Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	MPSB-96 5-7 10/13/2003	MPSB-96 9-11 10/13/2003	MPSB-99 11-13 10/14/2003	MPSB-99 21-23 10/14/2003	MPSB-100 2-4 10/14/2003	MPSB-100 8-10 10/14/2003	MPSB-101 8-10 10/14/2003	MPSB-101 10-12 10/14/2003	MPSB-101 16-18 10/14/2003
Volatile Organic Compounds[4]													
Acetone	10,000,000	370,000	41,000	µg/kg[5]	NS[6]	NS	19	6.2[7]	NS	NS	93	38	44
Benzene	41,000	500	130	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	23	<5.5
Bromodichloromethane	8,600	10,000	3,400	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
Bromoform	290,000	10,000	4,400	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
Bromomethane	95,000	1,000	540	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
2-Butanone	--[8]	--	--	µg/kg	NS	NS	<12	<10	NS	NS	<24	8.9[7]	3.7[7]
Carbon disulfide	10,000,000	190,000	160,000	µg/kg	NS	NS	5.2[7]	<5	NS	NS	6.2[7]	<5	<5.5
Carbon tetrachloride	21,000	500	260	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
Chlorobenzene	4,400,000	10,000	6,100	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
Chloroethane	6,200,000	23,000	5,000	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
Chloroform	6,000	10,000	2,500	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
Chloromethane	180,000	300	38	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
1,1-Dichloroethane	200,000	2,700	650	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
1,2-Dichloroethane	12,000	500	100	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
1,1-Dichloroethene	6,400	700	190	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
cis-1,2-Dichloroethene	670,000	7,000	1,600	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
trans-1,2-Dichloroethene	1,300,000	10,000	2,300	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
1,2-Dichloropropane	31,000	500	110	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
cis-1,3-Dichloropropene	--	--	--	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
trans-1,3-Dichloropropene	--	--	--	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
Dibromochloromethane	12,000	10,000	3,200	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	8.8	<5.5
2-Hexanone	10,000,000	280,000	54,000	µg/kg	NS	NS	<12	<10	NS	NS	<24	<10	<11
Methylene chloride	680,000	500	76	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
4-Methyl-2-pentanone	1,500,000	19,000	2,900	µg/kg	NS	NS	<12	<10	NS	NS	<24	<10	<11
Styrene	10,000,000	10,000	24,000	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
1,1,2,2-Tetrachloroethane	5,500	300	9.3	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
Tetrachloroethene	340,000	500	430	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
Toluene	7,600,000	100,000	44,000	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	45	<5.5
1,1,1-Trichloroethane	10,000,000	20,000	7,200	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
1,1,2-Trichloroethane	20,000	500	150	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
Trichloroethene	190,000	500	170	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
Vinyl chloride	12,000	200	27	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	<5	<5.5
Xylene, m & p-	--	--	--	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	19	<5.5
Xylene, o-	--	--	--	µg/kg	NS	NS	<6.1	<5	NS	NS	<12	5.4	<5.5
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	NS	NS	<12	<10	NS	NS	<24	24.4	<11
Semi-Volatile Organic Compounds[9]													
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Anthracene	66,000,000	6,600	350,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-96	MPSB-96	MPSB-99	MPSB-99	MPSB-100	MPSB-100	MPSB-101	MPSB-101	MPSB-101
				Sample Depth (ft bgs)[3]	5-7	9-11	11-13	21-23	2-4	8-10	8-10	10-12	16-18
				Sample Date	10/13/2003	10/13/2003	10/14/2003	10/14/2003	10/14/2003	10/14/2003	10/14/2003	10/14/2003	10/14/2003
				Units									
Benzo(a)anthracene	25,000	90	79,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	61[7]	NS
Benzo(a)pyrene	2,500	20	46,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	61[7]	NS
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	71[7]	NS
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Bis(2-chloroethoxy)methane	--	--	--	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Bis(2-chloroethyl)ether	960	13	3.9	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Bis(2-chloroisopropyl)ether	32,000	30,000	8,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Bis(2-ethylhexyl)phthalate	1,300,000	600	130,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
4-Bromophenyl-phenylether	--	--	--	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Butylbenzylphthalate	10,000,000	270,000	10,000,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Carbazole	900,000	3,300	21,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
4-Chloroaniline	880,000	15,000	19,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
2-Chloronaphthalene	18,000,000	290,000	6,200,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
4-Chlorophenyl-phenylether	--	--	--	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Chrysene	2,500,000	190	230,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	84[7]	NS
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Dibenzofuran	--	--	--	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
1,2-Dichlorobenzene	3,800,000	60,000	59,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
1,3-Dichlorobenzene	6,600,000	60,000	61,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
1,4-Dichlorobenzene	750,000	7,500	10,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
3,3'-Dichlorobenzidine	40,000	150	8,300	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Diethylphthalate	10,000,000	500,000	160,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Dimethylphthalate	--	--	--	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Di-n-butylphthalate	--	--	--	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
4,6-Dinitro-2-methylphenol	--	--	--	µg/kg	NS	NS	<86	NS	NS	NS	NS	<250	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	NS	NS	<86	NS	NS	NS	NS	<250	NS
2,4-Dinitrotoluene	58,000	210	50	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
2,6-Dinitrotoluene	220,000	3,700	1,100	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Di-n-octylphthalate	--	--	--	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	150	NS
Fluorene	8,800,000	150,000	3,000,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Hexachlorobenzene	11,000	100	960	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Hexachlorobutadiene	44,000	100	1,200	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Hexachlorocyclopentadiene	1,300,000	5,000	91,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Hexachloroethane	220,000	100	560	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-96	MPSB-96	MPSB-99	MPSB-99	MPSB-100	MPSB-100	MPSB-101	MPSB-101	MPSB-101
				Sample Depth (ft bgs)[3]	5-7	9-11	11-13	21-23	2-4	8-10	8-10	10-12	16-18
				Sample Date	10/13/2003	10/13/2003	10/14/2003	10/14/2003	10/14/2003	10/14/2003	10/14/2003	10/14/2003	10/14/2003
				Units									
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Isophorone	10,000,000	10,000	1,900	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
2-Methylnaphthalene	4,400,000	73,000	2,900,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Naphthalene	4,400,000	10,000	25,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Nitrobenzene	110,000	1,800	790	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
2-Nitroaniline	13,000	210	38	µg/kg	NS	NS	<86	NS	NS	NS	NS	<250	NS
3-Nitroaniline	13,000	210	33	µg/kg	NS	NS	<86	NS	NS	NS	NS	<250	NS
4-Nitroaniline	13,000	210	31	µg/kg	NS	NS	<86	NS	NS	NS	NS	<250	NS
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	NS	NS	<86	NS	NS	NS	NS	<250	NS
N-nitrosodi-n-propylamine	2,600	9.4	1.3	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
N-nitrosodiphenylamine	3,700,000	13,000	20,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	NS	NS	<83	NS	NS	NS	NS	<130	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	94[7]	NS
Phenol	130,000,000	400,000	66,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	100[7]	NS
1,2,4-Trichlorobenzene	2,200,000	7,000	27,000	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	NS	NS	<86	NS	NS	NS	NS	<250	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	NS	NS	<43	NS	NS	NS	NS	<130	NS
Total Metals[10]													
Aluminum	190,000	NA[11]	NA	mg/kg[12]	14,000	17,000	NS	NS	11,000	22,000	NS	NS	NS
Antimony	88	0.6	27	mg/kg	0.87	0.42[7]	NS	NS	<0.5	0.87	NS	NS	NS
Arsenic	12	5	150	mg/kg	15	5.2	NS	NS	6.1	9.8	NS	NS	NS
Barium	15,000	200	8,200	mg/kg	180	210	NS	NS	110	3,400	NS	NS	NS
Beryllium	440	0.4	320	mg/kg	1.3	1.2	NS	NS	1.2	1.6	NS	NS	NS
Boron	20,000	60	6.7	mg/kg	<5	0.32	NS	NS	3.2[7]	10	NS	NS	NS
Cadmium	47	0.5	38	mg/kg	<0.2	<0.32	NS	NS	<0.2	<0.26	NS	NS	NS
Chromium	190,000	10	190,000	mg/kg	15	20	NS	NS	19	23	NS	NS	NS
Cobalt	4,400	73	8.1	mg/kg	12	11	NS	NS	2	19	NS	NS	NS
Copper	8,200	100	36,000	mg/kg	23	24	NS	NS	180	63	NS	NS	NS
Iron	66,000	NA	NA	mg/kg	31,000	21,000	NS	NS	31,000	25,000	NS	NS	NS
Lead	500	0.5	450	mg/kg	41	17	NS	NS	440	72	NS	NS	NS
Manganese	31,000	NA	NA	mg/kg	4,400	290	NS	NS	830	890	NS	NS	NS
Mercury	66	0.2	10	mg/kg	0.069[7]	0.045[7]	NS	NS	0.011[7]	0.044[7]	NS	NS	NS
Molybdenum	--	--	--	mg/kg	88	11	NS	NS	10,000	520	NS	NS	NS
Nickel	4,400	10	650	mg/kg	19	24	NS	NS	9	26	NS	NS	NS
Selenium	1,100	5	26	mg/kg	1.5	2.6	NS	NS	<4	1.2	NS	NS	NS
Silver	1,100	10	84	mg/kg	0.13[7]	<0.32	NS	NS	4.2	<0.26	NS	NS	NS
Thallium	15	0.2	14	mg/kg	<2	<3.2	NS	NS	<2	<2.6	NS	NS	NS
Tin	130,000	2,200	240	mg/kg	4[7]	5.5[7]	NS	NS	5[7]	4.2[7]	NS	NS	NS

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-96	MPSB-96	MPSB-99	MPSB-99	MPSB-100	MPSB-100	MPSB-101	MPSB-101	MPSB-101
				Sample Depth (ft bgs)[3]	5-7	9-11	11-13	21-23	2-4	8-10	8-10	10-12	16-18
				Sample Date	10/13/2003	10/13/2003	10/14/2003	10/14/2003	10/14/2003	10/14/2003	10/14/2003	10/14/2003	10/14/2003
				Units									
Tungsten	--	--	--	mg/kg	16	16	NS	NS	110	70	NS	NS	NS
Vanadium	1,500	26	26,000	mg/kg	22	30	NS	NS	9.4	29	NS	NS	NS
Zinc	66,000	200	12,000	mg/kg	67	70	NS	NS	120	84	NS	NS	NS

