.0	12	<10.0	<10.0	<10.0	--	<10.0	<10.0	--	<5 J	<10.0	<10.0	--	<10.0	--
MW15	OC2-MW15-W-0-198	15-Mar-06	0.2 J	<0.50	<0.50	440	<0.50	7.5	<0.50	--	<0.50	<0.50	0.0051 J	4.7	<0.50	<0.50	--	<0.50	--
	OC2-MW15-W-1-199	15-Mar-06	0.2 J	<0.50	<0.50	210	<0.50	6.1	<0.50	--	<0.50	<0.50	0.0062 J	2.7	<0.50	<0.50	--	<0.50	--
	OC2-MW15-W-0-219	29-Aug-06	<0.50	<0.50	<0.50	170	<0.50	2.6	<0.50	--	<0.50	<0.50	--	1.9	<0.50	<0.50	--	<0.50	--
MW23C	OC2-MW23C-W-0-195	14-Mar-06	<0.50	<0.50	<0.50	110	<0.50	20	<0.50	--	<0.50	<0.50	0.0024 J	0.9	<0.50	<0.50	--	<0.50	--
	OC2-MW23C-W-0-261	11-Sep-06	<0.50	<0.50	<0.50	91	<0.50	24	<0.50	--	<0.50	<0.50	--	1	<0.50	<0.50	--	<0.50	--
	OC2-MW23C-W-1-262	11-Sep-06	<0.50	<0.50	<0.50	--	<0.50	16	<0.50	--	<0.50	<0.50	--	0.5 J	<0.50	<0.50	--	<0.50	--
OW1A	OC1-OW1-W-0-3	24-Feb-04	<0.2	3.2 J	<0.5	90	<0.5	5.3	<0.2	--	<0.5	<0.5	--	<0.5	4.7 J	<0.5	--	2.4	--
	OC-GW-OW1-022404	24-Feb-04	1	3.4	<1.00	81	<1.00	4.5	<0.50	--	<1.00	<1.00	--	<5.00	4.4	<1.00	--	2.3	--
	OC2-OW1A-W-0-34	17-Jun-04	<1000	500 J	<1000	88 J	<1000	<1000	<1000	<1000	<1000	--	--	<1000	<1000	--	--	<1000	<1000
	OC1-OW1-W-0-23	27-Aug-04	<0.50	2.3 J	0.2 J	60	0.4 J	6.6	<0.50	--	<0.50	<0.50	--	0.5	3.9 J	<0.50	--	2.1	--
	OC-GW-OW1-082704	27-Aug-04	<200	<400	<400	<400	<400	<400	<200	--	<400	<400	--	<2000	<400	<400	--	<400	--
	OC-GW-OW1k-082704	27-Aug-04	0.44 J	1.9	<1.00	59	<1.00	4.6	<0.50	--	<1.00	<1.00	--	<5.00	3.1	<1.00	--	1.5	--
	OC2-OW1A-W-0-90	08-Dec-04	<1000	<1000	<1000	200 J	<1000	<1000	<1000	<1000	<1000	--	--	<1000	<1000	--	--	<1000	<1000
	OC-GW-OW1-022505	25-Feb-05	0.6	2.5	<1.00	52	<1.00	3.4	<0.50	--	<1.00	<1.00	--	<5.00	3.4	<1.00	--	2.4	--
	OC1-OW1-W-0-47	24-Aug-05	<50.0	<50.0	<50.0	86	<50.0	<50.0	<50.0	--	<50.0	<50.0	--	<50.0	<50.0	<50.0	--	<50.0	--
	OC-GW-OW1-082405	24-Aug-05	<2.50	2.8 J	<5.00	100	<5.00	6.8	<2.50	--	<5.00	<5.00	--	<25.0	3.8 J	<5.00	--	2 J	--
	OC-GW-OW1-02206	22-Feb-06	<100	<200	<200	98 J	<200	<200	<100	--	<200	<200	--	<1000	<200	<200	--	<200	--
	OW-1	13-Mar-06	<630	<630	<1300	<630	<1300	<630	<630	--	<630	<630	--	<1300	<630	<630	--	<630	--
	OW-GW-OW-1-082406	24-Aug-06	0.54	5	<1.00	120	<1.00	6	<0.50	--	<1.00	<1.00	--	<5.00	4	<1.00	--	1.7	--
OW2	OC1-OW2-W-0-1	24-Feb-04	<0.2	<0.5	<0.5	4.8	<0.5	0.6 J	<0.2	--	<0.5	<0.5	--	0.7 J	<0.5	<0.5	--	<0.5	--
	OC1-OW2-W-5-2	24-Feb-04	<0.2	<0.5	<0.5	4.3	<0.5	0.5 J	<0.2	--	<0.5	<0.5	--	0.8 J	<0.5	<0.5	--	<0.5	--
	OC-GW-OW2-022404	24-Feb-04	<2.50	<5.00	<5.00	3.4 J	<5.00	<5.00	<2.50	--	<5.00	<5.00	--	<25.0	<5.00	<5.00	--	<5.00	--
	OC2-OW2-W-0-32	17-Jun-04	<20.0	9.5 J	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	--	--	<20.0	<20.0	--	--	<20.0	<20.0
	OC-GW-OW2-082404	24-Aug-04	<5.00	<10.0	<10.0	4.4 J	<10.0	<10.0	<5.00	--	<10.0	<10.0	--	<50.0	<10.0	<10.0	--	<10.0	--
	OC2-OW2-W-0-89	02-Dec-04	<10.0	<10.0	<10.0	5.4 J	2.6 J	<10.0	<10.0	<10.0	<10.0	--	--	<10.0	<10.0	--	--	<10.0	<10.0
	OC-GW-OW2-022405	24-Feb-05	<5.00	<10.0	<10.0	5.1 J	<10.0	<10.0	<5.00	--	<10.0	<10.0	--	<50.0	<10.0	<10.0	--	<10.0	--
	OC-GW-OW2-082405	24-Aug-05	<2.50	<5.00	<5.00	7.1	<5.00	<5.00	<2.50	--	<5.00	<5.00	--	<25.0	<5.00	<5.00	--	<5.00	--
	OC-GW-OW2-02206	22-Feb-06	<5.00	<10.0	<10.0	17	<10.0	<10.0	<5.00	--	<10.0	<10.0	--	<50.0	<10.0	<10.0	--	<10.0	--
	OC-GW-OW-2-082206	22-Aug-06	<2.50	<5.00	<5.00	2.9 J	<5.00	<5.00	<2.50	--	<5.00	<5.00	--	<25.0	<5.00	<5.00	--	<5.00	--
OW3	OC1-OW3-W-0-4	25-Feb-04	<5	<10	<10	13 J	<10	<10	<5	--	<10	<10	--	<10	<10	<10	--	<10	--
	OC-GW-OW3-022504	25-Feb-04	<5.00	<10.0	<10.0	14	<10.0	<10.0	<5.00	--	<10.0	<10.0	--	<50.0	<10.0	<10.0	--	<10.0	--
	OC2-OW3-W-0-30	17-Jun-04	<10.0	5.4 J	<10.0	20	<10.0	<10.0	<10.0	<10.0	<10.0	--	--	<10.0	<10.0	--	--	<10.0	<10.0
	OC2-OW3-W-1-31	17-Jun-04	<10.0	4.8 J	<10.0	18	<10.0	<10.0	<10.0	<10.0	<10.0	--	--	<10.0	<10.0	--	--	<10.0	<10.0
	OC-GW-OW3-082404	24-Aug-04	<2.50	<5.00	<5.00	16	<5.00	<5.00	<2.50	--	<5.00	<5.00	--	<25.0	<5.00	<5.00	--	<5.00	--
	OC2-OW3-W-0-85	01-Dec-04	<5.00	<5.00	<5.00	11	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	--	<5 J	<5.00
	OC-GW-OW3-022305	23-Feb-05	<0.50	<1.00	<1.00	19	<1.00	1.2	<0.50	--	<1.00	<1.00	--	0.94 J	<1.00	<1.00	--	<1.00	--
	OC-GW-OW3-082405	24-Aug-05	<0.50	<1.00	<1.00	22	<1.00	1.5	<0.50	--	0.6 J	<1.00	--	0.91 J	<1.00	<1.00	--	<1.00	--
	OC1-OW3-W-0-60	21-Feb-06	0.2 J	<0.50	<0.50	31	<0.50	1.6	<0.50	--	<0.50	<0.50	--	0.9	<0.50	<0.50	--	<0.50	--
	OC-GW-OW3-02106	21-Feb-06	<2.50	<5.00	<5.00	39	<5.00	<5.00	<2.50	--	<5.00	<5.00	--	<25.0	<5.00	<5.00	--	<5.00	--
	OW-GW-OW-3-082306	23-Aug-06	<0.50	<1.00	<1.00	23	<1.00	1.2	<0.50	--	<1.00	<1.00	--	<5.00	<1.00	<1.00	--	<1.00	--
OW4A	OC-GW-OW4A-022704	27-Feb-04	<0.50	<1.00	<1.00	22	<1.00	<1.00	<0.50	--	<1.00	<1.00	--	<5.00	<1.00	<1.00	--	<1.00	--
	OC2-MW4A-W-0-25	15-Jun-04	<2.50	<2.50	<2.50	7.4	<2.50	<2.50	<2.50	<2.50	<2.50	--	--	<2.50	<2.50	--	--	<2.50	<2.50
	OC-GW-OW4a-082504	25-Aug-04	<0.50	<1.00	<1.00	6.4	<1.00	<1.00	<0.50	--	<1.00	<1.00	--	0.87 J	<1.00	<1.00	--	<1.00	--
	OC-GW-OW4ak-082504	25-Aug-04	<0.50	<1.00	<1.00	6.7	0.65 J	<1.00	<0.50	--	<1.00	<1.00	--	0.94 J	<1.00	<1.00	--	<1.00	--
	OC2-OW4A-W-0-81	30-Nov-04	<0.50	<0.50	<0.50	5.8	<0.50	<0.50	<0.50	0.63	<0.50	--	--	<0.50	0.094 J	--	--	0.18 J	<0.50
	OC-GW-OW4A-022505	25-Feb-05	<0.50	<1.00	<1.00	5	<1.00	<1.00	<0.50	--	<1.00	<1.00	--	<5.00	<1.00	<1.00	--	<1.00	--
	OC-GW-OW4a-082505	25-Aug-05	<0.50	<1.00	<1.00	14	<1.00	<1.00	<0.50	--	3.2	<1.00	--	1.1 J	<1.00	<1.00	--	<1.00	--
	OC-GW-OW4A-02206	22-Feb-06	<0.50	<1.00	<1.00	12	<1.00	<1.00	<0.50	--	<1.00	<1.00	--	<5.00	<1.00	<1.00	--	<1.00	--
	OW-GW-OW-4A-082306	23-Aug-06	<0.50	<1.00	<1.00	17	<1.00	<1.00	<0.50	--	<1.00	<1.00	--	<5.00	<1.00	<1.00	--	<1.00	--
OW5	OC-GW-OW5-022404	24-Feb-04	<0.50	<1.00	<1.00	160	<1.00	33	<0.50	--	<1.00	<1.00	--	<5.00	<1.00	<1.00	--	<1.00	--
	OC2-OW5-W-5-26	16-Jun-04	<10.0	<10.0	<10.0	490 J	<10.0	26 J	<10.0	<10.0	<10.0	--	--	3.6 J	<10.0	--	--	<10.0	<10.0
	OC-GW-OW5-082504	25-Aug-04	<0.50	<1.00	<1.00	300	<1.00	14	<0.50	--	<1.00	<1.00	--	1.8 J	<1.00	<1.00	--	<1.00	--
	OC2-OW5-W-0-86	02-Dec-04	<2.50	<2.50	<2.50	62	<2.50	4.6 J	<2.50	<2.50	<2.50	--	--	<2.50	<2.50	--	--	<2.5 J	<2.50
	OC2-OW5-W-1-87	02-Dec-04	<2.50	<2.50	<2.50	67	<2.50	5.8 J	<2.5 J	<2.50	<2.5 J	--	--	<2.50	<2.50	--	--	<2.5 J	<2.50
	OC-GW-OW5-022405	24-Feb-05	<0.50	<1.00	<1.00	32	<1.00	2.4	<0.50	--	0.54 J	<1.00	--	<5.00	<1.00	<1.00	--	<1.00	--
	OC-GW-OW5-082305	22-Aug-05	<2.50	<5.00	<5.00	400	<5.00	27	<2.50	--	16	<5.00	--	<25.0	<5.00	<5.00	--	<5.00	--
	OC-GW-OW5-021706	17-Feb-06	<0.50	<1.00	<1.00	320	<1.00	31	<0.50	--	<1.00	<1.00	--	1.1 J	<1.00	<1.00	--	<1.00	--
	OW-GW-OW-5-082406	24-Aug-06	<0.50	<1.00	<1.00	180	<1.00	48	<0.50	--	<1.00	<1.00	--	<5.00	<1.00	<1.00	--	<1.00	--
OW8A	OC-GW-OW8-022404	24-Feb-04	<25.0	<50.0	<50.0	670	<50.0	<50.0	<25.0	--	<50.0	<50.0	--	<250	<50.0	<50.0	--	<50.0	--
	OC2-OW8-W-0-29	16-Jun-04	<50.0	<50.0	<50.0	1,600	<50.0	<50.0	<50.0	<50.0	<50.0	--	--	<50.0	15 J	--	--	<50.0	<50.0
	OC-GW-OW8-082404	24-Aug-04	<50.0	<100	<100	1,700	<100	<100	<50.0	--	<100	<100	--	<500	<100	<100	--	<100	--
	OC2-OW8-W-0-91	03-Dec-04	<100	<100	<100	1,600	<100	25 J	<100	<100	<100	--	--	<100 J	<100	--	--	<100	1,300
	OC1-OW8A-W-0-40	23-Feb-05	<2.50	5.7	<2.50	2,400	<2.50	12	<2.50	--	<2.50	<2.50	--	2 J	31	<2.50	--	3.6	--
	OC-GW-OW8-022305	23-Feb-05	<0.50	7.6	<1.00	2,700	<1.00	16	<0.50	--	<1.00	<1.00	--	1.2 J	41	<1.00	--	6.7	--
	OC-GW-OW8-K-022305	23-Feb-05	<100	<200	<200	2,800	<200	<200	<100	--	<200	<200	--	<1000	<200	<200	--	<200	--
	OC1-OW8A-W-0-48	24-Aug-05	<50.0	<50.0	<50.0	2,200	<50.0	<50.0	<50.0	--	<50.0	<50.0	--	<50.0	<50.0	<50.0	--	<50.0	--
	OC-GW-OW8a-082405	24-Aug-05	<0.50	4.8	<1.00	2,400	<1.00	16	<0.50	--	<1.00	<1.00	--	1.1 J	15	<1.00	--	4.1	--
	OC-GW-OW8a-K-082405	24-Aug-05	<0.50	5.6	<1.00	2,400	<1.00	20	<0.50	--	<1.00	<1.00	--	1.6 J	17	<1.00	--	4.9	--
	OC1-OW8A-W-5-59	21-Feb-06	<0.50	4.4 J	<0.50	1,500	<0.50	16 J	<0.50	--	<0.50	<0.50	--	2.3 J	24 J	<0.50	--	1.4 J	--
	OC-GW-OW8-022106	21-Feb-06	<50.0	<100	<100	1,700	<100	<100	<50.0	--	<100	<100	--	<500	<100	<100	--	<100	--
	OC-GW-OW8K-022106	21-Feb-06	<25.0	<50.0	<50.0	1,500	<50.0	<50.0	<25.0	--	<50.0	<50.0	--	<250	15 J	<50.0	--	<50.0	--
	OW-8	13-Mar-06	<200	<200	<400	1,100	<400	<200	<200	--	<200	<200	--	<400	<200	<200	--	<200	--
	OW-GW-OW-8-082406	24-Aug-06	<0.50	2	<1.00	790	<1.00	4.5	<0.50	--	<1.00	<1.00	--	<5.00	6.8	<1.00	--	0.53 J	--
	OW-GW-OW-8K-082406	24-Aug-06	<0.50	1.7	<1.00	520	<1.00	4	<0.50	--	<1.00	<1.00	--	0.79 J	5.2	<1.00	--	0.37 J	--

Groundwater Data for Operable Unit 2 (OU2)
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Location	Sample Name	Date Sampled	Methyl tert-butyl ether (MTBE)	Methylcyclohexane	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	p-Isopropyltoluene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	Tetrahydrofuran	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene (TCE)	Trichlorofluoromethane (Freon 11)
		Region 9 PRG:	*11 ca*	*5200 nc*	*4.3 ca*	*6.2 nc/ Cal EPA 0.093 ca*	*240 nc*	*240 nc*		*240 nc*	*1600 nc*	*240 nc*	*0.1 ca*	*1.6 ca*	*720 nc*	*120 nc*	*0.4 ca*	*0.028 ca/ CalEPA1.4 ca*	*1300 nc*
		EPA MCL:			*5*						*100*		*5*		*1000*	*100*		*5*	
		CalDPH MCL/NL/AL:	*13*		*5*	*17 NL*	*260 NL*	*260 NL*		*260 NL*	*100*	*260 NL*	*5*		*150*	*10*		*5*	*150*
MW2	OC2-MW2A-W-0-4	02-Mar-04	16 J	<0.5 J	32 J	<5.00	--	--	--	--	<0.5 J	--	770 J	--	<0.5 J	1.7 J	<0.5 J	400 J	300 J
	OC2-MW2A-W-0-40	22-Jun-04	15	<2.50	<2.5 J	<5.00	--	--	--	--	<2.50	--	290	--	2.5 J	<2.50	<2.50	100	130
	OC2-MW2A-W-0-64	14-Sep-04	5.8	<2.50	<2.5 J	<5.00	--	--	--	--	<2.50	--	480	--	<2.50	<2.50	<2.50	270	320
	OC2-MW2A-W-0-106	08-Dec-04	2.1	<2.00	<2.00	<5.00	--	--	--	--	<2.00	--	320	--	<2.00	<2.00	<2.00	280	210
	OC2-MW2-W-0-126	02-Mar-05	<21 J	<21.0	<21 J	--	--	--	--	--	<21.0	--	790	--	<21.0	<21.0	<21.0	130	250
	OC2-MW2-W-0-149	02-Sep-05	2.1	<0.50	0.53 J	--	--	--	--	--	<0.50	--	500	--	<0.50	1.4	<0.50	80	140
	OC2-MW2-W-0-174	08-Mar-06	2.2	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1,700	--	<0.50	3.1	<0.50	220	250
	OC2-MW2-W-0-251	07-Sep-06	1.6 J	--	0.3 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2,200	--	<0.50	3.7	<0.50	210	260
MW4A	OC2-MW4A-W-0-5	03-Mar-04	13	<0.50	51 J	<5.00	--	--	--	--	<0.50	--	670	--	<0.50	0.53	<0.50	310	330
	OC2-MW4A-W-1-6	03-Mar-04	16	<0.50	<50 J	<5.00	--	--	--	--	<0.50	--	680	--	<0.50	0.46 J	<0.50	290	280
	OC2-MW4A-W-0-36	21-Jun-04	12	<5.00	<5 J	<5.00	--	--	--	--	<5.00	--	370	--	<5.00	<5.00	<5.00	130	120
	OC2-MW4A-W-1-37	21-Jun-04	13	<5.00	<5.00	<5.00	--	--	--	--	<5.00	--	450	--	<5.00	<5.00	<5.00	140	200
	OC2-MW4A-W-0-58	13-Sep-04	7.2	<5.00	<5 J	<5.00	--	--	--	--	<5.00	--	600	--	<5.00	<5.00	<5.00	140 J	160 J
	OC2-MW4A-W-0-92	06-Dec-04	4.5 J	<5.00	<5.00	<5.00	--	--	--	--	<5.00	--	330 J	--	<5.00	<5.00	<5.00	110	200
	OC2-MW4A-W-0-116	28-Feb-05	6.8	<0.50	<0.5 J	--	--	--	--	--	<0.50	--	400 J	--	<0.50	0.41 J	<0.50	130	190
	OC2-MW4A-W-1-112	28-Feb-05	6.1	<0.50	<0.5 J	--	--	--	--	--	<0.50	--	620	--	<0.50	0.28 J	<0.50	190	350
	OC2-MW4A-W-0-135	30-Aug-05	4.2	<0.50	<0.5 J	--	--	--	--	--	<0.50	--	460	--	<0.50	0.3 J	<0.50	180	190
	OC2-MW4A-W-0-163	07-Mar-06	4.8	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	520	--	<0.50	0.4 J	<0.50	180	230
	OC2-MW4A-W-5-217	29-Aug-06	2	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	670	--	<0.50	0.4 J	<0.50	310	310
MW4B	OC2-MW4B-W-0-7	03-Mar-04	34 J	<0.50	<0.50	<5.00	--	--	--	--	<0.50	--	980	--	<0.50	0.77	<0.50	260	520
	OC2-MW4B-W-0-38	21-Jun-04	11	<5.00	<25 J	<5.00	--	--	--	--	<5.00	--	340	--	<5.00	<5.00	<5.00	150	180
	OC2-MW4B-W-0-59	13-Sep-04	9.2 J	<5.00	<5 J	<5.00	--	--	--	--	<5.00	--	510	--	<5.00	<5.00	<5.00	110	200 J
	OC2-MW4B-W-1-60	13-Sep-04	6.6	<5.00	<5 J	<5.00	--	--	--	--	<5.00	--	490	--	<5.00	<5.00	<5.00	100	170
	OC2-MW4B-W-0-93	06-Dec-04	3.9 J	<5.00	<5.00	<5.00	--	--	--	--	<5.00	--	320 J	--	<5.00	<5.00	<5.00	80	150
	OC2-MW4B-W-1-94	06-Dec-04	3.6	<2.00	<2.00	<5.00	--	--	--	--	<2.00	--	340 J	--	<2.00	<2.00	<2.00	82	170
	OC2-MW4B-W-5-113	28-Feb-05	3.4	<0.50	<0.5 J	--	--	--	--	--	<0.50	--	210 J	--	<0.50	0.25 J	<0.50	60	80
	OC2-MW4B-W-0-134	30-Aug-05	2 J	<0.5 R	<0.5 J	--	--	--	--	--	<0.5 R	--	250 J	--	<0.5 R	<0.5 R	<0.5 R	72 J	96 J
	OC2-MW4B-W-0-164	07-Mar-06	1.4 J	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	160	--	<0.50	<0.50	<0.50	40	71
	OC2-MW4B-W-0-215	29-Aug-06	2.8	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	820	--	<0.50	0.5	<0.50	200	390
	OC2-MW4B-W-1-216	29-Aug-06	2.8	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	710	--	<0.50	0.5	<0.50	180	350
MW5	OC2-MW5A-W-0-9	03-Mar-04	16	<0.50	<0.50	<5.00	--	--	--	--	<0.50	--	1,200	--	<0.50	2.2	<0.50	550	430
	OC2-MW5A-W-0-41	22-Jun-04	10	<2.50	<2.5 J	<5.00	--	--	--	--	<2.50	--	340	--	<2.50	<2.50	<2.50	140	120
	OC2-MW5A-W-0-66	14-Sep-04	6.7	<5.00	<5 J	<5.00	--	--	--	--	<5.00	--	780	--	<5.00	<5.00	<5.00	320	220 J
	OC2-MW5A-W-0-97	06-Dec-04	5.7	<4.00	<4.00	<5.00	--	--	--	--	<4.00	--	270	--	<4.00	<4.00	<4.00	150	100
	OC2-MW5-W-0-117	28-Feb-05	8.9	<0.50	<0.5 J	--	--	--	--	--	<0.50	--	1,400	--	<0.50	2.1 J	<0.50	790	550
	OC2-MW5-W-5-139	30-Aug-05	1.8	<0.50	<0.5 J	--	--	--	--	--	<0.50	--	330	--	<0.50	1.1	<0.50	430	76
	OC2-MW5-W-0-167	07-Mar-06	1.9 J	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	620	--	<0.50	1.4	<0.50	810	190
	OC2-MW5-W-1-168	07-Mar-06	1.9 J	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	630	--	<0.50	1.4	<0.50	810	170
	OC2-MW5-W-0-218	29-Aug-06	<2.00	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1,200	--	<0.50	2.2	<0.50	480	200
MW14	OC2-MW14-W-0-206	07-Jul-06	<2.00	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	250	--	<0.50	0.3 J	<0.50	39 J	100
	OC2-MW14-W-0-263	11-Sep-06	<40.0	--	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	160	--	<10.0	<10.0	<10.0	30	140
MW15	OC2-MW15-W-0-198	15-Mar-06	5.6	--	<0.50	<0.5 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1,900	--	<0.50	2.5	<0.50	540	670
	OC2-MW15-W-1-199	15-Mar-06	6.1	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	840	--	<0.50	1.9	<0.50	260	340
	OC2-MW15-W-0-219	29-Aug-06	1.9 J	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1,300	--	<0.50	1.1	<0.50	270	540
MW23C	OC2-MW23C-W-0-195	14-Mar-06	1.9 J	--	<0.5 J	<0.5 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	540	--	<0.50	1.4	<0.50	530	190
	OC2-MW23C-W-0-261	11-Sep-06	1.1 J	--	0.3 J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	500	--	<0.50	1.5	<0.50	610	250
	OC2-MW23C-W-1-262	11-Sep-06	<2.00	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	210	--	<0.50	0.9	<0.50	230	120
OW1A	OC1-OW1-W-0-3	24-Feb-04	<0.5	--	40	0.6 J	<0.5	0.7 J	0.7 J	<0.5	<0.5	<0.5	190,000 J	--	5.3	25	<0.2	3,000 J	57
	OC-GW-OW1-022404	24-Feb-04	0.33 J	--	53	<1.00	<1.00	0.63 J	0.52 J	0.26 J	<1.00	<1.00	150,000	--	11	21	<0.50	3,600	55
	OC2-OW1A-W-0-34	17-Jun-04	<1000	<1000	<1000 J	<5.00	--	--	--	--	<1000	--	41,000	--	310 J	<1000	<1000	2,100	<1000
	OC1-OW1-W-0-23	27-Aug-04	0.3 J	--	40	<0.50	<0.50	0.7	0.5	<0.50	<0.50	<0.50	210,000 J	--	9.5 J	24	<0.50	2,800 J	25
	OC-GW-OW1-082704	27-Aug-04	<400	--	<2000	<400	<400	<400	<400	<400	<400	<400	110,000	--	<400	<400	<200	2,300	<400
	OC-GW-OW1k-082704	27-Aug-04	<1.00	--	41	<1.00	<1.00	0.42 J	0.32 J	<1.00	<1.00	<1.00	150,000	--	9.6	15	<0.50	3,500	22
	OC2-OW1A-W-0-90	08-Dec-04	<1000	<1000	<1000	--	--	--	--	--	<1000	--	110,000	--	120 J	<1000	<1000	2,700	<1000
	OC-GW-OW1-022505	25-Feb-05	<1.00	--	42	<1.00	<1.00	0.56 J	0.29 J	0.29 J	<1.00	<1.00	170,000	--	12	13	<0.50	2,500	13
	OC1-OW1-W-0-47	24-Aug-05	<200	--	57	<100	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	120,000	--	<50.0	<50.0	<50.0	3,100	77
	OC-GW-OW1-082405	24-Aug-05	<5.00	--	48	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	19,000	--	12	22	<2.50	10,000	66
	OC-GW-OW1-02206	22-Feb-06	<200	--	<1000	<200	<200	<200	<200	<200	<200	<200	96,000	--	<200	<200	<100	2,800	<200
	OW-1	13-Mar-06	<630	--	<13000	<10	<630	<630	<630	<630	<630	<630	100,000	--	<630	<630	<630	2,200	<1300
	OW-GW-OW-1-082406	24-Aug-06	<1.00	--	34	0.45 J	<1.00	0.44 J	0.4 J	0.3 J	<1.00	<1.00	150,000	--	13	22	<0.50	2,600	59
OW2	OC1-OW2-W-0-1	24-Feb-04	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2,100	--	<0.5	1.3	<0.2	190	160
	OC1-OW2-W-5-2	24-Feb-04	<0.5	--	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2,600	--	<0.5	1.3	<0.2	270 J	<220
	OC-GW-OW2-022404	24-Feb-04	<5.00	--	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2,500	--	<5.00	<5.00	<2.50	200	180
	OC2-OW2-W-0-32	17-Jun-04	<20.0	<20.0	<20.0	<5.00	--	--	--	--	<20.0	--	3,600	--	6.3 J	<20.0	<20.0	490	320
	OC-GW-OW2-082404	24-Aug-04	<10.0	--	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	2,800	--	<10.0	<10.0	<5.00	300	300
	OC2-OW2-W-0-89	02-Dec-04	<10.0	<10.0	<10 J	<5.00	--	--	--	--	<10.0	--	800	--	<10.0	<10.0	<10.0	210	98
	OC-GW-OW2-022405	24-Feb-05	<10.0	--	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	3,600	--	<10.0	<10.0	<5.00	300	300
	OC-GW-OW2-082405	24-Aug-05	<5.00	--	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2,300	--	<5.00	1.5 J	<2.50	280	240
	OC-GW-OW2-02206	22-Feb-06	<10.0	--	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	2,500	--	<10.0	3.6 J	<5.00	810	1,000
	OC-GW-OW-2-082206	22-Aug-06	<5.00	--	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	1,200	--	<5.00	<5.00	<2.50	150	240
OW3	OC1-OW3-W-0-4	25-Feb-04	<10	--	<10	<10	<10	<10	<10	<10	<10	<10	3,500	--	<10	<10	<5	340	230
	OC-GW-OW3-022504	25-Feb-04	<10.0	--	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	2,800	--	<10.0	<10.0	<5.00	260	230
	OC2-OW3-W-0-30	17-Jun-04	<10.0	<10.0	<10.0	<5.00	--	--	--	--	<10.0	--	1,700	--	3.4 J	<10.0	<10.0	290	290
	OC2-OW3-W-1-31	17-Jun-04	<10.0	<10.0	<10.0	<5.00	--	--	--	--	<10.0	--	1,800	--	3.2 J	<10.0	<10.0	260	260
	OC-GW-OW3-082404	24-Aug-04	<5.00	--	12 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2,200	--	<5.00	<5.00	<2.50	250	270
	OC2-OW3-W-0-85	01-Dec-04	<5.00	<5.00	<5 J	0.21 J	--	--	--	--	<5.00	--	850	--	<5.00	<5.00	<5.00	140	110
	OC-GW-OW3-022305	23-Feb-05	<1.00	--	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	2,600	--	<1.00	0.79 J	<0.50	200	180
	OC-GW-OW3-082405	24-Aug-05	<1.00	--	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	2,700	--	<1.00	0.85 J	<0.50	320	260
	OC1-OW3-W-0-60	21-Feb-06	<2.00	--	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	3,800 J	--	<0.50	1.2	<0.50	270	140
	OC-GW-OW3-02106	21-Feb-06	<5.00	--	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2,900	--	<5.00	<5.00	<2.50	280	160
	OW-GW-OW-3-082306	23-Aug-06	<1.00	--	0.89 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	3,000	--	<1.00	0.72 J	<0.50	260	140
OW4A	OC-GW-OW4A-022704	27-Feb-04	<1.00	--	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	12	--	<1.00	<1.00	<0.50	31	7
	OC2-MW4A-W-0-25	15-Jun-04	<2.50	<2.50	<2.50	--	--	--	--	--	<2.50	--	40	--	<2.50	<2.50	<2.50	12	53
	OC-GW-OW4a-082504	25-Aug-04	0.5 J	--	1.1 J	0.52 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	68	--	<1.00	<1.00	<0.50	12	100
	OC-GW-OW4ak-082504	25-Aug-04	0.39 J	--	1 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	75	--	<1.00	<1.00	<0.50	13	120
	OC2-OW4A-W-0-81	30-Nov-04	0.72	0.85	<0.50	1.9 J	--	--	--	--	<0.50	--	24	--	0.14 J	<0.50	<0.50	9.9	30
	OC-GW-OW4A-022505	25-Feb-05	0.79 J	--	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	49	--	<1.00	<1.00	<0.50	8.4	130
	OC-GW-OW4a-082505	25-Aug-05	0.87 J	--	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	180	--	<1.00	0.32 J	<0.50	19	200
	OC-GW-OW4A-02206	22-Feb-06	<1.00	--	<5.00	0.61 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	150	--	<1.00	<1.00	<0.50	17	41
	OW-GW-OW-4A-082306	23-Aug-06	<1.00	--	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	290	--	<1.00	0.45 J	<0.50	29	53
OW5	OC-GW-OW5-022404	24-Feb-04	<1.00	--	20	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1,500	--	<1.00	2.9	<0.50	420	190
	OC2-OW5-W-5-26	16-Jun-04	<10.0	<10.0	<10.0	<5.00	--	--	--	--	<10.0	--	2,600 J	--	<10.0	7.3 J	<10.0	450	450 J
	OC-GW-OW5-082504	25-Aug-04	0.51 J	--	29	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	1,800	--	<1.00	3.2	<0.50	320	360
	OC2-OW5-W-0-86	02-Dec-04	0.78 J	<2.50	<2.50	<5.00	--	--	--	--	<2.50	--	240	--	<2.50	0.68 J	<2.50	100	76
	OC2-OW5-W-1-87	02-Dec-04	<2.50	<2.50	<2.50	<5.00	--	--	--	--	<2.50	--	270	--	<2.50	0.81 J	<2.5 J	88	93
	OC-GW-OW5-022405	24-Feb-05	0.68 J	--	<5.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	230	--	<1.00	0.4 J	<0.50	110	64
	OC-GW-OW5-082305	22-Aug-05	<5.00	--	<25.0	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2,400	--	<5.00	6	<2.50	430	400
	OC-GW-OW5-021706	17-Feb-06	0.33 J	--	21	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	2,000	--	<1.00	6.2	<0.50	500	300
	OW-GW-OW-5-082406	24-Aug-06	<1.00	--	0.98 J	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	2,300	--	<1.00	5.9	<0.50	580	190
OW8A	OC-GW-OW8-022404	24-Feb-04	<50.0	--	1,700	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	17,000	--	92	68	<25.0	1,000	730
	OC2-OW8-W-0-29	16-Jun-04	<50.0	<50.0	8,600	0.43 J	--	--	--	--	<50.0	--	30,000	--	280	130 J	<50.0	1,900	950
	OC-GW-OW8-082404	24-Aug-04	<100	--	6,300	<100	<100	<100	<100	<100	<100	<100	3,400	--	340	100	<50.0	1,600	800
	OC2-OW8-W-0-91	03-Dec-04	<100	<100	3,500	0.26 J	--	--	--	--	<100	--	34,000 J	--	72 J	98 J	<100	2,400	550
	OC1-OW8A-W-0-40	23-Feb-05	<2.50	--	11,000	<2.50	<2.50	3	<2.50	<2.50	<2.50	<2.50	50,000	--	910	85	<2.50	2,700	500
	OC-GW-OW8-022305	23-Feb-05	1.3	--	9,100	1.6	<1.00	5.7	0.86 J	0.39 J	<1.00	<1.00	68,000	650	1,300	91	<0.50	3,300	460 J
	OC-GW-OW8-K-022305	23-Feb-05	<200	--	9,200	<200	<200	<200	<200	<200	<200	<200	62,000	--	1,300	84 J	<100	3,400	480
	OC1-OW8A-W-0-48	24-Aug-05	<200	--	3,600	<100	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	95,000	--	540	100	<50.0	2,500	550
	OC-GW-OW8a-082405	24-Aug-05	0.97 J	--	5,000	1.2	<1.00	2.6	0.51 J	0.26 J	<1.00	<1.00	68,000	520	570	70	<0.50	3,000	680
	OC-GW-OW8a-K-082405	24-Aug-05	1.2	--	4,700	1.3	<1.00	3.1	0.65 J	0.36 J	<1.00	<1.00	72,000	560	510	81	<0.50	2,900	590
	OC1-OW8A-W-5-59	21-Feb-06	<2.00	--	7,800	0.5	<0.50	1.2 J	0.4 J	<0.50	<0.50	<0.50	48,000 J	--	320	92	<0.50	2,000	480
	OC-GW-OW8-022106	21-Feb-06	<100	--	7,400	<100	<100	<100	<100	<100	<100	<100	33,000	--	330	99 J	<50.0	2,000	570
	OC-GW-OW8K-022106	21-Feb-06	<50.0	--	6,000	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	35,000	--	260	85	<25.0	1,800	520
	OW-8	13-Mar-06	<200	--	4,600	<10	<200	<200	<200	<200	<200	<200	27,000	--	<200	<200	<200	1,200	410
	OW-GW-OW-8-082406	24-Aug-06	<1.00	--	2,700	<1.00	<1.00	0.35 J	<1.00	<1.00	<1.00	<1.00	17,000	--	55	42	<0.50	890	280
	OW-GW-OW-8K-082406	24-Aug-06	<1.00	--	2,000	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	16,000	--	46	39	<0.50	870	210

Groundwater Data for Operable Unit 2 (OU2)
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Location	Sample Name	Date Sampled	Vinyl acetate	Vinyl chloride	Xylene, m + p	Xylene, o	Xylenes (total)	1,1-Biphenyl	1,2,4,5-Tetrachlorobenzene	2,2'-oxybis(1-chloropropane)	2,4,5-Trichlorophenol	2,4,6-Trichlorophenol	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol
		Region 9 PRG:	*410 nc*	*0.02 ca*	*210 nc*	*210 nc*	*210 nc*	*300 nc*	*11 nc*		*3600 nc*	*3.6 nc/ CalEPA 0.96 ca*	*110 nc*	*730 nc*	*73 nc*	*73 nc*	*36 nc*	*490 nc*	*30 nc*
		EPA MCL:		*2*	*10,000*	*10,000*	*10,000*												
		CalDPH MCL/NL/AL:		*0.5*	*1,750*	*1,750*	*1,750*												
MW2	OC2-MW2A-W-0-4	02-Mar-04	--	<0.50	--	--	<0.5 J	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-MW2A-W-0-40	22-Jun-04	--	<2.50	--	--	<2.50	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-MW2A-W-0-64	14-Sep-04	--	<2.50	--	--	<2.50	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20 J	<5.00	<5.00	<5.00	<5.00
	OC2-MW2A-W-0-106	08-Dec-04	--	<2.00	--	--	<2.00	<5.00	<5.00	<5 J	<20.0	<5.00	<5.00	<5.00	<20 J	<5.00	<5.00	<5.00	<5.00
	OC2-MW2-W-0-126	02-Mar-05	--	<21.0	--	--	<21.0	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-149	02-Sep-05	--	<0.50	--	--	<0.50	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-174	08-Mar-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-251	07-Sep-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
MW4A	OC2-MW4A-W-0-5	03-Mar-04	--	<0.50	--	--	<0.50	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-1-6	03-Mar-04	--	<0.50	--	--	<0.50	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-0-36	21-Jun-04	--	<5.00	--	--	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-1-37	21-Jun-04	--	<5.00	--	--	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-0-58	13-Sep-04	--	<5.00	--	--	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20 J	<5.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-0-92	06-Dec-04	--	<5.00	--	--	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-0-116	28-Feb-05	--	<0.50	--	--	<0.50	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-1-112	28-Feb-05	--	<0.50	--	--	<0.50	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-135	30-Aug-05	--	<0.50	--	--	<0.50	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-163	07-Mar-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-5-217	29-Aug-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
MW4B	OC2-MW4B-W-0-7	03-Mar-04	--	<0.50	--	--	<0.50	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-MW4B-W-0-38	21-Jun-04	--	<5.00	--	--	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-MW4B-W-0-59	13-Sep-04	--	<5.00	--	--	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20 J	<5.00	<5.00	<5.00	<5.00
	OC2-MW4B-W-1-60	13-Sep-04	--	<5.00	--	--	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20 J	<5.00	<5.00	<5.00	<5.00
	OC2-MW4B-W-0-93	06-Dec-04	--	<5.00	--	--	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-MW4B-W-1-94	06-Dec-04	--	<2.00	--	--	<2.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-MW4B-W-5-113	28-Feb-05	--	<0.50	--	--	<0.50	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-134	30-Aug-05	--	<0.5 R	--	--	<0.5 R	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-164	07-Mar-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-215	29-Aug-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-1-216	29-Aug-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
MW5	OC2-MW5A-W-0-9	03-Mar-04	--	<0.50	--	--	<0.50	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-MW5A-W-0-41	22-Jun-04	--	<2.50	--	--	<2.50	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-MW5A-W-0-66	14-Sep-04	--	<5.00	--	--	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20 J	<5.00	<5.00	<5.00	<5.00
	OC2-MW5A-W-0-97	06-Dec-04	--	<4.00	--	--	<4.00	<5.00	<5.00	<5 J	<20.0	<5.00	<5.00	<5.00	<20 J	<5.00	<5.00	<5.00	<5.00
	OC2-MW5-W-0-117	28-Feb-05	--	<0.50	--	--	<0.50	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-5-139	30-Aug-05	--	<0.50	--	--	<0.50	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-0-167	07-Mar-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-1-168	07-Mar-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-0-218	29-Aug-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
MW14	OC2-MW14-W-0-206	07-Jul-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW14-W-0-263	11-Sep-06	--	<10.0	<20.0	<10.0	--	--	--	--	--	--	--	--	--	--	--	--	--
MW15	OC2-MW15-W-0-198	15-Mar-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW15-W-1-199	15-Mar-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW15-W-0-219	29-Aug-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
MW23C	OC2-MW23C-W-0-195	14-Mar-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW23C-W-0-261	11-Sep-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW23C-W-1-262	11-Sep-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
OW1A	OC1-OW1-W-0-3	24-Feb-04	--	0.5	0.7 J	1.2 J	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-022404	24-Feb-04	--	0.64	0.71 J	1.1	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW1A-W-0-34	17-Jun-04	--	<1000	--	--	<1000	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC1-OW1-W-0-23	27-Aug-04	--	0.9	0.3 J	0.8 J	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-082704	27-Aug-04	--	<200	<400	<400	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1k-082704	27-Aug-04	--	<0.50	<1.00	0.55 J	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW1A-W-0-90	08-Dec-04	--	<1000	--	--	<1000	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-022505	25-Feb-05	--	<0.50	0.63 J	0.74 J	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW1-W-0-47	24-Aug-05	--	<50.0	<100	<50.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-082405	24-Aug-05	--	<2.50	<5.00	<5.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-02206	22-Feb-06	--	<100	<200	<200	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-1	13-Mar-06	<13000	<630	<630	<630	--	--	--	--	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0	<10.0	<10.0
	OW-GW-OW-1-082406	24-Aug-06	--	<0.50	<1.00	0.88 J	--	--	--	--	--	--	--	--	--	--	--	--	--
OW2	OC1-OW2-W-0-1	24-Feb-04	--	<0.2	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW2-W-5-2	24-Feb-04	--	<0.2	<0.5	<0.5	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-022404	24-Feb-04	--	<2.50	<5.00	<5.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW2-W-0-32	17-Jun-04	--	<20.0	--	--	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC-GW-OW2-082404	24-Aug-04	--	<5.00	<10.0	<10.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW2-W-0-89	02-Dec-04	--	<10.0	--	--	<10.0	<5.00	<5.00	<5 J	<20.0	<5.00	<5.00	<5.00	<20 J	<5.00	<5.00	<5.00	<5.00
	OC-GW-OW2-022405	24-Feb-05	--	<5.00	<10.0	<10.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-082405	24-Aug-05	--	<2.50	<5.00	<5.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-02206	22-Feb-06	--	<5.00	<10.0	<10.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW-2-082206	22-Aug-06	--	<2.50	<5.00	<5.00	--	--	--	--	--	--	--	--	--	--	--	--	--
OW3	OC1-OW3-W-0-4	25-Feb-04	--	<5	<10	<10	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-022504	25-Feb-04	--	<5.00	<10.0	<10.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW3-W-0-30	17-Jun-04	--	<10.0	--	--	<10.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-OW3-W-1-31	17-Jun-04	--	<10.0	--	--	<10.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC-GW-OW3-082404	24-Aug-04	--	<2.50	<5.00	<5.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW3-W-0-85	01-Dec-04	--	<5.00	--	--	<5.00	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC-GW-OW3-022305	23-Feb-05	--	<0.50	<1.00	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-082405	24-Aug-05	--	<0.50	<1.00	0.25 J	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW3-W-0-60	21-Feb-06	--	<0.50	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-02106	21-Feb-06	--	<2.50	<5.00	<5.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-3-082306	23-Aug-06	--	<0.50	<1.00	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
OW4A	OC-GW-OW4A-022704	27-Feb-04	--	<0.50	<1.00	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-25	15-Jun-04	--	<2.50	--	--	<2.50	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC-GW-OW4a-082504	25-Aug-04	--	<0.50	<1.00	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4ak-082504	25-Aug-04	--	<0.50	<1.00	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW4A-W-0-81	30-Nov-04	--	<0.50	--	--	1.5	0.8 J	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC-GW-OW4A-022505	25-Feb-05	--	<0.50	<1.00	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4a-082505	25-Aug-05	--	<0.50	<1.00	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4A-02206	22-Feb-06	--	<0.50	<1.00	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-4A-082306	23-Aug-06	--	<0.50	<1.00	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
OW5	OC-GW-OW5-022404	24-Feb-04	--	<0.50	<1.00	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW5-W-5-26	16-Jun-04	--	<10.0	--	--	<10.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC-GW-OW5-082504	25-Aug-04	--	<0.50	<1.00	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW5-W-0-86	02-Dec-04	--	<2.50	--	--	<2.50	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC2-OW5-W-1-87	02-Dec-04	--	<2.50	--	--	<2.50	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC-GW-OW5-022405	24-Feb-05	--	<0.50	<1.00	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW5-082305	22-Aug-05	--	<2.50	<5.00	<5.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW5-021706	17-Feb-06	--	<0.50	<1.00	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-5-082406	24-Aug-06	--	<0.50	<1.00	<1.00	--	--	--	--	--	--	--	--	--	--	--	--	--
OW8A	OC-GW-OW8-022404	24-Feb-04	--	<25.0	<50.0	<50.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW8-W-0-29	16-Jun-04	--	<50.0	--	--	75	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC-GW-OW8-082404	24-Aug-04	--	<50.0	<100	27 J	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW8-W-0-91	03-Dec-04	--	<100	--	--	<100	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<20.0	<5.00	<5.00	<5.00	<5.00
	OC1-OW8A-W-0-40	23-Feb-05	--	<2.50	110	73	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-022305	23-Feb-05	--	0.78	130	81	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-K-022305	23-Feb-05	--	<100	130 J	72 J	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW8A-W-0-48	24-Aug-05	--	<50.0	57 J	37 J	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8a-082405	24-Aug-05	--	0.72	54	35	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8a-K-082405	24-Aug-05	--	0.83	61	40	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW8A-W-5-59	21-Feb-06	--	1.1 J	43	29	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-022106	21-Feb-06	--	<50.0	<100	39 J	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8K-022106	21-Feb-06	--	<25.0	32 J	30 J	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-8	13-Mar-06	<4000	<200	<200	<200	--	--	--	--	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0	<10.0	<10.0
	OW-GW-OW-8-082406	24-Aug-06	--	<0.50	15	9.2	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-8K-082406	24-Aug-06	--	<0.50	12	7.6	--	--	--	--	--	--	--	--	--	--	--	--	--

Groundwater Data for Operable Unit 2 (OU2)
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Location	Sample Name	Date Sampled	2-Methylnaphthalene	2-Methylphenol	2-Nitroaniline	2-Nitrophenol	3,3'-Dichlorobenzidine	3-Nitroaniline	4,6-Dinitro-o-cresol	4-Bromophenyl phenyl ether	4-Chloro-3-methylphenol	4-Chloroaniline	4-Chlorophenylphenyl ether	4-Methylphenol	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene	Acetophenone
		Region 9 PRG:		*1800 nc*	*110 nc*		*0.15 ca*	*3.2 ca*	*3.6 nc*			*150 nc*		*180 nc*	*3.2 ca*		*370 nc*		
		EPA MCL:																	
		CalDPH MCL/NL/AL:																	
MW2	OC2-MW2A-W-0-4	02-Mar-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW2A-W-0-40	22-Jun-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW2A-W-0-64	14-Sep-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20 J	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW2A-W-0-106	08-Dec-04	<5.00	<5.00	<20.0	<5 J	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW2-W-0-126	02-Mar-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-149	02-Sep-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-174	08-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-251	07-Sep-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW4A	OC2-MW4A-W-0-5	03-Mar-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW4A-W-1-6	03-Mar-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW4A-W-0-36	21-Jun-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW4A-W-1-37	21-Jun-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW4A-W-0-58	13-Sep-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20 J	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<0.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-0-92	06-Dec-04	<5.00	<5.00	<20.0	<5 J	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW4A-W-0-116	28-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-1-112	28-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-135	30-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-163	07-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-5-217	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW4B	OC2-MW4B-W-0-7	03-Mar-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW4B-W-0-38	21-Jun-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW4B-W-0-59	13-Sep-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20 J	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<0.00	<5.00	<5.00	<5.00
	OC2-MW4B-W-1-60	13-Sep-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20 J	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW4B-W-0-93	06-Dec-04	<5.00	<5.00	<20.0	<5 J	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW4B-W-1-94	06-Dec-04	<5.00	<5.00	<20.0	<5 J	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW4B-W-5-113	28-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-134	30-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-164	07-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-215	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-1-216	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW5	OC2-MW5A-W-0-9	03-Mar-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW5A-W-0-41	22-Jun-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW5A-W-0-66	14-Sep-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20 J	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW5A-W-0-97	06-Dec-04	<5.00	<5.00	<20.0	<5 J	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-MW5-W-0-117	28-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-5-139	30-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-0-167	07-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-1-168	07-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-0-218	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW14	OC2-MW14-W-0-206	07-Jul-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW14-W-0-263	11-Sep-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW15	OC2-MW15-W-0-198	15-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW15-W-1-199	15-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW15-W-0-219	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW23C	OC2-MW23C-W-0-195	14-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW23C-W-0-261	11-Sep-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW23C-W-1-262	11-Sep-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW1A	OC1-OW1-W-0-3	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW1A-W-0-34	17-Jun-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC1-OW1-W-0-23	27-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-082704	27-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1k-082704	27-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW1A-W-0-90	08-Dec-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-022505	25-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW1-W-0-47	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-02206	22-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-1	13-Mar-06	<10.0	<10.0	<20.0	<20.0	<20.0	<20.0	<20.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<20.0	<10.0	<10.0	--
	OW-GW-OW-1-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW2	OC1-OW2-W-0-1	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW2-W-5-2	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW2-W-0-32	17-Jun-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC-GW-OW2-082404	24-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW2-W-0-89	02-Dec-04	<5.00	<5.00	<20.0	<5 J	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC-GW-OW2-022405	24-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-02206	22-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW-2-082206	22-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW3	OC1-OW3-W-0-4	25-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-022504	25-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW3-W-0-30	17-Jun-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-OW3-W-1-31	17-Jun-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC-GW-OW3-082404	24-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW3-W-0-85	01-Dec-04	<5.00	<5.00	<20.0	<5 J	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC-GW-OW3-022305	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW3-W-0-60	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-02106	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-3-082306	23-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW4A	OC-GW-OW4A-022704	27-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-25	15-Jun-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC-GW-OW4a-082504	25-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4ak-082504	25-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW4A-W-0-81	30-Nov-04	2.8 J	<5.00	<20.0	<5 J	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC-GW-OW4A-022505	25-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4a-082505	25-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4A-02206	22-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-4A-082306	23-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW5	OC-GW-OW5-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW5-W-5-26	16-Jun-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC-GW-OW5-082504	25-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW5-W-0-86	02-Dec-04	<5.00	<5.00	<20.0	<5 J	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC2-OW5-W-1-87	02-Dec-04	<5.00	<5.00	<20.0	<5 J	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00
	OC-GW-OW5-022405	24-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW5-082305	22-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW5-021706	17-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-5-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW8A	OC-GW-OW8-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW8-W-0-29	16-Jun-04	<5.00	<5.00	<20.0	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	6.9
	OC-GW-OW8-082404	24-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW8-W-0-91	03-Dec-04	<5.00	<5.00	<20.0	<5 J	<5.00	<20.0	<20.0	<5.00	<5.00	<5.00	<5.00	<5.00	<20.0	<20.0	<5.00	<5.00	2.2 J
	OC1-OW8A-W-0-40	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-022305	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-K-022305	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW8A-W-0-48	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8a-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8a-K-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW8A-W-5-59	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-022106	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8K-022106	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-8	13-Mar-06	<10.0	<10.0	<20.0	<20.0	<20.0	<20.0	<20.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<20.0	<10.0	<10.0	--
	OW-GW-OW-8-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-8K-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Groundwater Data for Operable Unit 2 (OU2)
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

