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TABLE C.1

SOIL SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

	USEPA Regional Screening Levels (RSLs) [1]				Ecological Screening Levels [2]	Ohio EPA VAP Derived Leach-Based Soil Values 2008				
			Protection of Ground Water			Table I				Table II
	Residential Soil	Industrial Soil	Risk-based	MCL-based SSL		Soil Type I	Soil Type II	Soil Type III	Sources ≥ ½	Sources < ½
	ug/kg	ug/kg	ug/kg	ug/kg	µg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Parameter										
Volatile Organic Compounds										
1,1,1-Trichloroethane	8700000	38000000	2600	70	29800	1.2	0.74	1.3	-	-
1,1,2,2-Tetrachloroethane	560	2800	0.026	-	127	-	-	-	-	-
1,1,2-Trichloroethane	1100	5300	0.077	1.6	28600	-	-	-	-	-
1,1-Dichloroethane	3300	17000	0.68	-	20100	-	-	-	-	-
1,1-Dichloroethene	240000	1100000	93	2.5	8280	0.28	0.10	0.24	-	-
1,1-Dichloropropane	-	-	-	-	-	-	-	-	-	-
1,2,3-Trichloropropane	5	95	0.00028	-	3360	-	-	-	-	-
1,2,4-Trichlorobenzene	22000	99000	2.9	200	11100	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	5.4	69	0.00014	0.086	35.2	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	34	170	0.0018	0.014	1230	-	-	-	-	-
1,2-Dichlorobenzene	1900000	9800000	270	580	2960	-	-	-	-	-
1,2-Dichloroethane	430	2200	0.042	1.4	21200	0.0030	0.0020	0.0030	-	-
1,2-Dichloroethene (total)	700000	9200000	37	-	-	-	-	-	-	-
1,2-Dichloropropane	940	4700	0.13	1.7	32700	-	-	-	-	-
1,3-Dichlorobenzene	-	-	-	-	37700	-	-	-	-	-
1,4-Dichloro-2-butene	6.9	35	0.00054	-	-	-	-	-	-	-
1,4-Dichlorobenzene	2400	12000	0.4	72	546	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	28000000	200000000	1000	-	89600	1.8	1.8	1.8	-	-
2-Chloroethyl vinyl ether	-	-	-	-	-	-	-	-	-	-
2-Hexanone	210000	1400000	7.9	-	12600	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	5300000	53000000	230	-	443000	-	-	-	-	-
Acetone	61000000	630000000	2400	-	2500	-	-	-	-	-
Acrolein	150	650	0.0084	-	5270	-	-	-	-	-
Acrylonitrile	240	1200	0.0098	-	23.9	-	-	-	-	-
Benzene	1100	5400	0.2	2.6	255	0.017	0.0090	0.015	-	-
Bromodichloromethane	270	1400	0.032	22	540	-	-	-	-	-
Bromoform	62000	220000	2.1	21	15900	-	-	-	-	-
Bromomethane (Methyl bromide)	7300	32000	1.8	-	235	-	-	-	-	-
Carbon disulfide	820000	3700000	210	-	94.1	-	-	-	-	-
Carbon tetrachloride	610	3000	0.15	1.9	2980	0.25	0.25	0.28	-	-
Chlorobenzene	290000	1400000	49	68	13100	-	-	-	-	-
Chloroethane	15000000	61000000	5900	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	290	1500	0.053	22	1190	-	-	-	-	-
Chloromethane (Methyl chloride)	120000	500000	49	-	10400	-	-	-	-	-
cis-1,2-Dichloroethene	160000	2000000	8.2	21	-	0.12	0.070	0.12	-	-
cis-1,3-Dichloropropene	-	-	-	-	398	-	-	-	-	-
Cyclohexane	7000000	29000000	13000	-	-	-	-	-	-	-
Dibromochloromethane	680	3300	0.039	21	2050	-	-	-	-	-
Dibromomethane	25000	110000	1.9	-	65000	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	94000	400000	300	-	39500	-	-	-	-	-
Dichlorofluoromethane	-	-	-	-	-	-	-	-	-	-
Ethyl methacrylate	1500000	7500000	99	-	30000	-	-	-	-	-
Ethylbenzene	5400	27000	1.5	780	5160	12	7.9	16	-	-
Iodomethane	-	-	-	-	1230	-	-	-	-	-
Isopropyl benzene (Cumene)	2100000	11000000	640	-	-	-	-	-	-	-
Methyl acetate	78000000	1000000000	3200	-	-	-	-	-	-	-
Methyl cyclohexane	-	-	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	43000	220000	2.8	-	-	-	-	-	-	-
Methylene chloride	56000	960000	2.5	1.3	4050	-	-	-	-	-
n-Hexane	-	-	-	-	-	121	111	104	-	-
Styrene	6300000	36000000	1200	110	4690	0.46	0.37	0.62	-	-
Tetrachloroethene	22000	110000	4.4	2.3	9920	0.15	0.11	0.27	-	-
Toluene	5000000	45000000	590	690	5450	6.8	4.1	7.7	-	-

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trans-1,2-Dichloroethene	trans-1,2-Dichloroethene	150000	690000	25	29	784	0.036	0.023	0.048	-	-
trans-1,3-Dichloropropene	trans-1,3-Dichloropropene	-	-	-	-	398	-	-	-	-	-
Trichloroethene	Trichloroethene	910	6400	0.16	1.8	12400	0.036	0.023	0.048	-	-
Trichlorofluoromethane (CFC-11)	Trichlorofluoromethane (CFC-11)	790000	3400000	690	-	16400	-	-	-	-	-
Trifluorotrichloroethane (Freon 113)	Trifluorotrichloroethane (Freon 113)	43000000	180000000	130000	-	-	-	-	-	-	-
Vinyl acetate	Vinyl acetate	970000	4100000	87	-	12700	-	-	-	-	-
Vinyl chloride	Vinyl chloride	60	1700	0.0053	0.69	646	0.0090	0.0050	0.012	-	-
Xylenes (total)	Xylenes (total)	630000	2700000	190	9800	10000	156	96	191	-	-
Semi-Volatile Organic Compounds	***Semi-Volatile Organic Compounds***										
1,2,4-Trichlorobenzene	1,2,4-Trichlorobenzene	22000	99000	2.9	200	11100	-	-	-	-	-
1,2-Dichlorobenzene	1,2-Dichlorobenzene	1900000	9800000	270	580	2960	-	-	-	-	-
1,3-Dichlorobenzene	1,3-Dichlorobenzene	-	-	-	-	37700	-	-	-	-	-
1,4-Dichlorobenzene	1,4-Dichlorobenzene	2400	12000	0.4	72	546	-	-	-	-	-
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	4600	22000	0.11	-	19900	-	-	-	-	-
2,4,5-Trichlorophenol	2,4,5-Trichlorophenol	6100000	62000000	3300	-	14100	-	-	-	-	-
2,4,6-Trichlorophenol	2,4,6-Trichlorophenol	44000	160000	13	-	9940	-	-	-	-	-
2,4-Dichlorophenol	2,4-Dichlorophenol	180000	1800000	41	-	87500	-	-	-	-	-
2,4-Dimethylphenol	2,4-Dimethylphenol	1200000	12000000	320	-	10	-	-	-	-	-
2,4-Dinitrophenol	2,4-Dinitrophenol	120000	1200000	34	-	60.9	-	-	-	-	-
2,4-Dinitrotoluene	2,4-Dinitrotoluene	1600	5500	0.28	-	1280	-	-	-	-	-
2,6-Dinitrotoluene	2,6-Dinitrotoluene	61000	620000	20	-	32.8	-	-	-	-	-
2-Chloronaphthalene	2-Chloronaphthalene	6300000	82000000	2900	-	12.2	-	-	-	-	-
2-Chlorophenol	2-Chlorophenol	390000	5100000	57	-	243	-	-	-	-	-
2-Methylnaphthalene	2-Methylnaphthalene	230000	2200000	140	-	3240	-	-	-	-	-
2-Methylphenol	2-Methylphenol	3100000	31000000	580	-	40400	-	-	-	-	-
2-Nitroaniline	2-Nitroaniline	610000	6000000	62	-	74100	-	-	-	-	-
2-Nitrophenol	2-Nitrophenol	-	-	-	-	1600	-	-	-	-	-
3&4-Methylphenol	3&4-Methylphenol	-	-	-	-	-	-	-	-	-	-
3,3'-Dichlorobenzidine	3,3'-Dichlorobenzidine	1100	3800	0.71	-	646	-	-	-	-	-
3-Nitroaniline	3-Nitroaniline	-	-	-	-	3160	-	-	-	-	-
4,6-Dinitro-2-methylphenol	4,6-Dinitro-2-methylphenol	4900	49000	2	-	144	-	-	-	-	-
4-Bromophenyl phenyl ether	4-Bromophenyl phenyl ether	-	-	-	-	-	-	-	-	-	-
4-Chloro-3-methylphenol	4-Chloro-3-methylphenol	6100000	62000000	1300	-	7950	-	-	-	-	-
4-Chloroaniline	4-Chloroaniline	2400	8600	0.13	-	1100	-	-	-	-	-
4-Chlorophenyl phenyl ether	4-Chlorophenyl phenyl ether	-	-	-	-	-	-	-	-	-	-
4-Methylphenol	4-Methylphenol	6100000	62000000	1100	-	163000	-	-	-	-	-
4-Nitroaniline	4-Nitroaniline	24000	86000	1.4	-	21900	-	-	-	-	-
4-Nitrophenol	4-Nitrophenol	-	-	-	-	5120	-	-	-	-	-
Acenaphthene	Acenaphthene	3400000	33000000	4100	-	682000	-	-	-	-	-
Acenaphthylene	Acenaphthylene	-	-	-	-	682000	-	-	-	-	-
Acetophenone	Acetophenone	7800000	100000000	450	-	300000	-	-	-	-	-
Anthracene	Anthracene	17000000	170000000	42000	-	1480000	-	-	-	-	-
Atrazine	Atrazine	2100	7500	0.17	1.9	-	-	-	-	-	-
Benzaldehyde	Benzaldehyde	7800000	100000000	330	-	-	-	-	-	-	-
Benzo(a)anthracene	Benzo(a)anthracene	150	2100	10	-	5210	-	-	-	-	-
Benzo(a)pyrene	Benzo(a)pyrene	15	210	3.5	240	1520	-	-	-	-	-
Benzo(b)fluoranthene	Benzo(b)fluoranthene	150	2100	35	-	59800	-	-	-	-	-
Benzo(g,h,i)perylene	Benzo(g,h,i)perylene	-	-	-	-	119000	-	-	-	-	-
Benzo(k)fluoranthene	Benzo(k)fluoranthene	1500	21000	350	-	148000	-	-	-	-	-

