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TABLE 6-14A

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-1, MORGAN FRANCIS PROPERTIES
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
Volatile Organic Compounds (ug/kg)							
1,1,1-TRICHLOROETHANE	3/18	2 - 35	11 - 6400	186	RM-SD-MF01-02	2000	40000
1,1-DICHLOROETHANE	5/18	5 - 3400	11 - 24	205	RM-SD-MF03-03	23000	14000
1,1-DICHLOROETHENE	3/18	2 - 9	11 - 6400	185	RM-SD-MF01-01	60	1400
1,2-DICHLOROETHENE (TOTAL)	4/18	4 - 27	11 - 6400	186	RM-SD-MF01-02	400	14000
2-BUTANONE	2/18	44 - 46	11 - 6400	190	RM-SD-MF02-02	-	80000
ACETONE	3/18	42 - 260	11 - 6400	211	SD-18	16000	140000
BENZENE	2/18	2 - 31	11 - 6400	186	RM-SD-MF01-02	30	200
CARBON DISULFIDE	2/18	3 - 29	11 - 6400	185	SD-18	32000	140000
CHLOROBENZENE	4/18	2 - 95	11 - 6400	189	RM-SD-MF01-02	1000	20000
ETHYLBENZENE	1/18	6 - 6	11 - 6400	185	BP70AC-S528,E172(0.6-1.5)	13000	10100
METHYLENE CHLORIDE	1/18	130 - 130	11 - 6400	195	SD-17	20	1000
TETRACHLOROETHENE	2/18	8 - 14	11 - 6400	185	BP68AC-S535,E172(1.8-2.4)	60	1000
TOLUENE	3/18	1 - 34	11 - 6400	186	BP68AC-S535,E172(1.8-2.4)	12000	67000
TRICHLOROETHENE	3/18	3 - 8	11 - 6400	184	SD-18	60	1000
VINYL CHLORIDE	2/18	1 - 40	11 - 6400	186	RM-SD-MF01-02	10	400
XYLENES, TOTAL	2/18	4 - 6	11 - 6400	185	BP70AC-S528,E172(0.6-1.5)	190000	19500
Semivolatile Organic Compounds (ug/kg)							
2,4-DIMETHYLPHENOL	8/35	90 - 520	330 - 11000	564	OU3-A1-SB11-0002	9000	28000
2-METHYLNAPHTHALENE	8/35	30 - 120	330 - 11000	543	RM-SD-MF02-02	-	56000
2-METHYLPHENOL	7/35	70 - 690	330 - 11000	565	MFP-6	15000	70000
3,3'-DICHLOROBENZIDINE	1/35	540 - 540	330 - 11000	507	MFP-5	7	16
4-METHYLPHENOL	11/35	120 - 850	330 - 11000	456	MFP-6	-	7000
4-NITROPHENOL	1/35	80 - 80	820 - 28000	1437	OU3-A1-SB11-0002	-	11000
ACENAPHTHENE	18/35	26 - 530	340 - 11000	379	MFP-5	570000	84000
ACENAPHTHYLENE	24/35	23 - 1800	340 - 6000	483	RM-SD-MF02-03	-	84000
ANTHRACENE	29/35	30 - 2900	340 - 780	488	OU3-A1-SB01-0002	12000000	400000
BENZO(A)ANTHRACENE	33/35	40 - 6800	560 - 660	1441	OU3-A1-SB01-0002, OU3-A1-SB01-0002	2000	1000
BENZO(A)PYRENE	33/35	75 - 6400	340 - 560	1336	OU3-A1-SB01-0002	8000	1000
BENZO(B)FLUORANTHENE	34/35	40 - 7900	560 - 560	2166	RM-SD-MF02-03, RM-SD-MF02-03	5000	1000
BENZO(G,H,I)PERYLENE	31/35	47 - 3100	560 - 3400	783	RM-SD-MF02-02, OU3-A1-SS02-0002	-	40000
BENZO(K)FLUORANTHENE	32/35	40 - 7300	420 - 560	1565	OU3-A1-SD02-0002	49000	1000
BIS(2-ETHYLHEXYL)PHTHALATE	20/35	41 - 12000	340 - 11000	1745	OU3-A1-SD01-0002	3600000	11000
BUTYLBENZYL PHTHALATE	9/35	61 - 1800	330 - 11000	643	RM-SD-MF02-02	930000	200000
CARBAZOLE	25/35	26 - 770	340 - 11000	397	RM-SD-MF02-02	600	360
CHRYSENE	34/35	36 - 8300	560 - 560	1903	MFP-5, MFP-5	160000	960
DI-N-BUTYL PHTHALATE	9/35	27 - 1600	330 - 11000	512	OU3-A1-SD03-0002	2300000	140000

TABLE 6-14A

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-1, MORGAN FRANCIS PROPERTIES
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
DI-N-OCTYL PHTHALATE	7/35	210 - 9200	330 - 11000	801	RM-SD-MF02-03	10000000	20000
DIBENZO(A,H)ANTHRACENE	22/35	36 - 1500	330 - 11000	554	OU3-A1-SS02-0002	2000	0.96
DIBENZOFURAN	15/35	39 - 480	330 - 11000	414	MFP-5	-	5600
DIETHYL PHTHALATE	6/35	54 - 860	330 - 11000	565	RM-SD-MF02-02	470000	1100000
DIMETHYL PHTHALATE	4/35	150 - 280	330 - 11000	566	MFP-1	-	14000000
FLUORANTHENE	31/35	64 - 17000	400 - 660	3225	OU3-A1-SB01-0002	4300000	56000
FLUORENE	23/32	23 - 1200	340 - 1600	269	OU3-A1-SB01-0002	560000	56000
INDENO(1,2,3-CD)PYRENE	32/35	59 - 3800	340 - 660	874	OU3-A1-SB01-0002	14000	9.6
N-NITROSODIPHENYLAMINE	2/35	47 - 48	330 - 11000	565	MFP-1	1000	1400
NAPHTHALENE	12/35	33 - 345	330 - 11000	515	OU3-A1-SS02-0002	84000	56000
PENTACHLOROPHENOL	1/35	30 - 30	820 - 28000	1436	OU3-A1-SB11-0002	30	1000
PHENANTHRENE	34/35	44 - 12000	560 - 560	1716	OU3-A1-SB01-0002	-	40000
PHENOL	9/34	89 - 6100	330 - 11000	935	MFP-6	100000	800000
PYRENE	33/35	50 - 14000	560 - 660	2763	OU3-A1-SB01-0002	4200000	40000
Pesticides/PCBs (ug/kg)							
4,4'-DDD	12/46	0.99 - 42	3.3 - 82	8	RM-SD-MF03-03	16000	29
4,4'-DDE	24/45	1.2 - 89	3.2 - 60	7	SLE-G2	54000	21
4,4'-DDT	22/42	1.3 - 190	3.3 - 60	13	SLE-G2	32000	21
ALDRIN	8/46	0.75 - 19	1.7 - 42	4	RM-SD-MF01-01	500	0.41
ALPHA-BHC	8/46	0.13 - 1.7	1.7 - 42	3	RM-SD-MF02-02	0.5	1.1
ALPHA-CHLORDANE	24/46	0.48 - 230	1.8 - 31	13	SLE-G2	10000	66
AROCLOR-1248	2/46	130 - 190	32 - 1950	88	OU3-A1-SS01-0002	-	-
AROCLOR-1254	2/46	119 - 350	32 - 1950	90	RM-SD-MF02-01	-	-
AROCLOR-1260	3/46	236 - 900	32 - 1950	106	SD-16	-	-
AROCLOR-1262	27/43	53 - 130000	32 - 460	3473	MFP-5	-	-
AROCLOR-1268	30/46	28 - 270000	32 - 820	7008	MFP-5	-	-
BETA-BHC	5/45	0.16 - 11	1.7 - 42	4	RM-SD-MF02-01	3	3.9
DELTA-BHC	6/46	0.14 - 9.2	1.7 - 42	3	PP-EF+100	-	1.1
DIELDRIN	17/46	0.49 - 28	3.3 - 82	8	RM-SD-MF03-03	4	7
ENDOSULFAN I	3/46	1.7 - 66	1.7 - 42	5	PP-EF+100	18000	8400
ENDOSULFAN II	7/43	1.4 - 28	3.2 - 82	8	PP-DDE+110	18000	8400
ENDOSULFAN SULFATE	8/43	1.4 - 82	3.2 - 82	9	RM-SD-MF02-02	-	8400
ENDRIN	8/45	0.46 - 180	3.2 - 82	10	RM-SD-MF03-03	1000	-
ENDRIN ALDEHYDE	7/45	12 - 34	3.2 - 82	9	OU3-A1-SD03-0002	-	-
ENDRIN KETONE	6/45	2.5 - 200	3.2 - 82	11	PP-DDE+110	-	-
GAMMA-BHC (LINDANE)	2/45	0.54 - 0.59	1.7 - 42	3	RM-SD-MF02-02	9	40
GAMMA-CHLORDANE	25/42	0.85 - 130	1.8 - 22	10	MFP-5	10000	66

TABLE 6-14A

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-1, MORGAN FRANCIS PROPERTIES
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
HEPTACHLOR	13/46	0.25 - 12	1.7 - 42	4	PP-EF+100	23000	13
HEPTACHLOR EPOXIDE	12/44	0.22 - 42	1.7 - 31	4	SLE-G2	700	20
METHOXYCHLOR	9/44	3.3 - 180	17 - 420	37	RM-SD-MF01-01	160000	8000
PCB Congeners (ug/kg)							
2',3,4,4',5-PENTACHLOROBIPHENYL (123)	1/1	8.59 - 8.59	-	9	OU3-A1-SD03-0002	-	-
2,2',3,3',4,4',5-HEPTACHLOROBIPHENYL (170)	1/1	205 - 205	-	205	OU3-A1-SD03-0002	-	-
2,2',3,4,4',5,5'-HEPTACHLOROBIPHENYL (180)	1/1	35.3 - 35.3	-	35	OU3-A1-SD03-0002	-	-
2,3',4,4',5,5'-HEXACHLOROBIPHENYL (167)	1/1	0.958 - 0.958	-	1	OU3-A1-SD03-0002	-	-
2,3',4,4',5-PENTACHLOROBIPHENYL (118)	1/1	0.2935 - 0.2935	-	0.3	OU3-A1-SD03-0002	-	-
2,3,3',4,4',5'-HEXACHLOROBIPHENYL (157)	1/1	4.16 - 4.16	-	4	OU3-A1-SD03-0002	-	-
2,3,3',4,4',5,5'-HEPTACHLOROBIPHENYL (189)	1/1	2.15 - 2.15	-	2	OU3-A1-SD03-0002	-	-
2,3,3',4,4',5-HEXACHLOROBIPHENYL (156)	1/1	2.81 - 2.81	-	3	OU3-A1-SD03-0002	-	-
2,3,3',4,4'-PENTACHLOROBIPHENYL (105)	1/1	4.23 - 4.23	-	4	OU3-A1-SD03-0002	-	-
2,3,4,4',5-PENTACHLOROBIPHENYL (114)	1/1	26 - 26	-	26	OU3-A1-SD03-0002	-	-
3,3',4,4',5,5'-HEXACHLOROBIPHENYL (169)	1/1	0.131 - 0.131	-	0.1	OU3-A1-SD03-0002	-	-
3,3',4,4',5-PENTACHLOROBIPHENYL (126)	1/1	0.238 - 0.238	-	0.2	OU3-A1-SD03-0002	-	-
3,3',4,4'-TETRACHLOROBIPHENYL (77)	1/1	0.826 - 0.826	-	1	OU3-A1-SD03-0002	-	-
DECACHLOROBIPHENYL	1/1	45.9 - 45.9	-	46	OU3-A1-SD03-0002	-	-
TOTAL DICHLOROBIPHENYLS	1/1	6.87 - 6.87	-	7	OU3-A1-SD03-0002	-	-
TOTAL HEPTACHLOROBIPHENYLS	1/1	746 - 746	-	746	OU3-A1-SD03-0002	-	-
TOTAL HEXACHLOROBIPHENYLS	1/1	302 - 302	-	302	OU3-A1-SD03-0002	-	-
TOTAL NONACHLOROBIPHENYLS	1/1	64.5 - 64.5	-	65	OU3-A1-SD03-0002	-	-
TOTAL OCTACHLOROBIPHENYLS	1/1	805 - 805	-	805	OU3-A1-SD03-0002	-	-
TOTAL PENTACHLOROBIPHENYLS	1/1	239 - 239	-	239	OU3-A1-SD03-0002	-	-
TOTAL TETRACHLOROBIPHENYLS	1/1	191 - 191	-	191	OU3-A1-SD03-0002	-	-
TOTAL TRICHLOROBIPHENYLS	1/1	80.9 - 80.9	-	81	OU3-A1-SD03-0002	-	-
Metals (mg/kg)							
ALUMINUM	44/44	1640 - 18700	-	8676	SD-17	-	-
ANTIMONY	6/36	4.1 - 16.5	1.1 - 13.4	4	MF-A+400	5	-
ARSENIC	37/44	1.9 - 28.1	1.8 - 7.1	7	OU3-A1-SS01-0002	29	-
BARIUM	43/44	18.9 - 17000	12.9 - 12.9	1500	MFP-5	1600	-
BERYLLIUM	29/43	0.23 - 1.3	0.17 - 1.2	0.5	SLE-G7	63	-
CADMIUM	22/43	0.083 - 18.9	0.21 - 4.1	2	RM-SD-MF02-03	8	-
CALCIUM	39/44	566 - 27500	1200 - 3420	3103	BP70AC-S528,E172(0.6-1.5)	-	-
CHROMIUM	44/44	7.8 - 900	-	73	RM-SD-MF03-03	38	-
COBALT	44/44	2 - 30.9	-	10	MFP-5	-	-
COPPER	53/61	15 - 42000	6.3 - 300	2487	MFP-5	-	-

TABLE 6-14A

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-1, MORGAN FRANCIS PROPERTIES
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT
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Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
IRON	44/44	5580 - 61400	-	19367	OU3-A1-SS01-0002	-	-
LEAD	200/227	9.4 - 24700	100 - 100	825	MFP-5	-	-
MAGNESIUM	44/44	571 - 81600	-	11813	MFP-1	-	-
MANGANESE	44/44	71.1 - 934	-	252	RM-SD-MF03-03	-	-
MERCURY	23/44	0.054 - 4.3	0.05 - 0.27	0.3	MF-AZ+300	2	-
NICKEL	44/44	6 - 530	-	81	MFP-1	130	-
POTASSIUM	38/44	435 - 3240	255 - 1040	1179	SD-17	-	-
SELENIUM	7/44	0.27 - 3.6	0.28 - 7.3	1	MF-AZ+300	5	-
SILVER	10/43	0.33 - 8.7	0.17 - 2.6	1	RM-SD-MF02-03	34	-
SODIUM	28/41	41.3 - 42500	47.5 - 1190	1435	MFP-5	-	-
THALLIUM	3/44	0.24 - 5.2	0.16 - 4	1	MF-AZ+300	0.7	-
VANADIUM	44/44	9.6 - 101	-	33	OU3-A1-SD02-0002	6000	-
ZINC	41/44	33.5 - 2930	92.9 - 146	540	MFP-2	12000	-
Dioxin (ug/kg)							
TOXICITY EQUIVALENCY (TEQ)	20/20	0.0044 - 17.54	-	1.225	MFP-5	-	-
Asbestos (%)							
ASBESTOS	92/193	0.99 - 80	0.1 - 0.1	5	PP EF+050, MF A+400	-	-
Total Organic Carbon (mg/kg)							
TOTAL ORGANIC CARBON	4/4	5310 - 71700	-	32478	OU3-A1-SD02-0002	-	-

1 USEPA Soil Screening Levels (USEPA, May 1996). Values associated with dilution and attenuation factor (DAF) of 20 are used.

2 CTDEP, January 1996. State Pollutant Mobility criteria for metals and PCBs are not included since direct comparison of the aqueous SPLP criteria (in ug/L) and the soil analytical results (in ug/kg or mg/kg) cannot be made. TCLP and SPLP results for soil samples are presented in a separate table. In some cases, calculated or surrogate or ceiling value presented as detailed in Table 6-1.

- Not available or not applicable.

TABLE 6-14B

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-1, MORGAN FRANCIS PROPERTIES
ALL SOIL/SEDIMENT (0-15')
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 1 OF 4

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
Volatile Organic Compounds (ug/kg)							
1,1,1-TRICHLOROETHANE	4/49	2 - 44	10 - 6400	88	MF-SO-MW102-0406	2000	40000
1,1,2,2-TETRACHLOROETHANE	1/49	2 - 2	10 - 6400	86	BP78AC-S453,E162(4.6-5.0)	3	100
1,1-DICHLOROETHANE	10/49	5 - 3400	10 - 1300	97	RM-SD-MF03-03	23000	14000
1,1-DICHLOROETHENE	4/49	2 - 9	10 - 6400	86	RM-SD-MF01-01	60	1400
1,2-DICHLOROETHENE (TOTAL)	7/49	4 - 66	10 - 6400	88	MF-SO-MW103-0810	400	14000
2-BUTANONE	8/49	8 - 250	10 - 6400	94	MF-SO-SB7-1416	-	80000
2-HEXANONE	1/49	40 - 40	10 - 6400	87	OU3-A1-SD02-0204	-	56000
ACETONE	8/49	37 - 810	10 - 10000	229	MF-SO-SB7-1416	16000	140000
BENZENE	3/49	2 - 31	10 - 6400	87	RM-SD-MF01-02	30	200
CARBON DISULFIDE	6/49	3 - 130	10 - 6400	89	MF-SO-MW103-1416	32000	140000
CHLOROBENZENE	6/49	2 - 95	10 - 6400	88	RM-SD-MF01-02	1000	20000
ETHYLBENZENE	3/49	4 - 12	10 - 6400	86	OU3-A1-SB03-0608	13000	10100
METHYLENE CHLORIDE	1/49	130 - 130	11 - 6400	91	SD-17	20	1000
TETRACHLOROETHENE	5/49	8 - 48	10 - 6400	88	BP68AC-S535,E172(5.2-5.5)	60	1000
TOLUENE	7/49	1 - 250	10 - 6400	92	OU3-A1-SB03-0608	12000	67000
TRICHLOROETHENE	6/49	3 - 120	10 - 6400	90	MF-SO-MW103-0810	60	1000
VINYL CHLORIDE	4/49	1 - 40	10 - 6400	87	RM-SD-MF01-02	10	400
XYLENES, TOTAL	5/49	4 - 100	10 - 6400	88	OU3-A1-SB03-0608	190000	19500
Semivolatile Organic Compounds (ug/kg)							
2,4-DIMETHYLPHENOL	18/80	37 - 3800	330 - 12000	629	OU3-A1-SB03-0608	9000	28000
2-METHYLNAPHTHALENE	19/80	30 - 580	330 - 15000	654	OU3-A1-SB06-0810	-	56000
2-METHYLPHENOL	15/80	36 - 790	330 - 15000	683	MF-SO-MW102-0406	15000	70000
3,3'-DICHLOROBENZIDINE	1/80	540 - 540	330 - 15000	662	MFP-5	7	16
4-METHYLPHENOL	23/80	96 - 4800	330 - 15000	692	MF-SO-MW103-0810	-	7000
4-NITROPHENOL	2/80	80 - 460	820 - 38000	1719	MF-SO-MW103-0810	-	11000
ACENAPHTHENE	33/80	26 - 3000	340 - 12000	512	OU3-A1-SB06-0810	570000	84000
ACENAPHTHYLENE	44/80	23 - 1800	340 - 15000	648	OU3-A1-SB06-0810, RM-SD-MF02-03	-	84000
ANTHRACENE	53/80	21 - 5200	340 - 12000	614	OU3-A1-SB06-0810	12000000	400000
BENZO(A)ANTHRACENE	66/80	33 - 14000	350 - 12000	1456	OU3-A1-SB06-0810, OU3-A1-SB06-0810	2000	1000
BENZO(A)PYRENE	68/80	32 - 13000	340 - 12000	1342	OU3-A1-SB06-0810	8000	1000
BENZO(B)FLUORANTHENE	71/80	34 - 13000	350 - 12000	1918	MF-SO-TP3-0405, MF-SO-TP3-0405	5000	1000
BENZO(G,H,I)PERYLENE	60/80	47 - 7600	350 - 15000	922	OU3-A1-SB06-0810	-	40000
BENZO(K)FLUORANTHENE	62/80	32 - 10000	350 - 12000	1458	OU3-A1-SB06-0810	49000	1000
BIS(2-ETHYLHEXYL)PHTHALATE	33/80	22 - 12000	340 - 15000	1401	OU3-A1-SD01-0002	3600000	11000
BUTYLBENZYL PHTHALATE	13/80	20 - 1800	330 - 15000	710	RM-SD-MF02-02	930000	200000
CARBAZOLE	42/80	26 - 3100	340 - 12000	493	MF-SO-TP3-0405	600	360
CHRYSENE	69/80	36 - 14000	350 - 12000	1832	OU3-A1-SB06-0810, OU3-A1-SB06-0810	160000	960
DI-N-BUTYL PHTHALATE	17/80	26 - 1600	330 - 12000	583	OU3-A1-SD03-0002	2300000	140000

TABLE 6-14B

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-1, MORGAN FRANCIS PROPERTIES
ALL SOIL/SEDIMENT (0-15')
FERRY CREEK, STRATFORD, CONNECTICUT
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Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
DI-N-OCTYL PHTHALATE	7/80	210 - 9200	330 - 15000	790	RM-SD-MF02-03	10000000	20000
DIBENZO(A,H)ANTHRACENE	29/80	36 - 1500	330 - 15000	654	OU3-A1-SS02-0002	2000	0.96
DIBENZOFURAN	27/80	25 - 1200	330 - 15000	581	OU3-A1-SB06-0810	-	5600
DIETHYL PHTHALATE	7/80	54 - 860	330 - 15000	684	RM-SD-MF02-02	470000	1100000
DIMETHYL PHTHALATE	6/80	67 - 460	330 - 15000	685	MF-SO-MW102-0406	-	14000000
FLUORANTHENE	69/80	46 - 33000	350 - 4100	3079	OU3-A1-SB06-0810	4300000	56000
FLUORENE	42/77	23 - 3800	340 - 12000	479	OU3-A1-SB06-0810	560000	56000
INDENO(1,2,3-CD)PYRENE	65/80	24 - 7000	340 - 12000	884	OU3-A1-SB06-0810	14000	9.6
N-NITROSODIPHENYLAMINE	5/80	47 - 1300	330 - 12000	592	OU3-A1-SB03-0608	1000	1400
NAPHTHALENE	30/80	24 - 1100	330 - 12000	507	OU3-A1-SB03-0608	84000	56000
PENTACHLOROPHENOL	1/80	30 - 30	820 - 38000	1723	OU3-A1-SB11-0002	30	1000
PHENANTHRENE	70/80	40 - 24000	350 - 12000	1968	OU3-A1-SB06-0810	-	40000
PHENOL	24/78	89 - 9800	330 - 15000	1141	OU3-A1-SB07-0608	100000	800000
PYRENE	71/80	48 - 31000	350 - 4100	2856	OU3-A1-SB06-0810	4200000	40000
Pesticides/PCBs (ug/kg)							
4,4'-DDD	19/90	0.99 - 42	3.3 - 94	8	RM-SD-MF03-03	16000	29
4,4'-DDE	31/89	1.2 - 89	2.6 - 94	8	SLE-G2	54000	21
4,4'-DDT	30/86	1.3 - 190	2.6 - 94	11	SLE-G2	32000	21
ALDRIN	12/90	0.75 - 37	1.3 - 49	4	MF-SO-SB7-1416	500	0.41
ALPHA-BHC	10/90	0.083 - 7.8	1.7 - 49	4	OU3-A1-SD03-0204	0.5	1.1
ALPHA-CHLORDANE	33/90	0.48 - 230	1.3 - 32	9	SLE-G2	10000	66
AROCLOR-1248	5/90	44 - 650	26 - 1950	91	MF-SO-MW103-0810	-	-
AROCLOR-1254	3/90	119 - 8400	26 - 1950	175	MF-SO-SB7-1416	-	-
AROCLOR-1260	4/90	236 - 900	26 - 1950	98	SD-16	-	-
AROCLOR-1262	54/88	23 - 130000	32 - 460	3354	MFP-5	-	-
AROCLOR-1268	62/91	19 - 270000	32 - 820	5572	MFP-5	-	-
BETA-BHC	6/89	0.16 - 11	1.3 - 49	4	RM-SD-MF02-01	3	3.9
DELTA-BHC	9/89	0.14 - 9.2	1.7 - 49	4	PP-EF+100	-	1.1
DIELDRIN	22/90	0.49 - 28	2.6 - 94	7	RM-SD-MF03-03	4	7
ENDOSULFAN I	10/91	1.4 - 74	1.3 - 49	5	MF-SO-SB8-0608	18000	8400
ENDOSULFAN II	7/84	1.4 - 28	3.2 - 94	8	PP-DDE+110	18000	8400
ENDOSULFAN SULFATE	13/88	1.4 - 82	2.6 - 94	9	RM-SD-MF02-02	-	8400
ENDRIN	11/89	0.46 - 180	2.6 - 94	9	RM-SD-MF03-03	1000	-
ENDRIN ALDEHYDE	17/89	7.5 - 93	3.2 - 350	13	OU3-A1-SD03-0204	-	-
ENDRIN KETONE	6/89	2.5 - 200	2.6 - 94	10	PP-DDE+110	-	-
GAMMA-BHC (LINDANE)	3/89	0.54 - 5.6	1.3 - 49	4	OU3-A1-SD03-0204	9	40
GAMMA-CHLORDANE	38/86	0.85 - 130	1.3 - 25	9	MFP-5	10000	66
HEPTACHLOR	17/90	0.25 - 12	1.7 - 49	4	PP-EF+100	23000	13
HEPTACHLOR EPOXIDE	19/88	0.22 - 63	1.3 - 32	4	MF-SO-SB7-1416	700	20