			Semi-Volatile Organics (ug/L)																
Location	Sample Name	Date Sampled	Anthracene	Atrazine	Azobenzene	Benzaldehyde	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(ghi)perylene	Benzo(k)fluoranthene	Benzoic acid	Benzyl alcohol	bis(2-Chloroethoxy)methane	Bis(2-chloroethyl)ether	Bis(2-chloroisopropyl)ether	Bis(2-ethylhexyl)phthalate (DEHP)	Butyl benzyl phthalate	Caprolactam
		Region 9 PRG:	*1800 nc*	*0.3 ca*	*0.61 ca*	*3600 nc*	*0.092 ca*	*0.0092 ca*	*0.092 ca*		*0.92 ca/ CalEPA 0.056 ca*	*150,000 nc*	*11,000 nc*		*0.01 ca*	*0.27 ca*	*4.8 ca*	*7300 nc*	*18,000 nc*
		EPA MCL:		*3*				*0.2*									*6*		
		CalDPH MCL/NL/AL:		*3*				*0.2*									*4*		
MW2	OC2-MW2A-W-0-4	02-Mar-04	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5.00	<5.00	<5 J
	OC2-MW2A-W-0-40	22-Jun-04	<5.00	<5 R	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	8.5	<5.00	<5.00
	OC2-MW2A-W-0-64	14-Sep-04	<5.00	<5 J	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	12	<5.00	<5.00
	OC2-MW2A-W-0-106	08-Dec-04	<5.00	<5 R	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5 J	<5.00	<5.00
	OC2-MW2-W-0-126	02-Mar-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-149	02-Sep-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-174	08-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-251	07-Sep-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW4A	OC2-MW4A-W-0-5	03-Mar-04	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5.00	<5.00	11 J
	OC2-MW4A-W-1-6	03-Mar-04	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5.00	<5.00	<5 J
	OC2-MW4A-W-0-36	21-Jun-04	<5.00	<5 R	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	11	<5.00	<5.00
	OC2-MW4A-W-1-37	21-Jun-04	<5.00	<5 R	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	3.9 J	<5.00	<5.00
	OC2-MW4A-W-0-58	13-Sep-04	<5.00	<5 J	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	13	<5.00	<5.00
	OC2-MW4A-W-0-92	06-Dec-04	<5.00	<5 R	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	1.1 J	<5 J	<5.00
	OC2-MW4A-W-0-116	28-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-1-112	28-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-135	30-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-163	07-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-5-217	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW4B	OC2-MW4B-W-0-7	03-Mar-04	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5.00	<5.00	<5 J
	OC2-MW4B-W-0-38	21-Jun-04	<5.00	<5 R	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	2.6 J	<5.00	<5.00
	OC2-MW4B-W-0-59	13-Sep-04	<5.00	<5 J	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	5.6	<5.00	<5.00
	OC2-MW4B-W-1-60	13-Sep-04	<5.00	<5 J	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	4.2 J	<5.00	<5.00
	OC2-MW4B-W-0-93	06-Dec-04	<5.00	<5 R	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	1 J	<5 J	<5.00
	OC2-MW4B-W-1-94	06-Dec-04	<5.00	<5 R	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5 J	<5 J	<5.00
	OC2-MW4B-W-5-113	28-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-134	30-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-164	07-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-215	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-1-216	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW5	OC2-MW5A-W-0-9	03-Mar-04	<5.00	<5.00	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5.00	<5.00	<5 J
	OC2-MW5A-W-0-41	22-Jun-04	<5.00	<5 R	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	80	<5.00	<5.00
	OC2-MW5A-W-0-66	14-Sep-04	<5.00	<5 J	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	3 J	<5.00	<5.00
	OC2-MW5A-W-0-97	06-Dec-04	<5.00	<5 R	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	0.68 J	<5.00	<5.00
	OC2-MW5-W-0-117	28-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-5-139	30-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-0-167	07-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-1-168	07-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-0-218	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW14	OC2-MW14-W-0-206	07-Jul-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW14-W-0-263	11-Sep-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW15	OC2-MW15-W-0-198	15-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW15-W-1-199	15-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW15-W-0-219	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW23C	OC2-MW23C-W-0-195	14-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW23C-W-0-261	11-Sep-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW23C-W-1-262	11-Sep-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW1A	OC1-OW1-W-0-3	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW1A-W-0-34	17-Jun-04	<5.00	<5 R	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5.00	<5.00	28
	OC1-OW1-W-0-23	27-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-082704	27-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1k-082704	27-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW1A-W-0-90	08-Dec-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-022505	25-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW1-W-0-47	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-02206	22-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-1	13-Mar-06	<10.0	--	<10.0	--	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	--
	OW-GW-OW-1-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW2	OC1-OW2-W-0-1	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW2-W-5-2	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW2-W-0-32	17-Jun-04	<5.00	<5 R	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	2.5 J	<5.00	<5.00
	OC-GW-OW2-082404	24-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW2-W-0-89	02-Dec-04	<5.00	<5 R	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	0.45 J	<5.00	<5.00
	OC-GW-OW2-022405	24-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-02206	22-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW-2-082206	22-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW3	OC1-OW3-W-0-4	25-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-022504	25-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW3-W-0-30	17-Jun-04	<5.00	<5 R	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5.00	<5.00	<5.00
	OC2-OW3-W-1-31	17-Jun-04	<5.00	<5 R	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5.00	<5.00	<5.00
	OC-GW-OW3-082404	24-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW3-W-0-85	01-Dec-04	<5.00	<5 R	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5 J	<5 J	<5.00
	OC-GW-OW3-022305	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW3-W-0-60	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-02106	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-3-082306	23-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW4A	OC-GW-OW4A-022704	27-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-25	15-Jun-04	<5.00	<5 R	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5.00	<5.00	<5.00
	OC-GW-OW4a-082504	25-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4ak-082504	25-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW4A-W-0-81	30-Nov-04	<5.00	<5 R	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	0.69 J	<5 J	<5.00
	OC-GW-OW4A-022505	25-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4a-082505	25-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4A-02206	22-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-4A-082306	23-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW5	OC-GW-OW5-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW5-W-5-26	16-Jun-04	<5.00	<5 R	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5.00	<5.00	<5.00
	OC-GW-OW5-082504	25-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW5-W-0-86	02-Dec-04	<5.00	<5 R	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	0.76 J	<5 J	0.15 J
	OC2-OW5-W-1-87	02-Dec-04	<5.00	<5 R	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5 J	<5 J	<5.00
	OC-GW-OW5-022405	24-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW5-082305	22-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW5-021706	17-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-5-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW8A	OC-GW-OW8-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW8-W-0-29	16-Jun-04	<5.00	<5 R	--	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	<5.00	<5.00	<5.00
	OC-GW-OW8-082404	24-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW8-W-0-91	03-Dec-04	<5.00	<5 R	--	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	--	--	<5.00	<5.00	--	0.62 J	<5 J	<5.00
	OC1-OW8A-W-0-40	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-022305	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-K-022305	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW8A-W-0-48	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8a-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8a-K-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW8A-W-5-59	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-022106	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8K-022106	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-8	13-Mar-06	<10.0	--	<10.0	--	<10.0	<10.0	<10.0	<10.0	<10.0	<50.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	--
	OW-GW-OW-8-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-8K-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Groundwater Data for Operable Unit 2 (OU2)
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Location	Sample Name	Date Sampled	Chrysene	Dibenzo(a,h)anthracene	Dibenzofuran	Diethyl phthalate	Dimethyl phthalate	Di-n-butyl phthalate	di-n-Octyl phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene	Hexachlorocyclopentadiene	Hexachloroethane	Indeno(1,2,3-cd)pyrene	Isophorone	Nitrobenzene	N-Nitroso-di-n-propylamine
		Region 9 PRG:	*9.2 ca/ CalEPA 0.56 ca*	*0.0092 ca*	*12 nc*	*29,000 nc*	*360,000 nc*	*3600 nc*	*1500 nc*	*1500 nc*	*240 nc*	*0.042 ca*	*0.86 ca*	*220 nc*	*4.8 ca*	*0.092 ca*	*71 ca*	*3.4 nc*	*0.0096 ca*
		EPA MCL:										*1*		*50*					
		CalDPH MCL/NL/AL:										*1*		*50*					*0.01 NL*
MW2	OC2-MW2A-W-0-4	02-Mar-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW2A-W-0-40	22-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5 J
	OC2-MW2A-W-0-64	14-Sep-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW2A-W-0-106	08-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J
	OC2-MW2-W-0-126	02-Mar-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-149	02-Sep-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-174	08-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-251	07-Sep-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW4A	OC2-MW4A-W-0-5	03-Mar-04	<5.00	<5.00	<5.00	<5.00	<5.00	1 J	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-1-6	03-Mar-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-0-36	21-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-1-37	21-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-0-58	13-Sep-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW4A-W-0-92	06-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J
	OC2-MW4A-W-0-116	28-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-1-112	28-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-135	30-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-163	07-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-5-217	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW4B	OC2-MW4B-W-0-7	03-Mar-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW4B-W-0-38	21-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW4B-W-0-59	13-Sep-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW4B-W-1-60	13-Sep-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW4B-W-0-93	06-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J
	OC2-MW4B-W-1-94	06-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J
	OC2-MW4B-W-5-113	28-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-134	30-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-164	07-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-215	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-1-216	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW5	OC2-MW5A-W-0-9	03-Mar-04	<5.00	<5.00	<5.00	<5.00	<5.00	1 J	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW5A-W-0-41	22-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5 J
	OC2-MW5A-W-0-66	14-Sep-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-MW5A-W-0-97	06-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J
	OC2-MW5-W-0-117	28-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-5-139	30-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-0-167	07-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-1-168	07-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-0-218	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW14	OC2-MW14-W-0-206	07-Jul-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW14-W-0-263	11-Sep-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW15	OC2-MW15-W-0-198	15-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW15-W-1-199	15-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW15-W-0-219	29-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW23C	OC2-MW23C-W-0-195	14-Mar-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW23C-W-0-261	11-Sep-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW23C-W-1-262	11-Sep-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW1A	OC1-OW1-W-0-3	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW1A-W-0-34	17-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC1-OW1-W-0-23	27-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-082704	27-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1k-082704	27-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW1A-W-0-90	08-Dec-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-022505	25-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW1-W-0-47	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-02206	22-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-1	13-Mar-06	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0	<10.0	<10.0	<10.0
	OW-GW-OW-1-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW2	OC1-OW2-W-0-1	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW2-W-5-2	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW2-W-0-32	17-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC-GW-OW2-082404	24-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW2-W-0-89	02-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J
	OC-GW-OW2-022405	24-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-02206	22-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW-2-082206	22-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW3	OC1-OW3-W-0-4	25-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-022504	25-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW3-W-0-30	17-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC2-OW3-W-1-31	17-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC-GW-OW3-082404	24-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW3-W-0-85	01-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J
	OC-GW-OW3-022305	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW3-W-0-60	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-02106	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-3-082306	23-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW4A	OC-GW-OW4A-022704	27-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-25	15-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC-GW-OW4a-082504	25-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4ak-082504	25-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW4A-W-0-81	30-Nov-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J
	OC-GW-OW4A-022505	25-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4a-082505	25-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4A-02206	22-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-4A-082306	23-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW5	OC-GW-OW5-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW5-W-5-26	16-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00
	OC-GW-OW5-082504	25-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW5-W-0-86	02-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J
	OC2-OW5-W-1-87	02-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J
	OC-GW-OW5-022405	24-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW5-082305	22-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW5-021706	17-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-5-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW8A	OC-GW-OW8-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW8-W-0-29	16-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	4.9 J	<5.00	<5.00
	OC-GW-OW8-082404	24-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW8-W-0-91	03-Dec-04	<5.00	<5.00	<5.00	<5.00	0.68 J	<5 J	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	2.2 J	<5.00	<5 J
	OC1-OW8A-W-0-40	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-022305	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-K-022305	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW8A-W-0-48	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8a-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8a-K-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW8A-W-5-59	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-022106	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8K-022106	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-8	13-Mar-06	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<20.0	<10.0	<10.0	<10.0	<10.0	<10.0
	OW-GW-OW-8-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-8K-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Groundwater Data for Operable Unit 2 (OU2)
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Location	Sample Name	Date Sampled	N-Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	1,2,3-Trichloropropane	1,4-Dioxane	N-Nitrosodimethylamine	Perchlorate	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium
		Region 9 PRG:	*14 ca*	*0.56 ca*		*11000 nc*	*180 nc*	*0.0056 ca*	*6.1 ca*	*0.0013 ca*	*3.6 ca/nc*	*36,000 nc*	*15 nc*	*0.045 ca/ CalEPA 0.0071*	*2600 nc*	*73 nc*		*18 nc*	
		EPA MCL:		*1*									*6*	*10*	*200*	*4*		*5*	
		CalDPH MCL/NL/AL:		*1*				*0.005 NL*	*3 NL*	*0.01 NL*		*1000*	*6*	*10*	*1000*	*4*		*5*	
MW2	OC2-MW2A-W-0-4	02-Mar-04	<5.00	<5.00	<5.00	<5.00	<5.00	--	41	0.03	2.7	<20	<2	1.9	53	<1	390	<2	170,000
	OC2-MW2A-W-0-40	22-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<2.00	28	0.0096	2.5	<200	<60.0	0.64 J-	56.4 J	<5.00	--	0.07 J	167,000
	OC2-MW2A-W-0-64	14-Sep-04	<5.00	<5.00	<5.00	<5.00	<5.00	0.0039 J	18	0.011	1.9 J	<200	<0.17 J	2	62.9	<2 R	--	<1.00	174,999
	OC2-MW2A-W-0-106	08-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	14	<0.0043 J	1.7 J	<200	1.6 J	1.6	59.8	<1.00	--	<1.00	193,000
	OC2-MW2-W-0-126	02-Mar-05	--	--	--	--	--	<5.00	22	0.0026	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-149	02-Sep-05	--	--	--	--	--	<5.00	49	<2.00	1.9 J	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-174	08-Mar-06	--	--	--	--	--	<0.005	96	0.0054	3.7	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-251	07-Sep-06	--	--	--	--	--	<5.00	150	0.0077	3.2	--	--	--	--	--	--	--	--
MW4A	OC2-MW4A-W-0-5	03-Mar-04	<5.00	<5.00	<5.00	<5.00	<5.00	--	25 J	0.0033	4.1	<20	<2	1.6	35	<1	360	<2	170,000
	OC2-MW4A-W-1-6	03-Mar-04	<5.00	<5.00	<5.00	<5.00	<5.00	--	25 J	0.0039	4.1	<20	<2	1.7	36	<1	360	<2	170,000
	OC2-MW4A-W-0-36	21-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<2.00	33	<2.00	4.2	<200 R	<4 R	0.97 J	21.5 J	<2 R	--	<2 R	176,000
	OC2-MW4A-W-1-37	21-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<2.00	32	<2.00	4.4	<45.2 J	<4 R	0.99 J	21.8 J	<2 R	--	<2 R	177,000
	OC2-MW4A-W-0-58	13-Sep-04	<5.00	<5.00	<5.00	<5.00	<5.00	0.0027 J	19	0.0029	3.2	<200	<0.27 J	1.4	43.5	<1.00	--	<1.00	174,999
	OC2-MW4A-W-0-92	06-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	14	0.002 J	2.5	<200	1.7 J	1.5	44	<1.00	--	<1.00	204,000
	OC2-MW4A-W-0-116	28-Feb-05	--	--	--	--	--	<5.00	9.3	0.0021	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-1-112	28-Feb-05	--	--	--	--	--	<5.00	9.2	<2.00	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-135	30-Aug-05	--	--	--	--	--	<5.00	17	<2.00	2.6	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-163	07-Mar-06	--	--	--	--	--	<0.005	20	0.002	3.2	--	--	--	--	--	--	--	--
	OC2-MW4A-W-5-217	29-Aug-06	--	--	--	--	--	<5.00	16	0.0019 J	3.6	--	--	--	--	--	--	--	--
MW4B	OC2-MW4B-W-0-7	03-Mar-04	<5.00	<5.00	<5.00	<5.00	<5.00	--	37 J	0.0059	4.3	<20	<2	<1	<2	<1	350	<2	200,000
	OC2-MW4B-W-0-38	21-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<2.00	27	<2.00	3.4	<45.5 J	<4 R	1.2 J	27.7 J	<2 R	--	<2 R	227,000
	OC2-MW4B-W-0-59	13-Sep-04	<5.00	<5.00	<5.00	<5.00	<5.00	0.0028 J	10	<2.00	2.9	<200	<0.23 J	1.6	52.8	<1.00	--	<1.00	216,000
	OC2-MW4B-W-1-60	13-Sep-04	<5.00	<5.00	<5.00	<5.00	<5.00	0.0044 J	12	<2.00	3.4	<200	<0.42 J	1.8	53.3	<1.00	--	<1.00	221,001
	OC2-MW4B-W-0-93	06-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	12	0.002 J	2.4	<200	1.8 J	1.6	44.2	<1.00	--	<1.00	238,000
	OC2-MW4B-W-1-94	06-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	12	0.002 J	2.5	<200	1.7 J	1.6	46	<1.00	--	<1.00	235,000
	OC2-MW4B-W-5-113	28-Feb-05	--	--	--	--	--	<5.00	5.4	<2.00	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-134	30-Aug-05	--	--	--	--	--	<5.00	6.8	<2.00	3.1	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-164	07-Mar-06	--	--	--	--	--	<0.005	5.6	<0.002	2.9	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-215	29-Aug-06	--	--	--	--	--	<5.00	21	0.0019 J	3.7	--	--	--	--	--	--	--	--
	OC2-MW4B-W-1-216	29-Aug-06	--	--	--	--	--	<5.00	20	0.0019 J	3.7	--	--	--	--	--	--	--	--
MW5	OC2-MW5A-W-0-9	03-Mar-04	<5.00	<5.00	<5.00	<5.00	<5.00	--	70 J	0.0102	3.6	<20	<2	1.8	57	<1	370	<2	190,000
	OC2-MW5A-W-0-41	22-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<2.00	54	0.0041	3.7	<200	<60.0	0.83 J-	61.5 J	<5.00	--	<5.00	182,000
	OC2-MW5A-W-0-66	14-Sep-04	<5.00	<5.00	<5.00	<5.00	<5.00	0.0042 J	37	0.0043	3	<200	<0.3 J	1.5	72.3 J+	<2 R	--	<0.08 J	198,999
	OC2-MW5A-W-0-97	06-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	45	0.0031 J	2.6	<200	1.9 J	1.7	59.6	<1.00	--	<1.00	199,000
	OC2-MW5-W-0-117	28-Feb-05	--	--	--	--	--	<5.00	31	0.0035	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-5-139	30-Aug-05	--	--	--	--	--	<5.00	37	0.0045	2.3	--	--	--	--	--	--	--	--
	OC2-MW5-W-0-167	07-Mar-06	--	--	--	--	--	<0.005	42	0.004	2.3	--	--	--	--	--	--	--	--
	OC2-MW5-W-1-168	07-Mar-06	--	--	--	--	--	<0.005	42	0.0041	2.3	--	--	--	--	--	--	--	--
	OC2-MW5-W-0-218	29-Aug-06	--	--	--	--	--	<5.00	89	0.0043 J	3	--	--	--	--	--	--	--	--
MW14	OC2-MW14-W-0-206	07-Jul-06	--	--	--	--	--	<0.50	11	--	--	--	--	--	--	--	--	--	--
	OC2-MW14-W-0-263	11-Sep-06	--	--	--	--	--	<10.0	7.1	0.0059	2.1	--	--	--	--	--	--	--	--
MW15	OC2-MW15-W-0-198	15-Mar-06	--	--	--	--	--	<0.005	70	0.003	3.9	--	--	--	--	--	--	--	--
	OC2-MW15-W-1-199	15-Mar-06	--	--	--	--	--	<0.0051	74	0.0048	4.2	--	--	--	--	--	--	--	--
	OC2-MW15-W-0-219	29-Aug-06	--	--	--	--	--	<5.00	50	0.0028 J	3.7	--	--	--	--	--	--	--	--
MW23C	OC2-MW23C-W-0-195	14-Mar-06	--	--	--	--	--	<0.005	38	0.0053	5.3	--	--	--	--	--	--	--	--
	OC2-MW23C-W-0-261	11-Sep-06	--	--	--	--	--	<0.50	22	0.0023	3.6	--	--	--	--	--	--	--	--
	OC2-MW23C-W-1-262	11-Sep-06	--	--	--	--	--	<0.50	24	0.0031	2	--	--	--	--	--	--	--	--
OW1A	OC1-OW1-W-0-3	24-Feb-04	--	--	--	--	--	<0.5	26,000	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-022404	24-Feb-04	--	--	--	--	--	<1.00	12,000	--	--	--	--	--	--	--	--	--	--
	OC2-OW1A-W-0-34	17-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	0.014	8,500	0.23	3.5	<70.1 J	<0.2 J	1.9 J	44 J	<1 R	--	<0.72 J	180,000
	OC1-OW1-W-0-23	27-Aug-04	--	--	--	--	--	<0.50	5,900 J	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-082704	27-Aug-04	--	--	--	--	--	<400	5,600	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1k-082704	27-Aug-04	--	--	--	--	--	<1.00	6,800	--	--	--	--	--	--	--	--	--	--
	OC2-OW1A-W-0-90	08-Dec-04	--	--	--	--	--	--	13,000 J	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-022505	25-Feb-05	--	--	--	--	--	<1.00	3,300	--	--	--	--	--	--	--	--	--	--
	OC1-OW1-W-0-47	24-Aug-05	--	--	--	--	--	<50.0	4,100	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-082405	24-Aug-05	--	--	--	--	--	<5.00	3,100	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-02206	22-Feb-06	--	--	--	--	--	<200	2,700	--	--	--	--	--	--	--	--	--	--
	OW-1	13-Mar-06	<10.0	<20.0	<10.0	<10.0	<10.0	<630	3,100	<10.0	--	--	<60.0	<5.00	51	<2.00	290	<5.00	--
	OW-GW-OW-1-082406	24-Aug-06	--	--	--	--	--	<1.00	210	--	--	--	--	--	--	--	--	--	--
OW2	OC1-OW2-W-0-1	24-Feb-04	--	--	--	--	--	<0.5	2.7	--	--	--	--	--	--	--	--	--	--
	OC1-OW2-W-5-2	24-Feb-04	--	--	--	--	--	<0.5	3.6	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-022404	24-Feb-04	--	--	--	--	--	<5.00	<0.50	--	--	--	--	--	--	--	--	--	--
	OC2-OW2-W-0-32	17-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<2.00	<1.00	<2.00	2.7	<200 R	<0.18 J	0.74 J	21.8 J	<2 R	--	0.09 J	158,000
	OC-GW-OW2-082404	24-Aug-04	--	--	--	--	--	<10.0	12	--	--	--	--	--	--	--	--	--	--
	OC2-OW2-W-0-89	02-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<1.00	0.002 J	1.7 J	<200	1.9 J	0.75 J	35.7	<1.00	--	<1.00	145,000
	OC-GW-OW2-022405	24-Feb-05	--	--	--	--	--	<10.0	1.7	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-082405	24-Aug-05	--	--	--	--	--	<5.00	0.51	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-02206	22-Feb-06	--	--	--	--	--	<10.0	<0.47	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW-2-082206	22-Aug-06	--	--	--	--	--	<5.00	<0.47	--	--	--	--	--	--	--	--	--	--
OW3	OC1-OW3-W-0-4	25-Feb-04	--	--	--	--	--	<10	<0.5	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-022504	25-Feb-04	--	--	--	--	--	<10.0	0.51	--	--	--	--	--	--	--	--	--	--
	OC2-OW3-W-0-30	17-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<2.00	1.2	<2.00	3.5	<48.2 J	<4 R	0.62 J	13 J	<1.00	--	0.07 J	183,000
	OC2-OW3-W-1-31	17-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<2.00	0.7 J	<2.00	3.8	<200 R	<4 R	0.71 J	12.9 J	<2 R	--	0.08 J	172,000
	OC-GW-OW3-082404	24-Aug-04	--	--	--	--	--	<5.00	<0.50	--	--	--	--	--	--	--	--	--	--
	OC2-OW3-W-0-85	01-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<1.00	0.002 J	2.5	<200	1.8 J	0.79 J	24.7	<1.00	--	<1.00	186,000
	OC-GW-OW3-022305	23-Feb-05	--	--	--	--	--	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-082405	24-Aug-05	--	--	--	--	--	<1.00	1.4	--	--	--	--	--	--	--	--	--	--
	OC1-OW3-W-0-60	21-Feb-06	--	--	--	--	--	<0.50	3.5	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-02106	21-Feb-06	--	--	--	--	--	<5.00	1.5	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-3-082306	23-Aug-06	--	--	--	--	--	<1.00	1.1	--	--	--	--	--	--	--	--	--	--
OW4A	OC-GW-OW4A-022704	27-Feb-04	--	--	--	--	--	<1.00	<0.50	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-25	15-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<2.00	<1 J	<2.00	1.7 J	<180 J	<0.4 J	1 J+	48.8 J+	<1.00	--	<1.00	153,000
	OC-GW-OW4a-082504	25-Aug-04	--	--	--	--	--	<1.00	1.8	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4ak-082504	25-Aug-04	--	--	--	--	--	<1.00	1.9	--	--	--	--	--	--	--	--	--	--
	OC2-OW4A-W-0-81	30-Nov-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	0.5 J	0.002 J	1.3 J	<200	1.8 J	0.9 J	44.4	<1.00	--	<1.00	140,000
	OC-GW-OW4A-022505	25-Feb-05	--	--	--	--	--	<1.00	1.1	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4a-082505	25-Aug-05	--	--	--	--	--	<1.00	4.1	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4A-02206	22-Feb-06	--	--	--	--	--	<1.00	6.7	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-4A-082306	23-Aug-06	--	--	--	--	--	<1.00	10	--	--	--	--	--	--	--	--	--	--
OW5	OC-GW-OW5-022404	24-Feb-04	--	--	--	--	--	<1.00	68	--	--	--	--	--	--	--	--	--	--
	OC2-OW5-W-5-26	16-Jun-04	<5.00	<5.00	<5.00	<5.00	<5.00	<2.00	170	0.011	5.6	331	<0.18 J	3.4 J+	40.4 J	<1.00	--	0.1 J	171,000
	OC-GW-OW5-082504	25-Aug-04	--	--	--	--	--	<1.00	85	--	--	--	--	--	--	--	--	--	--
	OC2-OW5-W-0-86	02-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	51	0.0046 J	2.2	<200	1.7 J	1.5	59.9	<1.00	--	<1.00	140,000
	OC2-OW5-W-1-87	02-Dec-04	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	46	0.002 J	2.2	<200	1.9 J	1.6	60.2	<1.00	--	<1.00	140,000
	OC-GW-OW5-022405	24-Feb-05	--	--	--	--	--	<1.00	10	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW5-082305	22-Aug-05	--	--	--	--	--	<5.00	95	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW5-021706	17-Feb-06	--	--	--	--	--	<1.00	120	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-5-082406	24-Aug-06	--	--	--	--	--	<1.00	27	--	--	--	--	--	--	--	--	--	--
OW8A	OC-GW-OW8-022404	24-Feb-04	--	--	--	--	--	<50.0	210	--	--	--	--	--	--	--	--	--	--
	OC2-OW8-W-0-29	16-Jun-04	<5.00	<5.00	<5.00	20	<5.00	0.087	5,000	0.9	<2.00	<200 R	<0.34 J	64.7 J	73.3 J	<1 R	--	<0.16 J	286,000
	OC-GW-OW8-082404	24-Aug-04	--	--	--	--	--	<100	5,300	--	--	--	--	--	--	--	--	--	--
	OC2-OW8-W-0-91	03-Dec-04	<5.00	0.3 J	0.069 J	8.5 J	<5.00	0.065	3,200	0.68 J	<2.00	<200	1.8 J	17.1	57.8	<1.00	--	<1.00	285,000
	OC1-OW8A-W-0-40	23-Feb-05	--	--	--	--	--	<2.50	7,600 J	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-022305	23-Feb-05	--	--	--	--	--	<1.00	60	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-K-022305	23-Feb-05	--	--	--	--	--	<200	6,300	--	--	--	--	--	--	--	--	--	--
	OC1-OW8A-W-0-48	24-Aug-05	--	--	--	--	--	<50.0	7,600	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8a-082405	24-Aug-05	--	--	--	--	--	<1.00	3,900	--	--	--	<0.01	<0.005	--	<0.002	--	<0.005	170,000
	OC-GW-OW8a-K-082405	24-Aug-05	--	--	--	--	--	<1.00	54	--	--	--	--	--	--	--	--	--	--
	OC1-OW8A-W-5-59	21-Feb-06	--	--	--	--	--	<0.50	4,500	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-022106	21-Feb-06	--	--	--	--	--	<100	480	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8K-022106	21-Feb-06	--	--	--	--	--	<50.0	2,100	--	--	--	--	--	--	--	--	--	--
	OW-8	13-Mar-06	<10.0	<20.0	<10.0	11	<10.0	<200	2,800	<10.0	--	--	<60.0	<5.00	47	<2.00	310	<5.00	--
	OW-GW-OW-8-082406	24-Aug-06	--	--	--	--	--	<1.00	250	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-8K-082406	24-Aug-06	--	--	--	--	--	<1.00	390	--	--	--	--	--	--	--	--	--	--

Groundwater Data for Operable Unit 2 (OU2)
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

			Emergents and Metals: (ug/L)																
Location	Sample Name	Date Sampled	Chromium	Cobalt	Copper	Cyanide (total)	Hexavalent chromium	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silica (SiO2)	Silver	Sodium
		Region 9 PRG:	*Cr (III) 55000 nc*	*730 nc*	*1500 nc*	*730 nc*	*110 nc*	*11000 nc*			*880 nc*		*180 nc*	*730 nc*		*180 nc*		*180 nc*	
		EPA MCL:	*100*		*1300*	*200*			*15*			*2*				*50*			
		CalDPH MCL/NL/AL:	*50*		*1300 AL*	*150*	*50*		*15 AL*			*2*		*100*		*50*			
MW2	OC2-MW2A-W-0-4	02-Mar-04	3.8	<1	<4	<10	4.22	<100	<2	<49000	<2	0.068	9.5	6.2	<5000	4.6	46,000 J	<1	92,000
	OC2-MW2A-W-0-40	22-Jun-04	3.5 J	0.13 J	<25.0	<10.0	3.5	<100	<10.0	48,000	<15.0	0.05 J	--	3.8 J+	<2450 J	2.2 J-	--	<1.00	95,000
	OC2-MW2A-W-0-64	14-Sep-04	3.8	0.08 J	0.62 J+	<10.0	3.1	<100	<1.00	50,800	<0.50	<0.20	--	3 J+	<2910 J	4.2 J	--	<1.00	95,500
	OC2-MW2A-W-0-106	08-Dec-04	3.9	0.18 J	0.41 J	<10.0	3.8	<100	0.08 J	54,900	0.37 J	<0.20	--	1	<4270 J	2.8 J	--	<1.00	110,000
	OC2-MW2-W-0-126	02-Mar-05	--	--	--	--	4.2	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-149	02-Sep-05	--	--	--	--	2.7	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-174	08-Mar-06	--	--	--	--	10.5	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW2-W-0-251	07-Sep-06	--	--	--	--	6.8	--	--	--	--	--	--	--	--	--	--	--	--
MW4A	OC2-MW4A-W-0-5	03-Mar-04	20	<1	<4	<10	23.1	<100	<2	45,000 J	<2	<0.03	5.7	6.1	2,600 J	7.2	38,000 J	<1	96,000
	OC2-MW4A-W-1-6	03-Mar-04	20	<1	<4	<10	22.7	<100	<2	45,000 J	<2	<0.03	5.8	6.3	2,800 J	7.8	38,000 J	<1	95,000
	OC2-MW4A-W-0-36	21-Jun-04	8.5 J	0.08 J	0.63 J	<10.0	13.9	<100	0.12 J	44,300	<2 R	<0.20	--	2.6 J	2,300 J	4.3 J	--	<2 R	95,900
	OC2-MW4A-W-1-37	21-Jun-04	8.5 J	0.08 J	0.54 J	<10.0	13.3	<100	0.11 J	44,300	<2 R	0.02 J	--	2.7 J	2,270 J	4.2 J	--	<2 R	94,400
	OC2-MW4A-W-0-58	13-Sep-04	11	0.13 J	0.77 J	<10.0	11.4	<100	<1.00	45,100	<0.50	<0.20	--	2.9	<2920 J	7.5	--	<1.00	95,700
	OC2-MW4A-W-0-92	06-Dec-04	8.1	0.22 J	0.42 J	<10.0	9.1	<100	0.19 J	48,800	0.73 J	0.03 J	--	1.3	<2850 J	5.5	--	<1.00	131,000
	OC2-MW4A-W-0-116	28-Feb-05	--	--	--	--	7.4	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-1-112	28-Feb-05	--	--	--	--	7.2	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-135	30-Aug-05	--	--	--	--	11.6	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-163	07-Mar-06	--	--	--	--	22.2	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-5-217	29-Aug-06	--	--	--	--	15	--	--	--	--	--	--	--	--	--	--	--	--
MW4B	OC2-MW4B-W-0-7	03-Mar-04	<2	<1	<4	<10	17.2	<100	<2	50,000	<2	<0.03	<1	<2	4,100 J	<2	41,000 J	<1	93,000
	OC2-MW4B-W-0-38	21-Jun-04	5.7 J	0.1 J	0.6 J	<10.0	8.7	<100	<0.09 R	59,200	<2 R	<0.20	--	3.3 J	4,480 J	3.7 J	--	<2 R	100,000
	OC2-MW4B-W-0-59	13-Sep-04	9.3	0.1 J	0.83 J	<10.0	9.4	<100	0.13 J	56,700	<0.68 J	<0.20	--	3.4	<4210 J	8	--	<1.00	93,900
	OC2-MW4B-W-1-60	13-Sep-04	9.2	0.11 J	0.83 J+	<10.0	9.6	<100	<1.00	58,200	<0.62 J	<0.20	--	3.3 J+	<4240 J	8.4	--	<1.00	96,600
	OC2-MW4B-W-0-93	06-Dec-04	8.1	0.26 J	0.5 J	<10.0	9	<100	<1.00	59,000	0.74 J	0.03 J	--	1.1	<4350 J	8	--	<1.00	126,000
	OC2-MW4B-W-1-94	06-Dec-04	8.4	0.28 J	0.6 J	<10.0	8.8	<100	0.16 J	59,000	0.78 J	<0.20	--	1.4	<4260 J	8	--	<1.00	127,000
	OC2-MW4B-W-5-113	28-Feb-05	--	--	--	--	6.7	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-134	30-Aug-05	--	--	--	--	6.9	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-164	07-Mar-06	--	--	--	--	11.7	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-0-215	29-Aug-06	--	--	--	--	11	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4B-W-1-216	29-Aug-06	--	--	--	--	12	--	--	--	--	--	--	--	--	--	--	--	--
MW5	OC2-MW5A-W-0-9	03-Mar-04	18 J	<1	<4	<10	10.1	<100	<2	51,000	<2	<0.03	4.5	6.8	3,300 J	6.7	41,000 J	<1	95,000
	OC2-MW5A-W-0-41	22-Jun-04	7.9 J	0.19 J	<25.0	<10.0	7.9	<100	0.12 J	49,900	<15.0	0.02 J	--	5.1 J	<2950 J	3 J-	--	<1.00	90,400
	OC2-MW5A-W-0-66	14-Sep-04	7.3	0.41 J+	0.57 J+	<10.0	7.9	34.5 J	<1.00	54,500	<0.50	<0.20	--	7.7 J+	<3280 J	5.7	--	<1.00	89,700
	OC2-MW5A-W-0-97	06-Dec-04	9.1	0.6 J	0.46 J	<10.0	9.2	<100	<1.00	53,100	0.54 J	<0.20	--	8.8	<2820 J	3.6 J	--	<1.00	111,000
	OC2-MW5-W-0-117	28-Feb-05	--	--	--	--	9.3	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-5-139	30-Aug-05	--	--	--	--	6.1	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-0-167	07-Mar-06	--	--	--	--	11.6	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-1-168	07-Mar-06	--	--	--	--	11.3	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW5-W-0-218	29-Aug-06	--	--	--	--	8.1	--	--	--	--	--	--	--	--	--	--	--	--
MW14	OC2-MW14-W-0-206	07-Jul-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW14-W-0-263	11-Sep-06	--	--	--	--	4.1	--	--	--	--	--	--	--	--	--	--	--	--
MW15	OC2-MW15-W-0-198	15-Mar-06	--	--	--	--	16.6	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW15-W-1-199	15-Mar-06	--	--	--	--	17.1	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW15-W-0-219	29-Aug-06	--	--	--	--	9.6	--	--	--	--	--	--	--	--	--	--	--	--
MW23C	OC2-MW23C-W-0-195	14-Mar-06	--	--	--	--	6.5	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW23C-W-0-261	11-Sep-06	--	--	--	--	0.52	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW23C-W-1-262	11-Sep-06	--	--	--	--	0.57	--	--	--	--	--	--	--	--	--	--	--	--
OW1A	OC1-OW1-W-0-3	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW1A-W-0-34	17-Jun-04	<0.74 J	1.2 J-	0.87 J	3.4 J	<1.00	2,480	0.16 J	45,300	191 J	<0.20	--	12.4 J	5,280	6.9 J	--	<2 R	125,000
	OC1-OW1-W-0-23	27-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-082704	27-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1k-082704	27-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW1A-W-0-90	08-Dec-04	--	--	--	--	<1.00	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-022505	25-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW1-W-0-47	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW1-02206	22-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-1	13-Mar-06	<10.0	<20.0	<10.0	--	--	1,900	<3.00	--	320	<0.20	<20.0	<20.0	--	<5.00	--	<5.00	--
	OW-GW-OW-1-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW2	OC1-OW2-W-0-1	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW2-W-5-2	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW2-W-0-32	17-Jun-04	<2.5 J	0.12 J-	0.47 J	<10.0	3.4	36.7 J	0.12 J	56,000	0.53 J	0.03 J	--	2.6 J	1,860 J	4 J	--	<2 R	72,300
	OC-GW-OW2-082404	24-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW2-W-0-89	02-Dec-04	3.2	0.36 J	0.57 J	2 J	2.1	<100	0.31 J	54,600	1.1	<0.20	--	1.6	<1760 J	4.4 J	--	<1.00	82,400
	OC-GW-OW2-022405	24-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW2-02206	22-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW-2-082206	22-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW3	OC1-OW3-W-0-4	25-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-022504	25-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW3-W-0-30	17-Jun-04	<2.8 J	0.14 J	1 J	<10.0	4.2	<100	0.27 J	60,400	0.96 J	<0.20	--	3.1	2,490 J	3.6 J	--	<1.00	72,900
	OC2-OW3-W-1-31	17-Jun-04	<2.7 J	0.13 J	0.96 J	<10.0	4.1	42.1 J	0.26 J	56,300	0.93 J	<0.20	--	3.1 J	2,420 J	3.3 J	--	<2 R	68,600
	OC-GW-OW3-082404	24-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW3-W-0-85	01-Dec-04	5.1	2.6	0.41 J	<10.0	3.2	<100	<1.00	57,600	4	<0.20	--	2	<2550 J	5	--	<1.00	83,900
	OC-GW-OW3-022305	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW3-W-0-60	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW3-02106	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-3-082306	23-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW4A	OC-GW-OW4A-022704	27-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-MW4A-W-0-25	15-Jun-04	9.3 J	0.26 J	2.1 J+	<10.0	7.3	284	0.38 J	48,800	2.5 J-	<0.20	--	5.8 J+	2,070 J	4 J	--	<1.00	85,400
	OC-GW-OW4a-082504	25-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4ak-082504	25-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW4A-W-0-81	30-Nov-04	9.2	5	0.76 J	<10.0	8	<100	0.11 J	43,500	1.8	<0.20	--	3.2	<1980 J	2.4 J	--	<1.00	102,000
	OC-GW-OW4A-022505	25-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4a-082505	25-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW4A-02206	22-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-4A-082306	23-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW5	OC-GW-OW5-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW5-W-5-26	16-Jun-04	98.1 J	1.5	6.8 J+	<10.0	3.5	2,290	0.17 J	50,000	25.8 J-	0.03 J	--	109 J+	2,260 J	10.8	--	<2 R	82,700
	OC-GW-OW5-082504	25-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW5-W-0-86	02-Dec-04	8.3	0.64 J	2.3	<10.0	4.6	<100	0.08 J	39,900	9.5	<0.20	--	47.9	<2100 J	3.9 J	--	<1.00	107,000
	OC2-OW5-W-1-87	02-Dec-04	8.4	0.67 J	2.2	<10.0	7.6	41.8 J	0.05 J	40,100	10	<0.20	--	52.9	<2070 J	3.7 J	--	<1.00	107,000
	OC-GW-OW5-022405	24-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW5-082305	22-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW5-021706	17-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-5-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
OW8A	OC-GW-OW8-022404	24-Feb-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW8-W-0-29	16-Jun-04	<1.8 J	1.3 J	0.83 J	<10.0	<1.00	1,980	<0.07 R	100,000	2,490 J-	0.19 J	--	12.7 J	2,480 J	227 J	--	<1 R	97,000
	OC-GW-OW8-082404	24-Aug-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-OW8-W-0-91	03-Dec-04	0.75 J	1.8	0.95 J	<10.0	<1.00	2,620	0.04 J	95,200	4,010	0.07 J	--	5.4	<2710 J	1 J	--	<1.00	120,000
	OC1-OW8A-W-0-40	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-022305	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-K-022305	23-Feb-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW8A-W-0-48	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8a-082405	24-Aug-05	7.4	<0.01	<0.01	--	--	1,200	<0.005	62,000	2,900	--	<0.02	<0.01	2,300	--	--	--	95,000
	OC-GW-OW8a-K-082405	24-Aug-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC1-OW8A-W-5-59	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8-022106	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC-GW-OW8K-022106	21-Feb-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-8	13-Mar-06	<10.0	<20.0	<10.0	--	--	1,300	<3.00	--	3,500	0.22	<20.0	<20.0	--	<5.00	--	<5.00	--
	OW-GW-OW-8-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OW-GW-OW-8K-082406	24-Aug-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Groundwater Data for Operable Unit 2 (OU2)
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Location	Sample Name	Date Sampled	Thallium	Vanadium	Zinc
		Region 9 PRG:	*2.4 nc*	*36 nc*	*11000 nc*
		EPA MCL:	*2*		
		CalDPH MCL/NL/AL:	*2*	*50 NL*	
MW2	OC2-MW2A-W-0-4	02-Mar-04	<2	<20	<10
	OC2-MW2A-W-0-40	22-Jun-04	11.9 J	2	1.9 J
	OC2-MW2A-W-0-64	14-Sep-04	<1.00	4.9	2.3
	OC2-MW2A-W-0-106	08-Dec-04	<1.00	5	0.47 J
	OC2-MW2-W-0-126	02-Mar-05	--	--	--
	OC2-MW2-W-0-149	02-Sep-05	--	--	--
	OC2-MW2-W-0-174	08-Mar-06	--	--	--
	OC2-MW2-W-0-251	07-Sep-06	--	--	--
MW4A	OC2-MW4A-W-0-5	03-Mar-04	<2	<20	<10
	OC2-MW4A-W-1-6	03-Mar-04	<2	<20	<10
	OC2-MW4A-W-0-36	21-Jun-04	<2 R	1.2 J	1.4 J-
	OC2-MW4A-W-1-37	21-Jun-04	<2 R	1.2 J	1.1 J-
	OC2-MW4A-W-0-58	13-Sep-04	<0.08 J	3.9	2.8
	OC2-MW4A-W-0-92	06-Dec-04	<1.00	4.1	1.4 J
	OC2-MW4A-W-0-116	28-Feb-05	--	--	--
	OC2-MW4A-W-1-112	28-Feb-05	--	--	--
	OC2-MW4A-W-0-135	30-Aug-05	--	--	--
	OC2-MW4A-W-0-163	07-Mar-06	--	--	--
	OC2-MW4A-W-5-217	29-Aug-06	--	--	--
MW4B	OC2-MW4B-W-0-7	03-Mar-04	<2	<20	<10
	OC2-MW4B-W-0-38	21-Jun-04	<2 R	1.3 J	1.9 J-
	OC2-MW4B-W-0-59	13-Sep-04	<1.00	4.2	2.3
	OC2-MW4B-W-1-60	13-Sep-04	<1.00	4	1.8 J
	OC2-MW4B-W-0-93	06-Dec-04	<1.00	4	0.65 J
	OC2-MW4B-W-1-94	06-Dec-04	<1.00	4.1	1.7 J
	OC2-MW4B-W-5-113	28-Feb-05	--	--	--
	OC2-MW4B-W-0-134	30-Aug-05	--	--	--
	OC2-MW4B-W-0-164	07-Mar-06	--	--	--
	OC2-MW4B-W-0-215	29-Aug-06	--	--	--
	OC2-MW4B-W-1-216	29-Aug-06	--	--	--
MW5	OC2-MW5A-W-0-9	03-Mar-04	<2	<20	<10
	OC2-MW5A-W-0-41	22-Jun-04	<25.0	1.8 J	1.7 J
	OC2-MW5A-W-0-66	14-Sep-04	<1.00	3.8	2.6 J+
	OC2-MW5A-W-0-97	06-Dec-04	<1.00	4.6	1.3 J
	OC2-MW5-W-0-117	28-Feb-05	--	--	--
	OC2-MW5-W-5-139	30-Aug-05	--	--	--
	OC2-MW5-W-0-167	07-Mar-06	--	--	--
	OC2-MW5-W-1-168	07-Mar-06	--	--	--
	OC2-MW5-W-0-218	29-Aug-06	--	--	--
MW14	OC2-MW14-W-0-206	07-Jul-06	--	--	--
	OC2-MW14-W-0-263	11-Sep-06	--	--	--
MW15	OC2-MW15-W-0-198	15-Mar-06	--	--	--
	OC2-MW15-W-1-199	15-Mar-06	--	--	--
	OC2-MW15-W-0-219	29-Aug-06	--	--	--
MW23C	OC2-MW23C-W-0-195	14-Mar-06	--	--	--
	OC2-MW23C-W-0-261	11-Sep-06	--	--	--
	OC2-MW23C-W-1-262	11-Sep-06	--	--	--
OW1A	OC1-OW1-W-0-3	24-Feb-04	--	--	--
	OC-GW-OW1-022404	24-Feb-04	--	--	--
	OC2-OW1A-W-0-34	17-Jun-04	<2 R	<2 R	15 J-
	OC1-OW1-W-0-23	27-Aug-04	--	--	--
	OC-GW-OW1-082704	27-Aug-04	--	--	--
	OC-GW-OW1k-082704	27-Aug-04	--	--	--
	OC2-OW1A-W-0-90	08-Dec-04	--	--	--
	OC-GW-OW1-022505	25-Feb-05	--	--	--
	OC1-OW1-W-0-47	24-Aug-05	--	--	--
	OC-GW-OW1-082405	24-Aug-05	--	--	--
	OC-GW-OW1-02206	22-Feb-06	--	--	--
	OW-1	13-Mar-06	<5.00	<10.0	<20.0
	OW-GW-OW-1-082406	24-Aug-06	--	--	--
OW2	OC1-OW2-W-0-1	24-Feb-04	--	--	--
	OC1-OW2-W-5-2	24-Feb-04	--	--	--
	OC-GW-OW2-022404	24-Feb-04	--	--	--
	OC2-OW2-W-0-32	17-Jun-04	<2 R	1.4 J	1.9 J-
	OC-GW-OW2-082404	24-Aug-04	--	--	--
	OC2-OW2-W-0-89	02-Dec-04	<1.00	4.9	4.2
	OC-GW-OW2-022405	24-Feb-05	--	--	--
	OC-GW-OW2-082405	24-Aug-05	--	--	--
	OC-GW-OW2-02206	22-Feb-06	--	--	--
	OC-GW-OW-2-082206	22-Aug-06	--	--	--
OW3	OC1-OW3-W-0-4	25-Feb-04	--	--	--
	OC-GW-OW3-022504	25-Feb-04	--	--	--
	OC2-OW3-W-0-30	17-Jun-04	<1.00	1.7 J	4.3 J-
	OC2-OW3-W-1-31	17-Jun-04	<2 R	1.6 J	4 J-
	OC-GW-OW3-082404	24-Aug-04	--	--	--
	OC2-OW3-W-0-85	01-Dec-04	<1.00	4.8	4
	OC-GW-OW3-022305	23-Feb-05	--	--	--
	OC-GW-OW3-082405	24-Aug-05	--	--	--
	OC1-OW3-W-0-60	21-Feb-06	--	--	--
	OC-GW-OW3-02106	21-Feb-06	--	--	--
	OW-GW-OW-3-082306	23-Aug-06	--	--	--
OW4A	OC-GW-OW4A-022704	27-Feb-04	--	--	--
	OC2-MW4A-W-0-25	15-Jun-04	0.1 J	3.5	4.9 J-
	OC-GW-OW4a-082504	25-Aug-04	--	--	--
	OC-GW-OW4ak-082504	25-Aug-04	--	--	--
	OC2-OW4A-W-0-81	30-Nov-04	<1.00	3.9	7.6
	OC-GW-OW4A-022505	25-Feb-05	--	--	--
	OC-GW-OW4a-082505	25-Aug-05	--	--	--
	OC-GW-OW4A-02206	22-Feb-06	--	--	--
	OW-GW-OW-4A-082306	23-Aug-06	--	--	--
OW5	OC-GW-OW5-022404	24-Feb-04	--	--	--
	OC2-OW5-W-5-26	16-Jun-04	<2 R	4	7.5 J-
	OC-GW-OW5-082504	25-Aug-04	--	--	--
	OC2-OW5-W-0-86	02-Dec-04	<1.00	5.1	10.9
	OC2-OW5-W-1-87	02-Dec-04	<1.00	5.1	11.2
	OC-GW-OW5-022405	24-Feb-05	--	--	--
	OC-GW-OW5-082305	22-Aug-05	--	--	--
	OC-GW-OW5-021706	17-Feb-06	--	--	--
	OW-GW-OW-5-082406	24-Aug-06	--	--	--
OW8A	OC-GW-OW8-022404	24-Feb-04	--	--	--
	OC2-OW8-W-0-29	16-Jun-04	<1 R	0.41 J	1.9 J-
	OC-GW-OW8-082404	24-Aug-04	--	--	--
	OC2-OW8-W-0-91	03-Dec-04	<1.00	2	3.9
	OC1-OW8A-W-0-40	23-Feb-05	--	--	--
	OC-GW-OW8-022305	23-Feb-05	--	--	--
	OC-GW-OW8-K-022305	23-Feb-05	--	--	--
	OC1-OW8A-W-0-48	24-Aug-05	--	--	--
	OC-GW-OW8a-082405	24-Aug-05	28	<0.01	<0.02
	OC-GW-OW8a-K-082405	24-Aug-05	--	--	--
	OC1-OW8A-W-5-59	21-Feb-06	--	--	--
	OC-GW-OW8-022106	21-Feb-06	--	--	--
	OC-GW-OW8K-022106	21-Feb-06	--	--	--
	OW-8	13-Mar-06	<5.00	<10.0	<20.0
	OW-GW-OW-8-082406	24-Aug-06	--	--	--
	OW-GW-OW-8K-082406	24-Aug-06	--	--	--

OU2 Background Metals Groundwater Data

Groundwater Background Metals Data for Operable Unit 2 (OU2)
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

			Metals (ug/L)																												
Location	Sample Name	Sample Date	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Cyanide (total)	Dissolved Mercury	Hexavalent chromium	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium	Selenium	Silica (SiO2)	Silver	Sodium	Thallium	Vanadium	Zinc
		Region 9 PRG:	*36000 nc*	*15 nc*	*0.045 ca/ CalEPA 0.0071*	*2600 nc*	*73 nc*		*18 nc*		*Cr (III) 55000 nc*	*730 nc*	*1500 nc*	*730 nc*		*110 nc*	*11000 nc*			*880 nc*		*180 nc*	*730 nc*		*180 nc*		*180 nc*		*2.4 nc*	*36 nc*	*11000 nc*
		EPA MCL:		*6*	*10*	*200*	*4*		*5*		*100*		*1300*	*200*				*15*			*2*				*50*				*2*		
		CalDPH MCL/NL/AL:	*1000*	*6*	*10*	*1000*	*4*		*5*		*50*		*1300 AL*	*150*		*50*		*15 AL*			*2*		*100*		*50*				*2*	*50 NL*	
MW12	OC2-PMW12-0-1	7/6/2006	<1000	0.282 J	2.9	28.1	<0.50	538	<1.00	129,000	1.15	0.367 J	3.38	5.7 J	<0.50	1.29	<1000	<1.00	42,500	170	--	115	6.8	5,790	3.03	36,300	<1.00	92,300	<1.00	3.94	25.1
MW18A	OC2-PMW18A-0-22	7/10/2006	<1000	0.406 J	1.52	32.7	<0.50	386	<1.00	258,000	5.59	0.622	2.57	<10.0	<0.50	6.49	<1000	<1.00	76,300	0.532 J	--	3.26	0.434 J	8,900	27.9	30,300	<1.00	152,000	<1.00	3.99	7.44 J
MW18B	OC2-PMW18B-0-23	7/10/2006	<1000	<0.50	1.3	31.6	<0.50	302	<1.00	282,000	6.1	0.712	1.82	<10.0	<0.50	7.08	<1000	<1.00	94,600	<1.00	--	3.28	0.375 J	6,530	57	30,200	<1.00	127,000	<1.00	4.41	9.01 J
MW18C	OC2-PMW18C-0-24	7/10/2006	<1000	<0.50	1.66	177	<0.50	78	<1.00	67,600	1.01	<0.50	0.652	<10.0	<0.50	1.03	<1000	<1.00	24,300	3.22	--	4.94	<0.50	3,560	23.8	22,600	<1.00	40,400	<1.00	5.1	7.52 J
MW19	OC2-PMW19-0-34	7/12/2006	--	--	--	--	--	--	--	--	--	--	--	--	--	<0.20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	OC2-PMW19-0-37	7/13/2006	<1000	0.382 J	1.56	15.6	<0.50	398	<1.00	188,000	0.36 J	1.94	1.76	<10.0	<0.50	--	<1000	<1.00	57,600	1,100	--	35.3	4.82	6,880	<1.00	25,700	<1.00	159,000	<1.00	1.93	38.5
MW21	OC2-PMW21-0-40	7/12/2006	<1000	<0.50	1.23	36.5	<0.50	293	<1.00	123,000	3.13	0.647	1.42	<10.0	<0.50	2.74	<1000	<1.00	27,800	7.42	--	1.96 J	1.46	4,870	6.98	24,100	<1.00	85,700	<1.00	3.12	13.3
MW22	OC2-PMW22-0-33	7/11/2006	<1000	<0.50	0.831	52	<0.50	373	<1.00	137,000	3.06	0.77	1.01	<10.0	<0.50	2.93	<1000	<1.00	31,800	122	--	2.77	1.55	4,720	8.51	23,400	<1.00	88,700	<1.00	1.7	6.25 J
OW7	OC2-OW7-W-0-28	6/16/2004	<200	<0.33 J	<0.97 J	26 J	<1.00	--	<0.21 J	192,000	4.8 J	0.34 J	1 J	<10.0	--	4.5	36.5 J	0.38 J	61,100	0.48 J-	<0.20	--	6	1,880 J	5.8	--	<1.00	61,700	<1.00	4	4.6 J-
	OC2-OW7-W-5-79	11/30/2004	<200	2	0.91 J	20.7	<1.00	--	<1.00	190,000	4.6	7.9	1.6 J	2.2 J	--	3.2	<100	0.09 J	58,200	2.3	<0.20	--	2.2	<1230 J	4.4 J	--	<1.00	74,800	<1.00	5.3	5.3

Summary Statistics and EPCs for OU2

Summary Statistics and Exposure Point Concentrations for Operable Unit 2 (OU2) Groundwater

Baseline Human Health Risk Assessment

Omega Chemical Superfund Site

Parameter	Chemical Group	ProUCL File #	Number of Detects	Number of Analyses	Frequency of Detects	Percent Detects	Units	Minimum Detected Value	Min Qualifier	Maximum Detected Value	Max Qualifier	Minimum Non-detected DL	Maximum Non-detected DL	Range of Detected Concentrations
1,2,3-Trichloropropane	Emergents	1	7	83	7/83	8	mg/L	0.0000027	J	0.000087		0.000002	0.63	0.00000270 - 0.0000870
1,4-Dioxane	Emergents	2	79	88	79/88	90	mg/L	0.0005	J	26		0.00047	0.001	0.000500 - 26.0
N-Nitrosodimethylamine	Emergents	3	31	50	31/50	62	mg/L	0.0000019	J	0.0009		0.000002	0.01	0.00000190 - 0.000900
Perchlorate	Emergents	4	42	44	42/44	95	mg/L	0.0013	J	0.0056		0.002	0.002	0.00130 - 0.00560
Aluminum	Metal	.	1	25	1/25	4	mg/L	0.331		0.331		0.02	0.2	0.331 - 0.331
Antimony	Metal	5	9	27	9/27	33	mg/L	0.0016	J	0.0019	J	0.002	0.06	0.00160 - 0.00190
Arsenic	Metal	6	26	30	26/30	87	mg/L	0.00064	J-	0.0647	J	0.001	0.005	0.000640 - 0.0647
Barium	Metal	7	28	29	28/29	97	mg/L	0.013	J	0.0733	J	0.002	0.002	0.0130 - 0.0733
Boron	Metal	8	6	6	6/6	100	mg/L	0.29		0.39		NA	NA	0.290 - 0.390
Cadmium	Metal	9	4	28	4/28	14	mg/L	0.00007	J	0.0001	J	0.001	0.005	0.0000700 - 0.000100
Calcium	Metal	10	28	28	28/28	100	mg/L	140		286		NA	NA	140 - 286
Chromium	Metal	11	23	30	23/30	77	mg/L	0.00075	J	0.0981	J	0.002	0.01	0.000750 - 0.0981
Cobalt	Metal	12	23	30	23/30	77	mg/L	0.00008	J	0.005		0.001	0.02	0.0000800 - 0.00500
Copper	Metal	13	21	30	21/30	70	mg/L	0.00041	J	0.0068	J+	0.004	0.025	0.000410 - 0.00680
Cyanide (total)	Metal	14	2	27	2/27	7	mg/L	0.002	J	0.0034	J	0.01	0.01	0.00200 - 0.00340
Hexavalent chromium	Metal	15	45	49	45/49	92	mg/L	0.00057		0.0231		0.001	0.001	0.000570 - 0.0231
Iron	Metal	16	12	30	12/30	40	mg/L	0.0345	J	2.62		0.1	0.1	0.0345 - 2.62
Lead	Metal	17	15	28	15/28	54	mg/L	0.00004	J	0.00038	J	0.001	0.01	0.0000400 - 0.000380
Magnesium	Metal	18	27	28	27/28	96	mg/L	40.1		100		49	49	40.1 - 100
Manganese	Metal	19	18	28	18/28	64	mg/L	0.00037	J	4.01		0.0005	0.015	0.000370 - 4.01
Mercury	Metal	20	11	29	11/29	38	mg/L	0.00002	J	0.00022		0.00003	0.0002	0.0000200 - 0.000220
Molybdenum	Metal	21	3	7	3/7	43	mg/L	0.0045		0.0095		0.001	0.02	0.00450 - 0.00950
Nickel	Metal	22	26	30	26/30	87	mg/L	0.001		0.109	J+	0.002	0.02	0.00100 - 0.109
Potassium	Metal	23	12	28	12/28	43	mg/L	1.86	J	5.28		5	5	1.86 - 5.28
Selenium	Metal	24	26	29	26/29	90	mg/L	0.001	J	0.227	J	0.002	0.005	0.00100 - 0.227
Silica (SiO2)	Metal	25	4	4	4/4	100	mg/L	38	J	46	J	NA	NA	38.0 - 46.0
Sodium	Metal	26	28	28	28/28	100	mg/L	72.3		131		NA	NA	72.3 - 131
Thallium	Metal	27	3	24	3/24	13	mg/L	0.0001	J	0.028		0.001	0.025	0.000100 - 0.0280
Vanadium	Metal	28	22	29	22/29	76	mg/L	0.00041	J	0.0051		0.01	0.02	0.000410 - 0.00510
Zinc	Metal	29	23	30	23/30	77	mg/L	0.00047	J	0.015	J-	0.01	0.02	0.000470 - 0.0150
1,2,4-Trichlorobenzene	SVOC/VOC Combined	.	1	87	1/87	1	mg/L	0.00053	J	0.00053	J	0.0005	1	0.000530 - 0.000530
1,2-Dichlorobenzene	SVOC/VOC Combined	30	8	87	8/87	9	mg/L	0.0002	J	0.028		0.0005	1	0.000200 - 0.0280
1,3-Dichlorobenzene	SVOC/VOC Combined	31	5	87	5/87	6	mg/L	0.0003	J	0.0014		0.0005	1	0.000300 - 0.00140
1,4-Dichlorobenzene	SVOC/VOC Combined	32	4	87	4/87	5	mg/L	0.0006	J	0.0017		0.0005	1	0.000600 - 0.00170
Naphthalene	SVOC/VOC Combined	33	10	79	10/79	13	mg/L	0.00021	J	0.0019	J	0.0005	0.2	0.000210 - 0.00190
1,1-Biphenyl	Semi-Volatile Organics	.	1	27	1/27	4	mg/L	0.0008	J	0.0008	J	0.005	0.005	0.000800 - 0.000800
2-Methylnaphthalene	Semi-Volatile Organics	.	1	29	1/29	3	mg/L	0.0028	J	0.0028	J	0.005	0.01	0.00280 - 0.00280
Acetophenone	Semi-Volatile Organics	34	2	27	2/27	7	mg/L	0.0022	J	0.0069		0.005	0.005	0.00220 - 0.00690
Bis(2-ethylhexyl)phthalate (DEHP)	Semi-Volatile Organics	35	16	29	16/29	55	mg/L	0.00045	J	0.08		0.005	0.01	0.000450 - 0.0800
Caprolactam	Semi-Volatile Organics	36	3	27	3/27	11	mg/L	0.00015	J	0.028		0.005	0.005	0.000150 - 0.0280
Di-n-butyl phthalate	Semi-Volatile Organics	.	2	29	2/29	7	mg/L	0.001	J	0.001	J	0.005	0.01	0.00100 - 0.00100
Dimethyl phthalate	Semi-Volatile Organics	.	1	29	1/29	3	mg/L	0.00068	J	0.00068	J	0.005	0.01	0.000680 - 0.000680
Isophorone	Semi-Volatile Organics	38	2	29	2/29	7	mg/L	0.0022	J	0.0049	J	0.005	0.01	0.00220 - 0.00490
Pentachlorophenol	Semi-Volatile Organics	.	1	29	1/29	3	mg/L	0.0003	J	0.0003	J	0.005	0.02	0.000300 - 0.000300
Phenanthrene	Semi-Volatile Organics	.	1	29	1/29	3	mg/L	0.000069	J	0.000069	J	0.005	0.01	0.0000690 - 0.0000690
Phenol	Semi-Volatile Organics	39	3	29	3/29	10	mg/L	0.0085	J	0.02		0.005	0.01	0.00850 - 0.0200
1,1,1,2-Tetrachloroethane	Volatile Organics	40	6	52	6/52	12	mg/L	0.0014		0.022		0.0005	0.63	0.00140 - 0.0220
1,1,1-Trichloroethane	Volatile Organics	41	61	88	61/88	69	mg/L	0.0002	J	14		0.0005	0.2	0.000200 - 14.0
1,1,2,2-Tetrachloroethane	Volatile Organics	.	1	87	1/87	1	mg/L	0.00067	J	0.00067	J	0.0005	1	0.000670 - 0.000670
1,1,2-Trichloroethane	Volatile Organics	42	35	87	35/87	40	mg/L	0.00012	J	2		0.0005	1	0.000120 - 2.00
1,1-Dichloroethane	Volatile Organics	43	62	88	62/88	70	mg/L	0.00037	J	0.15	J	0.0005	1	0.000370 - 0.150
1,1-Dichloroethene	Volatile Organics	44	88	88	88/88	100	mg/L	0.014		5.1		NA	NA	0.0140 - 5.10
1,2,4-Trimethylbenzene	Volatile Organics	45	3	52	3/52	6	mg/L	0.0042		0.052	J	0.0005	0.63	0.00420 - 0.0520
1,2-Dibromo-3-chloropropane	Volatile Organics	.	1	77	1/77	1	mg/L	0.0055		0.0055		0.0005	1	0.00550 - 0.00550
1,2-Dichloroethane	Volatile Organics	46	59	88	59/88	67	mg/L	0.00027	J	1.3		0.0002	1	0.000270 - 1.30
1,2-Dichloropropane	Volatile Organics	.	1	87	1/87	1	mg/L	0.0016	J	0.0016	J	0.0005	1	0.00160 - 0.00160
1,3,5-Trimethylbenzene	Volatile Organics	47	2	52	2/52	4	mg/L	0.00096	J	0.0032	J	0.0005	0.63	0.000960 - 0.00320
2-Butanone	Volatile Organics	48	4	60	4/60	7	mg/L	0.29		0.77		0.002	13	0.290 - 0.770
2-Chlorotoluene	Volatile Organics	49	5	52	5/52	10	mg/L	0.0002	J	0.0006	J	0.0005	0.63	0.000200 - 0.000600
4-Chlorotoluene	Volatile Organics	.	1	52	1/52	2	mg/L	0.00046	J	0.00046	J	0.0005	0.63	0.000460 - 0.000460
4-Methyl-2-pentanone	Volatile Organics	.	1	45	1/45	2	mg/L	0.078	J	0.078	J	0.004	13	0.0780 - 0.0780
Acetone	Volatile Organics	50	23	88	23/88	26	mg/L	0.011		11		0.002	13	0.0110 - 11.0
Benzene	Volatile Organics	51	44	88	44/88	50	mg/L	0.00014	J	0.18	J	0.0005	0.63	0.000140 - 0.180
Bromochloromethane	Volatile Organics	.	1	87	1/87	1	mg/L	0.012	J	0.012	J	0.0005	1	0.0120 - 0.0120
Bromodichloromethane	Volatile Organics	52	2	87	2/87	2	mg/L	0.0004	J	0.001		0.0005	1	0.000400 - 0.00100
Bromoform	Volatile Organics	.	1	87	1/87	1	mg/L	0.0028		0.0028		0.0005	1.3	0.00280 - 0.00280
Bromomethane	Volatile Organics	53	2	86	2/86	2	mg/L	0.0056	J	0.18	J	0.0005	1.3	0.00560 - 0.180
Carbon disulfide	Volatile Organics	.	1	43	1/43	2	mg/L	0.24	J	0.24	J	0.0005	1	0.240 - 0.240
Carbon tetrachloride	Volatile Organics	54	16	88	16/88	18	mg/L	0.00014	J	0.001		0.0002	1	0.000140 - 0.00100
Chlorobenzene	Volatile Organics	55	9	87	9/87	10	mg/L	0.002		0.5	J	0.0005	1	0.00200 - 0.500
Chloroethane	Volatile Organics	.	1	86	1/86	1	mg/L	0.0002	J	0.0002	J	0.0005	1.3	0.000200 - 0.000200
Chloroform	Volatile Organics	56	85	88	85/88	97	mg/L	0.0029	J	2.8		0.02	0.63	0.00290 - 2.80
Chloromethane	Volatile Organics	57	10	86	10/86	12	mg/L	0.0004	J	0.0046	J	0.0005	1.3	0.000400 - 0.00460
Cyclohexane	Volatile Organics	.	1	35	1/35	3	mg/L	0.00063		0.00063		0.0005	1	0.000630 - 0.000630
Dibromochloromethane	Volatile Organics	58	4	87	4/87	5	mg/L	0.00054	J	0.016		0.0005	1	0.000540 - 0.0160
Dichlorodifluoromethane	Volatile Organics	59	34	87	34/87	39	mg/L	0.0003	J	0.0047		0.0005	1.3	0.000300 - 0.00470
Dichlorofluoromethane	Volatile Organics	60	6	6	6/6	100	mg/L	0.0016	J	0.0097	J	NA	NA	0.00160 - 0.00970
Ethylbenzene	Volatile Organics	61	7	87	7/87	8	mg/L	0.000094	J	0.015	J	0.0005	1	0.0000940 - 0.0150
Freon 11	Volatile Organics	62	83	88	83/88	94	mg/L	0.007		1		0.2	1.3	0.00700 - 1.00
Freon 113	Volatile Organics	63	83	88	83/88	94	mg/L	0.011		2.8		1	6.3	0.0110 - 2.80
Isopropylbenzene	Volatile Organics	64	7	87	7/87	8	mg/L	0.00018	J	0.0024		0.0005	1	0.000180 - 0.00240
Methyl acetate	Volatile Organics	.	1	35	1/35	3	mg/L	1.3		1.3		0.0005	1	1.30 - 1.30
Methyl tert-butyl ether (MTBE)	Volatile Organics	65	45	88	45/88	51	mg/L	0.0003	J	0.034	J	0.0005	1	0.000300 - 0.0340
Methylcyclohexane	Volatile Organics	.	1	35	1/35	3	mg/L	0.00085		0.00085		0.0005	1	0.000850 - 0.000850
Methylene chloride	Volatile Organics	66	25	88	25/88	28	mg/L	0.0003	J	11		0.00017	13	0.000300 - 11.0
Tetrachloroethene	Volatile Organics	67	88	88	88/88	100	mg/L	0.012		210	J	NA	NA	0.0120 - 210
Tetrahydrofuran	Volatile Organics	.	2	2	2/2	100	mg/L	0.56		0.65		NA	NA	0.560 - 0.650
Toluene	Volatile Organics	68	18	87	18/87	21	mg/L	0.00014	J	1.3		0.0005	0.63	0.000140 - 1.30
Trichloroethene (TCE)	Volatile Organics	69	88	88	88/88	100	mg/L	0.0084		10		NA	NA	0.00840 - 10.0
Vinyl chloride	Volatile Organics	70	4	87	4/87	5	mg/L	0.00064		0.0011	J	0.0002	1	0.000640 - 0.00110
Xylene, m + p	Volatile Organics	71	6	52	6/52	12	mg/L	0.0003	J	0.13	J	0.0005	0.63	0.000300 - 0.130
Xylene, o	Volatile Organics	72	9	52	9/52	17	mg/L	0.00025	J	0.081		0.0005	0.63	0.000250 - 0.0810
Xylenes (total)	Volatile Organics	73	2	35	2/35	6	mg/L	0.0015		0.075		0.0005	1	0.00150 - 0.0750
cis-1,2-Dichloroethene	Volatile Organics	74	54	88	54/88	61	mg/L	0.0004	J	0.048		0.0005	1	0.000400 - 0.0480
n-Propylbenzene	Volatile Organics	75	5	52	5/52	10	mg/L	0.00035	J	0.0012	J	0.0005	0.63	0.000350 - 0.00120
p-Isopropyltoluene	Volatile Organics	76	5	52	5/52	10	mg/L	0.00029	J	0.00086	J	0.0005	0.63	0.000290 - 0.000860
sec-Butylbenzene	Volatile Organics	77	4	52	4/52	8	mg/L	0.00026	J	0.00039	J	0.0005	0.63	0.000260 - 0.000390
trans-1,2-Dichloroethene	Volatile Organics	78	50	87	50/87	57	mg/L	0.00025	J	0.13	J	0.0005	1	0.000250 - 0.130