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Biphenyl (1,1-Biphenyl)	Biphenyl (1,1-Biphenyl)	51000	210000	8.7	-	-	-	-	-	-	-
bis(2-Chloroethoxy)methane	bis(2-Chloroethoxy)methane	180000	1800000	11	-	302	-	-	-	-	-
bis(2-Chloroethyl)ether	bis(2-Chloroethyl)ether	210	1000	0.0031	-	23700	-	-	-	-	-
bis(2-Ethylhexyl)phthalate (DEHP)	bis(2-Ethylhexyl)phthalate (DEHP)	35000	120000	1100	1400	925	-	-	-	-	-
Butyl benzylphthalate (BBP)	Butyl benzylphthalate (BBP)	260000	910000	200	-	239	-	-	-	-	-
Caprolactam	Caprolactam	31000000	310000000	1900	-	-	-	-	-	-	-
Carbazole	Carbazole	-	-	-	-	-	-	-	-	-	-
Chrysene	Chrysene	15000	210000	1100	-	4730	-	-	-	-	-
Dibenz(a,h)anthracene	Dibenz(a,h)anthracene	15	210	11	-	18400	-	-	-	-	-
Dibenzofuran	Dibenzofuran	78000	1000000	110	-	-	-	-	-	-	-
Diethyl phthalate	Diethyl phthalate	49000000	490000000	4700	-	24800	-	-	-	-	-
Dimethyl phthalate	Dimethyl phthalate	-	-	-	-	734000	-	-	-	-	-
Di-n-butylphthalate (DBP)	Di-n-butylphthalate (DBP)	6100000	62000000	1700	-	150	-	-	-	-	-
Di-n-octyl phthalate (DnOP)	Di-n-octyl phthalate (DnOP)	730000	7400000	53000	-	709000	-	-	-	-	-
Fluoranthene	Fluoranthene	2300000	22000000	70000	-	122000	-	-	-	-	-
Fluorene	Fluorene	2300000	22000000	4000	-	122000	-	-	-	-	-
Hexachlorobenzene	Hexachlorobenzene	300	1100	0.53	13	199	-	-	-	-	-
Hexachlorobutadiene	Hexachlorobutadiene	6200	22000	0.5	-	39.8	-	-	-	-	-
Hexachlorocyclopentadiene	Hexachlorocyclopentadiene	370000	3700000	70	160	755	-	-	-	-	-
Hexachloroethane	Hexachloroethane	12000	43000	0.48	-	596	-	-	-	-	-
Indeno(1,2,3-cd)pyrene	Indeno(1,2,3-cd)pyrene	150	2100	200	-	109000	-	-	-	-	-
Isophorone	Isophorone	510000	1800000	22	-	139000	-	-	-	-	-
Naphthalene	Naphthalene	3600	18000	0.47	-	99.4	0.27	0.28	0.36	-	-
Nitrobenzene	Nitrobenzene	4800	24000	0.079	-	1310	-	-	-	-	-
N-Nitrosodi-n-propylamine	N-Nitrosodi-n-propylamine	69	250	0.007	-	544	-	-	-	-	-
N-Nitrosodiphenylamine	N-Nitrosodiphenylamine	99000	350000	57	-	545	-	-	-	-	-
Pentachlorophenol	Pentachlorophenol	890	2700	0.36	10	119	-	-	-	-	-
Phenanthrene	Phenanthrene	-	-	-	-	45700	-	-	-	-	-
Phenol	Phenol	18000000	180000000	2600	-	120000	1.1	1.1	1.2	-	-
Pyrene	Pyrene	1700000	17000000	9500	-	78500	-	-	-	-	-
Metals	***Metals***										
Aluminum	Aluminum	77000000	990000000	23000000	-	-	-	-	-	-	-
Antimony	Antimony	31000	410000	270	270	142	-	-	-	3.6	7.2
Arsenic	Arsenic	390	1600	1.3	290	5700	-	-	-	3	6
Barium	Barium	15000000	190000000	120000	82000	1040	-	-	-	56000	110000
Beryllium	Beryllium	160000	2000000	13000	3200	1060	-	-	-	57	114
Cadmium	Cadmium	70000	800000	520	380	2.22	-	-	-	21	42
Calcium	Calcium	-	-	-	-	-	-	-	-	-	-
Chromium	Chromium	-	-	-	180000000	400	-	-	-	56	113
Cobalt	Cobalt	23000	300000	210	-	140	-	-	-	-	-
Copper	Copper	3100000	41000000	22000	46000	5400	-	-	-	-	-
Iron	Iron	55000000	720000000	270000	-	-	-	-	-	-	-
Lead	Lead	400000	800000	-	14000	53.7	-	-	-	89	178
Magnesium	Magnesium	-	-	-	-	-	-	-	-	-	-
Manganese	Manganese	1800000	23000000	21000	-	-	-	-	-	-	-
Mercury	Mercury	10000	43000	33	100	100	-	-	-	12	23
Nickel	Nickel	1500000	20000000	20000	-	13600	-	-	-	182	363
Potassium	Potassium	-	-	-	-	-	-	-	-	-	-
Selenium	Selenium	390000	5100000	400	260	27.6	-	-	-	2.15	4.3
Silver	Silver	390000	5100000	600	-	4040	-	-	-	3120	6240
Sodium	Sodium	-	-	-	-	-	-	-	-	-	-
Thallium	Thallium	780	10000	11	140	56.9	-	-	-	1.5	3.0
Vanadium	Vanadium	390000	5200000	78000	-	1590	-	-	-	130	65
Zinc	Zinc	23000000	310000000	290000	-	6620	-	-	-	44000	88000

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PCBs	***PCBs***										
Aroclor-1016 (PCB-1016)	Aroclor-1016 (PCB-1016)	3900	21000	92	-	-	-	-	-	-	-
Aroclor-1221 (PCB-1221)	Aroclor-1221 (PCB-1221)	140	540	0.069	-	-	-	-	-	-	-
Aroclor-1232 (PCB-1232)	Aroclor-1232 (PCB-1232)	140	540	0.069	-	-	-	-	-	-	-
Aroclor-1242 (PCB-1242)	Aroclor-1242 (PCB-1242)	220	740	5.3	-	-	-	-	-	-	-
Aroclor-1248 (PCB-1248)	Aroclor-1248 (PCB-1248)	220	740	5.2	-	-	-	-	-	-	-
Aroclor-1254 (PCB-1254)	Aroclor-1254 (PCB-1254)	220	740	8.8	-	-	-	-	-	-	-
Aroclor-1260 (PCB-1260)	Aroclor-1260 (PCB-1260)	220	740	24	-	-	-	-	-	-	-
Pesticides	***Pesticides***										
4,4'-DDD	4,4'-DDD	2000	7200	6.4	-	758	-	-	-	-	-
4,4'-DDE	4,4'-DDE	1400	5100	46	-	596	-	-	-	-	-
4,4'-DDT	4,4'-DDT	1700	7000	67	-	3.5	-	-	-	-	-
Aldrin	Aldrin	29	100	0.65	-	3.32	-	-	-	-	-
alpha-BHC	alpha-BHC	77	270	0.036	-	99.4	-	-	-	-	-
alpha-Chlordane	alpha-Chlordane	-	-	-	-	-	-	-	-	-	-
beta-BHC	beta-BHC	270	960	0.13	-	3.98	-	-	-	-	-
Chlordane	Chlordane	-	-	-	-	224	-	-	-	-	-
delta-BHC	delta-BHC	-	-	-	-	9940	-	-	-	-	-
Dieldrin	Dieldrin	30	110	0.061	-	2.38	-	-	-	-	-
Endosulfan I	Endosulfan I	-	-	-	-	119	-	-	-	-	-
Endosulfan II	Endosulfan II	-	-	-	-	119	-	-	-	-	-
Endosulfan sulfate	Endosulfan sulfate	-	-	-	-	35.8	-	-	-	-	-
Endrin	Endrin	18000	180000	68	81	10.1	-	-	-	-	-
Endrin aldehyde	Endrin aldehyde	-	-	-	-	10.5	-	-	-	-	-
Endrin ketone	Endrin ketone	-	-	-	-	-	-	-	-	-	-
gamma-BHC (lindane)	gamma-BHC (lindane)	520	2100	0.21	1.2	5	-	-	-	-	-
gamma-Chlordane	gamma-Chlordane	-	-	-	-	-	-	-	-	-	-
Heptachlor	Heptachlor	110	380	0.14	33	5.98	-	-	-	-	-
Heptachlor epoxide	Heptachlor epoxide	53	190	0.068	4.1	152	-	-	-	-	-
Methoxychlor	Methoxychlor	310000	3100000	1500	2200	19.9	-	-	-	-	-
Toxaphene	Toxaphene	440	1600	2.1	460	119	-	-	-	-	-
Herbicides	***Herbicides***										
2,4,5-TP (Silvex)	2,4,5-TP (Silvex)	490000	4900000	46	28	109	-	-	-	-	-
2,4-Dichlorophenoxyacetic acid (2,4-D)	2,4-Dichlorophenoxyacetic acid (2,4-D)	690000	7700000	35	18	27.2	-	-	-	-	-
Petroleum Hydrocarbonds	***Petroleum Hydrocarbonds***										
Total Petroleum Hydrocarbons - Extractable (DRO)	Total Petroleum Hydrocarbons - Extractable (DRO)	-	-	-	-	-	-	-	-	-	-
Total Petroleum Hydrocarbons - Purgeable (GRO)	Total Petroleum Hydrocarbons - Purgeable (GRO)	-	-	-	-	-	-	-	-	-	-

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Dioxins/Furans	***Dioxins/Furans***										
1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	1,2,3,4,6,7,8,9-Octachlorodibenzofuran (OCDF)	-	-	-	-	-	-	-	-	-	-
1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	1,2,3,4,6,7,8,9-Octachlorodibenzo-p-dioxin (OCDD)	-	-	-	-	-	-	-	-	-	-
1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	1,2,3,4,6,7,8-Heptachlorodibenzofuran (HpCDF)	-	-	-	-	-	-	-	-	-	-
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin (HpCDD)	-	-	-	-	-	-	-	-	-	-
1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	1,2,3,4,7,8,9-Heptachlorodibenzofuran (HpCDF)	-	-	-	-	-	-	-	-	-	-
1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	1,2,3,4,7,8-Hexachlorodibenzofuran (HxCDF)	-	-	-	-	-	-	-	-	-	-
1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	1,2,3,4,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	-	-	-	-	-	-	-	-	-	-
1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	1,2,3,6,7,8-Hexachlorodibenzofuran (HxCDF)	-	-	-	-	-	-	-	-	-	-
1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	1,2,3,6,7,8-Hexachlorodibenzo-p-dioxin (HxCDD)	-	-	-	-	-	-	-	-	-	-
1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	1,2,3,7,8,9-Hexachlorodibenzofuran (HxCDF)	-	-	-	-	-	-	-	-	-	-
1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin (HxCDD)	-	-	-	-	-	-	-	-	-	-
1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	1,2,3,7,8-Pentachlorodibenzofuran (PeCDF)	-	-	-	-	-	-	-	-	-	-
1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	1,2,3,7,8-Pentachlorodibenzo-p-dioxin (PeCDD)	-	-	-	-	-	-	-	-	-	-
2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	2,3,4,6,7,8-Hexachlorodibenzofuran (HxCDF)	-	-	-	-	-	-	-	-	-	-
2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	2,3,4,7,8-Pentachlorodibenzofuran (PeCDF)	-	-	-	-	-	-	-	-	-	-
2,3,7,8-Tetrachlorodibenzofuran (TCDF)	2,3,7,8-Tetrachlorodibenzofuran (TCDF)	-	-	-	-	0.0386	-	-	-	-	-
2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD)	0.0045	0.018	0.00026	0.015	0.000199	-	-	-	-	-
Total heptachlorodibenzofuran (HpCDF)	Total heptachlorodibenzofuran (HpCDF)	-	-	-	-	-	-	-	-	-	-
Total heptachlorodibenzo-p-dioxin (HpCDD)	Total heptachlorodibenzo-p-dioxin (HpCDD)	-	-	-	-	-	-	-	-	-	-
Total hexachlorodibenzofuran (HxCDF)	Total hexachlorodibenzofuran (HxCDF)	-	-	-	-	-	-	-	-	-	-
Total hexachlorodibenzo-p-dioxin (HxCDD)	Total hexachlorodibenzo-p-dioxin (HxCDD)	-	-	-	-	-	-	-	-	-	-
Total pentachlorodibenzofuran (PeCDF)	Total pentachlorodibenzofuran (PeCDF)	-	-	-	-	-	-	-	-	-	-
Total pentachlorodibenzo-p-dioxin (PeCDD)	Total pentachlorodibenzo-p-dioxin (PeCDD)	-	-	-	-	-	-	-	-	-	-
Total TEQ (ND=0.5)	Total TEQ (ND=0.5)	-	-	-	-	-	-	-	-	-	-
Total tetrachlorodibenzofuran (TCDF)	Total tetrachlorodibenzofuran (TCDF)	-	-	-	-	-	-	-	-	-	-
Total tetrachlorodibenzo-p-dioxin (TCDD)	Total tetrachlorodibenzo-p-dioxin (TCDD)	-	-	-	-	-	-	-	-	-	-
General Chemistry	***General Chemistry***										
Asbestos	Asbestos	-	-	-	-	-	-	-	-	-	-
Cellulose	Cellulose	-	-	-	-	-	-	-	-	-	-
Chrysotile asbestos	Chrysotile asbestos	-	-	-	-	-	-	-	-	-	-
Cyanide (total)	Cyanide (total)	22000	140000	14	2000	1330	-	-	-	-	-
Ignitability	Ignitability	-	-	-	-	-	-	-	-	-	-
Nitrite/Nitrate	Nitrite/Nitrate	-	-	-	-	-	-	-	-	-	-
pH corrosivity	pH corrosivity	-	-	-	-	-	-	-	-	-	-
Reactivity	Reactivity	-	-	-	-	-	-	-	-	-	-
Sulfide	Sulfide	-	-	-	-	3.58	-	-	-	-	-
Sulfide (acid soluble)	Sulfide (acid soluble)	-	-	-	-	-	-	-	-	-	-
Temperature, sample	Temperature, sample	-	-	-	-	-	-	-	-	-	-
Total solids	Total solids	-	-	-	-	-	-	-	-	-	-

Notes:

Chemicals of Concern

- - Not applicable.