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(9) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-102	MPSB-102	MPSB-106	MPSB-106	MPSB-106	MPSB-106	MPSB-106	MPSB-108	MPSB-108
				Sample Depth (ft bgs)[3]	2-4	6-8	2-4	4-6	6-8	12-14	20-22	8-10	10-12
				Sample Date	10/15/2003	10/15/2003	10/16/2003	10/16/2003	10/16/2003	10/16/2003	10/16/2003	10/17/2003	10/17/2003
				Units									
Volatile Organic Compounds[4]													
Acetone	10,000,000	370,000	41,000	µg/kg[5]	NS	NS	NS	25	NS	75	44	27	41
Benzene	41,000	500	130	µg/kg	NS	NS	NS	6.1	NS	3.4[7]	42	<5	<5.5
Bromodichloromethane	8,600	10,000	3,400	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
Bromoform	290,000	10,000	4,400	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
Bromomethane	95,000	1,000	540	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
2-Butanone	--[8]	--	--	µg/kg	NS	NS	NS	<10	NS	<11	8.2[7]	<10	<11
Carbon disulfide	10,000,000	190,000	160,000	µg/kg	NS	NS	NS	<5	NS	12	<5	17	3.1[7]
Carbon tetrachloride	21,000	500	260	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
Chlorobenzene	4,400,000	10,000	6,100	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
Chloroethane	6,200,000	23,000	5,000	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
Chloroform	6,000	10,000	2,500	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
Chloromethane	180,000	300	38	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
1,1-Dichloroethane	200,000	2,700	650	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
1,2-Dichloroethane	12,000	500	100	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
1,1-Dichloroethene	6,400	700	190	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
cis-1,2-Dichloroethene	670,000	7,000	1,600	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
trans-1,2-Dichloroethene	1,300,000	10,000	2,300	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
1,2-Dichloropropane	31,000	500	110	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
cis-1,3-Dichloropropene	--	--	--	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
trans-1,3-Dichloropropene	--	--	--	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
Dibromochloromethane	12,000	10,000	3,200	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	NS	NS	NS	<5	NS	<5.5	7.8	<5	<5.5
2-Hexanone	10,000,000	280,000	54,000	µg/kg	NS	NS	NS	<10	NS	<11	<10	<10	<11
Methylene chloride	680,000	500	76	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
4-Methyl-2-pentanone	1,500,000	19,000	2,900	µg/kg	NS	NS	NS	<10	NS	<11	<10	<10	<11
Styrene	10,000,000	10,000	24,000	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
1,1,2,2-Tetrachloroethane	5,500	300	9.3	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
Tetrachloroethene	340,000	500	430	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
Toluene	7,600,000	100,000	44,000	µg/kg	NS	NS	NS	4.3[7]	NS	<5.5	38	<5	<5.5
1,1,1-Trichloroethane	10,000,000	20,000	7,200	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
1,1,2-Trichloroethane	20,000	500	150	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
Trichloroethene	190,000	500	170	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
Vinyl chloride	12,000	200	27	µg/kg	NS	NS	NS	<5	NS	<5.5	<5	<5	<5.5
Xylene, m & p-	--	--	--	µg/kg	NS	NS	NS	<5	NS	180	16	<5	<5.5
Xylene, o-	--	--	--	µg/kg	NS	NS	NS	<5	NS	<5.5	6.2	<5	<5.5
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	NS	NS	NS	<10	NS	180	22.2	<10	<11
Semi-Volatile Organic Compounds[9]													
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Anthracene	66,000,000	6,600	350,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-102	MPSB-102	MPSB-106	MPSB-106	MPSB-106	MPSB-106	MPSB-106	MPSB-108	MPSB-108
				Sample Depth (ft bgs)[3]	2-4	6-8	2-4	4-6	6-8	12-14	20-22	8-10	10-12
				Sample Date	10/15/2003	10/15/2003	10/16/2003	10/16/2003	10/16/2003	10/16/2003	10/16/2003	10/17/2003	10/17/2003
				Units									
Benzo(a)anthracene	25,000	90	79,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	42	NS
Benzo(a)pyrene	2,500	20	46,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	26[7]	NS
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	36[7]	NS
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	32[7]	NS
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Bis(2-chloroethoxy)methane	--	--	--	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Bis(2-chloroethyl)ether	960	13	3.9	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Bis(2-chloroisopropyl)ether	32,000	30,000	8,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Bis(2-ethylhexyl)phthalate	1,300,000	600	130,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
4-Bromophenyl-phenylether	--	--	--	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Butylbenzylphthalate	10,000,000	270,000	10,000,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Carbazole	900,000	3,300	21,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
4-Chloroaniline	880,000	15,000	19,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
2-Chloronaphthalene	18,000,000	290,000	6,200,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
4-Chlorophenyl-phenylether	--	--	--	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Chrysene	2,500,000	190	230,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	45	NS
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Dibenzofuran	--	--	--	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
1,2-Dichlorobenzene	3,800,000	60,000	59,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
1,3-Dichlorobenzene	6,600,000	60,000	61,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
1,4-Dichlorobenzene	750,000	7,500	10,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
3,3'-Dichlorobenzidine	40,000	150	8,300	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Diethylphthalate	10,000,000	500,000	160,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Dimethylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Di-n-butylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
4,6-Dinitro-2-methylphenol	--	--	--	µg/kg	NS	NS	NS	NS	NS	<97	NS	<83	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	NS	NS	NS	NS	NS	<97	NS	<83	NS
2,4-Dinitrotoluene	58,000	210	50	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
2,6-Dinitrotoluene	220,000	3,700	1,100	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Di-n-octylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	88	NS
Fluorene	8,800,000	150,000	3,000,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Hexachlorobenzene	11,000	100	960	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Hexachlorobutadiene	44,000	100	1,200	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Hexachlorocyclopentadiene	1,300,000	5,000	91,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Hexachloroethane	220,000	100	560	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-102	MPSB-102	MPSB-106	MPSB-106	MPSB-106	MPSB-106	MPSB-106	MPSB-108	MPSB-108
				Sample Depth (ft bgs)[3]	2-4	6-8	2-4	4-6	6-8	12-14	20-22	8-10	10-12
				Sample Date	10/15/2003	10/15/2003	10/16/2003	10/16/2003	10/16/2003	10/16/2003	10/16/2003	10/17/2003	10/17/2003
				Units									
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Isophorone	10,000,000	10,000	1,900	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
2-Methylnaphthalene	4,400,000	73,000	2,900,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Naphthalene	4,400,000	10,000	25,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Nitrobenzene	110,000	1,800	790	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
2-Nitroaniline	13,000	210	38	µg/kg	NS	NS	NS	NS	NS	<97	NS	<83	NS
3-Nitroaniline	13,000	210	33	µg/kg	NS	NS	NS	NS	NS	<97	NS	<83	NS
4-Nitroaniline	13,000	210	31	µg/kg	NS	NS	NS	NS	NS	<97	NS	<83	NS
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	NS	NS	NS	NS	NS	<97	NS	<83	NS
N-nitrosodi-n-propylamine	2,600	9.4	1.3	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
N-nitrosodiphenylamine	3,700,000	13,000	20,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	NS	NS	NS	NS	NS	<83	NS	<83	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	42	NS
Phenol	130,000,000	400,000	66,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	68	NS
1,2,4-Trichlorobenzene	2,200,000	7,000	27,000	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	NS	NS	NS	NS	NS	<97	NS	<83	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	NS	NS	NS	NS	NS	<48	NS	<42	NS
Total Metals[10]													
Aluminum	190,000	NA[11]	NA	mg/kg[12]	32,000	15,000	12,000	NS	87,000	NS	NS	NS	NS
Antimony	88	0.6	27	mg/kg	<0.54	0.72	1.1	NS	0.81	NS	NS	NS	NS
Arsenic	12	5	150	mg/kg	5.8	19	12	NS	21	NS	NS	NS	NS
Barium	15,000	200	8,200	mg/kg	92	280	170	NS	700	NS	NS	NS	NS
Beryllium	440	0.4	320	mg/kg	4.8	1.3	1	NS	2.1	NS	NS	NS	NS
Boron	20,000	60	6.7	mg/kg	140	23	190	NS	330	NS	NS	NS	NS
Cadmium	47	0.5	38	mg/kg	<0.22	<0.21	0.59	NS	<0.24	NS	NS	NS	NS
Chromium	190,000	10	190,000	mg/kg	42	21	24	NS	37	NS	NS	NS	NS
Cobalt	4,400	73	8.1	mg/kg	2.5	19	11	NS	3.2	NS	NS	NS	NS
Copper	8,200	100	36,000	mg/kg	150	45	45	NS	240	NS	NS	NS	NS
Iron	66,000	NA	NA	mg/kg	68,000	36,000	43,000	NS	32,000	NS	NS	NS	NS
Lead	500	0.5	450	mg/kg	560	61	67	NS	210	NS	NS	NS	NS
Manganese	31,000	NA	NA	mg/kg	1,600	990	1,200	NS	2,000	NS	NS	NS	NS
Mercury	66	0.2	10	mg/kg	0.0092[7]	0.059[7]	0.076[7]	NS	0.055[7]	NS	NS	NS	NS
Molybdenum	--	--	--	mg/kg	4,200	970	630	NS	2,800	NS	NS	NS	NS
Nickel	4,400	10	650	mg/kg	6.6	19	20	NS	7.5	NS	NS	NS	NS
Selenium	1,100	5	26	mg/kg	<0.54	2.1	1.9	NS	4.6	NS	NS	NS	NS
Silver	1,100	10	84	mg/kg	9.6	<0.21	0.062[7]	NS	2.5	NS	NS	NS	NS
Thallium	15	0.2	14	mg/kg	<2.2	<2.1	<2	NS	<2.4	NS	NS	NS	NS
Tin	130,000	2,200	240	mg/kg	4.6[7]	6.2[7]	13	NS	5.2[7]	NS	NS	NS	NS

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-102	MPSB-102	MPSB-106	MPSB-106	MPSB-106	MPSB-106	MPSB-106	MPSB-108	MPSB-108
				Sample Depth (ft bgs)[3]	2-4	6-8	2-4	4-6	6-8	12-14	20-22	8-10	10-12
				Sample Date	10/15/2003	10/15/2003	10/16/2003	10/16/2003	10/16/2003	10/16/2003	10/16/2003	10/17/2003	10/17/2003
				Units									
Tungsten	--	--	--	mg/kg	39	82	780	NS	900	NS	NS	NS	NS
Vanadium	1,500	26	26,000	mg/kg	7.4	30	35	NS	9.2	NS	NS	NS	NS
Zinc	66,000	200	12,000	mg/kg	130	110	110	NS	72	NS	NS	NS	NS

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(9) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-108	MPSB-112	MPSB-112	MPSB-113	MPSB-113	MPSB-116	MPSB-116	MPSB-119	MPSB-119
				Sample Depth (ft bgs)[3]	18-20	0-2	6-8	2-4	4-6	2-4	12-14	2-4	6-8
				Sample Date	10/17/2003	10/20/2003	10/20/2003	10/21/2003	10/21/2003	10/20/2003	10/20/2003	10/20/2003	10/20/2003
				Units									
Volatile Organic Compounds[4]													
Acetone	10,000,000	370,000	41,000	µg/kg[5]	16	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	41,000	500	130	µg/kg	13	NS	NS	NS	NS	NS	NS	NS	NS
Bromodichloromethane	8,600	10,000	3,400	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
Bromoform	290,000	10,000	4,400	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
Bromomethane	95,000	1,000	540	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone	--[8]	--	--	µg/kg	<10	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	10,000,000	190,000	160,000	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	21,000	500	260	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	4,400,000	10,000	6,100	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	6,200,000	23,000	5,000	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	6,000	10,000	2,500	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
Chloromethane	180,000	300	38	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	200,000	2,700	650	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	12,000	500	100	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	6,400	700	190	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	670,000	7,000	1,600	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	1,300,000	10,000	2,300	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	31,000	500	110	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	--	--	--	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	--	--	--	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	12,000	10,000	3,200	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	6.6	NS	NS	NS	NS	NS	NS	NS	NS
2-Hexanone	10,000,000	280,000	54,000	µg/kg	<10	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	680,000	500	76	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	1,500,000	19,000	2,900	µg/kg	<10	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	10,000,000	10,000	24,000	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	5,500	300	9.3	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	340,000	500	430	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	7,600,000	100,000	44,000	µg/kg	34	NS	NS	NS	NS	NS	NS	NS	NS
1,1,1-Trichloroethane	10,000,000	20,000	7,200	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	20,000	500	150	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	190,000	500	170	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl chloride	12,000	200	27	µg/kg	<5	NS	NS	NS	NS	NS	NS	NS	NS
Xylene, m & p-	--	--	--	µg/kg	15	NS	NS	NS	NS	NS	NS	NS	NS
Xylene, o-	--	--	--	µg/kg	5.5	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	20.5	NS	NS	NS	NS	NS	NS	NS	NS
Semi-Volatile Organic Compounds[9]													
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Anthracene	66,000,000	6,600	350,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-108	MPSB-112	MPSB-112	MPSB-113	MPSB-113	MPSB-116	MPSB-116	MPSB-119	MPSB-119
				Sample Depth (ft bgs)[3]	18-20	0-2	6-8	2-4	4-6	2-4	12-14	2-4	6-8
				Sample Date	10/17/2003	10/20/2003	10/20/2003	10/21/2003	10/21/2003	10/20/2003	10/20/2003	10/20/2003	10/20/2003
				Units									
Benzo(a)anthracene	25,000	90	79,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(a)pyrene	2,500	20	46,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bis(2-chloroethoxy)methane	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bis(2-chloroethyl)ether	960	13	3.9	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bis(2-chloroisopropyl)ether	32,000	30,000	8,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bis(2-ethylhexyl)phthalate	1,300,000	600	130,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl-phenylether	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butylbenzylphthalate	10,000,000	270,000	10,000,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	900,000	3,300	21,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloroaniline	880,000	15,000	19,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chloronaphthalene	18,000,000	290,000	6,200,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chlorophenyl-phenylether	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chrysene	2,500,000	190	230,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibenzofuran	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	3,800,000	60,000	59,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	6,600,000	60,000	61,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	750,000	7,500	10,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	40,000	150	8,300	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	10,000,000	500,000	160,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrotoluene	58,000	210	50	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	220,000	3,700	1,100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluorene	8,800,000	150,000	3,000,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobenzene	11,000	100	960	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	44,000	100	1,200	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	1,300,000	5,000	91,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	220,000	100	560	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-108	MPSB-112	MPSB-112	MPSB-113	MPSB-113	MPSB-116	MPSB-116	MPSB-119	MPSB-119
				Sample Depth (ft bgs)[3]	18-20	0-2	6-8	2-4	4-6	2-4	12-14	2-4	6-8
				Sample Date	10/17/2003	10/20/2003	10/20/2003	10/21/2003	10/21/2003	10/20/2003	10/20/2003	10/20/2003	10/20/2003
				Units									
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Isophorone	10,000,000	10,000	1,900	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Methylnaphthalene	4,400,000	73,000	2,900,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	4,400,000	10,000	25,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nitrobenzene	110,000	1,800	790	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitroaniline	13,000	210	38	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
3-Nitroaniline	13,000	210	33	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitroaniline	13,000	210	31	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
N-nitrosodi-n-propylamine	2,600	9.4	1.3	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
N-nitrosodiphenylamine	3,700,000	13,000	20,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Phenol	130,000,000	400,000	66,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2,4-Trichlorobenzene	2,200,000	7,000	27,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS
Total Metals[10]													
Aluminum	190,000	NA[11]	NA	mg/kg[12]	NS	9,700	12,000	14,000	14,000	13,000	11,000	25,000	12,000
Antimony	88	0.6	27	mg/kg	NS	0.58[7]	0.34[7]	0.77	0.66	<0.5	0.99	<0.67	0.46[7]
Arsenic	12	5	150	mg/kg	NS	15	8	10	13	9.5	7.1	12	25
Barium	15,000	200	8,200	mg/kg	NS	150	200	83	180	160	180	190	220
Beryllium	440	0.4	320	mg/kg	NS	1.2	1.1	0.79	0.9	1.3	0.99	4.9	1
Boron	20,000	60	6.7	mg/kg	NS	3.6[7]	13	0.83[7]	6.4	44	17	230	12
Cadmium	47	0.5	38	mg/kg	NS	<0.24	<0.21	<0.21	<0.22	<0.2	<0.22	<0.27	<0.24
Chromium	190,000	10	190,000	mg/kg	NS	20	16	17	19	21	16	61	18
Cobalt	4,400	73	8.1	mg/kg	NS	12	13	9	14	3.4	12	3.7	12
Copper	8,200	100	36,000	mg/kg	NS	33	20	16	27	200	20	350	33
Iron	66,000	NA	NA	mg/kg	NS	29,000	27,000	26,000	25,000	25,000	26,000	39,000	27,000
Lead	500	0.5	450	mg/kg	NS	18	15	17	34	440	17	460	42
Manganese	31,000	NA	NA	mg/kg	NS	340	650	330	800	1,200	550	1,600	1,100
Mercury	66	0.2	10	mg/kg	NS	0.14	0.034[7]	0.048[7]	0.065[7]	0.10	0.032[7]	0.011[7]	0.072[7]
Molybdenum	--	--	--	mg/kg	NS	5.7	240	56	380	3,900	250	8,800	430
Nickel	4,400	10	650	mg/kg	NS	27	23	14	22	22	22	8.6	24
Selenium	1,100	5	26	mg/kg	NS	2.9	0.78	1.5	2.5	<0.5	0.79	2.5	1.9
Silver	1,100	10	84	mg/kg	NS	0.056[7]	<0.21	<0.21	0.06[7]	2.6	0.14[7]	3.4	0.24
Thallium	15	0.2	14	mg/kg	NS	<2.4	<2.1	<2.1	<2.2	<2	<2.2	<2.7	<2.4
Tin	130,000	2,200	240	mg/kg	NS	4.6[7]	4[7]	3.7[7]	5.9[7]	4.9[7]	3.9[7]	7.8[7]	7.8[7]

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-108	MPSB-112	MPSB-112	MPSB-113	MPSB-113	MPSB-116	MPSB-116	MPSB-119	MPSB-119
				Sample Depth (ft bgs)[3]	18-20	0-2	6-8	2-4	4-6	2-4	12-14	2-4	6-8
				Sample Date	10/17/2003	10/20/2003	10/20/2003	10/21/2003	10/21/2003	10/20/2003	10/20/2003	10/20/2003	10/20/2003
				Units									
Tungsten	--	--	--	mg/kg	NS	5.4[7]	20	9.8[7]	47	110	7.5[7]	290	110
Vanadium	1,500	26	26,000	mg/kg	NS	28	24	27	28	14	21	16	26
Zinc	66,000	200	12,000	mg/kg	NS	60	57	38	82	120	54	73	110