TABLE 6-14B

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-1, MORGAN FRANCIS PROPERTIES
ALL SOIL/SEDIMENT (0-15')
FERRY CREEK, STRATFORD, CONNECTICUT

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
METHOXYCHLOR	9/88	3.3 - 180	13 - 490	40	RM-SD-MF01-01	160000	8000
PCB Congeners (ug/kg)							
2',3,4,4',5-PENTACHLOROBIPHENYL (123)	1/1	8.59 - 8.59	-	9	OU3-A1-SD03-0002	-	-
2,2',3,3',4,4',5-HEPTACHLOROBIPHENYL (170)	1/1	205 - 205	-	205	OU3-A1-SD03-0002	-	-
2,2',3,4,4',5,5'-HEPTACHLOROBIPHENYL (180)	1/1	35.3 - 35.3	-	35	OU3-A1-SD03-0002	-	-
2,3',4,4',5,5'-HEXACHLOROBIPHENYL (167)	1/1	0.958 - 0.958	-	1	OU3-A1-SD03-0002	-	-
2,3',4,4',5-PENTACHLOROBIPHENYL (118)	1/1	0.2935 - 0.2935	-	0.3	OU3-A1-SD03-0002	-	-
2,3,3',4,4',5-HEXACHLOROBIPHENYL (157)	1/1	4.16 - 4.16	-	4	OU3-A1-SD03-0002	-	-
2,3,3',4,4',5,5'-HEPTACHLOROBIPHENYL (189)	1/1	2.15 - 2.15	-	2	OU3-A1-SD03-0002	-	-
2,3,3',4,4',5-HEXACHLOROBIPHENYL (156)	1/1	2.81 - 2.81	-	3	OU3-A1-SD03-0002	-	-
2,3,3',4,4'-PENTACHLOROBIPHENYL (105)	1/1	4.23 - 4.23	-	4	OU3-A1-SD03-0002	-	-
2,3,4,4',5-PENTACHLOROBIPHENYL (114)	1/1	26 - 26	-	26	OU3-A1-SD03-0002	-	-
3,3',4,4',5,5'-HEXACHLOROBIPHENYL (169)	1/1	0.131 - 0.131	-	0.1	OU3-A1-SD03-0002	-	-
3,3',4,4',5-PENTACHLOROBIPHENYL (126)	1/1	0.238 - 0.238	-	0.2	OU3-A1-SD03-0002	-	-
3,3',4,4'-TETRACHLOROBIPHENYL (77)	1/1	0.826 - 0.826	-	1	OU3-A1-SD03-0002	-	-
DECACHLOROBIPHENYL	1/1	45.9 - 45.9	-	46	OU3-A1-SD03-0002	-	-
TOTAL DICHLOROBIPHENYLS	1/1	6.87 - 6.87	-	7	OU3-A1-SD03-0002	-	-
TOTAL HEPTACHLOROBIPHENYLS	1/1	746 - 746	-	746	OU3-A1-SD03-0002	-	-
TOTAL HEXACHLOROBIPHENYLS	1/1	302 - 302	-	302	OU3-A1-SD03-0002	-	-
TOTAL NONACHLOROBIPHENYLS	1/1	64.5 - 64.5	-	65	OU3-A1-SD03-0002	-	-
TOTAL OCTACHLOROBIPHENYLS	1/1	805 - 805	-	805	OU3-A1-SD03-0002	-	-
TOTAL PENTACHLOROBIPHENYLS	1/1	239 - 239	-	239	OU3-A1-SD03-0002	-	-
TOTAL TETRACHLOROBIPHENYLS	1/1	191 - 191	-	191	OU3-A1-SD03-0002	-	-
TOTAL TRICHLOROBIPHENYLS	1/1	80.9 - 80.9	-	81	OU3-A1-SD03-0002	-	-
Metals (mg/kg)							
ALUMINUM	91/91	443 - 32100	-	9093	OU3-A1-SD04-0204	-	-
ANTIMONY	12/72	2.9 - 16.5	1.1 - 13.4	3	MF-A+400	5	-
ARSENIC	75/91	0.83 - 263	1.3 - 7.8	14	MF-SO-SB2-1416	29	-
BARIUM	90/91	2.4 - 17000	12.9 - 12.9	1524	MFP-5	1600	-
BERYLLIUM	59/89	0.23 - 2	0.032 - 1.2	0.4	MF-SO-SB2-1416	63	-
CADMIUM	38/89	0.083 - 37	0.062 - 4.1	2	OU3-A1-SD02-0204	8	-
CALCIUM	84/91	130 - 27500	346 - 3420	3036	BP70AC-S528,E172(0.6-1.5)	-	-
CHROMIUM	90/91	5.1 - 900	0.72 - 0.72	65	RM-SD-MF03-03	38	-
COBALT	91/91	0.3 - 30.9	-	10	MFP-5	-	-
COPPER	159/231	2.1 - 97900	2.7 - 300	2104	MF-SO-MW103-0608	-	-
IRON	91/91	729 - 89900	-	21573	MF-SO-MW103-0810	-	-
LEAD	379/467	3.3 - 25600	3.1 - 100	780	MF-SO-MW103-0608	-	-
MAGNESIUM	91/91	234 - 81600	-	11028	MFP-1	-	-
MANGANESE	91/91	14.6 - 934	-	229	RM-SD-MF03-03	-	-

TABLE 6-14B

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-1, MORGAN FRANCIS PROPERTIES
ALL SOIL/SEDIMENT (0-15')
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 4 OF 4

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
MERCURY	41/91	0.054 - 9.4	0.049 - 0.27	0.45	BP68AC-S535,E172(5.2-5.5)	2	-
NICKEL	91/91	0.78 - 566	-	78	MF-SO-MW103-0608	130	-
POTASSIUM	85/91	147 - 3520	255 - 1040	1272	OU3-A1-SS05-0204	-	-
SELENIUM	19/91	0.26 - 8.8	0.27 - 7.3	1	MF-SO-SB2-1416	5	-
SILVER	30/90	0.31 - 8.7	0.17 - 2.6	1	RM-SD-MF02-03	34	-
SODIUM	52/87	41.3 - 42500	29.2 - 1200	1038	MFP-5	-	-
THALLIUM	8/91	0.24 - 5.2	0.15 - 4	1	MF-AZ+300	0.7	-
VANADIUM	91/91	1.1 - 143	-	31	OU3-A1-SD04-0204	6000	-
ZINC	87/90	4.3 - 24000	92.9 - 146	779	MF-SO-MW103-0608	12000	-
Dioxin (ug/kg)							
TOXICITY EQUIVALENCY (TEQ)	47/47	0.0044 - 17.54		0.936	MFP-5	-	-
Asbestos (%)							
ASBESTOS	178/363	0.99 - 85	0.1 - 0.1	6	MF-SO-MW103-1012	-	-

1 USEPA Soil Screening Levels (USEPA, May 1996). Values associated with dilution and attenuation factor (DAF) of 20 are used.
2 CTDEP, January 1996. State Pollutant Mobility criteria for metals and PCBs are not included since direct comparison of the aqueous SPLP criteria (in ug/L) and the soil analytical results (in ug/kg or mg/kg) cannot be made. TCLP and SPLP results for soil samples are presented in a separate table. In some cases, calculated or surrogate or ceiling value presented as detailed in Table 6-1.
- Not available or not applicable.

TABLE 6-14C

COMPARISON OF LEACHATE CONCENTRATIONS TO SPLP CRITERIA
AREA A1, MORGAN FRANCIS PROPERTIES
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 1 OF 3

	AOC	A1	A1	A1	A1	A1
	BkgMatrix	SOIL	SOIL	SOIL	SOIL	SOIL
	NSAMPLE	OU3-A1-SB01-0002	OU3-A1-SB02-0002	OU3-A1-SB03-0608	OU3-A1-SB04-0406	OU3-A1-SB05-0204
	INTERVAL	0.0-2.0	0.0-2.0	6.0-8.0	4.0-6.0	2.0-4.0
SPLP GB Mobility	SAMP_DATE	07/22/1997	07/22/1997	07/24/1997	07/22/1997	07/18/1997
Criteria						
ug/L (ppb)	PARAMETER					
	Aluminum	37100 J	42900 J	26000 J	2940	1570
60	Antimony	5 U	5 U	11.1	5 U	5 U
500	Arsenic	30.5	12.2	91.6	7 U	7 U
10000	Barium	991 J	1740 J	**20000 J**	62.2	93.7
40	Beryllium	4.8	4.3	2.4	1 U	1 U
50	Cadmium	6	10.2	27.9	1 U	1 U
	Calcium	21300 J	21800 J	50800 J	19100	34400
500	Chromium	25.8 J	21.2 J	498 J	2.4	3.2
4200	Cobalt	21.3	21.1	177 J	2 U	2 U
13000	Copper	1250 J	2620 J	**744000 *J**	115	114
	Iron	31500 J	15400 J	207000 J	4230	3010
150	Lead	**2200 J**	**4960 J**	**553000 *J**	**264**	**400**
	Magnesium	2840	3460	72800	1550	2220
500	Manganese	**1510 J**	**1970 J**	**2320 J**	113	52.6
20	Mercury	0.2 U	0.2 U	0.25 J	0.2 U	0.2 U
1000	Nickel	43.7 J	42.3 J	**3560**	2.4	2.1
	Potassium	2210 UJ	3980 J	5230 J	820	1750
500	Selenium	5 U	5 U	5 U	5 U	5 U
360	Silver	2 U	2 U	2 U	2 U	2 U
	Sodium	8260	7140	4120 J	2950	7740
50	Thallium	6 U	6.2	38.3	6 U	6 U
500	Vanadium	148	112	245	9.1	8.2
50000	Zinc	515	756	28100	169	16.5

U - Not detected; UJ - Detection limit approximate; J - Quantitation approximate;
* - From dilution analysis; R - Rejected; EB/TB - Equipment/Trip Blank contamination; NA - Not Analyzed

TABLE 6-14C

COMPARISON OF LEACHATE CONCENTRATIONS TO SPLP CRITERIA
AREA A1, MORGAN FRANCIS PROPERTIES
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 2 OF 3

	AOC	A1	A1	A1	A1	A1
	BkgMatrix	SOIL	SOIL	SOIL	SOIL	SOIL
	NSAMPLE	OU3-A1-SB06-0204	OU3-A1-SB07-0608	OU3-A1-SB10-0002	OU3-A1-SB11-0002	OU3-A1-SS01-0002
	INTERVAL	2.0-4.0	6.0-8.0	0.0-2.0	0.0-2.0	0.0-2.0
SPLP GB Mobility	SAMP_DATE	07/21/1997	07/21/1997	07/23/1997	07/23/1997	07/08/1997
Criteria						
ug/L (ppb)	PARAMETER					
	Aluminum	12100	1210	17000 J	14300 J	1560
60	Antimony	5 U	5 U	5 U	5 U	5 U
500	Arsenic	8.1	7 U	12.7	140	11.8
10000	Barium	264	56.6	297 J	7430 J	1510
40	Beryllium	1 U	1 U	1.4	1 U	1 U
50	Cadmium	1 U	1 U	1.1	16.5	1 U
	Calcium	3580	11900	23700 J	15500 J	13300
500	Chromium	9.5	3.4	13.5 J	156 J	28.8
4200	Cobalt	9.1	2 U	23	42.6	3.8
13000	Copper	621	93.1	181 J	**174000 *J**	5500
	Iron	9890	991	11100 J	28300 J	7400
150	Lead	**852**	69.9	**271 J**	**95500 *J**	**2390**
	Magnesium	2320	4290	9010	22000	11200
500	Manganese	117	25.9	**1440 J**	**1050 J**	69.4
20	Mercury	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
1000	Nickel	12.7	2.6	14.5 J	856 J	74.9
	Potassium	1280	2940	2960 UJ	3130 UJ	1730
500	Selenium	5 U	5 U	5 U	5 U	5 U
360	Silver	2 U	2 U	2 U	2 U	2 U
	Sodium	6540	20800	1050	494	1610
50	Thallium	6 U	6 U	6 U	12.5	6 U
500	Vanadium	32.3	3.9	31.6	128	53.6
50000	Zinc	116	15	102	20100	1020

U - Not detected; UJ - Detection limit ar ·imate; J - Quantitation approximate;
* - From dilution analysis; R - Rejected; EB/TB - Eq :nt/Trip Blank contamination; NA - Not Analyzed

TABLE 6-14C

COMPARISON OF LEACHATE CONCENTRATIONS TO SPLP CRITERIA
AREA A1, MORGAN FRANCIS PROPERTIES
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 3 OF 3

	AOC	A1	A1	A1	A1
	BkgMatrix	SOIL	SOIL	SOIL	SOIL
	NSAMPLE	OU3-A1-SS01-0204	OU3-A1-SS04-0002	OU3-A1-SS06-0002	OU3-A1-SS06-0204
	INTERVAL	2.0-4.0	0.0-2.0	0.0-2.0	2.0-4.0
SPLP GB Mobility	SAMP_DATE	07/08/1997	07/08/1997	08/05/1997	08/05/1997
Criteria					
ug/L (ppb)	PARAMETER				
	Aluminum	67.8	3120	39800	19900 J
60	Antimony	5 U	5 U	5 U	5 U
500	Arsenic	7 U	7 U	31	13.6
10000	Barium	286	44.9	1490	454 J
40	Beryllium	1 U	1 U	4	1.9
50	Cadmium	1 U	1 U	6.7	2.1
	Calcium	5100	5550	24200	16800 J
500	Chromium	1 U	3.3	36.3	27.1 J
4200	Cobalt	2 U	2 U	17.6	26
13000	Copper	251	87.5	547	307 J
	Iron	254	5080	22900	14900 J
150	Lead	131	107	**1580**	**596 J**
	Magnesium	627	1200	3130	3680
500	Manganese	4.9	78	**1260**	**1790 J**
20	Mercury	0.2 U	0.2 U	0.2 U	0.2 U
1000	Nickel	15.7	3.8	37.8	20.3 J
	Potassium	850	1610	1660 U	2320 UJ
500	Selenium	5 U	5 U	5 U	5 U
360	Silver	2 U	2 U	2 U	2 U
	Sodium	248	912	2300	1220
50	Thallium	6 U	6 U	6 U	6 U
500	Vanadium	4.4	9.6	86.9	50.5
50000	Zinc	284	73.8	550	207

U - Not detected; UJ - Detection limit approximate; J - Quantitation approximate;
* - From dilution analysis; R - Rejected; EB/TB - Equipment/Trip Blank contamination; NA - Not Analyzed

TABLE 6-15

SELECTION OF CHEMICALS OF POTENTIAL CONCERN
AREA A-1, MORGAN FRANCIS PROPERTIES
SURFACE WATER
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 1 OF 2

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	COPC Screening Level (1)	N/C (2)	Federal MCL (3)	State MCL (4)	Select As COPC? (5)
Volatiles (ug/L)										
1,1,1-TRICHLOROETHANE	6/6	3 - 170	-	57	RM-SW-MF01-02	54	N	200	200	Y
1,1-DICHLOROETHANE	6/6	6 - 45	-	20	RM-SW-MF01-02	81	N	-	-	N
1,1-DICHLOROETHENE	4/6	8 - 95	10 - 10	32	RM-SW-MF01-02	0.044	C	7	7	Y
1,2-DICHLOROETHENE (TOTAL)	6/6	7 - 110	-	48	RM-SW-MF01-02	5.5	N	70	70	Y
BENZENE	5/6	1 - 2	10 - 10	2	RM-SW-MF02-01, 02, & 03; RM-SW-MF01-02	0.36	C	5	5	Y
BROMODICHLOROMETHANE	1/6	1 - 1	10 - 10	4	RM-SW-MF02-01	0.17	C	100/80	100	Y
CARBON DISULFIDE	1/6	36 - 36	10 - 10	10	RM-SW-MF03-03	100	N	-	-	N
CHLOROBENZENE	5/6	1 - 4	10 - 10	3	RM-SW-MF02-02	3.9	N	100	100	Y
CHLOROFORM	5/6	1 - 4	10 - 10	3	RM-SW-MF02-01	0.15	C	100/80	100	Y
METHYLENE CHLORIDE	1/6	2 - 2	10 - 17	5	RM-SW-MF03-03	4.1	C	5	5	N
TETRACHLOROETHENE	3/6	1 - 3	10 - 10	3	RM-SW-MF03-03	1.1	C	5	5	Y
TOLUENE	1/6	5 - 5	10 - 10	5	RM-SW-MF01-02	75	N	1000	1000	N
TRICHLOROETHENE	6/6	1 - 76	-	30	RM-SW-MF01-02	1.6	C	5	5	Y
VINYL CHLORIDE	6/6	3 - 24	-	10	RM-SW-MF01-02	0.019	C	2	2	Y
Semivolatiles (ug/L)										
BIS(2-ETHYLHEXYL)PHTHALATE	2/6	1 - 1	10 - 10	4	RM-SW-MF01 & 02-02	4.8	C	6	6	N
DI-N-OCTYL PHTHALATE	3/6	1 - 2	10 - 10	3	RM-SW-MF03-03	73	N	-	-	N
DIETHYL PHTHALATE	2/6	2 - 3	10 - 10	4	RM-SW-MF03-03	2900	N	-	-	N
DIMETHYL PHTHALATE	1/6	4 - 4	10 - 10	5	RM-SW-MF01-01	37000	N	-	-	N
Pesticides/PCBs (ug/L)										
4,4'-DDT	1/6	0.0015 - 0.0015	0.1 - 0.1	0.04	RM-SW-MF01-02	0.2	C	-	-	N
ALDRIN	1/6	0.001 - 0.001	0.05 - 0.05	0.02	RM-SW-MF02-03	0.004	C	-	-	N
ALPHA-BHC	2/6	0.0035 - 0.0039	0.05 - 0.05	0.02	RM-SW-MF02-02	0.011	C	-	-	N
DELTA-BHC	1/6	0.001 - 0.001	0.05 - 0.05	0.02	RM-SW-MF01-02	-	-	-	-	N
DIELDRIN	3/6	0.001 - 0.0039	0.1 - 0.1	0.03	RM-SW-MF01-02	0.0042	C	-	-	N
GAMMA-CHLORDANE	1/6	0.002 - 0.002	0.05 - 0.05	0.02	RM-SW-MF03-03	0.19	C	2	2	Y
HEPTACHLOR	1/6	0.0011 - 0.0011	0.05 - 0.05	0.02	RM-SW-MF01-02	0.0023	C	0.4	0.4	N
Inorganics (ug/L)										
ANTIMONY	1/6	63.7 - 63.7	5 - 26.3	14	RM-SW-MF03-03	1.5	N	6	6	Y
ARSENIC	2/6	17.9 - 18.8	1.8 - 14.7	8	RM-SW-MF01-01	0.045	C	50	50	Y
BARIUM	6/6	29.8 - 75.1	-	41	RM-SW-MF02-03	260	N	2000	2000	N
CALCIUM	6/6	29900 - 50000	-	37633	RM-SW-MF01-01	-	-	-	-	N
COPPER	2/6	8.1 - 9.8	8 - 14.1	6	RM-SW-MF02-02	150	N	1300	-	N
IRON	6/6	231 - 943	-	701	RM-SW-MF02-02	1100	N		-	N
MAGNESIUM	6/6	12900 - 51000	-	26717	RM-SW-MF01-02	-	-	-	-	N
MANGANESE	6/6	379 - 1600	-	860	RM-SW-MF01-02	73	N	-	-	Y
MERCURY	2/6	0.11 - 0.12	0.2 - 0.2	0.1	RM-SW-MF03-03	1.1	N	2	2	N
POTASSIUM	5/6	7270 - 30500	5930 - 5930	14979	RM-SW-MF01-02	-	-	-	-	N

TABLE 6-15

SELECTION OF CHEMICALS OF POTENTIAL CONCERN
AREA A-1, MORGAN FRANCIS PROPERTIES
SURFACE WATER
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 2 OF 2

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	COPC Screening Level (1)	N/C (2)	Federal MCL (3)	State MCL (4)	Select As COPC? (5)
SELENIUM	1/6	4 - 4	2.5 - 5	2	RM-SW-MF01-01	18	N	50	50	N
SODIUM	6/6	61100 - 454000	-	213000	RM-SW-MF01-02	-	-	-	28000[6]	N
ZINC	6/6	35 - 77.7	-	58	RM-SW-MF02-01	1100	N	5000	-	N

1 Based on current USEPA Region III guidance (USEPA Region III, 10-1-98). Value for noncarcinogens is based on a target hazard quotient of 0.1. Value for carcinogens is based on a cancer risk of 1E-6.

2 COPC screening level based on noncarcinogenic (N)/carcinogenic (C) effects.

3 Maximum Contaminant Level (USEPA, October 1996). Values presented for lead and copper are action levels.

4 Title 19, Health and Safety, the Public Health Code of the State of Connecticut, Chapter 11 Environmental Health.

5 Chemical selected as COPC if maximum detected concentration exceeds screening levels or MCLs.

6 This is a state notification level and is not risk based.

- Not available or not applicable.