[1] - United States Environmental Protection Agency Regional Screening Levels (RSL), November 2012

[2] - United States Environmental Protection Agency RCRA Ecological Screening Levels, August 22, 2003

Notes:

Chemicals of Concern

- - Not applicable.

[1] - United States Environmental Protection Agency Regional Screening Levels (RSL), November 2012

[2] - United States Environmental Protection Agency RCRA Ecological Screening Levels, August 22, 2003

TABLE C.2

GROUNDWATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

	USEPA Regional Screening Levels (RSLs) [1]		*Ecological Screening Levels* [2]
	Tapwater	*MCL*	
Parameter	*µg/L*	*µg/L*	*µg/L*
Volatile Organic Compounds			
1,1,1-Trichloroethane	7500	200	76
1,1,2,2-Tetrachloroethane	0.066	-	380
1,1,2-Trichloroethane	0.24	5	500
1,1-Dichloroethane	2.4	-	47
1,1-Dichloroethene	260	7	65
1,2,4-Trichlorobenzene	0.99	70	30
1,2,4-Trimethylbenzene	15	-	-
1,2-Dibromo-3-chloropropane (DBCP)	0.00032	0.2	-
1,2-Dibromoethane (Ethylene dibromide)	0.0065	0.05	-
1,2-Dichlorobenzene	280	600	14
1,2-Dichloroethane	0.15	5	910
1,2-Dichloroethene (total)	130	-	-
1,2-Dichloropropane	0.38	5	360
1,3-Dichlorobenzene	-	-	38
1,4-Dichlorobenzene	0.42	75	9.4
2-Butanone (Methyl ethyl ketone) (MEK)	4900	-	2200
2-Hexanone	34	-	99
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	1000	-	170
Acetone	12000	-	1700
Benzene	0.39	5	114
Bromodichloromethane	0.12	80	-
Bromoform	7.9	80	230
Bromomethane (Methyl bromide)	7	-	16
Carbon disulfide	720	-	15
Carbon tetrachloride	0.39	5	240
Chlorobenzene	72	100	47
Chloroethane	21000	-	-
Chloroform (Trichloromethane)	0.19	80	140
Chloromethane (Methyl chloride)	190	-	-
cis-1,2-Dichloroethene	28	70	-
cis-1,3-Dichloropropene	-	-	-
Cyclohexane	13000	-	-
Dibromochloromethane	0.15	80	-
Dichlorodifluoromethane (CFC-12)	190	-	-
Ethylbenzene	1.3	700	14
Isopropyl benzene	390	-	-
m&p-Xylenes	190	10000	-
Methyl acetate	16000	-	-
Methyl cyclohexane	-	-	-
Methyl tert butyl ether (MTBE)	12	-	-
Methylene chloride	9.9	5	940
o-Xylene	190	-	-
Styrene	1100	100	32
Tetrachloroethene	9.7	5	45
Toluene	860	1000	253
trans-1,2-Dichloroethene	86	100	970
trans-1,3-Dichloropropene	-	-	-
Trichloroethene	0.44	5	47
Trichlorofluoromethane (CFC-11)	1100	-	-
Trifluorotrichloroethane (Freon 113)	53000	-	-
Vinyl chloride	0.015	2	930
Xylenes (total)	190	10000	27
Semi-Volatile Organic Compounds			
1,2,4-Trichlorobenzene	0.99	70	30
1,2-Dichlorobenzene	280	600	14
1,3-Dichlorobenzene	-	-	38
1,4-Dichlorobenzene	0.42	75	9.4
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ethe	0.31	-	-
2,4,5-Trichlorophenol	890	-	-
2,4,6-Trichlorophenol	3.5	-	4.9
2,4-Dichlorophenol	35	-	11
2,4-Dimethylphenol	270	-	100
2,4-Dinitrophenol	30	-	19
2,4-Dinitrotoluene	0.2	-	44

TABLE C.2

GROUNDWATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

2,6-Dinitrotoluene	2,6-Dinitrotoluene	15	-	81
2-Chloronaphthalene	2-Chloronaphthalene	550	-	0.396
2-Chlorophenol	2-Chlorophenol	71	-	24
2-Methylnaphthalene	2-Methylnaphthalene	27	-	330
2-Methylphenol	2-Methylphenol	720	-	67
2-Nitroaniline	2-Nitroaniline	150	-	-
2-Nitrophenol	2-Nitrophenol	-	-	-
3&4-Methylphenol	3&4-Methylphenol	-	-	-
3,3'-Dichlorobenzidine	3,3'-Dichlorobenzidine	0.11	-	4.5
3-Nitroaniline	3-Nitroaniline	-	-	-
4,6-Dinitro-2-methylphenol	4,6-Dinitro-2-methylphenol	1.2	-	23
4-Bromophenyl phenyl ether	4-Bromophenyl phenyl ether	-	-	1.5
4-Chloro-3-methylphenol	4-Chloro-3-methylphenol	1100	-	34.8
4-Chloroaniline	4-Chloroaniline	0.32	-	232
4-Chlorophenyl phenyl ether	4-Chlorophenyl phenyl ether	-	-	-
4-Methylphenol	4-Methylphenol	1400	-	25
4-Nitroaniline	4-Nitroaniline	3.3	-	-
4-Nitrophenol	4-Nitrophenol	-	-	60
Acenaphthene	Acenaphthene	400	-	38
Acenaphthylene	Acenaphthylene	-	-	4840
Acetophenone	Acetophenone	1500	-	-
Anthracene	Anthracene	1300	-	0.035
Atrazine	Atrazine	0.26	3	-
Benzaldehyde	Benzaldehyde	1500	-	-
Benzo(a)anthracene	Benzo(a)anthracene	0.029	-	0.025
Benzo(a)pyrene	Benzo(a)pyrene	0.0029	0.2	0.014
Benzo(b)fluoranthene	Benzo(b)fluoranthene	0.029	-	9.07
Benzo(g,h,i)perylene	Benzo(g,h,i)perylene	-	-	7.64
Benzo(k)fluoranthene	Benzo(k)fluoranthene	0.29	-	-
Biphenyl (1,1-Biphenyl)	Biphenyl (1,1-Biphenyl)	0.83	-	-
bis(2-Chloroethoxy)methane	bis(2-Chloroethoxy)methane	46	-	-
bis(2-Chloroethyl)ether	bis(2-Chloroethyl)ether	0.012	-	19000
bis(2-Ethylhexyl)phthalate (DEHP)	bis(2-Ethylhexyl)phthalate (DEHP)	4.8	6	0.3
Butyl benzylphthalate (BBP)	Butyl benzylphthalate (BBP)	14	-	23
Caprolactam	Caprolactam	7700	-	-
Carbazole	Carbazole	-	-	-
Chrysene	Chrysene	2.9	-	-
Dibenz(a,h)anthracene	Dibenz(a,h)anthracene	0.0029	-	-
Dibenzofuran	Dibenzofuran	5.8	-	4
Diethyl phthalate	Diethyl phthalate	11000	-	110
Dimethyl phthalate	Dimethyl phthalate	-	-	-
Di-n-butylphthalate (DBP)	Di-n-butylphthalate (DBP)	670	-	9.7
Di-n-octyl phthalate (DnOP)	Di-n-octyl phthalate (DnOP)	190	-	30
Fluoranthene	Fluoranthene	630	-	1.9
Fluorene	Fluorene	220	-	19
Hexachlorobenzene	Hexachlorobenzene	0.042	1	0.0003
Hexachlorobutadiene	Hexachlorobutadiene	0.26	-	0.053
Hexachlorocyclopentadiene	Hexachlorocyclopentadiene	22	50	77
Hexachloroethane	Hexachloroethane	0.79	-	8
Indeno(1,2,3-cd)pyrene	Indeno(1,2,3-cd)pyrene	0.029	-	4.31
Isophorone	Isophorone	67	-	920
Naphthalene	Naphthalene	0.14	-	13
Nitrobenzene	Nitrobenzene	0.12	-	220
N-Nitrosodi-n-propylamine	N-Nitrosodi-n-propylamine	0.0093	-	-
N-Nitrosodiphenylamine	N-Nitrosodiphenylamine	10	-	-
Pentachlorophenol	Pentachlorophenol	0.035	1	4.0
Phenanthrene	Phenanthrene	-	-	3.6
Phenol	Phenol	4500	-	180
Pyrene	Pyrene	87	-	0.3
Metals	***Metals***			
Aluminum	Aluminum	16000	-	-
Aluminum (dissolved)	Aluminum (dissolved)	16000	-	-
Antimony	Antimony	6	6	80
Antimony (dissolved)	Antimony (dissolved)	6	6	80
Arsenic	Arsenic	0.045	10	148
Arsenic (dissolved)	Arsenic (dissolved)	0.045	10	148
Barium	Barium	2900	2000	220
Barium (dissolved)	Barium (dissolved)	2900	2000	220
Beryllium	Beryllium	16	4	3.6