Parameter	Range of Nondetect Concentrations (1/2 DL)	Range of Detection Limits for Nondetects	Location of Maximum Detected Concentration	Depth of Maximum Detected Concentration	Qualifier of Maximum Detected Concentration	Arithmetic Mean Value	Standard Deviation	Exposure Point Concentration	EPC Basis	Exposure Point Concentration (may be Max)	EPC Basis (may be Max)
1,2,3-Trichloropropane	0.00000100 - 0.315	0.00000200 - 0.630	OW8A	.		0.0077	0.0379	0.0000136	95% KM (BCA) UCL	0.0000136	95% KM (BCA) UCL
1,4-Dioxane	0.000235 - 0.000500	0.000470 - 0.00100	OW1A	.		1.21	3.53	3.56	97.5% KM (Chebyshev) UCL	3.56	97.5% KM (Chebyshev) UCL
N-Nitrosodimethylamine	0.00000100 - 0.00500	0.00000200 - 0.0100	OW8A	.		0.00024	0.000994	0.000189	97.5% KM (Chebyshev) UCL	0.000189	97.5% KM (Chebyshev) UCL
Perchlorate	0.00100 - 0.00100	0.00200 - 0.00200	OW5	.		0.00298	0.00102	0.00324	95% KM (BCA) UCL	0.00324	95% KM (BCA) UCL
Aluminum	0.0100 - 0.100	0.0200 - 0.200	OW5	.		0.0948	0.0595	0.147	Too Few Unique Detected Values	0.147	Too Few Unique Detected Values
Antimony	0.00100 - 0.0300	0.00200 - 0.0600	MW5	.	J	0.00571	0.0104	0.00186	95% KM (t) UCL	0.00186	95% KM (t) UCL
Arsenic	0.000500 - 0.00250	0.00100 - 0.00500	OW8A	.	J	0.00413	0.0118	0.0135	95% KM (Chebyshev) UCL	0.0135	95% KM (Chebyshev) UCL
Barium	0.00100 - 0.00100	0.00200 - 0.00200	OW8A	.	J	0.0454	0.0173	0.051	95% KM (t) UCL	0.051	95% KM (t) UCL
Boron	NA - NA	NA - NA	MW2	.		0.345	0.0378	0.376	95% Student's-t UCL	0.376	95% Student's-t UCL
Cadmium	0.000500 - 0.00250	0.00100 - 0.00500	OW5	.	J	0.000798	0.00075	0.000096	95% KM (t) UCL	0.000096	95% KM (t) UCL
Calcium	NA - NA	NA - NA	OW8A	.		189	36.3	200	95% Approximate Gamma UCL	200	95% Approximate Gamma UCL
Chromium	0.00100 - 0.00500	0.00200 - 0.0100	OW5	.	J	0.00949	0.0174	0.0166	95% KM (BCA) UCL	0.0166	95% KM (BCA) UCL
Cobalt	0.000500 - 0.0100	0.00100 - 0.0200	OW4A	.		0.00148	0.00264	0.00197	97.5% KM (Chebyshev) UCL	0.00197	97.5% KM (Chebyshev) UCL
Copper	0.00200 - 0.0125	0.00400 - 0.0250	OW5	.	J+	0.00237	0.00322	0.00159	95% KM (BCA) UCL	0.00159	95% KM (BCA) UCL
Cyanide (total)	0.00500 - 0.00500	0.0100 - 0.0100	OW1A	.	J	0.00483	0.000644	0.00389	95% KM (t) UCL	0.0034	Maximum Result
Hexavalent chromium	0.000500 - 0.000500	0.00100 - 0.00100	MW4A	.		0.00783	0.00522	0.00929	95% KM (BCA) UCL	0.00929	95% KM (BCA) UCL
Iron	0.0500 - 0.0500	0.100 - 0.100	OW8A	.		0.504	0.86	0.772	95% KM (t) UCL	0.772	95% KM (t) UCL
Lead	0.000500 - 0.00500	0.00100 - 0.0100	OW4A	.	J	0.000694	0.00102	0.000203	95% KM (t) UCL	0.000203	95% KM (t) UCL
Magnesium	24.5 - 24.5	49.0 - 49.0	OW8A	.		53.9	14.5	65.7	95% KM (Chebyshev) UCL	65.7	95% KM (Chebyshev) UCL
Manganese	0.000250 - 0.00750	0.000500 - 0.0150	OW8A	.		0.481	1.16	2.69	99% KM (Chebyshev) UCL	2.69	99% KM (Chebyshev) UCL
Mercury	0.0000150 - 0.000100	0.0000300 - 0.000200	OW8A	.		0.0000794	0.0000495	0.0000759	95% KM (t) UCL	0.0000759	95% KM (t) UCL
Molybdenum	0.000500 - 0.0100	0.00100 - 0.0200	MW2	.		0.00719	0.00372	0.00851	95% KM (t) UCL	0.00851	95% KM (t) UCL
Nickel	0.00100 - 0.0100	0.00200 - 0.0200	OW5	.	J+	0.01	0.0209	0.0336	97.5% KM (Chebyshev) UCL	0.0336	97.5% KM (Chebyshev) UCL
Potassium	2.50 - 2.50	5.00 - 5.00	OW1A	.		2.7	0.733	3.3	95% KM (t) UCL	3.3	95% KM (t) UCL
Selenium	0.00100 - 0.00250	0.00200 - 0.00500	OW8A	.	J	0.0123	0.0414	0.0459	95% KM (Chebyshev) UCL	0.0459	95% KM (Chebyshev) UCL
Silica (SiO2)	NA - NA	NA - NA	MW2	.	J	41.5	3.32	45.4	95% Student's-t UCL	45.4	95% Student's-t UCL
Sodium	NA - NA	NA - NA	MW4A	.		97.8	14.8	103	95% Student's-t UCL	103	95% Student's-t UCL
Thallium	0.000500 - 0.0125	0.00100 - 0.0250	OW8A	.		0.00285	0.00628	0.00435	95% KM (t) UCL	0.00435	95% KM (t) UCL
Vanadium	0.00500 - 0.0100	0.0100 - 0.0200	OW5	.		0.0044	0.00268	0.0038	95% KM (BCA) UCL	0.0038	95% KM (BCA) UCL
Zinc	0.00500 - 0.0100	0.0100 - 0.0200	OW1A	.	J-	0.00461	0.00358	0.00495	95% KM (BCA) UCL	0.00495	95% KM (BCA) UCL
1,2,4-Trichlorobenzene	0.000250 - 0.500	0.000500 - 1.00	OW8A	.	J	0.0158	0.0759	0.0513	Too Few Unique Detected Values	0.00053	Maximum Result
1,2-Dichlorobenzene	0.000250 - 0.500	0.000500 - 1.00	OW8A	.		0.0199	0.0787	0.0018	95% KM (t) UCL	0.0018	95% KM (t) UCL
1,3-Dichlorobenzene	0.000250 - 0.500	0.000500 - 1.00	OW8A	.		0.0184	0.0783	0.000424	95% KM (t) UCL	0.000424	95% KM (t) UCL
1,4-Dichlorobenzene	0.000250 - 0.500	0.000500 - 1.00	OW1A	.		0.0196	0.0788	0.000709	95% KM (t) UCL	0.000709	95% KM (t) UCL
Naphthalene	0.000250 - 0.100	0.000500 - 0.200	OW4A	.	J	0.00441	0.0136	0.000557	95% KM (t) UCL	0.000557	95% KM (t) UCL
1,1-Biphenyl	0.00250 - 0.00250	0.00500 - 0.00500	OW4A	.	J	0.00244	0.000327	0.00271	Too Few Unique Detected Values	0.0008	Maximum Result
2-Methylnaphthalene	0.00250 - 0.00500	0.00500 - 0.0100	OW4A	.	J	0.00268	0.000644	0.0032	Too Few Unique Detected Values	0.0028	Maximum Result
Acetophenone	0.00250 - 0.00250	0.00500 - 0.00500	OW8A	.		0.00265	0.000851	0.00279	95% KM (t) UCL	0.00279	95% KM (t) UCL
Bis(2-ethylhexyl)phthalate (DEHP)	0.00250 - 0.00500	0.00500 - 0.0100	MW5	.		0.00624	0.0146	0.0115	95% KM (BCA) UCL	0.0115	95% KM (BCA) UCL
Caprolactam	0.00250 - 0.00250	0.00500 - 0.00500	OW1A	.		0.00367	0.00515	0.00382	95% KM (t) UCL	0.00382	95% KM (t) UCL
Di-n-butyl phthalate	0.00250 - 0.00500	0.00500 - 0.0100	MW5	.	J	0.00257	0.000776	0.0032	Too Few Unique Detected Values	0.001	Maximum Result
Dimethyl phthalate	0.00250 - 0.00500	0.00500 - 0.0100	OW8A	.	J	0.00261	0.000743	0.00321	Too Few Unique Detected Values	0.00068	Maximum Result
Isophorone	0.00250 - 0.00500	0.00500 - 0.0100	OW8A	.	J	0.00274	0.00077	0.00585	95% KM (t) UCL	0.0049	Maximum Result
Pentachlorophenol	0.00250 - 0.0100	0.00500 - 0.0200	OW8A	.	J	0.00294	0.002	0.00456	Too Few Unique Detected Values	0.0003	Maximum Result
Phenanthrene	0.00250 - 0.00500	0.00500 - 0.0100	OW8A	.	J	0.00259	0.000806	0.00324	Too Few Unique Detected Values	0.000069	Maximum Result
Phenol	0.00250 - 0.00500	0.00500 - 0.0100	OW8A	.		0.00369	0.00368	0.00981	95% KM (t) UCL	0.00981	95% KM (t) UCL
1,1,1,2-Tetrachloroethane	0.000250 - 0.315	0.000500 - 0.630	OW1A	.		0.0172	0.0539	0.00359	95% KM (t) UCL	0.00359	95% KM (t) UCL
1,1,1-Trichloroethane	0.000250 - 0.100	0.000500 - 0.200	OW1A	.		0.781	2.54	2.47	97.5% KM (Chebyshev) UCL	2.47	97.5% KM (Chebyshev) UCL
1,1,2,2-Tetrachloroethane	0.000250 - 0.500	0.000500 - 1.00	OW1A	.	J	0.0205	0.0828	0.0592	Too Few Unique Detected Values	0.00067	Maximum Result
1,1,2-Trichloroethane	0.000250 - 0.500	0.000500 - 1.00	OW1A	.		0.0452	0.223	0.179	97.5% KM (Chebyshev) UCL	0.179	97.5% KM (Chebyshev) UCL
1,1-Dichloroethane	0.000250 - 0.500	0.000500 - 1.00	OW8A	.	J	0.0337	0.0875	0.0378	97.5% KM (Chebyshev) UCL	0.0378	97.5% KM (Chebyshev) UCL
1,1-Dichloroethene	NA - NA	NA - NA	OW1A	.		0.896	0.766	1.04	95% Approximate Gamma UCL	1.04	95% Approximate Gamma UCL
1,2,4-Trimethylbenzene	0.000250 - 0.315	0.000500 - 0.630	OW8A	.	J	0.0142	0.0476	0.00753	95% KM (t) UCL	0.00753	95% KM (t) UCL
1,2-Dibromo-3-chloropropane	0.000250 - 0.500	0.000500 - 1.00	OW4A	.		0.0273	0.0914	0.0727	Too Few Unique Detected Values	0.0055	Maximum Result
1,2-Dichloroethane	0.000100 - 0.500	0.000200 - 1.00	OW8A	.		0.0975	0.25	0.245	97.5% KM (Chebyshev) UCL	0.245	97.5% KM (Chebyshev) UCL
1,2-Dichloropropane	0.000250 - 0.500	0.000500 - 1.00	OW4A	.	J	0.0205	0.0828	0.0592	Too Few Unique Detected Values	0.0016	Maximum Result
1,3,5-Trimethylbenzene	0.000250 - 0.315	0.000500 - 0.630	OW8A	.	J	0.0148	0.0489	0.00117	95% KM (t) UCL	0.00117	95% KM (t) UCL
2-Butanone	0.00100 - 6.50	0.00200 - 13.0	OW8A	.		0.367	1.23	0.327	95% KM (t) UCL	0.327	95% KM (t) UCL
2-Chlorotoluene	0.000250 - 0.315	0.000500 - 0.630	OW1A	.	J	0.0123	0.0474	0.00045	95% KM (t) UCL	0.00045	95% KM (t) UCL
4-Chlorotoluene	0.000250 - 0.315	0.000500 - 0.630	OW1A	.	J	0.0123	0.0474	0.041	Too Few Unique Detected Values	0.00046	Maximum Result
4-Methyl-2-pentanone	0.00200 - 6.50	0.00400 - 13.0	OW8A	.	J	0.445	1.41	1.36	Too Few Unique Detected Values	0.078	Maximum Result
Acetone	0.00100 - 6.50	0.00200 - 13.0	OW8A	.		0.817	2.22	2.01	97.5% KM (Chebyshev) UCL	2.01	97.5% KM (Chebyshev) UCL
Benzene	0.000250 - 0.315	0.000500 - 0.630	OW1A	.	J	0.0134	0.0421	0.0192	97.5% KM (Chebyshev) UCL	0.0192	97.5% KM (Chebyshev) UCL
Bromochloromethane	0.000250 - 0.500	0.000500 - 1.00	OW8A	.	J	0.0206	0.0828	0.0593	Too Few Unique Detected Values	0.012	Maximum Result
Bromodichloromethane	0.000250 - 0.500	0.000500 - 1.00	OW5	.		0.0205	0.0828	0.000442	95% KM (t) UCL	0.000442	95% KM (t) UCL
Bromoform	0.000250 - 0.650	0.000500 - 1.30	OW3A	.		0.0255	0.104	0.0739	Too Few Unique Detected Values	0.0028	Maximum Result
Bromomethane	0.000250 - 0.650	0.000500 - 1.30	OW1A	.	J	0.0221	0.092	0.0264	97.5% KM (Chebyshev) UCL	0.0264	97.5% KM (Chebyshev) UCL
Carbon disulfide	0.000250 - 0.500	0.000500 - 1.00	OW1A	.	J	0.0303	0.0952	0.0936	Too Few Unique Detected Values	0.0936	Too Few Unique Detected Values
Carbon tetrachloride	0.000100 - 0.500	0.000200 - 1.00	OW1A	.		0.019	0.0819	0.000314	95% KM (t) UCL	0.000314	95% KM (t) UCL
Chlorobenzene	0.000250 - 0.500	0.000500 - 1.00	OW1A	.	J	0.0244	0.0852	0.0351	95% KM (Chebyshev) UCL	0.0351	95% KM (Chebyshev) UCL
Chloroethane	0.000250 - 0.650	0.000500 - 1.30	OW1A	.	J	0.0258	0.104	0.0747	Too Few Unique Detected Values	0.0002	Maximum Result
Chloroform	0.0100 - 0.315	0.0200 - 0.630	OW8A	.		0.243	0.515	0.582	97.5% KM (Chebyshev) UCL	0.582	97.5% KM (Chebyshev) UCL
Chloromethane	0.000250 - 0.650	0.000500 - 1.30	MW4A	.	J	0.0258	0.104	0.000972	95% KM (t) UCL	0.000972	95% KM (t) UCL
Cyclohexane	0.000250 - 0.500	0.000500 - 1.00	OW4A	.		0.0326	0.117	0.119	Too Few Unique Detected Values	0.00063	Maximum Result
Dibromochloromethane	0.000250 - 0.500	0.000500 - 1.00	OW5	.		0.0207	0.0828	0.00119	95% KM (t) UCL	0.00119	95% KM (t) UCL
Dichlorodifluoromethane	0.000250 - 0.650	0.000500 - 1.30	MW15	.		0.0416	0.127	0.00156	95% KM (t) UCL	0.00156	95% KM (t) UCL
Dichlorofluoromethane	NA - NA	NA - NA	MW2	.	J	0.00568	0.0035	0.00857	95% Student's-t UCL	0.00857	95% Student's-t UCL
Ethylbenzene	0.000250 - 0.500	0.000500 - 1.00	OW8A	.	J	0.0249	0.0852	0.00116	95% KM (t) UCL	0.00116	95% KM (t) UCL
Freon 11	0.100 - 0.650	0.200 - 1.30	OW2	.		0.272	0.207	0.358	95% KM (Chebyshev) UCL	0.358	95% KM (Chebyshev) UCL
Freon 113	0.500 - 3.15	1.00 - 6.30	OW8A	.		0.745	0.653	0.992	95% KM (Chebyshev) UCL	0.992	95% KM (Chebyshev) UCL
Isopropylbenzene	0.000250 - 0.500	0.000500 - 1.00	OW1A	.		0.0243	0.0853	0.00053	95% KM (t) UCL	0.00053	95% KM (t) UCL
Methyl acetate	0.000250 - 0.500	0.000500 - 1.00	OW8A	.		0.0683	0.244	0.248	Too Few Unique Detected Values	0.248	Too Few Unique Detected Values
Methyl tert-butyl ether (MTBE)	0.000250 - 0.500	0.000500 - 1.00	MW4B	.	J	0.0239	0.0823	0.00468	95% KM (BCA) UCL	0.00468	95% KM (BCA) UCL
Methylcyclohexane	0.000250 - 0.500	0.000500 - 1.00	OW4A	.		0.0326	0.117	0.119	Too Few Unique Detected Values	0.00085	Maximum Result
Methylene chloride	0.0000850 - 6.50	0.000170 - 13.0	OW8A	.		0.691	2.05	1.93	97.5% KM (Chebyshev) UCL	1.93	97.5% KM (Chebyshev) UCL
Tetrachloroethene	NA - NA	NA - NA	OW1A	.	J	18.2	44.1	65	99% Chebyshev (Mean, Sd) UCL	65	99% Chebyshev (Mean, Sd) UCL
Tetrahydrofuran	NA - NA	NA - NA	OW8A	.		0.605	0.0636	NA	Fewer Than Four Samples	0.65	Maximum Result
Toluene	0.000250 - 0.315	0.000500 - 0.630	OW8A	.		0.0499	0.167	0.0714	95% KM (t) UCL	0.0714	95% KM (t) UCL
Trichloroethene (TCE)	NA - NA	NA - NA	OW1A	.		0.764	1.35	1.32	95% H-UCL	1.32	95% H-UCL
Vinyl chloride	0.000100 - 0.500	0.000200 - 1.00	OW8A	.	J	0.0196	0.0824	0.00068	95% KM (t) UCL	0.00068	95% KM (t) UCL
Xylene, m + p	0.000250 - 0.315	0.000500 - 0.630	OW8A	.	J	0.0174	0.0505	0.0101	95% KM (t) UCL	0.0101	95% KM (t) UCL
Xylene, o	0.000250 - 0.315	0.000500 - 0.630	OW8A	.		0.019	0.0546	0.00812	95% KM (t) UCL	0.00812	95% KM (t) UCL
Xylenes (total)	0.000250 - 0.500	0.000500 - 1.00	OW8A	.		0.0341	0.117	0.0356	99% KM (Chebyshev) UCL	0.0356	99% KM (Chebyshev) UCL
cis-1,2-Dichloroethene	0.000250 - 0.500	0.000500 - 1.00	OW5	.		0.03	0.0838	0.0144	95% KM (Chebyshev) UCL	0.0144	95% KM (Chebyshev) UCL
n-Propylbenzene	0.000250 - 0.315	0.000500 - 0.630	OW8A	.	J	0.0186	0.0552	0.000517	95% KM (t) UCL	0.000517	95% KM (t) UCL
p-Isopropyltoluene	0.000250 - 0.315	0.000500 - 0.630	OW8A	.	J	0.0167	0.054	0.000478	95% KM (t) UCL	0.000478	95% KM (t) UCL
sec-Butylbenzene	0.000250 - 0.315	0.000500 - 0.630	OW8A	.	J	0.0128	0.0474	0.000357	95% KM (t) UCL	0.000357	95% KM (t) UCL
trans-1,2-Dichloroethene	0.000250 - 0.500	0.000500 - 1.00	OW8A	.	J	0.0308	0.0869	0.0308	97.5% KM (Chebyshev) UCL	0.0308	97.5% KM (Chebyshev) UCL

Note: When the EPC Basis reads "Two or Fewer Unique Detected Values", a Chebychev UCL was calculated using a proxy value of 1/2 the detetection limit for "ND" samples.

ProUCL Statistical Software Output Files for OU2 Groundwater Data

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_1 1,2,3-Trichloropropane

General Statistics			
Number of Valid Samples	83	Number of Detected Data	7
Number of Unique Samples	7	Number of Non-Detect Data	76
		Percent Non-Detects	91.57%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0027	Minimum Detected	-5.915
Maximum Detected	0.087	Maximum Detected	-2.442
Mean of Detected	0.0259	Mean of Detected	-4.543
SD of Detected	0.035	SD of Detected	1.432
Minimum Non-Detect	0.002	Minimum Non-Detect	-6.215
Maximum Non-Detect	630	Maximum Non-Detect	6.446
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	83
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.713	Lilliefors Test Statistic	0.825
5% Lilliefors Critical Value	0.803	5% Lilliefors Critical Value	0.803
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	7.699	Mean	-2.855
SD	37.87	SD	3.443
95% DL/2 (t) UCL	14.61	95% H-Stat (DL/2) UCL	318.8
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-7.228
		SD in Log Scale	1.822
		Mean in Original Scale	0.00393
		SD in Original Scale	0.0121
		95% Percentile Bootstrap UCL	0.00646
		95% BCA Bootstrap UCL	0.00732
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.485	Data appear Lognormal at 5% Significance Level	
Theta Star	0.0534		
nu star	6.789		
A-D Test Statistic	0.797	**Nonparametric Statistics**	
5% A-D Critical Value	0.74	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.74	Mean	0.0068
5% K-S Critical Value	0.324	SD	0.0158
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.00263
		95% KM (t) UCL	0.0112
Assuming Gamma Distribution		95% KM (z) UCL	0.0111
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.0104
Minimum	0	95% KM (bootstrap t) UCL	0.0328
Maximum	0.356	95% KM (BCA) UCL	0.0136
Mean	0.0947	95% KM (Percentile Bootstrap) UCL	0.0123
Median	0.0682	95% KM (Chebyshev) UCL	0.0183
SD	0.0965	97.5% KM (Chebyshev) UCL	0.0232
k star	0.234	99% KM (Chebyshev) UCL	0.033
Theta star	0.405		
Nu star	38.78	**Potential UCLs to Use**	
AppChi2	25.52	95% KM (BCA) UCL	0.0136
95% Gamma Approximate UCL	0.144		
95% Adjusted Gamma UCL	0.145		

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_2 1,4-Dioxane (p-dioxane)

General Statistics

Number of Valid Samples	88	Number of Detected Data		79
Number of Unique Samples	68	Number of Non-Detect Data		9
		Percent Non-Detects	10.23%	

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0005	Minimum Detected	-7.601
Maximum Detected	26	Maximum Detected	3.258
Mean of Detected	1.345	Mean of Detected	-2.96
SD of Detected	3.708	SD of Detected	2.688
Minimum Non-Detect	0.00047	Minimum Non-Detect	-7.663
Maximum Non-Detect	0.001	Maximum Non-Detect	-6.908

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	12
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	76
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	13.64%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.418	Lilliefors Test Statistic	0.143
5% Lilliefors Critical Value	0.0997	5% Lilliefors Critical Value	0.0997
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	1.208	Mean	-3.475
SD	3.535	SD	2.975
95% DL/2 (t) UCL	1.834	95% H-Stat (DL/2) UCL	11.45
Maximum Likelihood Estimate(MLE) Method		Log ROS Method	
Mean	0.827	Mean in Log Scale	-3.563
SD	3.852	SD in Log Scale	3.126
95% MLE (t) UCL	1.51	Mean in Original Scale	1.208
95% MLE (Tiku) UCL	1.468	SD in Original Scale	3.535
		95% Percentile Bootstrap UCL	1.855
		95% BCA Bootstrap UCL	2.135

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	0.222	Data do not follow a Discernable Distribution (0.05)
Theta Star	6.054	
nu star	35.12	
A-D Test Statistic	7.958	
5% A-D Critical Value	0.9	
K-S Test Statistic	0.9	
5% K-S Critical Value	0.111	
Data not Gamma Distributed at 5% Significance Level		

		Nonparametric Statistics	
Assuming Gamma Distribution		Kaplan-Meier (KM) Method	
Gamma ROS Statistics using Extrapolated Data		Mean	1.208
Minimum	0	SD	3.515
Maximum	26	SE of Mean	0.377
Mean	1.208	95% KM (t) UCL	1.835
Median	0.026	95% KM (z) UCL	1.828
SD	3.535	95% KM (jackknife) UCL	1.834
k star	0.156	95% KM (bootstrap t) UCL	2.282
Theta star	7.719	95% KM (BCA) UCL	1.946
Nu star	27.54	95% KM (Percentile Bootstrap) UCL	1.89
AppChi2	16.57	95% KM (Chebyshev) UCL	2.851
95% Gamma Approximate UCL	2.007	97.5% KM (Chebyshev) UCL	3.563
95% Adjusted Gamma UCL	2.025	99% KM (Chebyshev) UCL	4.96
		Potential UCLs to Use	
		97.5% KM (Chebyshev) UCL	3.563

Note: DL/2 is not a recommended method.

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_3 N-Nitrosodimethylamine

General Statistics

Number of Valid Samples	50	Number of Detected Data	31
Number of Unique Samples	25	Number of Non-Detect Data	19
		Percent Non-Detects	38.00%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0019	Minimum Detected	-6.266
Maximum Detected	0.9	Maximum Detected	-0.105
Mean of Detected	0.0636	Mean of Detected	-4.925
SD of Detected	0.2	SD of Detected	1.553
Minimum Non-Detect	0.002	Minimum Non-Detect	-6.215
Maximum Non-Detect	10	Maximum Non-Detect	2.303

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	50
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.347	Shapiro Wilk Test Statistic	0.693
5% Shapiro Wilk Critical Value	0.929	5% Shapiro Wilk Critical Value	0.929
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.24	Mean	-5.338
SD	0.994	SD	2.1
95% DL/2 (t) UCL	0.476	95% H-Stat (DL/2) UCL	0.187
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-5.828
		SD in Log Scale	1.789
		Mean in Original Scale	0.0399
		SD in Original Scale	0.16
		95% Percentile Bootstrap UCL	0.0807
		95% BCA Bootstrap UCL	0.102
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.306	Data do not follow a Discernable Distribution (0.05)	
Theta Star	0.208		
nu star	18.98		
A-D Test Statistic	6.828	**Nonparametric Statistics**	
5% A-D Critical Value	0.851	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.851	Mean	0.0418
5% K-S Critical Value	0.171	SD	0.161
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.0236
		95% KM (t) UCL	0.0814
Assuming Gamma Distribution		95% KM (z) UCL	0.0806
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.0812
Minimum	0	95% KM (bootstrap t) UCL	0.211
Maximum	0.9	95% KM (BCA) UCL	0.0794
Mean	0.0507	95% KM (Percentile Bootstrap) UCL	0.0853
Median	0.004	95% KM (Chebyshev) UCL	0.145
SD	0.171	97.5% KM (Chebyshev) UCL	0.189
k star	0.132	99% KM (Chebyshev) UCL	0.277
Theta star	0.384		
Nu star	13.23	**Potential UCLs to Use**	
AppChi2	6.046	97.5% KM (Chebyshev) UCL	0.189
95% Gamma Approximate UCL	0.111		
95% Adjusted Gamma UCL	0.114		

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_4 Perchlorate

General Statistics

Number of Valid Samples	44	Number of Detected Data	42
Number of Unique Samples	24	Number of Non-Detect Data	2
		Percent Non-Detects	4.55%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0013	Minimum Detected	-6.645
Maximum Detected	0.0056	Maximum Detected	-5.185
Mean of Detected	0.00307	Mean of Detected	-5.835
SD of Detected	0.000948	SD of Detected	0.321
Minimum Non-Detect	0.002	Minimum Non-Detect	-6.215
Maximum Non-Detect	0.002	Maximum Non-Detect	-6.215

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.927	Shapiro Wilk Test Statistic	0.934
5% Shapiro Wilk Critical Value	0.942	5% Shapiro Wilk Critical Value	0.942
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00298	Mean	-5.883
SD	0.00102	SD	0.386
95% DL/2 (t) UCL	0.00323	95% H-Stat (DL/2) UCL	0.0034
Maximum Likelihood Estimate(MLE) Method		Log ROS Method	
Mean	0.00296	Mean in Log Scale	-5.857
SD	0.00105	SD in Log Scale	0.33
95% MLE (t) UCL	0.00322	Mean in Original Scale	0.00301
95% MLE (Tiku) UCL	0.00323	SD in Original Scale	0.00096461
		95% Percentile Bootstrap UCL	0.00324
		95% BCA Bootstrap UCL	0.00326

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	9.776	Data appear Gamma Distributed at 5% Significance Level
Theta Star	0.0003139	
nu star	821.2	
A-D Test Statistic	0.27	
5% A-D Critical Value	0.748	
K-S Test Statistic	0.748	
5% K-S Critical Value	0.136	
Data appear Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0.0013	Mean	0.00301
Maximum	0.0056	SD	0.0009595
Mean	0.003	SE of Mean	0.0001466
Median	0.003	95% KM (t) UCL	0.00325
SD	0.000974	95% KM (z) UCL	0.00325
k star	8.86	95% KM (jackknife) UCL	0.00325
Theta star	0.0003392	95% KM (bootstrap t) UCL	0.00326
Nu star	779.7	95% KM (BCA) UCL	0.00324
AppChi2	715.9	95% KM (Percentile Bootstrap) UCL	0.00326
95% Gamma Approximate UCL	0.00327	95% KM (Chebyshev) UCL	0.00365
95% Adjusted Gamma UCL	0.00328	97.5% KM (Chebyshev) UCL	0.00392
		99% KM (Chebyshev) UCL	0.00447
		Potential UCLs to Use	
		95% KM (BCA) UCL	0.00324

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_5 Antimony

General Statistics

Number of Valid Samples	27	Number of Detected Data	9
Number of Unique Samples	4	Number of Non-Detect Data	18
		Percent Non-Detects	66.67%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0016	Minimum Detected	-6.438
Maximum Detected	0.0019	Maximum Detected	-6.266
Mean of Detected	0.0018	Mean of Detected	-6.321
SD of Detected	0.0001	SD of Detected	0.0569
Minimum Non-Detect	0.002	Minimum Non-Detect	-6.215
Maximum Non-Detect	0.06	Maximum Non-Detect	-2.813

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	27
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.853	Shapiro Wilk Test Statistic	0.845
5% Shapiro Wilk Critical Value	0.829	5% Shapiro Wilk Critical Value	0.829
Data appear Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00571	Mean	-6.149
SD	0.0104	SD	1.184
95% DL/2 (t) UCL	0.00911	95% H-Stat (DL/2) UCL	0.0169
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-6.321
		SD in Log Scale	0.051
		Mean in Original Scale	0.0018
		SD in Original Scale	0.000091058
		95% Percentile Bootstrap UCL	0.00183
		95% BCA Bootstrap UCL	0.00183

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	235.7	Data appear Normal at 5% Significance Level
Theta Star	0	
nu star	4242	
A-D Test Statistic	0.665	
5% A-D Critical Value	0.72	
K-S Test Statistic	0.72	
5% K-S Critical Value	0.279	
Data follow Appr. Gamma Distribution at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0.00158	Mean	0.0018
Maximum	0.00191	SD	0.000094281
Mean	0.0018	SE of Mean	0.000033333
Median	0.0018	95% KM (t) UCL	0.00186
SD	9.262E-05	95% KM (z) UCL	0.00185
k star	338.2	95% KM (jackknife) UCL	0.00186
Theta star	0	95% KM (bootstrap t) UCL	0.00185
Nu star	18264	95% KM (BCA) UCL	0.00184
AppChi2	17950	95% KM (Percentile Bootstrap) UCL	0.00185
95% Gamma Approximate UCL	0.00183	95% KM (Chebyshev) UCL	0.00195
95% Adjusted Gamma UCL	0.00183	97.5% KM (Chebyshev) UCL	0.00201
		99% KM (Chebyshev) UCL	0.00213
		Potential UCLs to Use	
		95% KM (t) UCL	0.00186
		95% KM (Percentile Bootstrap) UCL	0.00185

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_6 Arsenic

General Statistics

Number of Valid Samples	30	Number of Detected Data	26
Number of Unique Samples	20	Number of Non-Detect Data	4
		Percent Non-Detects	13.33%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00064	Minimum Detected	-7.354
Maximum Detected	0.0647	Maximum Detected	-2.738
Mean of Detected	0.00445	Mean of Detected	-6.397
SD of Detected	0.0127	SD of Detected	0.989
Minimum Non-Detect	0.001	Minimum Non-Detect	-6.908
Maximum Non-Detect	0.005	Maximum Non-Detect	-5.298

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	28
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	2
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	93.33%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.302	Shapiro Wilk Test Statistic	0.696
5% Shapiro Wilk Critical Value	0.92	5% Shapiro Wilk Critical Value	0.92
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00413	Mean	-6.397
SD	0.0118	SD	0.954
95% DL/2 (t) UCL	0.00779	95% H-Stat (DL/2) UCL	0.00514
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-6.441
		SD in Log Scale	0.944
		Mean in Original Scale	0.00404
		SD in Original Scale	0.0118
		95% Percentile Bootstrap UCL	0.00814
		95% BCA Bootstrap UCL	0.0116

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	0.578	Data do not follow a Discernable Distribution (0.05)
Theta Star	0.0077	
nu star	30.08	
A-D Test Statistic	5.198	
5% A-D Critical Value	0.796	
K-S Test Statistic	0.796	
5% K-S Critical Value	0.18	
Data not Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0.00064	Mean	0.00402
Maximum	0.0647	SD	0.0116
Mean	0.00447	SE of Mean	0.00217
Median	0.0016	95% KM (t) UCL	0.0077
SD	0.0118	95% KM (z) UCL	0.00759
k star	0.659	95% KM (jackknife) UCL	0.00769
Theta star	0.00678	95% KM (bootstrap t) UCL	0.0543
Nu star	39.56	95% KM (BCA) UCL	0.00841
AppChi2	26.15	95% KM (Percentile Bootstrap) UCL	0.0081
95% Gamma Approximate UCL	0.00677	95% KM (Chebyshev) UCL	0.0135
95% Adjusted Gamma UCL	0.00693	97.5% KM (Chebyshev) UCL	0.0175
		99% KM (Chebyshev) UCL	0.0256
		Potential UCLs to Use	
		95% KM (Chebyshev) UCL	0.0135

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_7 Barium

General Statistics

Number of Valid Samples	29	Number of Detected Data	28
Number of Unique Samples	26	Number of Non-Detect Data	1
		Percent Non-Detects	3.45%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.013	Minimum Detected	-4.343
Maximum Detected	0.0733	Maximum Detected	-2.613
Mean of Detected	0.047	Mean of Detected	-3.124
SD of Detected	0.0153	SD of Detected	0.406
Minimum Non-Detect	0.002	Minimum Non-Detect	-6.215
Maximum Non-Detect	0.002	Maximum Non-Detect	-6.215

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.961	Shapiro Wilk Test Statistic	0.875
5% Shapiro Wilk Critical Value	0.924	5% Shapiro Wilk Critical Value	0.924
Data appear Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0454	Mean	-3.255
SD	0.0173	SD	0.808
95% DL/2 (t) UCL	0.0509	95% H-Stat (DL/2) UCL	0.0752
Maximum Likelihood Estimate(MLE) Method		Log ROS Method	
Mean	0.0453	Mean in Log Scale	-3.157
SD	0.0174	SD in Log Scale	0.436
95% MLE (t) UCL	0.0508	Mean in Original Scale	0.046
95% MLE (Tiku) UCL	0.0509	SD in Original Scale	0.016
		95% Percentile Bootstrap UCL	0.0509
		95% BCA Bootstrap UCL	0.0505
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	6.8	**Data appear Normal at 5% Significance Level**	
Theta Star	0.00692		
nu star	380.8		
A-D Test Statistic	0.897	**Nonparametric Statistics**	
5% A-D Critical Value	0.747	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.747	Mean	0.0459
5% K-S Critical Value	0.166	SD	0.016
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.00303
		95% KM (t) UCL	0.051
Assuming Gamma Distribution		95% KM (z) UCL	0.0508
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.0509
Minimum	0.00542	95% KM (bootstrap t) UCL	0.0505
Maximum	0.0733	95% KM (BCA) UCL	0.051
Mean	0.0456	95% KM (Percentile Bootstrap) UCL	0.0509
Median	0.047	95% KM (Chebyshev) UCL	0.0591
SD	0.0169	97.5% KM (Chebyshev) UCL	0.0648
k star	4.297	99% KM (Chebyshev) UCL	0.076
Theta star	0.0106		
Nu star	249.3	**Potential UCLs to Use**	
AppChi2	213.7	95% KM (t) UCL	0.051
95% Gamma Approximate UCL	0.0532	95% KM (Percentile Bootstrap) UCL	0.0509
95% Adjusted Gamma UCL	0.0537		

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_8 Boron

General Statistics			
Number of Valid Samples	6	Number of Unique Samples	6
Raw Statistics		**Log-transformed Statistics**	
Minimum	0.29	Minimum of Log Data	-1.238
Maximum	0.39	Maximum of Log Data	-0.942
Mean	0.345	Mean of log Data	-1.069
Median	0.355	SD of log Data	0.113
SD	0.0378		
Coefficient of Variation	0.11		
Skewness	-0.549		
Relevant UCL Statistics			
Normal Distribution Test		**Lognormal Distribution Test**	
Shapiro Wilk Test Statistic	0.941	Shapiro Wilk Test Statistic	0.929
Shapiro Wilk Critical Value	0.788	Shapiro Wilk Critical Value	0.788
Data appear Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
95% Student's-t UCL	0.376	95% H-UCL	0.382
95% UCLs (Adjusted for Skewness)		95% Chebyshev (MVUE) UCL	0.414
95% Adjusted-CLT UCL	0.367	97.5% Chebyshev (MVUE) UCL	0.444
95% Modified-t UCL	0.376	99% Chebyshev (MVUE) UCL	0.503
Gamma Distribution Test		**Data Distribution**	
k star (bias corrected)	48.38	Data appear Normal at 5% Significance Level	
Theta Star	0.00713		
nu star	580.6		
Approximate Chi Square Value (.05)	525.7	**Nonparametric Statistics**	
Adjusted Level of Significance	0.0122	95% CLT UCL	0.37
Adjusted Chi Square Value	506.7	95% Jackknife UCL	0.376
		95% Standard Bootstrap UCL	0.368
Anderson-Darling Test Statistic	0.322	95% Bootstrap-t UCL	0.37
Anderson-Darling 5% Critical Value	0.696	95% Hall's Bootstrap UCL	0.363
Kolmogorov-Smirnov Test Statistic	0.236	95% Percentile Bootstrap UCL	0.367
Kolmogorov-Smirnov 5% Critical Value	0.332	95% BCA Bootstrap UCL	0.365
Data appear Gamma Distributed at 5% Significance Level		95% Chebyshev(Mean, Sd) UCL	0.412
		97.5% Chebyshev(Mean, Sd) UCL	0.441
Assuming Gamma Distribution		99% Chebyshev(Mean, Sd) UCL	0.499
95% Approximate Gamma UCL	0.381		
95% Adjusted Gamma UCL	0.395		
Potential UCL to Use		Use 95% Student's-t UCL	0.376

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_9 Cadmium

General Statistics

Number of Valid Samples	28	Number of Detected Data	4
Number of Unique Samples	4	Number of Non-Detect Data	24
		Percent Non-Detects	85.71%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.07	Minimum Detected	-2.659
Maximum Detected	0.1	Maximum Detected	-2.303
Mean of Detected	0.085	Mean of Detected	-2.474
SD of Detected	0.0129	SD of Detected	0.154
Minimum Non-Detect	1	Minimum Non-Detect	0
Maximum Non-Detect	5	Maximum Non-Detect	1.609

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	28
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.994	Shapiro Wilk Test Statistic	0.992
5% Shapiro Wilk Critical Value	0.748	5% Shapiro Wilk Critical Value	0.748
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.798	Mean	-0.619
SD	0.75	SD	0.96
95% DL/2 (t) UCL	1.039	95% H-Stat (DL/2) UCL	2.723
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-2.474
		SD in Log Scale	0.165
		Mean in Original Scale	0.0854
		SD in Original Scale	0.0141
		95% Percentile Bootstrap UCL	0.0898
		95% BCA Bootstrap UCL	0.0898

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	14.45	**Data appear Normal at 5% Significance Level**	
Theta Star	0.00588		
nu star	115.6		
A-D Test Statistic	0.202	**Nonparametric Statistics**	
5% A-D Critical Value	0.656	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.656	Mean	0.085
5% K-S Critical Value	0.394	SD	0.0112
Data appear Gamma Distributed at 5% Significance Level		SE of Mean	0.00645
		95% KM (t) UCL	0.096
Assuming Gamma Distribution		95% KM (z) UCL	0.0956
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.0975
Minimum	0.0487	95% KM (bootstrap t) UCL	0.0991
Maximum	0.102	95% KM (BCA) UCL	0.096
Mean	0.0841	95% KM (Percentile Bootstrap) UCL	0.0967
Median	0.087	95% KM (Chebyshev) UCL	0.113
SD	0.0138	97.5% KM (Chebyshev) UCL	0.125
k star	30.6	99% KM (Chebyshev) UCL	0.149
Theta star	0.00275		
Nu star	1714	**Potential UCLs to Use**	
AppChi2	1619	95% KM (t) UCL	0.096
95% Gamma Approximate UCL	0.0891	95% KM (Percentile Bootstrap) UCL	0.0967
95% Adjusted Gamma UCL	N/A		

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_10 Calcium

General Statistics			
Number of Valid Samples	28	Number of Unique Samples	24
Raw Statistics		**Log-transformed Statistics**	
Minimum	140	Minimum of Log Data	4.942
Maximum	286	Maximum of Log Data	5.656
Mean	188.7	Mean of log Data	5.224
Median	181	SD of log Data	0.179
SD	36.34		
Coefficient of Variation	0.193		
Skewness	1.328		
Relevant UCL Statistics			
Normal Distribution Test		**Lognormal Distribution Test**	
Shapiro Wilk Test Statistic	0.879	Shapiro Wilk Test Statistic	0.935
Shapiro Wilk Critical Value	0.924	Shapiro Wilk Critical Value	0.924
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
95% Student's-t UCL	200.4	95% H-UCL	200.4
95% UCLs (Adjusted for Skewness)		95% Chebyshev (MVUE) UCL	216.5
95% Adjusted-CLT UCL	201.9	97.5% Chebyshev (MVUE) UCL	228.6
95% Modified-t UCL	200.7	99% Chebyshev (MVUE) UCL	252.4
Gamma Distribution Test		**Data Distribution**	
k star (bias corrected)	27.83	Data appear Gamma Distributed at 5% Significance Level	
Theta Star	6.78		
nu star	1559		
Approximate Chi Square Value (.05)	1468	**Nonparametric Statistics**	
Adjusted Level of Significance	0.0404	95% CLT UCL	200
Adjusted Chi Square Value	1462	95% Jackknife UCL	200.4
		95% Standard Bootstrap UCL	199.9
Anderson-Darling Test Statistic	0.706	95% Bootstrap-t UCL	203.9
Anderson-Darling 5% Critical Value	0.744	95% Hall's Bootstrap UCL	205.4
Kolmogorov-Smirnov Test Statistic	0.135	95% Percentile Bootstrap UCL	200.6
Kolmogorov-Smirnov 5% Critical Value	0.165	95% BCA Bootstrap UCL	202.4
Data appear Gamma Distributed at 5% Significance Level		95% Chebyshev(Mean, Sd) UCL	218.6
		97.5% Chebyshev(Mean, Sd) UCL	231.6
Assuming Gamma Distribution		99% Chebyshev(Mean, Sd) UCL	257
95% Approximate Gamma UCL	200.4		
95% Adjusted Gamma UCL	201.1		
Potential UCL to Use		Use 95% Approximate Gamma UCL	200.4

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_11 Chromium

General Statistics			
Number of Valid Samples	30	Number of Detected Data	23
Number of Unique Samples	20	Number of Non-Detect Data	7
		Percent Non-Detects	23.33%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00075	Minimum Detected	-7.195
Maximum Detected	0.0981	Maximum Detected	-2.322
Mean of Detected	0.0117	Mean of Detected	-4.915
SD of Detected	0.0193	SD of Detected	0.876
Minimum Non-Detect	0.002	Minimum Non-Detect	-6.215
Maximum Non-Detect	0.01	Maximum Non-Detect	-4.605
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	26
For all methods (except KM, DL/2, and ROS Methods).		Number treated as Detected	4
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	86.67%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.402	Shapiro Wilk Test Statistic	0.88
5% Shapiro Wilk Critical Value	0.914	5% Shapiro Wilk Critical Value	0.914
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00949	Mean	-5.273
SD	0.0174	SD	1.07
95% DL/2 (t) UCL	0.0149	95% H-Stat (DL/2) UCL	0.0174
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE yields a negative mean		Mean in Log Scale	-5.222
		SD in Log Scale	0.997
		Mean in Original Scale	0.00956
		SD in Original Scale	0.0173
		95% Percentile Bootstrap UCL	0.0155
		95% BCA Bootstrap UCL	0.019
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	1.077	Data do not follow a Discernable Distribution (0.05)	
Theta Star	0.0109		
nu star	49.52		
A-D Test Statistic	2.001	**Nonparametric Statistics**	
5% A-D Critical Value	0.766	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.766	Mean	0.00947
5% K-S Critical Value	0.186	SD	0.0171
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.0032
		95% KM (t) UCL	0.0149
Assuming Gamma Distribution		95% KM (z) UCL	0.0147
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.0146
Minimum	0	95% KM (bootstrap t) UCL	0.0271
Maximum	0.0981	95% KM (BCA) UCL	0.0166
Mean	0.0099	95% KM (Percentile Bootstrap) UCL	0.0156
Median	0.00735	95% KM (Chebyshev) UCL	0.0234
SD	0.0175	97.5% KM (Chebyshev) UCL	0.0294
k star	0.326	99% KM (Chebyshev) UCL	0.0413
Theta star	0.0304		
Nu star	19.55	**Potential UCLs to Use**	
AppChi2	10.52	95% KM (BCA) UCL	0.0166
95% Gamma Approximate UCL	0.0184		
95% Adjusted Gamma UCL	0.0191		

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_12 Cobalt

General Statistics

Number of Valid Samples	30	Number of Detected Data	23
Number of Unique Samples	21	Number of Non-Detect Data	7
		Percent Non-Detects	23.33%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.08	Minimum Detected	-2.526
Maximum Detected	5	Maximum Detected	1.609
Mean of Detected	0.759	Mean of Detected	-1.046
SD of Detected	1.14	SD of Detected	1.211
Minimum Non-Detect	1	Minimum Non-Detect	0
Maximum Non-Detect	20	Maximum Non-Detect	2.996

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	30
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.634	Shapiro Wilk Test Statistic	0.92
5% Shapiro Wilk Critical Value	0.914	5% Shapiro Wilk Critical Value	0.914
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	1.482	Mean	-0.687
SD	2.639	SD	1.419
95% DL/2 (t) UCL	2.301	95% H-Stat (DL/2) UCL	7.786
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-1.12
		SD in Log Scale	1.1
		Mean in Original Scale	0.651
		SD in Original Scale	1.015
		95% Percentile Bootstrap UCL	0.957
		95% BCA Bootstrap UCL	1.115

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	0.702	Data appear Lognormal at 5% Significance Level
Theta Star	1.082	
nu star	32.28	
A-D Test Statistic	1.255	
5% A-D Critical Value	0.781	
K-S Test Statistic	0.781	
5% K-S Critical Value	0.188	
Data not Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0	Mean	0.682
Maximum	5	SD	1.048
Mean	0.757	SE of Mean	0.207
Median	0.354	95% KM (t) UCL	1.033
SD	1.022	95% KM (z) UCL	1.022
k star	0.473	95% KM (jackknife) UCL	1.033
Theta star	1.6	95% KM (bootstrap t) UCL	1.296
Nu star	28.38	95% KM (BCA) UCL	1.046
AppChi2	17.22	95% KM (Percentile Bootstrap) UCL	1.064
95% Gamma Approximate UCL	1.247	95% KM (Chebyshev) UCL	1.583
95% Adjusted Gamma UCL	1.285	97.5% KM (Chebyshev) UCL	1.973
		99% KM (Chebyshev) UCL	2.738
		Potential UCLs to Use	
		97.5% KM (Chebyshev) UCL	1.973

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_13 Copper

General Statistics

Number of Valid Samples	30	Number of Detected Data	21
Number of Unique Samples	17	Number of Non-Detect Data	9
		Percent Non-Detects	30.00%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00041	Minimum Detected	-7.799
Maximum Detected	0.0068	Maximum Detected	-4.991
Mean of Detected	0.00109	Mean of Detected	-7.14
SD of Detected	0.0014	SD of Detected	0.676
Minimum Non-Detect	0.004	Minimum Non-Detect	-5.521
Maximum Non-Detect	0.025	Maximum Non-Detect	-3.689

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	30
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.473	Shapiro Wilk Test Statistic	0.798
5% Shapiro Wilk Critical Value	0.908	5% Shapiro Wilk Critical Value	0.908
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00237	Mean	-6.649
SD	0.00322	SD	1.029
95% DL/2 (t) UCL	0.00336	95% H-Stat (DL/2) UCL	0.00958
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-7.15
		SD in Log Scale	0.596
		Mean in Original Scale	0.00101
		SD in Original Scale	0.00118
		95% Percentile Bootstrap UCL	0.00138
		95% BCA Bootstrap UCL	0.00162
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	1.49	Data do not follow a Discernable Distribution (0.05)	
Theta Star	0.0007341		
nu star	62.58		
A-D Test Statistic	2.321	**Nonparametric Statistics**	
5% A-D Critical Value	0.756	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.756	Mean	0.00105
5% K-S Critical Value	0.192	SD	0.00127
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.00026424
		95% KM (t) UCL	0.0015
Assuming Gamma Distribution		95% KM (z) UCL	0.00148
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.0015
Minimum	0.00041	95% KM (bootstrap t) UCL	0.00229
Maximum	0.0068	95% KM (BCA) UCL	0.00159
Mean	0.0011	95% KM (Percentile Bootstrap) UCL	0.00153
Median	0.00085	95% KM (Chebyshev) UCL	0.0022
SD	0.00116	97.5% KM (Chebyshev) UCL	0.0027
k star	2.155	99% KM (Chebyshev) UCL	0.00368
Theta star	0.0005087		
Nu star	129.3	**Potential UCLs to Use**	
AppChi2	104.1	95% KM (BCA) UCL	0.00159
95% Gamma Approximate UCL	0.00136		
95% Adjusted Gamma UCL	0.00138		

Note: DL/2 is not a recommended method.