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(9) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	MPSB-120 4-6 10/21/2003	MPSB-120 8-10 10/21/2003	MPSB-122 6-8 10/21/2003	MPSB-122 12-14 10/21/2003	MPSB-122 18-20 10/21/2003	MPSB-123 6-8 10/21/2003	MPSB-123 10-12 10/21/2003
Volatile Organic Compounds[4]											
Acetone	10,000,000	370,000	41,000	µg/kg[5]	NS	NS	18	17	28	NS	NS
Benzene	41,000	500	130	µg/kg	NS	NS	9.2	<5	<5.3	NS	NS
Bromodichloromethane	8,600	10,000	3,400	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
Bromoform	290,000	10,000	4,400	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
Bromomethane	95,000	1,000	540	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
2-Butanone	--[8]	--	--	µg/kg	NS	NS	<12	<10	<11	NS	NS
Carbon disulfide	10,000,000	190,000	160,000	µg/kg	NS	NS	5.8[7]	11	2.8[7]	NS	NS
Carbon tetrachloride	21,000	500	260	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
Chlorobenzene	4,400,000	10,000	6,100	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
Chloroethane	6,200,000	23,000	5,000	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
Chloroform	6,000	10,000	2,500	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
Chloromethane	180,000	300	38	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
1,1-Dichloroethane	200,000	2,700	650	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
1,2-Dichloroethane	12,000	500	100	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
1,1-Dichloroethene	6,400	700	190	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
cis-1,2-Dichloroethene	670,000	7,000	1,600	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
trans-1,2-Dichloroethene	1,300,000	10,000	2,300	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
1,2-Dichloropropane	31,000	500	110	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
cis-1,3-Dichloropropene	--	--	--	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
trans-1,3-Dichloropropene	--	--	--	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
Dibromochloromethane	12,000	10,000	3,200	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	NS	NS	4.8[7]	<5	<5.3	NS	NS
2-Hexanone	10,000,000	280,000	54,000	µg/kg	NS	NS	<12	<10	<11	NS	NS
Methylene chloride	680,000	500	76	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
4-Methyl-2-pentanone	1,500,000	19,000	2,900	µg/kg	NS	NS	<12	<10	<11	NS	NS
Styrene	10,000,000	10,000	24,000	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
1,1,2,2-Tetrachloroethane	5,500	300	9.3	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
Tetrachloroethene	340,000	500	430	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
Toluene	7,600,000	100,000	44,000	µg/kg	NS	NS	29	<5	<5.3	NS	NS
1,1,1-Trichloroethane	10,000,000	20,000	7,200	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
1,1,2-Trichloroethane	20,000	500	150	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
Trichloroethene	190,000	500	170	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
Vinyl chloride	12,000	200	27	µg/kg	NS	NS	<6.2	<5	<5.3	NS	NS
Xylene, m & p-	--	--	--	µg/kg	NS	NS	13	<5	<5.3	NS	NS
Xylene, o-	--	--	--	µg/kg	NS	NS	8.6	<5	<5.3	NS	NS
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	NS	NS	21.6	<10	<10.8	NS	NS
Semi-Volatile Organic Compounds[9]											
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
Anthracene	66,000,000	6,600	350,000	µg/kg	NS	NS	<42	NS	NS	NS	NS

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-120	MPSB-120	MPSB-122	MPSB-122	MPSB-122	MPSB-123	MPSB-123
				Sample Depth (ft bgs)[3]	4-6	8-10	6-8	12-14	18-20	6-8	10-12
				Sample Date	10/21/2003	10/21/2003	10/21/2003	10/21/2003	10/21/2003	10/21/2003	10/21/2003
				Units							
Benzo(a)anthracene	25,000	90	79,000	µg/kg	NS	NS	44	NS	NS	NS	NS
Benzo(a)pyrene	2,500	20	46,000	µg/kg	NS	NS	44	NS	NS	NS	NS
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	NS	NS	25[7]	NS	NS	NS	NS
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	NS	NS	30[7]	NS	NS	NS	NS
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	NS	NS	33[7]	NS	NS	NS	NS
Bis(2-chloroethoxy)methane	--	--	--	µg/kg	NS	NS	<42	NS	NS	NS	NS
Bis(2-chloroethyl)ether	960	13	3.9	µg/kg	NS	NS	<42	NS	NS	NS	NS
Bis(2-chloroisopropyl)ether	32,000	30,000	8,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
Bis(2-ethylhexyl)phthalate	1,300,000	600	130,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
4-Bromophenyl-phenylether	--	--	--	µg/kg	NS	NS	<42	NS	NS	NS	NS
Butylbenzylphthalate	10,000,000	270,000	10,000,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
Carbazole	900,000	3,300	21,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
4-Chloroaniline	880,000	15,000	19,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
2-Chloronaphthalene	18,000,000	290,000	6,200,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	NS	NS	<42	NS	NS	NS	NS
4-Chlorophenyl-phenylether	--	--	--	µg/kg	NS	NS	<42	NS	NS	NS	NS
Chrysene	2,500,000	190	230,000	µg/kg	NS	NS	48	NS	NS	NS	NS
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	NS	NS	<42	NS	NS	NS	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
Dibenzofuran	--	--	--	µg/kg	NS	NS	<42	NS	NS	NS	NS
1,2-Dichlorobenzene	3,800,000	60,000	59,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
1,3-Dichlorobenzene	6,600,000	60,000	61,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
1,4-Dichlorobenzene	750,000	7,500	10,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
3,3'-Dichlorobenzidine	40,000	150	8,300	µg/kg	NS	NS	<42	NS	NS	NS	NS
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
Diethylphthalate	10,000,000	500,000	160,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
Dimethylphthalate	--	--	--	µg/kg	NS	NS	<42	NS	NS	NS	NS
Di-n-butylphthalate	--	--	--	µg/kg	NS	NS	<42	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	--	--	--	µg/kg	NS	NS	<85	NS	NS	NS	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	NS	NS	<85	NS	NS	NS	NS
2,4-Dinitrotoluene	58,000	210	50	µg/kg	NS	NS	<42	NS	NS	NS	NS
2,6-Dinitrotoluene	220,000	3,700	1,100	µg/kg	NS	NS	<42	NS	NS	NS	NS
Di-n-octylphthalate	--	--	--	µg/kg	NS	NS	<42	NS	NS	NS	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	NS	NS	66	NS	NS	NS	NS
Fluorene	8,800,000	150,000	3,000,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
Hexachlorobenzene	11,000	100	960	µg/kg	NS	NS	<42	NS	NS	NS	NS
Hexachlorobutadiene	44,000	100	1,200	µg/kg	NS	NS	<42	NS	NS	NS	NS
Hexachlorocyclopentadiene	1,300,000	5,000	91,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
Hexachloroethane	220,000	100	560	µg/kg	NS	NS	<42	NS	NS	NS	NS

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	MPSB-120 4-6 10/21/2003	MPSB-120 8-10 10/21/2003	MPSB-122 6-8 10/21/2003	MPSB-122 12-14 10/21/2003	MPSB-122 18-20 10/21/2003	MPSB-123 6-8 10/21/2003	MPSB-123 10-12 10/21/2003
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	NS	NS	29[7]	NS	NS	NS	NS
Isophorone	10,000,000	10,000	1,900	µg/kg	NS	NS	<42	NS	NS	NS	NS
2-Methylnaphthalene	4,400,000	73,000	2,900,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
Naphthalene	4,400,000	10,000	25,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
Nitrobenzene	110,000	1,800	790	µg/kg	NS	NS	<42	NS	NS	NS	NS
2-Nitroaniline	13,000	210	38	µg/kg	NS	NS	<85	NS	NS	NS	NS
3-Nitroaniline	13,000	210	33	µg/kg	NS	NS	<85	NS	NS	NS	NS
4-Nitroaniline	13,000	210	31	µg/kg	NS	NS	<85	NS	NS	NS	NS
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	NS	NS	<42	NS	NS	NS	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	NS	NS	<85	NS	NS	NS	NS
N-nitrosodi-n-propylamine	2,600	9.4	1.3	µg/kg	NS	NS	<42	NS	NS	NS	NS
N-nitrosodiphenylamine	3,700,000	13,000	20,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	NS	NS	<83	NS	NS	NS	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	NS	NS	47	NS	NS	NS	NS
Phenol	130,000,000	400,000	66,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	NS	NS	110	NS	NS	NS	NS
1,2,4-Trichlorobenzene	2,200,000	7,000	27,000	µg/kg	NS	NS	<42	NS	NS	NS	NS
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	NS	NS	<85	NS	NS	NS	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	NS	NS	<42	NS	NS	NS	NS
Total Metals[10]											
Aluminum	190,000	NA[11]	NA	mg/kg[12]	27,000	13,000	NS	NS	NS	17,000	15,000
Antimony	88	0.6	27	mg/kg	0.25[7]	0.62	NS	NS	NS	2.6	<0.5
Arsenic	12	5	150	mg/kg	66	7.5	NS	NS	NS	32	6.4
Barium	15,000	200	8,200	mg/kg	650	230	NS	NS	NS	330	240
Beryllium	440	0.4	320	mg/kg	4.4	1.3	NS	NS	NS	6.7	1.3
Boron	20,000	60	6.7	mg/kg	590	26	NS	NS	NS	77	20
Cadmium	47	0.5	38	mg/kg	<0.2	<0.23	NS	NS	NS	4	<0.2
Chromium	190,000	10	190,000	mg/kg	53	18	NS	NS	NS	34	19
Cobalt	4,400	73	8.1	mg/kg	5.4	12	NS	NS	NS	13	15
Copper	8,200	100	36,000	mg/kg	250	23	NS	NS	NS	2,100	37
Iron	66,000	NA	NA	mg/kg	38,000	28,000	NS	NS	NS	51,000	29,000
Lead	500	0.5	450	mg/kg	280	18	NS	NS	NS	250	21
Manganese	31,000	NA	NA	mg/kg	860	550	NS	NS	NS	620	310
Mercury	66	0.2	10	mg/kg	0.03[7]	0.035[1]	NS	NS	NS	0.081[7]	0.035[7]
Molybdenum	--	--	--	mg/kg	5,300	170	NS	NS	NS	4,200	410
Nickel	4,400	10	650	mg/kg	9.5	24	NS	NS	NS	34	25
Selenium	1,100	5	26	mg/kg	1.5	0.78	NS	NS	NS	9.9	0.88
Silver	1,100	10	84	mg/kg	<0.2	0.075[7]	NS	NS	NS	2.8	0.0017[7]
Thallium	15	0.2	14	mg/kg	<20	<2.3	NS	NS	NS	<2.2	<2
Tin	130,000	2,200	240	mg/kg	4.3[7]	3.7[7]	NS	NS	NS	13	3.1[7]

Table H-7
Area 3 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-120	MPSB-120	MPSB-122	MPSB-122	MPSB-122	MPSB-123	MPSB-123
				Sample Depth (ft bgs)[3]	4-6	8-10	6-8	12-14	18-20	6-8	10-12
				Sample Date	10/21/2003	10/21/2003	10/21/2003	10/21/2003	10/21/2003	10/21/2003	10/21/2003
				Units							
Tungsten	--	--	--	mg/kg	400	7.1[7]	NS	NS	NS	260	41
Vanadium	1,500	26	26,000	mg/kg	16	25	NS	NS	NS	28	28
Zinc	66,000	200	12,000	mg/kg	79	66	NS	NS	NS	480	73

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(9) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-8
Area 3 Monitoring Well Soil Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	MW-50 4-6 10/21/2003	MW-50 6-8 10/21/2003
Volatile Organic Compounds[4]						
Acetone	10,000,000	370,000	41,000	µg/kg[5]	NS[6]	NS
Benzene	41,000	500	130	µg/kg	NS	NS
Bromodichloromethane	9,000	10,000	3,400	µg/kg	NS	NS
Bromoform	290,000	10,000	4,400	µg/kg	NS	NS
Bromomethane	95,000	1,000	540	µg/kg	NS	NS
2-Butanone	--[7]	--	--	µg/kg	NS	NS
Carbon disulfide	10,000,000	190,000	160,000	µg/kg	NS	NS
Carbon tetrachloride	21,000	500	260	µg/kg	NS	NS
Chlorobenzene	4,400,000	10,000	6,100	µg/kg	NS	NS
Chloroethane	6,200,000	23,000	5,000	µg/kg	NS	NS
Chloroform	6,000	10,000	2,500	µg/kg	NS	NS
Chloromethane	180,000	300	38	µg/kg	NS	NS
1,1-Dichloroethane	200,000	2,700	650	µg/kg	NS	NS
1,2-Dichloroethane	6,000	700	190	µg/kg	NS	NS
1,1-Dichloroethene	12,000	500	100	µg/kg	NS	NS
cis-1,2-Dichloroethene	670,000	7,000	1,600	µg/kg	NS	NS
trans-1,2-Dichloroethene	1,300,000	10,000	2,300	µg/kg	NS	NS
1,2-Dichloropropane	31,000	500	110	µg/kg	NS	NS
cis-1,3-Dichloropropene	--	--	--	µg/kg	NS	NS
trans-1,3-Dichloropropene	--	--	--	µg/kg	NS	NS
Dibromochloromethane	12,000	10,000	3,200	µg/kg	NS	NS
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	NS	NS
2-Hexanone	10,000,000	280,000	54,000	µg/kg	NS	NS
Methylene chloride	680,000	500	76	µg/kg	NS	NS
4-Methyl-2-pentanone	1,500,000	19,000	2,900	µg/kg	NS	NS
Styrene	10,000,000	10,000	24,000	µg/kg	NS	NS
1,1,2,2-Tetrachloroethane	6,000	300	9.3	µg/kg	NS	NS
Tetrachloroethene	340,000	500	430	µg/kg	NS	NS
Toluene	7,600,000	100,000	44,000	µg/kg	NS	NS
1,1,1-Trichloroethane	10,000,000	20,000	7,200	µg/kg	NS	NS
1,1,2-Trichloroethane	20,000	500	150	µg/kg	NS	NS
Trichloroethene	190,000	500	170	µg/kg	NS	NS
Vinyl chloride	12,000	200	27	µg/kg	NS	NS
Xylene, m & p-	--	--	--	µg/kg	NS	NS
Xylene, o-	--	--	--	µg/kg	NS	NS
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	NS	NS
Semi-Volatile Organic Compounds[8]						
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	NS	NS
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	NS	NS
Anthracene	66,000,000	6,600	350,000	µg/kg	NS	NS