TABLE C.2

GROUNDWATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

Beryllium (dissolved)	Beryllium (dissolved)	16	4	3.6
Cadmium	Cadmium	6.9	5	0.15
Cadmium (dissolved)	Cadmium (dissolved)	6.9	5	0.15
Calcium	Calcium	-	-	-
Calcium (dissolved)	Calcium (dissolved)	-	-	-
Chromium	Chromium	-	100	42
Chromium (dissolved)	Chromium (dissolved)	-	100	42
Cobalt	Cobalt	4.7	-	24
Cobalt (dissolved)	Cobalt (dissolved)	4.7	-	24
Copper	Copper	620	1300	1.58
Copper (dissolved)	Copper (dissolved)	620	1300	1.58
Iron	Iron	11000	-	-
Iron (dissolved)	Iron (dissolved)	11000	-	-
Lead	Lead	-	15	1.17
Lead (dissolved)	Lead (dissolved)	-	15	1.17
Magnesium	Magnesium	-	-	-
Magnesium (dissolved)	Magnesium (dissolved)	-	-	-
Manganese	Manganese	320	-	-
Manganese (dissolved)	Manganese (dissolved)	320	-	-
Manganese 2+	Manganese 2+	-	-	-
Mercury	Mercury	0.63	2	0.0013
Mercury (dissolved)	Mercury (dissolved)	0.63	2	0.0013
Nickel	Nickel	300	-	28.9
Nickel (dissolved)	Nickel (dissolved)	300	-	28.9
Potassium	Potassium	-	-	-
Potassium (dissolved)	Potassium (dissolved)	-	-	-
Selenium	Selenium	78	50	5
Selenium (dissolved)	Selenium (dissolved)	78	50	5
Silver	Silver	71	-	0.12
Silver (dissolved)	Silver (dissolved)	71	-	0.12
Sodium	Sodium	-	-	-
Sodium (dissolved)	Sodium (dissolved)	-	-	-
Thallium	Thallium	0.16	2	10
Thallium (dissolved)	Thallium (dissolved)	0.16	2	10
Vanadium	Vanadium	78	-	12
Vanadium (dissolved)	Vanadium (dissolved)	78	-	12
Zinc	Zinc	4700	-	65.7
Zinc (dissolved)	Zinc (dissolved)	4700	-	65.7
PCBs	***PCBs***			
Aroclor-1016 (PCB-1016)	Aroclor-1016 (PCB-1016)	0.96	-	-
Aroclor-1221 (PCB-1221)	Aroclor-1221 (PCB-1221)	0.004	-	-
Aroclor-1232 (PCB-1232)	Aroclor-1232 (PCB-1232)	0.004	-	-
Aroclor-1242 (PCB-1242)	Aroclor-1242 (PCB-1242)	0.034	-	-
Aroclor-1248 (PCB-1248)	Aroclor-1248 (PCB-1248)	0.034	-	-
Aroclor-1254 (PCB-1254)	Aroclor-1254 (PCB-1254)	0.034	-	-
Aroclor-1260 (PCB-1260)	Aroclor-1260 (PCB-1260)	0.034	-	-
Pesticides	***Pesticides***			
4,4'-DDD	4,4'-DDD	0.027	-	-
4,4'-DDE	4,4'-DDE	0.2	-	0.00000000451
4,4'-DDT	4,4'-DDT	0.2	-	0.000011
Aldrin	Aldrin	0.004	-	0.017
alpha-BHC	alpha-BHC	0.0062	-	12.4
alpha-Chlordane	alpha-Chlordane	-	-	-
beta-BHC	beta-BHC	0.022	-	0.495
delta-BHC	delta-BHC	-	-	667
Dieldrin	Dieldrin	0.0015	-	0.000071
Endosulfan I	Endosulfan I	-	-	0.056
Endosulfan II	Endosulfan II	-	-	0.056
Endosulfan sulfate	Endosulfan sulfate	-	-	2.22
Endrin	Endrin	1.7	2	0.036
Endrin aldehyde	Endrin aldehyde	-	-	0.15
Endrin ketone	Endrin ketone	-	-	-
gamma-BHC (lindane)	gamma-BHC (lindane)	0.036	0.2	0.026
gamma-Chlordane	gamma-Chlordane	-	-	-
Heptachlor	Heptachlor	0.0018	0.4	0.0038
Heptachlor epoxide	Heptachlor epoxide	0.0033	0.2	0.0038
Methoxychlor	Methoxychlor	27	40	0.019
Toxaphene	Toxaphene	0.013	3	0.00014

TABLE C.2

GROUNDWATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

TABLE C.2

GROUNDWATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

Herbicides	***Herbicides***			
2,4,5-TP (Silvex)	2,4,5-TP (Silvex)	84	50	30
2,4-Dichlorophenoxyacetic acid (2,4-D)	2,4-Dichlorophenoxyacetic acid (2,4-D)	130	70	220
Gases	***Gases***			
Ethane	Ethane	-	-	-
Ethene	Ethene	-	-	-
Methane	Methane	-	-	-
General Chemistry	***General Chemistry***			
Alkalinity, total (as CaCO3)	Alkalinity, total (as CaCO3)	-	-	-
Ammonia-N	Ammonia-N	-	-	-
Chloride	Chloride	-	-	-
Cyanide (total)	Cyanide (total)	1.4	200	5.2
Dissolved organic carbon (DOC)	Dissolved organic carbon (DOC)	-	-	-
Dissolved organic carbon (DOC) (dissolved)	Dissolved organic carbon (DOC) (dissolved)	-	-	-
Hardness	Hardness	-	-	-
Nitrate	Nitrate	-	-	-
Nitrate (as N)	Nitrate (as N)	25000	10000	-
Nitrite	Nitrite	-	-	-
Nitrite (as N)	Nitrite (as N)	1600	1000	-
Sulfate	Sulfate	-	-	-
Sulfide	Sulfide	-	-	-
Sulfide (acid soluble)	Sulfide (acid soluble)	-	-	-
Total organic carbon (TOC)	Total organic carbon (TOC)	-	-	-

Notes:

Chemicals of Concern

- - Not applicable.

[1] - United States Environmental Protection Agency Regional Screening Levels (RSL), November 2012

[2] - United States Environmental Protection Agency RCRA Ecological Screening Levels, August 22, 2003

Notes:

Chemicals of Concern

- - Not applicable.

[1] - United States Environmental Protection Agency Regional Screening Levels (RSL), November 2012

[2] - United States Environmental Protection Agency RCRA Ecological Screening Levels, August 22, 2003

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TABLE C.3

SOIL GAS SCREENING AND ACTION LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

	USEPA Regional Screening Levels (RSLs) [5]				*USEPA Regional Screening Levels (RSLs) [5]*								*Ohio Department of Health*							
	Residential Air	*Industrial Air*	*Residential "Near-source" exterior soil gas [6]*	*Industrial "Near-source" exterior soil gas [6]*	*Residential Soil Vapor Screening Levels for Further Investigation*		*Residential Soil Vapor Screening Levels for Monitoring*		*Industrial Soil Vapor Screening Levels for Further Investigation*		*Industrial Soil Vapor Screening Levels for Monitoring*		*Screening Levels*				*Action Levels*			
Parameter					*Carcinogenic Target ELCR of 10^{-6} assuming DAF=0.1*	*Non-Carcinogenic Target HI of 0.1 assuming DAF=0.1*	*Carcinogenic Target ELCR of 10^{-6} assuming DAF=0.1*	*Non-Carcinogenic, Target HI of 1 assuming DAF=0.1*	*Carcinogenic Target ELCR of 10^{-6} assuming DAF=0.1*	*Non-Carcinogenic Target HI of 0.1 assuming DAF=0.1*	*Carcinogenic Target ELCR of 10^{-6} assuming DAF=0.1*	*Non-Carcinogenic, Target HI of 1 assuming DAF=0.1*	*Residential*		*Non-Residential*		*Residential*		*Non-Residential*	
Units	*µg/m³*	*µg/m³*	*µg/m³*	*µg/m³*	*µg/m³*	*µg/m³*	*µg/m²*	*µg/m²*	*µg/m³*	*µg/m³*	*µg/m³*	*µg/m³*	*ppb*	*µg/m³*	*ppb*	*µg/m³*	*ppb*	*µg/m³*	*ppb*	*µg/m³*
Volatile Organic Compounds																				
1,1,1-Trichloroethane	5200	22000	173333	733333	-	5200	-	52000	-	22000	-	220000	-	-	-	-	-	-	-	-
1,1,2,2-Tetrachloroethane	0.042	0.21	1	7	0.42	-	4.2	-	2.1	-	21	-	-	-	-	-	-	-	-	-
1,1,2-Trichloroethane	0.15	0.77	5	26	1.5	0.21	15	2.1	7.7	0.88	77	8.8	-	-	-	-	-	-	-	-
1,1-Dichloroethane	1.5	7.7	50	257	15	-	150	-	77	-	770	-	37	150	160	630	370	1500	1600	6300
1,1-Dichloroethene	210	880	7000	29333	-	210	-	2100	-	880	-	8800	-	-	-	-	-	-	-	-
1,2,4-Trichlorobenzene	2.1	8.8	70	293	-	2.1	-	21	-	8.8	-	88	-	-	-	-	-	-	-	-
1,2,4-Trimethylbenzene	7.3	31	243	1033	-	7.3	-	73	-	31	-	310	-	-	-	-	-	-	-	-
1,2-Dibromo-3-chloropropane (DBCP)	0.00016	0.002	0	0	0.0016	0.21	0.016	2.1	0.02	0.88	0.20	8.8	-	-	-	-	-	-	-	-
1,2-Dibromoethane (Ethylene dibromide)	0.0041	0.02	0	1	0.041	9.4	0.41	94	0.20	39	2.0	390	-	-	-	-	-	-	-	-
1,2-Dichlorobenzene	210	880	7000	29333	-	210	-	2100	-	880	-	8800	-	-	-	-	-	-	-	-
1,2-Dichloroethane	0.094	0.47	3	16	0.94	7.3	9.4	73	4.7	31	47	310	-	-	-	-	-	-	-	-
1,2-Dichloroethene (total)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	0.24	1.2	8	40	2.4	4.2	24	42	12	18	120	180	-	-	-	-	-	-	-	-
1,2-Dichlorotetrafluoroethane (CFC 114)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3,5-Trimethylbenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,3-Butadiene	0.081	0.41	3	14	0.81	2.1	8.1	21	4.1	8.8	41	88	-	-	-	-	-	-	-	-
1,3-Dichlorobenzene[1]	-	-	-	-	2.2	830	22	8300	11	3500	110	35000	-	-	-	-	-	-	-	-
1,4-Dichlorobenzene	0.22	1.1	7	37	2.2	830	22	8300	11	3500	110	35000	-	-	-	-	-	-	-	-
1,4-Dioxane	0.32	1.6	11	53	3.2	3100	32	31000	16	13000	160	130000	-	-	-	-	-	-	-	-
2,2,4-Trimethylpentane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Butanone (Methyl ethyl ketone) (MEK)	5200	22000	173333	733333	-	5200	-	52000	-	22000	-	220000	-	-	-	-	-	-	-	-
2-Chlorotoluene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-Hexanone	31	130	1033	4333	-	31	-	310	-	130	-	1300	-	-	-	-	-	-	-	-
2-Phenylbutane (sec-Butylbenzene)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Ethyl toluene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	3100	13000	103333	433333	-	3100	-	31000	-	13000	-	130000	-	-	-	-	-	-	-	-
Acetone	32000	140000	1066667	4666667	-	32000	-	320000	-	140000	-	1400000	-	-	-	-	-	-	-	-
Allyl chloride	0.41	2	14	67	4.1	1	41	10	20	4.4	200	44	-	-	-	-	-	-	-	-
Benzene	0.31	1.6	10	53	3.1	31	31	310	16	130	160	1300	4	10	20	40	40	100	200	400
Benzyl chloride	0.05	0.25	2	8	0.5	1	5	10	2.5	4.4	25	44	-	-	-	-	-	-	-	-
Bromodichloromethane	0.066	0.33	2	11	0.66	-	6.6	-	3.3	-	33	-	-	-	-	-	-	-	-	-
Bromoform	2.2	11	73	367	22	-	220	-	110	-	1100	-	-	-	-	-	-	-	-	-
Bromomethane (Methyl bromide)	5.2	22	173	733	-	5.2	-	52	-	22	-	220	-	-	-	-	-	-	-	-
Butane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon disulfide	730	3100	24333	103333	-	730	-	7300	-	3100	-	31000	-	-	-	-	-	-	-	-
Carbon tetrachloride	0.41	2	14	67	4.1	100	41	1000	20	440	200	4400	-	-	-	-	-	-	-	-
Chlorobenzene	52	220	1733	7333	-	52	-	520	-	220	-	2200	-	-	-	-	-	-	-	-
Chlorodifluoromethane	52000	220000	1733333	7333333	-	52000	-	520000	-	220000	-	2200000	-	-	-	-	-	-	-	-
Chloroethane	10000	44000	333333	1466667	-	10000	-	100000	-	44000	-	440000	-	-	-	-	-	-	-	-
Chloroform (Trichloromethane)	0.11	0.53	4	18	1.1	100	11	1000	5.3	430	53	4300	200	1000	800	4000	2000	10000	8000	40000
Chloromethane (Methyl chloride)	94	390	3133	13000	-	94	-	940	-	390	-	3900	-	-	-	-	-	-	-	-
cis-1,2-Dichloroethene[2]	63	260	2100	8667	-	63	-	630	-	260	-	2600	88	350	370	1500	880	3500	3700	15000
cis-1,3-Dichloropropene[3]	-	-	-	-	6.1	21	61	210	31	88	310	880	-	-	-	-	-	-	-	-
Cyclohexane	6300	26000	210000	866667	-	6300	-	63000	-	26000	-	260000	-	-	-	-	-	-	-	-
Cymene (p-Isopropyltoluene)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dibromochloromethane	0.09	0.45	3	15	0.9	-	9.0	-	4.5	-	45	-	-	-	-	-	-	-	-	-
Dichlorodifluoromethane (CFC-12)	100	440	3333	14667	-	100	-	1000	-	440	-	4400	-	-	-	-	-	-	-	-
Ethane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ethylbenzene	0.97	4.9	32	163	9.7	1000	97	10000	49	4400	490	44000	600	3000	2500	13000	6000	30000	25000	130000
Helium	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hexachlorobutadiene	0.11	0.56	4	19	1.1	-	11	-	5.6	-	56	-	-	-	-	-	-	-	-	-
Hexane	730	3100	24333	103333	-	730	-	7300	-	3100	-	31000	-	-	-	-	-	-	-	-
Isopropyl alcohol	7300	31000	243333	1033333	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isopropyl benzene	420	1800	14000	60000	-	420	-	4200	-	1800	-	18000	-	-	-	-	-	-	-	-
m&p-Xylenes	-	-	-	-	-	100	-	1000	-	440	-	4400	500	2000	2000	8000	5000	20000	20000	80000
Methyl methacrylate	730	3100	24333	103333	-	730	-	7300	-	3100	-	31000	-	-	-	-	-	-	-	-
Methyl tert butyl ether (MTBE)	9.4	47	313	1567	94	3100	940	31000	470	13000	4700	130000	-	-	-	-	-	-	-	-
Methylene chloride	96	1200	3200	40000	960	630	9600	6300	12000	2600	120000	26000	-	-	-	-	-	-	-	-