ProUCL

General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_14 Cyanide (total)

General Statistics

Number of Valid Samples	27	Number of Detected Data	2
Number of Unique Samples	2	Number of Non-Detect Data	25
		Percent Non-Detects	92.59%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.002	Minimum Detected	-6.215
Maximum Detected	0.0034	Maximum Detected	-5.684
Mean of Detected	0.0027	Mean of Detected	-5.949
SD of Detected	0.00099	SD of Detected	0.375
Minimum Non-Detect	0.01	Minimum Non-Detect	-4.605
Maximum Non-Detect	0.01	Maximum Non-Detect	-4.605

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	1	Shapiro Wilk Test Statistic	1
5% Shapiro Wilk Critical Value	N/A	5% Shapiro Wilk Critical Value	N/A
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00483	Mean	-5.347
SD	0.0006438	SD	0.189
95% DL/2 (t) UCL	0.00504	95% H-Stat (DL/2) UCL	0.0061
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	N/A
		SD in Log Scale	N/A
		Mean in Original Scale	N/A
		SD in Original Scale	N/A
		95% Percentile Bootstrap UCL	N/A
		95% BCA Bootstrap UCL	N/A

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	N/A	Data do not follow a Discernable Distribution (0.05)
Theta Star	N/A	
nu star	N/A	
A-D Test Statistic	0.359	
5% A-D Critical Value	N/A	
K-S Test Statistic	N/A	
5% K-S Critical Value	N/A	
Data not Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	N/A	Mean	0.0027
Maximum	N/A	SD	0.0007
Mean	N/A	SE of Mean	0.0007
Median	N/A	95% KM (t) UCL	0.00389
SD	N/A	95% KM (z) UCL	0.00385
k star	N/A	95% KM (jackknife) UCL	0.00436
Theta star	N/A	95% KM (bootstrap t) UCL	1.7977E+308
Nu star	N/A	95% KM (BCA) UCL	0.0034
AppChi2	N/A	95% KM (Percentile Bootstrap) UCL	0.0034
95% Gamma Approximate UCL	N/A	95% KM (Chebyshev) UCL	0.00575
95% Adjusted Gamma UCL	N/A	97.5% KM (Chebyshev) UCL	0.00707
		99% KM (Chebyshev) UCL	0.00966
		Potential UCLs to Use	
		95% KM (t) UCL	0.00389
		95% KM (% Bootstrap) UCL	0.0034

Warning: Recommended UCL exceeds the maximum observation

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_15 Hexavalent chromium

General Statistics

Number of Valid Samples	49	Number of Detected Data	45
Number of Unique Samples	40	Number of Non-Detect Data	4
		Percent Non-Detects	8.16%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00057	Minimum Detected	-7.47
Maximum Detected	0.0231	Maximum Detected	-3.768
Mean of Detected	0.00848	Mean of Detected	-4.958
SD of Detected	0.00494	SD of Detected	0.683
Minimum Non-Detect	0.001	Minimum Non-Detect	-6.908
Maximum Non-Detect	0.001	Maximum Non-Detect	-6.908

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.918	Shapiro Wilk Test Statistic	0.932
5% Shapiro Wilk Critical Value	0.945	5% Shapiro Wilk Critical Value	0.945
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00783	Mean	-5.173
SD	0.00522	SD	0.981
95% DL/2 (t) UCL	0.00908	95% H-Stat (DL/2) UCL	0.0128
Maximum Likelihood Estimate(MLE) Method		Log ROS Method	
Mean	0.0076	Mean in Log Scale	-5.073
SD	0.00557	SD in Log Scale	0.763
95% MLE (t) UCL	0.00894	Mean in Original Scale	0.00793
95% MLE (Tiku) UCL	0.00894	SD in Original Scale	0.00508
		95% Percentile Bootstrap UCL	0.0092
		95% BCA Bootstrap UCL	0.00932

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	2.645	Data appear Gamma Distributed at 5% Significance Level
Theta Star	0.00321	
nu star	238	
A-D Test Statistic	0.436	**Nonparametric Statistics**
5% A-D Critical Value	0.756	Kaplan-Meier (KM) Method
K-S Test Statistic	0.756	Mean 0.00784
5% K-S Critical Value	0.133	SD 0.00516
Data appear Gamma Distributed at 5% Significance Level		SE of Mean 0.00074508
		95% KM (t) UCL 0.00909
Assuming Gamma Distribution		95% KM (z) UCL 0.00906
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL 0.00902
Minimum 0		95% KM (bootstrap t) UCL 0.00914
Maximum 0.0231		95% KM (BCA) UCL 0.00929
Mean 0.00784		95% KM (Percentile Bootstrap) UCL 0.00921
Median 0.0076		95% KM (Chebyshev) UCL 0.0111
SD 0.00521		97.5% KM (Chebyshev) UCL 0.0125
k star 0.694		99% KM (Chebyshev) UCL 0.0152
Theta star 0.0113		
Nu star 68.03		**Potential UCLs to Use**
AppChi2 50.05		95% KM (BCA) UCL 0.00929
95% Gamma Approximate UCL 0.0107		
95% Adjusted Gamma UCL 0.0108		

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_16 Iron

General Statistics

Number of Valid Samples	30	Number of Detected Data	12
Number of Unique Samples	12	Number of Non-Detect Data	18
		Percent Non-Detects	60.00%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0345	Minimum Detected	-3.367
Maximum Detected	2.62	Maximum Detected	0.963
Mean of Detected	1.184	Mean of Detected	-0.817
SD of Detected	1.052	SD of Detected	1.892
Minimum Non-Detect	0.1	Minimum Non-Detect	-2.303
Maximum Non-Detect	0.1	Maximum Non-Detect	-2.303

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.849	Shapiro Wilk Test Statistic	0.768
5% Shapiro Wilk Critical Value	0.859	5% Shapiro Wilk Critical Value	0.859
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.504	Mean	-2.124
SD	0.86	SD	1.593
95% DL/2 (t) UCL	0.77	95% H-Stat (DL/2) UCL	1.283
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE yields a negative mean		Mean in Log Scale	-2.106
		SD in Log Scale	1.866
		Mean in Original Scale	0.531
		SD in Original Scale	0.848
		95% Percentile Bootstrap UCL	0.784
		95% BCA Bootstrap UCL	0.848

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	0.523	Data Follow Appr. Gamma Distribution at 5% Significance Level
Theta Star	2.264	
nu star	12.55	
A-D Test Statistic	1.089	**Nonparametric Statistics**
5% A-D Critical Value	0.775	Kaplan-Meier (KM) Method
K-S Test Statistic	0.775	Mean 0.497
5% K-S Critical Value	0.257	SD 0.849
Data follow Appr. Gamma Distribution at 5% Significance Level		SE of Mean 0.162
		95% KM (t) UCL 0.772
Assuming Gamma Distribution		95% KM (z) UCL 0.763
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL 0.765
Minimum	0	95% KM (bootstrap t) UCL 0.823
Maximum	2.62	95% KM (BCA) UCL 0.757
Mean	0.989	95% KM (Percentile Bootstrap) UCL 0.772
Median	1.071	95% KM (Chebyshev) UCL 1.203
SD	0.779	97.5% KM (Chebyshev) UCL 1.508
k star	0.354	99% KM (Chebyshev) UCL 2.108
Theta star	2.795	
Nu star	21.23	**Potential UCLs to Use**
AppChi2	11.76	95% KM (t) UCL 0.772
95% Gamma Approximate UCL	1.785	
95% Adjusted Gamma UCL	1.849	

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_17 Lead

General Statistics

Number of Valid Samples	28	Number of Detected Data	15
Number of Unique Samples	11	Number of Non-Detect Data	13
		Percent Non-Detects	46.43%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.04	Minimum Detected	-3.219
Maximum Detected	0.38	Maximum Detected	-0.968
Mean of Detected	0.163	Mean of Detected	-1.962
SD of Detected	0.0923	SD of Detected	0.571
Minimum Non-Detect	1	Minimum Non-Detect	0
Maximum Non-Detect	10	Maximum Non-Detect	2.303

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	28
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.889	Shapiro Wilk Test Statistic	0.966
5% Shapiro Wilk Critical Value	0.881	5% Shapiro Wilk Critical Value	0.881
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.694	Mean	-1.055
SD	1.019	SD	1.174
95% DL/2 (t) UCL	1.022	95% H-Stat (DL/2) UCL	6.098
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-1.962
		SD in Log Scale	0.482
		Mean in Original Scale	0.157
		SD in Original Scale	0.0767
		95% Percentile Bootstrap UCL	0.182
		95% BCA Bootstrap UCL	0.183

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	2.918	**Data appear Normal at 5% Significance Level**	
Theta Star	0.0557		
nu star	87.55		
A-D Test Statistic	0.336	**Nonparametric Statistics**	
5% A-D Critical Value	0.742	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.742	Mean	0.163
5% K-S Critical Value	0.223	SD	0.0892
Data appear Gamma Distributed at 5% Significance Level		SE of Mean	0.0238
		95% KM (t) UCL	0.203
Assuming Gamma Distribution		95% KM (z) UCL	0.202
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.204
Minimum	0.04	95% KM (bootstrap t) UCL	0.226
Maximum	0.38	95% KM (BCA) UCL	0.203
Mean	0.166	95% KM (Percentile Bootstrap) UCL	0.204
Median	0.16	95% KM (Chebyshev) UCL	0.267
SD	0.0764	97.5% KM (Chebyshev) UCL	0.312
k star	4.295	99% KM (Chebyshev) UCL	0.4
Theta star	0.0386		
Nu star	240.5	**Potential UCLs to Use**	
AppChi2	205.6	95% KM (t) UCL	0.203
95% Gamma Approximate UCL	0.194	95% KM (Percentile Bootstrap) UCL	0.204
95% Adjusted Gamma UCL	0.196		

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_18 Magnesium

General Statistics

Number of Valid Samples	28	Number of Detected Data	27
Number of Unique Samples	25	Number of Non-Detect Data	1
		Percent Non-Detects	3.57%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	40.1	Minimum Detected	3.691
Maximum Detected	100	Maximum Detected	4.605
Mean of Detected	55.01	Mean of Detected	3.985
SD of Detected	13.55	SD of Detected	0.205
Minimum Non-Detect	49	Minimum Non-Detect	3.892
Maximum Non-Detect	49	Maximum Non-Detect	3.892

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.709	Shapiro Wilk Test Statistic	0.825
5% Shapiro Wilk Critical Value	0.923	5% Shapiro Wilk Critical Value	0.923
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	53.92	Mean	3.957
SD	14.49	SD	0.25
95% DL/2 (t) UCL	58.59	95% H-Stat (DL/2) UCL	59.5
Maximum Likelihood Estimate(MLE) Method		Log ROS Method	
Mean	51.46	Mean in Log Scale	3.978
SD	16.82	SD in Log Scale	0.204
95% MLE (t) UCL	56.87	Mean in Original Scale	54.64
95% MLE (Tiku) UCL	57.33	SD in Original Scale	13.44
		95% Percentile Bootstrap UCL	58.85
		95% BCA Bootstrap UCL	59.93

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	19.76	Data do not follow a Discernable Distribution (0.05)	
Theta Star	2.784		
nu star	1067		
A-D Test Statistic	1.729	**Nonparametric Statistics**	
5% A-D Critical Value	0.744	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.744	Mean	54.67
5% K-S Critical Value	0.168	SD	13.18
Data not Gamma Distributed at 5% Significance Level		SE of Mean	2.541
		95% KM (t) UCL	59
Assuming Gamma Distribution		95% KM (z) UCL	58.85
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	58.99
Minimum	40.1	95% KM (bootstrap t) UCL	63.29
Maximum	100	95% KM (BCA) UCL	59.17
Mean	54.7	95% KM (Percentile Bootstrap) UCL	58.92
Median	50.9	95% KM (Chebyshev) UCL	65.74
SD	13.4	97.5% KM (Chebyshev) UCL	70.54
k star	20.12	99% KM (Chebyshev) UCL	79.95
Theta star	2.718		
Nu star	1127	**Potential UCLs to Use**	
AppChi2	1050	95% KM (Chebyshev) UCL	65.74
95% Gamma Approximate UCL	58.7		
95% Adjusted Gamma UCL	58.96		

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_19 Manganese

General Statistics

Number of Valid Samples	28	Number of Detected Data	18
Number of Unique Samples	18	Number of Non-Detect Data	10
		Percent Non-Detects	35.71%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00037	Minimum Detected	-7.902
Maximum Detected	4.01	Maximum Detected	1.389
Mean of Detected	0.748	Mean of Detected	-4.188
SD of Detected	1.394	SD of Detected	3.504
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	0.015	Maximum Non-Detect	-4.2
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	21
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	7
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	75.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.591	Shapiro Wilk Test Statistic	0.833
5% Shapiro Wilk Critical Value	0.897	5% Shapiro Wilk Critical Value	0.897
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.481	Mean	-5.213
SD	1.164	SD	3.205
95% DL/2 (t) UCL	0.856	95% H-Stat (DL/2) UCL	56.19
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE yields a negative mean		Mean in Log Scale	-5.965
		SD in Log Scale	3.912
		Mean in Original Scale	0.481
		SD in Original Scale	1.164
		95% Percentile Bootstrap UCL	0.869
		95% BCA Bootstrap UCL	1.009
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.196	Data do not follow a Discernable Distribution (0.05)	
Theta Star	3.823		
nu star	7.042		
A-D Test Statistic	1.778	**Nonparametric Statistics**	
5% A-D Critical Value	0.888	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.888	Mean	0.481
5% K-S Critical Value	0.226	SD	1.143
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.222
		95% KM (t) UCL	0.86
Assuming Gamma Distribution		95% KM (z) UCL	0.847
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.856
Minimum	0.00037	95% KM (bootstrap t) UCL	1.084
Maximum	4.01	95% KM (BCA) UCL	0.87
Mean	0.58	95% KM (Percentile Bootstrap) UCL	0.896
Median	0.117	95% KM (Chebyshev) UCL	1.45
SD	1.142	97.5% KM (Chebyshev) UCL	1.869
k star	0.255	99% KM (Chebyshev) UCL	2.693
Theta star	2.278		
Nu star	14.27	**Potential UCLs to Use**	
AppChi2	6.756	99% KM (Chebyshev) UCL	2.693
95% Gamma Approximate UCL	1.226		
95% Adjusted Gamma UCL	1.287		

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_20 Mercury

General Statistics

Number of Valid Samples	29	Number of Detected Data	11
Number of Unique Samples	7	Number of Non-Detect Data	18
		Percent Non-Detects	62.07%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.02	Minimum Detected	-3.912
Maximum Detected	0.22	Maximum Detected	-1.514
Mean of Detected	0.0689	Mean of Detected	-3.033
SD of Detected	0.0698	SD of Detected	0.83
Minimum Non-Detect	0.03	Minimum Non-Detect	-3.507
Maximum Non-Detect	0.2	Maximum Non-Detect	-1.609

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	28
For all methods (except KM, DL/2, and ROS Methods).		Number treated as Detected	1
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	96.55%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.697	Shapiro Wilk Test Statistic	0.859
5% Shapiro Wilk Critical Value	0.85	5% Shapiro Wilk Critical Value	0.85
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0794	Mean	-2.776
SD	0.0495	SD	0.781
95% DL/2 (t) UCL	0.0951	95% H-Stat (DL/2) UCL	0.227
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-3.343
		SD in Log Scale	0.78
		Mean in Original Scale	0.0491
		SD in Original Scale	0.0493
		95% Percentile Bootstrap UCL	0.0645
		95% BCA Bootstrap UCL	0.0683

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	1.181	Data appear Lognormal at 5% Significance Level
Theta Star	0.0584	
nu star	25.98	
A-D Test Statistic	0.957	
5% A-D Critical Value	0.742	
K-S Test Statistic	0.742	
5% K-S Critical Value	0.26	
Data not Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0	Mean	0.052
Maximum	0.22	SD	0.0544
Mean	0.0723	SE of Mean	0.014
Median	0.05	95% KM (t) UCL	0.0759
SD	0.0627	95% KM (z) UCL	0.0751
k star	0.377	95% KM (jackknife) UCL	0.076
Theta star	0.192	95% KM (bootstrap t) UCL	0.109
Nu star	21.88	95% KM (BCA) UCL	0.0782
AppChi2	12.25	95% KM (Percentile Bootstrap) UCL	0.0766
95% Gamma Approximate UCL	0.129	95% KM (Chebyshev) UCL	0.113
95% Adjusted Gamma UCL	0.134	97.5% KM (Chebyshev) UCL	0.14
		99% KM (Chebyshev) UCL	0.192
		Potential UCLs to Use	
		95% KM (t) UCL	0.0759
		95% KM (% Bootstrap) UCL	0.0766

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_21 Molybdenum

General Statistics

Number of Valid Samples	7	Number of Detected Data	3
Number of Unique Samples	3	Number of Non-Detect Data	4
		Percent Non-Detects	57.14%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0045	Minimum Detected	-5.404
Maximum Detected	0.0095	Maximum Detected	-4.656
Mean of Detected	0.0066	Mean of Detected	-5.07
SD of Detected	0.00259	SD of Detected	0.38
Minimum Non-Detect	0.001	Minimum Non-Detect	-6.908
Maximum Non-Detect	0.02	Maximum Non-Detect	-3.912

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	7
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.929	Shapiro Wilk Test Statistic	0.967
5% Shapiro Wilk Critical Value	0.767	5% Shapiro Wilk Critical Value	0.767
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00719	Mean	-5.232
SD	0.00372	SD	1.092
95% DL/2 (t) UCL	0.00992	95% H-Stat (DL/2) UCL	0.247
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-5.332
		SD in Log Scale	0.522
		Mean in Original Scale	0.00539
		SD in Original Scale	0.00261
		95% Percentile Bootstrap UCL	0.00693
		95% BCA Bootstrap UCL	0.00701

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	N/A	**Data appear Normal at 5% Significance Level**
Theta Star	N/A	
nu star	N/A	
A-D Test Statistic	0.309	**Nonparametric Statistics**
5% A-D Critical Value	N/A	Kaplan-Meier (KM) Method
K-S Test Statistic	N/A	Mean 0.00608
5% K-S Critical Value	N/A	SD 0.00205
Data not Gamma Distributed at 5% Significance Level		SE of Mean 0.00125
		95% KM (t) UCL 0.00851
Assuming Gamma Distribution		95% KM (z) UCL 0.00814
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL 0.00854
Minimum	N/A	95% KM (bootstrap t) UCL 0.0109
Maximum	N/A	95% KM (BCA) UCL 0.0095
Mean	N/A	95% KM (Percentile Bootstrap) UCL 0.0095
Median	N/A	95% KM (Chebyshev) UCL 0.0115
SD	N/A	97.5% KM (Chebyshev) UCL 0.0139
k star	N/A	99% KM (Chebyshev) UCL 0.0185
Theta star	N/A	
Nu star	N/A	**Potential UCLs to Use**
AppChi2	N/A	95% KM (t) UCL 0.00851
95% Gamma Approximate UCL	N/A	95% KM (Percentile Bootstrap) UCL 0.0095
95% Adjusted Gamma UCL	N/A	

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_22 Nickel

General Statistics			
Number of Valid Samples	30	Number of Detected Data	26
Number of Unique Samples	26	Number of Non-Detect Data	4
		Percent Non-Detects	13.33%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.001	Minimum Detected	-6.908
Maximum Detected	0.109	Maximum Detected	-2.216
Mean of Detected	0.0106	Mean of Detected	-5.35
SD of Detected	0.0224	SD of Detected	1.054
Minimum Non-Detect	0.002	Minimum Non-Detect	-6.215
Maximum Non-Detect	0.02	Maximum Non-Detect	-3.912
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	28
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	2
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	93.33%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.414	Shapiro Wilk Test Statistic	0.895
5% Shapiro Wilk Critical Value	0.92	5% Shapiro Wilk Critical Value	0.92
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.01	Mean	-5.35
SD	0.0209	SD	1.039
95% DL/2 (t) UCL	0.0165	95% H-Stat (DL/2) UCL	0.018
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-5.42
		SD in Log Scale	1.022
		Mean in Original Scale	0.00959
		SD in Original Scale	0.021
		95% Percentile Bootstrap UCL	0.0164
		95% BCA Bootstrap UCL	0.02
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.689	Data do not follow a Discernable Distribution (0.05)	
Theta Star	0.0153		
nu star	35.83		
A-D Test Statistic	2.664	**Nonparametric Statistics**	
5% A-D Critical Value	0.784	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.784	Mean	0.00962
5% K-S Critical Value	0.178	SD	0.0206
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.00384
		95% KM (t) UCL	0.0161
Assuming Gamma Distribution		95% KM (z) UCL	0.0159
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.0161
Minimum	0	95% KM (bootstrap t) UCL	0.0442
Maximum	0.109	95% KM (BCA) UCL	0.017
Mean	0.01	95% KM (Percentile Bootstrap) UCL	0.0163
Median	0.0036	95% KM (Chebyshev) UCL	0.0264
SD	0.021	97.5% KM (Chebyshev) UCL	0.0336
k star	0.481	99% KM (Chebyshev) UCL	0.0479
Theta star	0.0208		
Nu star	28.86	**Potential UCLs to Use**	
AppChi2	17.6	97.5% KM (Chebyshev) UCL	0.0336
95% Gamma Approximate UCL	0.0164		
95% Adjusted Gamma UCL	0.0169		

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_23 Potassium

General Statistics

Number of Valid Samples	28	Number of Detected Data	12
Number of Unique Samples	11	Number of Non-Detect Data	16
		Percent Non-Detects	57.14%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	1.86	Minimum Detected	0.621
Maximum Detected	5.28	Maximum Detected	1.664
Mean of Detected	2.977	Mean of Detected	1.037
SD of Detected	1.085	SD of Detected	0.331
Minimum Non-Detect	5	Minimum Non-Detect	1.609
Maximum Non-Detect	5	Maximum Non-Detect	1.609

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.847	Shapiro Wilk Test Statistic	0.903
5% Shapiro Wilk Critical Value	0.859	5% Shapiro Wilk Critical Value	0.859
Data not Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	2.704	Mean	0.968
SD	0.733	SD	0.22
95% DL/2 (t) UCL	2.94	95% H-Stat (DL/2) UCL	4.148
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	1.003
		SD in Log Scale	0.292
		Mean in Original Scale	2.846
		SD in Original Scale	0.887
		95% Percentile Bootstrap UCL	3.126
		95% BCA Bootstrap UCL	3.163

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	7.191	**Data Follow Appr. Gamma Distribution at 5% Significance Level**
Theta Star	0.414	
nu star	172.6	
A-D Test Statistic	0.682	**Nonparametric Statistics**
5% A-D Critical Value	0.73	Kaplan-Meier (KM) Method
K-S Test Statistic	0.73	Mean 2.857
5% K-S Critical Value	0.245	SD 0.919
Data follow Appr. Gamma Distribution at 5% Significance Level		SE of Mean 0.262
		95% KM (t) UCL 3.303
Assuming Gamma Distribution		95% KM (z) UCL 3.287
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL 3.314
Minimum 1.86		95% KM (bootstrap t) UCL 3.56
Maximum 5.28		95% KM (BCA) UCL 3.332
Mean 2.988		95% KM (Percentile Bootstrap) UCL 3.307
Median 2.976		95% KM (Chebyshev) UCL 3.998
SD 0.698		97.5% KM (Chebyshev) UCL 4.491
k star 19.27		99% KM (Chebyshev) UCL 5.461
Theta star 0.155		
Nu star 1079		**Potential UCLs to Use**
AppChi2 1004		95% KM (t) UCL 3.303
95% Gamma Approximate UCL 3.212		
95% Adjusted Gamma UCL 3.227		

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_24 Selenium

General Statistics

Number of Valid Samples	29	Number of Detected Data	26
Number of Unique Samples	24	Number of Non-Detect Data	3
		Percent Non-Detects	10.34%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.001	Minimum Detected	-6.908
Maximum Detected	0.227	Maximum Detected	-1.483
Mean of Detected	0.0135	Mean of Detected	-5.267
SD of Detected	0.0436	SD of Detected	0.92
Minimum Non-Detect	0.002	Minimum Non-Detect	-6.215
Maximum Non-Detect	0.005	Maximum Non-Detect	-5.298

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	18
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	11
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	62.07%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.243	Shapiro Wilk Test Statistic	0.729
5% Shapiro Wilk Critical Value	0.92	5% Shapiro Wilk Critical Value	0.92
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0123	Mean	-5.373
SD	0.0414	SD	0.936
95% DL/2 (t) UCL	0.0254	95% H-Stat (DL/2) UCL	0.0121
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE yields a negative mean		Mean in Log Scale	-5.357
		SD in Log Scale	0.927
		Mean in Original Scale	0.0124
		SD in Original Scale	0.0413
		95% Percentile Bootstrap UCL	0.0276
		95% BCA Bootstrap UCL	0.0358

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	0.589	Data do not follow a Discernable Distribution (0.05)
Theta Star	0.0229	
nu star	30.63	
A-D Test Statistic	5.272	**Nonparametric Statistics**
5% A-D Critical Value	0.795	Kaplan-Meier (KM) Method
K-S Test Statistic	0.795	Mean 0.0124
5% K-S Critical Value	0.179	SD 0.0406
Data not Gamma Distributed at 5% Significance Level		SE of Mean 0.00769
		95% KM (t) UCL 0.0255
Assuming Gamma Distribution		95% KM (z) UCL 0.025
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL 0.0254
Minimum 0		95% KM (bootstrap t) UCL 0.184
Maximum 0.227		95% KM (BCA) UCL 0.0282
Mean 0.0124		95% KM (Percentile Bootstrap) UCL 0.0278
Median 0.0043		95% KM (Chebyshev) UCL 0.0459
SD 0.0414		97.5% KM (Chebyshev) UCL 0.0604
k star 0.336		99% KM (Chebyshev) UCL 0.0889
Theta star 0.0368		
Nu star 19.48		**Potential UCLs to Use**
AppChi2 10.47		95% KM (Chebyshev) UCL 0.0459
95% Gamma Approximate UCL 0.023		
95% Adjusted Gamma UCL 0.0239		

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_25 Silica (SiO2)

General Statistics			
Number of Valid Samples	4	Number of Unique Samples	3
Raw Statistics		**Log-transformed Statistics**	
Minimum	38	Minimum of Log Data	3.638
Maximum	46	Maximum of Log Data	3.829
Mean	41.5	Mean of log Data	3.723
Median	41	SD of log Data	0.0788
SD	3.317		
Coefficient of Variation	0.0799		
Skewness	0.877		
Relevant UCL Statistics			
Normal Distribution Test		**Lognormal Distribution Test**	
Shapiro Wilk Test Statistic	0.916	Shapiro Wilk Test Statistic	0.925
Shapiro Wilk Critical Value	0.748	Shapiro Wilk Critical Value	0.748
Data appear Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
95% Student's-t UCL	45.4	95% H-UCL	N/A
95% UCLs (Adjusted for Skewness)		95% Chebyshev (MVUE) UCL	48.62
95% Adjusted-CLT UCL	45	97.5% Chebyshev (MVUE) UCL	51.71
95% Modified-t UCL	45.52	99% Chebyshev (MVUE) UCL	57.76
Gamma Distribution Test		**Data Distribution**	
k star (bias corrected)	53.39	Data appear Normal at 5% Significance Level	
Theta Star	0.777		
nu star	427.1		
Approximate Chi Square Value (.05)	380.2	**Nonparametric Statistics**	
Adjusted Level of Significance	N/A	95% CLT UCL	44.23
Adjusted Chi Square Value	N/A	95% Jackknife UCL	45.4
		95% Standard Bootstrap UCL	43.9
Anderson-Darling Test Statistic	0.37	95% Bootstrap-t UCL	45.33
Anderson-Darling 5% Critical Value	0.657	95% Hall's Bootstrap UCL	60.58
Kolmogorov-Smirnov Test Statistic	0.311	95% Percentile Bootstrap UCL	43.5
Kolmogorov-Smirnov 5% Critical Value	0.394	95% BCA Bootstrap UCL	43.5
Data appear Gamma Distributed at 5% Significance Level		95% Chebyshev(Mean, Sd) UCL	48.73
		97.5% Chebyshev(Mean, Sd) UCL	51.86
Assuming Gamma Distribution		99% Chebyshev(Mean, Sd) UCL	58
95% Approximate Gamma UCL	46.62		
95% Adjusted Gamma UCL	N/A		
Potential UCL to Use		Use 95% Student's-t UCL	45.4

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_26 Sodium

General Statistics			
Number of Valid Samples	28	Number of Unique Samples	26
Raw Statistics		**Log-transformed Statistics**	
Minimum	72.3	Minimum of Log Data	4.281
Maximum	131	Maximum of Log Data	4.875
Mean	97.84	Mean of log Data	4.573
Median	95.6	SD of log Data	0.148
SD	14.81		
Coefficient of Variation	0.151		
Skewness	0.637		
Relevant UCL Statistics			
Normal Distribution Test		**Lognormal Distribution Test**	
Shapiro Wilk Test Statistic	0.931	Shapiro Wilk Test Statistic	0.951
Shapiro Wilk Critical Value	0.924	Shapiro Wilk Critical Value	0.924
Data appear Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
95% Student's-t UCL	102.6	95% H-UCL	102.8
95% UCLs (Adjusted for Skewness)		95% Chebyshev (MVUE) UCL	109.8
95% Adjusted-CLT UCL	102.8	97.5% Chebyshev (MVUE) UCL	115
95% Modified-t UCL	102.7	99% Chebyshev (MVUE) UCL	125.2
Gamma Distribution Test		**Data Distribution**	
k star (bias corrected)	41.81	Data appear Normal at 5% Significance Level	
Theta Star	2.34		
nu star	2341		
Approximate Chi Square Value (.05)	2230	**Nonparametric Statistics**	
Adjusted Level of Significance	0.0404	95% CLT UCL	102.4
Adjusted Chi Square Value	2223	95% Jackknife UCL	102.6
		95% Standard Bootstrap UCL	102.4
Anderson-Darling Test Statistic	0.674	95% Bootstrap-t UCL	103
Anderson-Darling 5% Critical Value	0.743	95% Hall's Bootstrap UCL	102.8
Kolmogorov-Smirnov Test Statistic	0.182	95% Percentile Bootstrap UCL	102.1
Kolmogorov-Smirnov 5% Critical Value	0.165	95% BCA Bootstrap UCL	102.6
Data follow Appr. Gamma Distribution at 5% Significance Level		95% Chebyshev(Mean, Sd) UCL	110
		97.5% Chebyshev(Mean, Sd) UCL	115.3
Assuming Gamma Distribution		99% Chebyshev(Mean, Sd) UCL	125.7
95% Approximate Gamma UCL	102.7		
95% Adjusted Gamma UCL	103		
Potential UCL to Use		Use 95% Student's-t UCL	102.6

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_27 Thallium

General Statistics

Number of Valid Samples	24	Number of Detected Data	3
Number of Unique Samples	3	Number of Non-Detect Data	21
		Percent Non-Detects	87.50%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0001	Minimum Detected	-9.21
Maximum Detected	0.028	Maximum Detected	-3.576
Mean of Detected	0.0133	Mean of Detected	-5.739
SD of Detected	0.014	SD of Detected	3.037
Minimum Non-Detect	0.001	Minimum Non-Detect	-6.908
Maximum Non-Detect	0.025	Maximum Non-Detect	-3.689

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	23
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	1
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	95.83%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.992	Shapiro Wilk Test Statistic	0.861
5% Shapiro Wilk Critical Value	0.767	5% Shapiro Wilk Critical Value	0.767
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00285	Mean	-6.984
SD	0.00628	SD	1.271
95% DL/2 (t) UCL	0.00505	95% H-Stat (DL/2) UCL	0.00602
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-8.781
		SD in Log Scale	2.258
		Mean in Original Scale	0.00197
		SD in Original Scale	0.00605
		95% Percentile Bootstrap UCL	0.00419
		95% BCA Bootstrap UCL	0.00535
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	N/A	**Data appear Normal at 5% Significance Level**	
Theta Star	N/A		
nu star	N/A		
A-D Test Statistic	0.374	**Nonparametric Statistics**	
5% A-D Critical Value	N/A	Kaplan-Meier (KM) Method	
K-S Test Statistic	N/A	Mean	0.00178
5% K-S Critical Value	N/A	SD	0.00597
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.0015
		95% KM (t) UCL	0.00435
Assuming Gamma Distribution		95% KM (z) UCL	0.00424
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.00939
Minimum	N/A	95% KM (bootstrap t) UCL	0.00317
Maximum	N/A	95% KM (BCA) UCL	0.028
Mean	N/A	95% KM (Percentile Bootstrap) UCL	0.028
Median	N/A	95% KM (Chebyshev) UCL	0.00831
SD	N/A	97.5% KM (Chebyshev) UCL	0.0111
k star	N/A	99% KM (Chebyshev) UCL	0.0167
Theta star	N/A		
Nu star	N/A	**Potential UCLs to Use**	
AppChi2	N/A	95% KM (t) UCL	0.00435
95% Gamma Approximate UCL	N/A	95% KM (Percentile Bootstrap) UCL	0.028
95% Adjusted Gamma UCL	N/A		

Note: DL/2 is not a recommended method.

ProUCL

General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_28 Vanadium

General Statistics

Number of Valid Samples	29	Number of Detected Data	22
Number of Unique Samples	18	Number of Non-Detect Data	7
		Percent Non-Detects	24.14%

Raw Statistics		Log-transformed Statistics	
Minimum Detected	0.00041	Minimum Detected	-7.799
Maximum Detected	0.0051	Maximum Detected	-5.279
Mean of Detected	0.0033	Mean of Detected	-5.869
SD of Detected	0.0015	SD of Detected	0.653
Minimum Non-Detect	0.01	Minimum Non-Detect	-4.605
Maximum Non-Detect	0.02	Maximum Non-Detect	-3.912

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	29
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		Lognormal Distribution Test with Detected Values Only	
Shapiro Wilk Test Statistic	0.88	Shapiro Wilk Test Statistic	0.811
5% Shapiro Wilk Critical Value	0.911	5% Shapiro Wilk Critical Value	0.911
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		Assuming Lognormal Distribution	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0044	Mean	-5.635
SD	0.00268	SD	0.725
95% DL/2 (t) UCL	0.00525	95% H-Stat (DL/2) UCL	0.0128
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-5.869
		SD in Log Scale	0.597
		Mean in Original Scale	0.00324
		SD in Original Scale	0.00143
		95% Percentile Bootstrap UCL	0.00366
		95% BCA Bootstrap UCL	0.00362

Gamma Distribution Test with Detected Values Only		Data Distribution Test with Detected Values Only
k star (bias corrected)	2.952	Data do not follow a Discernable Distribution (0.05)
Theta Star	0.00112	
nu star	129.9	
A-D Test Statistic	1.407	
5% A-D Critical Value	0.748	
K-S Test Statistic	0.748	
5% K-S Critical Value	0.186	
Data not Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		Nonparametric Statistics	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0.00041	Mean	0.0033
Maximum	0.0051	SD	0.00147
Mean	0.00333	SE of Mean	0.00032011
Median	0.0039	95% KM (t) UCL	0.00385
SD	0.0014	95% KM (z) UCL	0.00383
k star	3.616	95% KM (jackknife) UCL	0.00385
Theta star	0.000921	95% KM (bootstrap t) UCL	0.0038
Nu star	209.8	95% KM (BCA) UCL	0.0038
AppChi2	177.2	95% KM (Percentile Bootstrap) UCL	0.00382
95% Gamma Approximate UCL	0.00394	95% KM (Chebyshev) UCL	0.0047
95% Adjusted Gamma UCL	0.00398	97.5% KM (Chebyshev) UCL	0.0053
		99% KM (Chebyshev) UCL	0.00649
		Potential UCLs to Use	
		95% KM (BCA) UCL	0.0038

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_29 Zinc

General Statistics			
Number of Valid Samples	30	Number of Detected Data	23
Number of Unique Samples	17	Number of Non-Detect Data	7
		Percent Non-Detects	23.33%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00047	Minimum Detected	-7.663
Maximum Detected	0.015	Maximum Detected	-4.2
Mean of Detected	0.00383	Mean of Detected	-5.87
SD of Detected	0.0035	SD of Detected	0.784
Minimum Non-Detect	0.01	Minimum Non-Detect	-4.605
Maximum Non-Detect	0.02	Maximum Non-Detect	-3.912
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	30
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.75	Shapiro Wilk Test Statistic	0.959
5% Shapiro Wilk Critical Value	0.914	5% Shapiro Wilk Critical Value	0.914
Data not Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00461	Mean	-5.668
SD	0.00358	SD	0.797
95% DL/2 (t) UCL	0.00571	95% H-Stat (DL/2) UCL	0.0127
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-5.889
		SD in Log Scale	0.72
		Mean in Original Scale	0.00361
		SD in Original Scale	0.00314
		95% Percentile Bootstrap UCL	0.00458
		95% BCA Bootstrap UCL	0.00482
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	1.577	**Data Follow Appr. Gamma Distribution at 5% Significance Level**	
Theta Star	0.00243		
nu star	72.52		
A-D Test Statistic	0.837	**Nonparametric Statistics**	
5% A-D Critical Value	0.757	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.757	Mean	0.0037
5% K-S Critical Value	0.184	SD	0.00325
Data follow Appr. Gamma Distribution at 5% Significance Level		SE of Mean	0.00065859
		95% KM (t) UCL	0.00482
Assuming Gamma Distribution		95% KM (z) UCL	0.00479
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.00482
Minimum	0.00047	95% KM (bootstrap t) UCL	0.00544
Maximum	0.015	95% KM (BCA) UCL	0.00495
Mean	0.00387	95% KM (Percentile Bootstrap) UCL	0.00486
Median	0.00295	95% KM (Chebyshev) UCL	0.00657
SD	0.00307	97.5% KM (Chebyshev) UCL	0.00782
k star	2.032	99% KM (Chebyshev) UCL	0.0103
Theta star	0.00191		
Nu star	121.9	**Potential UCLs to Use**	
AppChi2	97.41	95% KM (BCA) UCL	0.00495
95% Gamma Approximate UCL	0.00485		
95% Adjusted Gamma UCL	0.00491		

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_30 1,2-Dichlorobenzene

General Statistics

Number of Valid Samples	87	Number of Detected Data	8
Number of Unique Samples	8	Number of Non-Detect Data	79
		Percent Non-Detects	90.80%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0002	Minimum Detected	-8.517
Maximum Detected	0.028	Maximum Detected	-3.576
Mean of Detected	0.00764	Mean of Detected	-5.454
SD of Detected	0.00859	SD of Detected	1.401
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1	Maximum Non-Detect	0

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	87
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.699	Lilliefors Test Statistic	0.835
5% Lilliefors Critical Value	0.818	5% Lilliefors Critical Value	0.818
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0199	Mean	-6.435
SD	0.0787	SD	1.904
95% DL/2 (t) UCL	0.034	95% H-Stat (DL/2) UCL	0.0267
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-8.132
		SD in Log Scale	1.528
		Mean in Original Scale	0.0011
		SD in Original Scale	0.00326
		95% Percentile Bootstrap UCL	0.00173
		95% BCA Bootstrap UCL	0.00207

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	0.706	Data appear Gamma Distributed at 5% Significance Level
Theta Star	0.0108	
nu star	11.3	
A-D Test Statistic	0.499	
5% A-D Critical Value	0.736	
K-S Test Statistic	0.736	
5% K-S Critical Value	0.301	
Data appear Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0.0002	Mean	0.00108
Maximum	0.028	SD	0.00348
Mean	0.00762	SE of Mean	0.00043344
Median	0.00762	95% KM (t) UCL	0.0018
SD	0.00245	95% KM (z) UCL	0.00179
k star	9.23	95% KM (jackknife) UCL	0.00294
Theta star	0.0008254	95% KM (bootstrap t) UCL	0.00225
Nu star	1606	95% KM (BCA) UCL	0.0053
AppChi2	1514	95% KM (Percentile Bootstrap) UCL	0.00497
95% Gamma Approximate UCL	0.00808	95% KM (Chebyshev) UCL	0.00297
95% Adjusted Gamma UCL	0.00809	97.5% KM (Chebyshev) UCL	0.00378
		99% KM (Chebyshev) UCL	0.00539
		Potential UCLs to Use	
		95% KM (t) UCL	0.0018

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_31 1,3-Dichlorobenzene

General Statistics			
Number of Valid Samples	87	Number of Detected Data	5
Number of Unique Samples	5	Number of Non-Detect Data	82
		Percent Non-Detects	94.25%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0003	Minimum Detected	-8.112
Maximum Detected	0.0014	Maximum Detected	-6.571
Mean of Detected	0.000768	Mean of Detected	-7.287
SD of Detected	0.0004011	SD of Detected	0.555
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1	Maximum Non-Detect	0
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	87
For all methods (except KM, DL/2, and ROS Methods).		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.921	Lilliefors Test Statistic	0.948
5% Lilliefors Critical Value	0.762	5% Lilliefors Critical Value	0.762
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0184	Mean	-6.62
SD	0.0783	SD	1.829
95% DL/2 (t) UCL	0.0324	95% H-Stat (DL/2) UCL	0.0184
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-8.08
		SD in Log Scale	0.488
		Mean in Original Scale	0.00034956
		SD in Original Scale	0.00019268
		95% Percentile Bootstrap UCL	0.00038468
		95% BCA Bootstrap UCL	0.00038816
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	1.928	**Data appear Normal at 5% Significance Level**	
Theta Star	0.0003983		
nu star	19.28		
A-D Test Statistic	0.295	**Nonparametric Statistics**	
5% A-D Critical Value	0.681	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.681	Mean	0.00036435
5% K-S Critical Value	0.358	SD	0.0001985
Data appear Gamma Distributed at 5% Significance Level		SE of Mean	0.000035807
		95% KM (t) UCL	0.00042389
Assuming Gamma Distribution		95% KM (z) UCL	0.00042325
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.00054883
Minimum	0.0002425	95% KM (bootstrap t) UCL	0.00041523
Maximum	0.0014	95% KM (BCA) UCL	0.00079098
Mean	0.0005194	95% KM (Percentile Bootstrap) UCL	0.00078537
Median	0.0004764	95% KM (Chebyshev) UCL	0.00052043
SD	0.0001949	97.5% KM (Chebyshev) UCL	0.00058796
k star	7.638	99% KM (Chebyshev) UCL	0.00072063
Theta star	6.8E-05		
Nu star	1329	**Potential UCLs to Use**	
AppChi2	1245	95% KM (t) UCL	0.00042389
95% Gamma Approximate UCL	0.0005543	95% KM (Percentile Bootstrap) UCL	0.00078537
95% Adjusted Gamma UCL	0.0005549		

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_32 1,4-Dichlorobenzene

General Statistics

Number of Valid Samples	87	Number of Detected Data	4
Number of Unique Samples	4	Number of Non-Detect Data	83
		Percent Non-Detects	95.40%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0006	Minimum Detected	-7.419
Maximum Detected	0.0017	Maximum Detected	-6.377
Mean of Detected	0.00118	Mean of Detected	-6.813
SD of Detected	0.0004574	SD of Detected	0.442
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1	Maximum Non-Detect	0

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	87
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.993	Lilliefors Test Statistic	0.946
5% Lilliefors Critical Value	0.748	5% Lilliefors Critical Value	0.748
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0196	Mean	-6.541
SD	0.0788	SD	1.877
95% DL/2 (t) UCL	0.0336	95% H-Stat (DL/2) UCL	0.0208
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-9.164
		SD in Log Scale	1.094
		Mean in Original Scale	0.00019165
		SD in Original Scale	0.00027027
		95% Percentile Bootstrap UCL	0.00023951
		95% BCA Bootstrap UCL	0.00025041

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	2.076	**Data appear Normal at 5% Significance Level**
Theta Star	0.000566	
nu star	16.61	
A-D Test Statistic	0.256	
5% A-D Critical Value	0.658	
K-S Test Statistic	0.658	
5% K-S Critical Value	0.395	
Data appear Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0.0006	Mean	0.00065111
Maximum	0.00515	SD	0.00020179
Mean	0.0033	SE of Mean	0.000034735
Median	0.00351	95% KM (t) UCL	0.00070887
SD	0.0012	95% KM (z) UCL	0.00070825
k star	5.344	95% KM (jackknife) UCL	0.00095996
Theta star	0.0006177	95% KM (bootstrap t) UCL	0.00068893
Nu star	929.9	95% KM (BCA) UCL	0.0017
AppChi2	860.1	95% KM (Percentile Bootstrap) UCL	0.00133
95% Gamma Approximate UCL	0.00357	95% KM (Chebyshev) UCL	0.00080252
95% Adjusted Gamma UCL	N/A	97.5% KM (Chebyshev) UCL	0.00086803
		99% KM (Chebyshev) UCL	0.00099672
		Potential UCLs to Use	
		95% KM (t) UCL	0.00070887
		95% KM (Percentile Bootstrap) UCL	0.00133

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_33 Naphthalene

General Statistics

Number of Valid Samples	79	Number of Detected Data	10
Number of Unique Samples	10	Number of Non-Detect Data	69
		Percent Non-Detects	87.34%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00021	Minimum Detected	-8.468
Maximum Detected	0.0019	Maximum Detected	-6.266
Mean of Detected	0.000708	Mean of Detected	-7.487
SD of Detected	0.0005685	SD of Detected	0.691
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	0.2	Maximum Non-Detect	-1.609

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	79
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.741	Lilliefors Test Statistic	0.907
5% Lilliefors Critical Value	0.842	5% Lilliefors Critical Value	0.842
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00441	Mean	-6.719
SD	0.0136	SD	1.369
95% DL/2 (t) UCL	0.00696	95% H-Stat (DL/2) UCL	0.00727
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-7.945
		SD in Log Scale	0.554
		Mean in Original Scale	0.00041746
		SD in Original Scale	0.00028817
		95% Percentile Bootstrap UCL	0.00047197
		95% BCA Bootstrap UCL	0.00048395

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	1.671	Data appear Lognormal at 5% Significance Level
Theta Star	0.0004237	
nu star	33.42	
A-D Test Statistic	0.738	**Nonparametric Statistics**
5% A-D Critical Value	0.735	Kaplan-Meier (KM) Method
K-S Test Statistic	0.735	Mean
5% K-S Critical Value	0.269	SD
Data not Gamma Distributed at 5% Significance Level		SE of Mean
		95% KM (t) UCL
Assuming Gamma Distribution		95% KM (z) UCL
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL
Minimum	0.00021	95% KM (bootstrap t) UCL
Maximum	0.0019	95% KM (BCA) UCL
Mean	0.0007157	95% KM (Percentile Bootstrap) UCL
Median	0.0007169	95% KM (Chebyshev) UCL
SD	0.0001934	97.5% KM (Chebyshev) UCL
k star	16.37	99% KM (Chebyshev) UCL
Theta star	4.372E-05	
Nu star	2587	Potential UCLs to Use
AppChi2	2469	95% KM (t) UCL
95% Gamma Approximate UCL	0.0007496	95% KM (% Bootstrap) UCL
95% Adjusted Gamma UCL	0.0007503	

Mean	0.00044296
SD	0.00032618
SE of Mean	0.000068688
95% KM (t) UCL	0.0005573
95% KM (z) UCL	0.00055594
95% KM (jackknife) UCL	0.0005673
95% KM (bootstrap t) UCL	0.00059005
95% KM (BCA) UCL	0.00058091
95% KM (Percentile Bootstrap) UCL	0.00057009
95% KM (Chebyshev) UCL	0.00074236
97.5% KM (Chebyshev) UCL	0.00087191
99% KM (Chebyshev) UCL	0.00113
95% KM (t) UCL	0.0005573
95% KM (% Bootstrap) UCL	0.00057009

Note: DL/2 is not a recommended method.

ProUCL

General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_34 Acetophenone

General Statistics

Number of Valid Samples	27	Number of Detected Data	2
Number of Unique Samples	2	Number of Non-Detect Data	25
		Percent Non-Detects	92.59%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0022	Minimum Detected	-6.119
Maximum Detected	0.0069	Maximum Detected	-4.976
Mean of Detected	0.00455	Mean of Detected	-5.548
SD of Detected	0.00332	SD of Detected	0.808
Minimum Non-Detect	0.005	Minimum Non-Detect	-5.298
Maximum Non-Detect	0.005	Maximum Non-Detect	-5.298

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	1	Shapiro Wilk Test Statistic	1
5% Shapiro Wilk Critical Value	N/A	5% Shapiro Wilk Critical Value	N/A
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00265	Mean	-5.959
SD	0.000851	SD	0.198
95% DL/2 (t) UCL	0.00293	95% H-Stat (DL/2) UCL	0.00298
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	N/A
		SD in Log Scale	N/A
		Mean in Original Scale	N/A
		SD in Original Scale	N/A
		95% Percentile Bootstrap UCL	N/A
		95% BCA Bootstrap UCL	N/A

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	N/A	Data do not follow a Discernable Distribution (0.05)
Theta Star	N/A	
nu star	N/A	
A-D Test Statistic	0.359	
5% A-D Critical Value	N/A	
K-S Test Statistic	N/A	
5% K-S Critical Value	N/A	
Data not Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	N/A	Mean	0.00237
Maximum	N/A	SD	0.00088761
Mean	N/A	SE of Mean	0.00024158
Median	N/A	95% KM (t) UCL	0.00279
SD	N/A	95% KM (z) UCL	0.00277
k star	N/A	95% KM (jackknife) UCL	0.00546
Theta star	N/A	95% KM (bootstrap t) UCL	1.7977E+308
Nu star	N/A	95% KM (BCA) UCL	0.0069
AppChi2	N/A	95% KM (Percentile Bootstrap) UCL	0.0069
95% Gamma Approximate UCL	N/A	95% KM (Chebyshev) UCL	0.00343
95% Adjusted Gamma UCL	N/A	97.5% KM (Chebyshev) UCL	0.00388
		99% KM (Chebyshev) UCL	0.00478
		Potential UCLs to Use	
		95% KM (t) UCL	0.00279
		95% KM (% Bootstrap) UCL	0.0069

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_35 Bis(2-ethylhexyl)phthalate (DEHP)

General Statistics

Number of Valid Samples	29	Number of Detected Data	16
Number of Unique Samples	16	Number of Non-Detect Data	13
		Percent Non-Detects	44.83%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00045	Minimum Detected	-7.706
Maximum Detected	0.08	Maximum Detected	-2.526
Mean of Detected	0.00897	Mean of Detected	-5.88
SD of Detected	0.0195	SD of Detected	1.473
Minimum Non-Detect	0.005	Minimum Non-Detect	-5.298
Maximum Non-Detect	0.01	Maximum Non-Detect	-4.605

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	25
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	4
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	86.21%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.455	Shapiro Wilk Test Statistic	0.918
5% Shapiro Wilk Critical Value	0.887	5% Shapiro Wilk Critical Value	0.887
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00624	Mean	-5.882
SD	0.0146	SD	1.091
95% DL/2 (t) UCL	0.0108	95% H-Stat (DL/2) UCL	0.0172
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE yields a negative mean		Mean in Log Scale	-6.263
		SD in Log Scale	1.296
		Mean in Original Scale	0.00567
		SD in Original Scale	0.0147
		95% Percentile Bootstrap UCL	0.0108
		95% BCA Bootstrap UCL	0.0143

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	0.479	Data Follow Appr. Gamma Distribution at 5% Significance Level
Theta Star	0.0187	
nu star	15.34	
A-D Test Statistic	1.083	
5% A-D Critical Value	0.793	
K-S Test Statistic	0.793	
5% K-S Critical Value	0.227	
Data follow Appr. Gamma Distribution at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0.00045	Mean	0.00558
Maximum	0.08	SD	0.0145
Mean	0.00883	SE of Mean	0.00279
Median	0.00789	95% KM (t) UCL	0.0103
SD	0.0143	95% KM (z) UCL	0.0102
k star	0.834	95% KM (jackknife) UCL	0.0103
Theta star	0.0106	95% KM (bootstrap t) UCL	0.0223
Nu star	48.35	95% KM (BCA) UCL	0.0115
AppChi2	33.39	95% KM (Percentile Bootstrap) UCL	0.0106
95% Gamma Approximate UCL	0.0128	95% KM (Chebyshev) UCL	0.0177
95% Adjusted Gamma UCL	0.0131	97.5% KM (Chebyshev) UCL	0.023
		99% KM (Chebyshev) UCL	0.0333
		Potential UCLs to Use	
		95% KM (BCA) UCL	0.0115

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_36 Caprolactam

General Statistics			
Number of Valid Samples	27	Number of Detected Data	3
Number of Unique Samples	3	Number of Non-Detect Data	24
		Percent Non-Detects	88.89%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00015	Minimum Detected	-8.805
Maximum Detected	0.028	Maximum Detected	-3.576
Mean of Detected	0.0131	Mean of Detected	-5.63
SD of Detected	0.014	SD of Detected	2.789
Minimum Non-Detect	0.005	Minimum Non-Detect	-5.298
Maximum Non-Detect	0.005	Maximum Non-Detect	-5.298

UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.984	Shapiro Wilk Test Statistic	0.879
5% Shapiro Wilk Critical Value	0.767	5% Shapiro Wilk Critical Value	0.767
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00367	Mean	-5.951
SD	0.00515	SD	0.782
95% DL/2 (t) UCL	0.00536	95% H-Stat (DL/2) UCL	0.00586
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-8.556
		SD in Log Scale	2.311
		Mean in Original Scale	0.00196
		SD in Original Scale	0.00565
		95% Percentile Bootstrap UCL	0.00398
		95% BCA Bootstrap UCL	0.00517
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	N/A	**Data appear Normal at 5% Significance Level**	
Theta Star	N/A		
nu star	N/A		
A-D Test Statistic	0.341	**Nonparametric Statistics**	
5% A-D Critical Value	N/A	Kaplan-Meier (KM) Method	
K-S Test Statistic	N/A	Mean	0.00158
5% K-S Critical Value	N/A	SD	0.00557
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.00131
		95% KM (t) UCL	0.00382
Assuming Gamma Distribution		95% KM (z) UCL	0.00374
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.00859
Minimum	N/A	95% KM (bootstrap t) UCL	0.00294
Maximum	N/A	95% KM (BCA) UCL	0.028
Mean	N/A	95% KM (Percentile Bootstrap) UCL	0.028
Median	N/A	95% KM (Chebyshev) UCL	0.00731
SD	N/A	97.5% KM (Chebyshev) UCL	0.00978
k star	N/A	99% KM (Chebyshev) UCL	0.0146
Theta star	N/A		
Nu star	N/A	**Potential UCLs to Use**	
AppChi2	N/A	95% KM (t) UCL	0.00382
95% Gamma Approximate UCL	N/A	95% KM (Percentile Bootstrap) UCL	0.028
95% Adjusted Gamma UCL	N/A		

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_38 Isophorone

General Statistics

Number of Valid Samples	29	Number of Detected Data	2
Number of Unique Samples	2	Number of Non-Detect Data	27
		Percent Non-Detects	93.10%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0022	Minimum Detected	-6.119
Maximum Detected	0.0049	Maximum Detected	-5.319
Mean of Detected	0.00355	Mean of Detected	-5.719
SD of Detected	0.00191	SD of Detected	0.566
Minimum Non-Detect	0.005	Minimum Non-Detect	-5.298
Maximum Non-Detect	0.01	Maximum Non-Detect	-4.605

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	29
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	1	Shapiro Wilk Test Statistic	1
5% Shapiro Wilk Critical Value	N/A	5% Shapiro Wilk Critical Value	N/A
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00274	Mean	-5.925
SD	0.0007702	SD	0.216
95% DL/2 (t) UCL	0.00299	95% H-Stat (DL/2) UCL	0.00332
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	N/A
		SD in Log Scale	N/A
		Mean in Original Scale	N/A
		SD in Original Scale	N/A
		95% Percentile Bootstrap UCL	N/A
		95% BCA Bootstrap UCL	N/A

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	N/A	Data do not follow a Discernable Distribution (0.05)
Theta Star	N/A	
nu star	N/A	
A-D Test Statistic	0.359	**Nonparametric Statistics**
5% A-D Critical Value	N/A	Kaplan-Meier (KM) Method
K-S Test Statistic	N/A	Mean 0.00355
5% K-S Critical Value	N/A	SD 0.00135
Data not Gamma Distributed at 5% Significance Level		SE of Mean 0.00135
		95% KM (t) UCL 0.00585
Assuming Gamma Distribution		95% KM (z) UCL 0.00577
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL 0.00674
Minimum	N/A	95% KM (bootstrap t) UCL 1.7977E+308
Maximum	N/A	95% KM (BCA) UCL 0.0049
Mean	N/A	95% KM (Percentile Bootstrap) UCL 0.0049
Median	N/A	95% KM (Chebyshev) UCL 0.00943
SD	N/A	97.5% KM (Chebyshev) UCL 0.012
k star	N/A	99% KM (Chebyshev) UCL 0.017
Theta star	N/A	
Nu star	N/A	**Potential UCLs to Use**
AppChi2	N/A	95% KM (t) UCL 0.00585
95% Gamma Approximate UCL	N/A	95% KM (% Bootstrap) UCL 0.0049
95% Adjusted Gamma UCL	N/A	

Warning: Recommended UCL exceeds the maximum observation

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_39 Phenol

General Statistics

Number of Valid Samples	29	Number of Detected Data	3
Number of Unique Samples	3	Number of Non-Detect Data	26
		Percent Non-Detects	89.66%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0085	Minimum Detected	-4.768
Maximum Detected	0.02	Maximum Detected	-3.912
Mean of Detected	0.0132	Mean of Detected	-4.397
SD of Detected	0.00605	SD of Detected	0.439
Minimum Non-Detect	0.005	Minimum Non-Detect	-5.298
Maximum Non-Detect	0.01	Maximum Non-Detect	-4.605

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	27
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	2
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	93.10%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Shapiro Wilk Test Statistic	0.904	Shapiro Wilk Test Statistic	0.95
5% Shapiro Wilk Critical Value	0.767	5% Shapiro Wilk Critical Value	0.767
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.00369	Mean	-5.803
SD	0.00368	SD	0.516
95% DL/2 (t) UCL	0.00485	95% H-Stat (DL/2) UCL	0.00421
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-6.637
		SD in Log Scale	1.245
		Mean in Original Scale	0.00277
		SD in Original Scale	0.00417
		95% Percentile Bootstrap UCL	0.00407
		95% BCA Bootstrap UCL	0.00445

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	N/A	**Data appear Normal at 5% Significance Level**
Theta Star	N/A	
nu star	N/A	
A-D Test Statistic	0.338	
5% A-D Critical Value	N/A	
K-S Test Statistic	N/A	
5% K-S Critical Value	N/A	
Data not Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	N/A	Mean	0.00898
Maximum	N/A	SD	0.00213
Mean	N/A	SE of Mean	0.00048474
Median	N/A	95% KM (t) UCL	0.00981
SD	N/A	95% KM (z) UCL	0.00978
k star	N/A	95% KM (jackknife) UCL	0.0106
Theta star	N/A	95% KM (bootstrap t) UCL	0.0101
Nu star	N/A	95% KM (BCA) UCL	0.02
AppChi2	N/A	95% KM (Percentile Bootstrap) UCL	0.02
95% Gamma Approximate UCL	N/A	95% KM (Chebyshev) UCL	0.0111
95% Adjusted Gamma UCL	N/A	97.5% KM (Chebyshev) UCL	0.012
		99% KM (Chebyshev) UCL	0.0138
		Potential UCLs to Use	
		95% KM (t) UCL	0.00981
		95% KM (Percentile Bootstrap) UCL	0.02

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_40 1,1,1,2-Tetrachloroethane

General Statistics

Number of Valid Samples	52	Number of Detected Data	6
Number of Unique Samples	6	Number of Non-Detect Data	46
		Percent Non-Detects	88.46%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0014	Minimum Detected	-6.571
Maximum Detected	0.022	Maximum Detected	-3.817
Mean of Detected	0.0099	Mean of Detected	-5.009
SD of Detected	0.00815	SD of Detected	1.067
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	0.63	Maximum Non-Detect	-0.462

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	52
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.924	Lilliefors Test Statistic	0.944
5% Lilliefors Critical Value	0.788	5% Lilliefors Critical Value	0.788
Data appear Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0172	Mean	-6.563
SD	0.0539	SD	2.003
95% DL/2 (t) UCL	0.0297	95% H-Stat (DL/2) UCL	0.0419
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-9.205
		SD in Log Scale	2.273
		Mean in Original Scale	0.0013
		SD in Original Scale	0.00405
		95% Percentile Bootstrap UCL	0.00225
		95% BCA Bootstrap UCL	0.0027

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	0.818	Data appear Normal at 5% Significance Level
Theta Star	0.0121	
nu star	9.815	
A-D Test Statistic	0.252	**Nonparametric Statistics**
5% A-D Critical Value	0.709	Kaplan-Meier (KM) Method
K-S Test Statistic	0.709	Mean 0.00253
5% K-S Critical Value	0.338	SD 0.00393
Data appear Gamma Distributed at 5% Significance Level		SE of Mean 0.00063539
		95% KM (t) UCL 0.00359
Assuming Gamma Distribution		95% KM (z) UCL 0.00357
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL 0.0037
Minimum 0		95% KM (bootstrap t) UCL 0.00387
Maximum 0.077		95% KM (BCA) UCL 0.0123
Mean 0.0338		95% KM (Percentile Bootstrap) UCL 0.00634
Median 0.0326		95% KM (Chebyshev) UCL 0.0053
SD 0.0233		97.5% KM (Chebyshev) UCL 0.0065
k star 0.623		99% KM (Chebyshev) UCL 0.00885
Theta star 0.0544		
Nu star 64.76		**Potential UCLs to Use**
AppChi2 47.24		95% KM (t) UCL 0.00359
95% Gamma Approximate UCL 0.0464		95% KM (Percentile Bootstrap) UCL 0.00634
95% Adjusted Gamma UCL 0.0468		

Note: DL/2 is not a recommended method.

