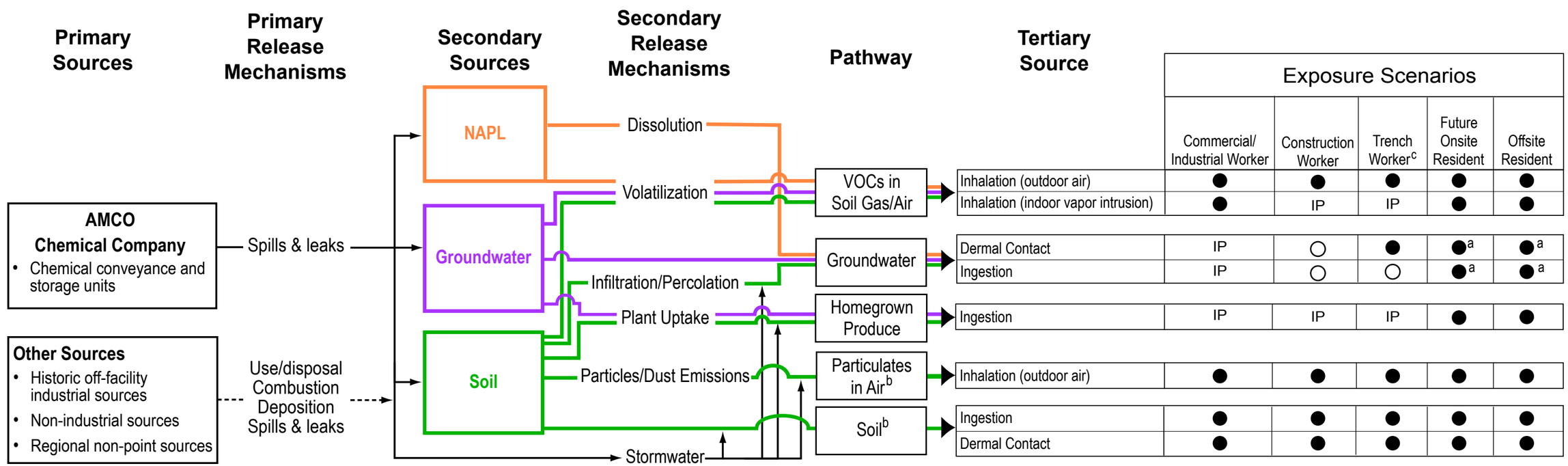


LEGEND:

● = Potentially complete pathway

○ = Potentially complete pathway but not considered a significant source of risk

IP = Incomplete pathway

NAPL = Non-aqueous Phase Liquid

NOTES:

a Groundwater is designated for Municipal and Domestic Supply Beneficial Use by default; however, there are no domestic water wells within 1 mile of the site, and there are no municipal water wells within 4 miles of the site

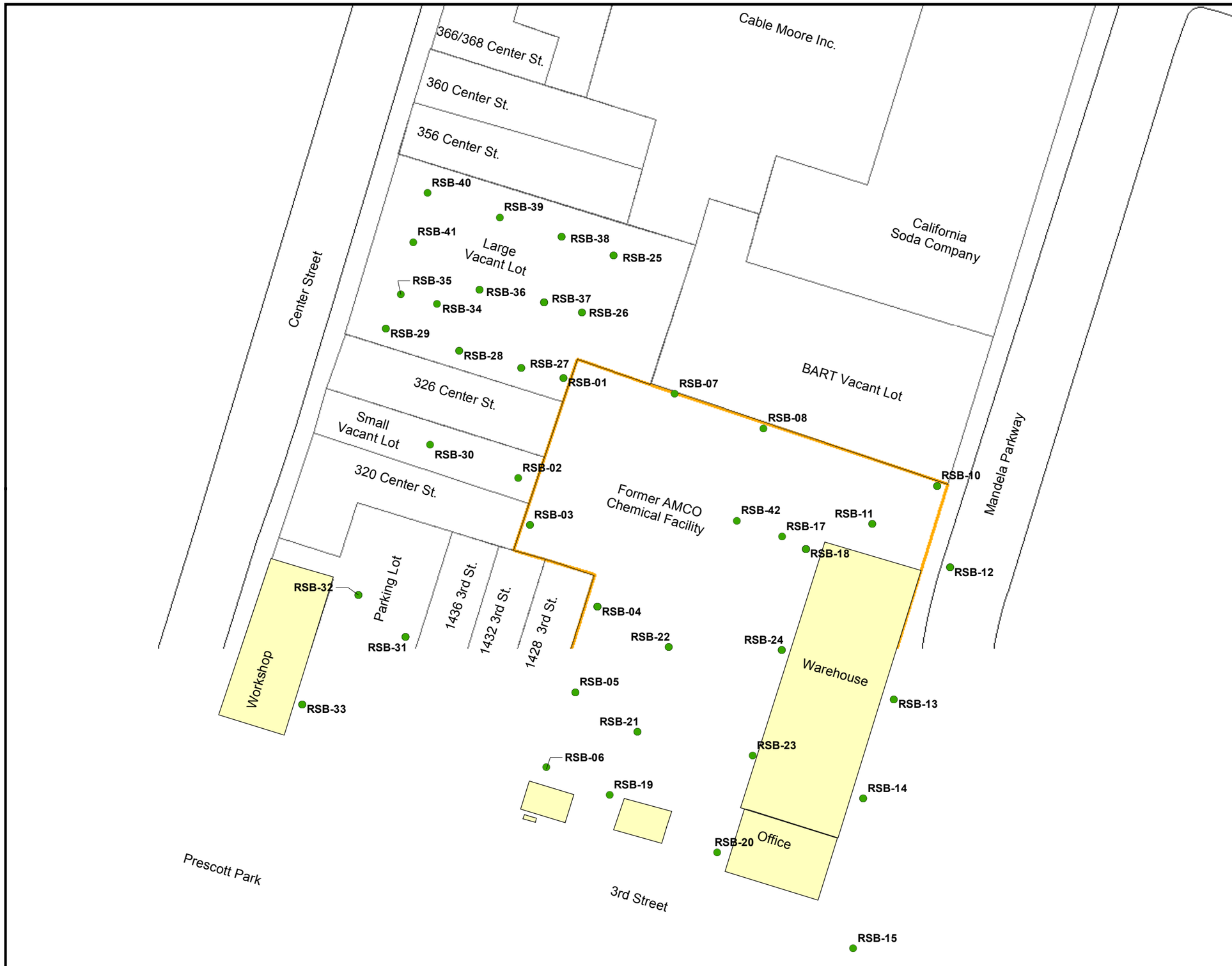
b Assuming no pavement

c Groundwater exposure for a Landscape Worker is accounted for by this pathway

FIGURE 1
CONCEPTUAL SITE MODEL DIAGRAM
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL

ES080610043239BAO_Fig 1 ConceptSiteModelDiagram.ai 8/6/10



N

50 0 50 Feet

1 inch equals 50 feet
CA State Plane (NAD83) Zone III

LEGEND

- Soil Sampling Location
- Former AMCO Chemical Facility Boundary
- Former Extraction Trench
- Buildings

FIGURE 2
SOIL SAMPLING LOCATION MAP
HUMAN HEALTH RISK ASESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL

ES080610043239BAO_Fig 2 Soil Sampling Location Map.ai 8/6/10

N

50 0 50 Feet

1 inch equals 66.7 feet
CA State Plane (NAD83) Zone III

LEGEND

- Groundwater Monitoring Wells
- Grab Groundwater Wells
- Buildings
- Former Extraction Trench
- Former AMCO Chemical Facility Boundary

Notes:
1. Data from 2005qtr2 was not used in the risk assessment because of insufficient quality.
2. Data from deep wells were not used in risk assessment calculations as the exposure pathway is incomplete.

FIGURE 3
GRAB AND MONITORING WELL SAMPLE LOCATIONS FOR SHALLOW WELLS USED IN THE RISK ASSESSMENT

HUMAN HEALTH RISK ASESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL

ES080610043239BAO_Fig 3 Grab And Monitoring Well Samp Loc Shallow Gw.ai 8/6/10

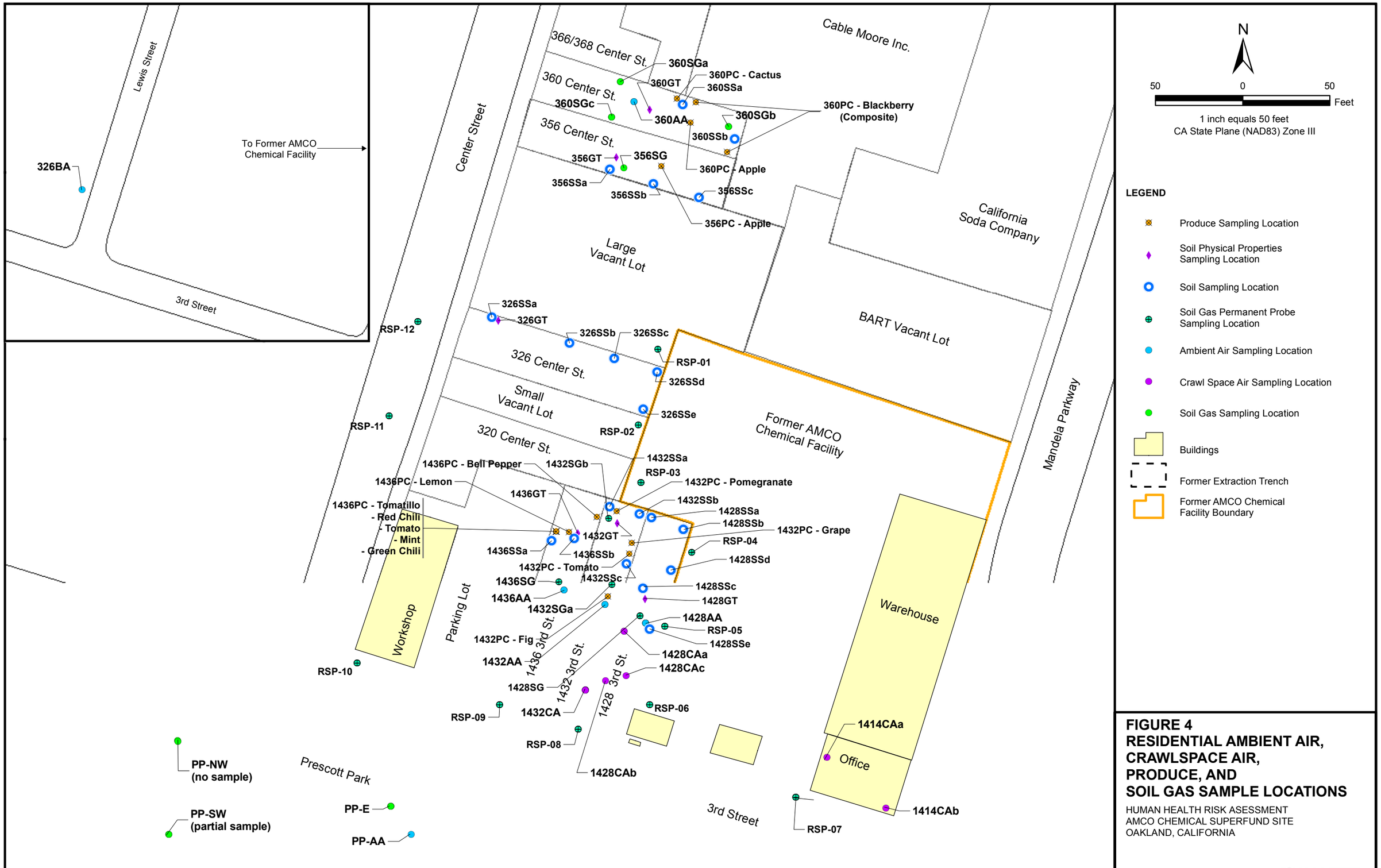
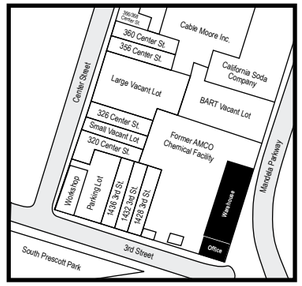


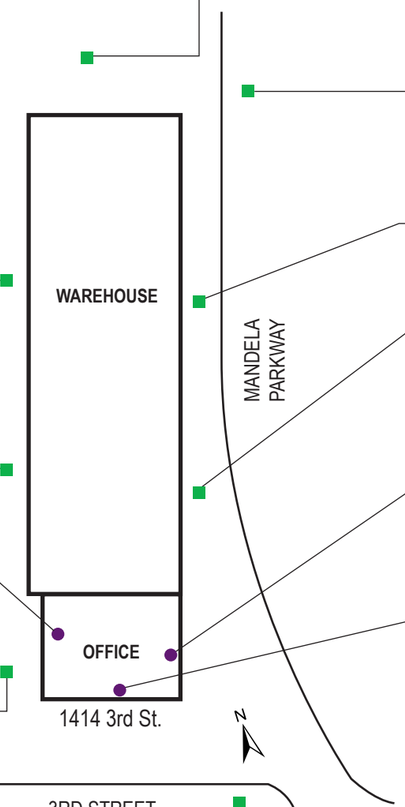
FIGURE 4
RESIDENTIAL AMBIENT AIR, CRAWLSPACE AIR, PRODUCE, AND SOIL GAS SAMPLE LOCATIONS

HUMAN HEALTH RISK ASESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL

ES080610043239BAO_Fig 4 Residential ambient air Crawlspace air Produce and Soilgas sample locations.ai 8/6/10





RSG-17	SL	SEP 2004
Concrete Depth (ft bgs)	- -	3.0
Sample Depth (ft bgs)	- -	5.6 - 6.0
1,1-Dichloroethane	15.0	**21000**
Benzene	3.10	**2600 J**
Chloromethane	14.0	**440**
Ethylbenzene	9.70	**390 J**
Tetrachloroethene	4.10	**40 J**
trans-1,2-Dichloroethene	630	**1000**
Trichloroethene	12.0	**240 J**
Vinyl chloride	1.60	**15000**

RSG-18	SL	SEP 2004
Concrete Depth (ft bgs)	- -	2.0
Sample Depth (ft bgs)	- -	4.6 - 5.0
1,1-Dichloroethane	15.0	**55000 J**
1,2-Dichloroethane	0.94	**44 J**
Benzene	3.10	**620**
Ethylbenzene	9.70	**40 J**
Trichloroethene	12.0	**150**
Vinyl chloride	1.60	**7300**

RSG-11	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.0
Sample Depth (ft bgs)	- -	2.6 - 3.0
1,1-Dichloroethane	15.0	**45 J**
Chloromethane	14.0	**470**
Vinyl chloride	1.60	**250**

INDOOR AIR CMI-IA01-E1	RSL	Jun 2009
No exceedances		

INDOOR AIR CMI-IA02-E1	Industrial RSL	Jun 2009
Tetrachloroethene	2.1	2.2

RSG-24	SL	SEP 2004
Concrete Depth (ft bgs)		0.8
Sample Depth (ft bgs)		3.5 - 3.9
1,1-Dichloroethane	15.0	**1100000**
1,1-Dichloroethene	2100	**53000**
1,2-Dichloroethane	0.94	**4200**
Benzene	3.10	**29000**
Chlorobenzene	520	**1300 J**
Ethylbenzene	9.70	**15000 J**
Tetrachloroethene	4.10	**180 J**
Toluene	52000	**440000**
trans-1,2-Dichloroethene	630	**73000**
Trichloroethene	12.0	**5700**
Vinyl chloride	1.60	**1500000**
Xylenes, total	1000	**43700 J**

RSG-12	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.25
Sample Depth (ft bgs)	- -	2.6 - 3.0
1,1-Dichloroethane	15.0	**37 J**
Vinyl chloride	1.60	**740**

RSG-23	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.75
Sample Depth (ft bgs)	- -	3.8 - 4.2
1,1,2-Trichloroethane	1.50	**1500**
1,1-Dichloroethane	15.0	**54000**
1,1-Dichloroethene	2100	**3000**
1,2,4-Trimethylbenzene	73.0	**110**
1,2-Dichloroethane	0.94	**350**
1,3,5-Trimethylbenzene	63.0	**160**
Benzene	3.10	**6500**
Chlorobenzene	520	**760**
Ethylbenzene	9.70	**5900**
Methylene chloride	52.0	**1200**
Tetrachloroethene	4.10	**190**
Toluene	52000	**600000 J**
trans-1,2-Dichloroethene	630	**11000**
Trichloroethene	12.0	**4000**
Vinyl chloride	1.60	**430000**
Xylenes, total	1000	**15300**