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TABLE C.3

SOIL GAS SCREENING AND ACTION LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

Naphthalene	Naphthalene	0.072	0.36	2	12	0.72	3.1	7.2	31	3.6	13	36	130	7	36.7	29	152	-	-	-	-
N-Butylbenzene	N-Butylbenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Decane	N-Decane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Dodecane	N-Dodecane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Heptane	N-Heptane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nonane	Nonane	210	880	7000	29333	-	210	-	2100	-	880	-	8800	-	-	-	-	-	-	-	-
N-Propylbenzene	N-Propylbenzene	1000	4400	33333	146667	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N-Undecane	N-Undecane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Octane	Octane	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
o-Xylene	o-Xylene	100	440	3333	14667	-	100	-	1000	-	440	-	4400	500	2000	2000	8000	5000	20000	20000	80000
Pentane	Pentane	1000	4400	33333	146667	-	1000	-	10000	-	4400	-	44000	-	-	-	-	-	-	-	-
Styrene	Styrene	1000	4400	33333	146667	-	1000	-	10000	-	4400	-	44000	-	-	-	-	-	-	-	-
tert-Butyl alcohol	tert-Butyl alcohol	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
tert-Butylbenzene	tert-Butylbenzene	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetrachloroethene	Tetrachloroethene	9.4	47	313	1567	94	42	940	420	470	180	4700	1800	60	400	250	1700	600	4000	2500	17000
Tetrahydrofuran	Tetrahydrofuran	2100	8800	70000	293333	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Toluene	Toluene	5200	22000	173333	733333	-	5200	-	52000	-	22000	-	220000	-	-	-	-	-	-	-	-
trans-1,2-Dichloroethene	trans-1,2-Dichloroethene	63	260	2100	8667	-	63	-	630	-	260	-	2600	-	-	-	-	-	-	-	-
trans-1,3-Dichloropropene[4]	trans-1,3-Dichloropropene[4]	-	-	-	-	6.1	21	61	210	31	88	310	880	-	-	-	-	-	-	-	-
Trichloroethene	Trichloroethene	0.43	3	14	100	4.3	2.1	43	21	30	8.8	300	88	4	20	20	100	40	200	200	1000
Trichlorofluoromethane (CFC-11)	Trichlorofluoromethane (CFC-11)	730	3100	24333	103333	-	730	-	7300	-	3100	-	31000	-	-	-	-	-	-	-	-
Trifluorotrichloroethane (Freon 113)	Trifluorotrichloroethane (Freon 113)	31000	130000	1033333	4333333	-	31000	-	310000	-	130000	-	1300000	-	-	-	-	-	-	-	-
Vinyl bromide (Bromoethene)	Vinyl bromide (Bromoethene)	0.076	0.38	3	13	0.76	3.1	7.6	31	3.8	13	38	130	-	-	-	-	-	-	-	-
Vinyl chloride	Vinyl chloride	0.16	2.8	5	93	1.6	100	16	1000	28	440	280	4400	4	10	20	40	40	100	200	400
Xylenes (total)	Xylenes (total)	100	440	3333	14667	-	100	-	1000	-	440	-	4400	-	-	-	-	-	-	-	-
Radiology	***Radiology***																				
Radon-222	Radon-222	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Petroleum Hydrocarbons	***Petroleum Hydrocarbons***																				
Total hydrocarbons - FID	Total hydrocarbons - FID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total hydrocarbons - PID	Total hydrocarbons - PID	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gases	***Gases***																				
Methane	Methane	0.5	0.5	5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Field Parameters	***Field Parameters***																				
Barometric pressure	Barometric pressure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carbon dioxide	Carbon dioxide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lower explosive limit	Lower explosive limit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Methane, field	Methane, field	0.5	0.5	5	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Oxygen	Oxygen	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PID reading	PID reading	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pressure	Pressure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Temperature, ambient	Temperature, ambient	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

Chemicals of Concern
- - Not applicable.

Notes:

Chemicals of Concern
- - Not applicable.

[1] - An RSL is not available for 1,3-dichlorobenzene; the RSL for 1,4-dichlorobenzene was considered an evaluation surrogate for 1,3-dichlorobenzene.
[2] - An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
[3] - An RSL is not available for cis-1,3-dichloropropene; the RSL for trans-1,3-dichloropropene was considered an evaluation surrogate for cis-1,3-dichloropropene.
[4] - An RSL is not available for trans-1,3-dichloropropene; the RSL for cis-1,3-dichloropropene was considered an evaluation surrogate for trans-1,3-dichloropropene.
[5] - United States Environmental Protection Agency Regional Screening Levels (RSL), November 2012
[6] - The Soil Gas screening levels are based on the USEPA "Final Guidance for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Sources to Indoor Air" (USEPA 2002) and the USEPA "Vapor Intrusion Screening Levels" (USEPA 2012) using default "conservative" exterior soil gas to indoor air attenuation factor of 0.03.

[1] - An RSL is not available for 1,3-dichlorobenzene; the RSL for 1,4-dichlorobenzene was considered an evaluation surrogate for 1,3-dichlorobenzene.
[2] - An RSL is not available for cis-1,2-dichloroethene; the RSL for trans-1,2-dichloroethene was considered an evaluation surrogate for cis-1,2-dichloroethene.
[3] - An RSL is not available for cis-1,3-dichloropropene; the RSL for trans-1,3-dichloropropene was considered an evaluation surrogate for cis-1,3-dichloropropene.
[4] - An RSL is not available for trans-1,3-dichloropropene; the RSL for cis-1,3-dichloropropene was considered an evaluation surrogate for trans-1,3-dichloropropene.
[5] - United States Environmental Protection Agency Regional Screening Levels (RSL), November 2012
[6] - The Soil Gas screening levels are based on the USEPA "Final Guidance for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Sources to Indoor Air" (USEPA 2002) and the USEPA "Vapor Intrusion Screening Levels" (USEPA 2012) using default "conservative" exterior soil gas to indoor air attenuation factor of 0.03.

TABLE C.4

SURFACE WATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

	Ecological Screening Levels [2]		*Aquatic Life [3]*			*Human Health[3]*	
		Tier	IMZM	OMZM	OMZA	Drink	Nondrink
Parameter	*mg/L*		*ug/L*	*ug/L*	*ug/L*	*ug/L*	*ug/L*
Volatile Organic Compounds							
1,1,1-Trichloroethane	0.076	II	1400	690	76	200a	
1,1,2,2-Tetrachloroethane	0.38	II	1800	910	260	1.7c	110c
1,1,2-Trichloroethane	0.5	II	6600	3300	740	5.0a,c	420c
1,1-Dichloroethane	0.047		ID	ID	ID		
1,1-Dichloroethene	0.065	II	3800	1900	210	0.57c	32c
1,2,4-Trichlorobenzene	0.03					70a	940
1,2,4-Trimethylbenzene	-	II	280	140	15		
1,2-Dibromo-3-chloropropane (DBCP)	-		ID	ID	ID	0.2a	
1,2-Dibromoethane (Ethylene dibromide)	-		ID	ID	ID	0.050a	
1,2-Dichlorobenzene	0.014	II	260	130	23	600a	17000
1,2-Dichloroethane	0.91	II	19000	9600	2000	3.8c	990c
1,2-Dichloroethene (total)	-	II	18000	8800	970	See criteria for individual chemicals	
1,2-Dichloropropane	0.36	II	6500	3300	520	5.0a,c	390c
1,3-Dichlorobenzene	0.038	II	160	79	22	400	2600
1,4-Dichlorobenzene	0.0094	II	110	57	9.4	75a	2600
2-Butanone (Methyl ethyl ketone) (MEK)	2.2	II	400000	200000	22000		
2-Hexanone	0.099						
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	0.17		ID	ID	ID		
Acetone	1.7						
Benzene	0.114	II	1400	700	160	5.0a,c	710c
Bromodichloromethane	-		ID	ID	ID	5.6c	460c
Bromoform	0.23						
Bromomethane (Methyl bromide)	0.016	II	75	38	16	48	4000
Carbon disulfide	0.015	II	260	130	15		
Carbon tetrachloride	0.24	II	4400	2200	240	2.5c	44c
Chlorobenzene	0.047	II	850	420	47	100a	21000
Chloroethane	-						
Chloroform (Trichloromethane)	0.14	II	2600	1300	140	57c	4,700c
Chloromethane (Methyl chloride)	-						
cis-1,2-Dichloroethene	-	II	18000	8800	970	70a	
cis-1,3-Dichloropropene	-	II	30	15	1.7	10	1700
Cyclohexane	-						
Dibromochloromethane	-		ID	ID	ID	4.1c	340c
Dichlorodifluoromethane (CFC-12)	-		ID	ID	ID		
Ethylbenzene	0.014	II	1100	550	61	700a	29000
Isopropyl benzene	-	II	86	43	4.8		
m&p-Xylenes	-						
Methyl acetate	-						
Methyl cyclohexane	-						
Methyl tert butyl ether (MTBE)	-	II	13000	6500	730		
Methylene chloride	0.94	II	22000	11000	1900	5.0c	16,000c
o-Xylene	-						
Styrene	0.032	II	570	290	32	100a	
Tetrachloroethene	0.045	II	850	430	53	5.0a,c	89c
Toluene	0.253	II	1100	560	62	1,000a	200000
trans-1,2-Dichloroethene	0.97	II	18000	8800	970	100a	140000
trans-1,3-Dichloropropene	-	II	30	15	1.7	10	1700
Trichloroethene	0.047	II	4000	2000	220	5.0a,c	810c
Trichlorofluoromethane (CFC-11)	-						
Trifluorotrichloroethane (Freon 113)	-						
Vinyl chloride	0.93	II	17000	8400	930	2.0a,c	5,300c
Xylenes (total)	0.027						
		II	480	240	27	10,000a	