Table H-8
Area 3 Monitoring Well Soil Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MW-50	MW-50
				Sample Depth (ft bgs)[3]	4-6	6-8
				Sample Date	10/21/2003	10/21/2003
				Units		
Benzo(a)anthracene	25,000	90	79,000	µg/kg	NS	NS
Benzo(a)pyrene	2,500	20	46,000	µg/kg	NS	NS
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	NS	NS
Benzo(k)fluoranthene	13,000,000	26	180,000	µg/kg	NS	NS
Benzo(g,h,i)perylene	250,000	55	610,000	µg/kg	NS	NS
Bis(2-chloroethoxy)methane	--	--	--	µg/kg	NS	NS
Bis(2-chloroethyl)ether	960	13	3.9	µg/kg	NS	NS
Bis(2-chloroisopropyl)ether	32,000	30,000	8,000	µg/kg	NS	NS
Bis(2-ethylhexyl)phthalate	1,300,000	600	130,000	µg/kg	NS	NS
4-Bromophenyl-phenylether	--	--	--	µg/kg	NS	NS
Butylbenzylphthalate	10,000,000	270,000	10,000,000	µg/kg	NS	NS
Carbazole	900,000	3,300	21,000	µg/kg	NS	NS
4-Chloroaniline	880,000	15,000	19,000	µg/kg	NS	NS
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	NS	NS
2-Chloronaphthalene	18,000,000	290,000	6,200,000	µg/kg	NS	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	NS	NS
4-Chlorophenyl-phenylether	--	--	--	µg/kg	NS	NS
Chrysene	2,500,000	190	230,000	µg/kg	NS	NS
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	NS	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	NS	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	NS	NS
Dibenzofuran	--	--	--	µg/kg	NS	NS
1,2-Dichlorobenzene	3,800,000	60,000	59,000	µg/kg	NS	NS
1,3-Dichlorobenzene	6,600,000	60,000	61,000	µg/kg	NS	NS
1,4-Dichlorobenzene	750,000	7,500	10,000	µg/kg	NS	NS
3,3'-Dichlorobenzidine	40,000	150	8,300	µg/kg	NS	NS
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	NS	NS
Diethylphthalate	10,000,000	500,000	160,000	µg/kg	NS	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	NS	NS
Dimethylphthalate	--	--	--	µg/kg	NS	NS
Di-n-butylphthalate	--	--	--	µg/kg	NS	NS
4,6-Dinitro-2-methylphenol	--	--	--	µg/kg	NS	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	NS	NS
2,4-Dinitrotoluene	58,000	210	50	µg/kg	NS	NS
2,6-Dinitrotoluene	220,000	3,700	1,100	µg/kg	NS	NS
Di-n-octylphthalate	--	--	--	µg/kg	NS	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	NS	NS
Fluorene	8,800,000	150,000	3,000,000	µg/kg	NS	NS
Hexachlorobenzene	11,000	100	960	µg/kg	NS	NS
Hexachlorobutadiene	44,000	100	1,200	µg/kg	NS	NS
Hexachlorocyclopentadiene	1,300,000	5,000	91,000	µg/kg	NS	NS
Hexachloroethane	220,000	100	560	µg/kg	NS	NS

Table H-8
Area 3 Monitoring Well Soil Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	MW-50 4-6 10/21/2003	MW-50 6-8 10/21/2003
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	NS	NS
Isophorone	10,000,000	10,000	1,900	µg/kg	NS	NS
2-Methylnaphthalene	4,400,000	73,000	2,900,000	µg/kg	NS	NS
Naphthalene	4,400,000	10,000	25,000	µg/kg	NS	NS
Nitrobenzene	110,000	1,800	790	µg/kg	NS	NS
2-Nitroaniline	13,000	210	38	µg/kg	NS	NS
3-Nitroaniline	13,000	210	33	µg/kg	NS	NS
4-Nitroaniline	13,000	210	31	µg/kg	NS	NS
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	NS	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	NS	NS
N-nitrosodi-n-propylamine	2,600	9.4	1.3	µg/kg	NS	NS
N-nitrosodiphenylamine	3,700,000	13,000	20,000	µg/kg	NS	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	NS	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	NS	NS
Phenol	130,000,000	400,000	66,000	µg/kg	NS	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	NS	NS
1,2,4-Trichlorobenzene	2,200,000	7,000	27,000	µg/kg	NS	NS
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	NS	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	NS	NS
Total Metals[9]						
Aluminum	190,000	NA[10]	NA	mg/kg[11]	14,000	12,000
Antimony	88	0.6	27	mg/kg	0.95	0.98
Arsenic	12	5	150	mg/kg	13	9.7
Barium	15,000	200	8,200	mg/kg	210	230
Beryllium	440	0.4	320	mg/kg	1.2	1.1
Boron	20,000	60	6.7	mg/kg	16	17
Cadmium	47	0.5	38	mg/kg	<0.26	<0.23
Chromium	190,000	10	190,000	mg/kg	21	16
Cobalt	4,400	73	8.1	mg/kg	12	14
Copper	8,200	100	36,000	mg/kg	49	22
Iron	66,000	NA	NA	mg/kg	28,000	26,000
Lead	500	0.5	450	mg/kg	45	15
Manganese	31,000	NA	NA	mg/kg	1,000	440
Mercury	66	0.2	10	mg/kg	0.04[12]	0.038[12]
Molybdenum	--	--	--	mg/kg	670	280
Nickel	4,400	10	650	mg/kg	25	23
Selenium	1,100	5	26	mg/kg	2.7	1.1
Silver	1,100	10	84	mg/kg	0.25[12]	<0.23
Thallium	15	0.2	14	mg/kg	<2.6	<2.3
Tin	130,000	2,200	240	mg/kg	6.5[12]	3.2[12]

Table H-8
Area 3 Monitoring Well Soil Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MW-50	MW-50
				Sample Depth (ft bgs)[3]	4-6	6-8
				Sample Date	10/21/2003	10/21/2003
				Units		
Tungsten	--	--	--	mg/kg	62	6.7[12]
Vanadium	1,500	26	26,000	mg/kg	25	23
Zinc	66,000	200	12,000	mg/kg	93	58

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(8) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(9) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(10) NA - Not Applicable
(11) mg/kg - milligrams/kilogram
(12) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential

Table H-9
Area 4 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	MPSB-189 2-4 11/5/2003	MPSB-189 12-14 11/5/2003
Volatile Organic Compounds[4]						
Acetone	10,000,000	370,000	41,000	µg/kg[5]	78	9.1[6]
Benzene	41,000	500	130	µg/kg	<5	39
Bromodichloromethane	8,600	10,000	3,400	µg/kg	<5	<5
Bromoform	290,000	10,000	4,400	µg/kg	<5	<5
Bromomethane	95,000	1,000	540	µg/kg	<5	<5
2-Butanone	--[8]	--	--	µg/kg	6.5[6]	<10
Carbon disulfide	10,000,000	190,000	160,000	µg/kg	15	<5
Carbon tetrachloride	21,000	500	260	µg/kg	<5	<5
Chlorobenzene	4,400,000	10,000	6,100	µg/kg	<5	<5
Chloroethane	6,200,000	23,000	5,000	µg/kg	<5	<5
Chloroform	6,000	10,000	2,500	µg/kg	<5	<5
Chloromethane	180,000	300	38	µg/kg	<5	<5
1,1-Dichloroethane	200,000	2,700	650	µg/kg	<5	<5
1,2-Dichloroethane	12,000	500	100	µg/kg	<5	<5
1,1-Dichloroethene	6,400	700	190	µg/kg	<5	<5
cis-1,2-Dichloroethene	670,000	7,000	1,600	µg/kg	<5	<5
trans-1,2-Dichloroethene	1,300,000	10,000	2,300	µg/kg	<5	<5
1,2-Dichloropropane	31,000	500	110	µg/kg	<5	<5
cis-1,3-Dichloropropene	--	--	--	µg/kg	<5	<5
trans-1,3-Dichloropropene	--	--	--	µg/kg	<5	<5
Dibromochloromethane	12,000	10,000	3,200	µg/kg	<5	<5
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	<5	4.9[6]
2-Hexanone	10,000,000	280,000	54,000	µg/kg	<10	<10
Methylene chloride	680,000	500	76	µg/kg	<5	<5
4-Methyl-2-pentanone	1,500,000	19,000	2,900	µg/kg	<10	<10
Styrene	10,000,000	10,000	24,000	µg/kg	<5	<5
1,1,2,2-Tetrachloroethane	5,500	300	9.3	µg/kg	<5	<5
Tetrachloroethene	340,000	500	430	µg/kg	<5	<5
Toluene	7,600,000	100,000	44,000	µg/kg	<5	35
1,1,1-Trichloroethane	10,000,000	20,000	7,200	µg/kg	<5	<5
1,1,2-Trichloroethane	20,000	500	150	µg/kg	<5	<5
Trichloroethene	190,000	500	170	µg/kg	<5	<5
Vinyl chloride	12,000	200	27	µg/kg	<5	<5
Xylene, m & p-	--	--	--	µg/kg	<5	14
Xylene, o-	--	--	--	µg/kg	<5	4.2[6]
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	<10	18.2
Semi-Volatile Organic Compounds[9]						
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	<43	<40
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	45	52
Anthracene	66,000,000	6,600	350,000	µg/kg	<43	<40
Benzo(a)anthracene	25,000	90	79,000	µg/kg	<43	<40
Benzo(a)pyrene	2,500	20	46,000	µg/kg	<43	<40

Table H-9
Area 4 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	MPSB-189 2-4 11/5/2003	MPSB-189 12-14 11/5/2003
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	33[6]	<40
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	<43	<40
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	<43	<40
Bis(2-chloroethoxy)methane	--	--	--	µg/kg	<43	<40
Bis(2-chloroethyl)ether	960	13	3.9	µg/kg	<43	<40
Bis(2-chloroisopropyl)ether	32,000	30,000	8,000	µg/kg	<43	<40
Bis(2-ethylhexyl)phthalate	1,300,000	600	130,000	µg/kg	<43	<40
4-Bromophenyl-phenylether	--	--	--	µg/kg	<43	<40
Butylbenzylphthalate	10,000,000	270,000	10,000,000	µg/kg	<43	<40
Carbazole	900,000	3,300	21,000	µg/kg	<43	<40
4-Chloroaniline	880,000	15,000	19,000	µg/kg	<43	<40
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	<43	<40
2-Chloronaphthalene	18,000,000	290,000	6,200,000	µg/kg	<43	<40
2-Chlorophenol	330,000	4,000	4,400	µg/kg	<43	<40
4-Chlorophenyl-phenylether	--	--	--	µg/kg	<43	<40
Chrysene	2,500,000	190	230,000	µg/kg	25[6]	<40
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	<43	<40
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	<43	<40
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	<43	<40
Dibenzofuran	--	--	--	µg/kg	22[6]	23[6]
1,2-Dichlorobenzene	3,800,000	60,000	59,000	µg/kg	<43	<40
1,3-Dichlorobenzene	6,600,000	60,000	61,000	µg/kg	<43	<40
1,4-Dichlorobenzene	750,000	7,500	10,000	µg/kg	<43	<40
3,3'-Dichlorobenzidine	40,000	150	8,300	µg/kg	<43	<40
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	<43	<40
Diethylphthalate	10,000,000	500,000	160,000	µg/kg	<43	<40
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	<43	<40
Dimethylphthalate	--	--	--	µg/kg	<43	<40
Di-n-butylphthalate	--	--	--	µg/kg	<43	<40
4,6-Dinitro-2-methylphenol	--	--	--	µg/kg	<86	<83
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	<86	<83
2,4-Dinitrotoluene	58,000	210	50	µg/kg	<43	<40
2,6-Dinitrotoluene	220,000	3,700	1,100	µg/kg	<43	<40
Di-n-octylphthalate	--	--	--	µg/kg	<43	<40
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	33[6]	<40
Fluorene	8,800,000	150,000	3,000,000	µg/kg	<43	<40
Hexachlorobenzene	11,000	100	960	µg/kg	<43	<40
Hexachlorobutadiene	44,000	100	1,200	µg/kg	<43	<40
Hexachlorocyclopentadiene	1,300,000	5,000	91,000	µg/kg	<43	<40
Hexachloroethane	220,000	100	560	µg/kg	<43	<40
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	<43	<40
Isophorone	10,000,000	10,000	1,900	µg/kg	<43	<40
2-Methylnaphthalene	4,400,000	73,000	2,900,000	µg/kg	82	110

Table H-9
Area 4 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	MPSB-189 2-4 11/5/2003	MPSB-189 12-14 11/5/2003
Naphthalene	4,400,000	10,000	25,000	µg/kg	140	220
Nitrobenzene	110,000	1,800	790	µg/kg	<43	<40
2-Nitroaniline	13,000	210	38	µg/kg	<86	<83
3-Nitroaniline	13,000	210	33	µg/kg	<86	<83
4-Nitroaniline	13,000	210	31	µg/kg	<86	<83
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	<43	<40
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	<86	<83
N-nitrosodi-n-propylamine	2,600	9.4	1.3	µg/kg	<43	<40
N-nitrosodiphenylamine	3,700,000	13,000	20,000	µg/kg	<43	<40
Pentachlorophenol	150,000	100	5,000	µg/kg	<83	<83
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	37[6]	<40
Phenol	130,000,000	400,000	66,000	µg/kg	<43	<40
Pyrene	6,600,000	13,000	2,200,000	µg/kg	36[6]	<40
1,2,4-Trichlorobenzene	2,200,000	7,000	27,000	µg/kg	<43	<40
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	<86	<83
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	<43	<40
Polychlorinated Biphenyls[9]						
PCB 1016	15,000	260	72,000	mg/kg	<1	<1
PCB 1221	36,000	130	630	mg/kg	<1	<1
PCB 1232	36,000	130	500	mg/kg	<1	<1
PCB 1242	36,000	130	16,000	mg/kg	<1	<1
PCB 1248	9,900	37	18,000	mg/kg	<1	<1
PCB 1254	4,400	37	75,000	mg/kg	<1	<1
PCB 1260	30,000	110	500,000	mg/kg	<1	<1
Total Metals[10]						
Aluminum	190,000	NA[11]	NA	mg/kg[12]	14,000	4,800
Antimony	88	0.6	27	mg/kg	0.15[6]	0.61
Arsenic	12	5	150	mg/kg	16	5
Barium	15,000	200	8,200	mg/kg	260	4,100
Beryllium	440	0.4	320	mg/kg	1.5	0.6
Boron	20,000	60	6.7	mg/kg	5	3.6
Cadmium	47	0.5	38	mg/kg	<0.23	0.026[6]
Chromium	190,000	10	190,000	mg/kg	20	4.8
Cobalt	4,400	73	8.1	mg/kg	15	5.6
Copper	8,200	100	36,000	mg/kg	33	9.8
Iron	66,000	NA	NA	mg/kg	45,000	21,000
Lead	500	0.5	450	mg/kg	17	6.9
Manganese	31,000	NA	NA	mg/kg	1,700	1,000
Mercury	66	0.2	10	mg/kg	0.038[6]	0.017[6]
Molybdenum	--	--	--	mg/kg	15	0.88[6]
Nickel	4,400	10	650	mg/kg	29	13
Selenium	1,100	5	26	mg/kg	0.59	<0.56