RSG-13	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.0
Sample Depth (ft bgs)	- -	2.6 - 3.0
1,1-Dichloroethane	15.0	**74 J**

RSG-14	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.0
Sample Depth (ft bgs)	- -	2.6 - 3.0
1,1-Dichloroethane	15.0	**300**
Chloroform	1.10	**40 J**
Trichloroethene	12.0	**1900**
Vinyl chloride	1.60	**59**

CRAWL SPACE AIR - 1414CAa	SL	NOV 2006	SEP 2007	MAY 2008	AUG 2008	SEP 2008	OCT 2008	DEC 2008
1,1-Dichloroethane	7.70	**28**	**24**	2.6	**19**	**33**	**27**	**10**
1,2-Dibromoethane	0.02	0.82 U	0.26 U	0.25 U	0.24 U	1.4 U	0.88 U	**0.11 J**
1,2-Dichloroethane	0.47	0.43 U	0.064 J	0.047 J	**1**	0.077 J	**0.66**	0.2
Carbon tetrachloride	0.82	0.47 J	0.66	0.42	0.72	**17**	0.5	0.5
Chloroform	0.53	**0.66 J**	0.37	0.15 J	**1.1**	**3**	**0.75 J**	0.53
Chloromethane	6.80	**22**	0.81	0.97	4.6	0.75 J	0.72 J	0.68
Naphthalene	0.36	**0.41 J**	**0.98 J**	4.3 U	0.6 UJ	**0.21 UJ**	15 U	**0.75 UJ**
Tetrachloroethene	2.10	**19**	**8.8**	**5.3**	**3.5**	**11**	**12**	**9.3**
Trichloroethene	6.10	**26**	**8.7**	3.7	4.9	**15**	**17**	**9.5**

CRAWL SPACE AIR - 1414CAc	SL	MAY 2008	AUG 2008	SEP 2008	OCT 2008	DEC 2008	JUN 2009
1,2-Dichloroethane	0.47	0.13 U	0.062 J	0.033 J	**1.5**	0.14	0.16 U
Chloroform	0.53	0.13 J	0.21	0.2	**0.64**	0.21	0.94 U
Tetrachloroethene	2.1	1.3	**2.9**	**3.1**	**3.2**	1.2	**2.7**

CRAWL SPACE AIR - 1414CAb	SL	NOV 2006	SEP 2007	JUN 2009
1,1-Dichloroethane	7.7	1.1	2	**24**
1,2-Dichloroethane	0.47	0.13 U	**0.85**	0.13 J
Carbon tetrachloride	0.82	0.38	0.6	**0.84**
Naphthalene	0.36	**0.53 J**	3.6 U	4.9 UJ
Tetrachloroethene	2.1	**3**	1.3	**14**
Trichloroethene	6.1	3.1	6.1	**28**
Vinyl chloride	2.8	**7.6**	0.29	0.048 U

RSG-20	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.5
Sample Depth (ft bgs)	- -	3.1 - 3.5
1,1-Dichloroethane	15.0	**370**
Benzene	3.10	**110**
Ethylbenzene	9.70	**27 J**
Trichloroethene	12.0	**88**
Vinyl chloride	1.60	**4400**

RSP-07	SL	OCT 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Concrete Depth (ft bgs)	- -	0.7	0.7	0.7	0.7	0.7	0.7
Sample Depth (ft bgs)	- -	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0
Depth to Water (ft bgs)	- -	NA[a]	4.1[c]	4.7[b]	4.7	4.7	
1,1-Dichloroethane	15	**3400**	**1100**	**1500**	**270**	**3100 J**	**2000**
1,2,4-Trimethylbenzene	73	**24000**	**290**	74 UJ	69 U	120 U	160 U
1,3,5-Trimethylbenzene	63	**15000**	**170**	74 U	69 U	120 U	160 U
1,4-Dichlorobenzene	2.2	**180**	82 U	91 U	85 U	140 U	200 U
4-Ethyltoluene	1000	**34000**	76	NA	NA	NA	NA
Benzene	3.1	92 U	44 UJ	48 U	**12 J**	75 U	100 U
Chloroform	1.1	140 U	NA	**36 J**	69 U	**160 J**	**39 J**
Ethylbenzene	9.7	**5200**	**150**	66 U	2.4 J	100 U	140 U
Methylene chloride	52	100 U	48 U	**150 J**	98 U	81 UJ	32 J
Tetrachloroethene	4.1	**7700**	**5200**	**3400**	**910**	**7100 J**	**10000**
trans-1,2-Dichloroethene	630	**1100**	490	580	100	**1400 J**	**820**
Trichloroethene	12	**13000**	**4600**	**5000**	**850**	**15000 J**	**11000**
Vinyl chloride	1.6	**85**	**40**	38 U	3.6 U	**44 J**	84 U
Xylenes, total	1000	**21900**	150	66 U	NA	NA	NA

RSG-15	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.25
Sample Depth (ft bgs)	- -	2.6 - 3.0
Benzene	3.10	**1100**
Chloromethane	14.0	**160**
Ethylbenzene	9.70	**21 J**
Trichloroethene	12.0	**49 J**
Vinyl chloride	1.60	**63**

● CRAWL SPACE AIR SAMPLING LOCATION
■ SOIL GAS SAMPLING LOCATION
⊗ PERMANENT SOIL GAS PROBE LOCATION

All results and screening levels in µg/m³
Bold - detected above screening levels
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level
Chemicals shown in blue were also detected in the background sample.

Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. No depth to water is available for September 2004. First groundwater sampling event occurred in March 2005.
4. All water levels approximate based on nearest available surveyed ground surface elevation and interpolation of water levels from nearest available wells.
5. November 2006 water levels based on September 2006 groundwater sampling event.
6. Property lines based on Alameda County parcel maps.
7. Building locations identified from orthocorrected aerial photograph.
8. RSP-07 is located in the backfill of the extraction trench.

FIGURE 5
1414 3rd STREET CRAWLSPACE AIR SAMPLING RESULTS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL

ES080610043239BAO_Fig 5_1414_sample_locs_allData_2009.ai 8/6/10

Soil Gas - 1428-SG02	SL	JUN 2009
Chloroform	1.1	**48**
Tetrachloroethene	4.1	**5**

Soil Gas - 1428SG	SL	SEP 2004	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Sample Depth (ft bgs)	- -	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5
Depth to Water (ft bgs)	- -	NA[a]	5.8[b]	5.6	5.6	5.6
1,1-Dichloroethane	15	**17**	4.9	**47**	**44**	7.4
Chloroform	1.1	**22**	**9**	**6.8**	**12**	**23**
Tetrachloroethene	4.1	**100**	**42**	**130**	**210**	**22**
Trichloroethene	12	**230**	**98**	**340**	**480**	**36**

RSP-04	SL	OCT 2004	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Concrete Depth (ft bgs)	- -	1.4	1.4	1.4	1.4	1.4
Sample Depth (ft bgs)	- -	4.0 - 4.5	4.0 - 4.5	4.0 - 4.5	4.0 - 4.5	4.0 - 4.5
Depth to Water (ft bgs)	- -	NA[a]	6.4[b]	6.5	6.5	
1,1-Dichloroethane	15	**70**	**59**	**76 J**	**66**	0.053 J
Benzene	3.1	**43**	**22 J**	**26 J**	**19**	0.34
Ethylbenzene	9.7	**12**	0.66	0.86 J	0.95	0.21
Vinyl chloride	1.6	**43**	**20**	**24 J**	**20**	0.048 U

1428 3rd Street - Downstairs Indoor Air		
Living room area along southeast wall		
1428-IA01-E1, 1428-IA02-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.36
1,4-Dichlorobenzene	0.22	0.3 J
Benzene	0.31	1.1
Carbon tetrachloride	0.16	0.41
Chloroform	0.11	2.7
Tetrachloroethene	0.41	3.6

Crawl Space Air - 1428CAa	SL	SEP 2004	MAY 2005	NOV 2006
1,2,4-Trimethylbenzene	7.3	**14**	0.077 J	0.5
1,4-Dichlorobenzene	0.22	**0.25 J**	0.19 UJ	**0.31**
Benzene	0.31	**1.1 J**	0.19 J	**0.49**
Carbon tetrachloride	0.16	**0.43**	**0.49 J**	**0.46**
Chloroform	0.11	**0.35**	**0.19**	**0.23**
Ethylbenzene	0.97	**1.9**	0.11 J	0.41
Naphthalene	0.072	NA	NA	**0.58 J**
Tetrachloroethene	0.41	0.34	0.29	**0.58**
Vinyl chloride	0.16	0.048 U	0.04 U	**1.5**

RSG-04	SL	SEP 2004
Concrete Depth (ft bgs)	- -	2.0
Sample Depth (ft bgs)	- -	3.6 - 4.0
All VOCs - No Exceedences		

Crawl Space Air - 1428CAe	SL	SEP 2007	MAY 2008	AUG 2008	SEP 2008	OCT 2008	DEC 2008	JUN 2009
1,2-Dibromoethane	0.0041	0.23 U	0.22 U	**0.034 J**	0.26 U	0.28 U	0.23 U	1.3 U
1,2-Dichloroethane	0.094	0.012 J	0.024 J	0.06 J	0.01 J	**2**	**0.13**	0.14 U
1,4-Dichlorobenzene	0.22	0.18 UJ	0.082 UJ	**0.4**	0.14 UJ	1.6 UJ	**0.54**	**0.36 J**
Benzene	0.31	0.18 J	**0.39**	0.3 J	0.28	**0.64**	**0.33**	**2.4**
Carbon tetrachloride	0.16	**0.57**	**0.42**	**0.5**	**0.4**	**0.46**	**0.49**	**0.4**
Chloroform	0.11	0.36	**1.1**	**1.7**	**0.56**	**0.9**	**0.41**	**0.38 J**
Ethylbenzene	0.97	0.69	**1.2**	0.57	0.32	0.16	0.17	**1.4**
Naphthalene	0.072	4 U	3.7 U	0.38 UJ	0.35 UJ	4.7 U	4 UJ	**3 J**
Tetrachloroethene	0.41	0.27	**0.72**	0.37	0.4	0.32	0.23	**1.7**
Trichloroethene	1.2	0.11	0.22	0.56	0.16	**3.1**	0.47	0.056 J

RSG-05	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.9
Sample Depth (ft bgs)	- -	3.6 - 4.0
Depth to Water (ft bgs)	- -	NA
1,1-Dichloroethane	15.0	**150**
Ethylbenzene	9.70	**29 J**
Tetrachloroethene	4.10	**1000**
Trichloroethene	12.0	**2500**

Ambient Air - 1428AA	SL	SEP 2004	MAY 2005	NOV 2006	SEP 2007	MAY 2008	AUG 2008	SEP 2008	OCT 2008	DEC 2008	JUN 2009
1,1,2,2-Tetrachloroethane	0.042	0.23 U	**0.15 J**	0.22 U	0.18 U	0.19 U	**0.18 J**	0.22 U	0.23 U	0.2 U	**42**
1,2,4-Trimethylbenzene	7.3	**23**	0.19	0.9	0.13	0.4	0.3 J	0.16 J	2.1	1.3	0.23 U
1,2-Dichloroethane	0.094	0.13 U	0.12 U	0.13 U	0.052 J	0.052 J	0.044 J	0.033 J	**0.27**	0.086 J	**0.4 J**
1,3,5-Trimethylbenzene	6.3	**8**	0.082 J	0.24	0.047 J	0.11 J	0.11 J	0.046 UJ	0.74	0.67	0.21
1,4-Dichlorobenzene	0.22	**3.5 J**	0.19 UJ	0.19 U	0.16 UJ	0.07 UJ	0.17 J	0.031 UJ	**0.51**	0.086 UJ	0.84 U
Benzene	0.31	**5.6 J**	**0.44**	**0.85**	**0.33**	**0.48**	**0.41 J**	**0.37**	**1.8**	**1.6**	1 U
Carbon tetrachloride	0.16	**0.47**	**0.54 J**	**0.46**	**0.7**	**0.43**	**0.58 J**	**0.45**	**0.48**	**0.54**	**0.31**
Chloroform	0.11	0.16 U	0.11 J	**0.14 J**	**0.13**	0.087 J	**0.18 J**	**0.12 J**	**0.38**	**0.16**	**0.62**
Chloromethane	1.4	**1.5**	1.2	0.99	1.3	1.4	1.4 J	1	1.2	0.87	0.83 U
Ethylbenzene	0.97	**12**	0.21	0.72	0.16	0.35	0.39 J	0.22	**1.7**	**1.3**	0.26
Methylene chloride	5.2	1.2 U	**21**	1.1 U	0.93 UJ	0.47 UJ	0.61 UJ	0.31 UJ	3.8	0.44 UJ	0.34 J
Naphthalene	0.072	NA	**0.12**	4.2 U	3.5 U	3.6 U	3.5 UJ	4.1 U	**0.63 J**	**16 J**	**0.76 J**
Tetrachloroethene	0.41	**2.2**	0.14 J	0.32	0.078 J	0.14 J	0.14 J	0.1 J	0.26	0.18 J	0.074 J

Master bedroom - center		
1428-IA03-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.14
1,4-Dichlorobenzene	0.22	0.25 J
Benzene	0.31	0.65
Carbon tetrachloride	0.16	0.52
Chloroform	0.11	1.2
Ethylbenzene	0.97	3.2
Naphthalene	0.072	0.73 J
Tetrachloroethene	0.41	58

Back bedroom along northeast wall		
1428-IA04-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.37
1,4-Dichlorobenzene	0.22	0.34 J
Benzene	0.31	0.72
Carbon tetrachloride	0.16	0.42
Chloroform	0.11	2.4
Ethylbenzene	0.97	1
Naphthalene	0.072	0.79 J
Tetrachloroethene	0.41	2.8

Kitchen on west wall, adjacent to back bedroom		
1428-IA05-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.38
Benzene	0.31	0.78
Carbon tetrachloride	0.16	0.42
Chloroform	0.11	2.7
Naphthalene	0.072	0.88 J
Tetrachloroethene	0.41	3.1

Crawl Space Air - 1428CAc	SL	MAY 2005	NOV 2006
1,4-Dichlorobenzene	0.22	**0.4 J**	**0.38**
Benzene	0.31	**0.55**	**0.51**
Carbon tetrachloride	0.16	**0.63 J**	**0.44**
Chloroform	0.11	**0.25**	**0.21**
Methylene chloride	5.2	**8.2**	2.5
Tetrachloroethene	0.41	0.28	**4.8**
Vinyl chloride	0.16	0.04 U	**10**

Crawl Space Air - 1428CAb	SL	SEP 2004
1,2,4-Trimethylbenzene	7.3	**13**
Benzene	0.31	**1.2 J**
Carbon tetrachloride	0.16	**0.45**
Chloroform	0.11	**0.47**
Ethylbenzene	0.97	**1.8**

RSG-06	SL	SEP 2004
Concrete Depth (ft bgs)	- -	1.0
Sample Depth (ft bgs)	- -	3.6 - 4.0
Depth to Water (ft bgs)	- -	NA
1,1-Dichloroethane	15.0	**530**
Benzene	3.10	**38 J**
Trichloroethene	12.0	**1300**

RSP-05	SL	OCT 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Concrete Depth (ft bgs)	- -	0.9	0.9	0.9	0.9	0.9	0.9
Sample Depth (ft bgs)	- -	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0
Depth to Water (ft bgs)	- -	NA[a]	5.5[c]	6.0[b]	6.3	6.3	
1,1-Dichloroethane	15	**130**	**25**	**100**	**75**	**76**	**32**
Benzene	3.1	17 U	10 UJ	11 UJ	**6.3 J**	15 U	1.3 J
Chloroform	1.1	27 U	**9.5 J**	**29 J**	**23 J**	**32**	**20 J**
Tetrachloroethene	4.1	**10000**	**4900**	**8400**	**7600**	**7000**	**6200**
Trichloroethene	12	**9500**	**4800**	**9500**	**7300**	**6400**	**5700**

1430 3rd Street - Outdoor Air		
Back deck, northeast corner		
1430-OA01-E1	**RSL**	**Jun-09**
Benzene	0.31	0.34
Carbon tetrachloride	0.16	0.42