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_41 1,1,1-Trichloroethane

General Statistics			
Number of Valid Samples	88	Number of Detected Data	61
Number of Unique Samples	50	Number of Non-Detect Data	27
		Percent Non-Detects	30.68%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0002	Minimum Detected	-8.517
Maximum Detected	14	Maximum Detected	2.639
Mean of Detected	1.123	Mean of Detected	-4.903
SD of Detected	2.991	SD of Detected	3.281
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	0.2	Maximum Non-Detect	-1.609
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	77
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	11
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	87.50%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.46	Lilliefors Test Statistic	0.231
5% Lilliefors Critical Value	0.113	5% Lilliefors Critical Value	0.113
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.781	Mean	-5.243
SD	2.537	SD	2.871
95% DL/2 (t) UCL	1.231	95% H-Stat (DL/2) UCL	2.327
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE yields a negative mean		Mean in Log Scale	-5.577
		SD in Log Scale	3.021
		Mean in Original Scale	0.779
		SD in Original Scale	2.538
		95% Percentile Bootstrap UCL	1.241
		95% BCA Bootstrap UCL	1.412
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.156	Data do not follow a Discernable Distribution (0.05)	
Theta Star	7.191		
nu star	19.05		
A-D Test Statistic	9.63	**Nonparametric Statistics**	
5% A-D Critical Value	0.945	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.945	Mean	0.779
5% K-S Critical Value	0.128	SD	2.524
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.271
		95% KM (t) UCL	1.23
Assuming Gamma Distribution		95% KM (z) UCL	1.225
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	1.229
Minimum	0	95% KM (bootstrap t) UCL	1.476
Maximum	14	95% KM (BCA) UCL	1.243
Mean	0.863	95% KM (Percentile Bootstrap) UCL	1.246
Median	0.00246	95% KM (Chebyshev) UCL	1.961
SD	2.545	97.5% KM (Chebyshev) UCL	2.473
k star	0.12	99% KM (Chebyshev) UCL	3.478
Theta star	7.195		
Nu star	21.11	**Potential UCLs to Use**	
AppChi2	11.68	97.5% KM (Chebyshev) UCL	2.473
95% Gamma Approximate UCL	1.561		
95% Adjusted Gamma UCL	1.577		

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_42 1,1,2-Trichloroethane

General Statistics			
Number of Valid Samples	87	Number of Detected Data	35
Number of Unique Samples	30	Number of Non-Detect Data	52
		Percent Non-Detects	59.77%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00012	Minimum Detected	-9.028
Maximum Detected	2	Maximum Detected	0.693
Mean of Detected	0.0802	Mean of Detected	-6.114
SD of Detected	0.337	SD of Detected	2.555
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1	Maximum Non-Detect	0
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	86
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	1
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	98.85%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.249	Lilliefors Test Statistic	0.808
5% Lilliefors Critical Value	0.934	5% Lilliefors Critical Value	0.934
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0452	Mean	-6.214
SD	0.223	SD	2.094
95% DL/2 (t) UCL	0.0849	95% H-Stat (DL/2) UCL	0.0944
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-7.123
		SD in Log Scale	2.099
		Mean in Original Scale	0.0328
		SD in Original Scale	0.216
		95% Percentile Bootstrap UCL	0.0787
		95% BCA Bootstrap UCL	0.106
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.206	**Data do not follow a Discernable Distribution (0.05)**	
Theta Star	0.39		
nu star	14.41		
A-D Test Statistic	5.064	**Nonparametric Statistics**	
5% A-D Critical Value	0.898	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.898	Mean	0.033
5% K-S Critical Value	0.165	SD	0.214
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.0233
		95% KM (t) UCL	0.0718
Assuming Gamma Distribution		95% KM (z) UCL	0.0714
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.0715
Minimum	0	95% KM (bootstrap t) UCL	0.263
Maximum	2	95% KM (BCA) UCL	0.0806
Mean	0.078	95% KM (Percentile Bootstrap) UCL	0.0783
Median	0.0775	95% KM (Chebyshev) UCL	0.135
SD	0.213	97.5% KM (Chebyshev) UCL	0.179
k star	0.386	99% KM (Chebyshev) UCL	0.265
Theta star	0.202		
Nu star	67.23	**Potential UCLs to Use**	
AppChi2	49.36	97.5% KM (Chebyshev) UCL	0.179
95% Gamma Approximate UCL	0.106		
95% Adjusted Gamma UCL	0.107		

Note: DL/2 is not a recommended method.

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_43 1,1-Dichloroethane

General Statistics			
Number of Valid Samples	88	Number of Detected Data	62
Number of Unique Samples	47	Number of Non-Detect Data	26
		Percent Non-Detects	29.55%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00037	Minimum Detected	-7.902
Maximum Detected	0.15	Maximum Detected	-1.897
Mean of Detected	0.0193	Mean of Detected	-5.373
SD of Detected	0.0371	SD of Detected	1.596
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1	Maximum Non-Detect	0
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	88
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.389	Lilliefors Test Statistic	0.197
5% Lilliefors Critical Value	0.113	5% Lilliefors Critical Value	0.113
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0337	Mean	-5.311
SD	0.0875	SD	1.812
95% DL/2 (t) UCL	0.0492	95% H-Stat (DL/2) UCL	0.0881
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-5.717
		SD in Log Scale	1.534
		Mean in Original Scale	0.0142
		SD in Original Scale	0.032
		95% Percentile Bootstrap UCL	0.02
		95% BCA Bootstrap UCL	0.0209
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.442	Data do not follow a Discernable Distribution (0.05)	
Theta Star	0.0436		
nu star	54.79		
A-D Test Statistic	6.392	**Nonparametric Statistics**	
5% A-D Critical Value	0.827	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.827	Mean	0.015
5% K-S Critical Value	0.12	SD	0.0329
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.00366
		95% KM (t) UCL	0.0211
Assuming Gamma Distribution		95% KM (z) UCL	0.021
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.0211
Minimum	0	95% KM (bootstrap t) UCL	0.023
Maximum	0.15	95% KM (BCA) UCL	0.0215
Mean	0.0172	95% KM (Percentile Bootstrap) UCL	0.021
Median	0.00345	95% KM (Chebyshev) UCL	0.0309
SD	0.0323	97.5% KM (Chebyshev) UCL	0.0378
k star	0.249	99% KM (Chebyshev) UCL	0.0514
Theta star	0.0692		
Nu star	43.8	**Potential UCLs to Use**	
AppChi2	29.62	97.5% KM (Chebyshev) UCL	0.0378
95% Gamma Approximate UCL	0.0255		
95% Adjusted Gamma UCL	0.0256		

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_44 1,1-Dichloroethene

General Statistics			
Number of Valid Samples	88	Number of Unique Samples	56
Raw Statistics		**Log-transformed Statistics**	
Minimum	0.014	Minimum of Log Data	-4.269
Maximum	5.1	Maximum of Log Data	1.629
Mean	0.896	Mean of log Data	-0.488
Median	0.73	SD of log Data	0.978
SD	0.766		
Coefficient of Variation	0.855		
Skewness	2.248		
Relevant UCL Statistics			
Normal Distribution Test		**Lognormal Distribution Test**	
Lilliefors Test Statistic	0.13	Lilliefors Test Statistic	0.0817
Lilliefors Critical Value	0.0944	Lilliefors Critical Value	0.0944
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
95% Student's-t UCL	1.031	95% H-UCL	1.248
95% UCLs (Adjusted for Skewness)		95% Chebyshev (MVUE) UCL	1.513
95% Adjusted-CLT UCL	1.051	97.5% Chebyshev (MVUE) UCL	1.743
95% Modified-t UCL	1.035	99% Chebyshev (MVUE) UCL	2.194
Gamma Distribution Test		**Data Distribution**	
k star (bias corrected)	1.425	Data appear Gamma Distributed at 5% Significance Level	
Theta Star	0.628		
nu star	250.8		
Approximate Chi Square Value (.05)	215.1	**Nonparametric Statistics**	
Adjusted Level of Significance	0.0473	95% CLT UCL	1.03
Adjusted Chi Square Value	214.6	95% Jackknife UCL	1.031
		95% Standard Bootstrap UCL	1.025
Anderson-Darling Test Statistic	0.242	95% Bootstrap-t UCL	1.058
Anderson-Darling 5% Critical Value	0.772	95% Hall's Bootstrap UCL	1.068
Kolmogorov-Smirnov Test Statistic	0.0514	95% Percentile Bootstrap UCL	1.027
Kolmogorov-Smirnov 5% Critical Value	0.0971	95% BCA Bootstrap UCL	1.046
Data appear Gamma Distributed at 5% Significance Level		95% Chebyshev(Mean, Sd) UCL	1.251
		97.5% Chebyshev(Mean, Sd) UCL	1.405
Assuming Gamma Distribution		99% Chebyshev(Mean, Sd) UCL	1.708
95% Approximate Gamma UCL	1.044		
95% Adjusted Gamma UCL	1.047		
Potential UCL to Use		Use 95% Approximate Gamma UCL	1.044

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_45 1,2,4-Trimethylbenzene

General Statistics

Number of Valid Samples	52	Number of Detected Data	3
Number of Unique Samples	3	Number of Non-Detect Data	49
		Percent Non-Detects	94.23%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0042	Minimum Detected	-5.473
Maximum Detected	0.052	Maximum Detected	-2.957
Mean of Detected	0.0241	Mean of Detected	-4.188
SD of Detected	0.0249	SD of Detected	1.259
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	0.63	Maximum Non-Detect	-0.462

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	52
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.921	Lilliefors Test Statistic	0.999
5% Lilliefors Critical Value	0.767	5% Lilliefors Critical Value	0.767
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0142	Mean	-6.688
SD	0.0476	SD	1.94
95% DL/2 (t) UCL	0.0252	95% H-Stat (DL/2) UCL	0.0248
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-10.59
		SD in Log Scale	2.827
		Mean in Original Scale	0.00151
		SD in Original Scale	0.00749
		95% Percentile Bootstrap UCL	0.00319
		95% BCA Bootstrap UCL	0.0045

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	N/A	**Data appear Normal at 5% Significance Level**
Theta Star	N/A	
nu star	N/A	
A-D Test Statistic	0.251	**Nonparametric Statistics**
5% A-D Critical Value	N/A	Kaplan-Meier (KM) Method
K-S Test Statistic	N/A	Mean 0.00545
5% K-S Critical Value	N/A	SD 0.007
Data not Gamma Distributed at 5% Significance Level		SE of Mean 0.00124
		95% KM (t) UCL 0.00753
Assuming Gamma Distribution		95% KM (z) UCL 0.00749
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL 0.0131
Minimum N/A		95% KM (bootstrap t) UCL 0.00777
Maximum N/A		95% KM (BCA) UCL 0.052
Mean N/A		95% KM (Percentile Bootstrap) UCL 0.052
Median N/A		95% KM (Chebyshev) UCL 0.0109
SD N/A		97.5% KM (Chebyshev) UCL 0.0132
k star N/A		99% KM (Chebyshev) UCL 0.0178
Theta star N/A		
Nu star N/A		**Potential UCLs to Use**
AppChi2 N/A		95% KM (t) UCL 0.00753
95% Gamma Approximate UCL N/A		95% KM (Percentile Bootstrap) UCL 0.052
95% Adjusted Gamma UCL N/A		

Note: DL/2 is not a recommended method.

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_46 1,2-Dichloroethane

General Statistics			
Number of Valid Samples	88	Number of Detected Data	59
Number of Unique Samples	46	Number of Non-Detect Data	29
		Percent Non-Detects	32.95%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00027	Minimum Detected	-8.217
Maximum Detected	1.3	Maximum Detected	0.262
Mean of Detected	0.12	Mean of Detected	-4.383
SD of Detected	0.288	SD of Detected	2.072
Minimum Non-Detect	0.0002	Minimum Non-Detect	-8.517
Maximum Non-Detect	1	Maximum Non-Detect	0
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	86
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	2
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	97.73%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.436	Lilliefors Test Statistic	0.116
5% Lilliefors Critical Value	0.115	5% Lilliefors Critical Value	0.115
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0975	Mean	-4.815
SD	0.25	SD	2.216
95% DL/2 (t) UCL	0.142	95% H-Stat (DL/2) UCL	0.37
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-5.305
		SD in Log Scale	2.3
		Mean in Original Scale	0.0807
		SD in Original Scale	0.242
		95% Percentile Bootstrap UCL	0.126
		95% BCA Bootstrap UCL	0.136
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.3	**Data do not follow a Discernable Distribution (0.05)**	
Theta Star	0.398		
nu star	35.45		
A-D Test Statistic	5.861	**Nonparametric Statistics**	
5% A-D Critical Value	0.862	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.862	Mean	0.0822
5% K-S Critical Value	0.126	SD	0.241
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.0261
		95% KM (t) UCL	0.126
Assuming Gamma Distribution		95% KM (z) UCL	0.125
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.126
Minimum	0	95% KM (bootstrap t) UCL	0.142
Maximum	1.3	95% KM (BCA) UCL	0.128
Mean	0.0924	95% KM (Percentile Bootstrap) UCL	0.129
Median	0.0067	95% KM (Chebyshev) UCL	0.196
SD	0.244	97.5% KM (Chebyshev) UCL	0.245
k star	0.143	99% KM (Chebyshev) UCL	0.342
Theta star	0.645		
Nu star	25.2	**Potential UCLs to Use**	
AppChi2	14.77	97.5% KM (Chebyshev) UCL	0.245
95% Gamma Approximate UCL	0.158		
95% Adjusted Gamma UCL	0.159		

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_47 1,3,5-Trimethylbenzene

General Statistics

Number of Valid Samples	52	Number of Detected Data	2
Number of Unique Samples	2	Number of Non-Detect Data	50
		Percent Non-Detects	96.15%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00096	Minimum Detected	-6.949
Maximum Detected	0.0032	Maximum Detected	-5.745
Mean of Detected	0.00208	Mean of Detected	-6.347
SD of Detected	0.00158	SD of Detected	0.851
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	0.63	Maximum Non-Detect	-0.462

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	52
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	1	Lilliefors Test Statistic	1
5% Lilliefors Critical Value	N/A	5% Lilliefors Critical Value	N/A
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0148	Mean	-6.734
SD	0.0489	SD	1.93
95% DL/2 (t) UCL	0.0261	95% H-Stat (DL/2) UCL	0.0238
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	N/A
		SD in Log Scale	N/A
		Mean in Original Scale	N/A
		SD in Original Scale	N/A
		95% Percentile Bootstrap UCL	N/A
		95% BCA Bootstrap UCL	N/A

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	N/A	Data do not follow a Discernable Distribution (0.05)
Theta Star	N/A	
nu star	N/A	
A-D Test Statistic	0.359	
5% A-D Critical Value	N/A	
K-S Test Statistic	N/A	
5% K-S Critical Value	N/A	
Data not Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	N/A	Mean	0.00102
Maximum	N/A	SD	0.00037318
Mean	N/A	SE of Mean	0.000089207
Median	N/A	95% KM (t) UCL	0.00117
SD	N/A	95% KM (z) UCL	0.00117
k star	N/A	95% KM (jackknife) UCL	0.00247
Theta star	N/A	95% KM (bootstrap t) UCL	1.7977E+308
Nu star	N/A	95% KM (BCA) UCL	0.0032
AppChi2	N/A	95% KM (Percentile Bootstrap) UCL	N/A
95% Gamma Approximate UCL	N/A	95% KM (Chebyshev) UCL	0.00141
95% Adjusted Gamma UCL	N/A	97.5% KM (Chebyshev) UCL	0.00158
		99% KM (Chebyshev) UCL	0.00191
		Potential UCLs to Use	
		95% KM (t) UCL	0.00117
		95% KM (% Bootstrap) UCL	N/A

Note: DL/2 is not a recommended method.

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_48 2-Butanone

General Statistics			
Number of Valid Samples	60	Number of Detected Data	4
Number of Unique Samples	4	Number of Non-Detect Data	56
		Percent Non-Detects	93.33%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.29	Minimum Detected	-1.238
Maximum Detected	0.77	Maximum Detected	-0.261
Mean of Detected	0.523	Mean of Detected	-0.709
SD of Detected	0.201	SD of Detected	0.411
Minimum Non-Detect	0.002	Minimum Non-Detect	-6.215
Maximum Non-Detect	13	Maximum Non-Detect	2.565
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	60
For all methods (except KM, DL/2, and ROS Methods).		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.999	Lilliefors Test Statistic	0.987
5% Lilliefors Critical Value	0.748	5% Lilliefors Critical Value	0.748
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.367	Mean	-4.262
SD	1.233	SD	2.343
95% DL/2 (t) UCL	0.633	95% H-Stat (DL/2) UCL	0.876
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-3.25
		SD in Log Scale	1.078
		Mean in Original Scale	0.0769
		SD in Original Scale	0.134
		95% Percentile Bootstrap UCL	0.109
		95% BCA Bootstrap UCL	0.117
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	2.279	**Data appear Normal at 5% Significance Level**	
Theta Star	0.229		
nu star	18.23		
A-D Test Statistic	0.199	**Nonparametric Statistics**	
5% A-D Critical Value	0.658	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.658	Mean	0.307
5% K-S Critical Value	0.395	SD	0.0765
Data appear Gamma Distributed at 5% Significance Level		SE of Mean	0.0119
		95% KM (t) UCL	0.327
Assuming Gamma Distribution		95% KM (z) UCL	0.327
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.414
Minimum	0.29	95% KM (bootstrap t) UCL	0.322
Maximum	0.77	95% KM (BCA) UCL	0.77
Mean	0.443	95% KM (Percentile Bootstrap) UCL	0.581
Median	0.428	95% KM (Chebyshev) UCL	0.359
SD	0.0913	97.5% KM (Chebyshev) UCL	0.381
k star	24.43	99% KM (Chebyshev) UCL	0.425
Theta star	0.0181		
Nu star	2931	**Potential UCLs to Use**	
AppChi2	2806	95% KM (t) UCL	0.327
95% Gamma Approximate UCL	0.463	95% KM (Percentile Bootstrap) UCL	0.581
95% Adjusted Gamma UCL	N/A		

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_49 2-Chlorotoluene

General Statistics

Number of Valid Samples	52	Number of Detected Data	5
Number of Unique Samples	5	Number of Non-Detect Data	47
		Percent Non-Detects	90.38%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0002	Minimum Detected	-8.517
Maximum Detected	0.0006	Maximum Detected	-7.419
Mean of Detected	0.000392	Mean of Detected	-7.916
SD of Detected	0.0001574	SD of Detected	0.435
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	0.63	Maximum Non-Detect	-0.462

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	52
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.981	Lilliefors Test Statistic	0.966
5% Lilliefors Critical Value	0.762	5% Lilliefors Critical Value	0.762
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0123	Mean	-6.963
SD	0.0474	SD	1.777
95% DL/2 (t) UCL	0.0234	95% H-Stat (DL/2) UCL	0.0186
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-8.04
		SD in Log Scale	0.302
		Mean in Original Scale	0.00033709
		SD in Original Scale	0.00010228
		95% Percentile Bootstrap UCL	0.00036029
		95% BCA Bootstrap UCL	0.0003617

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	2.996	**Data appear Normal at 5% Significance Level**
Theta Star	0.0001308	
nu star	29.96	
A-D Test Statistic	0.212	
5% A-D Critical Value	0.68	
K-S Test Statistic	0.68	
5% K-S Critical Value	0.358	
Data appear Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0.0002	Mean	0.000353
Maximum	0.0006	SD	0.00011789
Mean	0.0003836	SE of Mean	0.000058082
Median	0.0003789	95% KM (t) UCL	0.0004503
SD	4.8E-05	95% KM (z) UCL	0.00044854
k star	58.61	95% KM (jackknife) UCL	0.00046632
Theta star	0	95% KM (bootstrap t) UCL	0.00049456
Nu star	6096	95% KM (BCA) UCL	0.00047
AppChi2	5915	95% KM (Percentile Bootstrap) UCL	0.00046623
95% Gamma Approximate UCL	0.0003953	95% KM (Chebyshev) UCL	0.00060617
95% Adjusted Gamma UCL	0.0003957	97.5% KM (Chebyshev) UCL	0.00071572
		99% KM (Chebyshev) UCL	0.00093091
		Potential UCLs to Use	
		95% KM (t) UCL	0.0004503
		95% KM (Percentile Bootstrap) UCL	0.00046623

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_50 Acetone

General Statistics			
Number of Valid Samples	88	Number of Detected Data	23
Number of Unique Samples	23	Number of Non-Detect Data	65
		Percent Non-Detects	73.86%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.011	Minimum Detected	-4.51
Maximum Detected	11	Maximum Detected	2.398
Mean of Detected	2.236	Mean of Detected	-1.292
SD of Detected	3.531	SD of Detected	2.429
Minimum Non-Detect	0.002	Minimum Non-Detect	-6.215
Maximum Non-Detect	13	Maximum Non-Detect	2.565
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	88
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.683	Lilliefors Test Statistic	0.889
5% Lilliefors Critical Value	0.914	5% Lilliefors Critical Value	0.914
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.817	Mean	-3.606
SD	2.217	SD	2.55
95% DL/2 (t) UCL	1.21	95% H-Stat (DL/2) UCL	3.015
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-6.402
		SD in Log Scale	3.919
		Mean in Original Scale	0.586
		SD in Original Scale	2.032
		95% Percentile Bootstrap UCL	0.96
		95% BCA Bootstrap UCL	1.057
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.311	Data do not follow a Discernable Distribution (0.05)	
Theta Star	7.183		
nu star	14.32		
A-D Test Statistic	1.459	**Nonparametric Statistics**	
5% A-D Critical Value	0.843	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.843	Mean	0.61
5% K-S Critical Value	0.196	SD	2.038
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.225
		95% KM (t) UCL	0.984
Assuming Gamma Distribution		95% KM (z) UCL	0.98
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.977
Minimum	0.011	95% KM (bootstrap t) UCL	1.132
Maximum	11	95% KM (BCA) UCL	1.04
Mean	2.358	95% KM (Percentile Bootstrap) UCL	1.004
Median	2.071	95% KM (Chebyshev) UCL	1.59
SD	1.866	97.5% KM (Chebyshev) UCL	2.013
k star	0.982	99% KM (Chebyshev) UCL	2.846
Theta star	2.402		
Nu star	172.8	**Potential UCLs to Use**	
AppChi2	143.4	97.5% KM (Chebyshev) UCL	2.013
95% Gamma Approximate UCL	2.842		
95% Adjusted Gamma UCL	2.85		

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_51 Benzene

General Statistics

Number of Valid Samples	88	Number of Detected Data	44
Number of Unique Samples	30	Number of Non-Detect Data	44
		Percent Non-Detects	50.00%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00014	Minimum Detected	-8.874
Maximum Detected	0.18	Maximum Detected	-1.715
Mean of Detected	0.0077	Mean of Detected	-7.07
SD of Detected	0.0297	SD of Detected	1.603
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	0.63	Maximum Non-Detect	-0.462

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	88
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.28	Lilliefors Test Statistic	0.797
5% Lilliefors Critical Value	0.944	5% Lilliefors Critical Value	0.944
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0134	Mean	-6.467
SD	0.0421	SD	1.881
95% DL/2 (t) UCL	0.0208	95% H-Stat (DL/2) UCL	0.0574
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-7.405
		SD in Log Scale	1.31
		Mean in Original Scale	0.00415
		SD in Original Scale	0.0212
		95% Percentile Bootstrap UCL	0.00818
		95% BCA Bootstrap UCL	0.0104

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	0.305	**Data do not follow a Discernable Distribution (0.05)**
Theta Star	0.0253	
nu star	26.84	
A-D Test Statistic	7.677	
5% A-D Critical Value	0.858	
K-S Test Statistic	0.858	
5% K-S Critical Value	0.145	
Data not Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0	Mean	0.00433
Maximum	0.18	SD	0.0215
Mean	0.00797	SE of Mean	0.00237
Median	0.00064	95% KM (t) UCL	0.00828
SD	0.0229	95% KM (z) UCL	0.00824
k star	0.164	95% KM (jackknife) UCL	0.00826
Theta star	0.0487	95% KM (bootstrap t) UCL	0.0333
Nu star	28.78	95% KM (BCA) UCL	0.00901
AppChi2	17.54	95% KM (Percentile Bootstrap) UCL	0.00858
95% Gamma Approximate UCL	0.0131	95% KM (Chebyshev) UCL	0.0147
95% Adjusted Gamma UCL	0.0132	97.5% KM (Chebyshev) UCL	0.0192
		99% KM (Chebyshev) UCL	0.0279
		Potential UCLs to Use	
		97.5% KM (Chebyshev) UCL	0.0192

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_52 Bromodichloromethane

General Statistics

Number of Valid Samples	87	Number of Detected Data	2
Number of Unique Samples	2	Number of Non-Detect Data	85
		Percent Non-Detects	97.70%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0004	Minimum Detected	-7.824
Maximum Detected	0.001	Maximum Detected	-6.908
Mean of Detected	0.0007	Mean of Detected	-7.366
SD of Detected	0.0004243	SD of Detected	0.648
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1	Maximum Non-Detect	0

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	87
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	1	Lilliefors Test Statistic	1
5% Lilliefors Critical Value	N/A	5% Lilliefors Critical Value	N/A
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0205	Mean	-6.68
SD	0.0828	SD	1.884
95% DL/2 (t) UCL	0.0353	95% H-Stat (DL/2) UCL	0.0166
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	N/A
		SD in Log Scale	N/A
		Mean in Original Scale	N/A
		SD in Original Scale	N/A
		95% Percentile Bootstrap UCL	N/A
		95% BCA Bootstrap UCL	N/A

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	N/A	Data do not follow a Discernable Distribution (0.05)
Theta Star	N/A	
nu star	N/A	
A-D Test Statistic	0.359	
5% A-D Critical Value	N/A	
K-S Test Statistic	N/A	
5% K-S Critical Value	N/A	
Data not Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	N/A	Mean	0.0004125
Maximum	N/A	SD	0.000085696
Mean	N/A	SE of Mean	0.000017493
Median	N/A	95% KM (t) UCL	0.00044159
SD	N/A	95% KM (z) UCL	0.00044127
k star	N/A	95% KM (jackknife) UCL	0.00079789
Theta star	N/A	95% KM (bootstrap t) UCL	1.7977E+308
Nu star	N/A	95% KM (BCA) UCL	0.001
AppChi2	N/A	95% KM (Percentile Bootstrap) UCL	0.001
95% Gamma Approximate UCL	N/A	95% KM (Chebyshev) UCL	0.00048875
95% Adjusted Gamma UCL	N/A	97.5% KM (Chebyshev) UCL	0.00052174
Note: DL/2 is not a recommended method.		99% KM (Chebyshev) UCL	0.00058655
		Potential UCLs to Use	
		95% KM (t) UCL	0.00044159
		95% KM (% Bootstrap) UCL	0.001

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_53 Bromomethane

General Statistics

Number of Valid Samples	86	Number of Detected Data	2
Number of Unique Samples	2	Number of Non-Detect Data	84
		Percent Non-Detects	97.67%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0056	Minimum Detected	-5.185
Maximum Detected	0.18	Maximum Detected	-1.715
Mean of Detected	0.0928	Mean of Detected	-3.45
SD of Detected	0.123	SD of Detected	2.454
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1.3	Maximum Non-Detect	0.262

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	86
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	1	Lilliefors Test Statistic	1
5% Lilliefors Critical Value	N/A	5% Lilliefors Critical Value	N/A
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0221	Mean	-6.669
SD	0.092	SD	1.906
95% DL/2 (t) UCL	0.0386	95% H-Stat (DL/2) UCL	0.0164
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	N/A
		SD in Log Scale	N/A
		Mean in Original Scale	N/A
		SD in Original Scale	N/A
		95% Percentile Bootstrap UCL	N/A
		95% BCA Bootstrap UCL	N/A

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	N/A	Data do not follow a Discernable Distribution (0.05)
Theta Star	N/A	
nu star	N/A	
A-D Test Statistic	0.355	
5% A-D Critical Value	N/A	
K-S Test Statistic	N/A	
5% K-S Critical Value	N/A	
Data not Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	N/A	Mean	0.00773
Maximum	N/A	SD	0.0191
Mean	N/A	SE of Mean	0.00299
Median	N/A	95% KM (t) UCL	0.0127
SD	N/A	95% KM (z) UCL	0.0126
k star	N/A	95% KM (jackknife) UCL	0.121
Theta star	N/A	95% KM (bootstrap t) UCL	0.00785
Nu star	N/A	95% KM (BCA) UCL	0.18
AppChi2	N/A	95% KM (Percentile Bootstrap) UCL	N/A
95% Gamma Approximate UCL	N/A	95% KM (Chebyshev) UCL	0.0208
95% Adjusted Gamma UCL	N/A	97.5% KM (Chebyshev) UCL	0.0264
		99% KM (Chebyshev) UCL	0.0375
		Potential UCLs to Use	
		97.5% KM (Chebyshev) UCL	0.0264

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_54 Carbon tetrachloride

General Statistics

Number of Valid Samples	88	Number of Detected Data	16
Number of Unique Samples	12	Number of Non-Detect Data	72
		Percent Non-Detects	81.82%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00014	Minimum Detected	-8.874
Maximum Detected	0.001	Maximum Detected	-6.908
Mean of Detected	0.0003344	Mean of Detected	-8.149
SD of Detected	0.0002206	SD of Detected	0.519
Minimum Non-Detect	0.0002	Minimum Non-Detect	-8.517
Maximum Non-Detect	1	Maximum Non-Detect	0

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	88
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.738	Lilliefors Test Statistic	0.892
5% Lilliefors Critical Value	0.887	5% Lilliefors Critical Value	0.887
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.019	Mean	-6.94
SD	0.0819	SD	1.906
95% DL/2 (t) UCL	0.0336	95% H-Stat (DL/2) UCL	0.0272
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-8.315
		SD in Log Scale	0.401
		Mean in Original Scale	0.00026643
		SD in Original Scale	0.00012639
		95% Percentile Bootstrap UCL	0.00028958
		95% BCA Bootstrap UCL	0.00029335

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	2.958	Data Follow Appr. Gamma Distribution at 5% Significance Level
Theta Star	0.000113	
nu star	94.66	
A-D Test Statistic	1.011	
5% A-D Critical Value	0.743	
K-S Test Statistic	0.743	
5% K-S Critical Value	0.216	
Data follow Appr. Gamma Distribution at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0.00014	Mean	0.00026831
Maximum	0.001	SD	0.00014561
Mean	0.0003239	SE of Mean	0.000027327
Median	0.0003134	95% KM (t) UCL	0.00031374
SD	9.682E-05	95% KM (z) UCL	0.00031326
k star	15.74	95% KM (jackknife) UCL	0.00031249
Theta star	2.058E-05	95% KM (bootstrap t) UCL	0.00032843
Nu star	2771	95% KM (BCA) UCL	0.00032097
AppChi2	2649	95% KM (Percentile Bootstrap) UCL	0.00031615
95% Gamma Approximate UCL	0.0003388	95% KM (Chebyshev) UCL	0.00038742
95% Adjusted Gamma UCL	0.000339	97.5% KM (Chebyshev) UCL	0.00043897
		99% KM (Chebyshev) UCL	0.00054021
		Potential UCLs to Use	
		95% KM (t) UCL	0.00031374

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_55 Chlorobenzene

General Statistics			
Number of Valid Samples	87	Number of Detected Data	9
Number of Unique Samples	9	Number of Non-Detect Data	78
		Percent Non-Detects	89.66%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.002	Minimum Detected	-6.215
Maximum Detected	0.5	Maximum Detected	-0.693
Mean of Detected	0.0594	Mean of Detected	-5.007
SD of Detected	0.165	SD of Detected	1.684
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1	Maximum Non-Detect	0
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	87
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.402	Lilliefors Test Statistic	0.654
5% Lilliefors Critical Value	0.829	5% Lilliefors Critical Value	0.829
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0244	Mean	-6.386
SD	0.0852	SD	2.008
95% DL/2 (t) UCL	0.0396	95% H-Stat (DL/2) UCL	0.0373
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-10.3
		SD in Log Scale	2.838
		Mean in Original Scale	0.00625
		SD in Original Scale	0.0536
		95% Percentile Bootstrap UCL	0.0177
		95% BCA Bootstrap UCL	0.0236
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.283	**Data do not follow a Discernable Distribution (0.05)**	
Theta Star	0.21		
nu star	5.095		
A-D Test Statistic	2.183	**Nonparametric Statistics**	
5% A-D Critical Value	0.805	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.805	Mean	0.00816
5% K-S Critical Value	0.301	SD	0.0537
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.00618
		95% KM (t) UCL	0.0184
Assuming Gamma Distribution		95% KM (z) UCL	0.0183
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.0175
Minimum	0	95% KM (bootstrap t) UCL	0.479
Maximum	18.94	95% KM (BCA) UCL	0.0255
Mean	3.582	95% KM (Percentile Bootstrap) UCL	0.0198
Median	1.639	95% KM (Chebyshev) UCL	0.0351
SD	4.734	97.5% KM (Chebyshev) UCL	0.0467
k star	0.207	99% KM (Chebyshev) UCL	0.0696
Theta star	17.28		
Nu star	36.06	**Potential UCLs to Use**	
AppChi2	23.32	95% KM (Chebyshev) UCL	0.0351
95% Gamma Approximate UCL	5.539		
95% Adjusted Gamma UCL	5.581		

Note: DL/2 is not a recommended method.

ProUCL

General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_56 Chloroform

General Statistics			
Number of Valid Samples	88	Number of Detected Data	85
Number of Unique Samples	67	Number of Non-Detect Data	3
		Percent Non-Detects	3.41%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0029	Minimum Detected	-5.843
Maximum Detected	2.8	Maximum Detected	1.03
Mean of Detected	0.246	Mean of Detected	-2.74
SD of Detected	0.523	SD of Detected	1.606
Minimum Non-Detect	0.02	Minimum Non-Detect	-3.912
Maximum Non-Detect	0.63	Maximum Non-Detect	-0.462
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	79
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	9
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	89.77%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.347	Lilliefors Test Statistic	0.0791
5% Lilliefors Critical Value	0.0961	5% Lilliefors Critical Value	0.0961
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.243	Mean	-2.731
SD	0.515	SD	1.604
95% DL/2 (t) UCL	0.335	95% H-Stat (DL/2) UCL	0.435
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE yields a negative mean		Mean in Log Scale	-2.768
		SD in Log Scale	1.591
		Mean in Original Scale	0.239
		SD in Original Scale	0.515
		95% Percentile Bootstrap UCL	0.337
		95% BCA Bootstrap UCL	0.367
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.469	Data appear Lognormal at 5% Significance Level	
Theta Star	0.524		
nu star	79.77		
A-D Test Statistic	4.52	**Nonparametric Statistics**	
5% A-D Critical Value	0.824	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.824	Mean	0.239
5% K-S Critical Value	0.103	SD	0.512
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.055
		95% KM (t) UCL	0.331
Assuming Gamma Distribution		95% KM (z) UCL	0.33
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.331
Minimum	0	95% KM (bootstrap t) UCL	0.368
Maximum	2.8	95% KM (BCA) UCL	0.331
Mean	0.239	95% KM (Percentile Bootstrap) UCL	0.335
Median	0.07	95% KM (Chebyshev) UCL	0.479
SD	0.515	97.5% KM (Chebyshev) UCL	0.582
k star	0.424	99% KM (Chebyshev) UCL	0.786
Theta star	0.565		
Nu star	74.6	**Potential UCLs to Use**	
AppChi2	55.71	97.5% KM (Chebyshev) UCL	0.582
95% Gamma Approximate UCL	0.321		
95% Adjusted Gamma UCL	0.322		

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_57 Chloromethane

General Statistics

Number of Valid Samples	86	Number of Detected Data	10
Number of Unique Samples	9	Number of Non-Detect Data	76
		Percent Non-Detects	88.37%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0004	Minimum Detected	-7.824
Maximum Detected	0.0046	Maximum Detected	-5.382
Mean of Detected	0.00248	Mean of Detected	-6.3
SD of Detected	0.00157	SD of Detected	0.93
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1.3	Maximum Non-Detect	0.262

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	86
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.913	Lilliefors Test Statistic	0.835
5% Lilliefors Critical Value	0.842	5% Lilliefors Critical Value	0.842
Data appear Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0258	Mean	-6.622
SD	0.104	SD	1.935
95% DL/2 (t) UCL	0.0445	95% H-Stat (DL/2) UCL	0.0282
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-7.88
		SD in Log Scale	0.993
		Mean in Original Scale	0.00064784
		SD in Original Scale	0.00088743
		95% Percentile Bootstrap UCL	0.00081158
		95% BCA Bootstrap UCL	0.00084067

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	1.343	Data appear Normal at 5% Significance Level
Theta Star	0.00184	
nu star	26.86	
A-D Test Statistic	0.637	
5% A-D Critical Value	0.737	
K-S Test Statistic	0.737	
5% K-S Critical Value	0.27	
Data appear Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0.0004	Mean	0.00075066
Maximum	0.00508	SD	0.00097934
Mean	0.00345	SE of Mean	0.00013311
Median	0.00363	95% KM (t) UCL	0.00097202
SD	0.00103	95% KM (z) UCL	0.00096961
k star	7.051	95% KM (jackknife) UCL	0.00092652
Theta star	0.0004893	95% KM (bootstrap t) UCL	0.00101
Nu star	1213	95% KM (BCA) UCL	0.00222
AppChi2	1133	95% KM (Percentile Bootstrap) UCL	0.0013
95% Gamma Approximate UCL	0.00369	95% KM (Chebyshev) UCL	0.00133
95% Adjusted Gamma UCL	0.0037	97.5% KM (Chebyshev) UCL	0.00158
		99% KM (Chebyshev) UCL	0.00208
		Potential UCLs to Use	
		95% KM (t) UCL	0.00097202
		95% KM (Percentile Bootstrap) UCL	0.0013

Note: DL/2 is not a recommended method.

ProUCL — General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_58 Dibromochloromethane

General Statistics

Number of Valid Samples	87	Number of Detected Data	4
Number of Unique Samples	4	Number of Non-Detect Data	83
		Percent Non-Detects	95.40%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00054	Minimum Detected	-7.524
Maximum Detected	0.016	Maximum Detected	-4.135
Mean of Detected	0.00509	Mean of Detected	-6.206
SD of Detected	0.00738	SD of Detected	1.603
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1	Maximum Non-Detect	0

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	87
For all methods (except KM, DL/2, and ROS Methods).		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.748	Lilliefors Test Statistic	0.883
5% Lilliefors Critical Value	0.748	5% Lilliefors Critical Value	0.748
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0207	Mean	-6.648
SD	0.0828	SD	1.907
95% DL/2 (t) UCL	0.0354	95% H-Stat (DL/2) UCL	0.0197
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-12.78
		SD in Log Scale	2.895
		Mean in Original Scale	0.00025358
		SD in Original Scale	0.00174
		95% Percentile Bootstrap UCL	0.00061634
		95% BCA Bootstrap UCL	0.00094404

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	0.332	**Data appear Normal at 5% Significance Level**
Theta Star	0.0153	
nu star	2.652	
A-D Test Statistic	0.431	
5% A-D Critical Value	0.674	
K-S Test Statistic	0.674	
5% K-S Critical Value	0.407	
Data appear Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0	Mean	0.00079302
Maximum	7.215	SD	0.00179
Mean	1.726	SE of Mean	0.00023891
Median	1.063	95% KM (t) UCL	0.00119
SD	1.953	95% KM (z) UCL	0.00119
k star	0.417	95% KM (jackknife) UCL	0.0011
Theta star	4.135	95% KM (bootstrap t) UCL	0.00175
Nu star	72.61	95% KM (BCA) UCL	0.016
AppChi2	53.98	95% KM (Percentile Bootstrap) UCL	N/A
95% Gamma Approximate UCL	2.321	95% KM (Chebyshev) UCL	0.00183
95% Adjusted Gamma UCL	N/A	97.5% KM (Chebyshev) UCL	0.00228
		99% KM (Chebyshev) UCL	0.00317
		Potential UCLs to Use	
		95% KM (t) UCL	0.00119
		95% KM (Percentile Bootstrap) UCL	N/A

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_59 Dichlorodifluoromethane (Freon 12)

General Statistics

Number of Valid Samples	87	Number of Detected Data	34
Number of Unique Samples	21	Number of Non-Detect Data	53
		Percent Non-Detects	60.92%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0003	Minimum Detected	-8.112
Maximum Detected	0.0047	Maximum Detected	-5.36
Mean of Detected	0.00144	Mean of Detected	-6.733
SD of Detected	0.0009933	SD of Detected	0.621
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1.3	Maximum Non-Detect	0.262

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	87
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.811	Lilliefors Test Statistic	0.962
5% Lilliefors Critical Value	0.933	5% Lilliefors Critical Value	0.933
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0416	Mean	-5.616
SD	0.127	SD	1.85
95% DL/2 (t) UCL	0.0643	95% H-Stat (DL/2) UCL	0.132
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-6.843
		SD in Log Scale	0.551
		Mean in Original Scale	0.00124
		SD in Original Scale	0.00077057
		95% Percentile Bootstrap UCL	0.00138
		95% BCA Bootstrap UCL	0.0014

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	2.543	Data appear Lognormal at 5% Significance Level
Theta Star	0.000567	
nu star	173	
A-D Test Statistic	0.969	
5% A-D Critical Value	0.755	
K-S Test Statistic	0.755	
5% K-S Critical Value	0.152	
Data not Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0	Mean	0.00131
Maximum	0.0047	SD	0.00093343
Mean	0.00148	SE of Mean	0.00014761
Median	0.00151	95% KM (t) UCL	0.00156
SD	0.0007937	95% KM (z) UCL	0.00155
k star	1.713	95% KM (jackknife) UCL	0.00156
Theta star	0.0008658	95% KM (bootstrap t) UCL	0.00163
Nu star	298	95% KM (BCA) UCL	0.00158
AppChi2	259	95% KM (Percentile Bootstrap) UCL	0.00158
95% Gamma Approximate UCL	0.00171	95% KM (Chebyshev) UCL	0.00196
95% Adjusted Gamma UCL	0.00171	97.5% KM (Chebyshev) UCL	0.00223
Note: DL/2 is not a recommended method.		99% KM (Chebyshev) UCL	0.00278
		Potential UCLs to Use	
		95% KM (t) UCL	0.00156
		95% KM (% Bootstrap) UCL	0.00158

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_60 Dichlorofluoromethane (Freon 21)

General Statistics			
Number of Valid Samples	6	Number of Unique Samples	5
Raw Statistics		**Log-transformed Statistics**	
Minimum	0.0016	Minimum of Log Data	-6.438
Maximum	0.0097	Maximum of Log Data	-4.636
Mean	0.00568	Mean of log Data	-5.371
Median	0.00535	SD of log Data	0.74
SD	0.0035		
Coefficient of Variation	0.617		
Skewness	0.172		
Relevant UCL Statistics			
Normal Distribution Test		**Lognormal Distribution Test**	
Shapiro Wilk Test Statistic	0.894	Shapiro Wilk Test Statistic	0.91
Shapiro Wilk Critical Value	0.788	Shapiro Wilk Critical Value	0.788
Data appear Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
95% Student's-t UCL	0.00857	95% H-UCL	0.0189
95% UCLs (Adjusted for Skewness)		95% Chebyshev (MVUE) UCL	0.0134
95% Adjusted-CLT UCL	0.00814	97.5% Chebyshev (MVUE) UCL	0.0167
95% Modified-t UCL	0.00858	99% Chebyshev (MVUE) UCL	0.0231
Gamma Distribution Test		**Data Distribution**	
k star (bias corrected)	1.431	Data appear Normal at 5% Significance Level	
Theta Star	0.00397		
nu star	17.18		
Approximate Chi Square Value (.05)	8.799	**Nonparametric Statistics**	
Adjusted Level of Significance	0.0122	95% CLT UCL	0.00804
Adjusted Chi Square Value	6.747	95% Jackknife UCL	0.00857
		95% Standard Bootstrap UCL	0.00778
Anderson-Darling Test Statistic	0.321	95% Bootstrap-t UCL	0.00878
Anderson-Darling 5% Critical Value	0.702	95% Hall's Bootstrap UCL	0.00859
Kolmogorov-Smirnov Test Statistic	0.208	95% Percentile Bootstrap UCL	0.0079
Kolmogorov-Smirnov 5% Critical Value	0.335	95% BCA Bootstrap UCL	0.0079
Data appear Gamma Distributed at 5% Significance Level		95% Chebyshev(Mean, Sd) UCL	0.0119
		97.5% Chebyshev(Mean, Sd) UCL	0.0146
Assuming Gamma Distribution		99% Chebyshev(Mean, Sd) UCL	0.0199
95% Approximate Gamma UCL	0.0111		
95% Adjusted Gamma UCL	0.0145		
Potential UCL to Use		Use 95% Student's-t UCL	0.00857

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_61 Ethylbenzene

General Statistics

Number of Valid Samples	87	Number of Detected Data	7
Number of Unique Samples	7	Number of Non-Detect Data	80
		Percent Non-Detects	91.95%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.094	Minimum Detected	-2.364
Maximum Detected	15	Maximum Detected	2.708
Mean of Detected	5.399	Mean of Detected	1.108
SD of Detected	4.678	SD of Detected	1.613
Minimum Non-Detect	0.5	Minimum Non-Detect	-0.693
Maximum Non-Detect	1000	Maximum Non-Detect	6.908

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	87
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.831	Lilliefors Test Statistic	0.741
5% Lilliefors Critical Value	0.803	5% Lilliefors Critical Value	0.803
Data appear Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	24.88	Mean	0.555
SD	85.25	SD	2.053
95% DL/2 (t) UCL	40.07	95% H-Stat (DL/2) UCL	43.79
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-1.762
		SD in Log Scale	1.604
		Mean in Original Scale	0.696
		SD in Original Scale	1.899
		95% Percentile Bootstrap UCL	1.053
		95% BCA Bootstrap UCL	1.273

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	0.665	**Data appear Normal at 5% Significance Level**
Theta Star	8.114	
nu star	9.316	
A-D Test Statistic	0.609	**Nonparametric Statistics**
5% A-D Critical Value	0.728	Kaplan-Meier (KM) Method
K-S Test Statistic	0.728	Mean 0.694
5% K-S Critical Value	0.32	SD 2.128
Data follow Appr. Gamma Distribution at 5% Significance Level		SE of Mean 0.283
		95% KM (t) UCL 1.164
Assuming Gamma Distribution		95% KM (z) UCL 1.159
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL 2.666
Minimum	0	95% KM (bootstrap t) UCL 1.248
Maximum	15	95% KM (BCA) UCL 4.211
Mean	2.86	95% KM (Percentile Bootstrap) UCL 4.184
Median	2.617	95% KM (Chebyshev) UCL 1.927
SD	2.545	97.5% KM (Chebyshev) UCL 2.46
k star	0.161	99% KM (Chebyshev) UCL 3.508
Theta star	17.8	
Nu star	27.95	**Potential UCLs to Use**
AppChi2	16.89	95% KM (t) UCL 1.164
95% Gamma Approximate UCL	4.733	95% KM (Percentile Bootstrap) UCL 4.184
95% Adjusted Gamma UCL	4.774	

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_62 Trichlorofluoromethane (Freon 11)

General Statistics

Number of Valid Samples	88	Number of Detected Data	83
Number of Unique Samples	56	Number of Non-Detect Data	5
		Percent Non-Detects	5.68%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.007	Minimum Detected	-4.962
Maximum Detected	1	Maximum Detected	0
Mean of Detected	0.265	Mean of Detected	-1.64
SD of Detected	0.205	SD of Detected	0.883
Minimum Non-Detect	0.2	Minimum Non-Detect	-1.609
Maximum Non-Detect	1.3	Maximum Non-Detect	0.262

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	88
For all methods (except KM, DL/2, and ROS Methods).		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.155	Lilliefors Test Statistic	0.117
5% Lilliefors Critical Value	0.0973	5% Lilliefors Critical Value	0.0973
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.272	Mean	-1.612
SD	0.207	SD	0.881
95% DL/2 (t) UCL	0.309	95% H-Stat (DL/2) UCL	0.429
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-1.651
		SD in Log Scale	0.862
		Mean in Original Scale	0.259
		SD in Original Scale	0.201
		95% Percentile Bootstrap UCL	0.295
		95% BCA Bootstrap UCL	0.297

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	1.697	Data appear Gamma Distributed at 5% Significance Level
Theta Star	0.156	
nu star	281.8	
A-D Test Statistic	0.313	
5% A-D Critical Value	0.767	
K-S Test Statistic	0.767	
5% K-S Critical Value	0.0996	
Data appear Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0.007	Mean	0.262
Maximum	1	SD	0.202
Mean	0.264	SE of Mean	0.0221
Median	0.205	95% KM (t) UCL	0.299
SD	0.2	95% KM (z) UCL	0.298
k star	1.771	95% KM (jackknife) UCL	0.299
Theta star	0.149	95% KM (bootstrap t) UCL	0.303
Nu star	311.7	95% KM (BCA) UCL	0.301
AppChi2	271.8	95% KM (Percentile Bootstrap) UCL	0.3
95% Gamma Approximate UCL	0.302	95% KM (Chebyshev) UCL	0.358
95% Adjusted Gamma UCL	0.303	97.5% KM (Chebyshev) UCL	0.4
		99% KM (Chebyshev) UCL	0.482
		Potential UCLs to Use	
		95% KM (Chebyshev) UCL	0.358

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_63 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)

General Statistics			
Number of Valid Samples	88	Number of Detected Data	83
Number of Unique Samples	56	Number of Non-Detect Data	5
		Percent Non-Detects	5.68%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.011	Minimum Detected	-4.51
Maximum Detected	2.8	Maximum Detected	1.03
Mean of Detected	0.715	Mean of Detected	-0.704
SD of Detected	0.615	SD of Detected	0.949
Minimum Non-Detect	1	Minimum Non-Detect	0
Maximum Non-Detect	6.3	Maximum Non-Detect	1.841
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	88
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.161	Lilliefors Test Statistic	0.0704
5% Lilliefors Critical Value	0.0973	5% Lilliefors Critical Value	0.0973
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.745	Mean	-0.667
SD	0.653	SD	0.947
95% DL/2 (t) UCL	0.86	95% H-Stat (DL/2) UCL	1.209
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-0.713
		SD in Log Scale	0.925
		Mean in Original Scale	0.7
		SD in Original Scale	0.601
		95% Percentile Bootstrap UCL	0.81
		95% BCA Bootstrap UCL	0.818
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	1.452	Data appear Gamma Distributed at 5% Significance Level	
Theta Star	0.493		
nu star	241		
A-D Test Statistic	0.402	**Nonparametric Statistics**	
5% A-D Critical Value	0.771	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.771	Mean	0.706
5% K-S Critical Value	0.0999	SD	0.603
Data appear Gamma Distributed at 5% Significance Level		SE of Mean	0.0655
		95% KM (t) UCL	0.815
Assuming Gamma Distribution		95% KM (z) UCL	0.814
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.815
Minimum	0.011	95% KM (bootstrap t) UCL	0.832
Maximum	2.8	95% KM (BCA) UCL	0.812
Mean	0.714	95% KM (Percentile Bootstrap) UCL	0.806
Median	0.5	95% KM (Chebyshev) UCL	0.992
SD	0.599	97.5% KM (Chebyshev) UCL	1.115
k star	1.52	99% KM (Chebyshev) UCL	1.358
Theta star	0.47		
Nu star	267.6	**Potential UCLs to Use**	
AppChi2	230.7	95% KM (Chebyshev) UCL	0.992
95% Gamma Approximate UCL	0.828		
95% Adjusted Gamma UCL	0.831		

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_64 Isopropylbenzene

General Statistics			
Number of Valid Samples	87	Number of Detected Data	7
Number of Unique Samples	6	Number of Non-Detect Data	80
		Percent Non-Detects	91.95%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00018	Minimum Detected	-8.623
Maximum Detected	0.0024	Maximum Detected	-6.032
Mean of Detected	0.00152	Mean of Detected	-6.77
SD of Detected	0.0008757	SD of Detected	0.968
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1	Maximum Non-Detect	0
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	87
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.9	Lilliefors Test Statistic	0.801
5% Lilliefors Critical Value	0.803	5% Lilliefors Critical Value	0.803
Data appear Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0243	Mean	-6.439
SD	0.0853	SD	2.008
95% DL/2 (t) UCL	0.0395	95% H-Stat (DL/2) UCL	0.0383
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-8.412
		SD in Log Scale	0.988
		Mean in Original Scale	0.00036843
		SD in Original Scale	0.00046496
		95% Percentile Bootstrap UCL	0.00044994
		95% BCA Bootstrap UCL	0.00046898
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	1.207	**Data appear Normal at 5% Significance Level**	
Theta Star	0.00126		
nu star	16.9		
A-D Test Statistic	0.582	**Nonparametric Statistics**	
5% A-D Critical Value	0.716	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.716	Mean	0.00038174
5% K-S Critical Value	0.315	SD	0.00056616
Data appear Gamma Distributed at 5% Significance Level		SE of Mean	0.000089075
		95% KM (t) UCL	0.00052985
Assuming Gamma Distribution		95% KM (z) UCL	0.00052826
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.00060481
Minimum	0.00018	95% KM (bootstrap t) UCL	0.00052111
Maximum	0.0024	95% KM (BCA) UCL	0.00175
Mean	0.00108	95% KM (Percentile Bootstrap) UCL	0.00153
Median	0.0009869	95% KM (Chebyshev) UCL	0.00077001
SD	0.0004227	97.5% KM (Chebyshev) UCL	0.00093802
k star	6.093	99% KM (Chebyshev) UCL	0.00127
Theta star	0.0001774		
Nu star	1060	**Potential UCLs to Use**	
AppChi2	985.6	95% KM (t) UCL	0.00052985
95% Gamma Approximate UCL	0.00116	95% KM (Percentile Bootstrap) UCL	0.00153
95% Adjusted Gamma UCL	0.00116		

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_65 Methyl tert-butyl ether (MTBE)

General Statistics

Number of Valid Samples	88	Number of Detected Data	45
Number of Unique Samples	38	Number of Non-Detect Data	43
		Percent Non-Detects	48.86%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0003	Minimum Detected	-8.112
Maximum Detected	0.034	Maximum Detected	-3.381
Mean of Detected	0.00534	Mean of Detected	-5.871
SD of Detected	0.00641	SD of Detected	1.201
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1	Maximum Non-Detect	0

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	88
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.737	Lilliefors Test Statistic	0.967
5% Lilliefors Critical Value	0.945	5% Lilliefors Critical Value	0.945
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0239	Mean	-5.674
SD	0.0823	SD	1.707
95% DL/2 (t) UCL	0.0385	95% H-Stat (DL/2) UCL	0.0611
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-6.39
		SD in Log Scale	1.152
		Mean in Original Scale	0.00337
		SD in Original Scale	0.00504
		95% Percentile Bootstrap UCL	0.00433
		95% BCA Bootstrap UCL	0.00451

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	0.869	Data Follow Appr. Gamma Distribution at 5% Significance Level
Theta Star	0.00614	
nu star	78.19	
A-D Test Statistic	0.648	
5% A-D Critical Value	0.781	
K-S Test Statistic	0.781	
5% K-S Critical Value	0.136	
Data follow Appr. Gamma Distribution at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0	Mean	0.00364
Maximum	0.034	SD	0.00537
Mean	0.00528	SE of Mean	0.00063196
Median	0.00411	95% KM (t) UCL	0.0047
SD	0.00543	95% KM (z) UCL	0.00468
k star	0.405	95% KM (jackknife) UCL	0.00469
Theta star	0.013	95% KM (bootstrap t) UCL	0.00491
Nu star	71.29	95% KM (BCA) UCL	0.00468
AppChi2	52.85	95% KM (Percentile Bootstrap) UCL	0.00472
95% Gamma Approximate UCL	0.00712	95% KM (Chebyshev) UCL	0.0064
95% Adjusted Gamma UCL	0.00716	97.5% KM (Chebyshev) UCL	0.00759
		99% KM (Chebyshev) UCL	0.00993
		Potential UCLs to Use	
		95% KM (BCA) UCL	0.00468

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_66 Methylene chloride

General Statistics

Number of Valid Samples	88	Number of Detected Data	25
Number of Unique Samples	24	Number of Non-Detect Data	63
		Percent Non-Detects	71.59%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.3	Minimum Detected	-1.204
Maximum Detected	11000	Maximum Detected	9.306
Mean of Detected	2062	Mean of Detected	4.32
SD of Detected	3277	SD of Detected	3.605
Minimum Non-Detect	0.17	Minimum Non-Detect	-1.772
Maximum Non-Detect	13000	Maximum Non-Detect	9.473
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	88
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.692	Lilliefors Test Statistic	0.892
5% Lilliefors Critical Value	0.918	5% Lilliefors Critical Value	0.918
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	690.6	Mean	1.778
SD	2051	SD	3.19
95% DL/2 (t) UCL	1054	95% H-Stat (DL/2) UCL	8355
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-1.901
		SD in Log Scale	5.175
		Mean in Original Scale	586
		SD in Original Scale	1959
		95% Percentile Bootstrap UCL	963.8
		95% BCA Bootstrap UCL	1028
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.219	Data do not follow a Discernable Distribution (0.05)	
Theta Star	9396		
nu star	10.97		
A-D Test Statistic	1.427	**Nonparametric Statistics**	
5% A-D Critical Value	0.887	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.887	Mean	593.5
5% K-S Critical Value	0.193	SD	1958
Data not Gamma Distributed at 5% Significance Level		SE of Mean	214.2
		95% KM (t) UCL	949.7
Assuming Gamma Distribution		95% KM (z) UCL	945.9
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	944.5
Minimum	0.3	95% KM (bootstrap t) UCL	1128
Maximum	15098	95% KM (BCA) UCL	987
Mean	2351	95% KM (Percentile Bootstrap) UCL	984.9
Median	590.7	95% KM (Chebyshev) UCL	1527
SD	3413	97.5% KM (Chebyshev) UCL	1931
k star	0.359	99% KM (Chebyshev) UCL	2725
Theta star	6548		
Nu star	63.19	**Potential UCLs to Use**	
AppChi2	45.9	97.5% KM (Chebyshev) UCL	1931
95% Gamma Approximate UCL	3237		
95% Adjusted Gamma UCL	3254		

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_67 Tetrachloroethene

General Statistics			
Number of Valid Samples	88	Number of Unique Samples	71
Raw Statistics		**Log-transformed Statistics**	
Minimum	0.012	Minimum of Log Data	-4.423
Maximum	210	Maximum of Log Data	5.347
Mean	18.25	Mean of log Data	0.485
Median	1.2	SD of log Data	2.18
SD	44.1		
Coefficient of Variation	2.416		
Skewness	2.88		
Relevant UCL Statistics			
Normal Distribution Test		**Lognormal Distribution Test**	
Lilliefors Test Statistic	0.435	Lilliefors Test Statistic	0.155
Lilliefors Critical Value	0.0944	Lilliefors Critical Value	0.0944
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
95% Student's-t UCL	26.06	95% H-UCL	40.13
95% UCLs (Adjusted for Skewness)		95% Chebyshev (MVUE) UCL	42.3
95% Adjusted-CLT UCL	27.52	97.5% Chebyshev (MVUE) UCL	53.67
95% Modified-t UCL	26.31	99% Chebyshev (MVUE) UCL	75.99
Gamma Distribution Test		**Data Distribution**	
k star (bias corrected)	0.285	Data do not follow a Discernable Distribution (0.05)	
Theta Star	64.06		
nu star	50.14		
Approximate Chi Square Value (.05)	34.88	**Nonparametric Statistics**	
Adjusted Level of Significance	0.0473	95% CLT UCL	25.98
Adjusted Chi Square Value	34.67	95% Jackknife UCL	26.06
		95% Standard Bootstrap UCL	25.81
Anderson-Darling Test Statistic	8.884	95% Bootstrap-t UCL	28.3
Anderson-Darling 5% Critical Value	0.873	95% Hall's Bootstrap UCL	27.14
Kolmogorov-Smirnov Test Statistic	0.318	95% Percentile Bootstrap UCL	26.63
Kolmogorov-Smirnov 5% Critical Value	0.104	95% BCA Bootstrap UCL	27.74
Data not Gamma Distributed at 5% Significance Level		95% Chebyshev(Mean, Sd) UCL	38.74
		97.5% Chebyshev(Mean, Sd) UCL	47.61
Assuming Gamma Distribution		99% Chebyshev(Mean, Sd) UCL	65.02
95% Approximate Gamma UCL	26.23		
95% Adjusted Gamma UCL	26.39		
Potential UCL to Use		Use 99% Chebyshev (Mean, Sd) UCL	65.02

ProUCL — General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_68 Toluene

General Statistics

Number of Valid Samples	87	Number of Detected Data	18
Number of Unique Samples	17	Number of Non-Detect Data	69
		Percent Non-Detects	79.31%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00014	Minimum Detected	-8.874
Maximum Detected	1.3	Maximum Detected	0.262
Mean of Detected	0.196	Mean of Detected	-3.238
SD of Detected	0.321	SD of Detected	2.345
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	0.63	Maximum Non-Detect	-0.462

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	86
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	1
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	98.85%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.646	Lilliefors Test Statistic	0.947
5% Lilliefors Critical Value	0.897	5% Lilliefors Critical Value	0.897
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0499	Mean	-6.135
SD	0.167	SD	2.352
95% DL/2 (t) UCL	0.0796	95% H-Stat (DL/2) UCL	0.113
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-8.004
		SD in Log Scale	3.381
		Mean in Original Scale	0.041
		SD in Original Scale	0.164
		95% Percentile Bootstrap UCL	0.0725
		95% BCA Bootstrap UCL	0.0861

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	0.377	Data appear Gamma Distributed at 5% Significance Level
Theta Star	0.52	
nu star	13.57	
A-D Test Statistic	0.37	
5% A-D Critical Value	0.819	
K-S Test Statistic	0.819	
5% K-S Critical Value	0.218	
Data appear Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0	Mean	0.0414
Maximum	2.342	SD	0.163
Mean	0.552	SE of Mean	0.018
Median	0.28	95% KM (t) UCL	0.0714
SD	0.658	95% KM (z) UCL	0.071
k star	0.189	95% KM (jackknife) UCL	0.0691
Theta star	2.922	95% KM (bootstrap t) UCL	0.102
Nu star	32.9	95% KM (BCA) UCL	0.0777
AppChi2	20.79	95% KM (Percentile Bootstrap) UCL	0.0741
95% Gamma Approximate UCL	0.874	95% KM (Chebyshev) UCL	0.12
95% Adjusted Gamma UCL	0.881	97.5% KM (Chebyshev) UCL	0.154
		99% KM (Chebyshev) UCL	0.221
		Potential UCLs to Use	
		95% KM (t) UCL	0.0714

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_69 Trichloroethene (TCE)

General Statistics			
Number of Valid Samples	88	Number of Unique Samples	66
Raw Statistics		**Log-transformed Statistics**	
Minimum	0.0084	Minimum of Log Data	-4.78
Maximum	10	Maximum of Log Data	2.303
Mean	0.764	Mean of log Data	-1.254
Median	0.28	SD of log Data	1.483
SD	1.348		
Coefficient of Variation	1.765		
Skewness	4.263		
Relevant UCL Statistics			
Normal Distribution Test		**Lognormal Distribution Test**	
Lilliefors Test Statistic	0.307	Lilliefors Test Statistic	0.0769
Lilliefors Critical Value	0.0944	Lilliefors Critical Value	0.0944
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
95% Student's-t UCL	1.003	95% H-UCL	1.32
95% UCLs (Adjusted for Skewness)		95% Chebyshev (MVUE) UCL	1.624
95% Adjusted-CLT UCL	1.07	97.5% Chebyshev (MVUE) UCL	1.965
95% Modified-t UCL	1.014	99% Chebyshev (MVUE) UCL	2.636
Gamma Distribution Test		**Data Distribution**	
k star (bias corrected)	0.61	Data appear Lognormal at 5% Significance Level	
Theta Star	1.253		
nu star	107.4		
Approximate Chi Square Value (.05)	84.45	**Nonparametric Statistics**	
Adjusted Level of Significance	0.0473	95% CLT UCL	1.001
Adjusted Chi Square Value	84.11	95% Jackknife UCL	1.003
		95% Standard Bootstrap UCL	1.003
Anderson-Darling Test Statistic	2.678	95% Bootstrap-t UCL	1.11
Anderson-Darling 5% Critical Value	0.806	95% Hall's Bootstrap UCL	1.323
Kolmogorov-Smirnov Test Statistic	0.164	95% Percentile Bootstrap UCL	1.015
Kolmogorov-Smirnov 5% Critical Value	0.0999	95% BCA Bootstrap UCL	1.095
Data not Gamma Distributed at 5% Significance Level		95% Chebyshev(Mean, Sd) UCL	1.391
		97.5% Chebyshev(Mean, Sd) UCL	1.662
Assuming Gamma Distribution		99% Chebyshev(Mean, Sd) UCL	2.194
95% Approximate Gamma UCL	0.971		
95% Adjusted Gamma UCL	0.975		
Potential UCL to Use		Use 95% H-UCL	1.32

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_70 Vinyl chloride

General Statistics			
Number of Valid Samples	87	Number of Detected Data	4
Number of Unique Samples	4	Number of Non-Detect Data	83
		Percent Non-Detects	95.40%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00064	Minimum Detected	-7.354
Maximum Detected	0.0011	Maximum Detected	-6.812
Mean of Detected	0.000855	Mean of Detected	-7.084
SD of Detected	0.0001949	SD of Detected	0.229
Minimum Non-Detect	0.0002	Minimum Non-Detect	-8.517
Maximum Non-Detect	1	Maximum Non-Detect	0
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	87
For all methods (except KM, DL/2, and ROS Methods).		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.993	Lilliefors Test Statistic	1
5% Lilliefors Critical Value	0.748	5% Lilliefors Critical Value	0.748
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0196	Mean	-6.843
SD	0.0824	SD	1.92
95% DL/2 (t) UCL	0.0342	95% H-Stat (DL/2) UCL	0.0174
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-8.548
		SD in Log Scale	0.682
		Mean in Original Scale	0.00024451
		SD in Original Scale	0.00018709
		95% Percentile Bootstrap UCL	0.00027682
		95% BCA Bootstrap UCL	0.00028257
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	6.603	**Data appear Normal at 5% Significance Level**	
Theta Star	0.0001295		
nu star	52.83		
A-D Test Statistic	0.192	**Nonparametric Statistics**	
5% A-D Critical Value	0.657	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.657	Mean	0.0006583
5% K-S Critical Value	0.394	SD	0.000077606
Data appear Gamma Distributed at 5% Significance Level		SE of Mean	0.000013071
		95% KM (t) UCL	0.00068003
Assuming Gamma Distribution		95% KM (z) UCL	0.0006798
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.00074554
Minimum	0.0006208	95% KM (bootstrap t) UCL	0.00067651
Maximum	0.0011	95% KM (BCA) UCL	0.0011
Mean	0.0007202	95% KM (Percentile Bootstrap) UCL	0.00091224
Median	0.000694	95% KM (Chebyshev) UCL	0.00071527
SD	8.312E-05	97.5% KM (Chebyshev) UCL	0.00073993
k star	80.86	99% KM (Chebyshev) UCL	0.00078835
Theta star	0		
Nu star	14070	**Potential UCLs to Use**	
AppChi2	13795	95% KM (t) UCL	0.00068003
95% Gamma Approximate UCL	0.0007345	95% KM (Percentile Bootstrap) UCL	0.00091224
95% Adjusted Gamma UCL	N/A		

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_71 m,p-Xylenes

General Statistics			
Number of Valid Samples	52	Number of Detected Data	6
Number of Unique Samples	6	Number of Non-Detect Data	46
		Percent Non-Detects	88.46%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0003	Minimum Detected	-8.112
Maximum Detected	0.13	Maximum Detected	-2.04
Mean of Detected	0.0346	Mean of Detected	-5.295
SD of Detected	0.0523	SD of Detected	2.611
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	0.63	Maximum Non-Detect	-0.462
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	52
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.756	Lilliefors Test Statistic	0.873
5% Lilliefors Critical Value	0.788	5% Lilliefors Critical Value	0.788
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0174	Mean	-6.379
SD	0.0505	SD	1.917
95% DL/2 (t) UCL	0.0291	95% H-Stat (DL/2) UCL	0.0405
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-7.493
		SD in Log Scale	1.869
		Mean in Original Scale	0.00501
		SD in Original Scale	0.0197
		95% Percentile Bootstrap UCL	0.00983
		95% BCA Bootstrap UCL	0.0134
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.285	Data appear Gamma Distributed at 5% Significance Level	
Theta Star	0.121		
nu star	3.424		
A-D Test Statistic	0.452	**Nonparametric Statistics**	
5% A-D Critical Value	0.759	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.759	Mean	0.00474
5% K-S Critical Value	0.355	SD	0.0202
Data appear Gamma Distributed at 5% Significance Level		SE of Mean	0.00317
		95% KM (t) UCL	0.0101
Assuming Gamma Distribution		95% KM (z) UCL	0.00996
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.00956
Minimum	0	95% KM (bootstrap t) UCL	0.0379
Maximum	0.13	95% KM (BCA) UCL	0.016
Mean	0.0316	95% KM (Percentile Bootstrap) UCL	0.015
Median	0.0375	95% KM (Chebyshev) UCL	0.0186
SD	0.0221	97.5% KM (Chebyshev) UCL	0.0246
k star	0.398	99% KM (Chebyshev) UCL	0.0363
Theta star	0.0794		
Nu star	41.43	**Potential UCLs to Use**	
AppChi2	27.68	95% KM (t) UCL	0.0101
95% Gamma Approximate UCL	0.0473		
95% Adjusted Gamma UCL	0.0479		

Note: DL/2 is not a recommended method.