Table H-9
Area 4 Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-189	MPSB-189
				Sample Depth (ft bgs)[3]	2-4	12-14
				Sample Date	11/5/2003	11/5/2003
				Units		
Silver	1,100	10	84	mg/kg	0.0068[6]	<0.22
Thallium	15	0.2	14	mg/kg	<2.3	<2.2
Tin	130,000	2,200	240	mg/kg	4.3[6]	3.5[6]
Tungsten	--	--	--	mg/kg	2.1[6]	1.5[6]
Vanadium	1,500	26	26,000	mg/kg	27	12
Zinc	66,000	200	12,000	mg/kg	84	31

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(7) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(8) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(9) Polychlorinated Biphenyls were analyzed by US Environmental Protection Agency Method SW 846 8082.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-10
Area 5A Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-177	MPSB-177	MPSB-178	MPSB-178	MPSB-179	MPSB-179	MPSB-180	MPSB-180	MPSB-188	MPSB-188	MPSB-188	Tar Composite
				Sample Depth (in bgs)[3]	8-10	10-12	8-10	10-12	8-10	10-12	8-10	10-12	8-10	14-16	22-24	
				Sample Date	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003
				Units												
Volatile Organic Compounds[4]																
Acetone	10,000,000	370,000	41,000	µg/kg[5]	NS[6]	NS	NS	NS	NS	NS	NS	NS	48	52	<10	NS
Benzene	41,000	500	130	µg/kg	4,000	<280	8,600	67	3,400	1,900	18,000	1,200	<5	6	<5	<2,100
Bromodichloromethane	8,600	10,000	3,400	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Bromoform	290,000	10,000	4,400	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Bromomethane	95,000	1,000	540	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
2-Butanone	_[8]	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<10	<10	<10	NS
Carbon disulfide	10,000,000	190,000	160,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	21	<5	NS
Carbon tetrachloride	21,000	500	260	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Chlorobenzene	4,400,000	10,000	6,100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Chloroethane	6,200,000	23,000	5,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Chloroform	6,000	10,000	2,500	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Chloromethane	180,000	300	38	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
1,1-Dichloroethane	200,000	2,700	650	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
1,2-Dichloroethane	12,000	500	100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
1,1-Dichloroethene	6,400	700	190	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
cis-1,2-Dichloroethene	670,000	7,000	1,600	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
trans-1,2-Dichloroethene	1,300,000	10,000	2,300	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
1,2-Dichloropropane	31,000	500	110	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
cis-1,3-Dichloropropene	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
trans-1,3-Dichloropropene	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Dibromochloromethane	12,000	10,000	3,200	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	640	<280	1,400	<6.1	1,000	640	2,200	240[7]	<5	<5	<5	<2,100
2-Hexanone	10,000,000	280,000	54,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<10	<10	<10	NS
Methylene chloride	680,000	500	76	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
4-Methyl-2-pentanone	1,500,000	19,000	2,900	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<10	<10	<10	NS
Styrene	10,000,000	10,000	24,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
1,1,2,2-Tetrachloroethane	5,500	300	9.3	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Tetrachloroethene	340,000	500	430	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Toluene	7,600,000	100,000	44,000	µg/kg	6,000	<280	13,000	63	8,800	5,000	25,000	1,100	<5	<5	<5	2,300
1,1,1-Trichloroethane	10,000,000	20,000	7,200	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
1,1,2-Trichloroethane	20,000	500	150	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Trichloroethene	190,000	500	170	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Vinyl chloride	12,000	200	27	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Xylene, m & p-	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Xylene, o-	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<5	<5	<5	NS
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	12,000	410	26,000	87	23,000	13,000	42,000	1,800	<10	<10	<10	5,700
Semi-Volatile Organic Compounds[9]																
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	110,000	<4,500	230,000	44,000	200,000[7]	19,000[7]	90,000	120	<41	<43	<36	<180,000
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	1,000,000	15,000	3,100,000	440,000	2,300,000	150,000	1,500,000	110	<41	<43	<36	880,000
Anthracene	66,000,000	6,600	350,000	µg/kg	750,000	12,000	2,200,000	330,000	1,400,000	96,000	920,000	140	<41	<43	<36	640,000
Benzo(a)anthracene	25,000	90	79,000	µg/kg	630,000	8,000	1,400,000	210,000	860,000	57,000	620,000	140	370	<43	<36	430,000
Benzo(a)pyrene	2,500	20	46,000	µg/kg	340,000	<4,500	740,000	120,000	450,000	29,000	330,000	76	58	<43	<36	210,000
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	510,000	6,800	1,200,000	190,000	650,000	43,000	530,000	110	160	<43	<36	320,000

Table H-10
Area 5A Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-177	MPSB-177	MPSB-178	MPSB-178	MPSB-179	MPSB-179	MPSB-180	MPSB-180	MPSB-188	MPSB-188	MPSB-188	Tar Composite
				Sample Depth (in bgs)[3]	8-10	10-12	8-10	10-12	8-10	10-12	8-10	10-12	8-10	14-16	22-24	
				Sample Date	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003
				Units												
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	200,000	<4,500	430,000	58,000	270,000	18,000[7]	160,000	46[7]	53	<43	<36	130,000
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	120,000	<4,500	270,000	42,000	<310,000	<22,000	110,000	27[7]	<41	<43	<36	<180,000
Bis(2-chloroethoxy)methane	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Bis(2-chloroethyl)ether	960	13	3.9	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Bis(2-chloroisopropyl)ether	32,000	30,000	8,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Bis(2-ethylhexyl)phthalate	1,300,000	600	130,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
4-Bromophenyl-phenylether	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Butylbenzylphthalate	10,000,000	270,000	10,000,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Carbazole	900,000	3,300	21,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
4-Chloroaniline	880,000	15,000	19,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	<41,000	NS	<73,000	NS	<310,000	NS	<2,900	NS	<41	<43	<36	NS
2-Chloronaphthalene	18,000,000	290,000	6,200,000	µg/kg	NS	NS	NS	NS		NS	NS	NS	<41	<43	<36	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	<41,000	NS	<73,000	NS	<310,000	NS	<2,900	NS	<41	<43	<36	NS
4-Chlorophenyl-phenylether	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Chrysene	2,500,000	190	230,000	µg/kg	460,000	5,900	1,100,000	160,000	550,000	38,000	440,000	100	330	<43	<36	NS
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	180,000	NS	430,000	NS	<310,000	NS	66,000	NS	<41	<43	<36	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	520,000	NS	1,600,000	NS	<310,000	NS	150,000	NS	<41	<43	<36	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	48,000	<4,500	110,000	<27,000	<310,000	<22,000	51,000	<47	<41	<43	<36	NS
Dibenzofuran	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
1,2-Dichlorobenzene	3,800,000	60,000	59,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
1,3-Dichlorobenzene	6,600,000	60,000	61,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
1,4-Dichlorobenzene	750,000	7,500	10,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
3,3'-Dichlorobenzidine	40,000	150	8,300	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	<41,000	NS	<73,000	NS	<310,000	NS	<2,900	NS	<41	<43	<36	NS
Diethylphthalate	10,000,000	500,000	160,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	460,000	NS	1,100,000	NS	200,000	NS	210,000	NS	<41	<43	<36	NS
Dimethylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Di-n-butylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
4,6-Dinitro-2-methylphenol	--	--	--	µg/kg	<81,000	NS	<150,000	NS	<620,000	NS	<5,700	NS	<83	<86	<83	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	<81,000	NS	<150,000	NS	<620,000	NS	<5,700	NS	<83	<86	<83	NS
2,4-Dinitrotoluene	58,000	210	50	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
2,6-Dinitrotoluene	220,000	3,700	1,100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Di-n-octylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	1,400,000	22,000	3,900,000	610,000	2,300,000	150,000	1,700,000	360	150	<43	<36	NS
Fluorene	8,800,000	150,000	3,000,000	µg/kg	820,000	16,000	2,600,000	390,000	2,000,000	140,000	1,300,000	130	<41	<43	<36	NS
Hexachlorobenzene	11,000	100	960	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Hexachlorobutadiene	44,000	100	1,200	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Hexachlorocyclopentadiene	1,300,000	5,000	91,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Hexachloroethane	220,000	100	560	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	170,000	<4,500	380,000	58,000	210,000	13,000	160,000	37[7]	<41	<43	<36	<180,000
Isophorone	10,000,000	10,000	1,900	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
2-Methylnaphthalene	4,400,000	73,000	2,900,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Naphthalene	4,400,000	10,000	25,000	µg/kg	1,200,000	14,000	3,500,000	530,000	2,400,000	180,000	1,300,000	730	<41	<43	<36	980,000
Nitrobenzene	110,000	1,800	790	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS

Table H-10
Area 5A Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-177	MPSB-177	MPSB-178	MPSB-178	MPSB-179	MPSB-179	MPSB-180	MPSB-180	MPSB-188	MPSB-188	MPSB-188	Tar Composite
				Sample Depth (in bgs)[3]	8-10	10-12	8-10	10-12	8-10	10-12	8-10	10-12	8-10	14-16	22-24	
				Sample Date	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003
				Units												
2-Nitroaniline	13,000	210	38	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<83	<86	<83	NS
3-Nitroaniline	13,000	210	33	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<83	<86	<83	NS
4-Nitroaniline	13,000	210	31	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<83	<86	<83	NS
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	<41,000	NS	<73,000	NS	<310,000	NS	<2,900	NS	<41	<43	<36	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	<81,000	NS	<150,000	NS	<620,000	NS	<5,700	NS	<83	<86	<83	NS
N-nitrosodi-n-propylamine	2,600	9.4	1.3	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
N-nitrosodiphenylamine	3,700,000	13,000	20,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	<41,000	NS	<73,000	NS	<310,000	NS	<2,900	NS	<83	<86	<83	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	2,100,000	33,000	5,800,000	920,000	3,600,000	240,000	2,500,000	360	<41	<43	<36	1,600,00
Phenol	130,000,000	400,000	66,000	µg/kg	190,000	NS	460,000	NS	<310,000	NS	45,000	NS	<41	<43	<36	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	790,000	12,000	2,200,000	340,000	1,300,000	89,000	960,000	210	180	<43	<36	600,000
1,2,4-Trichlorobenzene	2,200,000	7,000	27,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<41	<43	<36	NS
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	<81,000	NS	<150,000	NS	<620,000	NS	<5,700	NS	<83	<86	<83	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	<41,000	NS	<73,000	NS	<310,000	NS	<2,900	NS	<41	<43	<36	NS
Total Metals[10]																
Aluminum	190,000	NA[11]	NA	mg/kg[12]	10,000	14,000	8,800	13,000	11,000	12,000	10,000	15,000	11,000	13,000	18,000	12,000
Antimony	88	0.6	27	mg/kg	<0.51	0.75	<0.73	<0.56	0.28[7]	0.62[7]	0.38 [7]	0.93	0.74	<0.51	<0.50	<0.55
Arsenic	12	5	150	mg/kg	65	5.9	91	11	21	11	58	9.5	19	5.4	1.0	28
Barium	15,000	200	8,200	mg/kg	230	160	210	180	140	170	170	210	160	270	160	210
Beryllium	440	0.4	320	mg/kg	0.97	1.2	0.69	1.1	0.87	1	1	1	1.2	1.0	1.1	0.95
Boron	20,000	60	6.7	mg/kg	46	<4.6	110	11	7.6	6.6	26	7	<5.3	<5.1	5.8	35
Cadmium	47	0.5	38	mg/kg	0.59	<0.26	0.75	<0.22	<0.22	<0.26	0 [7]	<0.28	<0.21	<0.20	<0.20	<0.22
Chromium	190,000	10	190,000	mg/kg	41	19	26	17	17	16	18	17	17	17	24	24
Cobalt	4,400	73	8.1	mg/kg	11	11	6.9	13	11	12	12	8.9	11	12	15	12
Copper	8,200	100	36,000	mg/kg	41	23	45	20	23	20	29	24	31	20	42	41
Iron	66,000	NA	NA	mg/kg	27,000	27,000	15,000	27,000	23,000	27,000	25,000	23,000	29,000	27,000	31,000	25,000
Lead	500	0.5	450	mg/kg	150	15	140	17	26	16	47	15	20	12	13	79
Manganese	31,000	NA	NA	mg/kg	680	400	660	1,300	460	360	390	740	510	130	430	660
Mercury	66	0.2	10	mg/kg	<0.10	<0.10	0.17	<0.10	0.055[7]	0.032[7]	0.086 [7]	0.045[7]	0.15	<0.10	<0.10	<0.10
Molybdenum	--	--	--	mg/kg	820	1.5	710	29	40	6.3	88	2.9	19	<1.0	<1.0	850
Nickel	4,400	10	650	mg/kg	32	24	30	23	22	22	22	23	30	22	42	25
Selenium	1,100	5	26	mg/kg	2.9	<0.64	9.3	1.2	2.3	1.8	3.3	1.6	1.6	0.98	0.67	3.4
Silver	1,100	10	84	mg/kg	0.49	<0.26	<0.29	<0.22	0.066[7]	<0.26	0.16 [7]	<0.28	<0.21	<0.20	<0.20	<0.22
Thallium	15	0.2	14	mg/kg	<2.0	<2.6	<2.9	<2.2	<2.2	<2.6	0 [7]	<2.8	<2.1	<2.0	<2.0	<2.2
Tin	130,000	2,200	240	mg/kg	<10	<13	<15	<11	6.2[7]	4.1[7]	7.3 [7]	4.7[7]	<11	<10	<10	<11
Tungsten	--	--	--	mg/kg	90	<13	81	<11	17	5	27	2.8[7]	<11	<10	<10	81
Vanadium	1,500	26	26,000	mg/kg	22	27	17	24	24	24	26	29	22	21	20	25
Zinc	66,000	200	12,000	mg/kg	210	59	220	60	71	59	96	61	64	62	81	100

Table H-10
Area 5A Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-177	MPSB-177	MPSB-178	MPSB-178	MPSB-179	MPSB-179	MPSB-180	MPSB-180	MPSB-188	MPSB-188	MPSB-188	Tar Composite
				Sample Depth (in bgs)[3]	8-10	10-12	8-10	10-12	8-10	10-12	8-10	10-12	8-10	14-16	22-24	
				Sample Date	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003	11/5/2003
				Units												
Additional Parameters																
Cyanide, Free[13]	4,400	20	200	mg/kg	<1.3	<1.4	<1.5	<1.4	<1.3	<1.3	<1.4	<1.4	<1.2	<1.3	<1.1	<1.3
Cyanide, Total[14]	--	--	--	mg/kg	3	<1.4	5.7	<1.4	<1.3	<1.3	3.2	<1.4	<1.2	<1.3	<1.1	1.4
Total Organic Carbon[15]	--	--	--	mg/kg	323,000	NS	322,000	NS	321,000	NS	414,000	NS	NS	NS	NS	NS

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.