TABLE 6-16

SELECTION OF RECEPTORS AND EXPOSURE PATHWAYS
AREA A-1, MORGAN FRANCIS PROPERTIES
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 1 OF 3

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	Soils, Wetland Soils, and Sediments	Soils, Wetland Soils, and Sediments	Exposed Surface Soils near Residences	Frequent Recreational User	Adult	Ingestion	Quant	Residential properties are located in the vicinity of the site, along Blakeman Place and Meadow Street. Adults may be exposed to contaminated soil near residences through inadvertent contact.
								Residents in the vicinity of the site are not expected to to be exposed to wetland soils and sediments.
						Dermal	Quant	Residential properties are located in the vicinity of the site, along Blakeman Place and Meadow Street. Adults may be exposed to contaminated soil near residences through inadvertent contact.
								Residents in the vicinity of the site are not expected to to be exposed to wetland soils and sediments.
						Inhalation	Qual	Inhalation exposures represent a relatively minor exposure relative to dermal and ingestion pathways. A qualitative comparison of site soil data to USEPA Generic SSLs will be performed.
								Residents in the vicinity of the site are not expected to to be exposed to wetland soils and sediments.
					Child	Ingestion	Quant	Residential properties are located in the vicinity of the site, along Blakeman Place and Meadow Street. Children may be exposed to contaminated soil through inadvertent contact.
								Residents in the vicinity of the site are not expected to to be exposed to wetland soils and sediments.
						Dermal	Quant	Residential properties are located in the vicinity of the site, along Blakeman Place and Meadow Street. Children may be exposed to contaminated soil through inadvertent contact.
								Residents in the vicinity of the site are not expected to to be exposed to wetland soils and sediments.
						Inhalation	Qual	Inhalation exposures represent a relatively minor exposure relative to dermal and ingestion pathways. A qualitative comparison of site soil data to USEPA Generic SSLs will be performed.
								Residents in the vicinity of the site are not expected to to be exposed to wetland soils and sediments.
			All Exposed Surface Soils, Wetland Soils, and Sediments	Trespasser	Adolescent	Ingestion	Quant	All areas of A-1 are accessible to adolescent trespassers, who may be exposed to contaminated soil/sediment through inadvertent contact.
						Dermal	Quant	All areas of A-1 are accessible to adolescent trespassers, who may be exposed to contaminated soil/sediment through inadvertent contact.
						Inhalation	Qual	Inhalation exposures represent a relatively minor exposure relative to dermal and ingestion pathways. A qualitative comparison of site soil/sediment data to USEPA Generic SSLs will be performed.

TABLE 6-16

SELECTION OF RECEPTORS AND EXPOSURE PATHWAYS
AREA A-1, MORGAN FRANCIS PROPERTIES
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 2 OF 3

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
			Exposed Surface Soils in Commercial Area	Commercial Worker	Adult	Ingestion	Quant	Workers may be currently exposed to contaminated soil through inadvertent contact. Workers are not expected to be exposed to contaminated soil/sediment in the bed or along the banks of the creek.
						Dermal	Quant	Workers may be currently exposed to contaminated soil through inadvertent contact. Workers are not expected to be exposed to contaminated soil/sediment in the bed or along the banks of the creek.
						Inhalation	Qual	Inhalation exposures represent a relatively minor exposure relative to dermal and ingestion pathways. A qualitative comparison of site soil data to USEPA Generic SSLs will be performed.
	Surface Water	Surface Water	Surface Water in the Creek	Frequent Recreational User	Adult	Ingestion	None	The portion of Ferry Creek located in Area A-1 is not attractive for recreational purposes. Residents in the vicinity of the site are not expected to be exposed to surface water.
						Dermal	None	The portion of Ferry Creek located in Area A-1 is not attractive for recreational purposes. Residents in the vicinity of the site are not expected to be exposed to surface water.
						Inhalation	None	The portion of Ferry Creek located in Area A-1 is not attractive for recreational purposes. Residents in the vicinity of the site are not expected to be exposed to surface water.
					Child	Ingestion	None	The portion of Ferry Creek located in Area A-1 is not attractive for recreational purposes. Residents in the vicinity of the site are not expected to be exposed to surface water.
						Dermal	None	The portion of Ferry Creek located in Area A-1 is not attractive for recreational purposes. Residents in the vicinity of the site are not expected to be exposed to surface water.
						Inhalation	None	The portion of Ferry Creek located in Area A-1 is not attractive for recreational purposes. Residents in the vicinity of the site are not expected to be exposed to surface water.
				Trespasser	Adolescent	Ingestion	Qual	Exposure is expected to be minimal since limited contact with surface water is anticipated.
						Dermal	Quant	All areas of A-1, including Ferry Creek, are accessible to adolescent trespassers, who may be exposed to contaminated surface water through inadvertent contact.
						Inhalation	None	Inhalation exposures represent a relatively minor exposure relative to dermal and ingestion pathways.
				Commercial Worker	Adult	Ingestion	None	Workers are not expected to be exposed to contaminated surface water.
						Dermal	None	Workers are not expected to be exposed to contaminated surface water.
						Inhalation	None	Workers are not expected to be exposed to contaminated surface water.

TABLE 6-16

SELECTION OF RECEPTORS AND EXPOSURE PATHWAYS
AREA A-1, MORGAN FRANCIS PROPERTIES
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 3 OF 3

Scenario Timeframe	Medium	Exposure Medium	Exposure Point	Receptor Population	Receptor Age	Exposure Route	Type of Analysis	Rationale for Selection or Exclusion of Exposure Pathway
Future	Soils, Wetland Soils, and Sediments	Soils, Wetland Soils, and Sediments	All Soils in Commercial Area, regardless of Depth and Pavement	Commercial Worker	Adult	Ingestion	Quant	In the future contaminated soils currently located at depth and beneath pavement may be brought to the surface, exposing future commercial workers through inadvertent contact.
								Workers are not expected to be exposed to contaminated wetland soils/sediments.
						Dermal	Quant	In the future contaminated soils currently located at depth and beneath pavement may be brought to the surface, exposing future commercial workers through inadvertent contact.
								Workers are not expected to be exposed to contaminated wetland soils/sediments.
						Inhalation	Qual	Inhalation exposures represent a relatively minor exposure relative to dermal and ingestion pathways. A qualitative comparison of site soil data to USEPA Generic SSLs will be performed.
								Workers are not expected to be exposed to contaminated wetland soils/sediments.
	Surface Water	Surface Water	Surface Water in the Creek	Commercial Worker	Adult	Ingestion	None	Workers are not expected to be exposed to contaminated surface water.
						Dermal	None	Workers are not expected to be exposed to contaminated surface water.
						Inhalation	None	Workers are not expected to be exposed to contaminated surface water.

Notes:

Quant - Quantitative Analysis

Qual - Qualitative Analysis

SSL - Soil Screening Levels

TABLE 6-17

EXPOSURE POINT CONCENTRATIONS
AREA A-1, MORGAN FRANCIS PROPERTIES
FERRY CREEK, STRATFORD, CONNECTICUT

Chemical of Potential Concern	Commercial Worker		Frequent Recreational User (Adult and Child)	Adolescent Trespasser	
	Surface Soil[1] (0 to 2 Feet bgs) (mg/kg)	All Soil[2] (0 to 15 Feet bgs) (mg/kg)	Surface Soil (0 to 2 Feet bgs) (mg/kg)	Surface Soil (0 to 2 Feet bgs) (mg/kg)	Surface Water (ug/L)
Volatile Organic Compounds					
1,1,1-Trichloroethane	NA	NA	NA	NA	92/55
1,1-Dichloroethene	NA	NA	NA	NA	52/32
1,2-Dichloroethene (total)	NA	NA	NA	NA	84/49
Benzene	NA	NA	NA	NA	2
Bromodichloromethane	NA	NA	NA	NA	4
Chlorobenzene	NA	NA	NA	NA	4/3
Chloroform	NA	NA	NA	NA	4/2
Tetrachloroethene	NA	NA	NA	NA	4/3
Trichloroethene	NA	NA	NA	NA	56/30
Vinyl chloride	NA	NA	NA	NA	16/10
Semivolatile Organic Compounds					
Benzo(a)anthracene	7/2	2	2/0.5	3	NA
Benzo(a)pyrene	6/2	2	2/0.5	3	NA
Benzo(b)fluoranthene	6/2	3	4/0.8	6	NA
Benzo(k)fluoranthene	NA	2	NA	NA	NA
Dibenzo(a,h)anthracene	0.2	0.8	0.4/0.2	0.9	NA
Indeno(1,2,3-cd)pyrene	4/1	1	2/0.4	1	NA
Pesticides/PCBs					
Aldrin	NA	0.0047	NA	NA	NA
Gamma-chlordane	NA	NA	NA	NA	0.002
Aroclor-1248	ND	0.12	0.19/0.16	0.12	NA
Aroclor-1254	ND	0.13	ND	0.12	NA
Aroclor-1260	ND	0.1	ND	0.15	NA
Aroclor-1262	130/15	3.7	3.7/0.66	3.5	NA

TABLE 6-17

EXPOSURE POINT CONCENTRATIONS
AREA A-1, MORGAN FRANCIS PROPERTIES
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 2 OF 3

Chemical of Potential Concern	Commercial Worker		Frequent Recreational User (Adult and Child)	Adolescent Trespasser	
	Surface Soil[1] (0 to 2 Feet bgs) (mg/kg)	All Soil[2] (0 to 15 Feet bgs) (mg/kg)	Surface Soil (0 to 2 Feet bgs) (mg/kg)	Surface Soil (0 to 2 Feet bgs) (mg/kg)	Surface Water (ug/L)
Aroclor-1268	270/29	6.7	15/2	13	NA
Aroclor, total	410/44	8.8	19/3.6	10	NA
PCB Congeners:					
(Dioxin-like)					
Toxicity Equivalence (TEQ) Concentration	0.000064	0.000064	0.000064	0.000064	--
(Nondioxin-like)					
Total	2.191	2.191	2.191	2.191	--
Inorganics					
Antimony	9.6/5.1	3.6	ND	6.3	63.7/24.1
Arsenic	21.9/8.1	18.4	28.1/9	9.9	13.1/7.1
Barium	17000	4530	9350/1580	3510	NA
Cadmium	1.9/0.69	0.91	4.4/0.9	2.9	NA
Chromium (total)	215/68	60.8	215/47.2	99.5	NA
Copper	42000/6500	2260	23200/2220	6020	NA
Lead	1160	674	478	813	NA
Manganese	352/270	234	424/240	298	1230/841
Mercury	0.28/0.14	0.53	0.77/0.21	0.37	NA
Nickel	465/148	115	465/86.8	134	NA
Thallium	0.24	0.67	ND	0.79	NA
Vanadium	41.6/32.2	33.3	97.5/33.7	38.4	NA
Zinc	1910/806	1300	1780/599	1030	NA

TABLE 6-17

EXPOSURE POINT CONCENTRATIONS
AREA A-1, MORGAN FRANCIS PROPERTIES
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 3 OF 3

Chemical of Potential Concern	Commercial Worker		Frequent Recreational User (Adult and Child)	Adolescent Trespasser	
	Surface Soil[1] (0 to 2 Feet bgs) (mg/kg)	All Soil[2] (0 to 15 Feet bgs) (mg/kg)	Surface Soil (0 to 2 Feet bgs) (mg/kg)	Surface Soil (0 to 2 Feet bgs) (mg/kg)	Surface Water (ug/L)
Dioxins					
Toxicity Equivalence (TEQ) Concentration	0.0175/0.0089	0.002	0.00038/0.0002	0.0081	--

1 Exposure to currently exposed surface soil is assumed for the commercial worker under current land use.
2 Since development of the site for industrial use may occur, exposure to all soil (currently exposed and beneath pavement) to an estimate depth of 15 feet bgs is assumed for the commercial worker under future land use.
ND: Contaminant has been selected as a Chemical of Potential Concern (COPC) for this area/medium; however, this COPC was not detected (ND) in the respective sample subset for this receptor.
NA: Contaminant has not been selected as a COPC for this area/medium; an exposure point concentration is not applicable (NA).
-- Analysis for this chemical was not performed for samples collected from this medium.
For datasets with greater than 10 samples: EPCs represent the 95 percent UCL of the mean for the RME and CTE cases, unless the 95 percent UCL was greater than the maximum reported concentration. If the 95 percent UCL is greater than the maximum, the maximum is selected as the EPC for the RME case and the arithmetic mean is selected as the EPC for the CTE case. For datasets with 10 or less samples: the maximum detected and arithmetic mean concentration are selected as the EPCs for the RME and CTE cases respectively. (When a pair of numbers are presented in a cell of this table, the first number presented is the maximum detected concentration and the second number presented is the arithmetic mean concentration.)

TABLE 6-18A

SUMMARY OF CANCER RISKS AND HAZARD INDICES
REASONABLE MAXIMUM EXPOSURE SCENARIO
AREA A-1, MORGAN FRANCIS PROPERTIES
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 1 OF 2

Receptor	Media	Exposure Route	Cancer Risk	Chemicals with Cancer Risk $>10^{-4}$	Chemicals with Cancer Risk $>10^{-5}$	Chemicals with Cancer Risk $>10^{-6}$	Hazard Index	Chemicals with HI > 1
Commercial Worker (Current/Future)	Exposed Surface Soils in Commercial Area	Incidental Ingestion	1.2E-03	Aroclor (total), TEQ-Dioxins/Furans	Benzo(a)pyrene, Arsenic	Benzo(a)anthracene, Benzo(b)fluoranthene, Indeno(1,2,3-cd)pyrene	4.6E-01	--
		Dermal Contact	3.5E-04	Aroclor (total), TEQ-Dioxins/Furans	--	Benzo(a)pyrene, Arsenic	1.3E-02	--
		Total	1.6E-03	Aroclor (total), TEQ-Dioxins/Furans	Benzo(a)pyrene, Arsenic	Benzo(a)anthracene, Benzo(b)fluoranthene, Indeno(1,2,3-cd)pyrene	4.7E-01	--
Commercial Worker (Future)	All Soils in Entire Area Regardless of Depth and Pavement	Incidental Ingestion	1.4E-04	TEQ-Dioxins/Furans	--	Benzo(a)pyrene, Dibenzo(a,h)anthracene, Aroclor (total), Arsenic	2.0E-01	--
		Dermal Contact	2.9E-05	--	TEQ-Dioxins/Furans	Benzo(a)pyrene, Dibenzo(a,h)anthracene, Aroclor (total), Arsenic	1.4E-02	--
		Total	1.7E-04	TEQ-Dioxins/Furans	Aroclor (total), Arsenic	Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene	2.1E-01	--
Frequent Recreational User Adult (Current/Future)	Exposed Surface Soils near Residences	Incidental Ingestion	3.2E-05	--	TEQ-Dioxins/Furans	Benzo(a)pyrene, Aroclor (total), Arsenic	2.2E-01	--
		Dermal Contact	9.1E-06	--	--	Benzo(a)pyrene, Aroclor (total), Arsenic, TEQ-Dioxins/Furans	8.6E-03	--
		Total	4.1E-05	--	Aroclor (total), TEQ-Dioxins/Furans	Benzo(a)pyrene, Arsenic	2.3E-01	--

TABLE 6-18A

SUMMARY OF CANCER RISKS AND HAZARD INDICES
REASONABLE MAXIMUM EXPOSURE SCENARIO
AREA A-1, MORGAN FRANCIS PROPERTIES
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 2 OF 2

Receptor	Media	Exposure Route	Cancer Risk	Chemicals with Cancer Risk $>10^{-4}$	Chemicals with Cancer Risk $>10^{-5}$	Chemicals with Cancer Risk $>10^{-6}$	Hazard Index	Chemicals with HI > 1
Frequent Recreational User Child (Current/Future)	Exposed Surface Soil near Residences	Incidental Ingestion	7.5E-05	--	Arsenic, Aroclor (total), TEQ-Dioxins/Furans	Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene	2.0E+00	--
		Dermal Contact	1.5E-05	--	--	Benzo(a)pyrene, Arsenic, Aroclor (total), TEQ-Dioxins/Furans	5.9E-02	--
		Total	9.1E-05	--	Arsenic, Aroclor (total), TEQ-Dioxins/Furans	Benzo(a)pyrene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene	2.1E+00	--
Adolescent Trespasser (Current/Future)	All Exposed Surface Soils, Wetland Soils, and Sediments	Incidental Ingestion	5.1E-05	--	TEQ-Dioxins/Furans	--	5.1E-02	--
		Dermal Contact	3.6E-05	--	--	TEQ-Dioxins/Furans	1.7E-03	--
		Total	5.6E-05	--	TEQ-Dioxins/Furans	Benzo(a)pyrene, Aroclor (total)	5.3E-02	--
	Surface Water in the Creek	Dermal Contact	1.7E-06	--	--	1,1-Dichloroethene	3.5E-02	--
		Total All Routes	5.8E-05	--	TEQ-Dioxins/Furans	Benzo(a)pyrene, Aroclor (total), 1,1-Dichloroethene	8.8E-02	--

TABLE 6-18B

SUMMARY OF CANCER RISKS AND HAZARD INDICES - CENTRAL TENDENCY EXPOSURES
AREA A-1, MORGAN FRANCIS PROPERTIES
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 1 OF 1

Receptor	Media	Exposure Route	Cancer Risk	Chemicals with Cancer Risk $>10^{-4}$	Chemicals with Cancer Risk $>10^{-5}$	Chemicals with Cancer Risk $>10^{-6}$	Hazard Index	Chemicals with HI > 1
Commercial Worker (Current)	Exposed Surface Soils in Commercial Area	Incidental Ingestion	8.9E-05	--	TEQ-Dioxins/Furans	Aroclor, (total)	7.2E-02	--
		Dermal Contact	3.1E-06	--	--	TEQ-Dioxins/Furans	4.7E-04	--
		Total	9.2E-05	--	TEQ-Dioxins/Furans	Aroclor (total), Benzo(a)pyrene	7.3E-02	--
Commercial Worker (Future)	Soils, Wetland Soils, and Sediment	Incidental Ingestion	2.5E-05	--	TEQ-Dioxins/Furans	Arsenic	9.8E-02	--
		Dermal Contact	9.6E-07	--	--	--	1.4E-03	--
		Total	2.6E-05	--	TEQ-Dioxins/Furans	Benzo(a)pyrene, Arsenic	1.0E-01	--
Frequent Recreational User Adult	Exposed Surface Soil near	Incidental Ingestion	1.6E-06	--	--	--	2.7E-02	--
		Dermal Contact	8.8E-08	--	--	--	3.6E-04	--
		Total	1.7E-06	--	--	--	2.8E-02	--
Frequent Recreational User Child	Exposed Surface Soil near Residences	Incidental Ingestion	4.2E-06	--	--	Arsenic , TEQ-Dioxins/Furans	2.5E-01	--
		Dermal Contact	3.6E-07	--	--	--	5.1E-03	--
		Total	4.5E-06	--	--	Arsenic , TEQ-Dioxins/Furans	2.6E-01	--
Adolescent Trespasser (Current/Future)	All Exposed Surface Soils, Wetland Soils, and Sediments	Incidental Ingestion	1.3E-05	--	TEQ-Dioxins/Furans	--	2.6E-02	--
		Dermal Contact	3.0E-07	--	--	--	2.4E-04	--
		Total	1.3E-05	--	TEQ-Dioxins/Furans	--	2.6E-02	--
	Surface Water in the Creek	Dermal Contact	4.6E-07	--	--	--	1.7E-02	--
		Total All Routes	1.4E-05	--	TEQ-Dioxins/Furans	--	4.3E-02	--

TABLE 6-19

SUMMARY OF REMEDIAL INVESTIGATIONS AND RECOMMENDATIONS
AREA A-1, MORGAN FRANCIS PROPERTIES
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 1 OF 1

Area of Concern	Chemicals of Potential Concern			Receptor	Reasonable Maximum Exposure (RME) Risk Estimates						RME Lead Results (1) (2)	Asbestos Results (3)
					ILCR	Risk Drivers			HI	Risk Drivers		
A-1 Morgan Francis Property	Surface Soil/Sediment (0 to 2 feet)			Frequent Recreational User (adult) (current/future)	4 10E-05	$>10^{-4}$: None	$>10^{-5}$: Aroclor (total), TEQ-Dioxins/Furans	$>10^{-6}$: benzo(a)pyrene, arsenic	0 23	>1 0: None	Slope Factor Approach - Fetal blood lead level (6 2 to 9 5 ug/dl) was below the level of concern (10 ug/dl)	Asbestos was detected at an average concentration of 5 % This exceeds the 1% concentration which defines an asbestos-containing material
	benzo(a)anthracene	arsenic	thallium									
	benzo(a)pyrene	barium	vanadium									
	benzo(b)fluoranthene	cadmium	zinc									
	dibenzo(a,h)anthracene	chromium	Aroclor-1248									
	indeno(1,2,3-cd)pyrene	copper	Aroclor-1254									
	PCB congeners	lead	Aroclor-1260	Frequent Recreational User (adult) (current/future) (PCB congener data only)	2 60E-06	$>10^{-4}$: None	$>10^{-5}$: None	$>10^{-6}$: Dioxin-like congeners, Nondioxin-like congeners	NA	>1 0: None		
	dioxins/furans	manganese	Aroclor-1262									
	asbestos	mercury	Aroclor-1268									
	antimony	nickel		Frequent Recreational User (child) (current/future)	9 10E-05	$>10^{-4}$: None	$>10^{-5}$: arsenic, Aroclor (total), TEQ-Dioxins/Furans	$>10^{-6}$: benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene	2 1	>1 0: None	IEUBK - 5 8 ug/dl was below the level of concern (10 ug/dl) for the residential child However, 11 3% of the children had a blood lead level above 10ug/dl	
				Trespasser (adolescent) (current/future)	5 60E-05	$>10^{-4}$: None	$>10^{-5}$: TEQ-Dioxins/Furans	$>10^{-6}$: benzo(a)pyrene, Aroclor (total)	0 05	>1 0: None		
				Commercial Worker (current/future)	1 60E-03	$>10^{-4}$: Aroclor (total), TEQ-Dioxins/Furans	$>10^{-5}$: benzo(a)pyrene, arsenic	$>10^{-6}$: benzo(a)anthracene, benzo(b)fluoranthene, indeno(1,2,3-cd)pyrene	0 47	>1 0: None	Slope Factor Approach - The fetal blood lead level (12 2 to 17 2 ug/dl) exceeded the established level of concern (10 ug/dl)	
				Commercial Worker (current/future) (PCB congener data only)	4 70E-06	$>10^{-4}$: None	$>10^{-5}$: None	$>10^{-6}$: Dioxin-like congeners, Nondioxin-like congeners	NA	>1 0: None		
	All Soil/Sediment (0 to15 feet)			Commercial Worker (future)	1 70E-04	$>10^{-4}$: TEQ-Dioxins/Furans	$>10^{-5}$: Aroclor (total), arsenic	$>10^{-6}$: benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene	0 21	>1 0: None	Slope Factor Approach - The fetal blood lead level (9 8 to 14 2 ug/dl) exceeded the established level of concern (10 ug/dl) slightly	Asbestos was detected at an average concentration of 6 % This exceeds the 1% concentration which defines an asbestos-containing material
	benzo(a)anthracene	antimony	nickel									
	benzo(a)pyrene	arsenic	thallium									
	benzo(b)fluoranthene	barium	vanadium									
	benzo(k)fluoranthene	cadmium	zinc									
	dibenzo(a,h)anthracene	chromium, total	Aroclor-1248									
	indeno(1,2,3-cd)pyrene	copper	Aroclor-1254									
	aldrin	lead	Aroclor-1260									
	asbestos	manganese	Aroclor-1262									
	dioxins/furans	mercury	Aroclor-1268									
	PCB congeners											
	Surface Water			Trespasser (adolescent) (current/future)	1 70E-06	$>10^{-4}$: None	$>10^{-5}$: None	$>10^{-6}$: 1,1-dichloroethene	0 035	>1 0: None		
	1,1,1-trichloroethane	chlorobenzene	gamma-chlordane									
	1,1-dichloroethene	chloroform	antimony									
	1,2-dichloroethene, total	tetrachloroethene	arsenic									
	benzene	trichloroethene	manganese									
	bromodichloromethane	vinyl chloride										

1 The risk from lead for an adult was evaluated following "Recommendations of the Technical Review Workgroup for Lead for the Interim Approach to Assessing Risks Associated with Adult Exposures to Lead in Soil", USEPA, December 1996.
2 The risk from lead exposure for a residential child was evaluated with the Integrated Exposure Uptake Biokinetic Model (IEUBK), EPA/540/R-93/081, 1994.
3 The National Emission Standards for Hazardous Air Pollutants - EPA regulation 40 CFR Subpart M, Part 61 (NESHAP) defines asbestos as material containing one percent asbestos.