Crawl Space Air - 1428CAd	SL	SEP 2007	MAY 2008	AUG 2008	SEP 2008	OCT 2008	DEC 2008	JUN 2009
1,1,2,2-Tetrachloroethane	0.042	0.2 U	0.2 U	0.076 UJ	**0.074 J**	0.22 U	0.21 U	11 U
1,2,4-Trimethylbenzene	7.3	0.59	1.4	0.1 J	0.14 J	0.14 J	0.14 J	**57**
1,2-Dichloroethane	0.094	0.02 J	0.019 J	0.05 J	0.016 J	**2.9**	**0.23**	6.5 U
1,2-Dichloropropane	0.24	0.067 U	0.067 U	0.073 U	0.078 U	**0.3**	0.1	37 U
1,3,5-Trimethylbenzene	6.3	0.092 J	0.2	0.16 U	0.024 J	0.062 J	0.043 UJ	**15 J**
1,4-Dichlorobenzene	0.22	0.25 U	0.093 UJ	**0.4**	0.17 UJ	**2**	**0.32**	48 U
Benzene	0.31	0.14 J	**0.48**	**0.35**	**0.33**	**0.73**	**0.46**	13 U
Carbon tetrachloride	0.16	**0.62**	**0.41**	**0.5**	**0.42**	**0.46**	**0.47**	10 U
Chloroform	0.11	**1.4**	**6.6**	**2.5**	**1.1**	**0.99**	**0.48**	39 U
Ethylbenzene	0.97	0.32	**1.5**	0.7	0.38	0.29	0.49	**4 J**
Naphthalene	0.072	3.8 U	3.8 U	0.11 UJ	4.4 U	4.1 U	**0.64 J**	210 U
Tetrachloroethene	0.41	**0.48**	**0.82**	0.25	0.26	0.31	**0.57**	**1.4 J**
Trichloroethene	1.2	0.073	0.23	0.69	0.13	**4.2**	0.67	**2.9 J**

RSP-06	SL	OCT 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Concrete Depth (ft bgs)	- -	1.0	1.0	1.0	1.0	1.0	1.0
Sample Depth (ft bgs)	- -	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0
Depth to Water (ft bgs)	- -	NA[a]	5.4[c]	5.9[b]	6.2	6.2	
1,1-Dichloroethane	15	**56**	**34**	**110**	**78 J**	**58**	**63**
1,2-Dibromoethane	0.041	10 U	**0.043 J**	21 U	10 UJ	11 U	9 U
Chloroform	1.1	**40**	**15**	**17**	**240 J**	**96**	**66**
Tetrachloroethene	4.1	**36**	**18**	**30**	**36 J**	**24**	**23**
Trichloroethene	12	**320**	**120**	**220**	**310 J**	**170**	**160**

1430 3rd Street - Upstairs Indoor Air		
Center living room area		
1430-IA01-E1	**RSL**	**Jun-09**
Benzene	0.31	0.62
Carbon tetrachloride	0.16	0.45
Chloroform	0.11	1.5

Master bedroom, south side of residence		
1430-IA02-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.43
1,4-Dichlorobenzene	0.22	0.32 J
Benzene	0.31	0.99
Carbon tetrachloride	0.16	0.38
Chloroform	0.11	0.88
Naphthalene	0.072	1.4 J
Tetrachloroethene	0.41	0.64

RSP-08	SL	OCT 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Concrete Depth (ft bgs)	- -	0.3	0.3	0.3	0.3	0.3	0.3
Sample Depth (ft bgs)	- -	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0
Depth to Water (ft bgs)	- -	NA[a]	4.2[c]	4.8[b]	5.0	4.8	
Chloroform	1.1	**12**	**6.1**	**8.8**	**8**	**56**	**34**
Naphthalene	0.72	NA	3.8 U	**0.86 J**	**22**	3.5 U	4.7 UJ

Middle bedroom, west side of residence		
1430-IA03-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.11 J
Benzene	0.31	0.61
Carbon tetrachloride	0.16	0.56
Chloroform	0.11	1
Naphthalene	0.072	0.73 J
Tetrachloroethene	0.41	0.6

Back bedroom, west side of residence		
1430-IA04-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.1 J
Benzene	0.31	1.2
Carbon tetrachloride	0.16	0.41
Chloroform	0.11	2.9
Naphthalene	0.072	1.1 J

1428 3rd St.

3RD STREET

N

All results and screening levels in µg/m^3
Bold - detected above screening levels
[a] - Well construction not completed by October 2004; consequently, no water level information available
[b] - Based on nearest available water on March 2006
[c] - Based on nearest available water on November 2006
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level
Chemicals shown in blue were also detected in the background sample.

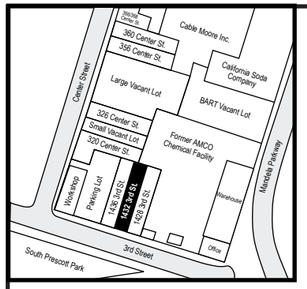
Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. No depth to water is available for September 2004. First groundwater sampling event occurred in March 2005.
4. All water levels approximate based on nearest available surveyed ground surface elevation and interpolation of water levels from nearest available wells.
5. Due to wet soil conditions, soil gas samples could not be collected at most location during the May 2005 sampling event.
6. November 2006 water levels based on September 2006 groundwater sampling event.
7. Property lines based on Alameda County parcel maps
8. Building locations identified from orthocorrected aerial photograph.

- AMBIENT AIR SAMPLING LOCATION
- CRAWL SPACE AIR SAMPLING LOCATION
- SOIL GAS SAMPLING LOCATION
- PERMANENT SOIL GAS PROBE LOCATION

FIGURE 6
1428 3rd STREET
SOIL GAS/CRAWLSPACE/AMBIENT/INDOOR AIR SAMPLING LOCATIONS AND RESULTS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL

ES080610043239BAO_Fig 6 1428_crawlSpace_allData_2009.ai 8/6/10



RSP-03	SL	OCT 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Concrete Depth (ft bgs)	- -	0.5	0.5	0.5	0.5	0.5	0.5
Sample Depth (ft bgs)	- -	3.0 - 3.5	3.0 - 3.5	3.0 - 3.5	3.0 - 3.5	3.0 - 3.5	3.0 - 3.5
Depth to Water (ft bgs)	- -	NA[a]	5.6[c]	6.4[b]	6.6	6.5	
Chloroform	1.1	**34**	**2.2 J**	**5.2**	**3.9 J**	**3.4**	**3**

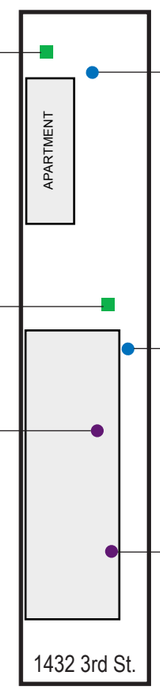
RSG-03A	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.0
Sample Depth (ft bgs)	- -	2.6 - 3.0
Depth to Water (ft bgs)	- -	NA
Ethylbenzene	9.70	**24 J**
Trichloroethene	12.0	**79**

Soil Gas - 1432SGb	SL	SEP 2004	NOV 2006	SEP 2007	OCT 2008
Sample Depth (ft bgs)	- -	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5
Depth to Water (ft bgs)	- -	NA	5.3	5.6	5.7
Chloroform	1.10	**6.3**	**1.6**	**5.9**	0.85 J
Tetrachloroethene	4.10	4.6 U	**11**	2.4	0.81

Soil Gas - 1432SGa	SL	SEP 2004	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Sample Depth (ft bgs)	- -	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5
Depth to Water (ft bgs)	- -	NA	5.5	5.7	5.8	
Chloroform	1.10	**6.3**	**1.4**	0.26 J	**12**	**280**
Naphthalene	0.72	NA	3.4 U	**1.6 J**	4.1 U	4.3 U
Tetrachloroethene	4.10	4.6 U	2.9	0.22	4	**5.1**

Crawl Space Air - 1432-CA02	SL	JUN 2009
1,4-Dichlorobenzene	0.22	**0.29 J**
Benzene	0.31	**0.35**
Carbon tetrachloride	0.16	**0.43**

RSP-08	SL	OCT 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Concrete Depth (ft bgs)	- -	0.3	0.3	0.3	0.3	0.3	0.3
Sample Depth (ft bgs)	- -	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0
Depth to Water (ft bgs)	- -	NA[a]	4.2[c]	4.8[b]	5.0	4.8	
Chloroform	1.1	**12**	**6.1**	**8.8**	**8**	**56**	**34**
Naphthalene	0.72	NA	3.8 U	**0.86 J**	**22**	3.5 U	4.7 UJ



3RD STREET

N

Ambient Air - 1432-OA02-E1	RSL	Jun-09
Carbon tetrachloride	0.16	0.42

Ambient Air - 1432AA	SL	SEP 2004	MAY 2005	NOV 2006	SEP 2007	MAY 2008	AUG 2008	SEP 2008	OCT 2008	DEC 2008
1,4-Dichlorobenzene	0.22	0.19 UJ	**0.25 J**	0.22 U	0.17 UJ	0.042 UJ	0.13 UJ	0.048 UJ	0.23 UJ	0.057 UJ
Benzene	0.31	**0.74 J**	**0.55**	**0.81**	0.24	0.47	0.25	**0.37**	**1.6**	**0.84**
Carbon tetrachloride	0.16	**0.53**	**0.6**	**0.45**	**0.56**	**0.43**	**0.55**	**0.46**	**0.45**	**0.52**
Chloroform	0.11	**0.3**	**0.18**	**0.15 J**	0.11 J	0.088 J	**0.12 J**	**0.12 J**	**0.36**	**0.18**
Ethylbenzene	0.97	0.4	0.24	0.6	0.11 J	0.25	0.13	0.19	**1.5**	0.48
Naphthalene	0.072	NA	**0.27**	**0.46 J**	3.8 U	3.9 U	4 U	3.7 U	**0.74 J**	**0.71 J**

Crawl Space Air - 1432CA	SL	SEP 2004	MAY 2005	NOV 2006	SEP 2007	MAY 2008	AUG 2008	SEP 2008	OCT 2008	DEC 2008	JUN 2009
1,2,4-Trimethylbenzene	7.30	**31**	0.066 J	0.092 J	0.5	0.95	0.41 J	0.2 J	1.4	0.22	0.8 J
1,2-Dichloroethane	0.094	0.13 U	0.044 J	0.14 U	0.056 J	0.047 J	0.038 J	0.03 J	**0.91**	**0.13**	0.06 J
1,3,5-Trimethylbenzene	6.30	**11**	0.047 J	0.16 U	0.1 J	0.17	0.12 J	0.064 J	0.54	0.078 J	0.22 J
1,4-Dichlorobenzene	0.22	**4.8**	**0.32 J**	0.2 U	0.18 UJ	0.073 UJ	0.14 UJ	0.13 UJ	1 .4	0.17 UJ	1.1 U
Benzene	0.31	**16 J**	0.23 J	0.19 J	0.25	**0.69**	**0.32**	**0.36**	**1.5**	**1.9**	**0.52**
Carbon tetrachloride	0.16	**0.54**	**0.58**	**0.48**	**0.55**	**0.43**	**0.56**	**0.45**	**0.48**	**0.54**	**0.47**
Chloroform	0.11	**0.44**	**0.19**	**0.33**	**0.27**	**0.35**	**0.21**	**0.18**	**0.65**	**0.25**	0.91 U
Ethylbenzene	0.97	**20**	0.046 J	0.083 J	0.29	0.94	0.47	0.29	**1.6**	0.42	0.28
Naphthalene	0.072	NA	NA	4.4 U	3.9 U	0.42 UJ	0.5 UJ	3.8 U	**0.92 J**	**0.71 J**	4.9 U
Tetrachloroethene	0.41	**3.2**	0.17 J	0.37	0.2 UJ	**0.43**	0.25	0.15 J	0.27	0.33	0.06 J
Trichloroethene	1.20	0.36	0.036 UJ	0.14	0.033	0.058	0.22	0.069	**1.5**	0.25	0.033 J
Vinyl chloride	0.16	0.13	0.064	**2.8**	0.038 U	0.032 J	0.038 U	0.037 U	0.042 U	0.041 U	0.074

1432 3rd Street - Downstairs Indoor Air		
First floor, living room area		
1432-IA01-E1, 1432-IA02-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.12 J
1,4-Dichlorobenzene	0.22	2.8
Benzene	0.31	0.32
Carbon tetrachloride	0.16	0.52
Chloroform	0.11	2.8
Naphthalene	0.072	110

First floor, backyard house, living area		
1432-IA03-E1	**RSL**	**Jun-09**
Carbon tetrachloride	0.16	0.45
Chloroform	0.11	0.29 J
Naphthalene	0.072	0.79 J

1434 3rd Street - Upstairs Indoor Air		
2nd floor, living room area - center residence		
1434-IA01-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.11 J
Carbon tetrachloride	0.16	0.49
Chloroform	0.11	0.21 J
Naphthalene	0.072	1.6 J

- AMBIENT AIR SAMPLING LOCATION
- CRAWL SPACE AIR SAMPLING LOCATION
- SOIL GAS SAMPLING LOCATION
- PERMANENT SOIL GAS PROBE LOCATION

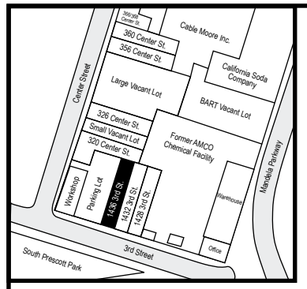
All results and screening levels in µg/m³
Bold - detected above screening levels
[a] - Well construction not completed by October 2004; consequently, no water level information available
[b] - Based on nearest available water on March 2006
[c] - Based on nearest available water on November 2006
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level
Chemicals shown in blue were also detected in the background sample.

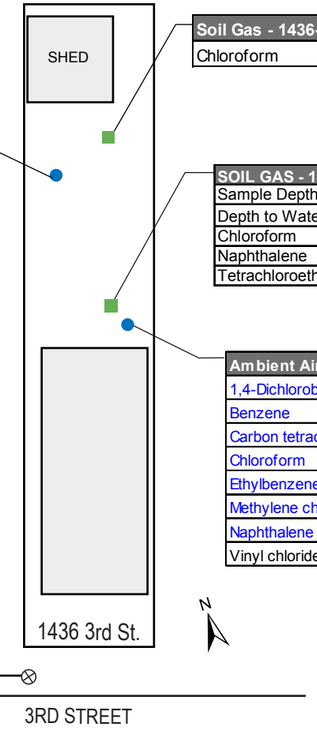
Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. No depth to water is available for September 2004. First groundwater sampling event occurred in March 2005.
4. All water levels approximate based on nearest available surveyed ground surface elevation and interpolation of water levels from nearest available wells.
5. Due to wet soil conditions, soil gas samples could not be collected at most location during the May 2005 sampling event.
6. November 2006 water levels based on September 2006 groundwater sampling event.
7. Property lines based on Alameda County parcel maps
8. Building locations identified from orthocorrected aerial photograph.