(3) ft bgs - feet below ground surface

(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(9) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram
(13) Free Cyanide was analyzed by US Environmental Protection Agency Method 4500-1.
(14) Total Cyanide was analyzed by US Environmental Protection Agency Method 9012.
(15) Total Organic Carbon was analyzed by US Environmental Protection Agency Method 9060M.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-154	MPSB-154	MPSB-154	MPSB-155	MPSB-155	MPSB-155	MPSB-155	MPSB-162	MPSB-162	MPSB-162
				Sample Depth (in bgs)[3]	4-6	6-8	12-14	0-2	2-4	6-8	16-18	0-2	6-8	12-14
				Sample Date	10/23/2003	10/23/2003	10/23/2003	10/28/2003	10/28/2003	10/28/2003	10/28/2003	11/4/2003	11/4/2003	11/4/2003
				Units										
Volatile Organic Compounds[4]														
Acetone	10,000,000	370,000	41,000	µg/kg[5]	NS[6]	NS	NS	NS	NS	NS	NS	NS	NS	NS
Benzene	41,000	500	130	µg/kg	NS	<5	<260	<5	NS	<5	<5	<5.4	<6.2	<5
Bromodichloromethane	8,600	10,000	3,400	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromoform	290,000	10,000	4,400	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bromomethane	95,000	1,000	540	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Butanone	--[8]	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	10,000,000	190,000	160,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	21,000	500	260	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	4,400,000	10,000	6,100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroethane	6,200,000	23,000	5,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloroform	6,000	10,000	2,500	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chloromethane	180,000	300	38	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	200,000	2,700	650	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	12,000	500	100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	6,400	700	190	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	670,000	7,000	1,600	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	1,300,000	10,000	2,300	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	31,000	500	110	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	12,000	10,000	3,200	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	NS	<5	<260	<5	NS	<5	<5	<5.4	<6.2	<5
2-Hexanone	10,000,000	280,000	54,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	680,000	500	76	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	1,500,000	19,000	2,900	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Styrene	10,000,000	10,000	24,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	5,500	300	9.3	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	340,000	500	430	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Toluene	7,600,000	100,000	44,000	µg/kg	NS	<5	<260	<5	NS	<5	<5	<5.4	<6.2	<5
1,1,1-Trichloroethane	10,000,000	20,000	7,200	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	20,000	500	150	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	190,000	500	170	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Vinyl chloride	12,000	200	27	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylene, m & p-	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylene, o-	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	NS	<5	<260	<5	NS	<5	<5	<5.4	<6.2	<5
Semi-Volatile Organic Compounds[9]														
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	NS	<210	<40	<2,700	NS	37[7]	<36	<440	<40	<38
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	NS	370	<40	12,000	NS	560	72	<440	<40	<38
Anthracene	66,000,000	6,600	350,000	µg/kg	NS	390	<40	13,000	NS	770	77	<440	<40	<38
Benzo(a)anthracene	25,000	90	79,000	µg/kg	NS	860	<40	19,000	NS	710	110	540	<40	<38

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-154	MPSB-154	MPSB-154	MPSB-155	MPSB-155	MPSB-155	MPSB-155	MPSB-162	MPSB-162	MPSB-162
				Sample Depth (in bgs)[3]	4-6	6-8	12-14	0-2	2-4	6-8	16-18	0-2	6-8	12-14
				Sample Date	10/23/2003	10/23/2003	10/23/2003	10/28/2003	10/28/2003	10/28/2003	10/28/2003	11/4/2003	11/4/2003	11/4/2003
				Units										
Benzo(a)pyrene	2,500	20	46,000	µg/kg	NS	440	<40	11,000	NS	330	53	450	<40	<38
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	NS	880	<40	20,000	NS	700	110	680	<40	<38
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	NS	290	<40	4,600	NS	240	31[7]	<440	<40	<38
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	NS	190[7]	<40	4,200	NS	140	30[7]	<440	<40	<38
Bis(2-chloroethoxy)methane	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bis(2-chloroethyl)ether	960	13	3.9	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bis(2-chloroisopropyl)ether	32,000	30,000	8,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Bis(2-ethylhexyl)phthalate	1,300,000	600	130,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl-phenylether	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Butylbenzylphthalate	10,000,000	270,000	10,000,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Carbazole	900,000	3,300	21,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloroaniline	880,000	15,000	19,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<40	NS
2-Chloronaphthalene	18,000,000	290,000	6,200,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<40	NS
4-Chlorophenyl-phenylether	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Chrysene	2,500,000	190	230,000	µg/kg	NS	620	<40	13,000	NS	540	81	530	<40	<38
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<40	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<40	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	NS	<210	<40	<2,700	NS	60	<36	<440	<40	<38
Dibenzofuran	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	3,800,000	60,000	59,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	6,600,000	60,000	61,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	750,000	7,500	10,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	40,000	150	8,300	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Diethylphthalate	10,000,000	500,000	160,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<40	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Dimethylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<40	NS
Di-n-butylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<83	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<83	NS
2,4-Dinitrotoluene	58,000	210	50	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	220,000	3,700	1,100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Di-n-octylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	NS	2,100	<40	45,000	NS	1,500	280	1,100	<40	<38
Fluorene	8,800,000	150,000	3,000,000	µg/kg	NS	180	<40	5,000	NS	510	37	<440	<40	<38
Hexachlorobenzene	11,000	100	960	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	44,000	100	1,200	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	1,300,000	5,000	91,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	220,000	100	560	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	NS	260	<40	5,500	NS	200	34[7]	<440	<40	<38
Isophorone	10,000,000	10,000	1,900	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-154	MPSB-154	MPSB-154	MPSB-155	MPSB-155	MPSB-155	MPSB-155	MPSB-162	MPSB-162	MPSB-162
				Sample Depth (in bgs)[3]	4-6	6-8	12-14	0-2	2-4	6-8	16-18	0-2	6-8	12-14
				Sample Date	10/23/2003	10/23/2003	10/23/2003	10/28/2003	10/28/2003	10/28/2003	10/28/2003	11/4/2003	11/4/2003	11/4/2003
				Units										
2-Methylnaphthalene	4,400,000	73,000	2,900,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Naphthalene	4,400,000	10,000	25,000	µg/kg	NS	<210	<40	<2,700	NS	38[7]	34[7]	<440	<40	<38
Nitrobenzene	110,000	1,800	790	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitroaniline	13,000	210	38	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
3-Nitroaniline	13,000	210	33	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitroaniline	13,000	210	31	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<40	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<83	NS
N-nitrosodi-n-propylamine	2,600	9.4	1.3	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
N-nitrosodiphenylamine	3,700,000	13,000	20,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<83	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	NS	1,300	<40	29,000	NS	2,100	220	490	<40	38
Phenol	130,000,000	400,000	66,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<40	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	NS	1,200	<40	25,000	NS	880	150	860	<40	<38
1,2,4-Trichlorobenzene	2,200,000	7,000	27,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<83	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<40	NS
Total Metals[9]														
Aluminum	190,000	NA[10]	NA	mg/kg[11]	12,000	11,000	14,000	4,200	15,000	13,000	18,000	14,000	10,000	14,000
Antimony	88	0.6	27	mg/kg	0.79	0.41[7]	0.89	<0.5	0.88	0.47[7]	<0.51	<0.60	<0.52	0.55
Arsenic	12	5	150	mg/kg	17	13	34	8.3	7.1	2.7	3.2	13	10	5.7
Barium	15,000	200	8,200	mg/kg	230	170	360	69	210	80	200	230	180	140
Beryllium	440	0.4	320	mg/kg	3.8	1.3	2.2	0.35	1.3	1.1	1	1.1	1.0	1.1
Boron	20,000	60	6.7	mg/kg	5.8	2.5	9.9	31	7.5	6	5.6	6.4	<5.2	<5.0
Cadmium	47	0.5	38	mg/kg	0.22	0.25	1.8	1.8	<0.27	1.9	4.1	<0.24	<0.21	<0.24
Chromium	190,000	10	190,000	mg/kg	17	20	33	40	20	18	24	25	16	21
Cobalt	4,400	73	8.1	mg/kg	13	16	27	2.6	12	5.6	18	13	9.8	31
Copper	8,200	100	36,000	mg/kg	30	28	43	51	25	22	37	32	18	31
Iron	66,000	NA	NA	mg/kg	28,000	41,000	81,000	12,000	28,000	14,000	29,000	28,000	35,000	41,000
Lead	500	0.5	450	mg/kg	35	26	35	76	18	14	12	64	13	12
Manganese	31,000	NA	NA	mg/kg	770	870	1,000	390	590	240	230	1,100	460	1,300
Mercury	66	0.2	10	mg/kg	0.038[7]	0.031[7]	0.018[7]	0.045[7]	0.029[7]	0.024[7]	0.012[7]	<0.10	<0.10	<0.10
Molybdenum	--	--	--	mg/kg	520	340	8.2	3,600	180	78	7.6	53	2.1	<1.0
Nickel	4,400	10	650	mg/kg	24	28	38	15	25	22	46	32	21	41
Selenium	1,100	5	26	mg/kg	0.11[7]	1.1	<5.3	<0.5	0.72	<0.58	<0.51	1.0	1.1	<0.50
Silver	1,100	10	84	mg/kg	0.023[7]	0.18[7]	0.31	0.7	<0.27	<0.23	<0.21	1.0	<0.21	<0.20
Thallium	15	0.2	14	mg/kg	<2.2	<2.1	<2.1	0.85[7]	<2.7	<2.3	2.4	<2.4	<2.1	<2.0
Tin	130,000	2,200	240	mg/kg	5.6[7]	5.4[7]	5.3[7]	6[7]	4.6[7]	3[7]	3.6[7]	<12	<10	<10
Tungsten	--	--	--	mg/kg	39	72	3.2[7]	110	5.4[7]	5.1[7]	2.1[7]	<12	<10	<10
Vanadium	1,500	26	26,000	mg/kg	27	29	38	11	27	21	20	33	22	24
Zinc	66,000	200	12,000	mg/kg	65	66	97	34	60	57	78	130	54	80

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-154	MPSB-154	MPSB-154	MPSB-155	MPSB-155	MPSB-155	MPSB-155	MPSB-162	MPSB-162	MPSB-162
				Sample Depth (in bgs)[3]	4-6	6-8	12-14	0-2	2-4	6-8	16-18	0-2	6-8	12-14
				Sample Date	10/23/2003	10/23/2003	10/23/2003	10/28/2003	10/28/2003	10/28/2003	10/28/2003	11/4/2003	11/4/2003	11/4/2003
				Units										
Additional Parameters														
Cyanide, Free[12]	4,400	20	200	mg/kg	NS	<1.3	<1.2	<1.1	NS	<1.3	<1.1	<1.4	<1.2	<1.1
Cyanide, Total[13]	--	--	--	mg/kg	NS	<1.3	<1.2	<1.1	NS	<1.3	<1.1	<1.4	<1.2	<1.1
Total Organic Carbon[14]	--	--	--	mg/kg	NS	NS	NS	NS	NS	NS	NS	NS	9,570	NS

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(9) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(10) NA - Not Applicable
(11) mg/kg - milligrams/kilogram
(12) Free Cyanide was analyzed by US Environmental Protection Agency Method 4500-1.
(13) Total Cyanide was analyzed by US Environmental Protection Agency Method 9012.
(14) Total Organic Carbon was analyzed by US Environmental Protection Agency Method 9060M.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (in bgs)[3] / Sample Date / Units	MPSB-166 0-2 11/4/2003	MPSB-166 6-8 11/4/2003	MPSB-166 14-16 11/4/2003	MPSB-190 0-2 11/6/2003	MPSB-190 6-8 11/6/2003	MPSB-190 14-16 11/6/2003	MPSB-191 0-2 11/6/2003	MPSB-191 4-6 11/6/2003	MPSB-191 12-14 11/6/2003	MPSB-192 0-2 11/6/2003
Volatile Organic Compounds[4]														
Acetone	10,000,000	370,000	41,000	µg/kg[5]	130	20	21	NS	NS	NS	NS	NS	NS	NS
Benzene	41,000	500	130	µg/kg	<5.2	<5.1	23	<5	4.6[7]	51	<5.7	<5	4[7]	3.1[7]
Bromodichloromethane	8,600	10,000	3,400	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Bromoform	290,000	10,000	4,400	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Bromomethane	95,000	1,000	540	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
2-Butanone	--[8]	--	--	µg/kg	16	<10	<10	NS	NS	NS	NS	NS	NS	NS
Carbon disulfide	10,000,000	190,000	160,000	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Carbon tetrachloride	21,000	500	260	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Chlorobenzene	4,400,000	10,000	6,100	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Chloroethane	6,200,000	23,000	5,000	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Chloroform	6,000	10,000	2,500	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Chloromethane	180,000	300	38	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethane	200,000	2,700	650	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloroethane	12,000	500	100	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
1,1-Dichloroethene	6,400	700	190	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
cis-1,2-Dichloroethene	670,000	7,000	1,600	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
trans-1,2-Dichloroethene	1,300,000	10,000	2,300	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
1,2-Dichloropropane	31,000	500	110	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
cis-1,3-Dichloropropene	--	--	--	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
trans-1,3-Dichloropropene	--	--	--	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Dibromochloromethane	12,000	10,000	3,200	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	<5.2	<5.1	<5	<5	3.2[7]	2.6[7]	<5.7	<5	<5	<5
2-Hexanone	10,000,000	280,000	54,000	µg/kg	<10	<10	<10	NS	NS	NS	NS	NS	NS	NS
Methylene chloride	680,000	500	76	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
4-Methyl-2-pentanone	1,500,000	19,000	2,900	µg/kg	<10	<10	<10	NS	NS	NS	NS	NS	NS	NS
Styrene	10,000,000	10,000	24,000	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
1,1,2,2-Tetrachloroethane	5,500	300	9.3	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Tetrachloroethene	340,000	500	430	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Toluene	7,600,000	100,000	44,000	µg/kg	<5.2	<5.1	22	<5	22	25	<5.7	<5	<5	<5
1,1,1-Trichloroethane	10,000,000	20,000	7,200	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
1,1,2-Trichloroethane	20,000	500	150	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Trichloroethene	190,000	500	170	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Vinyl chloride	12,000	200	27	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Xylene, m & p-	--	--	--	µg/kg	<5.2	<5.1	<7.6	NS	NS	NS	NS	NS	NS	NS
Xylene, o-	--	--	--	µg/kg	<5.2	<5.1	<5	NS	NS	NS	NS	NS	NS	NS
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	<10	<10	7.6	<5	52	12	<5.7	<5	<5	<5
Semi-Volatile Organic Compounds[9]														
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	<420	<41	<36	<82	<37	<37	<46	<42	<38	<73
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	740	<41	<36	55[7]	75	32[7]	27[7]	<42	<38	73
Anthracene	66,000,000	6,600	350,000	µg/kg	840	<41	<36	110	55	<37	28[7]	<42	<38	<73
Benzo(a)anthracene	25,000	90	79,000	µg/kg	2,300	<41	<36	460	47	<37	120	<42	<38	110