TABLE 6-20

SELECTION OF CHEMICALS OF POTENTIAL CONCERN
AREA A-2, SPADA PROPERTY
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT
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Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	COPC Screening Level (1)	N/C (2)	SSL Inhalation (3)	State Residential Direct Exposure (4)	State Industrial Direct Exposure (4)	Background Concentration (5)	Select As COPC? (6)
Volatile Organic Compounds (ug/kg)												
CARBON DISULFIDE	1/3	2 - 2	11 - 12	5	SP-SO-SB8-0002	780000	N	720000	500000	1000000	-	N
Semivolatile Organic Compounds (ug/kg)												
2,4-DIMETHYLPHENOL	3/10	215 - 1800	380 - 840	514	OU3-A2-SB03-0002	160000	N	-	1000000	2500000	-	N
2-METHYLNAPHTHALENE	5/10	39 - 240	380 - 4500	378	OU3-A2-SS04-0002	160000	N	-	1000000	2500000	-	N
2-METHYLPHENOL	1/10	130 - 130	380 - 4500	472	OU3-A2-SB03-0002	390000	N	-	1000000	2500000	-	N
4-METHYLPHENOL	4/10	130 - 2400	380 - 840	569	OU3-A2-SB03-0002	39000	N	-	340000	2500000	-	N
ACENAPHTHENE	6/10	40 - 3400	380 - 700	678	OU3-A2-SS05-0002	470000	N	-	1000000	2500000	-	N
ACENAPHTHYLENE	10/10	100 - 3200	-	782	DPS3	-		-	1000000	2500000	-	N
ANTHRACENE	10/10	110 - 5900	-	1812	OU3-A2-SS05-0002	2300000	N	-	1000000	2500000	-	N
BENZO(A)ANTHRACENE	10/10	400 - 13000	-	3444	DPS3, DPS3	880	C	-	1000	7800	-	Y
BENZO(A)PYRENE	10/10	460 - 12000	-	3423	DPS3	88	C	-	1000	1000	-	Y
BENZO(B)FLUORANTHENE	10/10	540 - 11000	-	3057	DPS3, DPS3	880	C	-	1000	7800	-	Y
BENZO(G,H,I)PERYLENE	10/10	170 - 4300	-	1360	OU3-A2-SS04-0002	-		-	1000000	2500000	-	N
BENZO(K)FLUORANTHENE	9/10	380 - 11000	750 - 750	2698	DPS3	8800	C	-	8400	78000	-	Y
BIS(2-ETHYLHEXYL)PHTHALATE	2/10	64 - 130	380 - 4500	459	OU3-A2-SB03-0002	46000	C	31000000	44000	410000	-	N
BUTYLBENZYL PHTHALATE	1/10	28 - 28	380 - 4500	461	DPS6	1600000	N	930000	1000000	2500000	-	N
CARBAZOLE	9/10	54 - 1900	440 - 440	463	OU3-A2-SS04-0002	32000	C	-	31000	290000	-	N
CHRYSENE	10/10	740 - 14000	-	3817	DPS3, DPS3	88000	C	-	84000	780000	-	N
DI-N-BUTYL PHTHALATE	2/10	49 - 200	380 - 4500	463	SP-SO-MW110D-0002	780000	N	2300000	1000000	2500000	-	N
DI-N-OCTYL PHTHALATE	1/10	12 - 12	380 - 4500	460	SP-SO-MW110D-0002	160000	N	10000000	1000000	2500000	-	N
DIBENZO(A,H)ANTHRACENE	7/10	98 - 2300	410 - 4500	730	OU3-A2-SS04-0002	88	C	-	84	780	-	Y
DIBENZOFURAN	5/10	45 - 3200	380 - 700	663	OU3-A2-SS05-0002	31000	N	-	270000	2500000	-	N
FLUORANTHENE	10/10	710 - 32000	-	8531	DPS3	310000	N	-	1000000	2500000	-	N
FLUORENE	8/10	80 - 6500	390 - 440	1227	OU3-A2-SS05-0002	310000	N	-	1000000	2500000	-	N
INDENO(1,2,3-CD)PYRENE	9/10	210 - 5700	390 - 390	1630	DPS3	880	C	-	840	7800	-	Y
NAPHTHALENE	6/10	22 - 550	380 - 4500	406	OU3-A2-SS04-0002	160000	N	-	1000000	2500000	-	N
PHENANTHRENE	10/10	470 - 21000	-	6290	OU3-A2-SS05-0002	-	-	-	1000000	2500000	-	N
PHENOL	4/10	190 - 1200	380 - 840	367	DPS3	4700000	N	-	1000000	2500000	-	N
PYRENE	10/10	600 - 32000	-	8137	DPS3	230000	N	-	1000000	2500000	-	N
Pesticides/PCBs (ug/kg)												
4,4'-DDD	4/16	4.8 - 7.2	3.5 - 120	14	OU3-A2-SS03-0002	2700	C	-	2600	24000	-	N
4,4'-DDE	3/15	2.2 - 4.9	3.4 - 120	12	SPTS006	1900	C	-	1800	17000	-	N
ALPHA-CHLORDANE	6/16	0.69 - 37	1.8 - 62	8	DPS3	1800	C	20000	490	2200	-	N
AROCLOR-1248	2/16	47 - 250	34 - 1200	139	OU3-A2-SS02-0002	320	C	-	1000	10000	-	Y
AROCLOR-1262	13/16	130 - 19000	40 - 360	3862	DPS3	320	C	-	1000	10000	-	Y
AROCLOR-1268	13/16	150 - 32000	40 - 350	6408	OU3-A2-SB03-0002	320	C	-	1000	10000	-	Y
DIELDRIN	5/15	0.37 - 11	3.4 - 120	12	SP-SO-SB8-0002	40	C	1000	38	360	-	N
ENDOSULFAN II	4/15	1.1 - 17	3.4 - 120	13	SPTS006	47000	N	-	410000	1200000	-	N
ENDRIN	1/16	160 - 160	3.4 - 120	22	DPS3	2300	N	-	20000	610000	-	N
ENDRIN ALDEHYDE	6/14	4.1 - 560	4 - 45	92	OU3-A2-SB03-0002	-	-	-	20000	610000	-	N
ENDRIN KETONE	2/16	10 - 94	3.4 - 120	18	SPDPS001	-	-	-	20000	610000	-	N
GAMMA-CHLORDANE	7/15	0.65 - 71	1.8 - 62	11	DPS3	1800	C	20000	490	2200	-	N
HEPTACHLOR	1/16	0.25 - 0.25	1.8 - 62	7	SPHMB+100	140	C	100	140	1300	-	N
HEPTACHLOR EPOXIDE	1/16	5.9 - 5.9	1.8 - 62	7	SP-SO-SB8-0002	70	C	5000	67	630	-	N

TABLE 6-20

SELECTION OF CHEMICALS OF POTENTIAL CONCERN
AREA A-2, SPADA PROPERTY
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT
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Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	COPC Screening Level (1)	N/C (2)	SSL Inhalation (3)	State Residential Direct Exposure (4)	State Industrial Direct Exposure (4)	Background Concentration (5)	Select As COPC? (6)
METHOXYCHLOR	2/13	7.2 - 27	18 - 620	69	SPTS006	39000	N	-	340000	10000000	-	N
Metals (mg/kg)												
ALUMINUM	19/19	4010 - 20000	-	9262	OU3-A2-SS05-0002	7800	N	-	-	-	22600	N
ARSENIC	16/19	2.1 - 44.5	3.4 - 4.9	8	OU3-A2-SS01-0002	0.43	C	750	10	10	11.6	Y
BARIUM	19/19	42.7 - 4260	-	907	DPS3	550	N	690000	4700	140000	329	Y
BERYLLIUM	12/17	0.32 - 0.78	0.19 - 0.85	0.5	FBE+400	16	C	1300	2	2	1.3	N
CADMIUM	7/19	0.49 - 4.8	0.24 - 0.72	1	SPTS006	7.8	N	1800	34	1000	1.4	N
CALCIUM	19/19	1130 - 26200	-	3532	SP-SO-MW110D-0002	-	-	-	-	-	7420	N
CHROMIUM	19/19	13.4 - 73.2	-	28	OU3-A2-SS02-0002	23	N	270	100	100	35.2	Y
COBALT	19/19	5 - 15.4	-	9	OU3-A2-SS02-0002	470	N	-	1000	2500	12.4	N
COPPER	27/32	25 - 10900	300 - 300	1126	DPS3	310	N	-	2500	76000	123	Y
IRON	19/19	10900 - 28300	-	17542	OU3-A2-SS02-0002	2300	N	-	-	-	24100	N(7)
LEAD	115/124	14 - 6550	100 - 100	732	DPS3	400(8)	N	-	500	1000	344	Y
MAGNESIUM	19/19	1820 - 20900	-	6557	OU3-A2-SS02-0002	-	-	-	-	-	5690	N
MANGANESE	19/19	145 - 1050	-	295	OU3-A2-SS05-0002	160	N	-	1600	47000	660	Y
MERCURY	8/19	0.08 - 0.19	0.07 - 0.15	0.1	DPS3	2.3	N	10	20	610	0.28	N
NICKEL	19/19	7.1 - 119	-	37	DPS3	160	N	13000	1400	7500	40.4	N
POTASSIUM	17/19	661 - 2840	364 - 676	1290	OU3-A2-SS02-0002	-	-	-	-	-	2680	N
SELENIUM	1/19	0.9 - 0.9	0.32 - 1.4	0.4	SP-SO-SB8-0002	39	N	-	340	10000	3.3	N
SODIUM	9/17	145 - 389	120 - 254	172	OU3-A2-SS02-0002	-	-	-	-	-	248	N
VANADIUM	19/19	17.7 - 49.4	-	33	OU3-A2-SS03-0002	55	N	-	470	14000	81.9	N
ZINC	19/19	43.6 - 916	-	271	DPS3	2300	N	-	20000	610000	604	N
Dioxin (ug/kg)												
TOXICITY EQUIVALENCY (TEQ)	6/6	0.0107 - 1.071	-	0.496	DPS3	0.0043	C	-	-	-	-	Y
Asbestos (%)												
ASBESTOS	73/112	0.99 - 75	0.1 - 0.1	4	SDFB-003	1	C	-	-	-	-	Y

1 Based on current USEPA Region III guidance (USEPA Region III, 10-1-98). Residential Soil Ingestion is used for soil and sediment. Value for noncarcinogens is based on a target hazard quotient of O.I. Value for carcinogens is based on a cancer risk of IE-6.

2 COPC screening level based on noncarcinogenic (N)/carcinogenic (C) effects.

3 USEPA Soil Screening Levels (USEPA, May 1996).

4 CTDEP, January 1996. In some cases, calculated or surrogate or ceiling value presented as detailed in Table 6-1.

5 Maximum background concentrations presented for inorganics only because background concentrations for organics were not used in COPC selection.

6 COPC selection criteria discussed in Section 6.2 and presented/defined in Table 6-1. Chemical was selected as a COPC (Y = yes) if maximum detected concentration exceeded screening levels, except that noncarcinogenic inorganics detec concentrations exceeding screening levels (based on Region III criteria) but less than Region III risk-based concentrations AND maximum background concentration were not selected as COPCs.

7 USEPA Region I does not advocate quantitative risk assessment of aluminum or iron.

8 Value is based on OSWER soil screening level for residential land use (USEPA, July 14, 1994).

- Not available or not applicable.

TABLE 6-21

SELECTION OF CHEMICALS OF POTENTIAL CONCERN
AREA A-2, SPADA PROPERTY
ALL SOIL/SEDIMENT (0-15')
FERRY CREEK, STRATFORD, CONNECTICUT
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Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	COPC Screening Level (1)	N/C (2)	SSL Inhalation (3)	State Residential Direct Exposure (4)	State Industrial Direct Exposure (4)	Background Concentration (5)	Select As COPC? (6)
Volatile Organic Compounds (ug/kg)												
1,1,2,2-TETRACHLOROETHANE	1/22	33 - 33	11 - 140	14	SP-SO-SB2-0204	3200	C	600	3100	29000	-	N
1,2-DICHLOROETHENE (TOTAL)	2/22	11 - 730	11 - 140	46	SP-SO-SB2-0204	70000	N	1200000	500000	1000000	-	N
2-BUTANONE	4/22	24 - 81	11 - 140	22	SP-SO-SB7-0204	4700000	N	-	500000	1000000	-	N
2-HEXANONE	1/22	14 - 14	11 - 140	15	SP-SO-MW113B-0406	310000	N	-	500000	1000000	-	N
4-METHYL-2-PENTANONE	4/22	2 - 6	11 - 140	14	SP-SO-SB7-0204, SP-SO-MW113B-0406	630000	N	-	500000	1000000	-	N
ACETONE	6/22	45 - 1400	11 - 1200	154	OU3-A2-SB01-0608	780000	N	100000000	500000	1000000	-	N
BENZENE	2/22	330 - 1200	11 - 130	81	SP-SO-SB1-0406	22000	C	800	21000	200000	-	N[7]
CARBON DISULFIDE	10/22	1 - 260	11 - 140	29	SP-SO-SB4-0406	780000	N	720000	500000	1000000	-	N
CHLOROBENZENE	5/22	5 - 94	11 - 140	19	SP-SO-SB2-0204	160000	N	130000	500000	1000000	-	N
ETHYLBENZENE	6/22	7 - 1000	11 - 34	70	OU3-A2-SB02-0406	780000	N	400000	500000	1000000	-	N
METHYLENE CHLORIDE	2/22	14 - 77	11 - 140	19	SP-SO-MW112B-0608	85000	C	13000	82000	760000	-	N
TOLUENE	5/22	37 - 1300	11 - 34	94	SP-SO-SB2-0204	1600000	N	650000	500000	1000000	-	N
TRICHLOROETHENE	2/22	9 - 330	11 - 140	28	SP-SO-SB2-0204	58000	C	5000	56000	520000	-	N
VINYL CHLORIDE	1/22	51 - 51	11 - 140	15	SP-SO-SB2-0204	340	C	30	320	3000	-	N[7]
XYLENES, TOTAL	8/22	7 - 1800	11 - 34	190	OU3-A2-SB02-0406	16000000	N	410000	500000	1000000	-	N
Semivolatile Organic Compounds (ug/kg)												
1,2-DICHLOROBENZENE	1/35	180 - 180	380 - 32000	1304	SP-SO-MW110D-0406	700000	N	560000	500000	1000000	-	N
1,4-DICHLOROBENZENE	1/35	66 - 66	380 - 32000	1300	OU3-A2-SB02-0406	27000	C	-	26000	240000	-	N
2,4-DIMETHYLPHENOL	8/35	215 - 11000	380 - 32000	1765	OU3-A2-SB01-0608	160000	N	-	1000000	2500000	-	N
2-METHYLNAPHTHALENE	19/35	32 - 5700	380 - 17000	995	SP-SO-SB3-1416	160000	N	-	1000000	2500000	-	N
2-METHYLPHENOL	4/35	130 - 1500	380 - 32000	1340	OU3-A2-SB01-0608	390000	N	-	1000000	2500000	-	N
4-CHLORO-3-METHYLPHENOL	1/35	64 - 64	380 - 32000	1294	SP-SO-MW113B-0204	-	-	-			-	N
4-METHYLPHENOL	10/35	44 - 7200	380 - 32000	1603	OU3-A2-SB01-0608	39000	N	-	340000	2500000	-	N
ACENAPHTHENE	22/35	40 - 15000	380 - 17000	1407	SP-SO-SB3-1416	470000	N	-	1000000	2500000	-	N
ACENAPHTHYLENE	24/35	92 - 3200	390 - 32000	1294	DPS3	-	-	-	1000000	2500000	-	N
ANTHRACENE	30/35	100 - 6500	400 - 17000	1478	SP-SO-SB3-1416	2300000	N	-	1000000	2500000	-	N
BENZO(A)ANTHRACENE	32/35	140 - 13000	400 - 870	2152	DPS3, DPS3	880	C	-	1000	7800	-	Y
BENZO(A)PYRENE	31/35	150 - 12000	400 - 32000	2403	DPS3	88	C	-	1000	1000	-	Y
BENZO(B)FLUORANTHENE	31/35	170 - 11000	400 - 870	2191	DPS3, DPS3	880	C	-	1000	7800	-	Y
BENZO(G,H,I)PERYLENE	30/35	80 - 4300	400 - 32000	1547	OU3-A2-SS04-0002	-	-	-	1000000	2500000	-	N
BENZO(K)FLUORANTHENE	24/35	110 - 11000	400 - 32000	1916	DPS3	8800	C	-	8400	78000	-	Y
BIS(2-ETHYLHEXYL)PHTHALATE	13/35	30 - 65000	380 - 17000	2920	SP-SO-SB9-0810	46000	C	31000000	44000	410000	-	Y
BUTYLBENZYL PHTHALATE	2/35	28 - 205	380 - 32000	1293	SP-SO-MW113B-0406	1600000	N	930000	1000000	2500000	-	N
CARBAZOLE	23/35	52 - 6500	380 - 32000	1341	SP-SO-SB4-0406	32000	C	-	31000	290000	-	N
CHRYSENE	32/35	220 - 14000	400 - 870	2615	DPS3, DPS3	88000	C	-	84000	780000	-	N
DI-N-BUTYL PHTHALATE	9/35	49 - 15000	380 - 17000	1573	SP-SO-SB3-1416	780000	N	2300000	1000000	2500000	-	N
DI-N-OCTYL PHTHALATE	2/35	12 - 30	380 - 32000	1295	OU3-A2-SB04-0204	160000	N	10000000	1000000	2500000	-	N
DIBENZO(A,H)ANTHRACENE	16/35	53 - 2300	390 - 32000	1366	OU3-A2-SS04-0002	88	C	-	84	780	-	Y
DIBENZOFURAN	17/35	24 - 7600	380 - 17000	1044	SP-SO-SB3-1416	31000	N	-	270000	2500000	-	N
FLUORANTHENE	30/35	67 - 32000	400 - 32000	5102	DPS3	310000	N	-	1000000	2500000	-	N
FLUORENE	27/35	48 - 11000	390 - 17000	1508	SP-SO-SB3-1416	310000	N	-	1000000	2500000	-	N
INDENO(1,2,3-CD)PYRENE	28/35	100 - 5700	390 - 32000	1622	DPS3	880	C	-	840	7800	-	Y
N-NITROSODIPHENYLAMINE	6/35	26 - 1600	380 - 32000	1341	OU3-A2-SB01-1416	130000	C	-	130000	1200000	-	N
NAPHTHALENE	19/35	22 - 7700	380 - 17000	1227	SP-SO-SB3-1416	160000	N	-	1000000	2500000	-	N
PHENANTHRENE	31/35	280 - 31000	400 - 17000	5060	SP-SO-SB3-1416	-	-	-	1000000	2500000	-	N
PHENOL	14/34	33 - 2300	380 - 32000	1464	OU3-A2-SB01-0608	4700000	N	-	1000000	2500000	-	N
PYRENE	32/35	410 - 32000	400 - 870	4753	DPS3	230000	N	-	1000000	2500000	-	N

TABLE 6-21

SELECTION OF CHEMICALS OF POTENTIAL CONCERN
AREA A-2, SPADA PROPERTY
ALL SOIL/SEDIMENT (0-15')
FERRY CREEK, STRATFORD, CONNECTICUT
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Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	COPC Screening Level (1)	N/C (2)	SSL Inhalation (3)	State Residential Direct Exposure (4)	State Industrial Direct Exposure (4)	Background Concentration (5)	Select As COPC? (6)
Pesticides/PCBs (ug/kg)												
4,4'-DDD	14/41	1.7 - 350	3.5 - 270	27	SP-SO-SB6-0608	2700	C	-	2600	24000	-	N
4,4'-DDE	12/40	0.74 - 17	3.4 - 270	14	SP-SO-MW111D-0810	1900	C	-	1800	17000	-	N
4,4'-DDT	5/37	3.7 - 23	3.4 - 270	16	SP-SO-MW113B-0204	1900	C	-	1800	17000	-	N
ALDRIN	1/41	2.1 - 2.1	1.8 - 140	7	SP-SO-MW112B-0608	38	C	3000	36	340	-	N
ALPHA-CHLORDANE	11/41	0.69 - 37	1.8 - 140	8	DPS3	1800	C	20000	490	2200	-	N
AROCLOR-1242	1/41	4100 - 4100	34 - 1200	214	SP-SO-SB2-0204	320	C	-	1000	10000	-	Y
AROCLOR-1248	3/41	47 - 1200	34 - 2700	168	OU3-A2-SB01-1416	320	C	-	1000	10000	-	Y
AROCLOR-1254	3/41	130 - 3800	34 - 1200	225	SP-SO-SB2-0204	160	N	-	1000	10000	-	Y
AROCLOR-1262	32/41	26 - 97000	39 - 360	5141	SP-SO-SB2-0204	320	C	-	1000	10000	-	Y
AROCLOR-1268	36/41	30 - 57000	40 - 350	5807	SP-SO-SB2-0204	320	C	-	1000	10000	-	Y
BETA-BHC	2/41	4.2 - 9.5	1.8 - 140	8	SP-SO-MW113B-0204	350	C	-	340	3200	-	N
DELTA-BHC	1/41	4 - 4	1.8 - 140	8	SP-SO-MW110D-0406	-	-	-	97	910	-	N
DIELDRIN	14/40	0.37 - 28	3.4 - 120	12	OU3-A2-SS04-0204	40	C	1000	38	360	-	N
ENDOSULFAN I	4/41	2.3 - 41	1.8 - 62	7	SP-SO-SB2-0204	47000	N	-	410000	1200000	-	N
ENDOSULFAN II	8/40	1.1 - 17	3.4 - 270	14	SPTS006	47000	N	-	410000	1200000	-	N
ENDOSULFAN SULFATE	5/41	3.8 - 19	3.4 - 270	14	SP-SO-MW112B-0608	-	-	-	410000	1200000	-	N
ENDRIN	2/41	6.8 - 160	3.4 - 270	18	DPS3	2300	N	-	20000	610000	-	N
ENDRIN ALDEHYDE	12/39	1.8 - 2000	4 - 270	105	OU3-A2-SB01-0608	-	-	-	20000	610000	-	N
ENDRIN KETONE	3/41	10 - 94	3.4 - 270	17	SPDPS001	-	-	-	20000	610000	-	N
GAMMA-BHC (LINDANE)	1/41	5.6 - 5.6	1.8 - 140	8	SP-SO-SB6-0608	490	C	-	20000	610000	-	N
GAMMA-CHLORDANE	14/40	0.65 - 71	1.8 - 62	9	DPS3	1800	C	20000	490	2200	-	N
HEPTACHLOR	3/41	0.25 - 2.7	1.8 - 140	7	OU3-A2-SB04-0204, SP-SO-SB4-0406	140	C	100	140	1300	-	N
HEPTACHLOR EPOXIDE	5/41	1.1 - 8.6	1.8 - 140	7	SP-SO-MW113B-0406	70	C	5000	67	630	-	N
METHOXYCHLOR	4/38	6.1 - 480	18 - 1400	86	SP-SO-MW110D-0406	39000	N	-	340000	10000000	-	N
Metals (mg/kg)												
ALUMINUM	49/49	3800 - 20000	-	9612	OU3-A2-SS05-0002	7800	N	-	-	-	22600	N
ARSENIC	40/49	2.1 - 44.5	2.3 - 8.3	7	OU3-A2-SS01-0002	0.43	C	750	10	10	11.6	Y
BARIUM	47/49	42.7 - 10400	41.5 - 47.1	1395	SP-SO-SB2-0204	550	N	690000	4700	140000	329	Y
BERYLLIUM	30/47	0.31 - 0.92	0.19 - 0.85	0.4	OU3-A2-SB03-1416	16	C	1300	2	2	1.3	N
CADMIUM	17/49	0.49 - 4.8	0.24 - 1.6	1	SPTS006	7.8	N	1800	34	1000	1.4	N
CALCIUM	48/49	880 - 54600	1560 - 1560	8297	SP-SO-MW113B-0406	-	-	-	-	-	7420	N
CHROMIUM	49/49	8.2 - 208	-	48	SP-SO-MW113B-0204	23	N	270	100	100	35.2	Y
COBALT	48/49	4.5 - 25.4	6.5 - 6.5	9	SP-SO-SB2-0204	470	N	-	1000	2500	12.4	N
COPPER	94/138	17.4 - 40000	300 - 300	2530	OU3-A2-SB01-1012	310	N	-	2500	76000	123	Y
IRON	49/49	9430 - 32300	-	17778	SP-SO-MW112B-0810	2300	N	-	-	-	24100	N[8]
LEAD	206/230	11 - 24000	100 - 100	1396	OU3-A2-SB01-1012	400[9]	N	-	500	1000	344	Y
MAGNESIUM	49/49	1820 - 48900	-	9394	SP-SO-SB2-0204	-		-			5690	N
MANGANESE	49/49	91.7 - 1050	-	238	OU3-A2-SS05-0002	160	N	-	1600	47000	660	Y
MERCURY	21/49	0.08 - 1.8	0.06 - 0.34	0.2	SP-SO-MW113B-0204	2.3	N	10	20	610	0.28	N
NICKEL	49/49	7.1 - 369	-	53	SP-SO-SB2-0204	160	N	13000	1400	7500	40.4	Y
POTASSIUM	47/49	661 - 3640	364 - 676	1548	OU3-A2-SB02-1416	-	-	-	-	-	2680	N
SELENIUM	6/49	0.47 - 1.7	0.32 - 3.1	1	SP-SO-MW111D-0810, SP-SO-MW111D-1012	39	N	-	340	10000	3.3	N
SILVER	7/49	0.77 - 2.8	0.3 - 2.1	1	SP-SO-SB4-0406	39	N	-	340	10000	3.3	N
SODIUM	25/47	145 - 17000	120 - 1090	1663	OU3-A2-SB02-1416	-	-	-	-	-	248	N
THALLIUM	2/48	0.72 - 2.6	0.16 - 3.7	1	OU3-A2-SS01-0204	0.55	N	-	5.4	160	ND	Y
VANADIUM	49/49	2 - 60.8	-	31	SP-SO-SB4-0406	55	N	-	470	14000	81.9	N
ZINC	49/49	30 - 3260	-	460	SP-SO-SB4-0406	2300	N	-	20000	610000	604	Y