ProUCL — General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_72 o-Xylene

General Statistics

Number of Valid Samples	52	Number of Detected Data	9
Number of Unique Samples	9	Number of Non-Detect Data	43
		Percent Non-Detects	82.69%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00025	Minimum Detected	-8.294
Maximum Detected	0.081	Maximum Detected	-2.513
Mean of Detected	0.0221	Mean of Detected	-5.171
SD of Detected	0.0276	SD of Detected	2.152
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	0.63	Maximum Non-Detect	-0.462

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	52
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.811	Lilliefors Test Statistic	0.89
5% Lilliefors Critical Value	0.829	5% Lilliefors Critical Value	0.829
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.019	Mean	-6.486
SD	0.0546	SD	2.082
95% DL/2 (t) UCL	0.0317	95% H-Stat (DL/2) UCL	0.0643
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-8.405
		SD in Log Scale	2.3
		Mean in Original Scale	0.0041
		SD in Original Scale	0.0137
		95% Percentile Bootstrap UCL	0.00744
		95% BCA Bootstrap UCL	0.0087

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.388	Data appear Gamma Distributed at 5% Significance Level	
Theta Star	0.057		
nu star	6.987		
A-D Test Statistic	0.489	**Nonparametric Statistics**	
5% A-D Critical Value	0.776	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.776	Mean	0.00447
5% K-S Critical Value	0.295	SD	0.0142
Data appear Gamma Distributed at 5% Significance Level		SE of Mean	0.00218
		95% KM (t) UCL	0.00812
Assuming Gamma Distribution		95% KM (z) UCL	0.00805
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.00767
Minimum	0.00025	95% KM (bootstrap t) UCL	0.0114
Maximum	0.289	95% KM (BCA) UCL	0.0102
Mean	0.0764	95% KM (Percentile Bootstrap) UCL	0.0089
Median	0.045	95% KM (Chebyshev) UCL	0.014
SD	0.0776	97.5% KM (Chebyshev) UCL	0.0181
k star	0.707	99% KM (Chebyshev) UCL	0.0262
Theta star	0.108		
Nu star	73.58	Potential UCLs to Use	
AppChi2	54.82	95% KM (t) UCL	0.00812
95% Gamma Approximate UCL	0.103		
95% Adjusted Gamma UCL	0.103		

Note: DL/2 is not a recommended method.

ProUCL

General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_73 Xylenes, total

General Statistics

Number of Valid Samples	35	Number of Detected Data	2
Number of Unique Samples	2	Number of Non-Detect Data	33
		Percent Non-Detects	94.29%

Raw Statistics		Log-transformed Statistics	
Minimum Detected	0.0015	Minimum Detected	-6.502
Maximum Detected	0.075	Maximum Detected	-2.59
Mean of Detected	0.0383	Mean of Detected	-4.546
SD of Detected	0.052	SD of Detected	2.766
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1	Maximum Non-Detect	0

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	35
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		Lognormal Distribution Test with Detected Values Only	
Shapiro Wilk Test Statistic	1	Shapiro Wilk Test Statistic	1
5% Shapiro Wilk Critical Value	N/A	5% Shapiro Wilk Critical Value	N/A
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		Assuming Lognormal Distribution	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0341	Mean	-6.196
SD	0.117	SD	2.015
95% DL/2 (t) UCL	0.0676	95% H-Stat (DL/2) UCL	0.0767
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	N/A
		SD in Log Scale	N/A
		Mean in Original Scale	N/A
		SD in Original Scale	N/A
		95% Percentile Bootstrap UCL	N/A
		95% BCA Bootstrap UCL	N/A

Gamma Distribution Test with Detected Values Only		Data Distribution Test with Detected Values Only
k star (bias corrected)	N/A	Data do not follow a Discernable Distribution (0.05)
Theta Star	N/A	
nu star	N/A	
A-D Test Statistic	0.355	
5% A-D Critical Value	N/A	
K-S Test Statistic	N/A	
5% K-S Critical Value	N/A	
Data not Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		Nonparametric Statistics	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	N/A	Mean	0.0038
Maximum	N/A	SD	0.0128
Mean	N/A	SE of Mean	0.0032
Median	N/A	95% KM (t) UCL	0.0092
SD	N/A	95% KM (z) UCL	0.00906
k star	N/A	95% KM (jackknife) UCL	0.0517
Theta star	N/A	95% KM (bootstrap t) UCL	0.00406
Nu star	N/A	95% KM (BCA) UCL	0.075
AppChi2	N/A	95% KM (Percentile Bootstrap) UCL	0.075
95% Gamma Approximate UCL	N/A	95% KM (Chebyshev) UCL	0.0177
95% Adjusted Gamma UCL	N/A	97.5% KM (Chebyshev) UCL	0.0238
		99% KM (Chebyshev) UCL	0.0356
		Potential UCLs to Use	
		99% KM (Chebyshev) UCL	0.0356

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_74 cis-1,2-Dichloroethene

General Statistics			
Number of Valid Samples	88	Number of Detected Data	54
Number of Unique Samples	45	Number of Non-Detect Data	34
		Percent Non-Detects	38.64%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.0004	Minimum Detected	-7.824
Maximum Detected	0.048	Maximum Detected	-3.037
Mean of Detected	0.0116	Mean of Detected	-5.118
SD of Detected	0.0124	SD of Detected	1.245
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1	Maximum Non-Detect	0
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	88
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.247	Lilliefors Test Statistic	0.111
5% Lilliefors Critical Value	0.121	5% Lilliefors Critical Value	0.121
Data not Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.03	Mean	-5.059
SD	0.0838	SD	1.663
95% DL/2 (t) UCL	0.0448	95% H-Stat (DL/2) UCL	0.0909
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-5.607
		SD in Log Scale	1.303
		Mean in Original Scale	0.00811
		SD in Original Scale	0.0108
		95% Percentile Bootstrap UCL	0.0101
		95% BCA Bootstrap UCL	0.0102
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	0.85	Data appear Lognormal at 5% Significance Level	
Theta Star	0.0136		
nu star	91.77		
A-D Test Statistic	1.38	**Nonparametric Statistics**	
5% A-D Critical Value	0.786	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.786	Mean	0.00868
5% K-S Critical Value	0.125	SD	0.0113
Data not Gamma Distributed at 5% Significance Level		SE of Mean	0.0013
		95% KM (t) UCL	0.0108
Assuming Gamma Distribution		95% KM (z) UCL	0.0108
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.0108
Minimum	0.0004	95% KM (bootstrap t) UCL	0.0111
Maximum	0.048	95% KM (BCA) UCL	0.011
Mean	0.0112	95% KM (Percentile Bootstrap) UCL	0.0109
Median	0.00677	95% KM (Chebyshev) UCL	0.0144
SD	0.0104	97.5% KM (Chebyshev) UCL	0.0168
k star	1.141	99% KM (Chebyshev) UCL	0.0217
Theta star	0.00985		
Nu star	200.8	**Potential UCLs to Use**	
AppChi2	169	95% KM (Chebyshev) UCL	0.0144
95% Gamma Approximate UCL	0.0134		
95% Adjusted Gamma UCL	0.0134		

Note: DL/2 is not a recommended method.

ProUCL General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_75 n-Propylbenzene

General Statistics

Number of Valid Samples	52	Number of Detected Data	5
Number of Unique Samples	5	Number of Non-Detect Data	47
		Percent Non-Detects	90.38%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00035	Minimum Detected	-7.958
Maximum Detected	0.0012	Maximum Detected	-6.725
Mean of Detected	0.00065	Mean of Detected	-7.433
SD of Detected	0.0003344	SD of Detected	0.473
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	0.63	Maximum Non-Detect	-0.462

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	52
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.881	Lilliefors Test Statistic	0.969
5% Lilliefors Critical Value	0.762	5% Lilliefors Critical Value	0.762
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0186	Mean	-6.625
SD	0.0552	SD	2.037
95% DL/2 (t) UCL	0.0314	95% H-Stat (DL/2) UCL	0.0536
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-7.808
		SD in Log Scale	0.326
		Mean in Original Scale	0.00042958
		SD in Original Scale	0.00016047
		95% Percentile Bootstrap UCL	0.0004664
		95% BCA Bootstrap UCL	0.0004733

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	2.321	**Data appear Normal at 5% Significance Level**
Theta Star	0.0002801	
nu star	23.21	
A-D Test Statistic	0.266	
5% A-D Critical Value	0.681	
K-S Test Statistic	0.681	
5% K-S Critical Value	0.358	
Data appear Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0.0003486	Mean	0.00044269
Maximum	0.0012	SD	0.00015712
Mean	0.0005346	SE of Mean	0.000044133
Median	0.0004954	95% KM (t) UCL	0.00051662
SD	0.0001482	95% KM (z) UCL	0.00051528
k star	14.98	95% KM (jackknife) UCL	0.00054586
Theta star	3.569E-05	95% KM (bootstrap t) UCL	0.00052369
Nu star	1558	95% KM (BCA) UCL	0.0007
AppChi2	1467	95% KM (Percentile Bootstrap) UCL	0.00062225
95% Gamma Approximate UCL	0.0005676	95% KM (Chebyshev) UCL	0.00063506
95% Adjusted Gamma UCL	0.0005686	97.5% KM (Chebyshev) UCL	0.0007183
		99% KM (Chebyshev) UCL	0.00088181
		Potential UCLs to Use	
		95% KM (t) UCL	0.00051662
		95% KM (Percentile Bootstrap) UCL	0.00062225

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_76 p-Isopropyltoluene

General Statistics			
Number of Valid Samples	52	Number of Detected Data	5
Number of Unique Samples	4	Number of Non-Detect Data	47
		Percent Non-Detects	90.38%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00029	Minimum Detected	-8.146
Maximum Detected	0.00086	Maximum Detected	-7.059
Mean of Detected	0.00053	Mean of Detected	-7.623
SD of Detected	0.0002394	SD of Detected	0.448
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	0.63	Maximum Non-Detect	-0.462
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	52
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.888	Lilliefors Test Statistic	0.918
5% Lilliefors Critical Value	0.762	5% Lilliefors Critical Value	0.762
Data appear Normal at 5% Significance Level		**Data appear Lognormal at 5% Significance Level**	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0167	Mean	-6.745
SD	0.054	SD	1.954
95% DL/2 (t) UCL	0.0292	95% H-Stat (DL/2) UCL	0.0377
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-7.855
		SD in Log Scale	0.314
		Mean in Original Scale	0.00040726
		SD in Original Scale	0.00013408
		95% Percentile Bootstrap UCL	0.00044019
		95% BCA Bootstrap UCL	0.00044182
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	2.676	**Data appear Normal at 5% Significance Level**	
Theta Star	0.0001981		
nu star	26.76		
A-D Test Statistic	0.392	**Nonparametric Statistics**	
5% A-D Critical Value	0.68	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.68	Mean	0.000405
5% K-S Critical Value	0.358	SD	0.00013669
Data appear Gamma Distributed at 5% Significance Level		SE of Mean	0.000043864
		95% KM (t) UCL	0.00047848
Assuming Gamma Distribution		95% KM (z) UCL	0.00047715
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.00048821
Minimum	0.000222	95% KM (bootstrap t) UCL	0.00048788
Maximum	0.00086	95% KM (BCA) UCL	0.00070842
Mean	0.0004295	95% KM (Percentile Bootstrap) UCL	0.00049818
Median	0.0003916	95% KM (Chebyshev) UCL	0.0005962
SD	0.0001437	97.5% KM (Chebyshev) UCL	0.00067893
k star	9.294	99% KM (Chebyshev) UCL	0.00084144
Theta star	4.622E-05		
Nu star	966.5	**Potential UCLs to Use**	
AppChi2	895.4	95% KM (t) UCL	0.00047848
95% Gamma Approximate UCL	0.0004637	95% KM (Percentile Bootstrap) UCL	0.00049818
95% Adjusted Gamma UCL	0.0004647		

Note: DL/2 is not a recommended method.

ProUCL | General UCL Statistics for Data Sets with Non-Detects

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_77 sec-Butylbenzene

General Statistics			
Number of Valid Samples	52	Number of Detected Data	4
Number of Unique Samples	4	Number of Non-Detect Data	48
		Percent Non-Detects	92.31%
Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00026	Minimum Detected	-8.255
Maximum Detected	0.00039	Maximum Detected	-7.849
Mean of Detected	0.00031	Mean of Detected	-8.09
SD of Detected	5.598E-05	SD of Detected	0.172
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	0.63	Maximum Non-Detect	-0.462
Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	52
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%
UCL Statistics			
Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.881	Lilliefors Test Statistic	0.912
5% Lilliefors Critical Value	0.748	5% Lilliefors Critical Value	0.748
Data appear Normal at 5% Significance Level		Data appear Lognormal at 5% Significance Level	
Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0128	Mean	-6.922
SD	0.0474	SD	1.848
95% DL/2 (t) UCL	0.0238	95% H-Stat (DL/2) UCL	0.0215
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-8.09
		SD in Log Scale	0.173
		Mean in Original Scale	0.00031102
		SD in Original Scale	0.000054205
		95% Percentile Bootstrap UCL	0.00032357
		95% BCA Bootstrap UCL	0.00032377
Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**	
k star (bias corrected)	11.13	Data appear Normal at 5% Significance Level	
Theta Star	2.786E-05		
nu star	89.01		
A-D Test Statistic	0.385	**Nonparametric Statistics**	
5% A-D Critical Value	0.656	Kaplan-Meier (KM) Method	
K-S Test Statistic	0.656	Mean	0.00031
5% K-S Critical Value	0.394	SD	0.000048477
Data appear Gamma Distributed at 5% Significance Level		SE of Mean	0.000027988
		95% KM (t) UCL	0.00035689
Assuming Gamma Distribution		95% KM (z) UCL	0.00035604
Gamma ROS Statistics using Extrapolated Data		95% KM (jackknife) UCL	0.00036362
Minimum	0.0001678	95% KM (bootstrap t) UCL	0.00044994
Maximum	0.00039	95% KM (BCA) UCL	0.00036
Mean	0.0003068	95% KM (Percentile Bootstrap) UCL	0.00039
Median	0.0003177	95% KM (Chebyshev) UCL	0.000432
SD	5.268E-05	97.5% KM (Chebyshev) UCL	0.00048479
k star	28.68	99% KM (Chebyshev) UCL	0.00058848
Theta star	1.07E-05		
Nu star	2983	**Potential UCLs to Use**	
AppChi2	2857	95% KM (t) UCL	0.00035689
95% Gamma Approximate UCL	0.0003203	95% KM (Percentile Bootstrap) UCL	0.00039
95% Adjusted Gamma UCL	N/A		

Note: DL/2 is not a recommended method.

User Selected Options	99		99
From File		C:\lhilsche\Omega\EPCs7\all1.wst	
Full Precision		OFF	
Confidence Coefficient		95%	
Number of Bootstrap Operations		2000	

_78 trans-1,2-Dichloroethene

General Statistics

Number of Valid Samples	87	Number of Detected Data	50
Number of Unique Samples	40	Number of Non-Detect Data	37
		Percent Non-Detects	42.53%

Raw Statistics		**Log-transformed Statistics**	
Minimum Detected	0.00025	Minimum Detected	-8.294
Maximum Detected	0.13	Maximum Detected	-2.04
Mean of Detected	0.0176	Mean of Detected	-5.806
SD of Detected	0.0342	SD of Detected	1.87
Minimum Non-Detect	0.0005	Minimum Non-Detect	-7.601
Maximum Non-Detect	1	Maximum Non-Detect	0

Note: Data have multiple DLs - Use of KM Method is recommended		Number treated as Non-Detect	87
For all methods (except KM, DL/2, and ROS Methods),		Number treated as Detected	0
Observations < Largest ND are treated as NDs		Single DL Non-Detect Percentage	100.00%

UCL Statistics

Normal Distribution Test with Detected Values Only		**Lognormal Distribution Test with Detected Values Only**	
Lilliefors Test Statistic	0.555	Lilliefors Test Statistic	0.889
5% Lilliefors Critical Value	0.947	5% Lilliefors Critical Value	0.947
Data not Normal at 5% Significance Level		Data not Lognormal at 5% Significance Level	

Assuming Normal Distribution		**Assuming Lognormal Distribution**	
DL/2 Substitution Method		DL/2 Substitution Method	
Mean	0.0308	Mean	-5.675
SD	0.0869	SD	1.934
95% DL/2 (t) UCL	0.0463	95% H-Stat (DL/2) UCL	0.107
Maximum Likelihood Estimate(MLE) Method	N/A	Log ROS Method	
MLE method failed to converge properly		Mean in Log Scale	-6.321
		SD in Log Scale	1.671
		Mean in Original Scale	0.0107
		SD in Original Scale	0.0271
		95% Percentile Bootstrap UCL	0.0157
		95% BCA Bootstrap UCL	0.0164

Gamma Distribution Test with Detected Values Only		**Data Distribution Test with Detected Values Only**
k star (bias corrected)	0.367	**Data do not follow a Discernable Distribution (0.05)**
Theta Star	0.0481	
nu star	36.67	
A-D Test Statistic	4.278	
5% A-D Critical Value	0.844	
K-S Test Statistic	0.844	
5% K-S Critical Value	0.135	
Data not Gamma Distributed at 5% Significance Level		

Assuming Gamma Distribution		**Nonparametric Statistics**	
Gamma ROS Statistics using Extrapolated Data		Kaplan-Meier (KM) Method	
Minimum	0.00025	Mean	0.0113
Maximum	0.13	SD	0.0278
Mean	0.0171	SE of Mean	0.00313
Median	0.00944	95% KM (t) UCL	0.0165
SD	0.0264	95% KM (z) UCL	0.0164
k star	0.574	95% KM (jackknife) UCL	0.0165
Theta star	0.0298	95% KM (bootstrap t) UCL	0.0182
Nu star	99.87	95% KM (BCA) UCL	0.0167
AppChi2	77.81	95% KM (Percentile Bootstrap) UCL	0.0169
95% Gamma Approximate UCL	0.0219	95% KM (Chebyshev) UCL	0.0249
95% Adjusted Gamma UCL	0.022	97.5% KM (Chebyshev) UCL	0.0308
Note: DL/2 is not a recommended method.		99% KM (Chebyshev) UCL	0.0424
		Potential UCLs to Use	
		97.5% KM (Chebyshev) UCL	0.0308

Appendix B
Screening-Level Soil Gas Risk Evaluation

Appendix B – Screening-Level Soil Gas Risk Evaluation

- Cancer Risk and Non-cancer Hazard Calculations and Summary Tables
- Soil Gas Data
- Groundwater Hydropunch Data
- Johnson and Ettinger Model Input/Output Files

Cancer Risk and Non-cancer Hazard Calculations and Summary Tables

Table B-1
Soil, and Building Parameters Used in the Johnson and Ettinger Model
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Parameter	Description	Selected Value	Notes
Depth below grade to bottom of enclosed space floor	This is the depth from soil surface to the bottom of the floor in contact with soil	15 cm	Default value in User's Guide for slab-on-grade construction (EPA, 2000). Represents 6 inch thick concrete slab
Depth below grade to Top of Contamination	This is the depth from soil surface to the top of VOD-contaminated soil. It represents the depth of a VOC contaminant source in soil, or the "dry zone" between the surface and VOC contaminant source	Sample specific	Selected value is based on sample collection depth for the soil gas sample.
Average soil temperature	Average soil temperature	22^0 C.	Groundwater and subsurface default soil temperatures obtained from DTSC SL_ and GW_Screen.
Soil Stratum SCS soil type	A parameter associated with convective transport of vapors within the zone of influence of a building. It is related to the size and shape of connected soil pores	Sample specific	See Tables 2-1 to 2-12
Vadose Zone Soil Dry Bulk Density	Weight of soil per unit volume given on an oven-dry basis	Sample specific	See Tables 2-1 to 2-12
Vadose Zone Total Porosity	Used with water-filled porosity to calculate air-filled porosity (see below)	Sample specific	See Tables 2-1 to 2-12
Vadose Zone Water-filled porosity	Used with total porosity to calculate air-filled porosity (see above)	Sample specific	See Tables 2-1 to 2-12

Table B-2
Soil Physical Properties
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Soil Sample Number	Depth (ft bgs)	Soil Bulk Density (g/cm^3)	Total Porosity (cm^3/cm^3)	Water-Filled Porosity (cm^3/cm^3)	Air-Filled Porosity (cm^3/cm^3)	SCS Soil Type
OC2-SSRA1A-S-0-295	11.5-12	1.61	0.382	0.244	0.138	Silty Clay Loam (SICL)
OC2-SSRA1B-S-0-296	18.5-19	1.63	0.379	0.294	0.085	Silty Clay Loam (SICL)
OC2-SSRA1C-S-0-297	28.5-29	1.67	0.383	0.277	0.106	Silty Clay Loam (SICL)
OC2-SSRA2A-S-0-292	7-7.5	1.62	0.381	0.276	0.104	Silty Clay Loam (SICL)
OC2-SSRA2B-S-0-293	12.5-13	1.54	0.408	0.304	0.104	Silty Clay Loam (SICL)
OC2-SSRA2C-S-0-294	28.5-29	1.82	0.312	0.272	0.040	Silty Clay Loam (SICL)
OC2-SSRA3A-S-0-289	12-12.5	1.57	0.397	0.324	0.073	Silt Loam (SIL)
OC2-SSRA3B-S-0-290	18.5-19	1.66	0.368	0.307	0.060	Silty Clay Loam (SICL)
OC2-SSRA3C-S-0-291	28.5-29	1.80	0.324	0.250	0.073	Loam (L)
OC2-SSRA4A-S-0-286	11-11.5	1.63	0.381	0.304	0.077	Silt Loam (SIL)
OC2-SSRA4A-S-0-287	18-18.5	1.65	0.373	0.152	0.221	Silt Loam (SIL)
OC2-SSRA4A-S-0-288	32-32.5	1.56	0.424	0.279	0.145	Loam (L)

Table B-3
Volatile Organic Compound (VOC) Soil Gas Concentrations Used in Johnson and Ettinger Vapor Intrusion Modeling
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Soil Gas Sampling Location	Depth of Soil Gas Sample (ft bgs)	Volatile Organic Compounds ($\mu g/m^3$)											
		Benzene	Chloroform	Ethylbenzene	Tetrachloroethene (PCE)	Toluene	Trichloroethene (TCE)	Trichlorofluoromethane (Freon11)	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon113)	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m,p-Xylene	o-Xylene
SGRA-1	12.5-13	23.6	68.3	35.1	21.0	131.8	---	---	---	38.3	21.6	125.8	34.7
	21.5-22	27.1	26.3	23.4	35.9	79.1	---	---	---	24.1	23.1	47.7	29.1
	31.5-32	22.0	---	33.0	325.3	113.0	150.3	---	63.6	38.3	19.2	121.5	29.5
SGRA-1 (field duplicate)	12.5-13	26.8	78.1	41.6	25.8	150.6	---	---	---	48.1	28	151.8	41.6
SGRA-2	7-7.5	4.1	175.6	10	29.8	23.3	---	---	---	20.1	8.3	36	12.1
	12.5-13	8.3	117.1	23.9	29.8	67.8	---	---	---	41.7	18.7	91.1	28.2
	28.5-29	4.1	58.5	13.9	33.9	24.1	---	---	---	15.2	7.4	52.1	15.2
SGRA-3	11.5-12	16.6	122	32.1	23.7	124.3	---	---	---	19.2	9.3	112.8	28.2
	18.5-19	19.8	53.7	52.1	12.9	94.1	---	---	---	132.6	68.8	169.2	82.4
	28.5-29	28.4	20	28.2	50.8	143.1	---	---	---	---	---	95.4	25.6
SGRA-4	10.5-11	4.8	12.7	12.1	122	33.9	12.3	6.7	46.7	13.3	6.9	42.5	12.6
	18-18.5	24.3	31.2	35.1	61.7	139.3	---	---	107.2	30.9	20.1	112.8	36.4
	30.5-31	---	---	---	155.9	146.9	64.4	---	359.9	---	---	160.5	---
SGRA-4 (field duplicate)	10.5-11	3.8	9.8	9.5	108.4	26.7	8.1	---	36.8	10.8	---	33.8	10.4

Notes:

"---" = Not Detected

Table B-4
Estimated Cancer Risks, Soil Gas Sampling Location SGRA-1 at 12.5 ft, 21.5 ft and 31.5 ft bgs
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Sample Location	Soil Gas Sample Depth (ft bgs)	VOC	VOC Soil Gas Concentration ($\mu g/m^3$)	Estimated Cancer Risk (J&E Model)
SGRA-1	12.5-13	Benzene	26.8	4.10E-08
		Chloroform	78.1	1.10E-07
		Ethylbenzene	41.6	4.70E-09
		Tetrachloroethene (PCE)	25.8	6.70E-09
		Toluene	150.6	NA
		1,2,4-Trimethylbenzene	48.1	NA
		1,3,5-Trimethylbenzene	28.0	NA
		p-Xylene	151.8	NA
		o-Xylene	41.6	NA
			Total	**1.6E-07**
SGRA-1	21.5-22	Benzene	27.1	5.10E-09
		Chloroform	26.3	4.70E-09
		Ethylbenzene	23.4	3.20E-10
		Tetrachloroethene (PCE)	35.9	1.10E-09
		Toluene	79.1	NA
		1,2,4-Trimethylbenzene	24.1	NA
		1,3,5-Trimethylbenzene	23.1	NA
		p-Xylene	47.7	NA
		o-Xylene	29.1	NA
			Total	**1.1E-08**
SGRA-1	31.5-32	Benzene	22.0	5.60E-09
		Ethylbenzene	33.0	6.20E-10
		Tetrachloroethene (PCE)	325.3	1.40E-08
		Toluene	113.0	NA
		Trichloroethene (TCE)	150.3	2.40E-09
		Freon 113	63.6	NA
		1,2,4-Trimethylbenzene	38.3	NA
		1,3,5-Trimethylbenzene	19.2	NA
		p-Xylene	121.5	NA
		o-Xylene	29.5	NA
			Total	**2.3E-08**

Notes:
For depth of 12.5-13 ft maximum concentration comparing primary/duplicate samples was used in risk estimation

Table B-5
Estimated Cancer Risks, Soil Gas Sampling Location SGRA-2 at 7 ft, 12.5 ft and 28.5 ft bgs
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Sample Location	Soil Gas Sample Depth (ft bgs)	VOC	VOC Soil Gas Concentration ($\mu g/m^3$)	Estimated Cancer Risk (J&E Model)
SGRA-2	7-7.5	Benzene	4.1	4.80E-09
		Chloroform	175.6	1.90E-07
		Ethylbenzene	10.0	8.60E-10
		Tetrachloroethene (PCE)	29.8	5.80E-09
		Toluene	23.3	NA
		1,2,4-Trimethylbenzene	20.1	NA
		1,3,5-Trimethylbenzene	8.3	NA
		p-Xylene	36.0	NA
		o-Xylene	12.1	NA
			Total	**2.0E-07**
SGRA-2	12.5-13	Benzene	8.3	4.50E-09
		Chloroform	117.1	6.00E-08
		Ethylbenzene	23.9	9.60E-10
		Tetrachloroethene (PCE)	29.8	2.70E-09
		Toluene	67.8	NA
		1,2,4-Trimethylbenzene	41.7	NA
		1,3,5-Trimethylbenzene	18.7	NA
		p-Xylene	91.1	NA
		o-Xylene	28.2	NA
			Total	**6.8E-08**
SGRA-2	28.5-29	Benzene	4.1	9.00E-11
		Chloroform	58.5	1.30E-09
		Ethylbenzene	13.9	2.10E-11
		Tetrachloroethene (PCE)	33.9	1.00E-10
		Toluene	24.1	NA
		1,2,4-Trimethylbenzene	15.2	NA
		1,3,5-Trimethylbenzene	7.4	NA
		p-Xylene	52.1	NA
		o-Xylene	15.2	NA
			Total	**1.5E-09**

Table B-6
Estimated Cancer Risks, Soil Gas Sampling Location SGRA-3 at 11.5 ft, 18.5 ft and 28.5 ft bgs
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Sample Location	Soil Gas Sample Depth (ft bgs)	VOC	VOC Soil Gas Concentration (µg/m3)	Estimated Cancer Risk (J&E Model)
SGRA-3	11.5-12	Benzene	16.6	3.40E-09
		Chloroform	122.0	2.40E-08
		Ethylbenzene	32.1	4.80E-10
		Tetrachloroethene (PCE)	23.7	7.70E-10
		Toluene	124.3	NA
		1,2,4-Trimethylbenzene	19.2	NA
		1,3,5-Trimethylbenzene	9.3	NA
		p-Xylene	112.8	NA
		o-Xylene	28.2	NA
			Total	**2.9E-08**
SGRA-3	18.5-19	Benzene	19.8	1.70E-09
		Chloroform	53.7	4.40E-09
		Ethylbenzene	52.1	3.10E-10
		Tetrachloroethene (PCE)	12.9	1.70E-10
		Toluene	94.1	NA
		1,2,4-Trimethylbenzene	132.6	NA
		1,3,5-Trimethylbenzene	68.8	NA
		p-Xylene	169.2	NA
		o-Xylene	82.4	NA
			Total	**6.6E-09**
SGRA-3	28.5-29	Benzene	28.4	3.50E-09
		Chloroform	20.0	2.30E-09
		Ethylbenzene	28.2	2.50E-10
		Tetrachloroethene (PCE)	50.8	1.00E-09
		Toluene	143.1	NA
		p-Xylene	95.4	NA
		o-Xylene	25.6	NA
			Total	**7.1E-09**

Table B-7
Estimated Cancer Risks, Soil Gas Sampling Location SGRA-4 at 10.5 ft, 18ft, and 30.5 ft bgs
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Sample Location	Soil Gas Sample Depth (ft bgs)	VOC	VOC Soil Gas Concentration ($\mu g/m^3$)	Estimated Cancer Risk (J&E Model)
SGRA-4	10.5-11	Benzene	4.8	1.40E-09
		Chloroform	12.7	3.50E-09
		Ethylbenzene	12.1	2.50E-10
		Tetrachloroethene (PCE)	122.0	5.60E-09
		Toluene	33.9	NA
		Trichloroethene (TCE)	12.3	2.10E-10
		Freon 11	6.7	NA
		Freon 113	46.7	NA
		1,2,4-Trimethylbenzene	13.3	NA
		1,3,5-Trimethylbenzene	6.9	NA
		p-Xylene	42.5	NA
		o-Xylene	12.6	NA
			Total	**1.1E-08**
SGRA-4	18-18.5	Benzene	24.3	1.20E-07
		Chloroform	31.2	1.40E-07
		Ethylbenzene	35.1	1.30E-08
		Tetrachloroethene (PCE)	61.7	5.20E-08
		Toluene	139.3	NA
		Freon 113	107.2	NA
		1,2,4-Trimethylbenzene	30.9	NA
		1,3,5-Trimethylbenzene	20.1	NA
		p-Xylene	112.8	NA
		o-Xylene	36.4	NA
			Total	**3.3E-07**
SGRA-4	30.5-31	Tetrachloroethene (PCE)	155.9	1.60E-08
		Toluene	146.9	NA
		Trichloroethene (TCE)	64.4	2.40E-09
		Freon 113	359.9	NA
		p-Xylene	160.5	NA
			Total	**1.8E-08**

Notes:
For depth of 10.5-11 ft bgs maximum concentration comparing primary/duplicate samples was used in risk estimation

Table B-8
Estimated Non-cancer Hazard Quotient, Soil Gas Sampling Location SGRA-1 at 12.5 ft, 21.5 ft and 31.5 ft bgs
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Sample Location	Soil Gas Sample Depth (ft bgs)	VOC	VOC Soil Gas Concentration ($\mu g/m^3$)	Estimated Hazard Quotient (J&E Model)
SGRA-1	12.5-13	Benzene	26.8	1.10E-04
		Chloroform	78.1	3.80E-05
		Ethylbenzene	41.6	4.40E-06
		Tetrachloroethene (PCE)	25.8	7.50E-05
		Toluene	150.6	6.20E-05
		1,2,4-Trimethylbenzene	48.1	7.00E-04
		1,3,5-Trimethylbenzene	28.0	4.00E-04
		p-Xylene	151.8	1.70E-04
		o-Xylene	41.6	5.10E-05
			Total	**1.6E-03**
SGRA-1	21.5-22	Benzene	27.1	1.40E-05
		Chloroform	26.3	1.60E-06
		Ethylbenzene	23.4	3.00E-07
		Tetrachloroethene (PCE)	35.9	1.20E-05
		Toluene	79.1	3.90E-06
		1,2,4-Trimethylbenzene	24.1	4.30E-05
		1,3,5-Trimethylbenzene	23.1	4.10E-05
		p-Xylene	47.7	6.30E-06
		o-Xylene	29.1	4.40E-06
			Total	**1.3E-04**
SGRA-1	31.5-32	Benzene	22.0	1.50E-05
		Ethylbenzene	33.0	5.80E-07
		Tetrachloroethene (PCE)	325.3	1.60E-04
		Toluene	113.0	7.60E-06
		Trichloroethene (TCE)	150.3	4.60E-06
		Freon 113	63.6	3.80E-08
		1,2,4-Trimethylbenzene	38.3	9.20E-05
		1,3,5-Trimethylbenzene	19.2	4.60E-05
		p-Xylene	121.5	2.20E-05
		o-Xylene	29.5	6.00E-06
			Total	**3.5E-04**

Notes:
For depth of 12.5-13 ft maximum concentration comparing primary/duplicate samples was used in HQ estimation

Table B-9
Estimated Non-cancer Hazard Quotients, Soil Gas Sampling Location SGRA-2 at 7 ft, 12.5 ft and 28.5 ft bgs
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Sample Location	Soil Gas Sample Depth (ft bgs)	VOC	VOC Soil Gas Concentration ($\mu g/m^3$)	Estimated Hazard Quotient (J&E Model)
SGRA-2	7-7.5	Benzene	4.1	1.30E-05
		Chloroform	175.6	6.60E-05
		Ethylbenzene	10.0	8.10E-07
		Tetrachloroethene (PCE)	29.8	6.60E-05
		Toluene	23.3	7.30E-06
		1,2,4-Trimethylbenzene	20.1	2.20E-04
		1,3,5-Trimethylbenzene	8.3	9.10E-05
		p-Xylene	36.0	3.00E-05
		o-Xylene	12.1	1.10E-05
			Total	**5.1E-04**
SGRA-2	12.5-13	Benzene	8.3	1.20E-05
		Chloroform	117.1	2.00E-05
		Ethylbenzene	23.9	8.90E-07
		Tetrachloroethene (PCE)	29.8	3.00E-05
		Toluene	67.8	9.80E-06
		1,2,4-Trimethylbenzene	41.7	2.10E-04
		1,3,5-Trimethylbenzene	18.7	9.50E-05
		p-Xylene	91.1	3.50E-05
		o-Xylene	28.2	1.20E-05
			Total	**4.2E-04**
SGRA-2	28.5-29	Benzene	4.1	2.40E-07
		Chloroform	58.5	4.40E-07
		Ethylbenzene	13.9	1.90E-08
		Tetrachloroethene (PCE)	33.9	1.20E-06
		Toluene	24.1	1.30E-07
		1,2,4-Trimethylbenzene	15.2	3.20E-06
		1,3,5-Trimethylbenzene	7.4	1.60E-06
		p-Xylene	52.1	7.50E-07
		o-Xylene	15.2	2.70E-07
			Total	**7.8E-06**

Table B-10
Estimated Non-cancer Hazard Quotient, Soil Gas Sampling Location SGRA-3 at 11.5 ft, 18.5 ft and 28.5 ft bgs
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Sample Location	Soil Gas Sample Depth (ft bgs)	VOC	VOC Soil Gas Concentration (µg/m3)	Estimated Hazard Quotient (J&E Model)
SGRA-3	11.5-12	Benzene	16.6	9.20E-06
		Chloroform	122.0	8.10E-06
		Ethylbenzene	32.1	4.40E-07
		Tetrachloroethene (PCE)	23.7	8.70E-06
		Toluene	124.3	6.70E-06
		1,2,4-Trimethylbenzene	19.2	3.70E-05
		1,3,5-Trimethylbenzene	9.3	1.80E-05
		p-Xylene	112.8	1.60E-05
		o-Xylene	28.2	4.70E-06
			Total	**1.1E-04**
SGRA-3	18.5-19	Benzene	19.8	4.50E-06
		Chloroform	53.7	1.50E-06
		Ethylbenzene	52.1	2.90E-07
		Tetrachloroethene (PCE)	12.9	1.90E-06
		Toluene	94.1	2.00E-06
		1,2,4-Trimethylbenzene	132.6	1.10E-04
		1,3,5-Trimethylbenzene	68.8	5.50E-05
		p-Xylene	169.2	9.70E-06
		o-Xylene	82.4	5.60E-06
			Total	**1.9E-04**
SGRA-3	28.5-29	Benzene	28.4	9.30E-06
		Chloroform	20.0	7.80E-07
		Ethylbenzene	28.2	2.30E-07
		Tetrachloroethene (PCE)	50.8	1.10E-05
		Toluene	143.1	4.60E-06
		p-Xylene	95.4	8.10E-06
		o-Xylene	25.6	2.50E-06
			Total	**3.7E-05**

Table B-11
Estimated Non-cancer Hazard Quotient, Soil Gas Sampling Location SGRA-4 at 10.5 ft, 18ft, and 30.5 ft bgs
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Sample Location	Soil Gas Sample Depth (ft bgs)	VOC	VOC Soil Gas Concentration ($\mu g/m^3$)	Estimated Hazard Quotient (J&E Model)
SGRA-4	10.5-11	Benzene	4.8	3.70E-06
		Chloroform	12.7	1.20E-06
		Ethylbenzene	12.1	2.30E-07
		Tetrachloroethene (PCE)	122.0	6.40E-05
		Toluene	33.9	2.50E-06
		Trichloroethene (TCE)	12.3	4.20E-07
		Freon 11	6.7	2.10E-07
		Freon 113	46.7	3.00E-08
		1,2,4-Trimethylbenzene	13.3	3.60E-05
		1,3,5-Trimethylbenzene	6.9	1.90E-05
		p-Xylene	42.5	8.50E-06
		o-Xylene	12.6	2.90E-06
			Total	**1.4E-04**
SGRA-4	18-18.5	Benzene	24.3	3.30E-04
		Chloroform	31.2	4.90E-05
		Ethylbenzene	35.1	1.20E-05
		Tetrachloroethene (PCE)	61.7	5.90E-04
		Toluene	139.3	1.80E-04
		Freon 113	107.2	1.30E-06
		1,2,4-Trimethylbenzene	30.9	1.50E-03
		1,3,5-Trimethylbenzene	20.1	9.60E-04
		p-Xylene	112.8	4.00E-04
		o-Xylene	36.4	1.40E-04
			Total	**4.2E-03**
SGRA-4	30.5-31	Tetrachloroethene (PCE)	155.9	1.80E-04
		Toluene	146.9	2.30E-05
		Trichloroethene (TCE)	64.4	4.70E-06
		Freon 113	359.9	5.10E-07
		p-Xylene	160.5	6.80E-05
			Total	**2.8E-04**

Notes:
For depth of 10.5-11 ft bgs maximum concentration comparing primary/duplicate samples was used in HQ estimation

Table B-12
Summary of Estimated Cancer Risks, Soil Gas Sampling Locations SGRA-1 through SGRA-4
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Soil Gas Sampling Location	Soil Gas Sample Depth (ft bgs)	Total Estimated Indoor Air Vapor Intrusion Cancer Risks	Maximum Cancer Risk per Sampling Location
SGRA-1	12.5-13	1.6E-07	**1.6E-07**
	21.5-22	1.1E-08	
	31.5-32	2.3E-08	
SGRA-2	7-7.5	2.0E-07	**2.0E-07**
	12.5-13	6.8E-08	
	28.5-29	1.5E-09	
SGRA-3	11.5-12	2.9E-08	**2.9E-08**
	18.5-19	6.6E-09	
	28.5-29	7.1E-09	
SGRA-4	10.5-11	1.1E-08	
	18-18.5	3.3E-07	**3.3E-07**
	30.5-31	1.8E-08	

Table B-13
Summary of Estimated Hazard Quotients, Soil Gas Sampling Locations SGRA-1 through SGRA-4
Baseline Human Health Risk Assessment
Omega Chemical Superfund Site

Soil Gas Sampling Location	Soil Gas Sample Depth (ft bgs)	Total Estimated Indoor Air Vapor Intrusion Hazard Quotients	Maximum Hazard Quotient per Sampling Location
SGRA-1	12.5-13	1.6E-03	**1.6E-03**
	21.5-22	1.3E-04	
	31.5-32	3.5E-04	
SGRA-2	7-7.5	5.1E-04	**5.1E-04**
	12.5-13	4.2E-04	
	28.5-29	7.8E-06	
SGRA-3	11.5-12	1.1E-04	
	18.5-19	1.9E-04	**1.9E-04**
	28.5-29	3.7E-05	
SGRA-4	10.5-11	1.4E-04	
	18-18.5	4.2E-03	**4.2E-03**
	30.5-31	2.8E-04	

Soil Gas Data

SGRA1 (Primary)

Soil Gas Samples at the Residential Study Area - Whispering Fountains Apartment.

Comparisons of Analytical Parameters of Laboratory Results and Reporting Limits, and Environmental Screening Levels.

Parameter to be Analyzed	Soil Gas Screening Levels (µg/m³)							Lab Results (µg/m³)											
								Depth: 12.5 ft - 13 ft				Depth: 21.5 ft - 22 ft				Depth: 31.5 ft - 32 ft			
TCL VOCs	Required Reporting Limit (unit: µg/m³)	Residential CHHSLs[1]	Commercial/ Industrial CHHSLs[1]	Region 9 Ambient Air PRG (2004)[2]	cancer/ noncancer (ca/nc)	Residential (Based on Region 9 Ambient Air PRG)[3]	Commercial/Industrial (Based on Region 9 Ambient Air PRG)[4]	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL
Acetone	4.8			3.30E+03	nc	1,453,744	5,548,673												
Benzene	1.6	36.2	122.0					23.6		6.7	13.7	27.1		11.8	23.6	22.0		12.1	24.3
Bromobenzene	6.4			1.00E+01	nc	4,405	16,814												
Bromodichloromethane	3.4			1.10E-01	ca	48	273												
Bromoform	5.2			1.75E+00	ca	769	4,327												
Bromomethane	2			5.21E+00	nc	2,297	8,767	1.0	ND	8.1	16.7	14.4	ND	14.4	28.7	14.7	ND	14.7	29.5
Bromochloromethane	3.4																		
Butane (leak check compound)	10000							5225.3				831.3				570.0			
n-Butylbenzene	5.5			1.46E+02	nc	64,317	245,487												
sec-Butylbenzene	6			1.46E+02	nc	64,317	245,487												
Carbon disulfide	1.6			7.30E+02	nc	321,586	1,227,434												
Carbon tetrachloride	3.2	25.1	84.6					13.2	ND	13.2	27.0	23.3	ND	23.3	46.5	23.9	ND	23.9	47.8
Chlorobenzene	2.3			6.21E+01	nc	27,335	104,332	9.7	ND	9.7	19.8	17.0	ND	17.0	34.0	17.5	ND	17.5	35.0
Chloroethane	1.3			2.32E+00	ca	1,021	5,745	5.5	ND	5.5	11.3	9.8	ND	9.8	19.5	10.0	ND	10.0	20.0
Chloroform	2.5			8.30E-02	ca	37	206	**68.3**		10.2	21.0	26.3		18.1	36.1	18.5	ND	18.5	37.1
Chloromethane	4.2			9.49E+01	nc	41,806	159,566	4.3	ND	4.3	8.9	7.6	ND	7.6	15.3	7.8	ND	7.8	15.7
2-Chlorotoluene	4.5			7.30E+01	nc	32,159	122,743												
4-Chlorotoluene	4.5																		
Cyclohexane	1.7			6.21E+03	nc	2,733,480	10,433,186												
Dibromochloromethane	4.3			8.00E-02	ca	35	198												
Dibromochloropropane (DBCP)	9.7			2.09E-01	nc	92	351												
Dibromomethane				3.65E+01	nc	16,079	61,372												
1,2-Dibromoethane	3.9			3.40E-03	ca	1	8	**16.1**	ND	16.1	33.0	**28.4**	ND	28.4	56.8	**29.2**	ND	29.2	58.3
1,2-Dichloro-Tetrafluoroethane	6.3							14.7	ND	14.7	30.0	25.8	ND	25.8	51.7	26.5	ND	26.5	53.1
1,2-Dichlorobenzene	3			2.09E+02	nc	91,882	350,695	12.6	ND	12.6	25.8	22.2	ND	22.2	44.5	22.8	ND	22.8	45.7
1,3-Dichlorobenzene	3			1.10E+02	nc	48,238	184,115	12.6	ND	12.6	25.8	22.2	ND	22.2	44.5	22.8	ND	22.8	45.7
1,4-Dichlorobenzene	3			3.06E-01	ca	135	757	12.6	ND	12.6	25.8	22.2	ND	22.2	44.5	22.8	ND	22.8	45.7
Dichlorodifluoromethane (Freon 12)	2.5			2.09E+02	nc	91,882	350,695	10.4	ND	10.4	21.2	18.3	ND	18.3	36.6	18.8	ND	18.8	37.6
1,1-Dichloroethane	2			5.21E+02	nc	229,704	876,738	8.5	ND	8.5	17.4	15.0	ND	15.0	29.9	15.4	ND	15.4	30.7
1,2-Dichloroethane	2	49.6	167.0					8.5	ND	8.5	17.4	15.0	ND	15.0	29.9	15.4	ND	15.4	30.7
1,1-Dichloroethene	2			2.08E+02	nc	91,652	349,819	8.3	ND	8.3	17.0	14.7	ND	14.7	29.3	15.1	ND	15.1	30.1
cis-1,2-Dichloroethene	2	15900.0	44400.0					8.3	ND	8.3	17.0	14.7	ND	14.7	29.3	15.1	ND	15.1	30.1
trans-1,2-Dichloroethene	2	31900.0	88700.0																
Dichloromethane (Methylene chloride)	1.8			4.09E+00	ca	1,801	10,128	7.3	ND	7.3	14.9	12.8	ND	12.8	25.7	13.2	ND	13.2	26.4
1,2-Dichloropropane	2.3			9.89E-02	ca	44	245	9.7	ND	9.7	19.9	17.1	ND	17.1	34.2	17.5	ND	17.5	35.1
1,3-Dichloropropane	2.3			7.30E+01	nc	32,159	122,743												
2,2-Dichloropropane	2.3																		
1,1-Dichloropropene	2.3																		
cis-1,3-Dichloropropene	2.3			4.80E-01	ca	212	1,190	9.5	ND	9.5	19.5	16.8	ND	16.8	33.6	17.2	ND	17.2	34.5
trans-1,3-Dichloropropene	2.3			4.80E-01	ca	212	1,190	9.5	ND	9.5	19.5	16.8	ND	16.8	33.6	17.2	ND	17.2	34.5
Ethanol																			
Ethyl acetate				3.29E+03	nc	1,447,137	5,523,451												
Ethylbenzene	2.2			1.06E+03	nc	466,300	1,779,779	35.1		9.1	18.7	23.4		16.1	32.1	33.0		16.5	33.0
n-Hexane	4.1			2.09E+02	nc	91,882	350,695												
2-Hexanone	8.3																		
Hexachlorobutadiene	22			8.62E-02	ca	38	214	22.4	ND	22.4	45.8	39.4	ND	39.4	78.9	40.5	ND	40.5	81.0
Isopropanol	2.5																		
Isopropylbenzene	4.9			4.02E+02	nc	176,872	675,088												
Methyl acetate	3.6			3.65E+03	nc	1,607,930	6,137,168												
Methyl ethyl ketone	1.5			5.11E+03	nc	2,251,101	8,592,035												
Methyl isobutyl ketone (MIBK)	2.1			3.14E+03	nc	1,382,819	5,277,965												
Methyl-t-butyl ether	3.6	4000.0	13400.0																
Methylcyclohexane	4			3.13E+03	nc	1,378,225	5,260,430												
Naphthalene	5.3	31.9	106.0																
n-Propylbenzene	4.9			1.46E+02	nc	64,317	245,487												
Styrene	2.2			1.06E+03	nc	466,300	1,779,779	8.9	ND	8.9	18.3	15.7	ND	15.7	31.5	16.2	ND	16.2	32.3
1,1,1,2-Tetrachloroethane	6.9			2.60E-01	ca	114	643												

SGRA1 (Primary)

Soil Gas Samples at the Residential Study Area - Whispering Fountains Apartment.

Comparisons of Analytical Parameters of Laboratory Results and Reporting Limits, and Environmental Screening Levels.