TABLE C.4

SURFACE WATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

Semi-Volatile Organic Compounds	***Semi-Volatile Organic Compounds***						
1,2,4-Trichlorobenzene	1,2,4-Trichlorobenzene	0.03					
1,2-Dichlorobenzene	1,2-Dichlorobenzene	0.014					
1,3-Dichlorobenzene	1,3-Dichlorobenzene	0.038					
1,4-Dichlorobenzene	1,4-Dichlorobenzene	0.0094					
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)	-					
2,4,5-Trichlorophenol	2,4,5-Trichlorophenol	-					
2,4,6-Trichlorophenol	2,4,6-Trichlorophenol	0.0049	II	79		39	4.9
2,4-Dichlorophenol	2,4-Dichlorophenol	0.011	II	210		110	11
2,4-Dimethylphenol	2,4-Dimethylphenol	0.1	II	280		140	15
2,4-Dinitrophenol	2,4-Dinitrophenol	0.019					
2,4-Dinitrotoluene	2,4-Dinitrotoluene	0.044	II	790		390	44
2,6-Dinitrotoluene	2,6-Dinitrotoluene	0.081	II	1500		730	81
2-Chloronaphthalene	2-Chloronaphthalene	0.000396					
2-Chlorophenol	2-Chlorophenol	0.024	II	580		290	32
2-Methylnaphthalene	2-Methylnaphthalene	0.33					
2-Methylphenol	2-Methylphenol	0.067	II	1200		600	67
2-Nitroaniline	2-Nitroaniline	-					
2-Nitrophenol	2-Nitrophenol	-	II	1300		650	73
3-Methylphenol	3-Methylphenol		II	1100		560	62
3&4-Methylphenol	3&4-Methylphenol	-					
3,3'-Dichlorobenzidine	3,3'-Dichlorobenzidine	0.0045					
3-Nitroaniline	3-Nitroaniline	-					
4,6-Dinitro-2-methylphenol	4,6-Dinitro-2-methylphenol	0.023					
4-Bromophenyl phenyl ether	4-Bromophenyl phenyl ether	0.0015					
4-Chloro-3-methylphenol	4-Chloro-3-methylphenol	0.0348					
4-Chloroaniline	4-Chloroaniline	0.232					
4-Chlorophenyl phenyl ether	4-Chlorophenyl phenyl ether	-					
4-Methylphenol	4-Methylphenol	0.025	II	960		480	53
4-Nitroaniline	4-Nitroaniline	-					
4-Nitrophenol	4-Nitrophenol	0.06					
Acenaphthene	Acenaphthene	0.038	I	38		19	15
Acenaphthylene	Acenaphthylene	4.84					
Acetophenone	Acetophenone	-					
Anthracene	Anthracene	0.000035	II	0.35		0.18	0.02
Atrazine	Atrazine	-					
Benzaldehyde	Benzaldehyde	-					
Benzo(a)anthracene	Benzo(a)anthracene	0.000025			ID	ID	ID
Benzo(a)pyrene	Benzo(a)pyrene	0.000014			ID	ID	ID
Benzo(b)fluoranthene	Benzo(b)fluoranthene	0.00907			ID	ID	ID
Benzo(g,h,i)perylene	Benzo(g,h,i)perylene	0.00764			ID	ID	ID
Benzo(k)fluoranthene	Benzo(k)fluoranthene	-			ID	ID	ID
Biphenyl (1,1-Biphenyl)	Biphenyl (1,1-Biphenyl)	-	II	51		26	6.5
bis(2-Chloroethoxy)methane	bis(2-Chloroethoxy)methane	-					
bis(2-Chloroethyl)ether	bis(2-Chloroethyl)ether	19					
bis(2-Ethylhexyl)phthalate (DEHP)	bis(2-Ethylhexyl)phthalate (DEHP)	0.0003	II	2100		1100	8.4
Butyl benzylphthalate (BBP)	Butyl benzylphthalate (BBP)	0.023					
Caprolactam	Caprolactam	-					
Carbazole	Carbazole	-					
Chrysene	Chrysene	-			ID	ID	ID
Dibenz(a,h)anthracene	Dibenz(a,h)anthracene	-			ID	ID	ID
Dibenzofuran	Dibenzofuran	0.004	II	71		36	4
Diethyl phthalate	Diethyl phthalate	0.11	II	2000		980	220
Dimethyl phthalate	Dimethyl phthalate	-	II	6400		3200	1100
Di-n-butylphthalate (DBP)	Di-n-butylphthalate (DBP)	0.0097					
Di-n-octyl phthalate (DnOP)	Di-n-octyl phthalate (DnOP)	0.03					
Fluoranthene	Fluoranthene	0.0019	II	7.4		3.7	0.8
Fluorene	Fluorene	0.019	I,I,II	220		110	19
Hexachlorobenzene	Hexachlorobenzene	0.0000003					
Hexachlorobutadiene	Hexachlorobutadiene	0.000053					
Hexachlorocyclopentadiene	Hexachlorocyclopentadiene	0.077					
Hexachloroethane	Hexachloroethane	0.008					
Indeno(1,2,3-cd)pyrene	Indeno(1,2,3-cd)pyrene	0.00431			ID	ID	ID
Isophorone	Isophorone	0.92	II	15000		7500	920
Naphthalene	Naphthalene	0.013	II	340		170	21
Nitrobenzene	Nitrobenzene	0.22	II	4000		2000	380
N-Nitrosodi-n-propylamine	N-Nitrosodi-n-propylamine	-					
N-Nitrosodiphenylamine	N-Nitrosodiphenylamine	-					
Pentachlorophenol	Pentachlorophenol	Table 7-10 0.004	I				
Phenanthrene	Phenanthrene	0.0036	II	61		31	2.3
Phenol (wwh, ewh, mwh)	Phenol (wwh, ewh, mwh)		I,I,II	9400		4700	400
Phenol (lrw)	Phenol (lrw)		I,I,II	9400		4700	NA
Phenol (cwh, ssh)	Phenol (cwh, ssh)		I,I,II	9100		4600	160
Phenol	Phenol	0.18					
Pyrene	Pyrene	0.0003	II	83		42	4.6

TABLE C.4

SURFACE WATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

Metals	***Metals***							
Aluminum	Aluminum	-						
Aluminum (dissolved)	Aluminum (dissolved)	-						
Antimony	Antimony	0.08	II	1800		900	190	
Antimony (dissolved)	Antimony (dissolved)	0.08						
Arsenic	Arsenic	0.148	I	680		340	150	
Arsenic (dissolved)	Arsenic (dissolved)	0.148	I	680		340	150	
Barium	Barium	0.22	II	4000		2000	220	
Barium (dissolved)	Barium (dissolved)	0.22						
Beryllium	Beryllium	0.0036	II		g	g		g
Beryllium (dissolved)	Beryllium (dissolved)	0.0036						
Cadmium	Cadmium	Table 7-9	0.00015	I				
Cadmium (dissolved)	Cadmium (dissolved)	Table 7-9	0.00015	I				
Calcium	Calcium	-						
Calcium (dissolved)	Calcium (dissolved)	-						
Chromium	Chromium	Table 7-9	0.042	I				
Chromium (dissolved)	Chromium (dissolved)	Table 7-9	0.042	I				
Cobalt	Cobalt	0.024	II	440		220	24	
Cobalt (dissolved)	Cobalt (dissolved)	0.024						
Copper	Copper	Table 7-9	0.00158					
Copper (dissolved)	Copper (dissolved)	Table 7-9	0.00158					
Iron	Iron	-						
Iron (dissolved)	Iron (dissolved)	-						
Lead	Lead	Table 7-9	0.00117	I				
Lead (dissolved)	Lead (dissolved)	Table 7-9	0.00117	I				
Magnesium	Magnesium	-						
Magnesium (dissolved)	Magnesium (dissolved)	-						
Manganese	Manganese	-						
Manganese (dissolved)	Manganese (dissolved)	-						
Manganese 2+	Manganese 2+	-						
Mercury	Mercury	0.0000013	I	3.4		1.7	0.91	
Mercury (dissolved)	Mercury (dissolved)	0.0000013	I	2.9		1.4	0.77	
Nickel	Nickel	Table 7-9	0.0289					
Nickel (dissolved)	Nickel (dissolved)	Table 7-9	0.0289					
Potassium	Potassium	-						
Potassium (dissolved)	Potassium (dissolved)	-						
Selenium	Selenium	0.005	I					5.0
Selenium (dissolved)	Selenium (dissolved)	0.005	I					4.6
Silver	Silver	0.00012						
Silver (wwh, ewh, mwh) - TR	Silver (wwh, ewh, mwh) - TR		I		h	h		1.3
Silver (lrw) - TR	Silver (lrw) - TR		I		h	h		
Silver (ssh, cwh) - TR	Silver (ssh, cwh) - TR		I		h	h		0.06
Silver (dissolved)	Silver (dissolved)	0.00012	I					iD
Sodium	Sodium	-						
Sodium (dissolved)	Sodium (dissolved)	-						
Thallium	Thallium	0.01	II	160		79	17	
Thallium (dissolved)	Thallium (dissolved)	0.01						
Vanadium	Vanadium	0.012	II	300		150	44	
Vanadium (dissolved)	Vanadium (dissolved)	0.012						
Zinc	Zinc	Table 7-9	0.0657	I				
Zinc (dissolved)	Zinc (dissolved)	Table 7-9	0.0657	I				

TABLE C.4

SURFACE WATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

PCBs	***PCBs***					
PCBs	PCBs					
Aroclor-1016 (PCB-1016)	Aroclor-1016 (PCB-1016)	-				
Aroclor-1221 (PCB-1221)	Aroclor-1221 (PCB-1221)	-				
Aroclor-1232 (PCB-1232)	Aroclor-1232 (PCB-1232)	-				
Aroclor-1242 (PCB-1242)	Aroclor-1242 (PCB-1242)	-				
Aroclor-1248 (PCB-1248)	Aroclor-1248 (PCB-1248)	-				
Aroclor-1254 (PCB-1254)	Aroclor-1254 (PCB-1254)	-				
Aroclor-1260 (PCB-1260)	Aroclor-1260 (PCB-1260)	-				
Pesticides	***Pesticides***					
4,4'-DDD	4,4'-DDD	-				
4,4'-DDE	4,4'-DDE	0.00000000000451				
4,4'-DDT	4,4'-DDT	0.000000011				
Aldrin	Aldrin	0.000017				
alpha-BHC	alpha-BHC	0.0124				
alpha-Chlordane	alpha-Chlordane	-				
beta-BHC	beta-BHC	0.000495				
delta-BHC	delta-BHC	0.667				
Dieldrin	Dieldrin	0.000000071				
Endosulfan	Endosulfan					
Endosulfan I	Endosulfan I	0.000056				
Endosulfan II	Endosulfan II	0.000056				
Endosulfan sulfate	Endosulfan sulfate	0.00222				
Endrin	Endrin	0.000036	I	0.17	0.086	0.036
Endrin aldehyde	Endrin aldehyde	0.00015				
Endrin ketone	Endrin ketone	-				
gamma-BHC (lindane)	gamma-BHC (lindane)	0.000026	I,I,II	1.9	0.95	0.057
gamma-Chlordane	gamma-Chlordane	-				
Heptachlor	Heptachlor	0.0000038				
Heptachlor epoxide	Heptachlor epoxide	0.0000038				
Methoxychlor	Methoxychlor	0.000019				
Toxaphene	Toxaphene	0.00000014				
Herbicides	***Herbicides***					
2,4,5-TP (Silvex)	2,4,5-TP (Silvex)	0.03				
2,4-Dichlorophenoxyacetic acid (2,4-D)	2,4-Dichlorophenoxyacetic acid (2,4-D)	0.22				
Gases	***Gases***					
Ethane	Ethane	-				
Ethene	Ethene	-				
Methane	Methane	-				

TABLE C.4

SURFACE WATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

General Chemistry	***General Chemistry***						
Alkalinity, total (as CaCO3)	Alkalinity, total (as CaCO3)	-					
Ammonia-N	Ammonia-N	-					
Chloride	Chloride	-					
Cyanide (total)	Cyanide (total)	0.0052					
Cyanide - free (wwh, ewh, mwh)	Cyanide - free (wwh, ewh, mwh)		I	92	46	12	
Cyanide - free (lwh)	Cyanide - free (lwh)		I	92	46		NA
Cyanide - free (ssh, cwh)	Cyanide - free (ssh, cwh)		I	45	22	5.2	
Dissolved organic carbon (DOC)	Dissolved organic carbon (DOC)	-					
Dissolved organic carbon (DOC) (dissolved)	Dissolved organic carbon (DOC) (dissolved)	-					
Hardness	Hardness	-					
Nitrate + Nitrite (as N)	Nitrate + Nitrite (as N)						
Nitrate	Nitrate	-					
Nitrate (as N)	Nitrate (as N)	-					
Nitrite	Nitrite	-					
Nitrite (as N)	Nitrite (as N)	-					
Sulfate	Sulfate	-					
Sulfide	Sulfide	-					
Sulfide (acid soluble)	Sulfide (acid soluble)	-					
Total organic carbon (TOC)	Total organic carbon (TOC)	-					

Notes:

Chemicals of Concern

- - Not applicable.