FIGURE 7
1432 3rd STREET
SOIL GAS/CRAWLSPACE/AMBIENT INDOOR AIR SAMPLING LOCATIONS AND RESULTS

HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL





Outdoor Air - 1436-OA01	SL	JUN 2009
Benzene	0.31	**0.66**
Carbon tetrachloride	0.16	**0.46 J**

Soil Gas - 1436-SG01	SL	JUN 2009
Chloroform	1.1	**7.6**

SOIL GAS - 1436SG	SL	SEP 2004	NOV 2006	SEP 2007	OCT 2008
Sample Depth (ft bgs)	- -	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5
Depth to Water (ft bgs)	- -	NA	5.7	5.7	5.8
Chloroform	1.10	3.3 U	**1.6**	**2.5**	**2.9**
Naphthalene	0.72	NA	4.4 U	**1.3 J**	4.4 U
Tetrachloroethene	4.10	**5.2**	1.4	0.4	0.88

RSG-31	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.5
Sample Depth (ft bgs)	- -	3.4 - 3.8
Depth to Water (ft bgs)	- -	NA
All VOCs - No Exceedences		

Ambient Air - 1436AA	SL	SEP 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008
1,4-Dichlorobenzene	0.22	0.19 U	0.14 J	**0.23**	0.19 U	0.27 UJ
Benzene	0.31	**0.79 J**	**0.48**	**1.2**	0.24 J	**1.8**
Carbon tetrachloride	0.16	**0.48**	**0.63**	**0.48**	**0.55**	**0.49**
Chloroform	0.11	**0.16**	0.11 J	**0.14**	0.09 J	**0.39**
Ethylbenzene	0.97	0.57	0.22	**1.7**	0.13 J	**2.2**
Methylene chloride	5.2	1.1 U	**11**	4.5 J	1.1 UJ	3.8
Naphthalene	0.072	NA	0.069	3.6 U	4.1 U	**0.62 J**
Vinyl chloride	0.16	0.04 U	0.04 U	**0.7 J**	0.04 U	0.039 U

RSP-09	SL	OCT 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Concrete Depth (ft bgs)	- -	0.3	0.3	0.3	0.3	0.3	0.3
Sample Depth (ft bgs)	- -	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0
Depth to Water (ft bgs)	- -	NA[a]	4.0[c]	4.9[b]	4.9	4.9	
Naphthalene	0.72	NA	3.8 U	3.6 UJ	3.6 UJ	4.2 U	**2.6 J**
Tetrachloroethene	4.1	**15**	**9.1**	**11**	**13 J**	**11**	**11**

1436 3rd Street - Downstairs Indoor Air

Master bedroom - along southeast wall		
1436-IA01	RSL	JUN 2009
1,2-Dichloroethane	0.094	1.1
1,4-Dichlorobenzene	0.22	0.67 J
1,4-Dioxane (p-dioxane)	0.32	0.36 J
Benzene	0.31	0.5
Carbon tetrachloride	0.16	0.45
Chloroform	0.11	1.6
Ethylbenzene	0.97	1
Naphthalene	0.072	1 J
Tetrachloroethene	0.41	0.95

Duplicate of 1436-IA01		
1436-IA02	RSL	JUN 2009
1,2-Dichloroethane	0.094	0.35
1,4-Dichlorobenzene	0.22	0.54 J
Benzene	0.31	0.54
Carbon tetrachloride	0.16	0.5
Chloroform	0.11	1.7

Living room/kitchen area		
1436-IA03	RSL	JUN 2009
1,2-Dichloroethane	0.094	0.38
1,4-Dichlorobenzene	0.22	0.75 J
1,4-Dioxane (p-dioxane)	0.32	0.47 J
Benzene	0.31	0.49
Carbon tetrachloride	0.16	0.5
Chloroform	0.11	1.7
Naphthalene	0.072	1.2 J

Back bedroom southeast wall		
1436-IA04	RSL	JUN 2009
1,2-Dichloroethane	0.094	0.34
1,4-Dichlorobenzene	0.22	0.58 J
Benzene	0.31	0.47
Carbon tetrachloride	0.16	0.48
Chloroform	0.11	1.8
Naphthalene	0.072	0.76 J
Tetrachloroethene	0.41	0.48

1436 3rd Street - Backhouse Unit Indoor Air

Main bedroom - north wall		
1436-IA05	RSL	JUN 2009
1,4-Dichlorobenzene	0.22	2.2
Benzene	0.31	0.84
Carbon tetrachloride	0.16	0.45
Chloroform	0.11	3
Naphthalene	0.072	0.63 J

1438 3rd Street - Upstairs Indoor Air

Back bedroom, north side of residence		
1438-IA01	RSL	JUN 2009
1,2-Dichloroethane	0.094	0.15
Benzene	0.31	0.36
Carbon tetrachloride	0.16	0.37

Middle bedroom - west side of residence		
1438-IA02	RSL	JUN 2009
1,1,2,2-Tetrachloroethane	0.042	0.18 J
1,2-Dichloroethane	0.094	0.2
Benzene	0.31	0.4
Carbon tetrachloride	0.16	0.41
Chloroform	0.11	0.48 J

Center of master bedroom		
1438-IA03	RSL	JUN 2009
1,2-Dichloroethane	0.094	0.25
Benzene	0.31	0.48
Carbon tetrachloride	0.16	0.37
Chloroform	0.11	0.43 J

Back bedroom along the northeast wall		
1438-IA04	RSL	JUN 2009
1,2-Dichloroethane	0.094	0.23
Benzene	0.31	0.4
Carbon tetrachloride	0.16	0.39
Chloroform	0.11	0.41 J

● AMBIENT AIR SAMPLING LOCATION
■ SOIL GAS SAMPLING LOCATION
⊕ PERMANENT SOIL GAS PROBE LOCATION

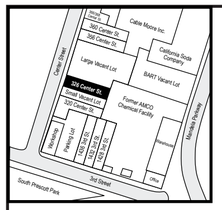
All results and screening levels in µg/m³
Bold - detected above screening levels
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level
Chemicals shown in blue were also detected in the background sample.

Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. No depth to water is available for September 2004. First groundwater sampling event occurred in March 2005.
4. All water levels approximate based on nearest available surveyed ground surface elevation and interpolation of water levels from nearest available wells.
5. Due to wet soil conditions, soil gas samples could not be collected at most location during the May 2005 sampling event.
6. November 2006 water levels based on September 2006 groundwater sampling event.
7. Property lines based on Alameda County parcel maps
8. Building locations identified from orthocorrected aerial photograph.

FIGURE 8
1436 3rd STREET
SOIL GAS/AMBIENT/INDOOR AIR SAMPLING LOCATIONS AND RESULTS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL

ES080610043239BAO_Fig 8 1436_sample_locs_allData_2009.ai 8/6/10



SOIL GAS - 326SG	SL	SEP 2004	MAY 2005	SEP 2007	OCT 2008
Sample Depth (ft bgs)	- -	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5
Depth to Water (ft bgs)	- -	NA	3.5	5.7	5.5
Chloroform	1.10	**32**	**1.8 J**	**2.2**	**4.8**
Naphthalene	0.72	NA	5 U	**0.9 J**	4.1 U
Tetrachloroethene	4.10	**680**	**46**	**12**	**66**
Trichloroethene	12.0	**52**	0.15 U	0.039 J	0.38

RSG-29	SL	SEP 2004
Concrete Depth (ft bgs)	- -	1.0
Sample Depth (ft bgs)	- -	3.6 - 4.0
Depth to Water (ft bgs)	- -	NA
Benzene	3.10	150
Bromomethane	52.0	140 J
Ethylbenzene	9.70	26 J
Vinyl chloride	1.60	110

RSG-28	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.8
Sample Depth (ft bgs)	- -	3.4 - 3.8
Depth to Water (ft bgs)	- -	NA
1,1-Dichloroethane	15.0	**110**

RSG-27	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.8
Sample Depth (ft bgs)	- -	3.4 - 3.8
Depth to Water (ft bgs)	- -	NA
1,1-Dichloroethane	15.0	**9600**
Benzene	3.10	**32 J**
Tetrachloroethene	4.10	**190**
Trichloroethene	12.0	**410**
Vinyl chloride	1.60	**310**

RSP-01	SL	OCT 2004	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Concrete Depth (ft bgs)	- -	0.9	0.9	0.9	0.9	0.9
Sample Depth (ft bgs)	- -	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0	3.5 - 4.0
Depth to Water (ft bgs)	- -	NA[a]	5.9[b]	6.2	6.1	
1,1-Dichloroethane	15	280 U	**200**	**230**	**120**	**190**
Benzene	3.1	**490**	**210**	**320**	**36 J**	**41 J**
Chloroform	1.1	340 U	190 U	100 U	77 U	**28 J**
Tetrachloroethene	4.1	**11000**	**12000**	**15000**	**8200**	**16000**
trans-1,2-Dichloroethene	630	**9600**	**6800**	**8700**	**2500**	**4900**
Trichloroethene	12	**23000**	**17000**	**21000**	**9600**	**17000**
Vinyl chloride	1.6	**3300**	**2800**	**5100**	**160**	**640**

RSG-01	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.8
Sample Depth (ft bgs)	- -	3.6 - 4.0
Depth to Water (ft bgs)	- -	NA
1,1-Dichloroethane	15.0	**53 J**
Benzene	3.10	**150**
Tetrachloroethene	4.10	**80 J**
trans-1,2-Dichloroethene	630	**3300**
Trichloroethene	12.0	**160**
Vinyl chloride	1.60	**13000**

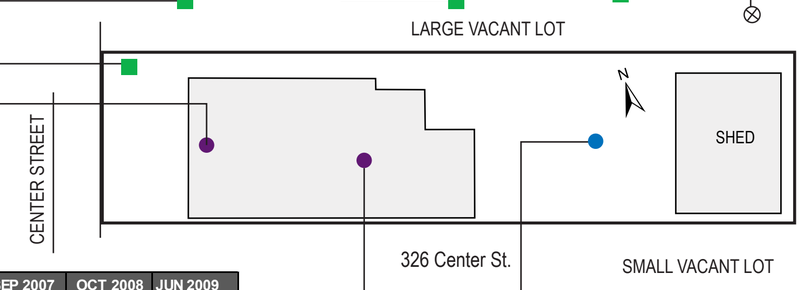
326 Center Street - Upstairs Indoor Air		
Center living room		
326-IA01-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.14 J
1,4-Dichlorobenzene	0.22	0.26 J
Benzene	0.31	0.34
Carbon tetrachloride	0.16	0.52 J
Chloroform	0.11	0.97

Front bedroom, south side of residence		
326-IA02-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.16 J
Benzene	0.31	0.42 J
Carbon tetrachloride	0.16	0.43 J
Chloroform	0.11	0.8 J

Front bedroom, north side of residence		
326-IA03-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.14
1,4-Dichlorobenzene	0.22	0.57 J
Benzene	0.31	0.37
Carbon tetrachloride	0.16	0.57 J
Chloroform	0.11	1

Dining room, adjacent to kitchen		
326-IA04-E1	**RSL**	**Jun-09**
1,1,2,2-Tetrachloroethane	0.042	0.058 J
1,2-Dichloroethane	0.094	0.12 J
Benzene	0.31	0.35
Carbon tetrachloride	0.16	0.51 J
Chloroform	0.11	1.3

Crawl Space Air - 326-CA01	SL	JUN 2009
1,4-Dichlorobenzene	0.22	**0.27 J**
Benzene	0.31	**0.34**
Carbon tetrachloride	0.16	**0.51 J**



RSP-12	SL	OCT 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Concrete Depth (ft bgs)	- -	0.4	0.4	0.4	0.4	0.4	0.4
Sample Depth (ft bgs)	- -	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0
Depth to Water (ft bgs)	- -	NA[a]	3.4[c]	4.3[b]	4.5	4.4	
Tetrachloroethene	4.1	**110**	**130**	**96**	**96**	**78**	**130**

RSG-02	SL	SEP 2004
Concrete Depth (ft bgs)	- -	1.0
Sample Depth (ft bgs)	- -	3.6 - 4.0
Depth to Water (ft bgs)	- -	NA
Ethylbenzene	9.70	**22 J**

CRAWL SPACE AIR - 326CA	SL	SEP 2004	MAY 2005	SEP 2007	MAY 2008	AUG 2008	SEP 2008	OCT 2008	DEC 2008
1,1,2,2-Tetrachloroethane	0.042	0.23 U	0.21 UJ	0.18 U	0.2 U	**0.58**	0.2 U	0.22 U	0.23 U
1,2-Dichloroethane	0.094	0.13 U	0.049 J	**0.12**	0.05 J	0.059 J	0.03 J	**1.9**	**0.34**
1,4-Dichlorobenzene	0.22	**6**	0.088 J	0.16 UJ	0.082 UJ	**0.32**	0.19 UJ	**1.3**	**0.86**
Benzene	0.31	**0.65 J**	**0.51**	0.28	**0.83**	**0.43**	**0.62**	**1.7**	**1**
Carbon tetrachloride	0.16	**0.48**	**0.55**	**0.55**	**0.42**	**0.52**	**0.44**	**0.45**	**0.49**
Chloroform	0.11	0.16 U	0.099 J	0.091 J	0.094 J	0.11 J	**0.15**	**0.53**	**0.35**
Ethylbenzene	0.97	0.31	0.11 J	0.72	**1.5**	0.88	0.53	**1.3**	0.81
Hexachlorobutadiene	0.11	1.8 UJ	**0.68 J**	1.4 U	1.6 U	1.8 U	1.6 U	1.7 UJ	1.8 UJ
Methylene chloride	5.20	1.2 U	1.1 UJ	0.93 UJ	0.87 UJ	0.79 UJ	1 U	**5.4**	0.72 J
Tetrachloroethene	0.41	0.23 U	0.2 J	0.19	**0.73**	**0.55**	0.28	0.25	**0.56**
Trichloroethene	1.20	0.027 U	0.042 UJ	0.54	0.07	0.38	0.17	**2.5**	0.79

RSP-02	SL	OCT 2004	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Concrete Depth (ft bgs)	- -	1.0	1.0	1.0	1.0	1.0
Sample Depth (ft bgs)	- -	4.0 - 4.5	4.0 - 4.5	4.0 - 4.5	4.0 - 4.5	4.0 - 4.5
Depth to Water (ft bgs)	- -	NA[a]	5.8[b]	6.0	5.9	
Chloroform	1.1	3.3 U	**3.2**	**1.6 J**	**1.5**	**1.6**
Tetrachloroethene	4.1	**210**	**180**	**140 J**	**160**	**150**

AMBIENT AIR - 326AA	SL	SEP 2004	MAY 2005	SEP 2007	MAY 2008	AUG 2008	SEP 2008	OCT 2008	DEC 2008
1,4-Dichlorobenzene	0.22	**0.85**	0.077 J	0.17 UJ	0.033 UJ	0.031 UJ	0.04 UJ	0.046 UJ	0.053 UJ
Benzene	0.31	**0.66 J**	**0.42**	0.25	**0.45**	0.25 J	**0.4**	**1.8**	**0.61**
Carbon tetrachloride	0.16	**0.46**	**0.53**	**0.56**	**0.43**	**0.45**	**0.45**	**0.48**	**0.52**
Chloroform	0.11	0.17 U	0.1 J	0.08 J	0.07 J	0.1 J	**0.12 J**	**0.33**	0.095 J
Ethylbenzene	0.97	0.36	0.22	0.12	0.23	0.11 J	0.23	**1.2**	**1.5**

RSG-30	SL	SEP 2004
Concrete Depth (ft bgs)	- -	1.0
Sample Depth (ft bgs)	- -	3.6 - 4.0
Depth to Water (ft bgs)	- -	NA
Ethylbenzene	9.70	**22 J**

- AMBIENT AIR SAMPLING LOCATION
- CRAWL SPACE AIR SAMPLING LOCATION
- SOIL GAS SAMPLING LOCATION
- PERMANENT SOIL GAS PROBE LOCATION

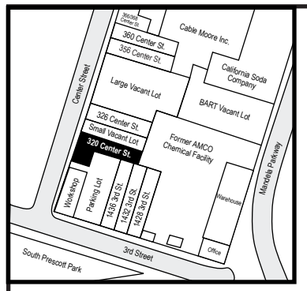
All results and screening levels in µg/m^3
Bold - detected above screening levels
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level
Chemicals shown in blue were also detected in the background sample.

Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. No depth to water is available for September 2004. First groundwater sampling event occurred in March 2005.
4. All water levels approximate based on nearest available surveyed ground surface elevation and interpolation of water levels from nearest available wells.
5. Due to wet soil conditions, soil gas samples could not be collected at most location during the May 2005 sampling event.
6. November 2006 water levels based on September 2006 groundwater sampling event.
7. Property lines based on Alameda County parcel maps
8. Building locations identified from orthocorrected aerial photograph.