TABLE 6-21

SELECTION OF CHEMICALS OF POTENTIAL CONCERN
AREA A-2, SPADA PROPERTY
ALL SOIL/SEDIMENT (0-15')
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 3 OF 3

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	COPC Screening Level (1)	N/C (2)	SSL Inhalation (3)	State Residential Direct Exposure (4)	State Industrial Direct Exposure (4)	Background Concentration (5)	Select As COPC? (6)
Dioxin (ug/kg)												
TOXICITY EQUIVALENCY (TEQ)	23/23	0.0107 - 3.686		0.7676	OU3-A2-SB01-1416	0.0043	C	-	-	-	-	Y
Asbestos (%)												
ASBESTOS	141/191	0.99 - 75	0.1 - 0.1	5	SDFB-003, SP-SO-SB4-1012	1	C	-	-	-	-	Y

1 Based on current USEPA Region III guidance (USEPA Region III, 10-1-98). Residential Soil Ingestion is used for soil and sediment. Value for noncarcinogens is based on a target hazard quotient of 0.1. Value for carcinogens is based on a cancer risk of 1E-6.
2 COPC screening level based on noncarcinogenic (N)/carcinogenic (C) effects.
3 USEPA Soil Screening Levels (USEPA, May 1996).
4 CTDEP, January 1996. In some cases, calculated or surrogate or ceiling value presented as detailed in Table 6-1.
5 Maximum background concentrations presented for inorganics only because background concentrations for organics were not used in COPC selection.
6 COPC selection criteria discussed in Section 6.2 and presented/defined in Table 6-1. Chemical was selected as a COPC (Y = yes) if maximum detected concentration exceeded screening levels, except that noncarcinogenic inorganics detected at concentrations exceeding screening levels (based on Region III criteria) but less than Region III risk-based concentrations AND maximum background concentration were not selected as COPCs.
7 Compound was not accepted as a COPC due to the low frequency of detection and only a slight exceedance of the selection criteria.
8 USEPA Region I does not advocate quantitative risk assessment of aluminum or iron.
9 Value is based on OSWER soil screening level for residential land use (USEPA, July 14, 1994).
ND Compound was not present at detectable concentrations in background samples.
- Not available or not applicable.

TABLE 6-22A

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-2, SPADA PROPERTY
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 1 OF 3

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
Volatile Organic Compounds (ug/kg)							
CARBON DISULFIDE	1/3	2 - 2	11 - 12	5	SP-SO-SB8-0002	32000	140000
Semivolatile Organic Compounds (ug/kg)							
2,4-DIMETHYLPHENOL	3/10	215 - 1800	380 - 840	514	OU3-A2-SB03-0002	9000	28000
2-METHYLNAPHTHALENE	5/10	39 - 240	380 - 4500	378	OU3-A2-SS04-0002	-	56000
2-METHYLPHENOL	1/10	130 - 130	380 - 4500	472	OU3-A2-SB03-0002	15000	70000
4-METHYLPHENOL	4/10	130 - 2400	380 - 840	569	OU3-A2-SB03-0002	-	7000
ACENAPHTHENE	6/10	40 - 3400	380 - 700	678	OU3-A2-SS05-0002	570000	84000
ACENAPHTHYLENE	10/10	100 - 3200	-	782	DPS3	-	84000
ANTHRACENE	10/10	110 - 5900	-	1812	OU3-A2-SS05-0002	12000000	400000
BENZO(A)ANTHRACENE	10/10	400 - 13000	-	3444	DPS3, DPS3	2000	1000
BENZO(A)PYRENE	10/10	460 - 12000	-	3423	DPS3	8000	1000
BENZO(B)FLUORANTHENE	10/10	540 - 11000	-	3057	DPS3, DPS3	5000	1000
BENZO(G,H,I)PERYLENE	10/10	170 - 4300	-	1360	OU3-A2-SS04-0002	-	40000
BENZO(K)FLUORANTHENE	9/10	380 - 11000	750 - 750	2698	DPS3	49000	1000
BIS(2-ETHYLHEXYL)PHTHALATE	2/10	64 - 130	380 - 4500	459	OU3-A2-SB03-0002	3600000	11000
BUTYLBENZYL PHTHALATE	1/10	28 - 28	380 - 4500	461	DPS6	930000	200000
CARBAZOLE	9/10	54 - 1900	440 - 440	463	OU3-A2-SS04-0002	600	360
CHRYSENE	10/10	740 - 14000	-	3817	DPS3, DPS3	160000	960
DI-N-BUTYL PHTHALATE	2/10	49 - 200	380 - 4500	463	SP-SO-MW110D-0002	2300000	140000
DI-N-OCTYL PHTHALATE	1/10	12 - 12	380 - 4500	460	SP-SO-MW110D-0002	10000000	20000
DIBENZO(A,H)ANTHRACENE	7/10	98 - 2300	410 - 4500	730	OU3-A2-SS04-0002	2000	0.96
DIBENZOFURAN	5/10	45 - 3200	380 - 700	663	OU3-A2-SS05-0002	-	5600
FLUORANTHENE	10/10	710 - 32000	-	8531	DPS3	4300000	56000
FLUORENE	8/10	80 - 6500	390 - 440	1227	OU3-A2-SS05-0002	560000	56000
INDENO(1,2,3-CD)PYRENE	9/10	210 - 5700	390 - 390	1630	DPS3	14000	9.6
NAPHTHALENE	6/10	22 - 550	380 - 4500	406	OU3-A2-SS04-0002	84000	56000
PHENANTHRENE	10/10	470 - 21000	-	6290	OU3-A2-SS05-0002	-	40000
PHENOL	4/10	190 - 1200	380 - 840	367	DPS3	100000	800000

TABLE 6-22A

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-2, SPADA PROPERTY
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
PYRENE	10/10	600 - 32000	-	8137	DPS3	4200000	40000
Pesticides/PCBs (ug/kg)							
4,4'-DDD	4/16	4.8 - 7.2	3.5 - 120	14	OU3-A2-SS03-0002	16000	29
4,4'-DDE	3/15	2.2 - 4.9	3.4 - 120	12	SPTS006	54000	21
ALPHA-CHLORDANE	6/16	0.69 - 37	1.8 - 62	8	DPS3	10000	66
AROCLOR-1248	2/16	47 - 250	34 - 1200	139	OU3-A2-SS02-0002	-	-
AROCLOR-1262	13/16	130 - 19000	40 - 360	3862	DPS3	-	-
AROCLOR-1268	13/16	150 - 32000	40 - 350	6408	OU3-A2-SB03-0002	-	-
DIELDRIN	5/15	0.37 - 11	3.4 - 120	12	SP-SO-SB8-0002	4	7
ENDOSULFAN II	4/15	1.1 - 17	3.4 - 120	13	SPTS006	18000	8400
ENDRIN	1/16	160 - 160	3.4 - 120	22	DPS3	1000	-
ENDRIN ALDEHYDE	6/14	4.1 - 560	4 - 45	92	OU3-A2-SB03-0002	-	-
ENDRIN KETONE	2/16	10 - 94	3.4 - 120	18	SPDPS001	-	-
GAMMA-CHLORDANE	7/15	0.65 - 71	1.8 - 62	11	DPS3	10000	66
HEPTACHLOR	1/16	0.25 - 0.25	1.8 - 62	7	SPHMB+100	23000	13
HEPTACHLOR EPOXIDE	1/16	5.9 - 5.9	1.8 - 62	7	SP-SO-SB8-0002	700	20
METHOXYCHLOR	2/13	7.2 - 27	18 - 620	69	SPTS006	160000	8000
Metals (mg/kg)							
ALUMINUM	19/19	4010 - 20000	-	9262	OU3-A2-SS05-0002	-	-
ARSENIC	16/19	2.1 - 44.5	3.4 - 4.9	8	OU3-A2-SS01-0002	29	-
BARIUM	19/19	42.7 - 4260	-	907	DPS3	1600	-
BERYLLIUM	12/17	0.32 - 0.78	0.19 - 0.85	0.5	FBE+400	63	-
CADMIUM	7/19	0.49 - 4.8	0.24 - 0.72	1	SPTS006	8	-
CALCIUM	19/19	1130 - 26200	-	3532	SP-SO-MW110D-0002	-	-
CHROMIUM	19/19	13.4 - 73.2	-	28	OU3-A2-SS02-0002	38	-
COBALT	19/19	5 - 15.4	-	9	OU3-A2-SS02-0002	-	-
COPPER	27/32	25 - 10900	300 - 300	1126	DPS3	-	-
IRON	19/19	10900 - 28300	-	17542	OU3-A2-SS02-0002	-	-
LEAD	115/124	14 - 6550	100 - 100	732	DPS3	-	-

TABLE 6-22A

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-2, SPADA PROPERTY
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 3 OF 3

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
MAGNESIUM	19/19	1820 - 20900	-	6557	OU3-A2-SS02-0002	-	-
MANGANESE	19/19	145 - 1050	-	295	OU3-A2-SS05-0002	-	-
MERCURY	8/19	0.08 - 0.19	0.07 - 0.15	0.08	DPS3	2	-
NICKEL	19/19	7.1 - 119	-	37	DPS3	130	-
POTASSIUM	17/19	661 - 2840	364 - 676	1290	OU3-A2-SS02-0002	-	-
SELENIUM	1/19	0.9 - 0.9	0.32 - 1.4	0.4	SP-SO-SB8-0002	5	-
SODIUM	9/17	145 - 389	120 - 254	172	OU3-A2-SS02-0002	-	-
VANADIUM	19/19	17.7 - 49.4	-	33	OU3-A2-SS03-0002	6000	-
ZINC	19/19	43.6 - 916	-	271	DPS3	12000	-
Dioxin (ug/kg)							
TOXICITY EQUIVALENCY (TEQ)	6/6	0.0107 - 1.071	-	0.496	DPS3	-	-
Asbestos (%)							
ASBESTOS	73/112	0.99 - 75	0.1 - 0.1	4	SDFB-003	-	-

1 USEPA Soil Screening Levels (USEPA, May 1996). Values associated with dilution and attenuation factor (DAF) of 20 are used.

2 CTDEP, January 1996. State Pollutant Mobility criteria for metals and PCBs are not included since direct comparison of the aqueous SPLP criteria (in ug/L) and the soil analytical results (in ug/kg or mg/kg) cannot be made. TCLP and SPLP results for soil samples are presented in a separate table. In some cases, calculated or surrogate or ceiling value presented as detailed in Table 6-1.

- Not available or not applicable.

TABLE 6-22B

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-2, ALL SOIL/SEDIMENT (0-15')
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 1 OF 3

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
Volatile Organic Compounds (ug/kg)							
1,1,2,2-TETRACHLOROETHANE	1/22	33 - 33	11 - 140	14	SP-SO-SB2-0204	3	100
1,2-DICHLOROETHENE (TOTAL)	2/22	11 - 730	11 - 140	46	SP-SO-SB2-0204	400	14000
2-BUTANONE	4/22	24 - 81	11 - 140	22	SP-SO-SB7-0204	-	80000
2-HEXANONE	1/22	14 - 14	11 - 140	15	SP-SO-MW113B-0406	-	56000
4-METHYL-2-PENTANONE	4/22	2 - 6	11 - 140	14	SP-SO-SB7-0204, SP-SO-MW113B-0406	-	14000
ACETONE	6/22	45 - 1400	11 - 1200	154	OU3-A2-SB01-0608	16000	140000
BENZENE	2/22	330 - 1200	11 - 130	81	SP-SO-SB1-0406	30	200
CARBON DISULFIDE	10/22	1 - 260	11 - 140	29	SP-SO-SB4-0406	32000	140000
CHLOROBENZENE	5/22	5 - 94	11 - 140	19	SP-SO-SB2-0204	1000	20000
ETHYLBENZENE	6/22	7 - 1000	11 - 34	70	OU3-A2-SB02-0406	13000	10100
METHYLENE CHLORIDE	2/22	14 - 77	11 - 140	19	SP-SO-MW112B-0608	20	1000
TOLUENE	5/22	37 - 1300	11 - 34	94	SP-SO-SB2-0204	12000	67000
TRICHLOROETHENE	2/22	9 - 330	11 - 140	28	SP-SO-SB2-0204	60	1000
VINYL CHLORIDE	1/22	51 - 51	11 - 140	15	SP-SO-SB2-0204	10	400
XYLENES, TOTAL	8/22	7 - 1800	11 - 34	190	OU3-A2-SB02-0406	190000	19500
Semivolatile Organic Compounds (ug/kg)							
1,2-DICHLOROBENZENE	1/35	180 - 180	380 - 32000	1304	SP-SO-MW110D-0406	17000	3100
1,4-DICHLOROBENZENE	1/35	66 - 66	380 - 32000	1300	OU3-A2-SB02-0406	2000	15000
2,4-DIMETHYLPHENOL	8/35	215 - 11000	380 - 32000	1765	OU3-A2-SB01-0608	9000	28000
2-METHYLNAPHTHALENE	19/35	32 - 5700	380 - 17000	995	SP-SO-SB3-1416	-	56000
2-METHYLPHENOL	4/35	130 - 1500	380 - 32000	1340	OU3-A2-SB01-0608	15000	70000
4-CHLORO-3-METHYLPHENOL	1/35	64 - 64	380 - 32000	1294	SP-SO-MW113B-0204	-	-
4-METHYLPHENOL	10/35	44 - 7200	380 - 32000	1603	OU3-A2-SB01-0608	-	7000
ACENAPHTHENE	22/35	40 - 15000	380 - 17000	1407	SP-SO-SB3-1416	570000	84000
ACENAPHTHYLENE	24/35	92 - 3200	390 - 32000	1294	DPS3	-	84000
ANTHRACENE	30/35	100 - 6500	400 - 17000	1478	SP-SO-SB3-1416	12000000	400000
BENZO(A)ANTHRACENE	32/35	140 - 13000	400 - 870	2152	DPS3, DPS3	2000	1000
BENZO(A)PYRENE	31/35	150 - 12000	400 - 32000	2403	DPS3	8000	1000
BENZO(B)FLUORANTHENE	31/35	170 - 11000	400 - 870	2191	DPS3, DPS3	5000	1000
BENZO(G,H,I)PERYLENE	30/35	80 - 4300	400 - 32000	1547	OU3-A2-SS04-0002	-	40000
BENZO(K)FLUORANTHENE	24/35	110 - 11000	400 - 32000	1916	DPS3	49000	1000
BIS(2-ETHYLHEXYL)PHTHALATE	13/35	30 - 65000	380 - 17000	2920	SP-SO-SB9-0810	3600000	11000
BUTYLBENZYL PHTHALATE	2/35	28 - 205	380 - 32000	1293	SP-SO-MW113B-0406	930000	200000
CARBAZOLE	23/35	52 - 6500	380 - 32000	1341	SP-SO-SB4-0406	600	360
CHRYSENE	32/35	220 - 14000	400 - 870	2615	DPS3, DPS3	160000	960
DI-N-BUTYL PHTHALATE	9/35	49 - 15000	380 - 17000	1573	SP-SO-SB3-1416	2300000	140000
DI-N-OCTYL PHTHALATE	2/35	12 - 30	380 - 32000	1295	OU3-A2-SB04-0204	10000000	20000
DIBENZO(A,H)ANTHRACENE	16/35	53 - 2300	390 - 32000	1366	OU3-A2-SS04-0002	2000	0.96

TABLE 6-22B

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-2, ALL SOIL/SEDIMENT (0-15')
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 2 OF 3

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
DIBENZOFURAN	17/35	24 - 7600	380 - 17000	1044	SP-SO-SB3-1416	-	5600
FLUORANTHENE	30/35	67 - 32000	400 - 32000	5102	DPS3	4300000	56000
FLUORENE	27/35	48 - 11000	390 - 17000	1508	SP-SO-SB3-1416	560000	56000
INDENO(1,2,3-CD)PYRENE	28/35	100 - 5700	390 - 32000	1622	DPS3	14000	9.6
N-NITROSODIPHENYLAMINE	6/35	26 - 1600	380 - 32000	1341	OU3-A2-SB01-1416	1000	1400
NAPHTHALENE	19/35	22 - 7700	380 - 17000	1227	SP-SO-SB3-1416	84000	56000
PHENANTHRENE	31/35	280 - 31000	400 - 17000	5060	SP-SO-SB3-1416	-	40000
PHENOL	14/34	33 - 2300	380 - 32000	1464	OU3-A2-SB01-0608	100000	800000
PYRENE	32/35	410 - 32000	400 - 870	4753	DPS3	4200000	40000
Pesticides/PCBs (ug/kg)							
4,4'-DDD	14/41	1.7 - 350	3.5 - 270	27	SP-SO-SB6-0608	16000	29
4,4'-DDE	12/40	0.74 - 17	3.4 - 270	14	SP-SO-MW111D-0810	54000	21
4,4'-DDT	5/37	3.7 - 23	3.4 - 270	16	SP-SO-MW113B-0204	32000	21
ALDRIN	1/41	2.1 - 2.1	1.8 - 140	7	SP-SO-MW112B-0608	500	0.41
ALPHA-CHLORDANE	11/41	0.69 - 37	1.8 - 140	8	DPS3	10000	66
AROCLOR-1242	1/41	4100 - 4100	34 - 1200	214	SP-SO-SB2-0204	-	-
AROCLOR-1248	3/41	47 - 1200	34 - 2700	168	OU3-A2-SB01-1416	-	-
AROCLOR-1254	3/41	130 - 3800	34 - 1200	225	SP-SO-SB2-0204	-	-
AROCLOR-1262	32/41	26 - 97000	39 - 360	5141	SP-SO-SB2-0204	-	-
AROCLOR-1268	36/41	30 - 57000	40 - 350	5807	SP-SO-SB2-0204	-	-
BETA-BHC	2/41	4.2 - 9.5	1.8 - 140	8	SP-SO-MW113B-0204	3	3.9
DELTA-BHC	1/41	4 - 4	1.8 - 140	8	SP-SO-MW110D-0406	-	1.1
DIELDRIN	14/40	0.37 - 28	3.4 - 120	12	OU3-A2-SS04-0204	4	7
ENDOSULFAN I	4/41	2.3 - 41	1.8 - 62	7	SP-SO-SB2-0204	18000	8400
ENDOSULFAN II	8/40	1.1 - 17	3.4 - 270	14	SPTS006	18000	8400
ENDOSULFAN SULFATE	5/41	3.8 - 19	3.4 - 270	14	SP-SO-MW112B-0608	-	8400
ENDRIN	2/41	6.8 - 160	3.4 - 270	18	DPS3	1000	-
ENDRIN ALDEHYDE	12/39	1.8 - 2000	4 - 270	105	OU3-A2-SB01-0608	-	-
ENDRIN KETONE	3/41	10 - 94	3.4 - 270	17	SPDPS001	-	-
GAMMA-BHC (LINDANE)	1/41	5.6 - 5.6	1.8 - 140	8	SP-SO-SB6-0608	9	40
GAMMA-CHLORDANE	14/40	0.65 - 71	1.8 - 62	9	DPS3	10000	66
HEPTACHLOR	3/41	0.25 - 2.7	1.8 - 140	7	OU3-A2-SB04-0204, SP-SO-SB4-0406	23000	13
HEPTACHLOR EPOXIDE	5/41	1.1 - 8.6	1.8 - 140	7	SP-SO-MW113B-0406	700	20
METHOXYCHLOR	4/38	6.1 - 480	18 - 1400	86	SP-SO-MW110D-0406	160000	8000
Metals (mg/kg)							
ALUMINUM	49/49	3800 - 20000	-	9612	OU3-A2-SS05-0002	-	-
ARSENIC	40/49	2.1 - 44.5	2.3 - 8.3	7	OU3-A2-SS01-0002	29	-
BARIUM	47/49	42.7 - 10400	41.5 - 47.1	1395	SP-SO-SB2-0204	1600	-
BERYLLIUM	30/47	0.31 - 0.92	0.19 - 0.85	0.4	OU3-A2-SB03-1416	63	-

TABLE 6-22B

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-2, ALL SOIL/SEDIMENT (0-15')
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 3 OF 3

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
CADMIUM	17/49	0.49 - 4.8	0.24 - 1.6	1	SPTS006	8	-
CALCIUM	48/49	880 - 54600	1560 - 1560	8297	SP-SO-MW113B-0406	-	-
CHROMIUM	49/49	8.2 - 208	-	48	SP-SO-MW113B-0204	38	-
COBALT	48/49	4.5 - 25.4	6.5 - 6.5	9	SP-SO-SB2-0204	-	-
COPPER	94/138	17.4 - 40000	300 - 300	2530	OU3-A2-SB01-1012	-	-
IRON	49/49	9430 - 32300	-	17778	SP-SO-MW112B-0810	-	-
LEAD	206/230	11 - 24000	100 - 100	1396	OU3-A2-SB01-1012	-	-
MAGNESIUM	49/49	1820 - 48900	-	9394	SP-SO-SB2-0204	-	-
MANGANESE	49/49	91.7 - 1050	-	238	OU3-A2-SS05-0002	-	-
MERCURY	21/49	0.08 - 1.8	0.06 - 0.34	0.2	SP-SO-MW113B-0204	2	-
NICKEL	49/49	7.1 - 369	-	53	SP-SO-SB2-0204	130	-
POTASSIUM	47/49	661 - 3640	364 - 676	1548	OU3-A2-SB02-1416	-	-
SELENIUM	6/49	0.47 - 1.7	0.32 - 3.1	1	SP-SO-MW111D-0810, SP-SO-MW111D-1012	5	-
SILVER	7/49	0.77 - 2.8	0.3 - 2.1	1	SP-SO-SB4-0406	34	-
SODIUM	25/47	145 - 17000	120 - 1090	1663	OU3-A2-SB02-1416		-
THALLIUM	2/48	0.72 - 2.6	0.16 - 3.7	1	OU3-A2-SS01-0204	0.7	-
VANADIUM	49/49	2 - 60.8	-	31	SP-SO-SB4-0406	6000	-
ZINC	49/49	30 - 3260	-	460	SP-SO-SB4-0406	12000	-
Dioxin (ug/kg)							
TOXICITY EQUIVALENCY(TEQ)	23/23	0.0107 - 3.686		0.7676	OU3-A2-SB01-1416	-	-
Asbestos (%)							
ASBESTOS	141/191	0.99 - 75	0.1 - 0.1	5	SDFB-003, SP-SO-SB4-1012	-	-

1 USEPA Soil Screening Levels (USEPA, May 1996). Values associated with dilution and attenuation factor (DAF) of 20 are used.