Parameter to be Analyzed	Soil Gas Screening Levels (µg/m³)							Lab Results (µg/m³)											
								Depth: 12.5 ft - 13 ft				Depth: 21.5 ft - 22 ft				Depth: 31.5 ft - 32 ft			
TCL VOCs	Required Reporting Limit (unit: µg/m³)	Residential CHHSLs[1]	Commercial/ Industrial CHHSLs[1]	Region 9 Ambient Air PRG (2004)[2]	cancer/ noncancer (ca/nc)	Residential (Based on Region 9 Ambient Air PRG)[3]	Commercial/Industrial (Based on Region 9 Ambient Air PRG)[4]	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL
1,1,2,2-Tetrachloroethane	3.5			3.31E-02	ca	15	82	14.4	ND	14.4	29.5	**25.4**	ND	25.4	50.8	**26.1**	ND	26.1	52.1
Tetrachloroethene (PCE)	3.4	180.0	603.0					21.0		14.2	29.1	35.9		25.1	50.1	**325.3**		25.8	51.5
Toluene	1.9	135000.0	378000.0					131.8		7.9	16.2	79.1		13.9	27.9	113.0		14.3	28.6
1,2,4-Trichlorobenzene	1.5			3.65E+00	nc	1,608	6,137	15.6	ND	15.6	31.9	27.4	ND	27.4	54.9	28.2	ND	28.2	56.4
1,1,1-Trichloroethane	2.5	991000.0	2790000.0					11.5	ND	11.5	23.4	20.2	ND	20.2	40.3	20.7	ND	20.7	41.4
1,1,2-Trichloroethane	2.8			1.20E-01	ca	53	298	11.5	ND	11.5	23.4	20.2	ND	20.2	40.3	20.7	ND	20.7	41.4
Trichloroethene (TCE) Cal-Modified PRG	2.7	528.0	1770.0	9.61E-01	ca[5]	423	2,380	11.3	ND	11.3	23.1	19.9	ND	19.9	39.7	150.3		20.4	40.8
Trichlorofluoromethane (Freon 11)	5.6			7.30E+02	nc	321,586	1,227,434	11.8	ND	11.8	24.1	20.8	ND	20.8	41.5	21.3	ND	21.3	42.7
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8			3.13E+04	nc	13,779,956	52,595,531	16.1	ND	16.1	32.9	28.3	ND	28.3	56.7	63.6		29.1	58.2
1,2,4-Trimethylbenzene				6.21E+00	nc	2,733	10,433	38.3		10.3	21.1	24.1		18.2	36.3	38.3		18.7	37.3
1,3,5-Trimethylbenzene				6.21E+00	nc	2,733	10,433	21.6		10.3	21.1	23.1		18.2	36.3	19.2		18.7	37.3
2,2,4-Trimethylpentane																			
Vinyl acetate				2.09E+02	nc	91,882	350,695												
Vinyl chloride	1.3	13.3	44.8					5.4	ND	5.4	11.0	9.5	ND	9.5	18.9	9.7	ND	9.7	19.4
m,p-Xylene	2.2	317000.0	887000.0					125.8		18.7	37.3	47.7		32.1	65.1	121.5		33.0	65.1
o-Xylene	2.2	315000.0	879000.0					34.7		9.1	18.7	29.1		16.1	32.1	29.5		16.5	33.0
1,4-Dioxane	7.3			6.11E-01	ca	269	1,515												
Butane, methyl								147.4				289.0							
Butene								59.6											
Butene, methyl								108.9				272.3							
Hexene								189.2											
Isobutane								2612.7				261.3							
Pentane								129.7				277.2							
Pentene								181.1				58.2				278.1			
unknown[6]								84											
unknown[6] (01)								140											
unknown[6] (02)								60											
unknown[6] (03)								100											
unknown[6] fluorocarbon (01)								26								140			
unknown[6] fluorocarbon (02)								62								75			
unknown[6] hydrocarbon												77				25			
unknown[6] hydrocarbon (02)												6.2							

Notes:

[1] Table 2, "Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties" (CalEPA, January 2005)

[2] EPA Region 9, "Preliminary Remediation Goals" (October 2004)

[3] Residential (Ambient Air PRG Based): Region 9 Ambient Air PRG divided by "alpha" (2.27E-03; Table 3,"Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soils, CalEPA OEHHA", 2005)

[4] Commercial/Industrial: Region 9 Ambient Air PRG was multiplied by 2.8 for carcinogens or 1.9 for noncarcinogens to estimate a Commercial/Industrial Worker PRG, which was then divided by the Commercial/Industrial "alpha" (e.g. 1.13E-03, which assumes a fully calibrated/maintained HVAC system; Table 3, CalEPA OEHHA, 2005)

[5] TCE: For the EPA NCEA Provisional Draft toxicity value the posted air concentrations would be towards the upper end of the risk management range of 1E-04.

[6] Unit of unknown analyte is ppvb.

[7] Nondetects (NDs) are posted at Method Detection Limit (MDL) as a proxy value.

[8] Bolded values are values that exceed a Residential CHHSL or a Residential soil gas screening level.

SGRA1 (Field Duplicate)

Soil Gas Samples at the Residential Study Area - Whispering Fountains Apartment.

Comparisons of Analytical Parameters of Laboratory Results and Reporting Limits, and Environmental Screening Levels.

Parameter to be Analyzed	Soil Gas Screening Levels (µg/m³)							Lab Results (µg/m³)			
								Depth: 12.5' - 13'			
TCL VOCs	Required Reporting Limit (unit: µg/m³)	Residential CHHSLs[1]	Commercial/ Industrial CHHSLs[1]	Region 9 Ambient Air PRG (2004)[2]	cancer/ noncancer (ca/nc)	Residential (Based on Region 9 Ambient Air PRG)[3]	Commercial/Industrial (Based on Region 9 Ambient Air PRG)[4]	Result	Non-Detected (ND)[7]	MDL	RL
Acetone	4.8			3.30E+03	nc	1453744	5548673				
Benzene	1.6	36.2	122.0					26.8		7.0	13.7
Bromobenzene	6.4			1.00E+01	nc	4405	16814				
Bromodichloromethane	3.4			1.10E-01	ca	48	273				
Bromoform	5.2			1.75E+00	ca	769	4327				
Bromomethane	2			5.21E+00	nc	2297	8767	8.5	ND	8.5	16.7
Bromochloromethane	3.4										
Butane (leak check compound)	10000							1211.3			
n-Butylbenzene	5.5			1.46E+02	nc	64317	245487				
sec-Butylbenzene	6			1.46E+02	nc	64317	245487				
Carbon disulfide	1.6			7.30E+02	nc	321586	1227434				
Carbon tetrachloride	3.2	25.1	84.6					13.8	ND	13.8	27.0
Chlorobenzene	2.3			6.21E+01	nc	27335	104332	10.1	ND	10.1	19.8
Chloroethane	1.3			2.32E+00	ca	1021	5745	5.8	ND	5.8	11.3
Chloroform	2.5			8.30E-02	ca	37	206	**78.1**		10.7	21.0
Chloromethane	4.2			9.49E+01	nc	41806	159566	4.5	ND	4.5	8.9
2-Chlorotoluene	4.5			7.30E+01	nc	32159	122743				
4-Chlorotoluene	4.5										
Cyclohexane	1.7			6.21E+03	nc	2733480	10433186				
Dibromochloromethane	4.3			8.00E-02	ca	35	198				
Dibromochloropropane (DBCP)	9.7			2.09E-01	nc	92	351				
Dibromomethane				3.65E+01	nc	16079	61372				
1,2-Dibromoethane	3.9			3.40E-03	ca	1	8	**16.9**	ND	16.9	33.0
1,2-Dichloro-Tetrafluoroethane	6.3							15.4	ND	15.4	30.0
1,2-Dichlorobenzene	3			2.09E+02	nc	91882	350695	13.2	ND	13.2	25.8
1,3-Dichlorobenzene	3			1.10E+02	nc	48238	184115	13.2	ND	13.2	25.8
1,4-Dichlorobenzene	3			3.06E-01	ca	135	757	13.2	ND	13.2	25.8
Dichlorodifluoromethane (Freon 12)	2.5			2.09E+02	nc	91882	350695	10.9	ND	10.9	21.2
1,1-Dichloroethane	2			5.21E+02	nc	229704	876738	8.9	ND	8.9	17.4
1,2-Dichloroethane	2	49.6	167.0					8.9	ND	8.9	17.4
1,1-Dichloroethene	2			2.08E+02	nc	91652	349819	8.7	ND	8.7	17.0
cis-1,2-Dichloroethene	2	15900.0	44400.0					8.7	ND	8.7	17.0
trans-1,2-Dichloroethene	2	31900.0	88700.0								
Dichloromethane (Methylene chloride)	1.8			4.09E+00	ca	1801	10128	7.6	ND	7.6	14.9
1,2-Dichloropropane	2.3			9.89E-02	ca	44	245	10.2	ND	10.2	19.9
1,3-Dichloropropane	2.3			7.30E+01	nc	32159	122743				
2,2-Dichloropropane	2.3										
1,1-Dichloropropene	2.3										
cis-1,3-Dichloropropene	2.3			4.80E-01	ca	212	1190	10.0	ND	10.0	19.5
trans-1,3-Dichloropropene	2.3			4.80E-01	ca	212	1190	10.0	ND	10.0	19.5
Ethanol											
Ethyl acetate				3.29E+03	nc	1447137	5523451				
Ethylbenzene	2.2			1.06E+03	nc	466300	1779779	41.6		9.5	18.7
n-Hexane	4.1			2.09E+02	nc	91882	350695				
2-Hexanone	8.3										
Hexachlorobutadiene	22			8.62E-02	ca	38	214	23.4	ND	23.4	45.8
Isopropanol	2.5										
Isopropylbenzene	4.9			4.02E+02	nc	176872	675088				
Methyl acetate	3.6			3.65E+03	nc	1607930	6137168				
Methyl ethyl ketone	1.5			5.11E+03	nc	2251101	8592035				
Methyl isobutyl ketone (MIBK)	2.1			3.14E+03	nc	1382819	5277965				

SGRA1 (Field Duplicate)

Soil Gas Samples at the Residential Study Area - Whispering Fountains Apartment.

Comparisons of Analytical Parameters of Laboratory Results and Reporting Limits, and Environmental Screening Levels.

Parameter to be Analyzed	Soil Gas Screening Levels (µg/m³)							Lab Results (µg/m³)			
								Depth: 12.5' - 13'			
TCL VOCs	Required Reporting Limit (unit: µg/m³)	Residential CHHSLs[1]	Commercial/ Industrial CHHSLs[1]	Region 9 Ambient Air PRG (2004)[2]	cancer/ noncancer (ca/nc)	Residential (Based on Region 9 Ambient Air PRG)[3]	Commercial/Industrial (Based on Region 9 Ambient Air PRG)[4]	Result	Non-Detected (ND)[7]	MDL	RL
Methyl-t-butyl ether	3.6	4000.0	13400.0								
Methylcyclohexane	4			3.13E+03	nc	1378225	5260430				
Naphthalene	5.3	31.9	106.0								
n-Propylbenzene	4.9			1.46E+02	nc	64317	245487				
Styrene	2.2			1.06E+03	nc	466300	1779779	9.4	ND	9.4	18.3
1,1,1,2-Tetrachloroethane	6.9			2.60E-01	ca	114	643				
1,1,2,2-Tetrachloroethane	3.5			3.31E-02	ca	15	82	**15.1**	ND	15.1	29.5
Tetrachloroethene (PCE)	3.4	180.0	603.0					25.8		14.9	29.1
Toluene	1.9	135000.0	378000.0					150.6		8.3	16.2
1,2,4-Trichlorobenzene	1.5			3.65E+00	nc	1608	6137	16.3	ND	16.3	31.9
1,1,1-Trichloroethane	2.5	991000.0	2790000.0					12.0	ND	12.0	23.4
1,1,2-Trichloroethane	2.8			1.20E-01	ca	53	298	12.0	ND	12.0	23.4
Trichloroethene (TCE) Cal-Modified PRG	2.7	528.0	1770.0	9.61E-01	ca[5]	423	2380	11.8	ND	11.8	23.1
Trichlorofluoromethane (Freon 11)	5.6			7.30E+02	nc	321586	1227434	12.4	ND	12.4	24.1
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8			3.13E+04	nc	13779956	52595531	16.8	ND	16.8	32.9
1,2,4-Trimethylbenzene				6.21E+00	nc	2733	10433	48.1		10.8	21.1
1,3,5-Trimethylbenzene				6.21E+00	nc	2733	10433	28.0		10.8	21.1
2,2,4-Trimethylpentane											
Vinyl acetate				2.09E+02	nc	91882	350695				
Vinyl chloride	1.3	13.3	44.8					5.6	ND	5.6	11.0
m,p-Xylene	2.2	317000.0	887000.0					151.8		18.7	37.3
o-Xylene	2.2	315000.0	879000.0					41.6		9.5	18.7
1,4-Dioxane	7.3			6.11E-01	ca	269	1515				
Isobutane								125.9			
Pentane								132.7			
Pentene								172.0			
Butene, methyl								117.5			
Butane, methyl								138.6			
Butene								80.3			
unknown[6] fluorocarbon (01)								29			
unknown[6] fluorocarbon (02)								69			

Notes:

[1] Table 2, "Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties" (CalEPA, January 2005)

[2] EPA Region 9, "Preliminary Remediation Goals" (October 2004)

[3] Residential (Ambient Air PRG Based): Region 9 Ambient Air PRG divided by "alpha" (2.27E-03; Table 3,"Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soils, CalEPA OEHHA", 2005)

[4] Commercial/Industrial: Region 9 Ambient Air PRG was multiplied by 2.8 for carcinogens or 1.9 for noncarcinogens to estimate a Commercial/Industrial Worker PRG, which was then divided by the Commercial/Industrial "alpha" (e.g. 1.13E-03, which assumes a fully calibrated/maintained HVAC system; Table 3, CalEPA OEHHA, 2005)

[5] TCE: For the EPA NCEA Provisional Draft toxicity value the posted air concentrations would be towards the upper end of the risk management range of 1E-04.

[6] Unit of unknown analyte is ppvb.

[7] Nondetects (NDs) are posted at Method Detection Limit (MDL) as a proxy value.

[8] Bolded values are values that exceed a Residential CHHSL or a Residential soil gas screening level.

SGRA2 (Primary)

Soil Gas Samples at the Residential Study Area - Whispering Fountains Apartment.

Comparisons of Analytical Parameters of Laboratory Results and Reporting Limits, and Environmental Screening Levels.

Parameter to be Analyzed	Soil Gas Screening Levels (μg/m³)							Lab Results (μg/m³)											
								Depth: 7 ft - 7.5 ft				Depth: 12.5 ft - 13 ft				Depth: 28.5 ft - 29 ft			
TCL VOCs	Required Reporting Limit (unit: μg/m³)	Residential CHHSLs[1]	Commercial/ Industrial CHHSLs[1]	Region 9 Ambient Air PRG (2004)[2]	cancer/ noncancer (ca/nc)	Residential (Based on Region 9 Ambient Air PRG)[3]	Commercial/Industrial (Based on Region 9 Ambient Air PRG)[4]	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL
Acetone	4.8			3.30E+03	nc	1453744.5	5.55E+06												
Benzene	1.6	36.2	1.22E+02					4.1		3.5	6.7	8.3		3.5	6.7	4.1		3.5	6.7
Bromobenzene	6.4			1.00E+01	nc	4405.3	1.68E+04												
Bromodichloromethane	3.4			1.10E-01	ca	48.5	2.73E+02												
Bromoform	5.2			1.75E+00	ca	769.3	4.33E+03												
Bromomethane	2			5.21E+00	nc	2297.0	8.77E+03	4.3	ND	4.3	8.1	4.3	ND	4.3	8.1	4.3	ND	4.3	8.1
Bromochloromethane	3.4																		
Butane (leak check compound)	10000							38.0				71.3				90.3			
n-Butylbenzene	5.5			1.46E+02	nc	64317.2	2.45E+05												
sec-Butylbenzene	6			1.46E+02	nc	64317.2	2.45E+05												
Carbon disulfide	1.6			7.30E+02	nc	321585.9	1.23E+06												
Carbon tetrachloride	3.2	25.1	8.46E+01					6.9	ND	6.9	13.2	6.9	ND	6.9	13.2	6.9	ND	6.9	13.2
Chlorobenzene	2.3			6.21E+01	nc	27334.8	1.04E+05	5.1	ND	5.1	9.7	5.1	ND	5.1	9.7	5.1	ND	5.1	9.7
Chloroethane	1.3			2.32E+00	ca	1021.4	5.74E+03	2.9	ND	2.9	5.5	2.9	ND	2.9	5.5	2.9	ND	2.9	5.5
Chloroform	2.5			8.30E-02	ca	36.6	2.06E+02	**175.6**		5.4	10.2	**117.1**		5.4	10.2	**58.5**		5.4	10.2
Chloromethane	4.2			9.49E+01	nc	41806.2	1.60E+05	2.3	ND	2.3	4.3	2.3	ND	2.3	4.3	2.3	ND	2.3	4.3
2-Chlorotoluene	4.5			7.30E+01	nc	32158.6	1.23E+05												
4-Chlorotoluene	4.5																		
Cyclohexane	1.7			6.21E+03	nc	2733480.2	1.04E+07												
Dibromochloromethane	4.3			8.00E-02	ca	35.3	1.98E+02												
Dibromochloropropane (DBCP)	9.7			2.09E-01	nc	91.9	3.51E+02												
Dibromomethane				3.65E+01	nc	16079.3	6.14E+04												
1,2-Dibromoethane	3.9			3.40E-03	ca	1.5	8.42E+00	**8.4**	ND	8.4	16.1	**8.4**	ND	8.4	16.1	**8.4**	ND	8.4	16.1
1,2-Dichloro-Tetrafluoroethane	6.3							7.7	ND	7.7	14.7	7.7	ND	7.7	14.7	7.7	ND	7.7	14.7
1,2-Dichlorobenzene	3			2.09E+02	nc	91881.7	3.51E+05	6.6	ND	6.6	12.6	6.6	ND	6.6	12.6	6.6	ND	6.6	12.6
1,3-Dichlorobenzene	3			1.10E+02	nc	48237.9	1.84E+05	6.6	ND	6.6	12.6	6.6	ND	6.6	12.6	6.6	ND	6.6	12.6
1,4-Dichlorobenzene	3			3.06E-01	ca	134.6	7.57E+02	6.6	ND	6.6	12.6	6.6	ND	6.6	12.6	6.6	ND	6.6	12.6
Dichlorodifluoromethane (Freon 12)	2.5			2.09E+02	nc	91881.7	3.51E+05	5.4	ND	5.4	10.4	5.4	ND	5.4	10.4	5.4	ND	5.4	10.4
1,1-Dichloroethane	2			5.21E+02	nc	229704.2	8.77E+05	4.4	ND	4.4	8.5	4.4	ND	4.4	8.5	4.4	ND	4.4	8.5
1,2-Dichloroethane	2	49.6	1.67E+02					4.4	ND	4.4	8.5	4.4	ND	4.4	8.5	4.4	ND	4.4	8.5
1,1-Dichloroethene	2			2.08E+02	nc	91652.0	3.50E+05	4.4	ND	4.4	8.3	4.4	ND	4.4	8.3	4.4	ND	4.4	8.3
cis-1,2-Dichloroethene	2	15900.0	4.44E+04					4.4	ND	4.4	8.3	4.4	ND	4.4	8.3	4.4	ND	4.4	8.3
trans-1,2-Dichloroethene	2	31900.0	8.87E+04																
Dichloromethane (Methylene chloride)	1.8			4.09E+00	ca	1800.6	1.01E+04	3.8	ND	3.8	7.3	3.8	ND	3.8	7.3	3.8	ND	3.8	7.3
1,2-Dichloropropane	2.3			9.89E-02	ca	43.6	2.45E+02	5.1	ND	5.1	9.7	5.1	ND	5.1	9.7	5.1	ND	5.1	9.7
1,3-Dichloropropane	2.3			7.30E+01	nc	32158.6	1.23E+05												
2,2-Dichloropropane	2.3																		
1,1-Dichloropropene	2.3																		
cis-1,3-Dichloropropene	2.3			4.80E-01	ca	211.6	1.19E+03	5.0	ND	5.0	9.5	5.0	ND	5.0	9.5	5.0	ND	5.0	9.5
trans-1,3-Dichloropropene	2.3			4.80E-01	ca	211.6	1.19E+03	5.0	ND	5.0	9.5	5.0	ND	5.0	9.5	5.0	ND	5.0	9.5
Ethanol																			
Ethyl acetate				3.29E+03	nc	1447136.6	5.52E+06												
Ethylbenzene	2.2			1.06E+03	nc	466299.6	1.78E+06	10.0		4.8	9.1	23.9		4.8	9.1	13.9		4.8	9.1
n-Hexane	4.1			2.09E+02	nc	91881.7	3.51E+05												
2-Hexanone	8.3																		
Hexachlorobutadiene	22			8.62E-02	ca	38.0	2.14E+02	11.7	ND	11.7	22.4	11.7	ND	11.7	22.4	11.7	ND	11.7	22.4
Isopropanol	2.5																		
Isopropylbenzene	4.9			4.02E+02	nc	176872.2	6.75E+05												
Methyl acetate	3.6			3.65E+03	nc	1607929.5	6.14E+06												
Methyl ethyl ketone	1.5			5.11E+03	nc	2251101.3	8.59E+06												
Methyl isobutyl ketone (MIBK)	2.1			3.14E+03	nc	1382819.4	5.28E+06												
Methyl-t-butyl ether	3.6	4000.0	1.34E+04																
Methylcyclohexane	4			3.13E+03	nc	1378225.3	5.26E+06												

SGRA2 (Primary)

Soil Gas Samples at the Residential Study Area - Whispering Fountains Apartment.

Comparisons of Analytical Parameters of Laboratory Results and Reporting Limits, and Environmental Screening Levels.

Parameter to be Analyzed	Soil Gas Screening Levels (µg/m³)							Lab Results (µg/m³)											
								Depth: 7 ft - 7.5 ft				Depth: 12.5 ft - 13 ft				Depth: 28.5 ft - 29 ft			
TCL VOCs	Required Reporting Limit (unit: µg/m³)	Residential CHHSLs[1]	Commercial/ Industrial CHHSLs[1]	Region 9 Ambient Air PRG (2004)[2]	cancer/ noncancer (ca/nc)	Residential (Based on Region 9 Ambient Air PRG)[3]	Commercial/Industrial (Based on Region 9 Ambient Air PRG)[4]	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL
Naphthalene	5.3	31.9	1.06E+02																
n-Propylbenzene	4.9			1.46E+02	nc	64317.2	2.45E+05												
Styrene	2.2			1.06E+03	nc	466299.6	1.78E+06	4.7	ND	4.7	8.9	4.7	ND	4.7	8.9	4.7	ND	4.7	8.9
1,1,1,2-Tetrachloroethane	6.9			2.60E-01	ca	114.4	6.43E+02												
1,1,2,2-Tetrachloroethane	3.5			3.31E-02	ca	14.6	8.21E+01	7.5	ND	7.5	14.4	7.5	ND	7.5	14.4	7.5	ND	7.5	14.4
Tetrachloroethene (PCE)	3.4	180.0	6.03E+02					29.8		7.5	14.2	29.8		7.5	14.2	33.9		7.5	14.2
Toluene	1.9	135000.0	3.78E+05					23.3		4.1	7.9	67.8		4.1	7.9	24.1		4.1	7.9
1,2,4-Trichlorobenzene	1.5			3.65E+00	nc	1607.9	6.14E+03	8.2	ND	8.2	15.6	8.2	ND	8.2	15.6	8.2	ND	8.2	15.6
1,1,1-Trichloroethane	2.5	991000.0	2.79E+06					6.0	ND	6.0	11.5	6.0	ND	6.0	11.5	6.0	ND	6.0	11.5
1,1,2-Trichloroethane	2.8			1.20E-01	ca	52.9	2.98E+02	6.0	ND	6.0	11.5	6.0	ND	6.0	11.5	6.0	ND	6.0	11.5
Trichloroethene (TCE) Cal-Modified PRG	2.7	528.0	1.77E+03	9.61E-01	ca5	423.1	2.38E+03	5.9	ND	5.9	11.3	5.9	ND	5.9	11.3	5.9	ND	5.9	11.3
Trichlorofluoromethane (Freon 11)	5.6			7.30E+02	nc	321585.9	1.23E+06	6.2	ND	6.2	11.8	6.2	ND	6.2	11.8	6.2	ND	6.2	11.8
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8			3.13E+04	nc	13779955.9	5.26E+07	8.4	ND	8.4	16.1	8.4	ND	8.4	16.1	8.4	ND	8.4	16.1
1,2,4-Trimethylbenzene				6.21E+00	nc	2733.5	1.04E+04	20.1		5.4	10.3	41.7		5.4	10.3	15.2		5.4	10.3
1,3,5-Trimethylbenzene				6.21E+00	nc	2733.5	1.04E+04	8.3		5.4	10.3	18.7		5.4	10.3	7.4		5.4	10.3
2,2,4-Trimethylpentane																			
Vinyl acetate				2.09E+02	nc	91881.7	3.51E+05												
Vinyl chloride	1.3	13.3	4.48E+01					2.8	ND	2.8	5.4	2.8	ND	2.8	5.4	2.8	ND	2.8	5.4
m,p-Xylene	2.2	317000.0	8.87E+05					36.0		9.1	18.7	91.1		9.1	18.7	52.1		9.1	18.7
o-Xylene	2.2	315000.0	8.79E+05					12.1		4.8	9.1	28.2		4.8	9.1	15.2		4.8	9.1
1,4-Dioxane	7.3			6.11E-01	ca	269.3	1.51E+03												
alpha Pinene								77.9	ND			183.7				1169.2			
beta Pinene																111.4			
Cyclohexane, tetramethyl-								17.8											
Cyclohexane, trimethyl								19.1				103.2							
Heptane, ethylmethyl												69.8							
Isobutane												54.6				19.0			
Octene, dimethyl-												137.6							
Pentane																16.5			
Pentene																20.6			
unknown																7.4			
unknown Fluorocarbon																5.9			
unknown fluorocarbon (01)								3.3				18							
unknown fluorocarbon (02)								2.4				30							
unknown fluorocarbon (03)								4.6											
unknown hydrocarbon								2.7											

Notes:

[1] Table 2, "Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties" (CalEPA, January 2005)

[2] EPA Region 9, "Preliminary Remediation Goals" (October 2004)

[3] Residential (Ambient Air PRG Based): Region 9 Ambient Air PRG divided by "alpha" (2.27E-03; Table 3,"Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soils, CalEPA OEHHA", 2005)

[4] Commercial/Industrial: Region 9 Ambient Air PRG was multiplied by 2.8 for carcinogens or 1.9 for noncarcinogens to estimate a Commercial/Industrial Worker PRG, which was then divided by the Commercial/Industrial "alpha" (e.g. 1.13E-03, which assumes a fully calibrated/maintained HVAC system; Table 3, CalEPA OEHHA, 2005)

[5] TCE: For the EPA NCEA Provisional Draft toxicity value the posted air concentrations would be towards the upper end of the risk management range of 1E-04.

[6] Unit of unknown analyte is ppvb.

[7] Nondetects (NDs) are posted at Method Detection Limit (MDL) as a proxy value.

[8] Bolded values are values that exceed a Residential CHHSL or a Residential soil gas screening level.

SGRA3 (Primary)

Soil Gas Samples at the Residential Study Area - Whispering Fountains Apartment.

Comparisons of Analytical Parameters of Laboratory Results and Reporting Limits, and Environmental Screening Levels.

Parameter to be Analyzed	Soil Gas Screening Levels (µg/m³)							Lab Results (µg/m³)											
								Depth: 11.5 ft - 12 ft				Depth: 18.5 ft - 19 ft				Depth: 28.5 ft - 29 ft			
TCL VOCs	Required Reporting Limit (unit: µg/m³)	Residential CHHSLs[1]	Commercial/ Industrial CHHSLs[1]	Region 9 Ambient Air PRG (2004)[2]	cancer/ noncancer (ca/nc)	Residential (Based on Region 9 Ambient Air PRG)[3]	Commercial/Industrial (Based on Region 9 Ambient Air PRG)[4]	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL
Acetone	4.8			3.30E+03	nc	1453744.5	5.55E+06												
Benzene	1.6	36.2	1.22E+02					16.6		3.5	6.7	19.8		4.5	8.9	28.4		11.2	22.7
Bromobenzene	6.4			1.00E+01	nc	4405.3	1.68E+04												
Bromodichloromethane	3.4			1.10E-01	ca	48.5	2.73E+02												
Bromoform	5.2			1.75E+00	ca	769.3	4.33E+03												
Bromomethane	2			5.21E+00	nc	2297.0	8.77E+03	4.3	ND	4.3	8.1	5.4	ND	5.4	10.9	13.6	ND	13.6	27.5
Bromochloromethane	3.4																		
Butane (leak check compound)	10000							831.3				1567.6				926.3			
n-Butylbenzene	5.5			1.46E+02	nc	64317.2	2.45E+05												
sec-Butylbenzene	6			1.46E+02	nc	64317.2	2.45E+05												
Carbon disulfide	1.6			7.30E+02	nc	321585.9	1.23E+06												
Carbon tetrachloride	3.2	25.1	8.46E+01					6.9	ND	6.9	13.2	8.8	ND	8.8	17.6	22.0	ND	22.0	44.6
Chlorobenzene	2.3			6.21E+01	nc	27334.8	1.04E+05	5.1	ND	5.1	9.7	6.4	ND	6.4	12.9	16.1	ND	16.1	32.7
Chloroethane	1.3			2.32E+00	ca	1021.4	5.74E+03	2.9	ND	2.9	5.5	3.7	ND	3.7	7.4	9.2	ND	9.2	18.7
Chloroform	2.5			8.30E-02	ca	36.6	2.06E+02	**122.0**		5.4	10.2	**53.7**		6.8	13.7	20.0		17.1	34.6
Chloromethane	4.2			9.49E+01	nc	41806.2	1.60E+05	2.3	ND	2.3	4.3	2.9	ND	2.9	5.8	7.2	ND	7.2	14.6
2-Chlorotoluene	4.5			7.30E+01	nc	32158.6	1.23E+05												
4-Chlorotoluene	4.5																		
Cyclohexane	1.7			6.21E+03	nc	2733480.2	1.04E+07												
Dibromochloromethane	4.3			8.00E-02	ca	35.3	1.98E+02												
Dibromochloropropane (DBCP)	9.7			2.09E-01	nc	91.9	3.51E+02												
Dibromomethane				3.65E+01	nc	16079.3	6.14E+04												
1,2-Dibromoethane	3.9			3.40E-03	ca	1.5	8.42E+00	**8.4**	ND	8.4	16.1	**10.7**	ND	10.7	21.5	**26.9**	ND	26.9	54.5
1,2-Dichloro-Tetrafluoroethane	6.3							7.7	ND	7.7	14.7	9.8	ND	9.8	19.6	24.4	ND	24.4	49.6
1,2-Dichlorobenzene	3			2.09E+02	nc	91881.7	3.51E+05	6.6	ND	6.6	12.6	8.4	ND	8.4	16.8	21.0	ND	21.0	42.7
1,3-Dichlorobenzene	3			1.10E+02	nc	48237.9	1.84E+05	6.6	ND	6.6	12.6	8.4	ND	8.4	16.8	21.0	ND	21.0	42.7
1,4-Dichlorobenzene	3			3.06E-01	ca	134.6	7.57E+02	6.6	ND	6.6	12.6	8.4	ND	8.4	16.8	21.0	ND	21.0	42.7
Dichlorodifluoromethane (Freon 12)	2.5			2.09E+02	nc	91881.7	3.51E+05	5.4	ND	5.4	10.4	6.9	ND	6.9	13.8	17.3	ND	17.3	35.1
1,1-Dichloroethane	2			5.21E+02	nc	229704.2	8.77E+05	4.4	ND	4.4	8.5	5.7	ND	5.7	11.3	14.2	ND	14.2	28.7
1,2-Dichloroethane	2	49.6	1.67E+02					4.4	ND	4.4	8.5	5.7	ND	5.7	11.3	14.2	ND	14.2	28.7
1,1-Dichloroethene	2			2.08E+02	nc	91652.0	3.50E+05	4.4	ND	4.4	8.3	5.5	ND	5.5	11.1	13.9	ND	13.9	28.1
cis-1,2-Dichloroethene	2	15900.0	4.44E+04					4.4	ND	4.4	8.3	5.5	ND	5.5	11.1	13.9	ND	13.9	28.1
trans-1,2-Dichloroethene	2	31900.0	8.87E+04																
Dichloromethane (Methylene chloride)	1.8			4.09E+00	ca	1800.6	1.01E+04	3.8	ND	3.8	7.3	4.9	ND	4.9	9.7	12.1	ND	12.1	24.6
1,2-Dichloropropane	2.3			9.89E-02	ca	43.6	2.45E+02	5.1	ND	5.1	9.7	6.5	ND	6.5	12.9	16.2	ND	16.2	32.8
1,3-Dichloropropane	2.3			7.30E+01	nc	32158.6	1.23E+05												
2,2-Dichloropropane	2.3																		
1,1-Dichloropropene	2.3																		
cis-1,3-Dichloropropene	2.3			4.80E-01	ca	211.6	1.19E+03	5.0	ND	5.0	9.5	6.3	ND	6.3	12.7	15.9	ND	15.9	32.2
trans-1,3-Dichloropropene	2.3			4.80E-01	ca	211.6	1.19E+03	5.0	ND	5.0	9.5	6.3	ND	6.3	12.7	15.9	ND	15.9	32.2
Ethanol																			
Ethyl acetate				3.29E+03	nc	1447136.6	5.52E+06												
Ethylbenzene	2.2			1.06E+03	nc	466299.6	1.78E+06	32.1		4.8	9.1	52.1		6.1	12.1	28.2		15.2	30.8
n-Hexane	4.1			2.09E+02	nc	91881.7	3.51E+05												
2-Hexanone	8.3																		
Hexachlorobutadiene	22			8.62E-02	ca	38.0	2.14E+02	11.7	ND	11.7	22.4	14.9	ND	14.9	29.8	37.3	ND	37.3	75.7
Isopropanol	2.5																		
Isopropylbenzene	4.9			4.02E+02	nc	176872.2	6.75E+05												
Methyl acetate	3.6			3.65E+03	nc	1607929.5	6.14E+06												
Methyl ethyl ketone	1.5			5.11E+03	nc	2251101.3	8.59E+06												
Methyl isobutyl ketone (MIBK)	2.1			3.14E+03	nc	1382819.4	5.28E+06												
Methyl-t-butyl ether	3.6	4000.0	1.34E+04																
Methylcyclohexane	4			3.13E+03	nc	1378225.3	5.26E+06												
Naphthalene	5.3	31.9	1.06E+02																
n-Propylbenzene	4.9			1.46E+02	nc	64317.2	2.45E+05												
Styrene	2.2			1.06E+03	nc	466299.6	1.78E+06	4.7	ND	4.7	8.9	6.0	ND	6.0	11.9	14.9	ND	14.9	30.2
1,1,1,2-Tetrachloroethane	6.9			2.60E-01	ca	114.4	6.43E+02												
1,1,2,2-Tetrachloroethane	3.5			3.31E-02	ca	14.6	8.21E+01	7.5	ND	7.5	14.4	9.6	ND	9.6	19.2	**24.0**	ND	24.0	48.7
Tetrachloroethene (PCE)	3.4	180.0	6.03E+02					23.7		7.5	14.2	12.9		9.5	19.0	50.8		23.7	48.1

SGRA3 (Primary)

Soil Gas Samples at the Residential Study Area - Whispering Fountains Apartment.

Comparisons of Analytical Parameters of Laboratory Results and Reporting Limits, and Environmental Screening Levels.

Parameter to be Analyzed	Soil Gas Screening Levels (µg/m³)							Lab Results (µg/m³)											
								Depth: 11.5 ft - 12 ft				Depth: 18.5 ft - 19 ft				Depth: 28.5 ft - 29 ft			
TCL VOCs	Required Reporting Limit (unit: µg/m³)	Residential CHHSLs[1]	Commercial/ Industrial CHHSLs[1]	Region 9 Ambient Air PRG (2004)[2]	cancer/ noncancer (ca/nc)	Residential (Based on Region 9 Ambient Air PRG)[3]	Commercial/Industrial (Based on Region 9 Ambient Air PRG)[4]	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL
Toluene	1.9	135000.0	3.78E+05					124.3		4.1	7.9	94.1		5.3	10.5	143.1		13.2	26.7
1,2,4-Trichlorobenzene	1.5			3.65E+00	nc	1607.9	6.14E+03	8.2	ND	8.2	15.6	10.4	ND	10.4	20.8	26.0	ND	26.0	52.6
1,1,1-Trichloroethane	2.5	991000.0	2.79E+06					6.0	ND	6.0	11.5	7.6	ND	7.6	15.3	19.1	ND	19.1	38.7
1,1,2-Trichloroethane	2.8			1.20E-01	ca	52.9	2.98E+02	6.0	ND	6.0	11.5	7.6	ND	7.6	15.3	19.1	ND	19.1	38.7
Trichloroethene (TCE) Cal-Modified PRG	2.7	528.0	1.77E+03	9.61E-01	ca5	423.1	2.38E+03	5.9	ND	5.9	11.3	7.5	ND	7.5	15.0	18.8	ND	18.8	38.1
Trichlorofluoromethane (Freon 11)	5.6			7.30E+02	nc	321585.9	1.23E+06	6.2	ND	6.2	11.8	7.9	ND	7.9	15.7	19.6	ND	19.6	39.9
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8			3.13E+04	nc	13779955.9	5.26E+07	8.4	ND	8.4	16.1	10.7	ND	10.7	21.4	26.8	ND	26.8	54.4
1,2,4-Trimethylbenzene				6.21E+00	nc	2733.5	1.04E+04	19.2		5.4	10.3	132.6		6.9	13.8	17.2	ND	17.2	34.9
1,3,5-Trimethylbenzene				6.21E+00	nc	2733.5	1.04E+04	9.3		5.4	10.3	68.8		6.9	13.8	17.2	ND	17.2	34.9
2,2,4-Trimethylpentane																			
Vinyl acetate				2.09E+02	nc	91881.7	3.51E+05												
Vinyl chloride	1.3	13.3	4.48E+01					2.8	ND	2.8	5.4	3.6	ND	3.6	7.2	8.9	ND	8.9	18.1
m,p-Xylene	2.2	317000.0	8.87E+05					112.8		9.1	18.2	169.2		12.1	24.3	95.4		30.8	60.7
o-Xylene	2.2	315000.0	8.79E+05					28.2		4.8	9.1	82.4		6.1	12.1	25.6		15.2	30.8
1,4-Dioxane	7.3			6.11E-01	ca	269.3	1.51E+03												
Butane,methyl-								256.5											
Butene								128.4											
Butene, -methyl-								151.9											
Cyclohexane, ethylmethyl												558.4							
Cyclohexane, tetramethyl												1777.0							
Cyclohexane, trimethyl (01)												1599.3							
Cyclohexane, trimethyl (02)												515.9							
Heptane, ethylmethyl-												814.0							
Indene, octahydro												609.2							
Isobutane												1520.1							
Pentane								294.9								85.5			
Pentene								458.6								100.3			
Propylene								2063.6											
unknown[6]												96				83			
unknown[6] fluorocarbon (01)								680								1300			
unknown[6] fluorocarbon (02)								82								92			
unknown[6] fluorocarbon (03)																27			
unknown[6] hydrocarbon (01)								86											
unknown[6] hydrocarbon (02)								57											

Notes:

[1] Table 2, "Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties" (CalEPA, January 2005)

[2] EPA Region 9, "Preliminary Remediation Goals" (October 2004)

[3] Residential (Ambient Air PRG Based): Region 9 Ambient Air PRG divided by "alpha" (2.27E-03; Table 3,"Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soils, CalEPA OEHHA", 2005)

[4] Commercial/Industrial: Region 9 Ambient Air PRG was multiplied by 2.8 for carcinogens or 1.9 for noncarcinogens to estimate a Commercial/Industrial Worker PRG, which was then divided by the Commercial/Industrial "alpha" (e.g. 1.13E-03, which assumes a fully calibrated/maintained HVAC system; Table 3, CalEPA OEHHA, 2005)

[5] TCE: For the EPA NCEA Provisional Draft toxicity value the posted air concentrations would be towards the upper end of the risk management range of 1E-04.

[6] Unit of unknown analyte is ppvb.

[7] Nondetects (NDs) are posted at Method Detection Limit (MDL) as a proxy value.

[8] Bolded values are values that exceed a Residential CHHSL or a Residential soil gas screening level.

SGRA4 (Primary)

Soil Gas Samples at the Residential Study Area - Whispering Fountains Apartment.

Comparisons of Analytical Parameters of Laboratory Results and Reporting Limits, and Environmental Screening Levels.

Parameter to be Analyzed	Soil Gas Screening Levels (µg/m³)							Lab Results (µg/m³)											
								Depth: 10.5 ft - 11 ft				Depth: 18 ft - 18.5 ft				Depth: 30.5 ft - 31 ft			
TCL VOCs	Required Reporting Limit (unit: µg/m³)	Residential CHHSLs[1]	Commercial/ Industrial CHHSLs[1]	Region 9 Ambient Air PRG (2004)[2]	cancer/ noncancer (ca/nc)	Residential (Based on Region 9 Ambient Air PRG)[3]	Commercial/Industrial (Based on Region 9 Ambient Air PRG)[4]	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL
Acetone	4.8			3.30E+03	nc	1453744.5	5548672.6												
Benzene	1.6	36.2	122.0					4.8		3.5	7.3	24.3		3.8	7.7	35.1	ND	35.1	67.0
Bromobenzene	6.4			1.00E+01	nc	4405.3	16814.2												
Bromodichloromethane	3.4			1.10E-01	ca	48.5	272.6												
Bromoform	5.2			1.75E+00	ca	769.3	4327.4												
Bromomethane	2			5.21E+00	nc	2297.0	8767.4	4.3	ND	4.3	8.9	4.7	ND	4.7	9.3	42.7	ND	42.7	81.5
Bromochloromethane	3.4																		
Butane (leak check compound)	10000							33.3				1401.3				617.5			
n-Butylbenzene	5.5			1.46E+02	nc	64317.2	245486.7												
sec-Butylbenzene	6			1.46E+02	nc	64317.2	245486.7												
Carbon disulfide	1.6			7.30E+02	nc	321585.9	1227433.6												
Carbon tetrachloride	3.2	25.1	84.6					6.9	ND	6.9	14.5	7.5	ND	7.5	15.1	**69.1**	ND	69.1	132.0
Chlorobenzene	2.3			6.21E+01	nc	27334.8	104331.9	5.1	ND	5.1	10.6	5.5	ND	5.5	11.0	50.6	ND	50.6	96.6
Chloroethane	1.3			2.32E+00	ca	1021.4	5745.0	2.9	ND	2.9	6.1	3.2	ND	3.2	6.3	29.0	ND	29.0	55.4
Chloroform	2.5			8.30E-02	ca	36.6	205.7	12.7		5.4	11.2	31.2		5.9	11.7	**53.7**	ND	53.7	102.5
Chloromethane	4.2			9.49E+01	nc	41806.2	159566.4	2.3	ND	2.3	4.7	2.5	ND	2.5	5.0	22.7	ND	22.7	43.3
2-Chlorotoluene	4.5			7.30E+01	nc	32158.6	122743.4												
4-Chlorotoluene	4.5																		
Cyclohexane	1.7			6.21E+03	nc	2733480.2	10433185.8												
Dibromochloromethane	4.3			8.00E-02	ca	35.3	198.3												
Dibromochloropropane (DBCP)	9.7			2.09E-01	nc	91.9	350.7												
Dibromomethane				3.65E+01	nc	16079.3	61371.7												
1,2-Dibromoethane	3.9			3.40E-03	ca	1.5	8.4	**8.4**	ND	8.4	17.7	**9.2**	ND	9.2	18.4	**84.4**	ND	84.4	161.2
1,2-Dichloro-Tetrafluoroethane	6.3							7.7	ND	7.7	16.1	8.4	ND	8.4	16.8	76.8	ND	76.8	146.7
1,2-Dichlorobenzene	3			2.09E+02	nc	91881.7	350695.3	6.6	ND	6.6	13.8	7.2	ND	7.2	14.4	66.1	ND	66.1	126.2
1,3-Dichlorobenzene	3			1.10E+02	nc	48237.9	184115.0	6.6	ND	6.6	13.8	7.2	ND	7.2	14.4	66.1	ND	66.1	126.2
1,4-Dichlorobenzene	3			3.06E-01	ca	134.6	757.3	6.6	ND	6.6	13.8	7.2	ND	7.2	14.4	66.1	ND	66.1	126.2
Dichlorodifluoromethane (Freon 12)	2.5			2.09E+02	nc	91881.7	350695.3	5.4	ND	5.4	11.4	5.9	ND	5.9	11.9	54.4	ND	54.4	103.8
1,1-Dichloroethane	2			5.21E+02	nc	229704.2	876738.3	4.4	ND	4.4	9.3	4.9	ND	4.9	9.7	44.5	ND	44.5	84.9
1,2-Dichloroethane	2	49.6	167.0					4.4	ND	4.4	9.3	4.9	ND	4.9	9.7	44.5	ND	44.5	84.9
1,1-Dichloroethene	2			2.08E+02	nc	91652.0	349818.6	4.4	ND	4.4	9.1	4.8	ND	4.8	9.5	43.6	ND	43.6	83.2
cis-1,2-Dichloroethene	2	15900.0	44400.0					4.4	ND	4.4	9.1	4.8	ND	4.8	9.5	43.6	ND	43.6	83.2
trans-1,2-Dichloroethene	2	31900.0	88700.0																
Dichloromethane (Methylene chloride)	1.8			4.09E+00	ca	1800.6	10127.9	3.8	ND	3.8	8.0	4.2	ND	4.2	8.3	38.2	ND	38.2	72.9
1,2-Dichloropropane	2.3			9.89E-02	ca	43.6	245.0	5.1	ND	5.1	10.6	5.5	ND	5.5	11.1	50.8	ND	50.8	97.0
1,3-Dichloropropane	2.3			7.30E+01	nc	32158.6	122743.4												
2,2-Dichloropropane	2.3																		
1,1-Dichloropropene	2.3																		
cis-1,3-Dichloropropene	2.3			4.80E-01	ca	211.6	1190.0	5.0	ND	5.0	10.4	5.4	ND	5.4	10.9	49.9	ND	49.9	95.2
trans-1,3-Dichloropropene	2.3			4.80E-01	ca	211.6	1190.0	5.0	ND	5.0	10.4	5.4	ND	5.4	10.9	49.9	ND	49.9	95.2
Ethanol																			
Ethyl acetate				3.29E+03	nc	1447136.6	5523451.3												
Ethylbenzene	2.2			1.06E+03	nc	466299.6	1779778.8	12.1		4.8	10.0	35.1		5.2	10.4	47.7	ND	47.7	91.1
n-Hexane	4.1			2.09E+02	nc	91881.7	350695.3												
2-Hexanone	8.3																		
Hexachlorobutadiene	22			8.62E-02	ca	38.0	213.6	11.7	ND	11.7	24.5	12.8	ND	12.8	25.6	**117.2**	ND	117.2	223.8
Isopropanol	2.5																		
Isopropylbenzene	4.9			4.02E+02	nc	176872.2	675088.5												
Methyl acetate	3.6			3.65E+03	nc	1607929.5	6137168.1												
Methyl ethyl ketone	1.5			5.11E+03	nc	2251101.3	8592035.4												
Methyl isobutyl ketone (MIBK)	2.1			3.14E+03	nc	1382819.4	5277964.6												
Methyl-t-butyl ether	3.6	4000.0	13400.0																
Methylcyclohexane	4			3.13E+03	nc	1378225.3	5260429.8												
Naphthalene	5.3	31.9	106.0																

SGRA4 (Primary)

Soil Gas Samples at the Residential Study Area - Whispering Fountains Apartment.

Comparisons of Analytical Parameters of Laboratory Results and Reporting Limits, and Environmental Screening Levels.

Parameter to be Analyzed	Soil Gas Screening Levels (µg/m³)							Lab Results (µg/m³)											
								Depth: 10.5 ft - 11 ft				Depth: 18 ft - 18.5 ft				Depth: 30.5 ft - 31 ft			
TCL VOCs	Required Reporting Limit (unit: µg/m³)	Residential CHHSLs[1]	Commercial/ Industrial CHHSLs[1]	Region 9 Ambient Air PRG (2004)[2]	cancer/ noncancer (ca/nc)	Residential (Based on Region 9 Ambient Air PRG)[3]	Commercial/Industrial (Based on Region 9 Ambient Air PRG)[4]	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL	Result	Non-Detected (ND)[7]	MDL	RL
n-Propylbenzene	4.9			1.46E+02	nc	64317.2	245486.7												
Styrene	2.2			1.06E+03	nc	466299.6	1779778.8	4.7	ND	4.7	9.8	5.1	ND	5.1	10.2	46.8	ND	46.8	89.4
1,1,1,2-Tetrachloroethane	6.9			2.60E-01	ca	114.4	643.3												
1,1,2,2-Tetrachloroethane	3.5			3.31E-02	ca	14.6	82.1	7.5	ND	7.5	15.8	8.2	ND	8.2	16.5	**75.5**	ND	75.5	144.0
Tetrachloroethene (PCE)	3.4	180.0	603.0					122.0		7.5	15.6	61.7		8.1	16.3	155.9		74.5	142.3
Toluene	1.9	135000.0	378000.0					33.9		4.1	8.7	139.3		4.5	9.0	146.9		41.4	79.1
1,2,4-Trichlorobenzene	1.5			3.65E+00	nc	1607.9	6137.2	8.2	ND	8.2	17.1	8.9	ND	8.9	17.8	81.6	ND	81.6	155.7
1,1,1-Trichloroethane	2.5	991000.0	2790000.0					6.0	ND	6.0	12.5	6.5	ND	6.5	13.1	60.0	ND	60.0	114.5
1,1,2-Trichloroethane	2.8			1.20E-01	ca	52.9	297.5	6.0	ND	6.0	12.5	6.5	ND	6.5	13.1	60.0	ND	60.0	114.5
Trichloroethene (TCE) Cal-Modified PRG	2.7	528.0	1770.0	9.61E-01	ca5	423.1	2380.1	12.3		5.9	12.3	6.4	ND	6.4	12.9	64.4		59.1	112.8
Trichlorofluoromethane (Freon 11)	5.6			7.30E+02	nc	321585.9	1227433.6	6.7		6.2	12.9	6.7	ND	6.7	13.5	61.8	ND	61.8	117.9
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8			3.13E+04	nc	13779955.9	52595531.0	46.7		8.4	17.6	107.2		9.2	18.4	359.9		84.2	160.8
1,2,4-Trimethylbenzene				6.21E+00	nc	2733.5	10433.2	13.3		5.4	11.3	30.9		5.9	11.8	54.0	ND	54.0	103.1
1,3,5-Trimethylbenzene				6.21E+00	nc	2733.5	10433.2	6.9		5.4	11.3	20.1		5.9	11.8	54.0	ND	54.0	103.1
2,2,4-Trimethylpentane																			
Vinyl acetate				2.09E+02	nc	91881.7	350695.3												
Vinyl chloride	1.3	13.3	44.8					2.8	ND	2.8	5.9	3.1	ND	3.1	6.1	**28.1**	ND	28.1	53.6
m,p-Xylene	2.2	317000.0	887000.0					42.5		10.0	20.0	112.8		10.4	21.3	160.5		91.1	186.6
o-Xylene	2.2	315000.0	879000.0					12.6		4.8	10.0	36.4		5.2	10.4	47.7	ND	47.7	91.1
1,4-Dioxane	7.3			6.11E-01	ca	269.3	1514.6												
Butane, methyl												109.1							
Butene												52.7							
Isobutane												83.1							
Pentane												120.9							
Pentene												131.8							
Propene, methyl								14.2											
unknown[6] Fluorocarbon												30							
unknown[6] hydrocarbon								6.8											
unknown[6] hydrocarbon (01)												34							
unknown[6] hydrocarbon (02)												24							
unknown[6] Fluorocarbon (01)								9.1											
unknown[6] Fluorocarbon (02)								8.2											
unknown[6] Fluorocarbon (03)								7.3											
unknown[6] Fluorocarbon (04)								19											

Notes:

[1] Table 2, "Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties" (CalEPA, January 2005)

[2] EPA Region 9, "Preliminary Remediation Goals" (October 2004)

[3] Residential (Ambient Air PRG Based): Region 9 Ambient Air PRG divided by "alpha" (2.27E-03; Table 3,"Human-Exposure-Based Screening Numbers Developed to Aid Estimation of Cleanup Costs for Contaminated Soils, CalEPA OEHHA", 2005)

[4] Commercial/Industrial: Region 9 Ambient Air PRG was multiplied by 2.8 for carcinogens or 1.9 for noncarcinogens to estimate a Commercial/Industrial Worker PRG, which was then divided by the Commercial/Industrial "alpha" (e.g. 1.13E-03, which assumes a fully calibrated/maintained HVAC system; Table 3, CalEPA OEHHA, 2005)

[5] TCE: For the EPA NCEA Provisional Draft toxicity value the posted air concentrations would be towards the upper end of the risk management range of 1E-04.

[6] Unit of unknown analyte is ppvb.

[7] Nondetects (NDs) are posted at Method Detection Limit (MDL) as a proxy value.

[8] Bolded values are values that exceed a Residential CHHSL or a Residential soil gas screening level.

SGRA4 (Field Duplicate)

Soil Gas Samples at the Residential Study Area - Whispering Fountains Apartment.

Comparisons of Analytical Parameters of Laboratory Results and Reporting Limits, and Environmental Screening Levels.

Parameter to be Analyzed	Soil Gas Screening Levels (μg/m³)							Lab Results (μg/m³)			
								Depth: 10.5 ft - 11 ft			
TCL VOCs	Required Reporting Limit (unit: μg/m³)	Residential CHHSLs[1]	Commercial/ Industrial CHHSLs[1]	Region 9 Ambient Air PRG (2004)[2]	cancer/ noncancer (ca/nc)	Residential (Based on Region 9 Ambient Air PRG)[3]	Commercial/Industrial (Based on Region 9 Ambient Air PRG)[4]	Result	Non-Detected (ND)[7]	MDL	RL
Acetone	4.8			3.30E+03	nc	1453744.5	5.55E+06				
Benzene	1.6	36.2	1.22E+02					3.8		3.5	6.7
Bromobenzene	6.4			1.00E+01	nc	4405.3	1.68E+04				
Bromodichloromethane	3.4			1.10E-01	ca	48.5	2.73E+02				
Bromoform	5.2			1.75E+00	ca	769.3	4.33E+03				
Bromomethane	2			5.21E+00	nc	2297.0	8.77E+03	4.3	ND	4.3	8.1
Bromochloromethane	3.4										
Butane (leak check compound)	10000							28.5			
n-Butylbenzene	5.5			1.46E+02	nc	64317.2	2.45E+05				
sec-Butylbenzene	6			1.46E+02	nc	64317.2	2.45E+05				
Carbon disulfide	1.6			7.30E+02	nc	321585.9	1.23E+06				
Carbon tetrachloride	3.2	25.1	8.46E+01					6.9	ND	6.9	13.2
Chlorobenzene	2.3			6.21E+01	nc	27334.8	1.04E+05	5.1	ND	5.1	9.7
Chloroethane	1.3			2.32E+00	ca	1021.4	5.74E+03	2.9	ND	2.9	5.5
Chloroform	2.5			8.30E-02	ca	36.6	2.06E+02	9.8		5.4	10.2
Chloromethane	4.2			9.49E+01	nc	41806.2	1.60E+05	2.3	ND	2.3	4.3
2-Chlorotoluene	4.5			7.30E+01	nc	32158.6	1.23E+05				
4-Chlorotoluene	4.5										
Cyclohexane	1.7			6.21E+03	nc	2733480.2	1.04E+07				
Dibromochloromethane	4.3			8.00E-02	ca	35.3	1.98E+02				
Dibromochloropropane (DBCP)	9.7			2.09E-01	nc	91.9	3.51E+02				
Dibromomethane				3.65E+01	nc	16079.3	6.14E+04				
1,2-Dibromoethane	3.9			3.40E-03	ca	1.5	8.42E+00	**8.4**	ND	8.4	16.1
1,2-Dichloro-Tetrafluoroethane	6.3							7.7	ND	7.7	14.7
1,2-Dichlorobenzene	3			2.09E+02	nc	91881.7	3.51E+05	6.6	ND	6.6	12.6
1,3-Dichlorobenzene	3			1.10E+02	nc	48237.9	1.84E+05	6.6	ND	6.6	12.6
1,4-Dichlorobenzene	3			3.06E-01	ca	134.6	7.57E+02	6.6	ND	6.6	12.6
Dichlorodifluoromethane (Freon 12)	2.5			2.09E+02	nc	91881.7	3.51E+05	5.4	ND	5.4	10.4
1,1-Dichloroethane	2			5.21E+02	nc	229704.2	8.77E+05	4.4	ND	4.4	8.5
1,2-Dichloroethane	2	49.6	1.67E+02					4.4	ND	4.4	8.5
1,1-Dichloroethene	2			2.08E+02	nc	91652.0	3.50E+05	4.4	ND	4.4	8.3
cis-1,2-Dichloroethene	2	15900.0	4.44E+04					4.4	ND	4.4	8.3
trans-1,2-Dichloroethene	2	31900.0	8.87E+04								
Dichloromethane (Methylene chloride)	1.8			4.09E+00	ca	1800.6	1.01E+04	3.8	ND	3.8	7.3
1,2-Dichloropropane	2.3			9.89E-02	ca	43.6	2.45E+02	5.1	ND	5.1	9.7
1,3-Dichloropropane	2.3			7.30E+01	nc	32158.6	1.23E+05				
2,2-Dichloropropane	2.3										
1,1-Dichloropropene	2.3										
cis-1,3-Dichloropropene	2.3			4.80E-01	ca	211.6	1.19E+03	5.0	ND	5.0	9.5
trans-1,3-Dichloropropene	2.3			4.80E-01	ca	211.6	1.19E+03	5.0	ND	5.0	9.5
Ethanol											
Ethyl acetate				3.29E+03	nc	1447136.6	5.52E+06				
Ethylbenzene	2.2			1.06E+03	nc	466299.6	1.78E+06	9.5		4.8	9.1
n-Hexane	4.1			2.09E+02	nc	91881.7	3.51E+05				
2-Hexanone	8.3										
Hexachlorobutadiene	22			8.62E-02	ca	38.0	2.14E+02	11.7	ND	11.7	22.4
Isopropanol	2.5										
Isopropylbenzene	4.9			4.02E+02	nc	176872.2	6.75E+05				
Methyl acetate	3.6			3.65E+03	nc	1607929.5	6.14E+06				
Methyl ethyl ketone	1.5			5.11E+03	nc	2251101.3	8.59E+06				
Methyl isobutyl ketone (MIBK)	2.1			3.14E+03	nc	1382819.4	5.28E+06				
Methyl-t-butyl ether	3.6	4000.0	1.34E+04								
Methylcyclohexane	4			3.13E+03	nc	1378225.3	5.26E+06				

SGRA4 (Field Duplicate)

Soil Gas Samples at the Residential Study Area - Whispering Fountains Apartment.

Comparisons of Analytical Parameters of Laboratory Results and Reporting Limits, and Environmental Screening Levels.

Parameter to be Analyzed	Soil Gas Screening Levels (µg/m³)							Lab Results (µg/m³)			
								Depth: 10.5 ft - 11 ft			
TCL VOCs	Required Reporting Limit (unit: µg/m³)	Residential CHHSLs[1]	Commercial/ Industrial CHHSLs[1]	Region 9 Ambient Air PRG (2004)[2]	cancer/ noncancer (ca/nc)	Residential (Based on Region 9 Ambient Air PRG)[3]	Commercial/Industrial (Based on Region 9 Ambient Air PRG)[4]	Result	Non-Detected (ND)[7]	MDL	RL
Naphthalene	5.3	31.9	1.06E+02								
n-Propylbenzene	4.9			1.46E+02	nc	64317.2	2.45E+05				
Styrene	2.2			1.06E+03	nc	466299.6	1.78E+06	4.7	ND	4.7	8.9
1,1,1,2-Tetrachloroethane	6.9			2.60E-01	ca	114.4	6.43E+02				
1,1,2,2-Tetrachloroethane	3.5			3.31E-02	ca	14.6	8.21E+01	7.5	ND	7.5	14.4
Tetrachloroethene (PCE)	3.4	180.0	6.03E+02					108.4		7.5	14.2
Toluene	1.9	135000.0	3.78E+05					26.7		4.1	7.9
1,2,4-Trichlorobenzene	1.5			3.65E+00	nc	1607.9	6.14E+03	8.2	ND	8.2	15.6
1,1,1-Trichloroethane	2.5	991000.0	2.79E+06					6.0	ND	6.0	11.5
1,1,2-Trichloroethane	2.8			1.20E-01	ca	52.9	2.98E+02	6.0	ND	6.0	11.5
Trichloroethene (TCE) Cal-Modified PRG	2.7	528.0	1.77E+03	9.61E-01	ca[5]	423.1	2.38E+03	8.1		5.9	11.3
Trichlorofluoromethane (Freon 11)	5.6			7.30E+02	nc	321585.9	1.23E+06	6.2	ND	6.2	11.8
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	8			3.13E+04	nc	13779955.9	5.26E+07	36.8		8.4	16.1
1,2,4-Trimethylbenzene				6.21E+00	nc	2733.5	1.04E+04	10.8		5.4	10.3
1,3,5-Trimethylbenzene				6.21E+00	nc	2733.5	1.04E+04	5.4	ND	5.4	10.3
2,2,4-Trimethylpentane											
Vinyl acetate				2.09E+02	nc	91881.7	3.51E+05				
Vinyl chloride	1.3	13.3	4.48E+01					2.8	ND	2.8	5.4
m,p-Xylene	2.2	317000.0	8.87E+05					33.8		9.1	18.2
o-Xylene	2.2	315000.0	8.79E+05					10.4		4.8	9.1
1,4-Dioxane	7.3			6.11E-01	ca	269.3	1.51E+03				
unknown[6] fluorocarbon (02)								12			
unknown[6] fluorocarbon (01)								9.8			
unknown[6] fluorocarbon (03)								8			
unknown[6] fluorocarbon (04)								16			
unknown[6]								8.4			

Notes:

[1] Table 2, "Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties" (CalEPA, January 2005)

[2] EPA Region 9, "Preliminary Remediation Goals" (October 2004)

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[5] TCE: For the EPA NCEA Provisional Draft toxicity value the posted air concentrations would be towards the upper end of the risk management range of 1E-04.