FIGURE 9
326 CENTER STREET
SOIL GAS/CRAWLSPACE/AMBIENT/INDOOR AIR SAMPLING LOCATIONS AND RESULTS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL

ES080610043239BAO_Fig 9 326_CenterSt_sample_locs_allData_2009.ai 8/6/10



RSP-03	SL	OCT 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Concrete Depth (ft bgs)	- -	0.5	0.5	0.5	0.5	0.5	0.5
Sample Depth (ft bgs)	- -	3.0 - 3.5	3.0 - 3.5	3.0 - 3.5	3.0 - 3.5	3.0 - 3.5	3.0 - 3.5
Depth to Water (ft bgs)	- -	NA[a]	5.6[c]	6.4[b]	6.6	6.5	
Chloroform	1.1	**34**	**2.2 J**	**5.2**	**3.9 J**	**3.4**	**3**

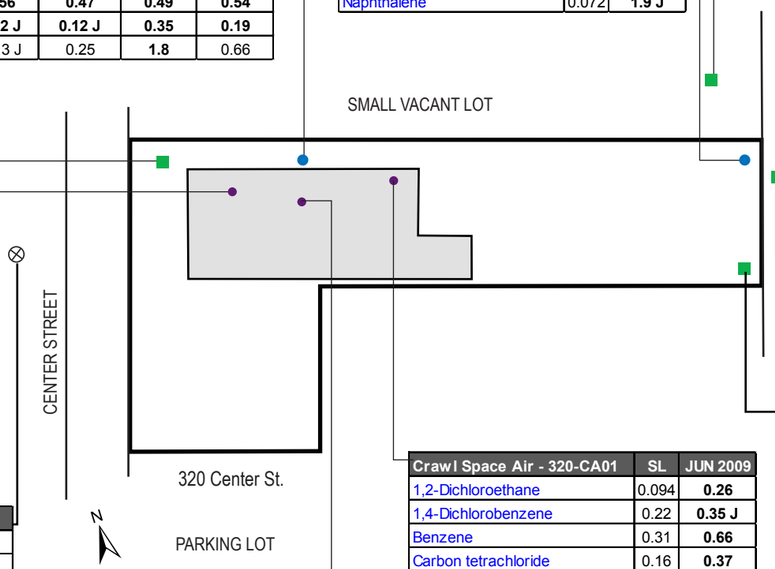
RSG-02	SL	SEP 2004
Concrete Depth (ft bgs)	- -	1.0
Sample Depth (ft bgs)	- -	3.6 - 4.0
Depth to Water (ft bgs)	- -	NA
Ethylbenzene	9.70	**22 J**

Ambient Air - 320AA	SL	AUG 2008	SEP 2008	OCT 2008	DEC 2008
Benzene	0.31	0.26 J	**0.45**	**1.8**	**0.88**
Carbon tetrachloride	0.16	**0.56**	**0.47**	**0.49**	**0.54**
Chloroform	0.11	**0.12 J**	**0.12 J**	**0.35**	**0.19**
Ethylbenzene	0.97	0.13 J	0.25	**1.8**	0.66

Ambient Air -OA01	SL	JUN 2009
Carbon tetrachloride	0.16	**0.48 J**
Naphthalene	0.072	**1.9 J**

Soil Gas - 320SG	SL	OCT 2008
Sample Depth (ft bgs)	- -	2.0 - 2.5
Depth to Water (ft bgs)	- -	5.8
Tetrachloroethene	4.10	**5.5**
Vinyl chloride	1.60	**4.4**

Crawl Space Air - 320-CA02	SL	JUN 2009
1,2-Dichloroethane	0.094	**0.31**
1,4-Dichlorobenzene	0.22	**0.34 J**
Benzene	0.31	**0.54**
Carbon tetrachloride	0.16	**0.37**



RSG-03A	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.0
Sample Depth (ft bgs)	- -	2.6 - 3.0
Depth to Water (ft bgs)	- -	NA
Ethylbenzene	9.70	**24 J**
Trichloroethene	12.0	**79**

Soil Gas - 320-SG01-E1	RSL*	Jun-09
No exceedances		

Crawl Space Air - 320-CA01	SL	JUN 2009
1,2-Dichloroethane	0.094	**0.26**
1,4-Dichlorobenzene	0.22	**0.35 J**
Benzene	0.31	**0.66**
Carbon tetrachloride	0.16	**0.37**

RSP-11	SL	OCT 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Concrete Depth (ft bgs)	- -	0.4	0.4	0.4	0.4	0.4	0.4
Sample Depth (ft bgs)	- -	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0
Depth to Water (ft bgs)	- -	NA[a]	3.4[c]	4.4[b]	4.4	4.4	
Benzene	3.1	2.2 U	2.7 UJ	0.22 UJ	**10 J**	0.22 U	0.18 J
Chloromethane	14	5.8 U	6.9 U	0.29 U	**1600**	0.29 U	0.39 U
Tetrachloroethene	4.1	**150**	**120**	**110**	**150**	**120**	**160**

Crawl Space Air - 320CA	SL	AUG 2008	SEP 2008	OCT 2008	DEC 2008
1,2-Dichloroethane	0.094	0.046 J	0.037 J	**1.2**	0.065 J
1,4-Dichlorobenzene	0.22	0.12 UJ	0.1 UJ	**1.4**	0.058 UJ
Benzene	0.31	0.3	**0.44**	**2**	**0.94**
Carbon tetrachloride	0.16	**0.6**	**0.44**	**0.48**	**0.52**
Chloroform	0.11	**0.14**	**0.15**	**0.56**	**0.16**
Ethylbenzene	0.97	0.58	0.36	**1.8**	0.53
Tetrachloroethene	0.41	**0.71**	0.14 J	0.27	0.14 J
Trichloroethene	1.20	0.13	0.054	**1.8**	0.051

320 Center Street - Indoor Air

Front storage room		
320-IA01-E1	RSL	Jun-09
1,2-Dichloroethane	0.094	2
1,4-Dichlorobenzene	0.22	5.4
Benzene	0.31	1.3
Carbon tetrachloride	0.16	0.56
Chloroform	0.11	4.5
Naphthalene	0.072	0.96 J

Front bedroom		
320-IA02-E1	RSL	Jun-09
1,2-Dichloroethane	0.094	2
1,4-Dichlorobenzene	0.22	5.5
Benzene	0.31	1.5
Carbon tetrachloride	0.16	0.41
Chloroform	0.11	6.4
Naphthalene	0.072	0.87 J

Middle bedroom		
320-IA03-E1	RSL	Jun-09
1,2-Dichloroethane	0.094	1.6
1,4-Dichlorobenzene	0.22	7.6
Benzene	0.31	1.6
Carbon tetrachloride	0.16	0.44
Chloroform	0.11	5.4
Naphthalene	0.072	0.88 J

Living room area		
320-IA04-E1	RSL	Jun-09
1,2-Dichloroethane	0.094	1.9
1,4-Dichlorobenzene	0.22	5.9
Benzene	0.31	1.6
Carbon tetrachloride	0.16	0.38
Chloroform	0.11	4.3
Naphthalene	0.072	0.82 J

Back bedroom		
320-IA05-E1	RSL	Jun-09
1,2-Dichloroethane	0.094	1.6
1,4-Dichlorobenzene	0.22	7.3
Benzene	0.31	1.5
Carbon tetrachloride	0.16	0.43
Chloroform	0.11	5.8

- AMBIENT AIR SAMPLING LOCATION
- CRAWL SPACE AIR SAMPLING LOCATION
- SOIL GAS SAMPLING LOCATION
- MONITORING WELL LOCATION

All results and screening levels in µg/m^3
Bold - detected above screening levels
[a] - Well construction not completed by October 2004; consequently, no water level information available
[b] - Based on nearest available water on March 2006
[c] - Based on nearest available water on November 2006
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level
Chemicals shown in blue were also detected in the background sample.

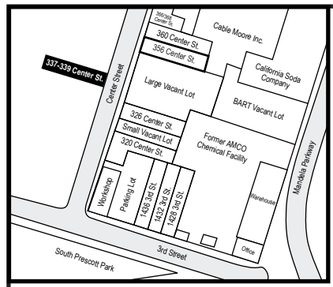
Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. No depth to water is available for September 2004. First groundwater sampling event occurred in March 2005.
4. All water levels approximate based on nearest available surveyed ground surface elevation and interpolation of water levels from nearest available wells.
5. Due to wet soil conditions, soil gas samples could not be collected at most location during the May 2005 sampling event.
6. November 2006 water levels based on September 2006 groundwater sampling event.
7. Property lines based on Alameda County parcel maps
8. Building locations identified from orthocorrected aerial photograph.

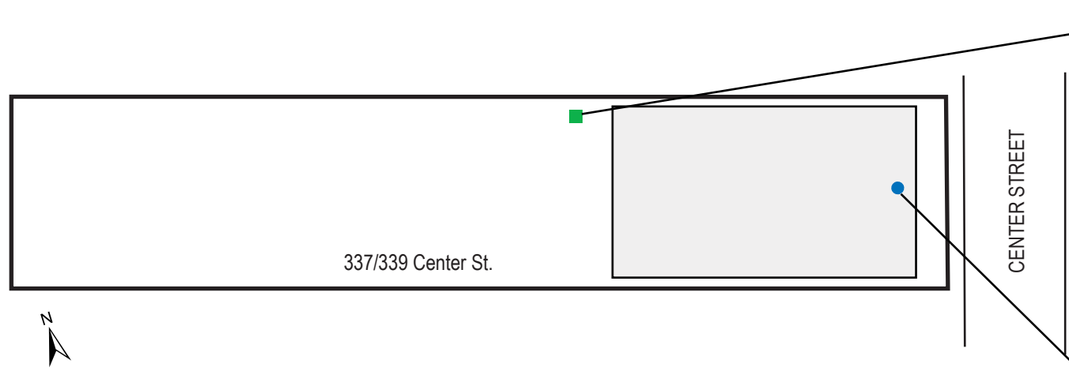
FIGURE 10
320 CENTER STREET
SOIL GAS/CRAWLSPACE/ AMBIENT/INDOOR AIR SAMPLING LOCATIONS AND RESULTS

HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL

ES080610043239BAO_Fig 10 320_CenterSt_sample_locs_allData_2009.ai 8/6/10





339-SG01	SL	JUN 2009
Chloroform	1.1	**4.7**

339-OA01	SL	JUN 2009
1,1,2,2-Tetrachloroethane	0.042	**0.18 J**
1,4-Dichlorobenzene	0.22	**0.24 J**
Benzene	0.31	**0.38**
Carbon tetrachloride	0.16	**0.4**
Naphthalene	0.072	**1.1 J**

337 Center Street - Downstairs Indoor Air

1st floor, storage room, below 339 Center St, south side of residence

337-IA01-E1	RSL	Jun-09
1,2-Dichloroethane	0.094	0.76
1,2-Dichloropropane	0.24	0.53 J
1,4-Dichlorobenzene	0.22	1
Benzene	0.31	0.82
Carbon tetrachloride	0.16	0.56 J
Chloroform	0.11	1.3
Ethylbenzene	0.97	1.9
Naphthalene	0.072	2.6 J
Tetrachloroethene	0.41	0.68

1st floor, center of living area

337-IA02-E1	RSL	Jun-09
1,2-Dichloroethane	0.094	0.52
1,2-Dichloropropane	0.24	0.81 J
1,4-Dichlorobenzene	0.22	1.5
Benzene	0.31	0.87
Carbon tetrachloride	0.16	0.43
Chloroform	0.11	1.5
Naphthalene	0.072	5.2 J
Tetrachloroethene	0.41	0.83

339 Center Street - Upstairs Indoor Air

2nd floor, west wall of child's bedroom

339-IA01-E1	RSL	Jun-09
1,2-Dichloroethane	0.094	0.1 J
1,4-Dichlorobenzene	0.22	0.26 J
Benzene	0.31	0.6
Carbon tetrachloride	0.16	0.4
Chloroform	0.11	0.83 J
Naphthalene	0.072	7 J

2nd floor, living room area, northeast corner

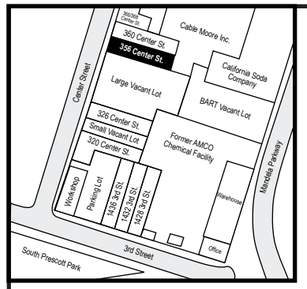
339-IA02-E1	RSL	Jun-09
1,2-Dichloroethane	0.094	0.095 J
Benzene	0.31	0.42 B
Carbon tetrachloride	0.16	0.39
Chloroform	0.11	0.46 J
Naphthalene	0.072	1.6 J

■ SOIL GAS SAMPLING LOCATION
● OUTDOOR AIR SAMPLING LOCATION
All results and screening levels in µg/m^3
J - estimated
Maximum value between field duplicate (FD) & primary sample is shown
RSL - Regional Screening Level
SL - Screening Level
Chemicals shown in blue were also detected in the background sample.

Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels.
3. Sampling locations indicated are approximate.

FIGURE 11
337 AND 339 CENTER STREET
SOIL GAS/INDOOR/OUTDOOR AIR SAMPLING LOCATIONS AND RESULTS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL

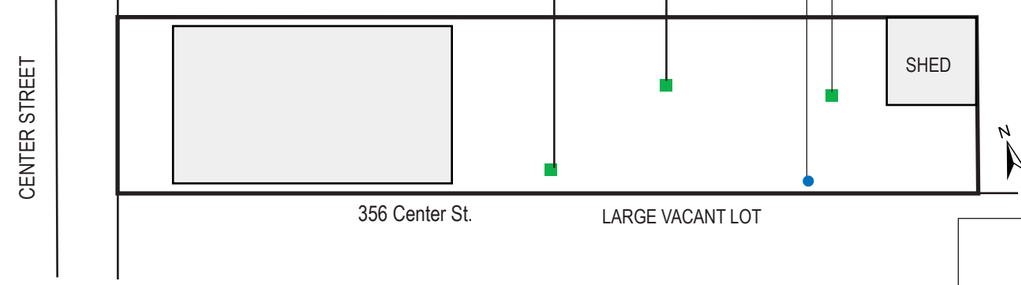


356-SG01-E1	RSL*	JUN 2009
No exceedances		

SOIL GAS - 356SG	SL	SEP 2004	MAY 2005	NOV 2006
Sample Depth (ft bgs)	- -	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5
Depth to Water (ft bgs)	- -	NA[3]	3.5	5.0[7]
Chloroform	1.10	3.3 U	12 U	**1.2**

356-OA01	SL	JUN 2009
1,4-Dichlorobenzene	0.22	**0.62 J**
1,4-Dioxane (p-dioxane)	0.32	**0.89**
Benzene	0.31	**0.41**
Carbon tetrachloride	0.16	**0.5 J**
Naphthalene	0.072	**1.9 J**

SOIL GAS - 356SGB	SL	SEP 2007
Sample Depth (ft bgs)	- -	2.0 - 2.5
Depth to Water (ft bgs)	- -	5.7
Naphthalene	0.72	**0.75 J**



RSG-40	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.5
Sample Depth (ft bgs)	- -	3.1 - 3.5
Depth to Water (ft bgs)	- -	NA
Benzene	3.10	**38 J**
Ethylbenzene	9.70	**20 J**

RSG-39	SL	SEP 2004
Concrete Depth (ft bgs)	- -	1.0
Sample Depth (ft bgs)	- -	3.6 - 4.0
Depth to Water (ft bgs)	- -	NA
Benzene	3.10	**41 J**
Trichloroethene	12.0	**25 J**
Vinyl chloride	1.60	**1100**

RSG-25	SL	SEP 2004
Concrete Depth (ft bgs)	- -	0.8
Sample Depth (ft bgs)	- -	3.6 - 4.0
Depth to Water (ft bgs)	- -	NA
1,1-Dichloroethane	15.0	**65 J**
Benzene	3.10	**45 J**
Vinyl chloride	1.60	**360**

RSG-38	SL	SEP 2004
Concrete Depth (ft bgs)	- -	1.0
Sample Depth (ft bgs)	- -	3.6 - 4.0
Depth to Water (ft bgs)	- -	NA
1,1-Dichloroethane	15.0	**220**
Benzene	3.10	**91**
Ethylbenzene	9.70	**130**
Trichloroethene	12.0	**51**
Vinyl chloride	1.60	**340**

356 Center Street - Indoor Air

1st floor, entertainment room		
356-IA04-E1	RSL	Jun 2009
1,2,4-Trimethylbenzene	7.3	35
1,2-Dichloroethane	0.094	0.32
1,3,5-Trimethylbenzene	6.3	9.8
Benzene	0.31	10
Carbon tetrachloride	0.16	0.53 J
Chloroform	0.11	0.9 J
Ethylbenzene	0.97	21
Naphthalene	0.072	2.6 J

2nd floor, front bedroom		
356-IA01-E1	RSL	Jun 2009
1,2,4-Trimethylbenzene	7.3	29
1,2-Dichloroethane	0.094	1.3
1,3,5-Trimethylbenzene	6.3	8.4
Benzene	0.31	8.6
Carbon tetrachloride	0.16	0.52 J
Chloroform	0.11	3.1
Ethylbenzene	0.97	17
Naphthalene	0.072	2.9 J

2nd floor, back bedroom		
356-IA03-E1	RSL	Jun 2009
1,2,4-Trimethylbenzene	7.3	26
1,2-Dichloroethane	0.094	1.4
1,3,5-Trimethylbenzene	6.3	7.3
Benzene	0.31	7.4
Carbon tetrachloride	0.16	0.53 J
Chloroform	0.11	1.8
Ethylbenzene	0.97	15
Naphthalene	0.072	2.7 J

1st floor, play room area		
356-IA05-E1	RSL	Jun 2009
1,2,4-Trimethylbenzene	7.3	26
1,2-Dichloroethane	0.094	0.39
1,3,5-Trimethylbenzene	6.3	7.5
Benzene	0.31	7.8
Carbon tetrachloride	0.16	0.51 J
Chloroform	0.11	0.92 J
Ethylbenzene	0.97	15
Naphthalene	0.072	2.5 J

2nd floor, living room		
356-IA02-E1	RSL	Jun 2009
1,2,4-Trimethylbenzene	7.3	27
1,2-Dichloroethane	0.094	1.3
1,3,5-Trimethylbenzene	6.3	7.7
Benzene	0.31	7.8
Carbon tetrachloride	0.16	0.55 J
Chloroform	0.11	2.5
Ethylbenzene	0.97	15
Naphthalene	0.072	3 J

Backyard shed		
356-IA06-E1	RSL	Jun 2009
1,2-Dichloroethane	0.094	1.3
Benzene	0.31	0.91
Carbon tetrachloride	0.16	0.45 J

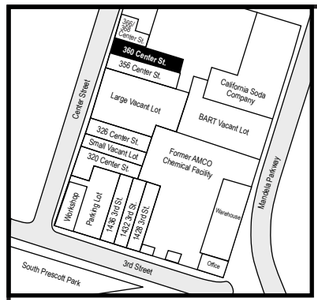
● AMBIENT AIR SAMPLING LOCATION
■ SOIL GAS SAMPLING LOCATION

All results and screening levels in µg/m³
Bold - detected above screening levels
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level
RSL - Regional Screening Level
Chemicals shown in blue were also detected in the background sample.

Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. No depth to water is available for September 2004. First groundwater sampling event occurred in March 2005.
4. All water levels approximate based on nearest available surveyed ground surface elevation and interpolation of water levels from nearest available wells.
5. Water levels for 356 and 360 Center Street extrapolated from nearest shallow well, RMW-06-15. Estimated error up to ± 1 foot.
6. Due to wet soil conditions, soil gas samples could not be collected at most location during the May 2005 sampling event.
7. November 2006 water levels based on September 2006 groundwater sampling event.
8. Property lines based on Alameda County parcel maps
9. Building locations identified from orthocorrected aerial photograph.
10. Sampling locations indicated are approximate.

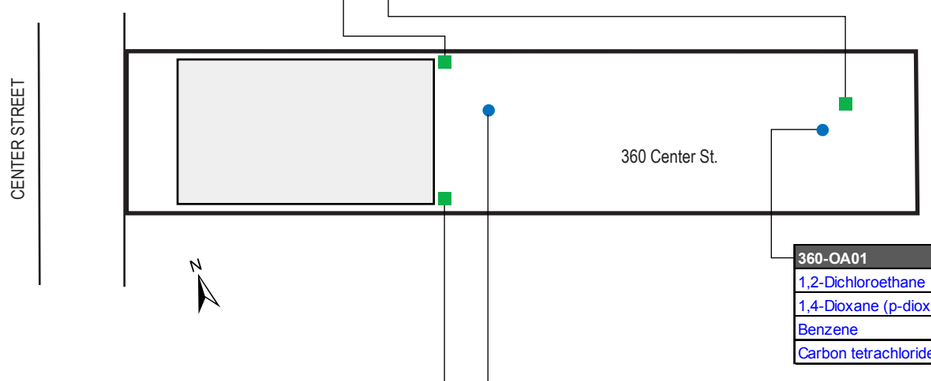
FIGURE 12
356 CENTER STREET
SOIL GAS/INDOOR/OUTDOOR AIR SAMPLING LOCATIONS AND RESULTS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL



Soil Gas - 360SGa	SL	SEP 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008
Sample Interval (ft bgs)	- -	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5
Depth to water (ft bgs)	- -	NA[a]	3.5	5.0[d]	5.5	5.3
Benzene	3.1	**3.6**	1.6 J	1.9 J	0.36	0.76
Chloroform	1.1	3.3 U	1.1 J	**2**	0.65 U	**1.5**
Naphthalene	0.72	NA	5.2 U	8.8 U	**0.81 J**	4.6 U

Soil Gas - 360SGb	SL	SEP 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Sample Depth (ft bgs)	- -	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5
Depth to Water (ft bgs)	- -	NA[a]	3.5	5.0[d]	5.5	5.3	
Chloroform	1.1	3.3 U	**1.2 J**	**3.9**	**1.5**	0.28 J	**6.9**
Naphthalene	0.72	NA	5.4 U	3.6 U	**1.2 J**	4 U	**0.97 J**
Tetrachloroethene	4.1	4.6 U	5.6 U	1.7	0.84	0.23	**4.7**
Vinyl chloride	1.6	0.035 U	0.042 U	0.035 U	0.018 J	**2**	0.049 U



360-OA01	SL	JUN 2009
1,2-Dichloroethane	0.094	**0.15**
1,4-Dioxane (p-dioxane)	0.32	**0.36 J**
Benzene	0.31	**0.36**
Carbon tetrachloride	0.16	**0.41**

Ambient Air - 360AA	SL	SEP 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008
1,4-Dichlorobenzene	0.22	**0.28 J**	0.2 J	0.16 J	0.2 UJ	0.26 UJ
Benzene	0.31	0.59 UJ	**1.2**	**1.2**	0.28	**2**
Carbon tetrachloride	0.16	**0.53**	**0.83**	**0.46**	**0.55**	**0.48**
Chloroform	0.11	0.18 U	0.093 J	**0.16 J**	0.078 J	**0.37**
Ethylbenzene	0.97	0.25	0.27	**3.5**	0.089 J	**2.3**

Soil Gas - 360SGc	SL	SEP 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008
Sample Depth (ft bgs)	- -	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5	2.0 - 2.5
Depth to Water (ft bgs)	- -	NA[a]	3.5	5.0[b]	5.5	5.3
Chloroform	1.1	3.3 U	**1.4 J**	0.64 U	0.56 J	**9.4**
Naphthalene	0.72	NA	4.9 U	3.4 U	**1.3 J**	4.1 U

360 Center Street - Downstairs Indoor Air

1st floor - bedroom		
360-IA01-E1	**RSL**	**Jun-09**
Benzene	0.31	0.56
Carbon tetrachloride	0.16	0.39
Chloroform	0.11	0.57 J

1st floor - back bedroom		
360-IA02-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.11 J
Benzene	0.31	0.52
Carbon tetrachloride	0.16	0.39
Chloroform	0.11	1.1

1st floor - left corner of front bedroom		
360-IA03-E1	**RSL**	**Jun-09**
Benzene	0.31	0.5
Carbon tetrachloride	0.16	0.4

1st floor - living room area		
360-IA04-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.21
Benzene	0.31	0.66
Carbon tetrachloride	0.16	0.54
Chloroform	0.11	0.68 J

1st floor, back shed area		
360-IA05-E1	**RSL**	**Jun-09**
Benzene	0.31	0.38
Carbon tetrachloride	0.16	0.35
Chloroform	0.11	0.37 J

360 Center Street - Upstairs Indoor Air

2nd floor, center bedroom		
360-IA06-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.48
Benzene	0.31	2.4
Carbon tetrachloride	0.16	0.38 J
Naphthalene	0.072	2.2 J

2nd floor, kitchen area		
360-IA07-E1	**RSL**	**Jun-09**
Benzene	0.31	0.56
Carbon tetrachloride	0.16	0.38
Chloroform	0.11	0.65 J

2nd floor, back bedroom (northeast)		
360-IA08-E1	**RSL**	**Jun-09**
Benzene	0.31	0.52
Carbon tetrachloride	0.16	0.4
Chloroform	0.11	0.34 J

2nd floor, laundry room area		
360-IA09-E1	**RSL**	**Jun-09**
1,4-Dichlorobenzene	0.22	0.24 J
Benzene	0.31	0.51
Carbon tetrachloride	0.16	0.38
Chloroform	0.11	1.4
Naphthalene	0.072	0.74 J

● AMBIENT AIR SAMPLING LOCATION
■ SOIL GAS SAMPLING LOCATION

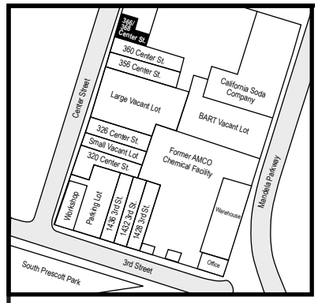
All results and screening levels in µg/m^3
Bold - detected above screening levels
[a] - Well construction not completed by October 2004; consequently, no water level information available
[b] - Based on nearest available water on March 2006
[c] - Based on nearest available water on November 2006
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level
Chemicals shown in blue were also detected in the background sample.

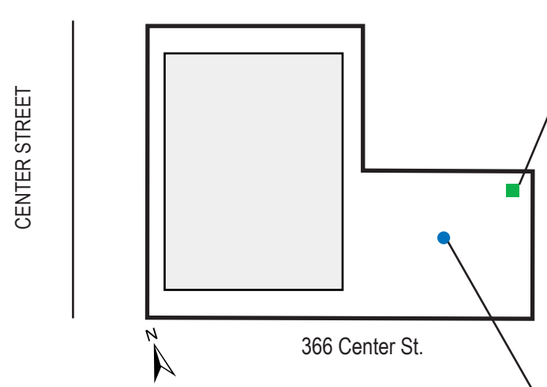
Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. No depth to water is available for September 2004. First groundwater sampling event occurred in March 2005.
4. All water levels approximate based on nearest available surveyed ground surface elevation and interpolation of water levels from nearest available wells.
5. Water levels for 356 and 360 Center Street extrapolated from nearest shallow well, RMW-06-15. Estimated error up to ± 1 foot.
6. November 2006 water levels based on September 2006 groundwater sampling event.
7. Property lines based on Alameda County parcel maps
8. Building locations identified from orthocorrected aerial photograph.

FIGURE 13
360 CENTER STREET
SOILGAS/INDOOR/OUTDOOR AIR SAMPLING LOCATIONS AND RESULTS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL

ES080610043239BAO_Fig 13 360 CenterSt_sample_locs_allData.ai 8/6/10





366-SG01	SL	JUN 2009
Chloroform	1.1	**5**

366-OA01	SL	JUN 2009
1,2-Dichloroethane	0.094	**0.11 J**
Benzene	0.31	**0.42**
Carbon tetrachloride	0.16	**0.48**

366 Center Street - Indoor Air		
Front bedroom		
366-IA01-E1	**RSL**	**Jun-09**
1,4-Dichlorobenzene	0.22	0.31 J
1,4-Dioxane (p-dioxane)	0.32	0.46 J
Benzene	0.31	1.2
Carbon tetrachloride	0.16	0.53
Chloroform	0.11	0.46 J
Ethylbenzene	0.97	1.7

Center living room area		
366-IA02-E1	**RSL**	**Jun-09**
Benzene	0.31	0.86
Carbon tetrachloride	0.16	0.46
Chloroform	0.11	0.54 J
Ethylbenzene	0.97	1.4
Naphthalene	0.072	0.9 J

Middle bedroom, south side of residence		
366-IA03-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.2
Benzene	0.31	0.58
Carbon tetrachloride	0.16	0.38
Chloroform	0.11	0.52 J
Tetrachloroethene	0.41	1.2

Back bedroom, south side of residence		
366-IA04-E1	**RSL**	**Jun-09**
1,2-Dichloroethane	0.094	0.11 J
1,4-Dichlorobenzene	0.22	0.88 J
Benzene	0.31	0.79
Carbon tetrachloride	0.16	0.38
Chloroform	0.11	0.71 J
Ethylbenzene	0.97	1.8

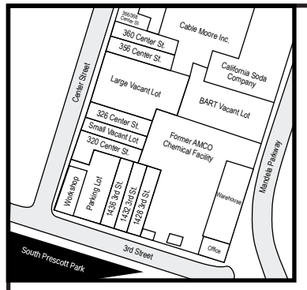
● OUTDOOR AIR SAMPLING LOCATION
■ SOIL GAS SAMPLING LOCATION

All results and screening levels in µg/m^3
J - estimated
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level
Chemicals shown in blue were also detected in the background sample.

Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels.
3. Sampling locations indicated are approximate.

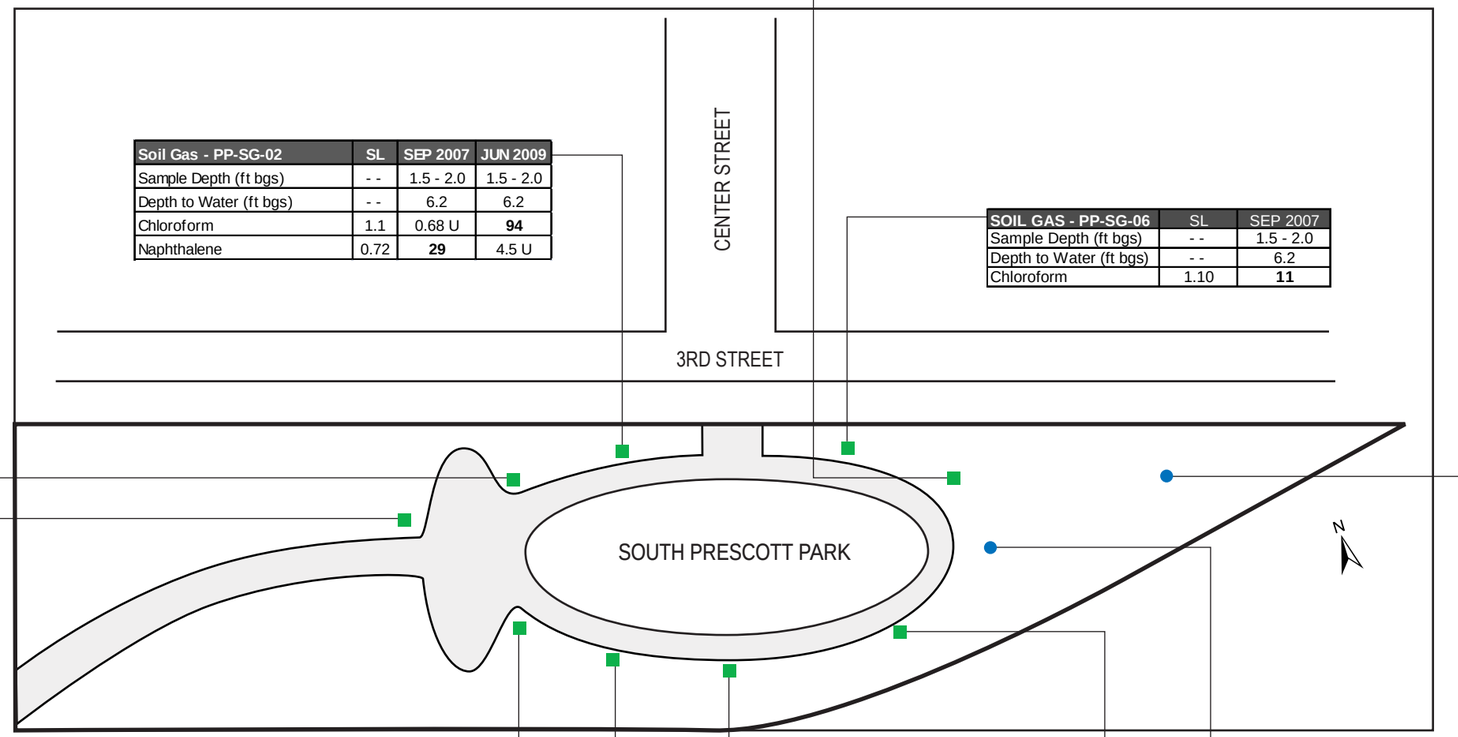
FIGURE 14
366 CENTER STREET
SOIL GAS/INDOOR/OUTDOOR AIR SAMPLING LOCATIONS AND RESULTS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL



Soil Gas - PP-NW	SL	SEP 2004	NOV 2006	SEP 2007	OCT 2008
Sample Depth (ft bgs)	- -	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0
Depth to Water (ft bgs)	- -	NA	6.2	6.2	6.6
Chloroform	1.10	10 U	0.49 U	**5.4**	0.71 U
Tetrachloroethene	4.10	**27**	0.14 U	2.5	0.078 J
Vinyl chloride	1.60	0.11 U	0.026 U	0.02 J	**2.7**

SOIL GAS - PP-E	SL	SEP 2004	MAY 2005	NOV 2006	SEP 2007	OCT 2008	JUN 2009
Sample Depth (ft bgs)	- -	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0
Depth to Water (ft bgs)	- -	NA[a]	5.3	6.2	6.2	6.6	6.2
1,3-Butadiene	0.81	1.5 U	1.7	NA	NA	NA	NA
Chloroform	1.1	**99**	**23**	**61**	**590**	1 U	14
Naphthalene	0.72	NA	3.5 U	9.2 U	**1.4 J**	5.6 U	4.3 U
Tetrachloroethene	4.1	**16**	**12**	**7.6**	**60**	0.14 J	41