2 CTDEP, January 1996. State Pollutant Mobility criteria for metals and PCBs are not included since direct comparison of the aqueous SPLP criteria (in ug/L) and the soil analytical results (in ug/kg or mg/kg) cannot be made. TCLP and SPLP results for soil samples are presented in a separate table. In some cases, calculated or surrogate or ceiling value presented as detailed in Table 6-1.

- Not available or not applicable.

TABLE 6-23

SELECTION OF RECEPTORS AND EXPOSURE PATHWAYS
AREA A-2, SPADA PROPERTY
FERRY CREEK, STRATFORD, CONNECTICUT

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	Soils	Soils	Exposed Surface Soils in Entire Area	Commercial Worker	Adult	Ingestion	Quant	Workers may be exposed to contaminated soil through inadvertent contact.
						Dermal	Quant	Workers may be exposed to contaminated soil through inadvertent contact.
						Inhalation	Qual	Inhalation exposures represent a relatively minor exposure relative to dermal and ingestion pathways. A qualitative comparison of site soil data to USEPA Generic SSLs will be performed.
				Trespasser	Adolescent	Ingestion	Quant	All areas of A-2 are accessible to adolescent trespassers, who may be exposed to contaminated soil through inadvertent contact.
						Dermal	Quant	All areas of A-2 are accessible to adolescent trespassers, who may be exposed to contaminated soil through inadvertent contact.
						Inhalation	Qual	Inhalation exposures represent a relatively minor exposure relative to dermal and ingestion pathways. A qualitative comparison of site soil data to USEPA Generic SSLs will be performed.
Future	Soils	Soils	All Soils, regardless of Depth and Pavement in Entire Area	Commercial Worker	Adult	Ingestion	Quant	In the future contaminated soils currently located at depth and beneath pavement may be brought to the surface, exposing future commercial workers through inadvertent contact.
						Dermal	Quant	In the future contaminated soils currently located at depth and beneath pavement may be brought to the surface, exposing future commercial workers through inadvertent contact.
						Inhalation	Qual	Inhalation exposures represent a relatively minor exposure relative to dermal and ingestion pathways. A qualitative comparison of site soil data to USEPA Generic SSLs will be performed.

Notes:

Quant - Quantitative Analysis

Qual - Qualitative Analysis

TABLE 6-24

EXPOSURE POINT CONCENTRATIONS
AREA A-2, SPADA PROPERTY
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 1 OF 2

Chemical of Potential Concern	Commercial Worker		Adolescent Trespasser
	Surface Soil[1] (0 to 2 Feet bgs) (mg/kg)	All Soil[2] (0 to 15 Feet bgs) (mg/kg)	Surface Soil[1] (0 to 2 Feet bgs) (mg/kg)
Semivolatile Organic Compounds			
Benzo(a)anthracene	13/4	4	13/4
Benzo(a)pyrene	12/4	4	12/4
Benzo(b)fluoranthene	11/4	4	11/4
Benzo(k)fluoranthene	11/4	3	11/4
Bis(2-ethylhexyl)phthalate	NA	3	NA
Dibenzo(a,h)anthracene	2/1	2	2/1
Indeno(1,2,3-cd)pyrene	6/2	3	6/2
Pesticides/PCBs			
Aroclor-1242	NA	0.26	NA
Aroclor-1248	0.047	0.25	0.047
Aroclor-1254	NA	0.3	NA
Aroclor-1262	19/3.9	28	19/3.9
Aroclor-1268	32/6.8	33	32/6.8
Aroclor, total	48/11	31	48/11
Inorganics			
Arsenic	12.5	7.6	12.5
Barium	4260/847	3180	4260/847
Chromium (total)	31.9	58.4	31.9
Copper	5830	3590	5830
Lead	881	1560	881
Manganese	307	260	307
Nickel	NA	64.4	NA
Thallium	NA	0.76	NA
Zinc	NA	650	NA
Dioxins			
Toxicity Equivalence (TEQ) Concentration	0.0011/0.00043	0.0021	0.0011/0.00043

1 Exposure to currently exposed surface soil is assumed for the commercial worker under current land use.
2 Since development of the site for industrial use may occur, exposure to all soil (currently exposed and beneath pavement) to an estimated depth of 15 feet bgs is assumed for the commercial worker under future land use.
ND: Contaminant has been selected as a Chemical of Potential Concern (COPC) for this area/medium; however, this COPC was not detected (ND) in the respective sample subset for this receptor.
NA: Contaminant has not been selected as a COPC for this area/medium; an exposure point concentration is not applicable (NA).
-- Analysis for this chemical was not performed for samples collected from this medium.

TABLE 6-24

EXPOSURE POINT CONCENTRATIONS
AREA A-2, SPADA PROPERTY
FERRY CREEK, STRATFORD, CONNECTICUT
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For datasets with greater than 10 samples: EPCs represent the 95 percent UCL of the mean, unless the 95 percent UCL was greater than the maximum reported concentration. If the 95 percent UCL is greater than the maximum, the maximum is selected as the EPC for the RME case and the arithmetic mean is selected as the EPC for the CTE case. For datasets with 10 or less samples: the maximum detected and arithmetic mean concentration are selected as the EPCs for the RME and CTE cases respectively.

TABLE 6-25A

SUMMARY OF CANCER RISKS AND HAZARD INDICES
REASONABLE MAXIMUM EXPOSURE SCENARIO
AREA A-2, SPADA PROPERTY
FERRY CREEK, STRATFORD, CONNECTICUT

Receptor	Media	Exposure Route	Cancer Risk	Chemicals with Cancer Risk $>10^{-4}$	Chemicals with Cancer Risk $>10^{-5}$	Chemicals with Cancer Risk $>10^{-6}$	Hazard Index	Chemicals with HI > 1
Commercial Worker (Current/Future)	Exposed Surface Soils in Entire Area	Incidental Ingestion	1.4E-04	--	Benzo(a)pyrene, Aroclor (total), TEQ-Dioxins/Furans	Benzo(a)anthracene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Arsenic	1.3E-01	--
		Dermal Contact	6.1E-05	--	Benzo(a)pyrene, Aroclor (total)	TEQ-Dioxins/Furans, Benzo(a)anthracene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene	6.1E-03	--
		Total	2.0E-04	--	Benzo(a)pyrene, Aroclor (total), TEQ-Dioxins/Furans	Benzo(a)anthracene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Arsenic	1.3E-01	--
Commercial Worker (Future)	All Soils in Entire Area regardless of Depth and Pavement	Incidental Ingestion	1.5E-04	TEQ-Dioxins/Furans	Benzo(a)pyrene, Aroclor (total)	Dibenzo(a,h)anthracene, Arsenic	1.3E-01	--
		Dermal Contact	4.4E-05	--	Aroclor (total), TEQ-Dioxins/Furans	Benzo(a)pyrene, Dibenzo(a,h)anthracene	1.4E-02	--
		Total	2.0E-04	TEQ-Dioxins/Furans	Benzo(a)pyrene, Aroclor (total)	Benzo(a)anthracene, Benzo(b)fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Arsenic	1.5E-01	--
Adolescent Trespasser (Current/Future)	All Exposed Surface Soils in Entire Area	Incidental Ingestion	1.6E-05	--	--	Benzo(a)pyrene, Aroclor (total), TEQ-Dioxins/Furans	3.6E-02	--
		Dermal Contact	3.4E-06	--	--	Benzo(a)pyrene, Aroclor (total)	8.6E-04	--
		Total	2.0E-05	--	--	Benzo(a)pyrene, Aroclor (total), TEQ-Dioxins/Furans	3.7E-02	--

TABLE 6-25B

SUMMARY OF CANCER RISKS AND HAZARD INDICES
CENTRAL TENDENCY EXPOSURE SCENARIO
AREA A-2, SPADA PROPERTY
FERRY CREEK, STRATFORD, CONNECTICUT

Receptor	Media	Exposure Route	Cancer Risk	Chemicals with Cancer Risk >10^{-4}	Chemicals with Cancer Risk >10^{-5}	Chemicals with Cancer Risk >10^{-6}	Hazard Index	Chemicals with HI > 1
Commercial Worker (Current/Future)	Exposed Surface Soils in Entire Area	Incidental Ingestion	8.7E-06	--	--	Benzo(a)pyrene, Arsenic, TEQ-Dioxins/Furans	3.9E-02	--
		Dermal Contact	6.1E-07	--	--	--	6.1E-04	--
		Total	9.3E-06	--	--	Benzo(a)pyrene, Arsenic, TEQ-Dioxins/Furans	4.0E-02	--
Commercial Worker (Future)	All Soils in Entire Area regardless of Depth and Pavement	Incidental Ingestion	2.6E-05	--	TEQ-Dioxins/Furans	Benzo(a)pyrene, Aroclor (total)	6.6E-02	--
		Dermal Contact	1.6E-06	--	--	--	1.4E-03	--
		Total	2.7E-05	--	TEQ-Dioxins/Furans	Benzo(a)pyrene, Dibenzo(a,h)anthracene, Aroclor (total)	6.7E-02	--
AdolescentTrespasser (Current/Future)	All Exposed Surface Soils in Entire Area	Incidental Ingestion	1.4E-06	--	--	--	1.1E-02	--
		Dermal Contact	6.8E-08	--	--	--	1.2E-04	--
		Total	1.4E-06	--	--	--	1.1E-02	--

TABLE 6-26

SUMMARY OF REMEDIAL INVESTIGATIONS AND RECOMMENDATIONS
AREA A-2, SPADA PROPERTY
FERRY CREEK, STRATFORD, CONNECTICUT

Area of Concern	Chemicals of Potential Concern	Receptor	Reasonable Maximum Exposure (RME) Risk Estimates						RME Lead Results [1]	Asbestos Results [2]
			ILCR	Risk Drivers			HI	Risk Drivers		
A-2 Commercial Properties West of Ferry Creek Property (Spada Property)	Surface Soil/Sediment (0 to 2 feet) benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)anthracene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene dioxins/furans, asbestos, arsenic, barium, chromium, total, copper lead, manganese, Aroclor-1248, Aroclor-1262, Aroclor-1268	Commercial Worker (current/future)	2.0E-04	>10^{-4} None	>10^{-5} benzo(a)pyrene Aroclor (total) dioxins/furans	>10^{-6} benzo(a)anthracene benzo(b)fluoranthene dibenzo(a,h)anthracene indeno(1,2,3-cd)pyrene arsenic	0.14	>1.0 None	Slope Factor Approach - Fetal blood lead level (9.7 to 14 ug/dl) was above the established level of concern (10 ug/dl).	Asbestos was detected at an average concentration of 4%. This exceeds the 1% concentration which defines an asbestos-containing material.
		Trespasser (adolescent) (current/future)	2.0E-05	>10^{-4} None	>10^{-5} None	>10^{-6} benzo(a)pyrene Aroclor (total) dioxins/furans	0.08	>1.0 None		
	All Soil/Sediment (0 to15 feet) benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, bis(2-ethylhexyl)phthalate, asbestos dioxins/furans, arsenic, barium, chromium, total, copper, lead, manganese, nickel thallium, zinc, Aroclor-1242, Aroclor-1248, Aroclor-1254, Aroclor-1262, Aroclor-1268	Commercial Worker (future)	2.0E-04	>10^{-4} dioxins/furans	>10^{-5} benzo(a)pyrene Aroclor (total)	>10^{-6} benzo(a)anthracene benzo(b)fluoranthene dibenzo(a,h)anthracene indeno(1,2,3-cd)pyrene arsenic	0.11	>1.0 None	Slope Factor Approach - Fetal blood lead level (14 [illegible] 8 ug/dl) was established level of concern (10 ug/dl).	Asbestos was detected at an average concentration of 5%. This exceeds the 1% concentration which defines an asbestos-containing material.

1 The risk from lead for an adult was evaluated following "Recommendations of the Technical Review Workgroup for Lead for the Interim Approach to Assessing Risks Associated with Adult Exposures to Lead in Soil", USEPA, December 1996.
2 The National Emission Standards for Hazardous Air Pollutants - EPA regulation 40 CFR Subpart M, Part 61 (NESHAP) defines asbestos as material containing one percent asbestos.

TABLE 6-27

SELECTION OF CHEMICALS OF POTENTIAL CONCERN
AREA A-3, RESIDENTIAL PROPERTIES ON HOUSATONIC AVENUE
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 1 OF 3

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	COPC Screening Level (1)	N/C (2)	SSL Inhalation (3)	State Residential Direct Exposure (4)	State Industrial Direct Exposure (4)	Background Concentration (5)	Select As COPC? (6)
Volatile Organic Compounds (ug/kg)												
1,1,1-TRICHLOROETHANE	2/47	9 - 13	11 - 32	9	RM-SD-SD16-04	160000	N	1200000	500000	1000000	-	N
1,1,2,2-TETRACHLOROETHANE	1/46	7 - 7	11 - 32	9	HU103AC-N790,W245(0 3-0 8)	3200	C	600	3100	29000	-	N
1,1-DICHLOROETHANE	13/46	2 - 59	11 - 32	11	RM-SD-SD12-04	780000	N	1300000	500000	1000000	-	N
1,2-DICHLOROETHANE	1/46	7 - 7	11 - 32	9	HU103AC-N790,W245(0 3-0 8)	7000	C	400	6700	63000	-	N
1,2-DICHLOROETHENE (TOTAL)	5/46	5 - 12	11 - 32	9	RM-SD-SD12-02	70000	N	1200000	500000	1000000	-	N
2-BUTANONE	5/46	32 - 64	11 - 35	13	RM-SD-SD13-02	4700000	N	-	500000	1000000	-	N
2-HEXANONE	1/46	9 - 9	11 - 32	9	HU103AC-N790,W245(0 3-0 8)	310000	N	-	500000	1000000	-	N
4-METHYL-2-PENTANONE	1/46	7 - 7	11 - 32	9	HU103AC-N790,W245(0 3-0 8)	630000	N	-	500000	1000000	-	N
ACETONE	3/48	46 - 190	11 - 240	29	SD-08	780000	N	100000000	500000	1000000	-	N
BROMOFORM	1/46	7 - 7	11 - 32	9	HU103AC-N790,W245(0 3-0 8)	81000	C	53000	78000	720000	-	N
CARBON DISULFIDE	13/46	1 - 58	11 - 32	11	RM-SD-SD24-04	780000	N	720000	500000	1000000	-	N
CHLOROBENZENE	6/46	2 - 27	11 - 32	9	RM-SD-SD13-02	160000	N	130000	500000	1000000	-	N
ETHYLBENZENE	2/46	9 - 29	11 - 32	10	RM-SD-SD2D-03	780000	N	400000	500000	1000000	-	N
TETRACHLOROETHENE	1/46	3 - 3	11 - 32	9	SD-09	12000	C	11000	12000	110000	-	N
TOLUENE	3/46	2 - 12	11 - 32	9	RM-SD-SD2D-03	1600000	N	650000	500000	1000000	-	N
TRICHLOROETHENE	2/47	7 - 23	11 - 32	9	RM-SD-SD16-04	58000	C	5000	56000	520000	-	N
XYLENES, TOTAL	1/46	88 - 88	11 - 32	11	RM-SD-SD2D-03	16000000	N	410000	500000	1000000	-	N
Semivolatile Organic Compounds (ug/kg)												
1,4-DICHLOROBENZENE	1/54	79 - 79	200 - 17000	898	RM-SD-SD2D-03	27000	C	-	26000	240000	-	N
2,4-DIMETHYLPHENOL	14/54	25 - 1500	200 - 17000	911	RM-SD-SD14-03	160000	N	-	1000000	2500000	-	N
2-METHYLNAPHTHALENE	13/54	20 - 4500	200 - 17000	951	RM-SD-SD2D-03	160000	N	-	1000000	2500000	-	N
2-METHYLPHENOL	6/54	57 - 330	200 - 17000	897	SD-08	390000	N	-	1000000	2500000	-	N
4-METHYLPHENOL	9/55	24 - 295	200 - 17000	875	SPDAC-E275,S130(0.4-1 5)	39000	N	-	340000	2500000	-	N
ACENAPHTHENE	21/54	42 - 3400	200 - 17000	854	RM-SD-SD2D-03	470000	N	-	1000000	2500000	-	N
ACENAPHTHYLENE	34/55	31 - 2600	250 - 17000	951	RM-SD-SD16-03	-	-	-	1000000	2500000	-	N
ANTHRACENE	38/55	40 - 2000	350 - 17000	964	SPDAC,E325,S38(0.0-1.0)	2300000	N	-	1000000	2500000	-	N
BENZO(A)ANTHRACENE	53/57	49 - 6700	370 - 620	1897	SPDAC,E325,S38(0 0-1 0), SPDAC,E325,S38(0 0-1 0)	880	C	-	1000	7800	-	Y
BENZO(A)PYRENE	56/57	24 - 6100	410 - 410	1729	RM-SD-SD23-04	88	C	-	1000	1000	-	Y
BENZO(B)FLUORANTHENE	56/57	22 - 9900	410 - 410	3146	RM-SD-SD23-04, RM-SD-SD23-04	880	C	-	1000	7800	-	Y
BENZO(G,H,I)PERYLENE	45/57	120 - 5400	350 - 7900	1061	RM-SD-SD23-04	-	-	-	-	2500000	-	N
BENZO(K)FLUORANTHENE	37/55	28 - 7500	410 - 8900	1698	OU3-A3-SD07-0002	8800	C	-	8400	78000	-	N
BIS(2-ETHYLHEXYL)PHTHALATE	32/57	290 - 160000	340 - 8800	8634	SD-08	46000	C	31000000	44000	410000	-	Y
BUTYLBENZYL PHTHALATE	18/55	41 - 1700	200 - 17000	873	OU3-A3-SD06-0002	1600000	N	930000	1000000	2500000	-	N
CARBAZOLE	31/55	36 - 1600	330 - 17000	805	RM-SD-SD21-04	32000	C	-	31000	290000	-	N
CHRYSENE	56/57	25 - 7200	410 - 410	2413	SPDAC,E325,S38(0.0-1.0), SPDAC,E325,S38(0 0-1 0)	88000	C	-	84000	780000	-	N
DI-N-BUTYL PHTHALATE	18/57	24 - 1900	200 - 17000	861	RM-SD-SD06-04, RM-SD-SD14-04	780000	N	2300000	1000000	2500000	-	N
DI-N-OCTYL PHTHALATE	18/55	40 - 4200	200 - 17000	976	SD-08	160000	N	10000000	1000000	2500000	-	N
DIBENZO(A,H)ANTHRACENE	37/56	46 - 1600	250 - 17000	858	RM-SD-SD21-04	88	C	-	84	780	-	Y
DIBENZOFURAN	20/54	39 - 2300	200 - 17000	822	RM-SD-SD2D-03	31000	N	-	270000	2500000	-	N
DIETHYL PHTHALATE	3/54	140 - 485	200 - 17000	899	RM-SD-SD06-03	6300000	N	2000000	1000000	2500000	-	N
DIMETHYL PHTHALATE	5/54	61 - 2200	200 - 17000	921	RM-SD-SD14-03	78000000	N	-	1000000	2500000	-	N
FLUORANTHENE	57/57	33 - 14000	-	4282	SPDAC,E325,S38(0 0-1 0)	310000	N	-	1000000	2500000	-	N
FLUORENE	31/53	23 - 2100	350 - 8900	650	RM-SD-SD2D-03	310000	N	-	1000000	2500000	-	N
INDENO(1,2,3-CD)PYRENE	53/57	39 - 5500	350 - 620	1094	RM-SD-SD24-04	880	C	-	840	7800	-	Y
N-NITROSO-DI-N-PROPYLAMINE	1/54	110 - 110	200 - 17000	899	RM-SD-SD2D-03	91	C	-	88	820	-	N[7]
N-NITROSODIPHENYLAMINE	4/54	55 - 1600	200 - 17000	922	RM-SD-SD21-04	130000	C	-	130000	1200000	-	N
NAPHTHALENE	23/54	29 - 36000	200 - 8900	1324	RM-SD-SD2D-03	160000	N	-	1000000	2500000	-	N
PENTACHLOROPHENOL	1/54	120 - 120	440 - 43000	2210	RM-SD-SD2D-03	5300	C	-	5100	48000	-	N
PHENANTHRENE	55/57	22 - 7900	370 - 410	1922	SPDAC,E325,S38(0 0-1 0)	-	-	-	1000000	2500000	-	N
PHENOL	15/53	29 - 4600	200 - 17000	1143	RM-SD-SD14D-03	4700000	N	-	1000000	2500000	-	N

TABLE 6-27

SELECTION OF CHEMICALS OF POTENTIAL CONCERN
AREA A-3, RESIDENTIAL PROPERTIES ON HOUSATONIC AVENUE
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 2 OF 3