[6] Unit of unknown analyte is ppvb.

[7] Nondetects (NDs) are posted at Method Detection Limit (MDL) as a proxy value.

[8] Bolded values are values that exceed a Residential CHHSL or a Residential soil gas screening level.

Groundwater Hydropunch Data

ANALYTICAL RESULTS - Trace Level Water Samples for Trace Volatiles (µg/l)
Omega Chemical OU2 - Whispering Fountains Hydropunch Sampling

Sample ID :	OC2-HPRA1A-W-0-279 (Primary)		OC2-HPRA1B-W-0-280 (Primary)		OC2-HPRA1B-W-1-281 (Field Duplicate)		OC2-HPRA2A-W-0-277 (Primary)		OC2-HPRA2B-W-0-278 (Primary)		OC2-HPRA3A-W-0-275 (Primary)		OC2-HPRA3B-W-0-276 (Primary)		OC2-HPRA4A-W-0-284 (Primary)		OC2-HPRA4B-W-5-285 (Primary)	
CLP ID:	Y34B4		Y34B5		Y34B6		Y34B2		Y34B3		Y34B0		Y34B1		Y34B9		Y34C0	
Depth (ft) :	40-43		50-53		50-53		40-43		50-53		47-50		57-60		44-47		54-57	
Collection Date :	1/10/2007		1/10/2007		1/10/2007		1/9/2007		1/9/2007		1/9/2007		1/9/2007		1/10/2007		1/10/2007	
Dilution Factor :	1.0		2.0		2.0		1.0		2.0		1.0		2.0		1.0		1.0	
Trace Volatiles	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val	Result	Val
Dichlorodifluoromethane	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
Chloromethane	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
Vinyl chloride	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
Bromomethane	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
Chloroethane	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
Trichlorofluoromethane	0.50U	U	0.60J	J	0.63J	J	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.14J	J	15	J
1,1-Dichloroethene	0.68		14		14		0.50U	U	11		0.50U	U	14		0.50U	U	12	J
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50U	U	2.9		3.0		0.50U	U	1.0U	U	0.50U	U	0.54J	J	0.35J	J	39D	J
Acetone	5.0U	U	10U	U	10U	U	5.0U	U	10U	U	5.0U	U	10U	U	5.0U	U	5.0U	U
Carbon disulfide	0.14J	J	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
Methyl acetate	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	UJ
Methylene chloride	0.50U	U	1.0J	U	1.0J	U	0.50J	U	1.0J	U	0.50U	U	1.0J	U	0.50U	U	0.50U	UJ
trans-1,2-Dichloroethene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.21J	J
Methyl tert-butyl ether	0.50U	U	0.42J	J	0.41J	J	0.50U	U	0.48J	J	0.50U	U	0.49J	J	0.50U	U	0.50U	UJ
1,1-Dichloroethane	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
cis-1,2-Dichloroethene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	3.8	J
2-Butanone	5.0U	U	10U	U	10U	U	5.0U	U	10U	U	5.0U	U	10U	U	5.0U	U	5.0U	U
Bromochloromethane	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
Chloroform	0.50U	U	1.1		1.1		1.1		0.93J	J	0.50U	U	0.98J	J	0.22J	J	1.8	
1,1,1-Trichloroethane	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	UJ
Cyclohexane	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
Carbon tetrachloride	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	UJ
Benzene	0.14J	J	1.0U	U	1.0U	U	0.17J	J	1.0U	U	0.50U	U	1.0U	U	0.24J	J	0.50U	U
1,2-Dichloroethane	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	UJ
1,4-Dioxane[1]	2.0U	R	2.0U	R	2.0U	R	2.0U	R	2.0U	R	2.0U	R	2.0U	R	2.0U	R	1.4J	J
Trichloroethene	18		330D		310D		0.86		260D		0.50J	U	230D		7.3		140D	
Methylcyclohexane	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
1,2-Dichloropropane	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
Bromodichloromethane	0.50U	U	1.0U	U	1.0U	U	0.27J	J	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.14J	J
cis-1,3-Dichloropropene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
4-Methyl-2-Pentanone	5.0U	U	10U	U	10U	U	5.0U	U	10U	U	5.0U	U	10U	U	5.0U	U	5.0U	U
Toluene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.15J	J	0.50U	U
trans-1,3-Dichloropropene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
1,1,2-Trichloroethane	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
Tetrachloroethene	2.5		24		24		0.62		21		0.50J	U	24		1.7		90D	
2-Hexanone	5.0U	U	10U	U	10U	U	5.0U	U	10U	U	5.0U	U	10U	U	5.0U	U	5.0U	U
Dibromochloromethane	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
1,2-Dibromoethane[1]	0.050U	U	0.050U	U	0.050U	U	0.050U	U	0.050U	U	0.050U	U	0.050U	U	0.050U	U	0.050U	U
Chlorobenzene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
Ethylbenzene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
o-Xylene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
m,p-Xylene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
Styrene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
Bromoform	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
Isopropylbenzene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
1,1,2,2-Tetrachloroethane	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
1,3-Dichlorobenzene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
1,4-Dichlorobenzene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
1,2-Dichlorobenzene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
1,2-Dibromo-3-chloropropane[1]	0.050U	U	0.050U	U	0.050U	U	0.050U	U	0.050U	U	0.050U	U	0.050U	U	0.050U	U	0.050U	U
1,2,4-Trichlorobenzene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U
1,2,3-Trichlorobenzene	0.50U	U	1.0U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	1.0U	U	0.50U	U	0.50U	U

Notes:

Val - Validity. Refer to Data Qualifiers to the left.
Com - Comments. Refer to the Corresponding Section in the Narrative for each letter.
CRQL - Contract Required Quantitation LImit
N/A - Not Applicable
NA - Not Analyzed
D1, D2, etc. - Field Duplicate Pairs
FB - Field Blank, EB - Equipment Blank,
TB - Trip Blank, BG - Background Sample
[1] - Samples are Analyzed by Volatiles Secondary Ion Monitoring (SIM, ug/l)

Data Qualifiers

B : Analyte found in associated method blank as well as in sample
BD : Analyte found in assoc method blank as well as in sample; detect assoc with dilution sample
BJD : Estimated below detection and detection associated with sample dilution
D : Detection associated with sample dilution
E : Estimated value; Concentration exceeds upper level of instrument calibration range
EB : Estimated value; analyte found in associated method blank as well as in sample
J : Estimated Value
J+ : Estimated and MSA correlation coefficient <0.995 (ILM4)
J- : Estimated and
JB : Estimated Detected in Method Blank
JD : Estimated Value, detection associated with sample dilution
R : Unusable
U : Undetected

Johnson and Ettinger Model Input/Output Files

Johnson and Ettinger Model Input/Output Sheets

- SGRA-1, 12.5 ft bgs
- SGRA-1, 21.5 ft bgs
- SGRA-1, 31.5 ft bgs
- SGRA-2, 7 ft bgs
- SGRA-2, 12.5 ft bgs
- SGRA-2, 28.5 ft bgs
- SGRA-3, 11.5 ft bgs
- SGRA-3, 18.5 ft bgs
- SGRA-3, 28.5 ft bgs
- SGRA-4, 10.5 ft bgs
- SGRA-4, 18 ft bgs
- SGRA-4, 30.5 ft bgs

SGRA-1, 12.5 ft bgs

- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- Benzene
- Chloroform
- Ethylbenzene
- m-Xylene
- o-Xylene
- p-Xylene
- Tetrachloroethylene (PCE)
- Toluene
  - VLookup Tables

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 12.5 ft, 1,2,4-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	4.81E+01			1,2,4-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.61	0.382	0.244	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 12.5 ft, 1,2,4-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	7.0E-04

MESSAGE SUMMARY BELOW:

END

VLOOKUP TABLES

Soil Properties Lookup Table

SCS Soil Type	K_s (cm/h)	α_1 (1/cm)	N (unitless)	M (unitless)	n (cm^3/cm^3)	θ_r (cm^3/cm^3)	Mean Grain Diameter (cm)	Bulk Density (g/cm3)	θ_w (cm^3/cm^3)	SCS Soil Name
C	0.61	0.01496	1.253	0.2019	0.459	0.098	0.0092	1.43	0.215	Clay
CL	0.34	0.01581	1.416	0.2938	0.442	0.079	0.016	1.48	0.168	Clay Loam
L	0.50	0.01112	1.472	0.3207	0.399	0.061	0.020	1.59	0.148	Loam
LS	4.38	0.03475	1.746	0.4273	0.390	0.049	0.040	1.62	0.076	Loamy Sand
S	26.78	0.03524	3.177	0.6852	0.375	0.053	0.044	1.66	0.054	Sand
SC	0.47	0.03342	1.208	0.1722	0.385	0.117	0.025	1.63	0.197	Sandy Clay
SCL	0.55	0.02109	1.330	0.2481	0.384	0.063	0.029	1.63	0.146	Sandy Clay Loam
SI	1.82	0.00658	1.679	0.4044	0.489	0.050	0.0046	1.35	0.167	Silt
SIC	0.40	0.01622	1.321	0.2430	0.481	0.111	0.0039	1.38	0.216	Silty Clay
SICL	0.46	0.00839	1.521	0.3425	0.482	0.090	0.0056	1.37	0.198	Silty Clay Loam
SIL	0.76	0.00506	1.663	0.3987	0.439	0.065	0.011	1.49	0.180	Silt Loam
SL	1.60	0.02667	1.449	0.3099	0.387	0.039	0.030	1.62	0.103	Sandy Loam

Chemical Properties Lookup Table

CAS No.	Chemical	Organic carbon partition coefficient, K_{oc} (cm^3/g)	Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Pure component water solubility, S (mg/L)	Henry's law constant H' (unitless)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (°C)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Unit risk factor, URF ($\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Molecular weight, MW (g/mol)	URF extrapolated (X)	RfC extrapolated (X)
56235	Carbon tetrachloride	1.74E+02	7.80E-02	8.80E-06	7.93E+02	1.24E+00	3.03E-02	25	349.90	556.60	7,127	1.5E-05	0.0E+00	1.54E+02		
57749	Chlordane	1.20E+05	1.18E-02	4.37E-06	5.60E-02	1.99E-03	4.85E-05	25	624.24	885.73	14,000	1.0E-04	7.0E-04	4.10E+02		
58899	gamma-HCH (Lindane)	1.07E+03	1.42E-02	7.34E-06	7.30E+00	5.73E-04	1.40E-05	25	596.55	839.36	15,000	3.7E-04	1.1E-03	2.91E+02	X	X
60297	Ethyl ether	5.73E+00	7.82E-02	8.61E-06	5.68E+04	1.35E+00	3.29E-02	25	307.50	466.74	6,338	0.0E+00	7.0E-01	7.41E+01		X
60571	Dieldrin	2.14E+04	1.25E-02	4.74E-06	1.95E-01	6.18E-04	1.51E-05	25	613.32	842.25	17,000	4.6E-03	1.8E-04	3.81E+02		X
67641	Acetone	5.75E-01	1.24E-01	1.14E-05	1.00E+06	1.59E-03	3.87E-05	25	329.20	508.10	6,955	0.0E+00	3.5E-01	5.81E+01		X
67663	**Chloroform**	3.98E+01	1.04E-01	1.00E-05	7.92E+03	1.50E-01	3.66E-03	25	334.32	536.40	6,988	2.3E-05	**3.0E-01**	1.19E+02		
67721	Hexachloroethane	1.78E+03	2.50E-03	6.80E-06	5.00E+01	1.59E-01	3.88E-03	25	458.00	695.00	9,510	4.0E-06	3.5E-03	2.37E+02		X
71432	**Benzene**	5.89E+01	8.80E-02	9.80E-06	1.79E+03	2.27E-01	5.54E-03	25	353.24	562.16	7,342	**2.9E-05**	3.0E-02	7.81E+01		
71556	1,1,1-Trichloroethane	1.10E+02	7.80E-02	8.80E-06	1.33E+03	7.03E-01	1.72E-02	25	347.24	545.00	7,136	0.0E+00	2.2E+00	1.33E+02		
72435	Methoxychlor	9.77E+04	1.56E-02	4.46E-06	1.00E-01	6.46E-04	1.58E-05	25	651.02	848.49	16,000	0.0E+00	1.8E-02	3.46E+02		X
72559	DDE	4.47E+06	1.44E-02	5.87E-06	1.20E-01	8.59E-04	2.09E-05	25	636.44	860.38	15,000	9.7E-05	0.0E+00	3.18E+02	X	
74839	Methyl bromide	1.05E+01	7.28E-02	1.21E-05	1.52E+04	2.55E-01	6.22E-03	25	276.71	467.00	5,714	0.0E+00	5.0E-03	9.49E+01		
74873	Methyl chloride (chloromethane)	2.12E+00	1.26E-01	6.50E-06	5.33E+03	3.61E-01	8.80E-03	25	249.00	416.25	5,115	1.0E-06	9.0E-02	5.05E+01		
74908	Hydrogen cyanide	3.80E+00	1.93E-01	2.10E-05	1.00E+06	5.44E-03	1.33E-04	25	299.00	456.70	6,676	0.0E+00	3.0E-03	2.70E+01		
74953	Methylene bromide	1.26E+01	4.30E-02	8.44E-06	1.19E+04	3.52E-02	8.59E-04	25	370.00	583.00	7,868	0.0E+00	3.5E-02	1.74E+02		X
75003	Chloroethane (ethyl chloride)	4.40E+00	2.71E-01	1.15E-05	5.68E+03	3.61E-01	8.80E-03	25	285.30	460.40	5,879	8.3E-07	1.0E+01	6.45E+01	X	
75014	Vinyl chloride (chloroethene)	1.86E+01	1.06E-01	1.23E-05	8.80E+03	1.10E+00	2.69E-02	25	259.25	432.00	5,250	8.8E-06	1.0E-01	6.25E+01		
75058	Acetonitrile	4.20E+00	1.28E-01	1.66E-05	1.00E+06	1.42E-03	3.45E-05	25	354.60	545.50	7,110	0.0E+00	6.0E-02	4.11E+01		
75070	Acetaldehyde	1.06E+00	1.24E-01	1.41E-05	1.00E+06	3.23E-03	7.87E-05	25	293.10	466.00	6,157	2.2E-06	9.0E-03	4.41E+01		
75092	Methylene chloride	1.17E+01	1.01E-01	1.17E-05	1.30E+04	8.96E-02	2.18E-03	25	313.00	510.00	6,706	4.7E-07	3.0E+00	8.49E+01		
75150	Carbon disulfide	4.57E+01	1.04E-01	1.00E-05	1.19E+03	1.24E+00	3.02E-02	25	319.00	552.00	6,391	0.0E+00	7.0E-01	7.61E+01		
75218	Ethylene oxide	1.33E+00	1.04E-01	1.45E-05	3.04E+05	2.27E-02	5.54E-04	25	283.60	469.00	6,104	1.0E-04	0.0E+00	4.41E+01		
75252	Bromoform	8.71E+01	1.49E-02	1.03E-05	3.10E+03	2.41E-02	5.88E-04	25	422.35	696.00	9,479	1.1E-06	7.0E-02	2.53E+02		X
75274	Bromodichloromethane	5.50E+01	2.98E-02	1.06E-05	6.74E+03	6.54E-02	1.60E-03	25	363.15	585.85	7,800	1.8E-05	7.0E-02	1.64E+02	X	X
75296	2-Chloropropane	9.14E+00	8.88E-02	1.01E-05	3.73E+03	5.93E-01	1.45E-02	25	308.70	485.00	6,286	0.0E+00	1.0E-01	7.85E+01		
75343	1,1-Dichloroethane	3.16E+01	7.42E-02	1.05E-05	5.06E+03	2.30E-01	5.61E-03	25	330.55	523.00	6,895	0.0E+00	5.0E-01	9.90E+01		
75354	1,1-Dichloroethylene	5.89E+01	9.00E-02	1.04E-05	2.25E+03	1.07E+00	2.60E-02	25	304.75	576.05	6,247	0.0E+00	2.0E-01	9.69E+01		
75456	Chlorodifluoromethane	4.79E+01	1.01E-01	1.28E-05	2.00E+00	1.10E+00	2.70E-02	25	232.40	369.30	4,836	0.0E+00	5.0E+01	8.65E+01		
75694	Trichlorofluoromethane	4.97E+02	8.70E-02	9.70E-06	1.10E+03	3.97E+00	9.68E-02	25	296.70	471.00	5,999	0.0E+00	7.0E-01	1.37E+02		
75718	Dichlorodifluoromethane	4.57E+02	6.65E-02	9.92E-06	2.80E+02	1.40E+01	3.42E-01	25	243.20	384.95	9,421	0.0E+00	2.0E-01	1.21E+02		
76131	1,1,2-Trichloro-1,2,2-trifluoroethane	1.11E+04	7.80E-02	8.20E-06	1.70E+02	1.97E+01	4.80E-01	25	320.70	487.30	6,463	0.0E+00	3.0E+01	1.87E+02		
76448	Heptachlor	1.41E+06	1.12E-02	5.69E-06	1.80E-01	6.05E+01	1.48E+00	25	603.69	846.31	13,000	1.3E-03	1.8E-03	3.73E+02		X
77474	Hexachlorocyclopentadiene	2.00E+05	1.61E-02	7.21E-06	1.80E+00	1.10E+00	2.69E-02	25	512.15	746.00	10,931	0.0E+00	2.0E-04	2.73E+02		
78831	Isobutanol	2.59E+00	8.60E-02	9.30E-06	8.50E+04	4.83E-04	1.18E-05	25	381.04	547.78	10,936	0.0E+00	1.1E+00	7.41E+01		X
78875	1,2-Dichloropropane	4.37E+01	7.82E-02	8.73E-06	2.80E+03	1.15E-01	2.79E-03	25	369.52	572.00	7,590	1.9E-05	4.0E-03	1.13E+02	X	
78933	Methylethylketone (2-butanone)	2.30E+00	8.08E-02	9.80E-06	2.23E+05	2.29E-03	5.58E-05	25	352.50	536.78	7,481	0.0E+00	5.0E+00	7.21E+01		

Chemical Properties Lookup Table

CAS No.	Chemical	Organic carbon partition coefficient, K_{oc} (cm^3/g)	Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Pure component water solubility, S (mg/L)	Henry's law constant H' (unitless)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (°C)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Unit risk factor, URF ($\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Molecular weight, MW (g/mol)	URF extrapolated (X)	RfC extrapolated (X)
79005	1,1,2-Trichloroethane	5.01E+01	7.80E-02	8.80E-06	4.42E+03	3.73E-02	9.11E-04	25	386.15	602.00	8,322	1.6E-05	1.4E-02	1.33E+02		X
79016	**Trichloroethylene**	1.66E+02	7.90E-02	9.10E-06	1.47E+03	4.21E-01	1.03E-02	25	360.36	544.20	7,505	**2.0E-06**	**6.0E-01**	1.31E+02	X	
79209	Methyl acetate	3.26E+00	1.04E-01	1.00E-05	2.00E+03	4.84E-03	1.18E-04	25	329.80	506.70	7,260	0.0E+00	3.5E+00	7.41E+01		X
79345	1,1,2,2-Tetrachloroethane	9.33E+01	7.10E-02	7.90E-06	2.96E+03	1.41E-02	3.44E-04	25	419.60	661.15	8,996	5.8E-05	2.1E-01	1.68E+02		X
79469	2-Nitropropane	1.17E+01	9.23E-02	1.01E-05	1.70E+04	5.03E-03	1.23E-04	25	393.20	594.00	8,383	2.7E-03	2.0E-02	8.91E+01		
80626	Methylmethacrylate	6.98E+00	7.70E-02	8.60E-06	1.50E+04	1.38E-02	3.36E-04	25	373.50	567.00	8,975	0.0E+00	7.0E-01	1.00E+02		
83329	Acenaphthene	7.08E+03	4.21E-02	7.69E-06	3.57E+00	6.34E-03	1.55E-04	25	550.54	803.15	12,155	0.0E+00	2.1E-01	1.54E+02		X
86737	Fluorene	1.38E+04	3.63E-02	7.88E-06	1.98E+00	2.60E-03	6.34E-05	25	570.44	870.00	12,666	0.0E+00	1.4E-01	1.66E+02		X
87683	Hexachloro-1,3-butadiene	5.37E+04	5.61E-02	6.16E-06	3.20E+00	3.33E-01	8.13E-03	25	486.15	738.00	10,206	2.2E-05	7.0E-04	2.61E+02		X
88722	o-Nitrotoluene	3.24E+02	5.87E-02	8.67E-06	6.50E+02	5.11E-04	1.25E-05	25	495.00	720.00	12,239	0.0E+00	3.5E-02	1.37E+02		X
91203	Naphthalene	2.00E+03	5.90E-02	7.50E-06	3.10E+01	1.98E-02	4.82E-04	25	491.14	748.40	10,373	0.0E+00	3.0E-03	1.28E+02		
91576	2-Methylnaphthalene	2.81E+03	5.22E-02	7.75E-06	2.46E+01	2.12E-02	5.17E-04	25	514.26	761.00	12,600	0.0E+00	7.0E-02	1.42E+02		X
92524	Biphenyl	4.38E+03	4.04E-02	8.15E-06	7.45E+00	1.23E-02	2.99E-04	25	529.10	789.00	10,890	0.0E+00	1.8E-01	1.54E+02		X
95476	o-Xylene	3.63E+02	8.70E-02	1.00E-05	1.78E+02	2.12E-01	5.18E-03	25	417.60	630.30	8,661	0.0E+00	1.0E-01	1.06E+02		
95501	1,2-Dichlorobenzene	6.17E+02	6.90E-02	7.90E-06	1.56E+02	7.77E-02	1.90E-03	25	453.57	705.00	9,700	0.0E+00	2.0E-01	1.47E+02		
95578	2-Chlorophenol	3.88E+02	5.01E-02	9.46E-06	2.20E+04	1.60E-02	3.90E-04	25	447.53	675.00	9,572	0.0E+00	1.8E-02	1.29E+02		X
95636	1,2,4-Trimethylbenzene	1.35E+03	6.06E-02	7.92E-06	5.70E+01	2.52E-01	6.14E-03	25	442.30	649.17	9,369	0.0E+00	6.0E-03	1.20E+02		
96184	1,2,3-Trichloropropane	2.20E+01	7.10E-02	7.90E-06	1.75E+03	1.67E-02	4.08E-04	25	430.00	652.00	9,171	5.7E-04	4.9E-03	1.47E+02	X	
96333	Methyl acrylate	4.53E+00	9.76E-02	1.02E-05	6.00E+04	7.68E-03	1.87E-04	25	353.70	536.00	7,749	0.0E+00	1.1E-01	8.61E+01		X
97632	Ethylmethacrylate	2.95E+01	6.53E-02	8.37E-06	3.67E+03	3.44E-02	8.40E-04	25	390.00	571.00	10,957	0.0E+00	3.2E-01	1.14E+02		X
98066	tert-Butylbenzene	7.71E+02	5.65E-02	8.02E-06	2.95E+01	4.87E-01	1.19E-02	25	442.10	1220.00	8,980	0.0E+00	1.4E-01	1.34E+02		X
98828	Cumene	4.89E+02	6.50E-02	7.10E-06	6.13E+01	4.74E+01	1.46E-02	25	425.56	631.10	10,335	0.0E+00	4.0E-01	1.20E+02		
98862	Acetophenone	5.77E+01	6.00E-02	8.73E-06	6.13E+03	4.38E-04	1.07E-05	25	475.00	709.50	11,732	0.0E+00	3.5E-01	1.20E+02		X
98953	Nitrobenzene	6.46E+01	7.60E-02	8.60E-06	2.09E+03	9.82E-04	2.39E-05	25	483.95	719.00	10,566	0.0E+00	2.0E-03	1.23E+02		
100414	**Ethylbenzene**	3.63E+02	7.50E-02	7.80E-06	1.69E+02	3.22E-01	7.86E-03	25	409.34	617.20	8,501	**2.5E-06**	1.0E+00	1.06E+02		
100425	Styrene	7.76E+02	7.10E-02	8.00E-06	3.10E+02	1.12E-01	2.74E-03	25	418.31	636.00	8,737	0.0E+00	1.0E+00	1.04E+02		
100447	Benzylchloride	6.14E+01	7.50E-02	7.80E-06	5.25E+02	1.70E-02	4.14E-04	25	452.00	685.00	8,773	4.9E-05	0.0E+00	1.27E+02	X	
100527	Benzaldehyde	4.59E+01	7.21E-02	9.07E-06	3.30E+03	9.73E-04	2.37E-05	25	452.00	695.00	11,658	0.0E+00	3.5E-01	1.06E+02		X
103651	n-Propylbenzene	5.62E+02	6.01E-02	7.83E-06	6.00E+01	4.37E-01	1.07E-02	25	432.20	630.00	9,123	0.0E+00	1.4E-01	1.20E+02		X
104518	n-Butylbenzene	1.11E+03	5.70E-02	8.12E-06	2.00E+00	5.38E-01	1.31E-02	25	456.46	660.50	9,290	0.0E+00	1.4E-01	1.34E+02		X
106423	p-Xylene	3.89E+02	7.69E-02	8.44E-06	1.85E+02	3.13E-01	7.64E-03	25	411.52	616.20	8,525	0.0E+00	1.0E-01	1.06E+02		
106467	1,4-Dichlorobenzene	6.17E+02	6.90E-02	7.90E-06	7.90E+01	9.82E-02	2.39E-03	25	447.21	684.75	9,271	0.0E+00	8.0E-01	1.47E+02		
106934	1,2-Dibromoethane (ethylene dibror	2.50E+01	2.17E-02	1.19E-05	4.18E+03	3.04E-02	7.41E-04	25	404.60	583.00	8,310	2.2E-04	2.0E-04	1.88E+02		
106990	1,3-Butadiene	1.91E+01	2.49E-01	1.08E-05	7.35E+02	3.01E+00	7.34E-02	25	268.60	425.00	5,370	3.0E-02	2.0E-03	5.41E+01		
107028	Acrolein	2.76E+00	1.05E-01	1.22E-05	2.13E+05	4.99E-03	1.22E-04	25	325.60	506.00	6,731	0.0E+00	2.0E-05	5.61E+01		
107062	1,2-Dichloroethane	1.74E+01	1.04E-01	9.90E-06	8.52E+03	4.00E-02	9.77E-04	25	356.65	561.00	7,643	2.6E-05	0.0E+00	9.90E+01		
107131	Acrylonitrile	5.90E+00	1.22E-01	1.34E-05	7.40E+04	4.21E-03	1.03E-04	25	350.30	519.00	7,786	6.8E-05	2.0E-03	5.31E+01		
108054	Vinyl acetate	5.25E+00	8.50E-02	9.20E-06	2.00E+04	2.09E-02	5.10E-04	25	345.65	519.13	7,800	0.0E+00	2.0E-01	8.61E+01		
108101	Methylisobutylketone (4-methyl-2-pe	9.06E+00	7.50E-02	7.80E-06	1.90E+04	5.64E-03	1.38E-04	25	389.50	571.00	8,243	0.0E+00	3.0E+00	1.00E+02		
108383	m-Xylene	4.07E+02	7.00E-02	7.80E-06	1.61E+02	3.00E-01	7.32E-03	25	412.27	617.05	8,523	0.0E+00	1.0E-01	1.06E+02		
108678	1,3,5-Trimethylbenzene	1.35E+03	6.02E-02	8.67E-06	2.00E+00	2.41E-01	5.87E-03	25	437.89	637.25	9,321	0.0E+00	6.0E-03	1.20E+02		
108872	Methylcyclohexane	7.85E+01	7.35E-02	8.52E-06	1.40E+01	4.22E+00	1.03E-01	25	373.90	572.20	7,474	0.0E+00	3.0E+00	9.82E+01		
108883	**Toluene**	1.82E+02	8.70E-02	8.60E-06	5.26E+02	2.72E-01	6.62E-03	25	383.78	591.79	7,930	0.0E+00	**3.0E-01**	9.21E+01		
108907	Chlorobenzene	2.19E+02	7.30E-02	8.70E-06	4.72E+02	1.51E-01	3.69E-03	25	404.87	632.40	8,410	0.0E+00	6.0E-02	1.13E+02		
109693	1-Chlorobutane	1.72E+01	8.26E-02	1.00E-05	1.10E+03	6.93E-01	1.69E-02	25	351.60	542.00	7,263	0.0E+00	1.4E+00	9.26E+01		X
110009	Furan	1.86E+01	1.04E-01	1.22E-05	1.00E+04	2.21E-01	5.39E-03	25	304.60	490.20	6,477	0.0E+00	3.5E-03	6.81E+01		X
110543	Hexane	4.34E+01	2.00E-01	7.77E-06	1.24E+01	6.82E+01	1.66E+00	25	341.70	508.00	6,895	0.0E+00	2.0E-01	8.62E+01		
111444	Bis(2-chloroethyl)ether	1.55E+01	6.92E-02	7.53E-06	1.72E+04	7.36E-04	1.80E-05	25	451.15	659.79	10,803	3.3E-04	0.0E+00	1.43E+02		
115297	Endosulfan	2.14E+03	1.15E-02	4.55E-06	5.10E-01	4.58E-04	1.12E-05	25	674.43	942.94	14,000	0.0E+00	2.1E-02	4.07E+02		X
118741	Hexachlorobenzene	5.50E+04	5.42E-02	5.91E-06	5.00E-03	5.40E-02	1.32E-03	25	582.55	825.00	14,447	4.6E-04	2.8E-03	2.85E+02		X
120821	1,2,4-Trichlorobenzene	1.78E+03	3.00E-02	8.23E-06	4.88E+01	5.81E-02	1.42E-03	25	486.15	725.00	10,471	0.0E+00	4.0E-03	1.81E+02		
123739	Crotonaldehyde (2-butenai)	4.82E+00	9.56E-02	1.07E-05	3.69E+04	7.99E-04	1.95E-05	25	375.20	568.00	9	5.4E-04	0.0E+00	7.01E+01	X	
124481	Chlorodibromomethane	6.31E+01	1.96E-02	1.05E-05	2.60E+03	3.20E-02	7.81E-04	25	416.14	678.20	5,900	2.4E-05	7.0E-02	2.08E+02	X	X
126987	Methacrylonitrile	3.58E+01	1.12E-01	1.32E-05	2.54E+04	1.01E-02	2.46E-04	25	363.30	554.00	7,600	0.0E+00	7.0E-04	6.71E+01		
126998	2-Chloro-1,3-butadiene (chloroprene	6.73E+01	8.58E-02	1.03E-05	2.12E+03	4.91E-01	1.20E-02	25	332.40	525.00	8,075	0.0E+00	7.0E-03	8.85E+01		

Chemical Properties Lookup Table

CAS No.	Chemical	Organic carbon partition coefficient, K_{oc} (cm^3/g)	Diffusivity in air, D_a (cm^2/s)	Diffusivity in water, D_w (cm^2/s)	Pure component water solubility, S (mg/L)	Henry's law constant H' (unitless)	Henry's law constant at reference temperature, H (atm-m^3/mol)	Henry's law constant reference temperature, T_R (°C)	Normal boiling point, T_B (°K)	Critical temperature, T_C (°K)	Enthalpy of vaporization at the normal boiling point, $\Delta H_{v,b}$ (cal/mol)	Unit risk factor, URF ($\mu g/m^3)^{-1}$	Reference conc., RfC (mg/m^3)	Molecular weight, MW (g/mol)	URF extrapolated (X)	RfC extrapolated (X)
127184	**Tetrachloroethylene**	1.55E+02	7.20E-02	8.20E-06	2.00E+02	7.53E-01	1.84E-02	25	394.40	620.20	8,288	5.9E-06	**3.5E-02**	1.66E+02		
129000	Pyrene	1.05E+05	2.72E-02	7.24E-06	1.35E+00	4.50E-04	1.10E-05	25	667.95	936	14370	0.0E+00	1.1E-01	2.02E+02		X
132649	Dibenzofuran	5.15E+03	2.38E-02	6.00E-06	3.10E+00	5.15E-04	1.26E-05	25	560	824	66400	0.0E+00	1.4E-02	1.68E+02		X
135988	sec-Butylbenzene	9.66E+02	5.70E-02	8.12E-06	3.94E+00	5.68E-01	1.39E-02	25	446.5	679	88730	0.0E+00	1.4E-01	1.34E+02		X
141786	Ethylacetate	6.44E+00	7.32E-02	9.70E-06	8.03E+04	5.64E-03	1.38E-04	25	350.26	523.3	7633.66	0.0E+00	3.2E+00	8.81E+01		X
156592	cis-1,2-Dichloroethylene	3.55E+01	7.36E-02	1.13E-05	3.50E+03	1.67E-01	4.07E-03	25	333.65	544	7192	0.0E+00	3.5E-02	9.69E+01		X
156605	trans-1,2-Dichloroethylene	5.25E+01	7.07E-02	1.19E-05	6.30E+03	3.84E-01	9.36E-03	25	320.85	516.5	6717	0.0E+00	7.0E-02	9.69E+01		X
205992	Benzo(b)fluoranthene	1.23E+06	2.26E-02	5.56E-06	1.50E-03	4.54E-03	1.11E-04	25	715.9	969.27	17000	2.1E-04	0.0E+00	2.52E+02	X	
218019	Chrysene	3.98E+05	2.48E-02	6.21E-06	6.30E-03	3.87E-03	9.44E-05	25	714.15	979	16455	2.1E-06	0.0E+00	2.28E+02	X	
309002	Aldrin	2.45E+06	1.32E-02	4.86E-06	1.70E-02	6.95E-03	1.70E-04	25	603.01	839.37	15000	4.9E-03	1.1E-04	3.65E+02		X
319846	alpha-HCH (alpha-BHC)	1.23E+03	1.42E-02	7.34E-06	2.00E+00	4.34E-04	1.06E-05	25	596.55	839.36	15000	1.8E-03	0.0E+00	2.91E+02		
541731	1,3-Dichlorobenzene	1.98E+03	6.92E-02	7.86E-06	1.34E+02	1.27E-01	3.09E-03	25	446	684	9230.18	0.0E+00	1.1E-01	1.47E+02		X
542756	1,3-Dichloropropene	4.57E+01	6.26E-02	1.00E-05	2.80E+03	7.24E-01	1.77E-02	25	381.15	587.38	7900	4.0E-06	2.0E-02	1.11E+02		
630206	1,1,1,2-Tetrachloroethane	1.16E+02	7.10E-02	7.90E-06	1.10E+03	9.90E-02	2.41E-03	25	403.5	624	9768.282525	7.4E-06	1.1E-01	1.68E+02		X
1634044	MTBE	7.26E+00	1.02E-01	1.05E-05	5.10E+04	2.56E-02	6.23E-04	25	328.3	497.1	6677.66	0.0E+00	3.0E+00	8.82E+01		
7439976	Mercury (elemental)	5.20E+01	3.07E-02	6.30E-06	2.00E+01	4.40E-01	1.07E-02	25	629.88	1750	14127	0.0E+00	3.0E-04	2.01E+02		

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 12.5 ft, 1,3,5-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108678	2.80E+01			1,3,5-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.61	0.382	0.244	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 12.5 ft, 1,3,5-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.0E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 12.5 ft, Benzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	2.68E+01			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.61	0.382	0.244	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 12.5 ft, Benzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.1E-08	1.1E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 12.5 ft, Chloroform

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67663	7.81E+01			Chloroform

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.61	0.382	0.244	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 12.5 ft, Chloroform

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.1E-07	3.8E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 12.5 ft, Ethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	4.16E+01			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.61	0.382	0.244	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 12.5 ft, Ethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.7E-09	4.4E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 12.5 ft, m-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108383	1.52E+02			m-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.61	0.382	0.244	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 12.5 ft, m-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.5E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 12.5 ft, o-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	4.16E+01			o-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.61	0.382	0.244	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 12.5 ft, o-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	5.1E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 12.5 ft, p-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
106423	1.52E+02			p-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.61	0.382	0.244	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 12.5 ft, p-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.7E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 12.5 ft, Tetrachloroethylene (PCE)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	2.58E+01			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.61	0.382	0.244	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 12.5 ft, Tetrachloroethylene (PCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
6.7E-09	7.5E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 12.5 ft, Toluene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	1.51E+02			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.61	0.382	0.244	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 12.5 ft, Toluene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	6.2E-05

MESSAGE SUMMARY BELOW:

END

SGRA-1, 21.5 ft bgs

- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- Benzene
- Chloroform
- Ethylbenzene
- m-Xylene
- o-Xylene
- p-Xylene
- Tetrachloroethylene (PCE)
- Toluene

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

Reset to Defaults

SGRA-1, 21.5 ft, 1,2,4-Trimethylbenzene

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	2.41E+01			1,2,4-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	655	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.63	0.379	0.294	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 21.5 ft, 1,2,4-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.3E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 21.5 ft, 1,3,5-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108678	2.31E+01			1,3,5-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	655	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.63	0.379	0.294	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 21.5 ft, 1,3,5-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.1E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 21.5 ft, Benzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	2.71E+01			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	655	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.63	0.379	0.294	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 21.5 ft, Benzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
5.1E-09	1.4E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 21.5 ft, Chloroform

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67663	2.63E+01			Chloroform

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	655	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.63	0.379	0.294	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 21.5 ft, Chloroform

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.7E-09	1.6E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 21.5 ft, Ethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	2.34E+01			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	655	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.63	0.379	0.294	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 21.5 ft, Ethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
3.2E-10	3.0E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 21.5 ft, m-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108383	4.77E+01			m-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	655	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.63	0.379	0.294	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 21.5 ft, m-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	5.7E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 21.5 ft, o-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	2.91E+01			o-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	655	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.63	0.379	0.294	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 21.5 ft, o-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.4E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 21.5 ft, p-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
106423	4.77E+01			p-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	655	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.63	0.379	0.294	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 21.5 ft, p-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	6.3E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 21.5 ft, Tetrachloroethylene (PCE)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	3.59E+01			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	655	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.63	0.379	0.294	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 21.5 ft, Tetrachloroethylene (PCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.1E-09	1.2E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 21.5 ft, Toluene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	7.91E+01			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	655	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.63	0.379	0.294	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 21.5 ft, Toluene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.9E-06

MESSAGE SUMMARY BELOW:

END

SGRA-1, 31.5 ft bgs

- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon113)
- Benzene
- Ethylbenzene
- m-Xylene
- o-Xylene
- p-Xylene
- Tetrachloroethylene (PCE)
- Trichloroethylene (TCE)
- Toluene

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 31.5 ft, 1,2,4-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	3.83E+01			1,2,4-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	960	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.67	0.383	0.277	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 31.5 ft, 1,2,4-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	9.2E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 31.5 ft, 1,3,5-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108678	1.92E+01			1,3,5-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	960	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.67	0.383	0.277	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 31.5 ft, 1,3,5-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.6E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 31.5 ft, 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon113)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
76131	6.36E+01			1,1,2-Trichloro-1,2,2-trifluoroethane

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	960	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.67	0.383	0.277	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 31.5 ft, 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon113)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.8E-08

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 31.5 ft, Benzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	2.20E+01			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	960	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.67	0.383	0.277	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 31.5 ft, Benzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
5.6E-09	1.5E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 31.5 ft, Ethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	3.30E+01			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	960	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.67	0.383	0.277	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 31.5 ft, Ethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
6.2E-10	5.8E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 31.5 ft, m-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108383	1.22E+02			m-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	960	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.67	0.383	0.277	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 31.5 ft, m-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.0E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 31.5 ft, o-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	2.95E+01			o-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	960	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.67	0.383	0.277	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 31.5 ft, o-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	6.0E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 31.5 ft, p-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
106423	1.22E+02			p-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	960	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.67	0.383	0.277	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 31.5 ft, p-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.2E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 31.5 ft, Tetrachloroethylene (PCE)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	3.25E+02			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	960	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.67	0.383	0.277	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 31.5 ft, Tetrachloroethylene (PCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.4E-08	1.6E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 31.5 ft, Trichloroethylene (TCE)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
79016	1.50E+02			Trichloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	960	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.67	0.383	0.277	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 31.5 ft, Trichloroethylene (TCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.4E-09	4.6E-06

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-1, 31.5 ft, Toluene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	1.13E+02			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	960	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.67	0.383	0.277	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-1, 31.5 ft, Toluene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	7.6E-06

MESSAGE SUMMARY BELOW:

END

SGRA-2, 7 ft bgs

- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- Benzene
- Chloroform
- Ethylbenzene
- m-Xylene
- o-Xylene
- p-Xylene
- Tetrachloroethylene (PCE)
- Toluene

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 7 ft, 1,2,4-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	2.01E+01			1,2,4-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	213	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.62	0.381	0.276	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 7 ft, 1,2,4-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.2E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 7 ft, 1,3,5-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108678	8.30E+00			1,3,5-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	213	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.62	0.381	0.276	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 7 ft, 1,3,5-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	9.1E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 7 ft, Benzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	4.10E+00			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	213	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.62	0.381	0.276	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 7 ft, Benzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.8E-09	1.3E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 7 ft, Chloroform

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67663	1.76E+02			Chloroform

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	213	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.62	0.381	0.276	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 7 ft, Chloroform

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.9E-07	6.6E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 7 ft, Ethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	1.00E+01			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	213	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.62	0.381	0.276	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 7 ft, Ethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
8.6E-10	8.1E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 7 ft, m-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108383	3.60E+01			m-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	213	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.62	0.381	0.276	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 7 ft, m-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.7E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 7 ft, o-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	1.21E+01			o-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	213	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.62	0.381	0.276	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 7 ft, o-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.1E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 7 ft, p-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
106423	3.60E+01			p-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	213	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.62	0.381	0.276	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 7 ft, p-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.0E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 7 ft, Tetrachloroethylene (PCE)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	2.98E+01			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	213	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.62	0.381	0.276	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 7 ft, Tetrachloroethylene (PCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
5.8E-09	6.6E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 7 ft, Toluene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	2.33E+01			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	213	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.62	0.381	0.276	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 7 ft, Toluene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	7.3E-06

MESSAGE SUMMARY BELOW:

END

SGRA-2, 12.5 ft bgs

- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- Benzene
- Chloroform
- Ethylbenzene
- m-Xylene
- o-Xylene
- p-Xylene
- Tetrachloroethylene (PCE)
- Toluene

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 12.5 ft, 1,2,4-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	4.17E+01			1,2,4-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.54	0.408	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 12.5 ft, 1,2,4-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.1E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 12.5 ft, 1,3,5-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108678	1.87E+01			1,3,5-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.54	0.408	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 12.5 ft, 1,3,5-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	9.5E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 12.5 ft, Benzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	8.30E+00			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.54	0.408	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 12.5 ft, Benzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.5E-09	1.2E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 12.5 ft, Chloroform

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67663	1.17E+02			Chloroform

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.54	0.408	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 12.5 ft, Chloroform

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
6.0E-08	2.0E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 12.5 ft, Ethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	2.39E+01			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.54	0.408	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 12.5 ft, Ethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
9.6E-10	8.9E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 12.5 ft, m-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108383	9.11E+01			m-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.54	0.408	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 12.5 ft, m-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.2E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 12.5 ft, o-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	2.82E+01			o-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.54	0.408	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 12.5 ft, o-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.2E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 12.5 ft, p-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
106423	9.11E+01			p-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.54	0.408	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 12.5 ft, p-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.5E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 12.5 ft, Tetrachloroethylene (PCE)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	2.98E+01			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.54	0.408	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 12.5 ft, Tetrachloroethylene (PCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.7E-09	3.0E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 12.5 ft, Toluene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	6.78E+01			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	381	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.54	0.408	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 12.5 ft, Toluene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	9.8E-06

MESSAGE SUMMARY BELOW:

END

SGRA-2, 28.5 ft bgs

- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- Benzene
- Chloroform
- Ethylbenzene
- m-Xylene
- o-Xylene
- p-Xylene
- Tetrachloroethylene (PCE)
- Toluene

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 28.5, 1,2,4-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	1.52E+01			1,2,4-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.82	0.312	0.272	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 28.5, 1,2,4-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.2E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 28.5 ft, 1,3,5-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108678	7.40E+00			1,3,5-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.82	0.312	0.272	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 28.5 ft, 1,3,5-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.6E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 28.5 ft, Benzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	4.10E+00			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.82	0.312	0.272	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 28.5 ft, Benzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
9.0E-11	2.4E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 28.5 ft, Chloroform

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67663	5.85E+01			Chloroform

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.82	0.312	0.272	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 28.5 ft, Chloroform

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.3E-09	4.4E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 28.5 ft, Ethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	1.39E+01			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.82	0.312	0.272	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 28.5 ft, Ethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.1E-11	1.9E-08

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 28.5 ft, m-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108383	5.21E+01			m-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.82	0.312	0.272	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 28.5 ft, m-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	6.9E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 28.5 ft, o-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	1.52E+01			o-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.82	0.312	0.272	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 28.5 ft, o-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.7E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 28.5 ft, p-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
106423	5.21E+01			p-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.82	0.312	0.272	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 28.5 ft, p-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	7.5E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 28.5 ft, Tetrachloroethylene (PCE)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	3.39E+01			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.82	0.312	0.272	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 28.5 ft, Tetrachloroethylene (PCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.0E-10	1.2E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-2, 28.5 ft, Toluene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	2.41E+01			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.82	0.312	0.272	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-2, 28.5 ft, Toluene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.3E-07

MESSAGE SUMMARY BELOW:

END

SGRA-3, 11.5 ft bgs

- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- Benzene
- Chloroform
- Ethylbenzene
- m-Xylene
- o-Xylene
- p-Xylene
- Tetrachloroethylene (PCE)
- Toluene

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 11.5 ft, 1,2,4-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	1.92E+01			1,2,4-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	351	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.57	0.397	0.324	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 11.5 ft, 1,2,4-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.7E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 11.5 ft, 1,3,5-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108678	9.30E+00			1,3,5-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	351	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.57	0.397	0.324	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 11.5 ft, 1,3,5-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.8E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 11.5 ft, Benzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	1.66E+01			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	351	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.57	0.397	0.324	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 11.5 ft, Benzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
3.4E-09	9.2E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 11.5 ft, Chloroform

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67663	1.22E+02			Chloroform

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	351	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.57	0.397	0.324	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 11.5 ft, Chloroform

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.4E-08	8.1E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 11.5 ft, Ethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	3.21E+01			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	351	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.57	0.397	0.324	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 11.5 ft, Ethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.8E-10	4.4E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 11.5 ft, m-Xylene

Reset to Defaults

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
	Soil Gas Concentration Data			
108383	1.13E+02			m-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	351	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.57	0.397	0.324	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 11.5 ft, m-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.5E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 11.5 ft, o-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	2.82E+01			o-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	351	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.57	0.397	0.324	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 11.5 ft, o-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.7E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 11.5 ft, p-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
106423	1.13E+02			p-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	351	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.57	0.397	0.324	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 11.5 ft, p-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.6E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 11.5 ft, Tetrachloroethylene (PCE)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	2.37E+01			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	351	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.57	0.397	0.324	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 11.5 ft, Tetrachloroethylene (PCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
7.7E-10	8.7E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 11.5 ft, Toluene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	1.24E+02			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	351	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.57	0.397	0.324	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 11.5 ft, Toluene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	6.7E-06

MESSAGE SUMMARY BELOW:

END

SGRA-3, 18.5 ft bgs

- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- Benzene
- Chloroform
- Ethylbenzene
- m-Xylene
- o-Xylene
- p-Xylene
- Tetrachloroethylene (PCE)
- Toluene

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 18.5 ft, 1,2,4-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	1.33E+02			1,2,4-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	564	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.66	0.368	0.307	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 18.5 ft, 1,2,4-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.1E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 18.5 ft, 1,3,5-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108678	6.88E+01			1,3,5-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	564	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.66	0.368	0.307	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 18.5 ft, 1,3,5-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	5.5E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 18.5 ft, Benzene

Reset to Defaults

ENTER Chemical CAS No. (numbers only, no dashes)	Soil Gas Concentration Data: ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	1.98E+01			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	564	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.66	0.368	0.307	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 18.5 ft, Benzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.7E-09	4.5E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 18.5 ft, Chloroform

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67663	5.37E+01			Chloroform

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	564	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.66	0.368	0.307	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 18.5 ft, Chloroform

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
4.4E-09	1.5E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 18.5 ft, Ethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	5.21E+01			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	564	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.66	0.368	0.307	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 18.5 ft, Ethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
3.1E-10	2.9E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 18.5 ft, m-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108383	1.69E+02			m-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (^oC)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	564	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.66	0.368	0.307	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 18.5 ft, m-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	8.9E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 18.5 ft, o-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	8.24E+01			o-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	564	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.66	0.368	0.307	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 18.5 ft, o-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	5.6E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 18.5 ft, p-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
106423	1.69E+02			p-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	564	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.66	0.368	0.307	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 18.5 ft, p-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	9.7E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 18.5 ft, Tetrachloroethylene (PCE)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	1.29E+01			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	564	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.66	0.368	0.307	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 18.5 ft, Tetrachloroethylene (PCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.7E-10	1.9E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 18.5 ft, Toluene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	9.41E+01			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	564	22	SICL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SICL	1.66	0.368	0.307	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 18.5 ft, Toluene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.0E-06

MESSAGE SUMMARY BELOW:

END

SGRA-3, 28.5 ft bgs

- Benzene
- Chloroform
- Ethylbenzene
- m-Xylene
- o-Xylene
- p-Xylene
- Tetrachloroethylene (PCE)
- Toluene

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 28.5 ft, Benzene

Reset to Defaults

ENTER Chemical CAS No. (numbers only, no dashes)	Soil Gas Concentration Data: ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	2.84E+01			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	L		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.8	0.324	0.25	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 28.5 ft, Benzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
3.5E-09	9.3E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 28.5 ft, Chloroform

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67663	2.00E+01			Chloroform

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	L		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.8	0.324	0.25	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 28.5 ft, Chloroform

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.3E-09	7.8E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 28.5 ft, Ethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	2.82E+01			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	L		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.8	0.324	0.25	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 28.5 ft, Ethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.5E-10	2.3E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 28.5 ft, m-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108383	9.54E+01			m-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	L		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.8	0.324	0.25	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 28.5 ft, m-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	7.4E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 28.5 ft, o-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	2.56E+01			o-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	L		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.8	0.324	0.25	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 28.5 ft, o-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.5E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 28.5 ft, p-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
106423	9.54E+01			p-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	L		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.8	0.324	0.25	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 28.5 ft, p-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	8.1E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 28.5 ft, Tetrachloroethylene (PCE)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	5.08E+01			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	L		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.8	0.324	0.25	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 28.5 ft, Tetrachloroethylene (PCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.0E-09	1.1E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-3, 28.5 ft, Toluene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	1.43E+02			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	869	22	L		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.8	0.324	0.25	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-3, 28.5 ft, Toluene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.6E-06

MESSAGE SUMMARY BELOW:

END

SGRA-4, 10.5 ft bgs

- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- Trichlorofluoromethane (Freon11)
- 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon113)
- Benzene
- Chloroform
- Ethylbenzene
- m-Xylene
- o-Xylene
- p-Xylene
- Tetrachloroethylene (PCE)
- Trichloroethylene (TCE)
- Toluene

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 10.5 ft, 1,2,4-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	1.33E+01			1,2,4-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	320	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.63	0.381	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 10.5 ft, 1,2,4-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.6E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 10.5 ft, 1,3,5-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108678	6.90E+00			1,3,5-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	320	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.63	0.381	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 10.5 ft, 1,3,5-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.9E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 10.5 ft, Trichlorofluoromethane (Freon 11)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
75694	6.70E+00			Trichlorofluoromethane

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	320	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.63	0.381	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 10.5 ft, Trichlorofluoromethane (Freon 11)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.1E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 10.5 ft, 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)

Reset to Defaults

ENTER Chemical CAS No. (numbers only, no dashes)	Soil Gas Concentration Data: ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
76131	4.67E+01			1,1,2-Trichloro-1,2,2-trifluoroethane

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	320	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.63	0.381	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 10.5 ft, 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.0E-08

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 10.5 ft, Benzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	4.80E+00			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	320	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.63	0.381	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 10.5 ft, Benzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.4E-09	3.7E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 10.5 ft, Chloroform

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67663	1.27E+01			Chloroform

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	320	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.63	0.381	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 10.5 ft, Chloroform

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
3.5E-09	1.2E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 10.5 ft, Ethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	1.21E+01			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	320	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.63	0.381	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 10.5 ft, Ethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.5E-10	2.3E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 10.5 ft, m-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108383	4.25E+01			m-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	320	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.63	0.381	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 10.5 ft, m-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	7.7E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 10.5 ft, o-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	1.26E+01			o-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	320	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.63	0.381	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 10.5 ft, o-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.9E-06

MESSAGE SUMMARY BELOW:

END

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 10.5 ft, p-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
106423	4.25E+01			p-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	320	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.63	0.381	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 10.5 ft, p-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	8.5E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 10.5 ft, Tetrachloroethylene (PCE)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	1.22E+02			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	320	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.63	0.381	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 10.5 ft, Tetrachloroethylene (PCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
5.6E-09	6.4E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 10.5 ft, Trichloroethylene (TCE)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
79016	1.23E+01			Trichloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	320	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.63	0.381	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 10.5 ft, Trichloroethylene (TCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.1E-10	4.2E-07

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 10.5 ft, Toluene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	3.39E+01			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	320	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.63	0.381	0.304	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 10.5 ft, Toluene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.5E-06

MESSAGE SUMMARY BELOW:

END

SGRA-4, 18 ft bgs

- 1,2,4-Trimethylbenzene
- 1,3,5-Trimethylbenzene
- 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon113)
- Benzene
- Chloroform
- Ethylbenzene
- m-Xylene
- o-Xylene
- p-Xylene
- Tetrachloroethylene (PCE)
- Toluene

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 18 ft, 1,2,4-Trimethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95636	3.09E+01			1,2,4-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	549	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.65	0.373	0.152	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 18 ft, 1,2,4-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.5E-03

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

Reset to Defaults

SGRA-4, 18 ft, 1,3,5-Trimethylbenzene

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108678	2.01E+01			1,3,5-Trimethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	549	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.65	0.373	0.152	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 18 ft, 1,3,5-Trimethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	9.6E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 18 ft, 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
76131	1.07E+02			1,1,2-Trichloro-1,2,2-trifluoroethane

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	549	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.65	0.373	0.152	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 18 ft, 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.3E-06

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 18 ft, Benzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
71432	2.43E+01			Benzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	549	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.65	0.373	0.152	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 18 ft, Benzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.2E-07	3.3E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 18 ft, Chloroform

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
67663	3.12E+01			Chloroform

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	549	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.65	0.373	0.152	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 18 ft, Chloroform

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.4E-07	4.9E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 18 ft, Ethylbenzene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
100414	3.51E+01			Ethylbenzene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	549	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.65	0.373	0.152	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 18 ft, Ethylbenzene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.3E-08	1.2E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 18 ft, m-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108383	1.13E+02			m-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	549	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.65	0.373	0.152	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 18 ft, m-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	3.7E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 18 ft, o-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
95476	3.64E+01			o-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	549	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.65	0.373	0.152	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 18 ft, o-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.4E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 18 ft, p-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
106423	1.13E+02			p-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	549	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.65	0.373	0.152	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 18 ft, p-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	4.0E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 18 ft, Tetrachloroethylene (PCE)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	6.17E+01			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	549	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.65	0.373	0.152	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 18 ft, Tetrachloroethylene (PCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
5.2E-08	5.9E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 18 ft, Toluene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	1.39E+02			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	549	22	SIL		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
SIL	1.65	0.373	0.152	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 18 ft, Toluene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	1.8E-04

MESSAGE SUMMARY BELOW:

END

SGRA-4, 30.5 ft bgs

- 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon113)
- m-Xylene
- p-Xylene
- Tetrachloroethylene (PCE)
- Trichloroethylene (TCE)
- Toluene

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 30.5 ft, 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
76131	3.60E+02			1,1,2-Trichloro-1,2,2-trifluoroethane

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	930	22	L		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.56	0.424	0.279	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 30.5 ft, 1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	5.1E-07

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 30.5 ft, m-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108383	1.61E+02			m-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	930	22	L		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.56	0.424	0.279	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 30.5 ft, m-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	6.2E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 30.5 ft, p-Xylene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
106423	1.61E+02			p-Xylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	930	22	L		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.56	0.424	0.279	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 30.5 ft, p-Xylene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	6.8E-05

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 30.5 ft, Tetrachloroethylene (PCE)

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
127184	1.56E+02			Tetrachloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	930	22	L		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.56	0.424	0.279	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 30.5 ft, Tetrachloroethylene (PCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
1.6E-08	1.8E-04

MESSAGE SUMMARY BELOW:

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 30.5 ft, Trichloroethylene (TCE)

Reset to Defaults

ENTER Chemical CAS No. (numbers only, no dashes)	Soil Gas Concentration Data: ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
79016	6.44E+01			Trichloroethylene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	930	22	L		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.56	0.424	0.279	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 30.5 ft, Trichloroethylene (TCE)

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
2.4E-09	4.7E-06

MESSAGE SUMMARY BELOW:

MESSAGE: Risk/HQ or risk-based soil concentration is based on a route-to-route extrapolation.

END

DATA ENTRY SHEET

SG-SCREEN
Version 3.1; 02/04

SGRA-4, 30.5 ft, Toluene

Reset to Defaults

Soil Gas Concentration Data

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Soil gas conc., C_g ($\mu g/m^3$)	OR	ENTER Soil gas conc., C_g (ppmv)	Chemical
108883	1.47E+02			Toluene

MORE ↓

ENTER Depth below grade to bottom of enclosed space floor, L_F (15 or 200 cm)	ENTER Soil gas sampling depth below grade, L_s (cm)	ENTER Average soil temperature, T_S (°C)	ENTER Vadose zone SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined vadose zone soil vapor permeability, k_v (cm^2)
15	930	22	L		

MORE ↓

ENTER Vandose zone SCS soil type (Lookup Soil Parameters)	ENTER Vadose zone soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Vadose zone soil total porosity, n^V (unitless)	ENTER Vadose zone soil water-filled porosity, θ_w^V (cm^3/cm^3)	ENTER Average vapor flow rate into bldg. (Leave blank to calculate) Q_{soil} (L/m)
L	1.56	0.424	0.279	5

MORE ↓

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)
70	30	30	350

END

RESULTS SHEET

INCREMENTAL RISK CALCULATIONS:

SGRA-4, 30.5 ft, Toluene

Incremental risk from vapor intrusion to indoor air, carcinogen (unitless)	Hazard quotient from vapor intrusion to indoor air, noncarcinogen (unitless)
NA	2.3E-05

MESSAGE SUMMARY BELOW:

END