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-166	MPSB-166	MPSB-166	MPSB-190	MPSB-190	MPSB-190	MPSB-191	MPSB-191	MPSB-191	MPSB-192
				Sample Depth (in bgs)[3]	0-2	6-8	14-16	0-2	6-8	14-16	0-2	4-6	12-14	0-2
				Sample Date	11/4/2003	11/4/2003	11/4/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003
				Units										
Benzo(a)pyrene	2,500	20	46,000	µg/kg	1,900	<41	<36	450	24[7]	<37	110	<42	<38	100
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	2,600	<41	<36	680	36[7]	<37	160	<42	<38	160
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	1,100	<41	<36	230	<37	<37	58	<42	<38	66[7]
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	1,100	<41	<36	310	<37	<37	65	<42	<38	67[7]
Bis(2-chloroethoxy)methane	--	--	--	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
Bis(2-chloroethyl)ether	960	13	3.9	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
Bis(2-chloroisopropyl)ether	32,000	30,000	8,000	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
Bis(2-ethylhexyl)phthalate	1,300,000	600	130,000	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
4-Bromophenyl-phenylether	--	--	--	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
Butylbenzylphthalate	10,000,000	270,000	10,000,000	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
Carbazole	900,000	3,300	21,000	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
4-Chloroaniline	880,000	15,000	19,000	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	<420	<41	<36	NS	<37	NS	NS	<42	NS	NS
2-Chloronaphthalene	18,000,000	290,000	6,200,000	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	<420	<41	<36	NS	<37	NS	NS	<42	NS	NS
4-Chlorophenyl-phenylether	--	--	--	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
Chrysene	2,500,000	190	230,000	µg/kg	2,200	<41	<36	450	33[7]	<37	120	<42	<38	120
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	<420	<41	<36	NS	<37	NS	NS	<42	NS	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	NS	<41	<36	NS	<37	NS	NS	<42	NS	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	NS	<41	<36	100	<37	<37	<46	<42	<38	<73
Dibenzofuran	--	--	--	µg/kg	NS	<41	<36	NS	NS	NS	NS	NS	NS	NS
1,2-Dichlorobenzene	3,800,000	60,000	59,000	µg/kg	NS	<41	<36	NS	NS	NS	NS	NS	NS	NS
1,3-Dichlorobenzene	6,600,000	60,000	61,000	µg/kg	NS	<41	<36	NS	NS	NS	NS	NS	NS	NS
1,4-Dichlorobenzene	750,000	7,500	10,000	µg/kg	NS	<41	<36	NS	NS	NS	NS	NS	NS	NS
3,3'-Dichlorobenzidine	40,000	150	8,300	µg/kg	NS	<41	<36	NS	NS	NS	NS	NS	NS	NS
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	NS	<41	<36	NS	<37	NS	NS	<42	NS	NS
Diethylphthalate	10,000,000	500,000	160,000	µg/kg	NS	<41	<36	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	NS	<41	<36	NS	<37	NS	NS	<42	NS	NS
Dimethylphthalate	--	--	--	µg/kg	NS	<41	<36	NS	NS	NS	NS	NS	NS	NS
Di-n-butylphthalate	--	--	--	µg/kg	NS	<41	<36	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	--	--	--	µg/kg	<830	<83	<83	NS	<83	NS	NS	<83	NS	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	<830	<83	<83	NS	<83	NS	NS	<83	NS	NS
2,4-Dinitrotoluene	58,000	210	50	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
2,6-Dinitrotoluene	220,000	3,700	1,100	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
Di-n-octylphthalate	--	--	--	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	5,00	<41	<36	770	130	24[7]	240	<42	<38	240
Fluorene	8,800,000	150,000	3,000,000	µg/kg	530	<41	<36	<82	62	18[7]	<46	<42	<38	<73
Hexachlorobenzene	11,000	100	960	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
Hexachlorobutadiene	44,000	100	1,200	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
Hexachlorocyclopentadiene	1,300,000	5,000	91,000	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
Hexachloroethane	220,000	100	560	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	1,100	<41	<36	280	<37	<37	64	<42	<38	67[7]
Isophorone	10,000,000	10,000	1,900	µg/kg	NS	<41	<36	NS	NS	NS	NS	NS	NS	NS

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-166	MPSB-166	MPSB-166	MPSB-190	MPSB-190	MPSB-190	MPSB-191	MPSB-191	MPSB-191	MPSB-192
				Sample Depth (in bgs)[3]	0-2	6-8	14-16	0-2	6-8	14-16	0-2	4-6	12-14	0-2
				Sample Date	11/4/2003	11/4/2003	11/4/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003
				Units										
2-Methylnaphthalene	4,400,000	73,000	2,900,000	µg/kg	NS	<41	<36	NS	NS	NS	NS	NS	NS	NS
Naphthalene	4,400,000	10,000	25,000	µg/kg	<420	<41	<36	<82	71	120	<46	<42	25[7]	120
Nitrobenzene	110,000	1,800	790	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
2-Nitroaniline	13,000	210	38	µg/kg	<830	<83	<83	NS	NS	NS	NS	NS	NS	NS
3-Nitroaniline	13,000	210	33	µg/kg	<830	<83	<83	NS	NS	NS	NS	NS	NS	NS
4-Nitroaniline	13,000	210	31	µg/kg	<830	<83	<83	NS	NS	NS	NS	NS	NS	NS
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	<420	<41	<36	NS	<37	NS	NS	<42	NS	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	<830	<83	<83	NS	<83	NS	NS	<83	NS	NS
N-nitrosodi-n-propylamine	2,600	9.4	1.3	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
N-nitrosodiphenylamine	3,700,000	13,000	20,000	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	<830	<83	<83	NS	<83	NS	NS	<83	NS	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	3,000	<41	<36	360	170	34[7]	120	<42	<38	130
Phenol	130,000,000	400,000	66,000	µg/kg	<420	<41	<36	NS	<37	NS	NS	<42	NS	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	3,700	<41	<36	630	72	<37	190	<42	<38	170
1,2,4-Trichlorobenzene	2,200,000	7,000	27,000	µg/kg	<420	<41	<36	NS	NS	NS	NS	NS	NS	NS
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	<830	<83	<83	NS	<83	NS	NS	<83	NS	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	<420	<41	<36	NS	<37	NS	NS	<42	NS	NS
Total Metals[9]														
Aluminum	190,000	NA[10]	NA	mg/kg[11]	11,000	9,200	8,400	16,000	15,000	17,000	14,000	11,000	15,000	5,900
Antimony	88	0.6	27	mg/kg	<0.60	1.1	0.75	0.48[7]	0.31[7]	0.23[7]	1.2	1	0.63	1.1
Arsenic	12	5	150	mg/kg	93	22	4.1	54	4.9	1.3	16	9.9	3.5	140
Barium	15,000	200	8,200	mg/kg	190	190	130	220	210	390	200	150	110	120
Beryllium	440	0.4	320	mg/kg	0.99	2.4	0.53	1.6	1.3	1.3	1.1	1.1	1.2	0.35
Boron	20,000	60	6.7	mg/kg	9.3	<5.9	10	110	3.7	6.5	7.2	3.5	4.7	6.6
Cadmium	47	0.5	38	mg/kg	<0.24	<0.24	0.43	<0.22	<0.21	<0.2	<0.25	<0.22	<0.2	0.24
Chromium	190,000	10	190,000	mg/kg	24	27	10	33	21	22	22	16	24	7.9
Cobalt	4,400	73	8.1	mg/kg	12	23	6.6	13	8.1	18	15	15	17	2.6
Copper	8,200	100	36,000	mg/kg	30	28	18	44	20	40	31	18	40	17
Iron	66,000	NA	NA	mg/kg	32,000	140,000	25,000	32,000	29,000	61,000	28,000	31,000	42,000	8,700
Lead	500	0.5	450	mg/kg	60	21	8.1	94	15	15	42	15	16	83
Manganese	31,000	NA	NA	mg/kg	790	980	1,800	1,100	190	1,100	1,300	980	710	320
Mercury	66	0.2	10	mg/kg	<0.10	<0.10	<0.10	0.12	0.035[7]	0.01[7]	0.07[7]	0.028[7]	0.011[7]	0.093[7]
Molybdenum	--	--	--	mg/kg	25	1.6	<1.0	870	23	3.7	140	41	1.3	43
Nickel	4,400	10	650	mg/kg	27	45	19	36	25	41	29	23	38	6.8
Selenium	1,100	5	26	mg/kg	0.73	<0.59	<0.52	1.9	1.1	<0.5	1.2	0.55	<0.5	0.8
Silver	1,100	10	84	mg/kg	0.68	0.72	<0.21	0.32	<0.21	0.039[7]	0.22[7]	<0.22	0.0059[7]	0.00096[7]
Thallium	15	0.2	14	mg/kg	<2.4	<2.4	<2.1	<2.2	<2.1	0.38[7]	<2.5	<2.2	<2	<2
Tin	130,000	2,200	240	mg/kg	<12	<12	<10	7.4[7]	3.7[7]	3.3[7]	6.2[7]	4.2[7]	3.6[7]	8.7[7]
Tungsten	--	--	--	mg/kg	<12	<12	<10	150	6.3[7]	2.6[7]	38	2.5[7]	1.8[7]	12
Vanadium	1,500	26	26,000	mg/kg	26	42	11	40	27	27	29	24	23	8.8
Zinc	66,000	200	12,000	mg/kg	110	84	37	140	61	100	110	52	80	73

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-166	MPSB-166	MPSB-166	MPSB-190	MPSB-190	MPSB-190	MPSB-191	MPSB-191	MPSB-191	MPSB-192
				Sample Depth (in bgs)[3]	0-2	6-8	14-16	0-2	6-8	14-16	0-2	4-6	12-14	0-2
				Sample Date	11/4/2003	11/4/2003	11/4/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003
				Units										
Additional Parameters														
Cyanide, Free[12]	4,400	20	200	mg/kg	<1.3	<1.2	<1.1	<1.3	<1.1	<1.1	<1.4	<1.3	<1.1	<1.1
Cyanide, Total[13]	--	--	--	mg/kg	<1.3	<1.2	<1.1	<1.3	<1.1	<1.1	<1.4	<1.3	<1.1	<1.1
Total Organic Carbon[14]	--	--	--	mg/kg	NS	13,500	NS	NS	18,900	NS	NS	5,290	NS	NS

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(9) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(10) NA - Not Applicable
(11) mg/kg - milligrams/kilogram
(12) Free Cyanide was analyzed by US Environmental Protection Agency Method 4500-1.
(13) Total Cyanide was analyzed by US Environmental Protection Agency Method 9012.
(14) Total Organic Carbon was analyzed by US Environmental Protection Agency Method 9060M.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-192	MPSB-192	MPSB-193	MPSB-193	MPSB-193	MPSB-194	MPSB-194	MPSB-194	MPSB-195	MPSB-195
				Sample Depth (in bgs)[3]	6-8	12-14	0-2	4-6	12-14	0-2	4-6	12-14	0-2	6-8
				Sample Date	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003
				Units										
Volatile Organic Compounds[4]														
Acetone	10,000,000	370,000	41,000	µg/kg[5]	NS	NS	NS	NS	NS	NS	NS	NS	150	130
Benzene	41,000	500	130	µg/kg	<5	<5	<5.8	<5	<5	<5.3	<5	<5	<6.1	<5
Bromodichloromethane	8,600	10,000	3,400	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
Bromoform	290,000	10,000	4,400	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
Bromomethane	95,000	1,000	540	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
2-Butanone	--[8]	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	19	16
Carbon disulfide	10,000,000	190,000	160,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	3.8[7]	<5
Carbon tetrachloride	21,000	500	260	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
Chlorobenzene	4,400,000	10,000	6,100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
Chloroethane	6,200,000	23,000	5,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
Chloroform	6,000	10,000	2,500	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	8.4	<5
Chloromethane	180,000	300	38	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
1,1-Dichloroethane	200,000	2,700	650	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
1,2-Dichloroethane	12,000	500	100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
1,1-Dichloroethene	6,400	700	190	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
cis-1,2-Dichloroethene	670,000	7,000	1,600	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
trans-1,2-Dichloroethene	1,300,000	10,000	2,300	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
1,2-Dichloropropane	31,000	500	110	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
cis-1,3-Dichloropropene	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
trans-1,3-Dichloropropene	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
Dibromochloromethane	12,000	10,000	3,200	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	<5	<5	<5.8	<5	<5	<5.3	<5	<5	<6.1	<5
2-Hexanone	10,000,000	280,000	54,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<12	<10
Methylene chloride	680,000	500	76	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
4-Methyl-2-pentanone	1,500,000	19,000	2,900	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<12	<10
Styrene	10,000,000	10,000	24,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
1,1,2,2-Tetrachloroethane	5,500	300	9.3	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
Tetrachloroethene	340,000	500	430	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
Toluene	7,600,000	100,000	44,000	µg/kg	<5	<5	<5.8	<5	<5	<5.3	<5	<5	<6.1	<5
1,1,1-Trichloroethane	10,000,000	20,000	7,200	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
1,1,2-Trichloroethane	20,000	500	150	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
Trichloroethene	190,000	500	170	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
Vinyl chloride	12,000	200	27	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
Xylene, m & p-	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
Xylene, o-	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<6.1	<5
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	<5	<5	<5.8	<5	<5	<5.3	<5	<5	<12	<10
Semi-Volatile Organic Compounds[9]														
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	<44	<39	<45	<42	<39	<92	<42	<38	770	<41
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	<44	<39	73	<42	<39	74[7]	<42	<38	8,800	<41
Anthracene	66,000,000	6,600	350,000	µg/kg	<44	<39	45	<42	<39	83[7]	<42	<38	8,500	<41
Benzo(a)anthracene	25,000	90	79,000	µg/kg	<44	<39	160	<42	<39	500	<42	<38	11,000	<41