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	COPC Screening Level (1)	N/C (2)	SSL Inhalation (3)	State Residential Direct Exposure (4)	State Industrial Direct Exposure (4)	Background Concentration (5)	Select As COPC? (6)
PYRENE	57/57	35 - 18000	-	4019	SPDAC,E325,S38(0.0-1.0)	230000	N	-	1000000	2500000	-	N
Pesticides/PCBs (ug/kg)												
4,4'-DDD	21/54	1.7 - 80	2 - 220	16	RM-SD-SD24-04	2700	C	-	2600	24000	-	N
4,4'-DDE	37/57	0.11 - 80	3 - 75	12	HU75AC-N647,W285(0.0-0.5)	1900	C	-	1800	17000	-	N
4,4'-DDT	24/49	0.2 - 4600	2 - 160	119	SPDG4	1900	C	-	1800	17000	-	Y
ALDRIN	20/52	0.12 - 12	1 - 39	5	OU3-A3-SD01-0002	38	C	3000	36	340	-	N
ALPHA-BHC	16/52	0.21 - 4.25	1 - 85	5	RM-SD-SD01-04	100	C	800	97	910	-	N
ALPHA-CHLORDANE	30/57	0.06 - 110	1 - 85	13	SPDB2	1800	C	20000	490	2200	-	N
AROCLOR-1248	2/54	1190 - 1400	20 - 2200	169	SPDAC-E275,S130(0.4-1.5)	320	C	-	1000	10000	-	Y
AROCLOR-1254	5/56	100 - 1200	20 - 2200	153	SPDAC-E275,S130(0.4-1.5)	160	N	-	1000	10000	-	Y
AROCLOR-1260	2/55	5100 - 24125	20 - 2200	650	SD-09	320	C	-	1000	10000	-	Y
AROCLOR-1262	37/58	31 - 68000	30 - 180	4432	OU3-A3-SD02-0002	320	C	-	1000	10000	-	Y
AROCLOR-1268	43/57	21 - 60000	33 - 2200	4351	OU3-A3-SD02-0002	320	C	-	1000	10000	-	Y
BETA-BHC	9/52	0.46 - 12	1 - 85	6	RM-SD-SD2D-03	350	C	-	340	3200	-	N
DELTA-BHC	3/54	3.7 - 24	1 - 110	7	RM-SD-SD01-04	-	-	-	97	910	-	N
DIELDRIN	29/54	0.12 - 39	3.3 - 220	14	RM-SD-SD16-03	40	C	1000	38	360	-	Y
ENDOSULFAN I	7/49	0.67 - 30	1 - 110	6	SPDAC-E275,S130(0.4-1.5)	47000	N	-	410000	1200000	-	N
ENDOSULFAN II	6/52	0.36 - 43	2 - 220	12	RM-SD-SD02-01	47000	N	-	410000	1200000	-	N
ENDOSULFAN SULFATE	8/51	6 - 55	2 - 220	15	RM-SD-SD14D-03	-	-	-	410000	1200000	-	N
ENDRIN	16/53	0.36 - 37.5	2 - 220	13	OU3-A3-SD05-0002	2300	N	-	20000	610000	-	N
ENDRIN ALDEHYDE	23/55	0.83 - 1200	2 - 220	69	RM-SD-SD02-01	-	-	-	20000	610000	-	N
ENDRIN KETONE	2/54	0.23 - 2000	2 - 220	50	SPDAC-E275,S130(0.4-1.5)	-	-	-	20000	610000	-	N
GAMMA-BHC (LINDANE)	9/52	0.05 - 14	1 - 85	6	RM-SD-SD14D-03	490	C	-	20000	610000	-	N
GAMMA-CHLORDANE	36/56	0.07 - 120	1.6 - 85	12	SPDB2	1800	C	20000	490	2200	-	N
HEPTACHLOR	6/51	0.24 - 2.8	1 - 85	6	OU3-A3-SB01-0002	140	C	100	140	1300	-	N
HEPTACHLOR EPOXIDE	21/54	0.16 - 19.5	1.5 - 110	7	OU3-A3-SD05-0002	70	C	5000	67	630	-	N
METHOXYCHLOR	3/51	41 - 260	3.3 - 850	60	RM-SD-SD01-01	39000	N	-	340000	10000000	-	N
PCB Congeners (ug/kg) [8]												
2',3,4,4',5-PENTACHLOROBIPHENYL (123)	1/1	43.4 - 43.4	-	43	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
2,2',3,3',4,4',5-HEPTACHLOROBIPHENYL (170	1/1	1020 - 1020	-	1020	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
2,3',4,4',5,5'-HEXACHLOROBIPHENYL (167)	1/1	4.95 - 4.95	-	5	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
2,3',4,4',5-PENTACHLOROBIPHENYL (118)	1/1	5.47 - 5.47	-	5	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
2,3,3',4,4',5'-HEXACHLOROBIPHENYL (157)	1/1	8.87 - 8.87	-	9	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
2,3,3',4,4',5-HEXACHLOROBIPHENYL (156)	1/1	42.2 - 42.2	-	42	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
2,3,4,4',5-PENTACHLOROBIPHENYL (114)	1/1	108 - 108	-	108	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
3,3',4,4',5,5'-HEXACHLOROBIPHENYL (169)	1/1	1.28 - 1.28	-	1	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
3,3',4,4'-TETRACHLOROBIPHENYL (77)	1/1	8.01 - 8.01	-	8	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
DECACHLOROBIPHENYL	1/1	382 - 382	-	382	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL DICHLOROBIPHENYLS	1/1	93.5 - 93.5	-	94	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL HEPTACHLOROBIPHENYLS	1/1	6890 - 6890	-	6890	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL HEXACHLOROBIPHENYLS	1/1	1770 - 1770	-	1770	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL MONOCHLOROBIPHENYLS	1/1	4.92 - 4.92	-	5	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL NONACHLOROBIPHENYLS	1/1	554 - 554	-	554	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL OCTACHLOROBIPHENYLS	1/1	6270 - 6270	-	6270	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL PENTACHLOROBIPHENYLS	1/1	995 - 995	-	995	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL TETRACHLOROBIPHENYLS	1/1	662 - 662	-	662	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL TRICHLOROBIPHENYLS	1/1	404 - 404	-	404	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
Metals (mg/kg)												
ALUMINUM	61/61	3830 - 24300	-	11504	OU3-A3-SD04-0002	7800	N	-	-	-	22600	N[9]
ANTIMONY	5/57	1.8 - 6.7	1.2 - 30.4	4	OU3-A3-SD01-0002	3.1	N	-	27	8200	ND	Y

TABLE 6-27

SELECTION OF CHEMICALS OF POTENTIAL CONCERN
AREA A-3, RESIDENTIAL PROPERTIES ON HOUSATONIC AVENUE
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT
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Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	COPC Screening Level (1)	N/C (2)	SSL Inhalation (3)	State Residential Direct Exposure (4)	State Industrial Direct Exposure (4)	Background Concentration (5)	Select As COPC? (6)
ARSENIC	56/61	1.7 - 21.2	1.6 - 5.8	9	RM-SD-SD16-03	0.43	C	750	10	10	11.6	Y
BARIUM	61/61	16.6 - 21000	-	1756	SPDAC-E275,S130(0.4-1.5)	550	N	690000	4700	140000	329	Y
BERYLLIUM	32/61	0.31 - 1.4	0.14 - 1.7	1	HU201AC-N1270,W160(1.6-2.4)	16	C	1300	2	2	1.3	N
CADMIUM	24/59	0.62 - 22.5	0.4 - 5.7	3	SD-08	7.8	N	1800	34	1000	1.4	Y
CALCIUM	56/61	470 - 30700	2090 - 3890	3787	OU3-A3-SB01-0002	-	-	-	-	-	7420	N
CHROMIUM	61/61	12.5 - 528	-	123	SPDB2	23	N	270	100	100	35.2	Y
COBALT	60/61	3.1 - 36.4	6.4 - 6.4	11	SPDAC-E275,S130(0.4-1.5)	470	N	-	1000	2500	12.4	N
COPPER	61/62	16.2 - 34600	20.3 - 20.3	3168	SPDAC-E275,S130(0.4-1.5)	310	N	-	2500	76000	123	Y
IRON	61/61	7570 - 57000	-	23544	RM-SD-SD13-02	2300	N	-	-	-	24100	N[9]
LEAD	207/225	10.4 - 26000	100 - 335	1281	SPDAC-E275,S130(0.4-1.5)	400[10]	N	-	500	1000	344	Y
MAGNESIUM	61/61	2150 - 92220	-	14397	RM-SD-SD16-04	-	-	-	-	-	5690	N
MANGANESE	61/61	75.3 - 1870	-	358	RM-SD-SD16-03	160	N	-	1600	47000	660	Y
MERCURY	33/61	0.1 - 2.4	0.08 - 0.58	0.4	RM-SD-SD14D-03	2.3	N	10	20	610	0.28	Y
NICKEL	60/61	11.2 - 506	13.5 - 13.5	114	RM-SD-SD14D-03	160	N	13000	1400	7500	40.4	Y
POTASSIUM	61/61	470 - 4330	-	1984	OU3-A3-SD08-0002	-	-	-	-	-	2680	N
SELENIUM	7/58	0.87 - 2.5	0.24 - 6.7	1	RM-SD-SD14D-03	39	N	-	340	10000	3.3	N
SILVER	12/58	0.81 - 7.6	0.5 - 4.6	1	HU103AC-N720,W258(0.0-0.3)	39	N	-	340	10000	3.3	N
SODIUM	56/61	112 - 19400	53.9 - 1030	3812	RM-SD-SD04-04	-	-	-	-	-	248	N
THALLIUM	4/57	1.4 - 3.9	0.17 - 11.2	1	OU3-A3-SD01-0002	0.55	N	-	5.4	160	ND	Y
VANADIUM	60/61	6.6 - 157	0.36 - 0.36	50	RM-SD-SD16-03	55	N	-	470	14000	81.9	Y
ZINC	59/61	47.9 - 4800	51.8 - 436	651	OU3-A3-SD02-0002	2300	N	-	20000	610000	604	Y
Dioxin (ug/kg)												
TOXICITY EQUIVALENCY (TEQ)	39/39	0.001866 - 6.123	-	0.4449	OU3-A3-SD02-0002	0.0043	C	-	-	-	-	Y
Asbestos (%)												
ASBESTOS	73/184	0.99 - 90	0.1 - 0.1	5	SPD F3	1	C	-	-	-	-	Y
Total Organic Carbon (mg/kg)												
TOTAL ORGANIC CARBON	8/8	11900 - 1020000	-	171688	OU3-A3-SD08-0002	-	-	-	-	-	-	N

1 Based on current USEPA Region III guidance (USEPA Region III, 10-1-98). Residential Soil Ingestion is used for soil and sediment. Value for noncarcinogens is based on a target hazard quotient of 0.1. Value for carcinogens is based on a cancer risk of 1E-6.

2 COPC screening level based on noncarcinogenic (N)/carcinogenic (C) effects.

3 USEPA Soil Screening Levels (USEPA, May 1996).

4 CTDEP, January 1996. In some cases, calculated or surrogate or ceiling value presented as detailed in Table 6-1.

5 Maximum background concentrations presented for inorganics only because background concentrations for organics were not used in COPC selection.

6 COPC selection criteria discussed in Section 6.2 and presented/defined in Table 6-1. Chemical was selected as a COPC (Y = yes) if maximum detected concentration exceeded screening levels, except that noncarcinogenic inorganics detected at concentrations exceeding screening levels (based on Region III criteria) but less than Region III risk-based concentrations AND maximum background concentration were not selected as COPCs.

7 Compound was not accepted as a COPC due to the low frequency of detection and only a slight exceedance of the selection criteria.

8 PCB Congeners will be evaluated qualitatively in the uncertainty section.

9 USEPA Region I does not advocate quantitative risk assessment of iron.

10 Value is based on OSWER soil screening level for residential land use (USEPA, July 14, 1994)

ND Compound was not present at detectable concentrations in background samples.

- Not available or not applicable.

TABLE 6-28

SELECTION OF CHEMICALS OF POTENTIAL CONCERN
AREA A-3, RESIDENTIAL PROPERTIES ON HOUSATONIC AVENUE
ALL SOIL/SEDIMENT (0-15')
FERRY CREEK, STRATFORD, CONNECTICUT
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Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	COPC Screening Level (1)	N/C (2)	SSL Inhalation (3)	State Residential Direct Exposure (4)	State Industrial Direct Exposure (4)	Background Concentration (5)	Select As COPC? (6)
Volatile Organic Compounds (ug/kg)												
1,1,1-TRICHLOROETHANE	2/63	9 - 13	10 - 32	9	RM-SD-SD16-04	160000	N	1200000	500000	1000000	-	N
1,1,2,2-TETRACHLOROETHANE	1/62	7 - 7	10 - 32	9	HU103AC-N790,W245(0.3-0.8)	3200	C	600	3100	29000	-	N
1,1,2-TRICHLOROETHANE	1/62	7 - 7	10 - 32	9	HU181AC-N1180,W148(3.0-4.0)	11000	C	1000	11000	100000	-	N
1,1-DICHLOROETHANE	14/62	2 - 59	10 - 32	10	RM-SD-SD12-04	780000	N	1300000	500000	1000000	-	N
1,2-DICHLOROETHANE	2/62	7 - 7	10 - 32	9	HU181AC-N1180,W148(3.0-4.0), HU103AC-N790,W245(0.3-0.8)	7000	C	400	6700	63000	-	N
1,2-DICHLOROETHENE (TOTAL)	5/62	5 - 12	10 - 32	8	RM-SD-SD12-02	70000	N	1200000	500000	1000000	-	N
2-BUTANONE	7/62	32 - 170	10 - 35	15	HU75AC-N686,W285(4.0-4.6)	4700000	N	-	500000	1000000	-	N
2-HEXANONE	2/62	9 - 11	10 - 32	9	HU181AC-N1180,W148(3.0-4.0)	310000	N	-	500000	1000000	-	N
4-METHYL-2-PENTANONE	2/62	7 - 9	10 - 32	9	HU181AC-N1180,W148(3.0-4.0)	630000	N	-	500000	1000000	-	N
ACETONE	5/64	46 - 220	11 - 240	32	OU3-A3-SB02-1416	780000	N	100000000	500000	1000000	-	N
BROMOFORM	1/62	7 - 7	10 - 32	9	HU103AC-N790,W245(0.3-0.8)	81000	C	53000	78000	720000	-	N
CARBON DISULFIDE	17/62	1 - 58	10 - 32	10	RM-SD-SD24-04	780000	N	720000	500000	1000000	-	N
CHLOROBENZENE	6/62	2 - 27	10 - 32	9	RM-SD-SD13-02	160000	N	130000	500000	1000000	-	N
ETHYLBENZENE	2/62	9 - 29	10 - 32	9	RM-SD-SD2D-03	780000	N	400000	500000	1000000	-	N
METHYLENE CHLORIDE	1/62	7 - 7	10 - 63	11	OU3-A3-SB02-1416	85000	C	13000	82000	760000	-	N
TETRACHLOROETHENE	1/62	3 - 3	10 - 32	9	SD-09	12000	C	11000	12000	110000	-	N
TOLUENE	7/63	2 - 12	10 - 32	8	RM-SD-SD2D-03	1600000	N	650000	500000	1000000	-	N
TRICHLOROETHENE	4/63	2 - 23	10 - 32	9	RM-SD-SD16-04	58000	C	5000	56000	520000	-	N
XYLENES, TOTAL	2/62	3 - 88	10 - 32	10	RM-SD-SD2D-03	16000000	N	410000	500000	1000000	-	N
Semivolatile Organic Compounds (ug/kg)											-	
1,4-DICHLOROBENZENE	1/79	79 - 79	160 - 17000	723	RM-SD-SD2D-03	27000	C	-	26000	240000	-	N
2,4-DIMETHYLPHENOL	19/79	25 - 11000	160 - 17000	844	OU3-A3-SB02-0608	160000	N	-	1000000	2500000	-	N
2-METHYLNAPHTHALENE	20/79	20 - 4500	160 - 17000	737	RM-SD-SD2D-03	160000	N	-	1000000	2500000	-	N
2-METHYLPHENOL	8/79	57 - 390	160 - 17000	687	OU3-A3-SB02-0608	390000	N	-	1000000	2500000	-	N
4-METHYLPHENOL	14/80	24 - 850	160 - 17000	675	OU3-A3-SB02-0608	39000	N	-	340000	2500000	-	N
ACENAPHTHENE	31/79	33 - 3400	160 - 17000	672	RM-SD-SD2D-03	470000	N	-	1000000	2500000	-	N
ACENAPHTHYLENE	43/80	31 - 2600	160 - 17000	768	RM-SD-SD16-03	-	-	-	1000000	2500000	-	N
ANTHRACENE	49/76	40 - 6500	350 - 17000	879	HU235AC-N1380,W182(3.0-3.6)	2300000	N	-	1000000	2500000	-	N
BENZO(A)ANTHRACENE	68/82	21 - 19000	270 - 620	1713	HU235AC-N1380,W182(3.0-3.6), HU235AC-N1380,W182(3.0-3.6)	880	C	-	1000	7800	-	Y
BENZO(A)PYRENE	70/82	24 - 17000	270 - 520	1582	HU235AC-N1380,W182(3.0-3.6)	88	C	-	1000	1000	-	Y
BENZO(B)FLUORANTHENE	71/82	22 - 29000	270 - 520	2775	HU235AC-N1380,W182(3.0-3.6), HU235AC-N1380,W182(3.0-3.6)	880	C	-	1000	7800	-	Y
BENZO(G,H,I)PERYLENE	58/82	39 - 8600	270 - 7900	961	HU235AC-N1380,W182(3.0-3.6)	-	-	-	1000000	2500000	-	N
BENZO(K)FLUORANTHENE	51/80	28 - 29000	270 - 8900	1740	HU235AC-N1380,W182(3.0-3.6)	8800	C	-	8400	78000	-	Y
BIS(2-ETHYLHEXYL)PHTHALATE	33/83	290 - 160000	270 - 8800	6107	SD-08	46000	C	31000000	44000	410000	-	Y
BUTYLBENZYL PHTHALATE	20/81	41 - 1700	160 - 17000	703	OU3-A3-SD06-0002	1600000	N	930000	1000000	2500000	-	N
CARBAZOLE	40/80	36 - 2200	160 - 17000	654	HU235AC-N1380,W182(3.0-3.6)	32000	C	-	31000	290000	-	N
CHRYSENE	73/83	22 - 20000	270 - 520	2110	HU235AC-N1380,W182(3.0-3.6), HU235AC-N1380,W182(3.0-3.6)	88000	C	-	84000	780000	-	N
DI-N-BUTYL PHTHALATE	26/82	24 - 1900	160 - 17000	675	RM-SD-SD06-04, RM-SD-SD14-04	780000	N	2300000	1000000	2500000	-	N
DI-N-OCTYL PHTHALATE	22/80	32 - 4200	200 - 17000	779	SD-08	160000	N	10000000	1000000	2500000	-	N
DIBENZO(A,H)ANTHRACENE	43/81	46 - 1800	160 - 17000	691	HU235AC-N1380,W182(3.0-3.6)	88	C	-	84	780	-	Y
DIBENZOFURAN	29/79	23 - 2300	160 - 17000	646	RM-SD-SD2D-03	31000	N	-	270000	2500000	-	N
DIETHYL PHTHALATE	3/79	140 - 485	160 - 17000	724	RM-SD-SD06-03	6300000	N	2000000	1000000	2500000	-	N
DIMETHYL PHTHALATE	5/79	61 - 2200	160 - 17000	738	RM-SD-SD14-03	78000000	N	-	1000000	2500000	-	N
FLUORANTHENE	74/83	32 - 35000	270 - 520	3779	HU235AC-N1380,W182(3.0-3.6)	310000	N	-	1000000	2500000	-	N
FLUORENE	41/78	23 - 5700	160 - 8900	596	HU235AC-N1380,W182(3.0-3.6)	310000	N	-	1000000	2500000	-	N
INDENO(1,2,3-CD)PYRENE	66/82	36 - 11000	270 - 620	1008	HU235AC-N1380,W182(3.0-3.6)	880	C	-	840	7800	-	Y
N-NITROSO-DI-N-PROPYLAMINE	1/79	110 - 110	160 - 17000	724	RM-SD-SD2D-03	91	C	-	88	820	-	N[7]
N-NITROSODIPHENYLAMINE	7/79	55 - 2900	160 - 17000	743	OU3-A3-SB02-0608	130000	C	-	130000	1200000	-	N
NAPHTHALENE	31/79	29 - 36000	160 - 8900	996	RM-SD-SD2D-03	160000	N	-	1000000	2500000	-	N
PENTACHLOROPHENOL	1/79	120 - 120	400 - 43000	1782	RM-SD-SD2D-03	5300	C	-	5100	48000	-	N
PHENANTHRENE	71/82	22 - 30000	270 - 520	1995	HU235AC-N1380,W182(3.0-3.6)	-	-	-	1000000	2500000	-	N

TABLE 6-28

SELECTION OF CHEMICALS OF POTENTIAL CONCERN
AREA A-3, RESIDENTIAL PROPERTIES ON HOUSATONIC AVENUE
ALL SOIL/SEDIMENT (0-15')
FERRY CREEK, STRATFORD, CONNECTICUT
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Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	COPC Screening Level (1)	N/C (2)	SSL Inhalation (3)	State Residential Direct Exposure (4)	State Industrial Direct Exposure (4)	Background Concentration (5)	Select As COPC? (6)
PHENOL	20/74	18 - 4600	200 - 17000	921	RM-SD-SD14D-03	4700000	N	-	1000000	2500000	-	N
PYRENE	75/83	33 - 33000	270 - 520	3514	HU235AC-N1380,W182(3.0-3.6)	230000	N	-	1000000	2500000	-	N
Pesticides/PCBs (ug/kg)												
4,4'-DDD	27/77	0.07 - 80	2 - 220	14	RM-SD-SD24-04	2700	C	-	2600	24000	-	N
4,4'-DDE	43/76	0.11 - 80	1.9 - 85	11	HU75AC-N647,W285(0.0-0.5)	1900	C	-	1800	17000	-	N
4,4'-DDT	27/66	0.2 - 4600	1.6 - 160	92	SPDG4	1900	C	-	1800	17000	-	Y
ALDRIN	24/75	0.051 - 12	0.98 - 44	4	OU3-A3-SD01-0002	38	C	3000	36	340	-	N
ALPHA-BHC	18/75	0.055 - 4.4	0.82 - 85	5	OU3-A3-SD01-0204	100	C	800	97	910	-	N
ALPHA-CHLORDANE	32/81	0.06 - 110	0.82 - 85	10	SPDB2	1800	C	20000	490	2200	-	N
AROCLOR-1248	4/77	310 - 1400	16 - 2200	144	SPDAC-E275,S130(0.4-1.5)	320	C	-	1000	10000	-	Y
AROCLOR-1254	6/79	100 - 1200	16 - 2200	133	SPDAC-E275,S130(0.4-1.5)	160	N	-	1000	10000	-	Y
AROCLOR-1260	2/78	5100 - 24125	16 - 2200	482	SD-09	320	C	-	1000	10000	-	Y
AROCLOR-1262	51/82	10 - 68000	30 - 360	4425	OU3-A3-SD02-0002	320	C	-	1000	10000	-	Y
AROCLOR-1268	56/81	21 - 60000	19 - 2200	4603	OU3-A3-SD02-0002	320	C	-	1000	10000	-	Y
BETA-BHC	9/75	0.46 - 12	0.82 - 85	5	RM-SD-SD2D-03	350	C	-	340	3200	-	N
DELTA-BHC	4/77	1.2 - 24	0.82 - 110	6	RM-SD-SD01-04	-		-	97	910	-	N
DIELDRIN	35/77	0.034 - 39	3.2 - 220	12	RM-SD-SD16-03	40	C	1000	38	360	-	Y
ENDOSULFAN I	12/67	0.11 - 30	0.82 - 110	6	SPDAC-E275,S130(0.4-1.5)	47000	N	-	410000	1200000	-	N
ENDOSULFAN II	7/73	0.16 - 43	1.6 - 220	11	RM-SD-SD02-01	47000	N	-	410000	1200000	-	N
ENDOSULFAN SULFATE	11/72	1.1 - 55	1.6 - 220	12	RM-SD-SD14D-03	-		-	410000	1200000	-	N
ENDRIN	20/75	0.17 - 92	1.6 - 220	12	OU3-A3-SB02-0608	2300	N	-	20000	610000	-	N
ENDRIN ALDEHYDE	27/76	0.52 - 1200	1.6 - 220	57	RM-SD-SD02-01	-		-	20000	610000	-	N
ENDRIN KETONE	4/77	0.23 - 2000	1.6 - 220	37	SPDAC-E275,S130(0.4-1.5)	-		-	20000	610000	-	N
GAMMA-BHC (LINDANE)	12/75	0.05 - 14	0.82 - 85	5	RM-SD-SD14D-03	490	C	-	20000	610000	-	N
GAMMA-CHLORDANE	41/80	0.07 - 120	0.82 - 85	10	SPDB2	1800	C	20000	490	2200	-	N
HEPTACHLOR	6/74	0.24 - 2.8	0.82 - 85	5	OU3-A3-SB01-0002	140	C	100	140	1300	-	N
HEPTACHLOR EPOXIDE	21/77	0.16 - 19.5	0.82 - 110	6	OU3-A3-SD05-0002	70	C	5000	67	630	-	N
METHOXYCHLOR	3/72	41 - 260	3.3 - 850	50	RM-SD-SD01-01	39000	N	-	340000	10000000	-	N
PCB Congeners (ug/kg)[8]												
2',3,4,4',5-PENTACHLOROBIPHENYL (123)	2/2	1.61 - 43.4	-	23	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
2,2',3,3',4,4',5-HEPTACHLOROBIPHENYL (170)	1/2	1020 - 1020	2.88 - 2.88	511	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
2,3',4,4',5,5'-HEXACHLOROBIPHENYL (167)	1/2	4.95 - 4.95	0.0532 - 0.0532	2	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
2,3',4,4',5-PENTACHLOROBIPHENYL (118)	1/2	5.47 - 5.47	0.233 - 0.233	3	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
2,3,3',4,4',5'-HEXACHLOROBIPHENYL (157)	1/2	8.87 - 8.87	0.0733 - 0.0733	4	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
2,3,3',4,4',5-HEXACHLOROBIPHENYL (156)	1/2	42.2 - 42.2	0.0507 - 0.0507	21	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
2,3,3',4,4'-PENTACHLOROBIPHENYL (105)	1/2	0.209 - 0.209	0.0143 - 0.0143	0.1	OU3-A3-SD05-0204	320	C	-	1000	10000	-	Y
2,3,4,4',5-PENTACHLOROBIPHENYL (114)	2/2	0.565 - 108	-	54	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
3,3',4,4',5,5'-HEXACHLOROBIPHENYL (169)	1/2	1.28 - 1.28	0.0272 - 0.0272	1	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
3,3',4,4'-TETRACHLOROBIPHENYL (77)	1/2	8.01 - 8.01	0.123 - 0.123	4	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
DECACHLOROBIPHENYL	1/2	382 - 382	0.0114 - 0.0114	191	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL DICHLOROBIPHENYLS	2/2	0.444 - 93.5	-	47	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL HEPTACHLOROBIPHENYLS	1/2	6890 - 6890	3.15 - 3.15	3446	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL HEXACHLOROBIPHENYLS	1/2	1770 - 1770	0.792 - 0.792	885	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL MONOCHLOROBIPHENYLS	2/2	0.0229 - 4.92	-	2	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL NONACHLOROBIPHENYLS	1/2	554 - 554	1.38 - 1.38	277	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL OCTACHLOROBIPHENYLS	1/2	6270 - 6270	4.3 - 4.3	3136	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL PENTACHLOROBIPHENYLS	1/2	995 - 995	0.277 - 0.277	498	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL TETRACHLOROBIPHENYLS	2/2	1.16 - 662	-	332	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
TOTAL TRICHLOROBIPHENYLS	2/2	1.97 - 404	-	203	OU3-A3-SD05-0002	320	C	-	1000	10000	-	Y
Metals (mg/kg)												
ALUMINUM	86/86	3830 - 24300	-	11332	OU3-A3-SD04-0002	7800	N	-	-	-	22600	N[9]
ANTIMONY	9/82	1.8 - 13	1.2 - 30.4	4	OU3-A3-SD01-0204	3.1	N	-	27	8200	ND	Y