Soil Gas - PP-SG-02	SL	SEP 2007	JUN 2009
Sample Depth (ft bgs)	- -	1.5 - 2.0	1.5 - 2.0
Depth to Water (ft bgs)	- -	6.2	6.2
Chloroform	1.1	0.68 U	**94**
Naphthalene	0.72	**29**	4.5 U

SOIL GAS - PP-SG-06	SL	SEP 2007
Sample Depth (ft bgs)	- -	1.5 - 2.0
Depth to Water (ft bgs)	- -	6.2
Chloroform	1.10	**11**

PP-BGA02	SL	JUN 2009
1,2-Dichloroethane	0.094	**0.29**
Benzene	0.31	**0.41**
Carbon tetrachloride	0.16	**0.53**

PP-BGA03	SL	JUN 2009
Carbon tetrachloride	0.16	**0.43**

SOIL GAS - PP-SG-01	SL	SEP 2007
Sample Depth (ft bgs)	- -	1.5 - 2.0
Depth to Water (ft bgs)	- -	6.2
Chloroform	1.10	**2.9**
Naphthalene	0.72	**2.4 J**
Tetrachloroethene	4.10	**12**

SOIL GAS - PP-SW	SL	SEP 2004	MAY 2005	SEP 2007	OCT 2008
Sample Depth (ft bgs)	- -	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0	1.5 - 2.0
Depth to Water (ft bgs)	- -	NA	5.3	6.2	6.6
Benzene	3.10	2.3 U	**14**	1.9	**3.6**
Chloroform	1.10	**22**	7.3 U	**21**	**12**

SOIL GAS - PP-SG-05	SL	SEP 2007
Naphthalene	0.56	**0.7 J**

AMBIENT AIR - PP-AA	SL	MAY 2005	NOV 2006	SEP 2007	OCT 2008
Benzene	0.31	**0.46**	**0.86**	**0.4**	**1.3**
Carbon tetrachloride	0.16	**0.55 J**	**0.48**	**0.64**	**0.46**
Chloroform	0.11	0.093 J	**0.51**	**0.25**	**0.2**
Tetrachloroethene	0.41	0.14 J	**0.42**	0.065 J	0.02 J

SOIL GAS - PP-SG-03	SL	SEP-07
Sample Depth (ft bgs)	- -	1.5 - 2.0
Depth to Water (ft bgs)	- -	6.2
All VOCs - No Exceedences		

SOIL GAS - PP-SG-04	SL	SEP 2007
Sample Depth (ft bgs)	- -	1.5 - 2.0
Depth to Water (ft bgs)	- -	6.2
Naphthalene	0.72	**1.5 J**

● AMBIENT AIR SAMPLING LOCATION

■ SOIL GAS SAMPLING LOCATION

All results and screening levels in µg/m³
Bold - detected above screening levels
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level
Chemicals shown in blue were also detected in the background sample.

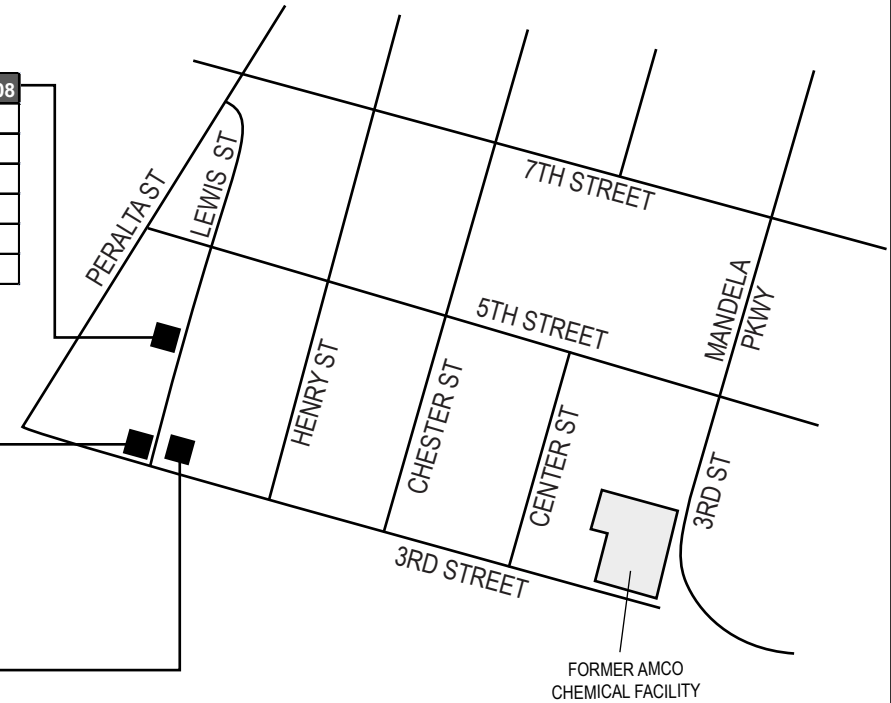
Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. No depth to water is available for September 2004. First groundwater sampling event occurred in March 2005.
4. All water levels approximate based on nearest available surveyed ground surface elevation and interpolation of water levels from nearest available wells.
5. Due to wet soil conditions, soil gas samples could not be collected at most location during the May 2005 sampling event.
6. November 2006 water levels based on September 2006 groundwater sampling event.
7. Property lines based on Alameda County parcel maps
8. Building locations identified from orthocorrected aerial photograph.

FIGURE 15
PRESCOTT PARK
SOIL GAS/AMBIENT AIR SAMPLING LOCATIONS AND RESULTS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL

ES080610043239BAO_Fig 15 PrescottPark_sample_locs_allData_2009.ai 10-06-10

Background (329 Lewis St)	SL	SEP 2004	SEP 2007	MAY 2008	AUG 2008	SEP 2008	OCT 2008	DEC 2008
Benzene	0.31	**1.3 J**	0.3	**0.62**	0.29	**0.33**	**1.5**	**0.83**
Carbon tetrachloride	0.16	**0.45**	**0.55**	**0.44**	**0.62**	**0.45**	**0.49**	**0.58**
Chloroform	0.11	**0.19**	0.1 J	0.073 J	**0.13**	0.11 J	**0.32**	**0.15**
Ethylbenzene	0.97	0.9	0.24	0.26	0.18	0.17	**1.5**	0.37
Naphthalene	0.072	NA	3.8 U	3.8 U	3.3 U	0.13 UJ	0.65 UJ	**0.7 J**
Tetrachloroethene	0.41	0.27	0.2 UJ	0.11 J	**0.76**	0.073 J	0.24	0.14 J



Background (323 Lewis St)	SL	JUN 2009
Carbon tetrachloride	0.16	**0.51**

Background (323 Lewis St)	SL	JUN 2009
Carbon tetrachloride	0.16	0.47

Background (322 Lewis St)	SL	MAY 2005	NOV 2006
Benzene	0.31	**0.52**	**0.97**
Carbon tetrachloride	0.16	**0.58**	**0.48**
Chloroform	0.11	**0.13 J**	0.1 J
Naphthalene	0.072	**0.09**	4.9 U
Tetrachloroethene	0.41	0.4	**0.42**

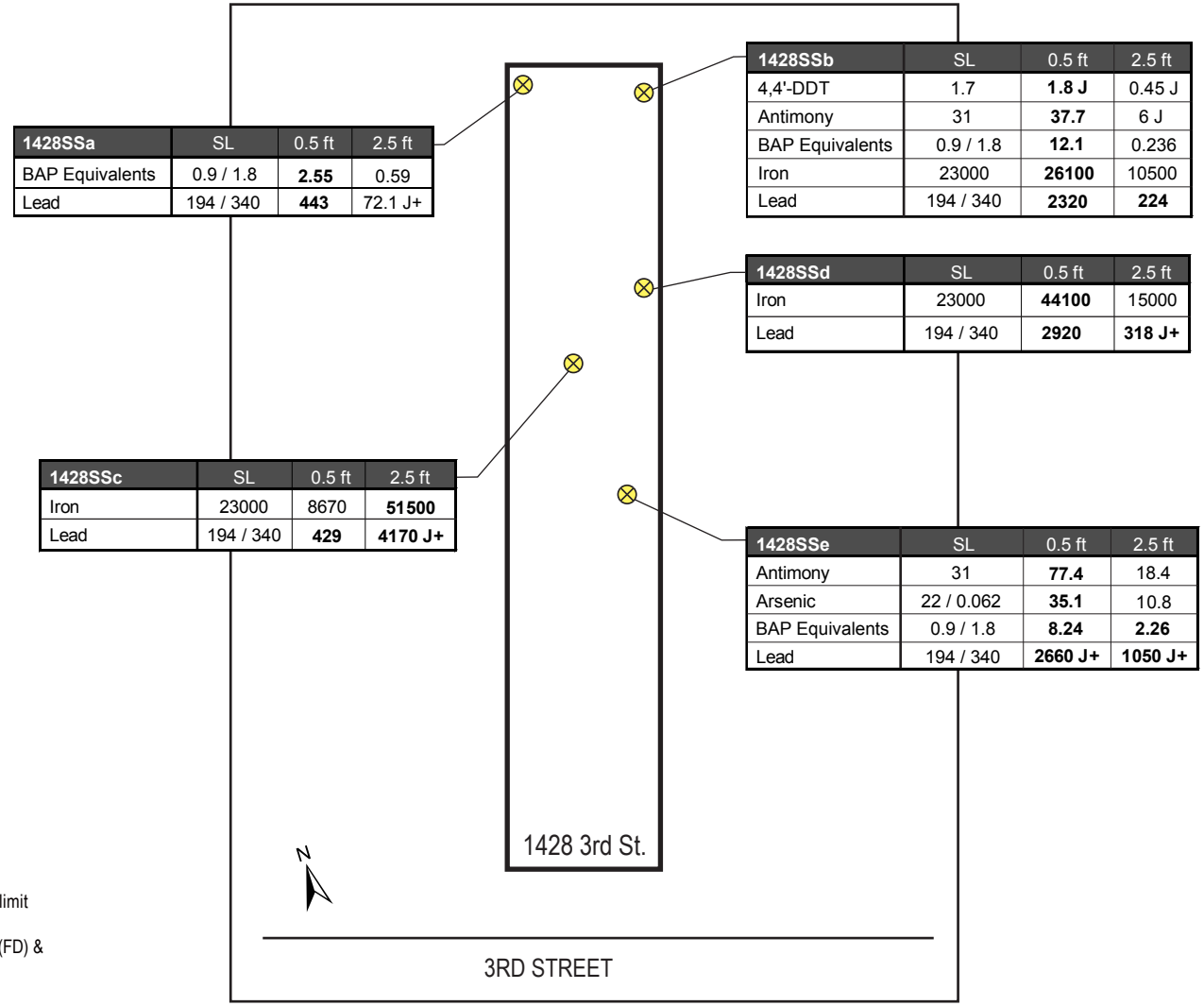
All results and screening levels in µg/m^3
Bold - detected above screening levels
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level

Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.

FIGURE 16
322, 323, AND 329 LEWIS STREET BACKGROUND SAMPLING RESULTS

HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL



1428SSa	SL	0.5 ft	2.5 ft
BAP Equivalents	0.9 / 1.8	**2.55**	0.59
Lead	194 / 340	**443**	72.1 J+

1428SSb	SL	0.5 ft	2.5 ft
4,4'-DDT	1.7	**1.8 J**	0.45 J
Antimony	31	**37.7**	6 J
BAP Equivalents	0.9 / 1.8	**12.1**	0.236
Iron	23000	**26100**	10500
Lead	194 / 340	**2320**	**224**

1428SSd	SL	0.5 ft	2.5 ft
Iron	23000	**44100**	15000
Lead	194 / 340	**2920**	**318 J+**

1428SSc	SL	0.5 ft	2.5 ft
Iron	23000	8670	**51500**
Lead	194 / 340	**429**	**4170 J+**

1428SSe	SL	0.5 ft	2.5 ft
Antimony	31	**77.4**	18.4
Arsenic	22 / 0.062	**35.1**	10.8
BAP Equivalents	0.9 / 1.8	**8.24**	**2.26**
Lead	194 / 340	**2660 J+**	**1050 J+**

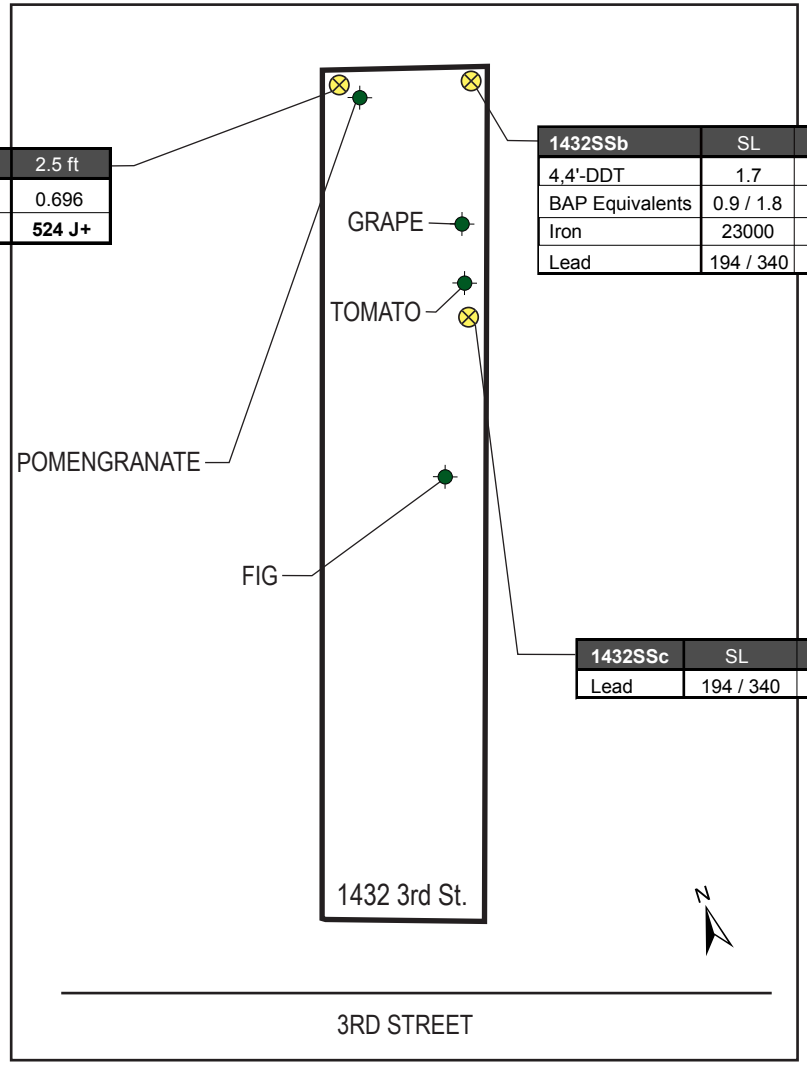
⊗ SOIL SAMPLING LOCATION

All results and screening levels in mg/kg
ft - feet below ground surface
Bold - detected above screening levels
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level

Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. For arsenic, 22 mg/kg was used for screening because the cancer endpoint of 0.062 mg/kg is below background levels.
4. Lead screening level in soil was evaluated using Department Toxic Substance Control's Lead Risk Assessment Spreadsheet Version 7 (Lead Spread 7, Cal/EPA 1999). Lead screening level of 194 mg/kg includes homegrown produce pathway.