[1] - United States Environmental Protection Agency Regional Screening Levels (RSL), November 2012

[2] - United States Environmental Protection Agency RCRA Ecological Screening Levels, August 22, 2003

[3] - Ohio River Basin Aquatic Life and Human Health Tier 1 Criteria and Tier II Values

ID - Insufficient data available to calculate criterion

NA - Not applicable.

IMNM - Inside Mixing Zone Maximum

OMZM - Outside Mixing Zone Maximum.

OMZA - Outside Mixing Zone Average.

Drink - Human health criterion applicable to Public Water Supply streams (2-route exposure).

Nondrink - Human health criterion - non Public Water Supply (1-route exposure).

a - This criterion is the maximum contaminant level (MCL) developed under the "Safe Drinking Water Act".

b - No chlorine is to be discharged.

c - This criterion is based on a carcinogenic endpoint.

d - Equivalent 25°C specific conductance value is 2400 micromhos/cm.

e - Equivalent 25°C specific conductance values are 1200 micromhos/cm as a maximum and 800 micromhos/cm as a thirty-day average.

f - This criterion is based on protection against adverse aesthetic effects.

Notes:

Chemicals of Concern

- - Not applicable.

[1] - United States Environmental Protection Agency Regional Screening Levels (RSL), November 2012

[2] - United States Environmental Protection Agency RCRA Ecological Screening Levels, August 22, 2003

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TABLE C.4

SURFACE WATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

Human Health[3]

Parameter	Drink ***ug/L***	Nondrink ***ug/L***
Volatile Organic Compounds		
1,1,1-Trichloroethane	200a	
1,1,2,2-Tetrachloroethane	1.7c	110c
1,1,2-Trichloroethane	5.0a,c	420c
1,1-Dichloroethane		
1,1-Dichloroethene	0.57c	32c
1,2,4-Trichlorobenzene	70a	940
1,2,4-Trimethylbenzene		
1,2-Dibromo-3-chloropropane (DBCP)	0.2a	
1,2-Dibromoethane (Ethylene dibromide)	0.050a	
1,2-Dichlorobenzene	600a	17000
1,2-Dichloroethane	3.8c	990c
1,2-Dichloroethene (total)		
1,2-Dichloropropane	5.0a,c	390c
1,3-Dichlorobenzene	400	2600
1,4-Dichlorobenzene	75a	2600
2-Butanone (Methyl ethyl ketone) (MEK)		
2-Hexanone		
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)		
Acetone		
Benzene	5.0a,c	710c
Bromodichloromethane	5.6c	460c
Bromoform		
Bromomethane (Methyl bromide)	48	4000
Carbon disulfide		
Carbon tetrachloride	2.5c	44c
Chlorobenzene	100a	21000
Chloroethane		
Chloroform (Trichloromethane)	57c	4,700c
Chloromethane (Methyl chloride)		
cis-1,2-Dichloroethene	70a	
cis-1,3-Dichloropropene	10	1700
Cyclohexane		
Dibromochloromethane	4.1c	340c
Dichlorodifluoromethane (CFC-12)		
Ethylbenzene	700a	29000
Isopropyl benzene		
m&p-Xylenes		
Methyl acetate		
Methyl cyclohexane		
Methyl tert butyl ether (MTBE)		
Methylene chloride	5.0c	16,000c
o-Xylene		
Styrene	100a	
Tetrachloroethene	5.0a,c	89c
Toluene	1,000a	200000
trans-1,2-Dichloroethene	100a	140000
trans-1,3-Dichloropropene	10	1700
Trichloroethene	5.0a,c	810c
Trichlorofluoromethane (CFC-11)		
Trifluorotrichloroethane (Freon 113)		
Vinyl chloride	2.0a,c	5,300c
Xylenes (total)		
	10,000a	

TABLE C.4

SURFACE WATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

Semi-Volatile Organic Compounds		
1,2,4-Trichlorobenzene		
1,2-Dichlorobenzene		
1,3-Dichlorobenzene		
1,4-Dichlorobenzene		
2,2'-Oxybis(1-chloropropane) (bis(2-Chloroisopropyl) ether)		
2,4,5-Trichlorophenol	2600	9800
2,4,6-Trichlorophenol	21c	65c
2,4-Dichlorophenol	0.3f	790
2,4-Dimethylphenol	540	2300
2,4-Dinitrophenol		
2,4-Dinitrotoluene	1.1c	91c
2,6-Dinitrotoluene		
2-Chloronaphthalene		
2-Chlorophenol	0.1f	400
2-Methylnaphthalene		
2-Methylphenol		
2-Nitroaniline		
2-Nitrophenol		
3-Methylphenol		
3&4-Methylphenol		
3,3'-Dichlorobenzidine	0.40c	0.77c
3-Nitroaniline		
4,6-Dinitro-2-methylphenol	13	770
4-Bromophenyl phenyl ether		
4-Chloro-3-methylphenol		
4-Chloroaniline		
4-Chlorophenyl phenyl ether		
4-Methylphenol		
4-Nitroaniline		
4-Nitrophenol		
Acenaphthene	1200	2700
Acenaphthylene		
Acetophenone		
Anthracene	9600	110000
Atrazine	3.0a	
Benzaldehyde		
Benzo(a)anthracene	0.044c	0.49c
Benzo(a)pyrene	0.044c	0.49c
Benzo(b)fluoranthene	0.044c	0.49c
Benzo(g,h,i)perylene		
Benzo(k)fluoranthene	0.044c	0.49c
Biphenyl (1,1-Biphenyl)		
bis(2-Chloroethoxy)methane		
bis(2-Chloroethyl)ether	0.31c	14c
bis(2-Ethylhexyl)phthalate (DEHP)	6.0a,c	59c
Butyl benzylphthalate (BBP)		
Caprolactam		
Carbazole		
Chrysene	0.044c	0.49c
Dibenz(a,h)anthracene	0.044c	0.49c
Dibenzofuran		
Diethyl phthalate	23000	120000
Dimethyl phthalate	310000	2900000
Di-n-butylphthalate (DBP)	2700	12000
Di-n-octyl phthalate (DnOP)		
Fluoranthene	300	370
Fluorene	1300	14000
Hexachlorobenzene	0.0075c	0.0077c
Hexachlorobutadiene	4.4c	500c
Hexachlorocyclopentadiene	50a	17000
Hexachloroethane	19c	89c
Indeno(1,2,3-cd)pyrene	0.044c	0.49c
Isophorone	360c	26,000c
Naphthalene		
Nitrobenzene	17	1900
N-Nitrosodi-n-propylamine	0.050c	14c
N-Nitrosodiphenylamine	50c	160c
Pentachlorophenol	1.0a,c	82c
Phenanthrene		
Phenol (wwh, ewh, mwh)	1.0f	4600000
Phenol (lrw)	1.0f	4600000
Phenol (cwh, ssh)	1.0f	4600000
Phenol		
Pyrene	960	11000

TABLE C.4

SURFACE WATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

Metals			
Aluminum			
Aluminum (dissolved)			
Antimony	6.0a	4300	
Antimony (dissolved)			
Arsenic	10a		
Arsenic (dissolved)			
Barium	2,000a		
Barium (dissolved)			
Beryllium	4.0a	280	
Beryllium (dissolved)			
Cadmium	5.0a		
Cadmium (dissolved)			
Calcium			
Calcium (dissolved)			
Chromium	100a		
Chromium (dissolved)			
Cobalt			
Cobalt (dissolved)			
Copper			1,300
Copper (dissolved)			
Iron			
Iron (dissolved)	300a		
Lead	ID		ID
Lead (dissolved)			
Magnesium			
Magnesium (dissolved)			
Manganese			
Manganese (dissolved)			
Manganese 2+			
Mercury	0.012	0.012	
Mercury (dissolved)			
Nickel	610	4600	
Nickel (dissolved)			
Potassium			
Potassium (dissolved)			
Selenium	50a		11000
Selenium (dissolved)			
Silver			
Silver (wwh, ewh, mwh) - TR	50		
Silver (lrw) - TR	50		
Silver (ssh, cwh) - TR	50		
Silver (dissolved)			
Sodium			
Sodium (dissolved)			
Thallium	1.7	6.3	
Thallium (dissolved)			
Vanadium			
Vanadium (dissolved)			
Zinc	9100	69000	
Zinc (dissolved)			

TABLE C.4

SURFACE WATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

PCBs				
PCBs		0.0017c		0.0017c
Aroclor-1016 (PCB-1016)				
Aroclor-1221 (PCB-1221)				
Aroclor-1232 (PCB-1232)				
Aroclor-1242 (PCB-1242)				
Aroclor-1248 (PCB-1248)				
Aroclor-1254 (PCB-1254)				
Aroclor-1260 (PCB-1260)				
Pesticides				
4,4'-DDD		0.0083c		0.0084c
4,4'-DDE		0.0059c		0.0059c
4,4'-DDT		0.0059c		0.0059c
Aldrin		0.0013c		0.0014c
alpha-BHC		0.039c		0.13c
alpha-Chlordane				
beta-BHC		0.14c		0.46c
delta-BHC				
Dieldrin				
Endosulfan	110		240	
Endosulfan I	110		240	
Endosulfan II	110		240	
Endosulfan sulfate	110		240	
Endrin	0.76		0.81	
Endrin aldehyde	0.76		0.81	
Endrin ketone				
gamma-BHC (lindane)		0.19c		0.63c
gamma-Chlordane				
Heptachlor		0.0021c		0.0021c
Heptachlor epoxide		0.0010c		0.0011c
Methoxychlor		40a		
Toxaphene		0.0073c		0.0075c
Herbicides				
2,4,5-TP (Silvex)				
2,4-Dichlorophenoxyacetic acid (2,4-D)				
Gases				
Ethane				
Ethene				
Methane				

TABLE C.4

SURFACE WATER SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

General Chemistry		
Alkalinity, total (as CaCO3)		
Ammonia-N		
Chloride	250,000a	
Cyanide (total)		
Cyanide - free (wwh, ewh, mwh)	200a	220000
Cyanide - free (lwh)	200a	220000
Cyanide - free (ssh, cwh)	200a	220000
Dissolved organic carbon (DOC)		
Dissolved organic carbon (DOC) (dissolved)		
Hardness		
Nitrate + Nitrite (as N)	10,000a	
Nitrate		
Nitrate (as N)		
Nitrite		
Nitrite (as N)	1,000a	
Sulfate	250,000a	
Sulfide		
Sulfide (acid soluble)		
Total organic carbon (TOC)		

Notes:

Chemicals of Concern

- - Not applicable.
[1] - United States Environmental Protection Agency Regional Screening Levels (RSL), November 2012

[2] - United States Environmental Protection Agency RCRA Ecological Screening Levels, August 22, 2003
[3] - Ohio River Basin Aquatic Life and Human Health Tier 1 Criteria and Tier II Values
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NA - Not applicable.
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OMZM - Outside Mixing Zone Maximum.
OMZA - Outside Mixing Zone Average.
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Nondrink - Human health criterion - non Public Water Supply (1-route exposure).

a - This criterion is the maximum contaminant level (MCL) developed under the "Safe Drinking Water Act".
b - No chlorine is to be discharged.
c - This criterion is based on a carcinogenic endpoint.
d - Equivalent 25°C specific conductance value is 2400 micromhos/cm.
e - Equivalent 25°C specific conductance values are 1200 micromhos/cm as a maximum and 800 micromhos/cm as a thirty-day average.
f - This criterion is based on protection against adverse aesthetic effects.