TABLE 6-28

SELECTION OF CHEMICALS OF POTENTIAL CONCERN
AREA A-3, RESIDENTIAL PROPERTIES ON HOUSATONIC AVENUE
ALL SOIL/SEDIMENT (0-15')
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 3 OF 3

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	COPC Screening Level (1)	N/C (2)	SSL Inhalation (3)	State Residential Direct Exposure (4)	State Industrial Direct Exposure (4)	Background Concentration (5)	Select As COPC? (6)
ARSENIC	80/86	1.7 - 21.2	1.6 - 5.8	9	RM-SD-SD16-03	0.43	C	750	10	10	11.6	Y
BARIUM	86/86	10.6 - 21000	-	1736	SPDAC-E275,S130(0.4-1.5)	550	N	690000	4700	140000	329	Y
BERYLLIUM	54/85	0.29 - 1.5	0.14 - 1.7	1	HU263AC-N1695,W192(7.5-8.0)	16	C	1300	2	2	1.3	N
CADMIUM	30/84	0.62 - 22.5	0.24 - 5.7	3	SD-08	7.8	N	1800	34	1000	1.4	Y
CALCIUM	81/86	470 - 30700	2090 - 3890	3527	OU3-A3-SB01-0002	-	-	-	-	-	7420	N
CHROMIUM	86/86	7.6 - 730	-	110	OU3-A3-SD01-0204	23	N	270	100	100	35.2	Y
COBALT	84/86	3.1 - 46.8	2.3 - 6.4	11	OU3-A3-SB02-0608	470	N	-	1000	2500	12.4	N
COPPER	84/97	16.2 - 34600	6.5 - 300	2858	SPDAC-E275,S130(0.4-1.5)	310	N	-	2500	76000	123	Y
IRON	86/86	7570 - 57000	-	22353	RM-SD-SD13-02	2300	N	-	-	-	24100	N[9]
LEAD	338/405	6.4 - 35400	5.1 - 335	1085	OU3-A3-SB02-0608	400[10]	N	-	500	1000	344	Y
MAGNESIUM	86/86	2000 - 95400	-	13651	OU3-A3-SB02-0608	-	-	-	-	-	5690	N
MANGANESE	86/86	70.1 - 1870	-	320	RM-SD-SD16-03	160	N	-	1600	47000	660	Y
MERCURY	41/86	0.06 - 2.4	0.05 - 0.58	0.35	RM-SD-SD14D-03	2.3	N	10	20	610	0.28	Y
NICKEL	82/86	6.6 - 580	3.5 - 13.5	101	OU3-A3-SB02-0608	160	N	13000	1400	7500	40.4	Y
POTASSIUM	83/86	470 - 4330	139 - 667	1906	OU3-A3-SD08-0002	-	-	-	-	-	2680	N
SELENIUM	7/83	0.87 - 2.5	0.24 - 6.7	1	RM-SD-SD14D-03	39	N	-	340	10000	3.3	N
SILVER	20/83	0.34 - 7.6	0.49 - 4.6	1	HU103AC-N720,W258(0.0-0.3)	39	N	-	340	10000	3.3	N
SODIUM	81/86	42.1 - 19400	53.9 - 1030	3266	RM-SD-SD04-04	-	-	-	-	-	248	N
THALLIUM	9/82	1 - 3.9	0.15 - 11.2	1	OU3-A3-SD01-0002	0.55	N	-	5.4	160	ND	Y
VANADIUM	85/86	6.6 - 157	0.36 - 0.36	44	RM-SD-SD16-03	55	N	-	470	14000	81.9	Y
ZINC	84/86	22.4 - 4800	51.8 - 436	603	OU3-A3-SD02-0002	2300	N	-	20000	610000	604	Y
Dioxin (ug/kg)												
TOXICITY EQUIVALENCY (TEQ)	58/58	0.0014 - 10.540	-	0.66	OU3-A3-SB02-0608	0.0043	C	-	-	-	-	Y
Asbestos (%)												
ASBESTOS	104/350	0.99 - 90	0.1 - 0.1	3	SPD F3	1	C	-	-	-	-	Y

1 Based on current USEPA Region III guidance (USEPA Region III, 10-1-98). Residential Soil Ingestion is used for soil and sediment. Value for noncarcinogens is based on a target hazard quotient of 0.1. Value for carcinogens is based on a cancer risk of 1E-6.

2 COPC screening level based on noncarcinogenic (N)/carcinogenic (C) effects.

3 USEPA Soil Screening Levels (USEPA, May 1996).

4 CTDEP, January 1996. In some cases, calculated or surrogate or ceiling value presented as detailed in Table 6-1.

5 Maximum background concentrations presented for inorganics only because background concentrations for organics were not used in COPC selection.

6 COPC selection criteria discussed in Section 6.2 and presented/defined in Table 6-1. Chemical was selected as a COPC (Y = yes) if maximum detected concentration exceeded screening levels, except that noncarcinogenic inorganics detected at concentrations exceeding screening levels (based on Region III criteria) but less than Region III risk-based concentrations AND maximum background concentration were not selected as COPCs.

7 Compound was not accepted as a COPC due to the low frequency of detection and only a slight exceedance of the selection criteria.

8 PCB Congeners will be evaluated qualitatively in the uncertainty section.

9 USEPA Region I does not advocate quantitative risk assessment of aluminum or iron.

10 Value is based on OSWER soil screening level for residential land use (USEPA, July 14, 1994).

ND Compound was not present at detectable concentrations in background samples.

- Not available or not applicable.

TABLE 6-29A

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-3, RESIDENTIAL PROPERTIES ON HOUSATONIC AVENUE
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT
PAGE 1 OF 4

Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
Volatile Organic Compounds (ug/kg)							
1,1,1-TRICHLOROETHANE	2/47	9 - 13	11 - 32	9	RM-SD-SD16-04	2000	40000
1,1,2,2-TETRACHLOROETHANE	1/46	7 - 7	11 - 32	9	HU103AC-N790,W245(0.3-0.8)	3	100
1,1-DICHLOROETHANE	13/46	2 - 59	11 - 32	11	RM-SD-SD12-04	23000	14000
1,2-DICHLOROETHANE	1/46	7 - 7	11 - 32	9	HU103AC-N790,W245(0.3-0.8)	20	200
1,2-DICHLOROETHENE (TOTAL)	5/46	5 - 12	11 - 32	9	RM-SD-SD12-02	400	14000
2-BUTANONE	5/46	32 - 64	11 - 35	13	RM-SD-SD13-02	-	80000
2-HEXANONE	1/46	9 - 9	11 - 32	9	HU103AC-N790,W245(0.3-0.8)	-	56000
4-METHYL-2-PENTANONE	1/46	7 - 7	11 - 32	9	HU103AC-N790,W245(0.3-0.8)	-	14000
ACETONE	3/48	46 - 190	11 - 240	29	SD-08	16000	140000
BROMOFORM	1/46	7 - 7	11 - 32	9	HU103AC-N790,W245(0.3-0.8)	800	800
CARBON DISULFIDE	13/46	1 - 58	11 - 32	11	RM-SD-SD24-04	32000	140000
CHLOROBENZENE	6/46	2 - 27	11 - 32	9	RM-SD-SD13-02	1000	20000
ETHYLBENZENE	2/46	9 - 29	11 - 32	10	RM-SD-SD2D-03	13000	10100
TETRACHLOROETHENE	1/46	3 - 3	11 - 32	9	SD-09	60	1000
TOLUENE	3/46	2 - 12	11 - 32	9	RM-SD-SD2D-03	12000	67000
TRICHLOROETHENE	2/47	7 - 23	11 - 32	9	RM-SD-SD16-04	60	1000
XYLENES, TOTAL	1/46	88 - 88	11 - 32	11	RM-SD-SD2D-03	190000	19500
Semivolatile Organic Compounds (ug/kg)							
1,4-DICHLOROBENZENE	1/54	79 - 79	200 - 17000	898	RM-SD-SD2D-03	2000	15000
2,4-DIMETHYLPHENOL	14/54	25 - 1500	200 - 17000	911	RM-SD-SD14-03	9000	28000
2-METHYLNAPHTHALENE	13/54	20 - 4500	200 - 17000	951	RM-SD-SD2D-03	-	56000
2-METHYLPHENOL	6/54	57 - 330	200 - 17000	897	SD-08	15000	70000
4-METHYLPHENOL	9/55	24 - 295	200 - 17000	875	SPDAC-E275,S130(0.4-1.5)	-	7000
ACENAPHTHENE	21/54	42 - 3400	200 - 17000	854	RM-SD-SD2D-03	570000	84000
ACENAPHTHYLENE	34/55	31 - 2600	250 - 17000	951	RM-SD-SD16-03	-	84000
ANTHRACENE	38/55	40 - 2000	350 - 17000	964	SPDAC,E325,S38(0.0-1.0)	12000000	400000
BENZO(A)ANTHRACENE	53/57	49 - 6700	370 - 620	1897	SPDAC,E325,S38(0.0-1.0), SPDAC,E325,S38(0.0-1.0)	2000	1000
BENZO(A)PYRENE	56/57	24 - 6100	410 - 410	1729	RM-SD-SD23-04	8000	1000
BENZO(B)FLUORANTHENE	56/57	22 - 9900	410 - 410	3146	RM-SD-SD23-04, RM-SD-SD23-04	5000	1000
BENZO(G,H,I)PERYLENE	45/57	120 - 5400	350 - 7900	1061	RM-SD-SD23-04	-	40000
BENZO(K)FLUORANTHENE	37/55	28 - 7500	410 - 8900	1698	OU3-A3-SD07-0002	49000	1000
BIS(2-ETHYLHEXYL)PHTHALATE	32/57	290 - 160000	340 - 8800	8634	SD-08	3600000	11000
BUTYLBENZYL PHTHALATE	18/55	41 - 1700	200 - 17000	873	OU3-A3-SD06-0002	930000	200000
CARBAZOLE	31/55	36 - 1600	330 - 17000	805	RM-SD-SD21-04	600	360
CHRYSENE	56/57	25 - 7200	410 - 410	2413	SPDAC,E325,S38(0.0-1.0), SPDAC,E325,S38(0.0-1.0)	160000	960
DI-N-BUTYL PHTHALATE	18/57	24 - 1900	200 - 17000	861	RM-SD-SD06-04, RM-SD-SD14-04	2300000	140000
DI-N-OCTYL PHTHALATE	18/55	40 - 4200	200 - 17000	976	SD-08	10000000	20000
DIBENZO(A,H)ANTHRACENE	37/56	46 - 1600	250 - 17000	858	RM-SD-SD21-04	2000	0.96
DIBENZOFURAN	20/54	39 - 2300	200 - 17000	822	RM-SD-SD2D-03	-	5600

TABLE 6-29A

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-3, RESIDENTIAL PROPERTIES ON HOUSATONIC AVENUE
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT
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Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
DIETHYL PHTHALATE	3/54	140 - 485	200 - 17000	899	RM-SD-SD06-03	470000	1100000
DIMETHYL PHTHALATE	5/54	61 - 2200	200 - 17000	921	RM-SD-SD14-03	-	14000000
FLUORANTHENE	57/57	33 - 14000	-	4282	SPDAC,E325,S38(0.0-1.0)	4300000	56000
FLUORENE	31/53	23 - 2100	350 - 8900	650	RM-SD-SD2D-03	560000	56000
INDENO(1,2,3-CD)PYRENE	53/57	39 - 5500	350 - 620	1094	RM-SD-SD24-04	14000	9.6
N-NITROSO-DI-N-PROPYLAMINE	1/54	110 - 110	200 - 17000	899	RM-SD-SD2D-03	0.05	1
N-NITROSODIPHENYLAMINE	4/54	55 - 1600	200 - 17000	922	RM-SD-SD21-04	1000	1400
NAPHTHALENE	23/54	29 - 36000	200 - 8900	1324	RM-SD-SD2D-03	84000	56000
PENTACHLOROPHENOL	1/54	120 - 120	440 - 43000	2210	RM-SD-SD2D-03	30	1000
PHENANTHRENE	55/57	22 - 7900	370 - 410	1922	SPDAC,E325,S38(0.0-1.0)	-	40000
PHENOL	15/53	29 - 4600	200 - 17000	1143	RM-SD-SD14D-03	100000	800000
PYRENE	57/57	35 - 18000	-	4019	SPDAC,E325,S38(0.0-1.0)	4200000	40000
Pesticides/PCBs (ug/kg)							
4,4'-DDD	21/54	1.7 - 80	2 - 220	16	RM-SD-SD24-04	16000	29
4,4'-DDE	37/57	0.11 - 80	3 - 75	12	HU75AC-N647,W285(0.0-0.5)	54000	21
4,4'-DDT	24/49	0.2 - 4600	2 - 160	119	SPDG4	32000	21
ALDRIN	20/52	0.12 - 12	1 - 39	5	OU3-A3-SD01-0002	500	0.41
ALPHA-BHC	16/52	0.21 - 4.25	1 - 85	5	RM-SD-SD01-04	0.5	1.1
ALPHA-CHLORDANE	30/57	0.06 - 110	1 - 85	13	SPDB2	10000	66
AROCLOR-1248	2/54	1190 - 1400	20 - 2200	169	SPDAC-E275,S130(0.4-1.5)	-	-
AROCLOR-1254	5/56	100 - 1200	20 - 2200	153	SPDAC-E275,S130(0.4-1.5)	-	-
AROCLOR-1260	2/55	5100 - 24125	20 - 2200	650	SD-09	-	-
AROCLOR-1262	37/58	31 - 68000	30 - 180	4432	OU3-A3-SD02-0002	-	-
AROCLOR-1268	43/57	21 - 60000	33 - 2200	4351	OU3-A3-SD02-0002	-	-
BETA-BHC	9/52	0.46 - 12	1 - 85	6	RM-SD-SD2D-03	3	3.9
DELTA-BHC	3/54	3.7 - 24	1 - 110	7	RM-SD-SD01-04	-	1.1
DIELDRIN	29/54	0.12 - 39	3.3 - 220	14	RM-SD-SD16-03	4	7
ENDOSULFAN I	7/49	0.67 - 30	1 - 110	6	SPDAC-E275,S130(0.4-1.5)	18000	8400
ENDOSULFAN II	6/52	0.36 - 43	2 - 220	12	RM-SD-SD02-01	18000	8400
ENDOSULFAN SULFATE	8/51	6 - 55	2 - 220	15	RM-SD-SD14D-03	-	8400
ENDRIN	16/53	0.36 - 37.5	2 - 220	13	OU3-A3-SD05-0002	1000	-
ENDRIN ALDEHYDE	23/55	0.83 - 1200	2 - 220	69	RM-SD-SD02-01	-	-
ENDRIN KETONE	2/54	0.23 - 2000	2 - 220	50	SPDAC-E275,S130(0.4-1.5)	-	-
GAMMA-BHC (LINDANE)	9/52	0.05 - 14	1 - 85	6	RM-SD-SD14D-03	9	40
GAMMA-CHLORDANE	36/56	0.07 - 120	1.6 - 85	12	SPDB2	10000	66
HEPTACHLOR	6/51	0.24 - 2.8	1 - 85	6	OU3-A3-SB01-0002	23000	13
HEPTACHLOR EPOXIDE	21/54	0.16 - 19.5	1.5 - 110	7	OU3-A3-SD05-0002	700	20
METHOXYCHLOR	3/51	41 - 260	3.3 - 850	60	RM-SD-SD01-01	160000	8000
PCB Congeners (ug/kg)							
2',3,4,4',5-PENTACHLOROBIPHENYL (123)	1/1	43.4 - 43.4	-	43	OU3-A3-SD05-0002	-	-

TABLE 6-29A

COMPARISON OF MAXIMUM CONCENTRATIONS TO GROUNDWATER PROTECTION BENCHMARKS
AREA A-3, RESIDENTIAL PROPERTIES ON HOUSATONIC AVENUE
SURFACE SOIL/SEDIMENT
FERRY CREEK, STRATFORD, CONNECTICUT
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Parameter	Frequency	Range Of Detects	Range Of Nondetects	Average	Location of Maximum	SSL Migration To Groundwater (1)	State Pollutant Mobility (GB) (2)
2,2',3,3',4,4',5-HEPTACHLOROBIPHENYL (170)	1/1	1020 - 1020	-	1020	OU3-A3-SD05-0002	-	-
2,3',4,4',5,5'-HEXACHLOROBIPHENYL (167)	1/1	4.95 - 4.95	-	5	OU3-A3-SD05-0002	-	-
2,3',4,4',5-PENTACHLOROBIPHENYL (118)	1/1	5.47 - 5.47	-	5	OU3-A3-SD05-0002	-	-
2,3,3',4,4',5'-HEXACHLOROBIPHENYL (157)	1/1	8.87 - 8.87	-	9	OU3-A3-SD05-0002	-	-
2,3,3',4,4',5-HEXACHLOROBIPHENYL (156)	1/1	42.2 - 42.2	-	42	OU3-A3-SD05-0002	-	-
2,3,4,4',5-PENTACHLOROBIPHENYL (114)	1/1	108 - 108	-	108	OU3-A3-SD05-0002	-	-
3,3',4,4',5,5'-HEXACHLOROBIPHENYL (169)	1/1	1.28 - 1.28	-	1	OU3-A3-SD05-0002	-	-
3,3',4,4'-TETRACHLOROBIPHENYL (77)	1/1	8.01 - 8.01	-	8	OU3-A3-SD05-0002	-	-
DECACHLOROBIPHENYL	1/1	382 - 382	-	382	OU3-A3-SD05-0002	-	-
TOTAL DICHLOROBIPHENYLS	1/1	93.5 - 93.5	-	94	OU3-A3-SD05-0002	-	-
TOTAL HEPTACHLOROBIPHENYLS	1/1	6890 - 6890	-	6890	OU3-A3-SD05-0002	-	-
TOTAL HEXACHLOROBIPHENYLS	1/1	1770 - 1770	-	1770	OU3-A3-SD05-0002	-	-
TOTAL MONOCHLOROBIPHENYLS	1/1	4.92 - 4.92	-	5	OU3-A3-SD05-0002	-	-
TOTAL NONACHLOROBIPHENYLS	1/1	554 - 554	-	554	OU3-A3-SD05-0002	-	-
TOTAL OCTACHLOROBIPHENYLS	1/1	6270 - 6270	-	6270	OU3-A3-SD05-0002	-	-
TOTAL PENTACHLOROBIPHENYLS	1/1	995 - 995	-	995	OU3-A3-SD05-0002	-	-
TOTAL TETRACHLOROBIPHENYLS	1/1	662 - 662	-	662	OU3-A3-SD05-0002	-	-
TOTAL TRICHLOROBIPHENYLS	1/1	404 - 404	-	404	OU3-A3-SD05-0002	-	-
Metals (mg/kg)							
ALUMINUM	61/61	3830 - 24300	-	11504	OU3-A3-SD04-0002	-	-
ANTIMONY	5/57	1.8 - 6.7	1.2 - 30.4	4	OU3-A3-SD01-0002	5	-
ARSENIC	56/61	1.7 - 21.2	1.6 - 5.8	9	RM-SD-SD16-03	29	-
BARIUM	61/61	16.6 - 21000	-	1756	SPDAC-E275,S130(0.4-1.5)	1600	-
BERYLLIUM	32/61	0.31 - 1.4	0.14 - 1.7	1	HU201AC-N1270,W160(1.6-2.4)	63	-
CADMIUM	24/59	0.62 - 22.5	0.4 - 5.7	3	SD-08	8	-
CALCIUM	56/61	470 - 30700	2090 - 3890	3787	OU3-A3-SB01-0002	-	-
CHROMIUM	61/61	12.5 - 528	-	123	SPDB2	38	-
COBALT	60/61	3.1 - 36.4	6.4 - 6.4	11	SPDAC-E275,S130(0.4-1.5)	-	-
COPPER	61/62	16.2 - 34600	20.3 - 20.3	3168	SPDAC-E275,S130(0.4-1.5)	-	-
IRON	61/61	7570 - 57000	-	23544	RM-SD-SD13-02	-	-
LEAD	207/225	10.4 - 26000	100 - 335	1281	SPDAC-E275,S130(0.4-1.5)	-	-
MAGNESIUM	61/61	2150 - 92220	-	14397	RM-SD-SD16-04	-	-
MANGANESE	61/61	75.3 - 1870	-	358	RM-SD-SD16-03	-	-
MERCURY	33/61	0.1 - 2.4	0.08 - 0.58	0.4	RM-SD-SD14D-03	2	-
NICKEL	60/61	11.2 - 506	13.5 - 13.5	114	RM-SD-SD14D-03	130	-
POTASSIUM	61/61	470 - 4330	-	1984	OU3-A3-SD08-0002	-	-
SELENIUM	7/58	0.87 - 2.5	0.24 - 6.7	1	RM-SD-SD14D-03	5	-
SILVER	12/58	0.81 - 7.6	0.5 - 4.6	1	HU103AC-N720,W258(0.0-0.3)	34	-
SODIUM	56/61	112 - 19400	53.9 - 1030	3812	RM-SD-SD04-04	-	-
THALLIUM	4/57	1.4 - 3.9	0.17 - 11.2	1	OU3-A3-SD01-0002	0.7	-