FIGURE 17
1428 3rd STREET SOIL/PRODUCE SAMPLING LOCATIONS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL



1432SSa	SL	0.5 ft	2.5 ft
BAP Equivalents	0.9 / 1.8	**2.67**	0.696
Lead	194 / 340	**1060**	**524 J+**

1432SSb	SL	0.5 ft	2.5 ft
4,4'-DDT	1.7	**3.1 J**	0.51 J
BAP Equivalents	0.9 / 1.8	**3.75**	**1**
Iron	23000	**28200**	22900
Lead	194 / 340	**1830**	**1500 J+**

1432SSc	SL	0.5 ft	2.5 ft
Lead	194 / 340	**2280 J**	**983**

PRODUCE SAMPLING LOCATION

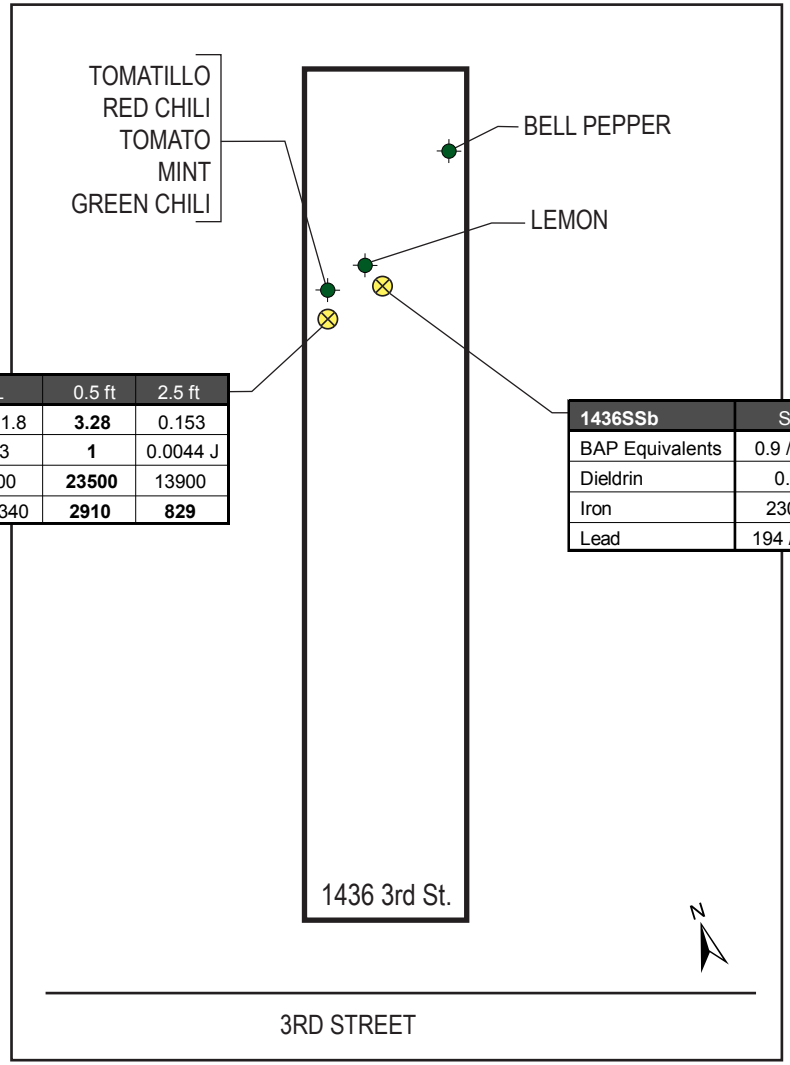
SOIL SAMPLING LOCATION

All results and screening levels in mg/kg
ft - feet below ground surface
Bold - detected above screening levels
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level

Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. For arsenic, 22 mg/kg was used for screening because the cancer endpoint of 0.062 mg/kg is below background levels.
4. Lead screening level in soil was evaluated using Department Toxic Substance Control's Lead Risk Assessment Spreadsheet Version 7 (Lead Spread 7, Cal/EPA 1999). Lead screening level of 194 mg/kg includes homegrown produce pathway.

FIGURE 18
1432 3rd STREET
SOIL/PRODUCE
SAMPLING LOCATIONS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL



1436SSa	SL	0.5 ft	2.5 ft
BAP Equivalents	0.9 / 1.8	**3.28**	0.153
Dieldrin	0.03	**1**	0.0044 J
Iron	23000	**23500**	13900
Lead	194 / 340	**2910**	**829**

1436SSb	SL	0.5 ft	2.5 ft
BAP Equivalents	0.9 / 1.8	**1.85**	0.136
Dieldrin	0.03	**0.036**	0.0002 J
Iron	23000	**27700**	9290
Lead	194 / 340	**3630**	**216 J+**

PRODUCE SAMPLING LOCATION

SOIL SAMPLING LOCATION

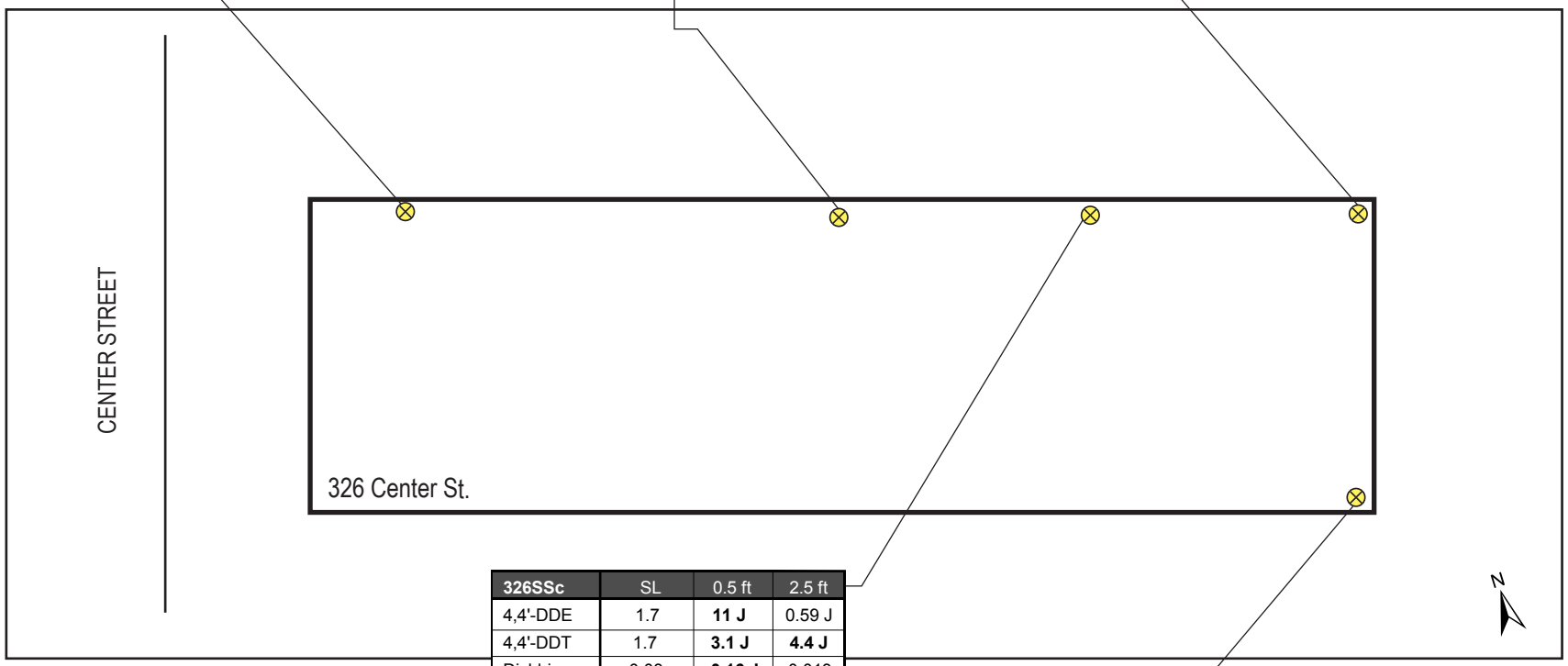
All results and screening levels in mg/kg
ft - feet below ground surface
Bold - detected above screening levels
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level

Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. For arsenic, 22 mg/kg was used for screening because the cancer endpoint of 0.062 mg/kg is below background levels.
4. Lead screening level in soil was evaluated using Department Toxic Substance Control's Lead Risk Assessment Spreadsheet Version 7 (Lead Spread 7, Cal/EPA 1999). Lead screening level of 194 mg/kg includes homegrown produce pathway.

FIGURE 19
1436 3rd STREET
SOIL/PRODUCE
SAMPLING LOCATIONS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL

ES080610043239BAO_Fig 19 1436_sample_locs_v2.ai 8/6/10



326SSa	SL	0.5 ft	2.5 ft
Lead	194 / 340	**274**	35.9

326SSb	SL	0.5 ft	2.5 ft
Lead	194 / 340	**261 J+**	179

326SSd	SL	0.5 ft	2.5 ft
4,4'-DDT	1.7	**2.2**	**3**
Arsenic	22 / 0.062	**451**	**125**
Iron	23000	**25400**	5530
Lead	194 / 340	**28600**	**631 J+**

326SSc	SL	0.5 ft	2.5 ft
4,4'-DDE	1.7	**11 J**	0.59 J
4,4'-DDT	1.7	**3.1 J**	**4.4 J**
Dieldrin	0.03	**0.16 J**	0.013
Lead	194 / 340	**389 J+**	**284**

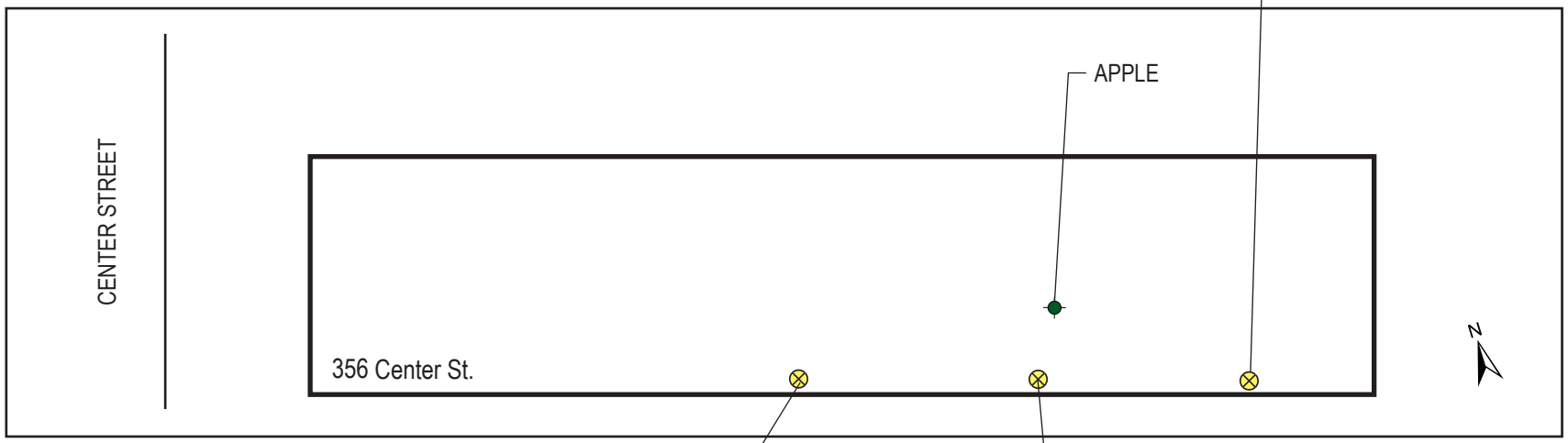
326SSe	SL	0.5 ft	2.5 ft
Lead	194 / 340	**1270 J+**	**53000 J**

⊗ SOIL SAMPLING LOCATION
All results and screening levels in mg/kg
ft - feet below ground surface
Bold - detected above screening levels
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level

Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. For arsenic, 22 mg/kg was used for screening because the cancer endpoint of 0.062 mg/kg is below background levels.
4. Lead screening level in soil was evaluated using Department Toxic Substance Control's Lead Risk Assessment Spreadsheet Version 7 (Lead Spread 7, Cal/EPA 1999). Lead screening level of 194 mg/kg includes homegrown produce pathway.

FIGURE 20
326 CENTER STREET SOIL/PRODUCE SAMPLING LOCATIONS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL



356SSc	SL	0.5 ft	2.5 ft
Lead	194 / 340	**354 J+**	26.2 J+

356SSa	SL	0.5 ft	2.5 ft
Lead	194 / 340	**822 J+**	**223**

356SSb	SL	0.5 ft	2.5 ft
Lead	194 / 340	**563 J+**	**432**

PRODUCE SAMPLING LOCATION

SOIL SAMPLING LOCATION

All results and screening levels in mg/kg
ft - feet below ground surface
Bold - detected above screening levels
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level

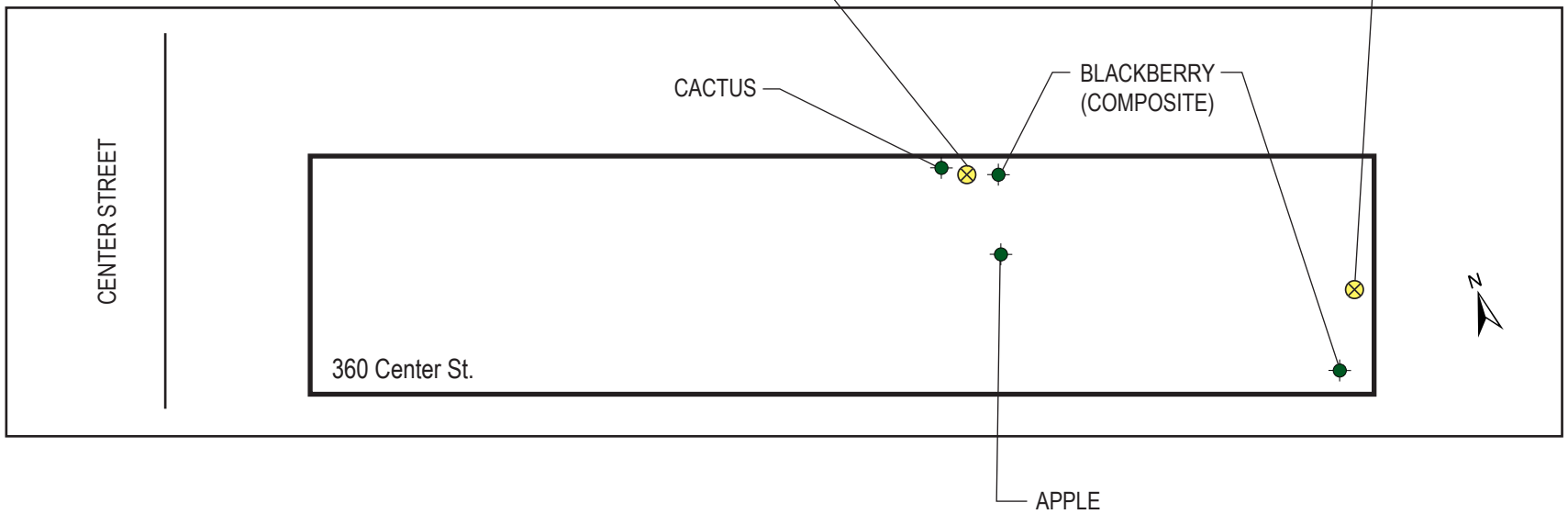
Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. For arsenic, 22 mg/kg was used for screening because the cancer endpoint of 0.062 mg/kg is below background levels.
4. Lead screening level in soil was evaluated using Department Toxic Substance Control's Lead Risk Assessment Spreadsheet Version 7 (Lead Spread 7, Cal/EPA 1999). Lead screening level of 194 mg/kg includes homegrown produce pathway.

FIGURE 21
356 CENTER STREET SOIL/PRODUCE SAMPLING LOCATIONS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL

360SSa	SL	0.5 ft	2.5 ft
Aroclor-1254	0.22	**11**	**2.4 J**
Heptachlor epoxide	0.053	**0.31 J**	0.0099J
Lead	194 / 340	**2230 J+**	193

360SSb	SL	0.5 ft	2.5 ft
Lead	194 / 340	**600**	**478 J**



PRODUCE SAMPLING LOCATION

SOIL SAMPLING LOCATION

All results and screening levels in mg/kg
ft - feet below ground surface
Bold - detected above screening levels
J - estimated
U - not detected at listed reporting limit
UJ - not detected at estimated reporting limit
NA - not analyzed
Maximum value between field duplicate (FD) & primary sample is shown
SL - Screening Level

Notes:
1. Screening levels are specific concentrations of chemicals that are considered health protective for human populations (including sensitive populations).
2. Concentrations are only shown for locations that had result(s) exceeding the screening levels during at least one sampling event.
3. For arsenic, 22 mg/kg was used for screening because the cancer endpoint of 0.062 mg/kg is below background levels.
4. Lead screening level in soil was evaluated using Department Toxic Substance Control's Lead Risk Assessment Spreadsheet Version 7 (Lead Spread 7, Cal/EPA 1999). Lead screening level of 194 mg/kg includes homegrown produce pathway.

FIGURE 22
360 CENTER STREET SOIL/PRODUCE SAMPLING LOCATIONS
HUMAN HEALTH RISK ASSESSMENT
AMCO CHEMICAL SUPERFUND SITE
OAKLAND, CALIFORNIA

CH2MHILL