TABLE C.5

SEDIMENT SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

Parameter	***USEPA Ecological Screening Levels [1]*** ***µg/kg***
Volatile Organic Compounds	
1,1,1-Trichloroethane	213
1,1,2,2-Tetrachloroethane	850
1,1,2-Trichloroethane	518
1,1-Dichloroethane	0.575
1,1-Dichloroethene	19.4
1,2-Dichloroethane	260
1,2-Dichloroethene (total)	-
1,2-Dichloropropane	333
2-Butanone (Methyl ethyl ketone) (MEK)	42.4
2-Hexanone	58.2
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	25.1
Acetone	9.9
Benzene	142
Bromodichloromethane	-
Bromoform	492
Bromomethane (Methyl bromide)	1.37
Carbon disulfide	23.9
Carbon tetrachloride	1450
Chlorobenzene	291
Chloroethane	-
Chloroform (Trichloromethane)	121
Chloromethane (Methyl chloride)	-
cis-1,3-Dichloropropene	-
Dibromochloromethane	-
Ethylbenzene	175
Methylene chloride	159
Styrene	254
Tetrachloroethene	990
Toluene	1220
trans-1,3-Dichloropropene	-
Trichloroethene	112
Vinyl chloride	202
Xylenes (total)	433
Semi-Volatile Organic Compounds	
1,2,4-Trichlorobenzene	5062
1,2-Dichlorobenzene	294
1,3-Dichlorobenzene	1315
1,4-Dichlorobenzene	318
2,4,5-Trichlorophenol	-
2,4,6-Trichlorophenol	208
2,4-Dichlorophenol	81.7

TABLE C.5

SEDIMENT SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

2,4-Dimethylphenol	2,4-Dimethylphenol
2,4-Dinitrophenol	2,4-Dinitrophenol
2,4-Dinitrotoluene	2,4-Dinitrotoluene
2,6-Dinitrotoluene	2,6-Dinitrotoluene
2-Chloronaphthalene	2-Chloronaphthalene
2-Chlorophenol	2-Chlorophenol
2-Methylnaphthalene	2-Methylnaphthalene
2-Methylphenol	2-Methylphenol
2-Nitroaniline	2-Nitroaniline
2-Nitrophenol	2-Nitrophenol
3,3'-Dichlorobenzidine	3,3'-Dichlorobenzidine
3-Nitroaniline	3-Nitroaniline
4,6-Dinitro-2-methylphenol	4,6-Dinitro-2-methylphenol
4-Bromophenyl phenyl ether	4-Bromophenyl phenyl ether
4-Chloro-3-methylphenol	4-Chloro-3-methylphenol
4-Chloroaniline	4-Chloroaniline
4-Chlorophenyl phenyl ether	4-Chlorophenyl phenyl ether
4-Methylphenol	4-Methylphenol
4-Nitroaniline	4-Nitroaniline
4-Nitrophenol	4-Nitrophenol
Acenaphthene	Acenaphthene
Acenaphthylene	Acenaphthylene
Anthracene	Anthracene
Benzo(a)anthracene	Benzo(a)anthracene
Benzo(a)pyrene	Benzo(a)pyrene
Benzo(b)fluoranthene	Benzo(b)fluoranthene
Benzo(g,h,i)perylene	Benzo(g,h,i)perylene
Benzo(k)fluoranthene	Benzo(k)fluoranthene
bis(2-Chloroethoxy)methane	bis(2-Chloroethoxy)methane
bis(2-Chloroethyl)ether	bis(2-Chloroethyl)ether
bis(2-Ethylhexyl)phthalate (DEHP)	bis(2-Ethylhexyl)phthalate (DEHP)
Butyl benzylphthalate (BBP)	Butyl benzylphthalate (BBP)
Carbazole	Carbazole
Chrysene	Chrysene
Dibenz(a,h)anthracene	Dibenz(a,h)anthracene
Dibenzofuran	Dibenzofuran
Diethyl phthalate	Diethyl phthalate
Dimethyl phthalate	Dimethyl phthalate
Di-n-butylphthalate (DBP)	Di-n-butylphthalate (DBP)
Di-n-octyl phthalate (DnOP)	Di-n-octyl phthalate (DnOP)
Fluoranthene	Fluoranthene
Fluorene	Fluorene
Hexachlorobenzene	Hexachlorobenzene
Hexachlorobutadiene	Hexachlorobutadiene
Hexachlorocyclopentadiene	Hexachlorocyclopentadiene
Hexachloroethane	Hexachloroethane
Indeno(1,2,3-cd)pyrene	Indeno(1,2,3-cd)pyrene

TABLE C.5

SEDIMENT SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

Isophorone	Isophorone
Naphthalene	Naphthalene
Nitrobenzene	Nitrobenzene
N-Nitrosodi-n-propylamine	N-Nitrosodi-n-propylamine
N-Nitrosodiphenylamine	N-Nitrosodiphenylamine
Pentachlorophenol	Pentachlorophenol
Phenanthrene	Phenanthrene
Phenol	Phenol
Pyrene	Pyrene
Metals	***Metals***
Aluminum	Aluminum
Antimony	Antimony
Arsenic	Arsenic
Barium	Barium
Beryllium	Beryllium
Cadmium	Cadmium
Calcium	Calcium
Chromium	Chromium
Cobalt	Cobalt
Copper	Copper
Cyanide (total)	Cyanide (total)
Iron	Iron
Lead	Lead
Magnesium	Magnesium
Manganese	Manganese
Mercury	Mercury
Nickel	Nickel
Potassium	Potassium
Selenium	Selenium
Silver	Silver
Sodium	Sodium
Thallium	Thallium
Vanadium	Vanadium
Zinc	Zinc
PCBs	***PCBs***
Aroclor-1016 (PCB-1016)	Aroclor-1016 (PCB-1016)
Aroclor-1221 (PCB-1221)	Aroclor-1221 (PCB-1221)
Aroclor-1232 (PCB-1232)	Aroclor-1232 (PCB-1232)
Aroclor-1242 (PCB-1242)	Aroclor-1242 (PCB-1242)
Aroclor-1248 (PCB-1248)	Aroclor-1248 (PCB-1248)
Aroclor-1254 (PCB-1254)	Aroclor-1254 (PCB-1254)
Aroclor-1260 (PCB-1260)	Aroclor-1260 (PCB-1260)
Pesticides	***Pesticides***
4,4'-DDD	4,4'-DDD

TABLE C.5

SEDIMENT SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

4,4'-DDE	4,4'-DDE
4,4'-DDT	4,4'-DDT
Aldrin	Aldrin
alpha-BHC	alpha-BHC
alpha-Chlordane	alpha-Chlordane
beta-BHC	beta-BHC
delta-BHC	delta-BHC
Dieldrin	Dieldrin
Endosulfan I	Endosulfan I
Endosulfan II	Endosulfan II
Endosulfan sulfate	Endosulfan sulfate
Endrin	Endrin
Endrin aldehyde	Endrin aldehyde
Endrin ketone	Endrin ketone
gamma-BHC (lindane)	gamma-BHC (lindane)
gamma-Chlordane	gamma-Chlordane
Heptachlor	Heptachlor
Heptachlor epoxide	Heptachlor epoxide
Methoxychlor	Methoxychlor
Toxaphene	Toxaphene
General Chemistry	***General Chemistry***
Percent moisture	Percent moisture
Total organic carbon (TOC)	Total organic carbon (TOC)

Notes:

- - Not applicable.

[1] - United States Environmental Protection Agency RCRA Ecological Screening Levels, August 22, 2003

Notes:

- - Not applicable.

[1] - United States Environmental Protection Agency RCRA Ecological Screening Levels, August 22, 2003

TABLE C.5

SEDIMENT SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

USEPA Ecological Screening Levels [1]	
Parameter	***µg/kg***
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1,1,1-Trichloroethane	213
1,1,2,2-Tetrachloroethane	850
1,1,2-Trichloroethane	518
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1,1-Dichloroethene	19.4
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1,2-Dichloroethene (total)	-
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4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	25.1
Acetone	9.9
Benzene	142
Bromodichloromethane	-
Bromoform	492
Bromomethane (Methyl bromide)	1.37
Carbon disulfide	23.9
Carbon tetrachloride	1450
Chlorobenzene	291
Chloroethane	-
Chloroform (Trichloromethane)	121
Chloromethane (Methyl chloride)	-
cis-1,3-Dichloropropene	-
Dibromochloromethane	-
Ethylbenzene	175
Methylene chloride	159
Styrene	254
Tetrachloroethene	990
Toluene	1220
trans-1,3-Dichloropropene	-
Trichloroethene	112
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Xylenes (total)	433
Semi-Volatile Organic Compounds	
1,2,4-Trichlorobenzene	5062
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2,4,5-Trichlorophenol	-
2,4,6-Trichlorophenol	208
2,4-Dichlorophenol	81.7

TABLE C.5

SEDIMENT SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

2,4-Dimethylphenol	304
2,4-Dinitrophenol	6.21
2,4-Dinitrotoluene	14.4
2,6-Dinitrotoluene	39.8
2-Chloronaphthalene	417
2-Chlorophenol	31.9
2-Methylnaphthalene	20.2
2-Methylphenol	55.4
2-Nitroaniline	-
2-Nitrophenol	-
3,3'-Dichlorobenzidine	127
3-Nitroaniline	-
4,6-Dinitro-2-methylphenol	104
4-Bromophenyl phenyl ether	1550
4-Chloro-3-methylphenol	388
4-Chloroaniline	146
4-Chlorophenyl phenyl ether	-
4-Methylphenol	20.2
4-Nitroaniline	-
4-Nitrophenol	13.3
Acenaphthene	6.71
Acenaphthylene	5.87
Anthracene	57.2
Benzo(a)anthracene	108
Benzo(a)pyrene	150
Benzo(b)fluoranthene	10400
Benzo(g,h,i)perylene	170
Benzo(k)fluoranthene	240
bis(2-Chloroethoxy)methane	-
bis(2-Chloroethyl)ether	3520
bis(2-Ethylhexyl)phthalate (DEHP)	182
Butyl benzylphthalate (BBP)	1970
Carbazole	-
Chrysene	166
Dibenz(a,h)anthracene	33
Dibenzofuran	449
Diethyl phthalate	295
Dimethyl phthalate	-
Di-n-butylphthalate (DBP)	1114
Di-n-octyl phthalate (DnOP)	40600
Fluoranthene	423
Fluorene	77.4
Hexachlorobenzene	20
Hexachlorobutadiene	26.5
Hexachlorocyclopentadiene	901
Hexachloroethane	584
Indeno(1,2,3-cd)pyrene	200

TABLE C.5

SEDIMENT SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

Isophorone	432
Naphthalene	176
Nitrobenzene	145
N-Nitrosodi-n-propylamine	-
N-Nitrosodiphenylamine	-
Pentachlorophenol	23000
Phenanthrene	204
Phenol	49.1
Pyrene	195
Metals	
Aluminum	-
Antimony	-
Arsenic	9790
Barium	-
Beryllium	-
Cadmium	990
Calcium	-
Chromium	43400
Cobalt	50000
Copper	31600
Cyanide (total)	0.1
Iron	-
Lead	35800
Magnesium	-
Manganese	-
Mercury	174
Nickel	22700
Potassium	-
Selenium	-
Silver	500
Sodium	-
Thallium	-
Vanadium	-
Zinc	121000
PCBs	
Aroclor-1016 (PCB-1016)	-
Aroclor-1221 (PCB-1221)	-
Aroclor-1232 (PCB-1232)	-
Aroclor-1242 (PCB-1242)	-
Aroclor-1248 (PCB-1248)	-
Aroclor-1254 (PCB-1254)	-
Aroclor-1260 (PCB-1260)	-
Pesticides	
4,4'-DDD	4.88

TABLE C.5

SEDIMENT SCREENING LEVELS
OU2 RI/FS WORK PLAN
SOUTH DAYTON DUMP AND LANDFILL
MORAINE, OHIO

4,4'-DDE	3.16
4,4'-DDT	4.16
Aldrin	2
alpha-BHC	6
alpha-Chlordane	-
beta-BHC	5
delta-BHC	71500
Dieldrin	1.9
Endosulfan I	3.26
Endosulfan II	1.94
Endosulfan sulfate	34.6
Endrin	2.22
Endrin aldehyde	480
Endrin ketone	-
gamma-BHC (lindane)	2.37
gamma-Chlordane	-
Heptachlor	0.6
Heptachlor epoxide	2.47
Methoxychlor	13.6
Toxaphene	0.077
General Chemistry	
Percent moisture	-
Total organic carbon (TOC)	-

Notes:

- - Not applicable.
[1] - United States Environmental Protection Agency RCRA Ecological Screening Levels, August 22, 2003