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-192	MPSB-192	MPSB-193	MPSB-193	MPSB-193	MPSB-194	MPSB-194	MPSB-194	MPSB-195	MPSB-195
				Sample Depth (in bgs)[3]	6-8	12-14	0-2	4-6	12-14	0-2	4-6	12-14	0-2	6-8
				Sample Date	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003
				Units										
Benzo(a)pyrene	2,500	20	46,000	µg/kg	<44	<39	150	<42	<39	430	<42	<38	6,500	<41
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	<44	<39	220	<42	<39	630	<42	<38	11,000	<41
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	<44	<39	65	<42	<39	250	<42	<38	3,000	<41
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	<44	<39	89	<42	<39	290	<42	<38	2,700	<41
Bis(2-chloroethoxy)methane	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
Bis(2-chloroethyl)ether	960	13	3.9	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
Bis(2-chloroisopropyl)ether	32,000	30,000	8,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
Bis(2-ethylhexyl)phthalate	1,300,000	600	130,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
4-Bromophenyl-phenylether	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
Butylbenzylphthalate	10,000,000	270,000	10,000,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
Carbazole	900,000	3,300	21,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	2,100	<41
4-Chloroaniline	880,000	15,000	19,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	<44	NS	NS	<42	NS	NS	<42	NS	<440	<41
2-Chloronaphthalene	18,000,000	290,000	6,200,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
2-Chlorophenol	330,000	4,000	4,400	µg/kg	<44	NS	NS	<42	NS	NS	<42	NS	<440	<41
4-Chlorophenyl-phenylether	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
Chrysene	2,500,000	190	230,000	µg/kg	<44	<39	160	<42	<39	490	<42	<38	8,400	<41
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	<44	NS	NS	<42	NS	NS	<42	NS	<440	<41
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	<44	NS	NS	<42	NS	NS	<42	NS	240	<41
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	<44	<39	26[7]	<42	<39	82[7]	<42	<38	900	<41
Dibenzofuran	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	3,600	<41
1,2-Dichlorobenzene	3,800,000	60,000	59,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
1,3-Dichlorobenzene	6,600,000	60,000	61,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
1,4-Dichlorobenzene	750,000	7,500	10,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
3,3'-Dichlorobenzidine	40,000	150	8,300	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	<44	NS	NS	<42	NS	NS	<42	NS	<440	<41
Diethylphthalate	10,000,000	500,000	160,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	<44	NS	NS	<42	NS	NS	<42	NS	230	<41
Dimethylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
Di-n-butylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
4,6-Dinitro-2-methylphenol	--	--	--	µg/kg	<88	NS	NS	<83	NS	NS	<85	NS	<890	<83
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	<88	NS	NS	<83	NS	NS	<85	NS	<890	<83
2,4-Dinitrotoluene	58,000	210	50	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
2,6-Dinitrotoluene	220,000	3,700	1,100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	310	<41
Di-n-octylphthalate	--	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	<44	<39	350	<42	<39	1,000	<42	<38	27,000	<41
Fluorene	8,800,000	150,000	3,000,000	µg/kg	<44	<39	39[7]	<42	<39	<92	<42	<38	6,000	<41
Hexachlorobenzene	11,000	100	960	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
Hexachlorobutadiene	44,000	100	1,200	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
Hexachlorocyclopentadiene	1,300,000	5,000	91,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
Hexachloroethane	220,000	100	560	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	<44	<39	87	<42	<39	270	<42	<38	3,400	<41
Isophorone	10,000,000	10,000	1,900	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-192	MPSB-192	MPSB-193	MPSB-193	MPSB-193	MPSB-194	MPSB-194	MPSB-194	MPSB-195	MPSB-195
				Sample Depth (in bgs)[3]	6-8	12-14	0-2	4-6	12-14	0-2	4-6	12-14	0-2	6-8
				Sample Date	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003
				Units										
2-Methylnaphthalene	4,400,000	73,000	2,900,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	1,900	<41
Naphthalene	4,400,000	10,000	25,000	µg/kg	30[7]	<39	150	<42	<39	<92	<42	<38	1,100	<41
Nitrobenzene	110,000	1,800	790	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
2-Nitroaniline	13,000	210	38	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<890	<83
3-Nitroaniline	13,000	210	33	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<890	<83
4-Nitroaniline	13,000	210	31	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<890	<83
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	<44	NS	NS	<42	NS	NS	<42	NS	<440	<41
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	<44	NS	NS	<83	NS	NS	<85	NS	<890	<83
N-nitrosodi-n-propylamine	2,600	9.4	1.3	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
N-nitrosodiphenylamine	3,700,000	13,000	20,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
Pentachlorophenol	150,000	100	5,000	µg/kg	<83	NS	NS	<83	NS	NS	<83	NS	<440	<83
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	<44	<39	180	<42	24[7]	370	<42	<38	26,000	<41
Phenol	130,000,000	400,000	66,000	µg/kg	<44	NS	NS	<42	NS	NS	<42	NS	<440	<41
Pyrene	6,600,000	13,000	2,200,000	µg/kg	<44	<39	260	<42	<39	810	<42	<38	16,000	<41
1,2,4-Trichlorobenzene	2,200,000	7,000	27,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS	<440	<41
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	<88	NS	NS	<83	NS	NS	<85	NS	<890	<83
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	<44	NS	NS	<42	NS	NS	<42	NS	<440	<41
Total Metals[9]														
Aluminum	190,000	NA[10]	NA	mg/kg[11]	10,000	9,500	14,000	12,000	14,000	14,000	12,000	14,000	13,000	7,300
Antimony	88	0.6	27	mg/kg	0.34[7]	0.61	0.68	0.17[7]	0.74	1.1	0.58	0.84	1.9	0.75
Arsenic	12	5	150	mg/kg	9.2	8.5	20	5.7	4.7	20	10	24	45	13
Barium	15,000	200	8,200	mg/kg	140	150	230	160	120	240	170	150	390	88
Beryllium	440	0.4	320	mg/kg	1.1	1.5	1.1	0.9	1.2	1.1	1.3	1.3	1	1.2
Boron	20,000	60	6.7	mg/kg	2.4[7]	2.6	6.1	4.6[7]	4.7	9.5	5.4	2.8[7]	8	4.3[7]
Cadmium	47	0.5	38	mg/kg	<0.2	<0.2	<0.24	<0.21	<0.21	<0.27	<0.22	0.86	0.59	0.019[7]
Chromium	190,000	10	190,000	mg/kg	16	18	24	17	21	26	17	24	24	13
Cobalt	4,400	73	8.1	mg/kg	13	19	13	8.7	21	12	15	24	13	10
Copper	8,200	100	36,000	mg/kg	17	23	34	18	37	30	23	34	33	15
Iron	66,000	NA	NA	mg/kg	31,000	53,000	26,000	24,000	64,000	26,000	32,000	68,000	25,000	41,000
Lead	500	0.5	450	mg/kg	15	20	67	11	14	59	17	22	73	11
Manganese	31,000	NA	NA	mg/kg	390	1,300	990	620	930	950	490	1,600	1,600	510
Mercury	66	0.2	10	mg/kg	0.027[7]	0.018[7]	0.083[7]	0.025[7]	0.01[7]	0.071[7]	0.025[7]	0.021[7]	0.073[7]	0.024[7]
Molybdenum	--	--	--	mg/kg	15	1.2	110	110	2.7	95	200	2.7	61	28
Nickel	4,400	10	650	mg/kg	22	31	31	20	37	30	24	38	28	19
Selenium	1,100	5	26	mg/kg	0.65	<0.5	1.9	0.57	0.68	0.85	0.38[7]	<0.5	0.16[7]	0.51
Silver	1,100	10	84	mg/kg	<0.2	<0.2	0.32	<0.21	0.16[7]	0.84	<0.22	<0.2	1.2	0.0029[7]
Thallium	15	0.2	14	mg/kg	<2	<2	<2.4	<2.1	<2.1	<2.7	<2.2	<2	<2.6	<2
Tin	130,000	2,200	240	mg/kg	3[7]	3.1[7]	6[7]	3.1[7]	4.4[7]	5.7[7]	3.7[7]	3.8[7]	7[7]	3.7[7]
Tungsten	--	--	--	mg/kg	1.7[7]	1.3[7]	36	2.3[7]	1.7[7]	15	7.1[7]	2[7]	13	1.8[7]
Vanadium	1,500	26	26,000	mg/kg	23	27	27	22	23	29	25	28	23	21
Zinc	66,000	200	12,000	mg/kg	50	74	120	50	78	110	54	98	110	47

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-192	MPSB-192	MPSB-193	MPSB-193	MPSB-193	MPSB-194	MPSB-194	MPSB-194	MPSB-195	MPSB-195
				Sample Depth (in bgs)[3]	6-8	12-14	0-2	4-6	12-14	0-2	4-6	12-14	0-2	6-8
				Sample Date	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003	11/6/2003
				Units										
Additional Parameters														
Cyanide, Free[12]	4,400	20	200	mg/kg	<1.3	<1.2	<1.4	<1.3	<1.2	<1.4	<1.3	<1.1	<1.3	<1.2
Cyanide, Total[13]	--	--	--	mg/kg	<1.3	<1.2	<1.4	<1.3	<1.2	<1.4	<1.3	<1.1	<1.3	<1.2
Total Organic Carbon[14]	--	--	--	mg/kg	16,900	NS	NS	4,650	NS	NS	6,740	NS	NS	4,550

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(9) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(10) NA - Not Applicable
(11) mg/kg - milligrams/kilogram
(12) Free Cyanide was analyzed by US Environmental Protection Agency Method 4500-1.
(13) Total Cyanide was analyzed by US Environmental Protection Agency Method 9012.
(14) Total Organic Carbon was analyzed by US Environmental Protection Agency Method 9060M.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (in bgs)[3] / Sample Date / Units	MPSB-195 / 14-16 / 11/6/2003
Volatile Organic Compounds[4]					
Acetone	10,000,000	370,000	41,000	µg/kg[5]	23
Benzene	41,000	500	130	µg/kg	12
Bromodichloromethane	8,600	10,000	3,400	µg/kg	<5
Bromoform	290,000	10,000	4,400	µg/kg	<5
Bromomethane	95,000	1,000	540	µg/kg	<5
2-Butanone	--[8]	--	--	µg/kg	<10
Carbon disulfide	10,000,000	190,000	160,000	µg/kg	<5
Carbon tetrachloride	21,000	500	260	µg/kg	<5
Chlorobenzene	4,400,000	10,000	6,100	µg/kg	<5
Chloroethane	6,200,000	23,000	5,000	µg/kg	<5
Chloroform	6,000	10,000	2,500	µg/kg	<5
Chloromethane	180,000	300	38	µg/kg	<5
1,1-Dichloroethane	200,000	2,700	650	µg/kg	<5
1,2-Dichloroethane	12,000	500	100	µg/kg	<5
1,1-Dichloroethene	6,400	700	190	µg/kg	<5
cis-1,2-Dichloroethene	670,000	7,000	1,600	µg/kg	<5
trans-1,2-Dichloroethene	1,300,000	10,000	2,300	µg/kg	<5
1,2-Dichloropropane	31,000	500	110	µg/kg	<5
cis-1,3-Dichloropropene	--	--	--	µg/kg	<5
trans-1,3-Dichloropropene	--	--	--	µg/kg	<5
Dibromochloromethane	12,000	10,000	3,200	µg/kg	<5
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	9.8
2-Hexanone	10,000,000	280,000	54,000	µg/kg	<10
Methylene chloride	680,000	500	76	µg/kg	<5
4-Methyl-2-pentanone	1,500,000	19,000	2,900	µg/kg	<10
Styrene	10,000,000	10,000	24,000	µg/kg	<5
1,1,2,2-Tetrachloroethane	5,500	300	9.3	µg/kg	<5
Tetrachloroethene	340,000	500	430	µg/kg	<5
Toluene	7,600,000	100,000	44,000	µg/kg	36
1,1,1-Trichloroethane	10,000,000	20,000	7,200	µg/kg	<5
1,1,2-Trichloroethane	20,000	500	150	µg/kg	<5
Trichloroethene	190,000	500	170	µg/kg	<5
Vinyl chloride	12,000	200	27	µg/kg	<5
Xylene, m & p-	--	--	--	µg/kg	26
Xylene, o-	--	--	--	µg/kg	8.3
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	34.3
Semi-Volatile Organic Compounds[9]					
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	<36
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	<36
Anthracene	66,000,000	6,600	350,000	µg/kg	<36
Benzo(a)anthracene	25,000	90	79,000	µg/kg	<36

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (in bgs)[3] / Sample Date / Units	MPSB-195 / 14-16 / 11/6/2003
Benzo(a)pyrene	2,500	20	46,000	µg/kg	<36
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	<36
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	<36
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	<36
Bis(2-chloroethoxy)methane	--	--	--	µg/kg	<36
Bis(2-chloroethyl)ether	960	13	3.9	µg/kg	<36
Bis(2-chloroisopropyl)ether	32,000	30,000	8,000	µg/kg	<36
Bis(2-ethylhexyl)phthalate	1,300,000	600	130,000	µg/kg	<36
4-Bromophenyl-phenylether	--	--	--	µg/kg	<36
Butylbenzylphthalate	10,000,000	270,000	10,000,000	µg/kg	<36
Carbazole	900,000	3,300	21,000	µg/kg	<36
4-Chloroaniline	880,000	15,000	19,000	µg/kg	<36
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	<36
2-Chloronaphthalene	18,000,000	290,000	6,200,000	µg/kg	<36
2-Chlorophenol	330,000	4,000	4,400	µg/kg	<36
4-Chlorophenyl-phenylether	--	--	--	µg/kg	<36
Chrysene	2,500,000	190	230,000	µg/kg	<36
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	<36
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	<36
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	<36
Dibenzofuran	--	--	--	µg/kg	<36
1,2-Dichlorobenzene	3,800,000	60,000	59,000	µg/kg	<36
1,3-Dichlorobenzene	6,600,000	60,000	61,000	µg/kg	<36
1,4-Dichlorobenzene	750,000	7,500	10,000	µg/kg	<36
3,3'-Dichlorobenzidine	40,000	150	8,300	µg/kg	<36
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	<36
Diethylphthalate	10,000,000	500,000	160,000	µg/kg	<36
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	<36
Dimethylphthalate	--	--	--	µg/kg	<36
Di-n-butylphthalate	--	--	--	µg/kg	<36
4,6-Dinitro-2-methylphenol	--	--	--	µg/kg	<83
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	<83
2,4-Dinitrotoluene	58,000	210	50	µg/kg	<36
2,6-Dinitrotoluene	220,000	3,700	1,100	µg/kg	<36
Di-n-octylphthalate	--	--	--	µg/kg	<36
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	<36
Fluorene	8,800,000	150,000	3,000,000	µg/kg	<36
Hexachlorobenzene	11,000	100	960	µg/kg	<36
Hexachlorobutadiene	44,000	100	1,200	µg/kg	<36
Hexachlorocyclopentadiene	1,300,000	5,000	91,000	µg/kg	<36
Hexachloroethane	220,000	100	560	µg/kg	<36
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	<36
Isophorone	10,000,000	10,000	1,900	µg/kg	<36

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (in bgs)[3] / Sample Date / Units	MPSB-195 / 14-16 / 11/6/2003
2-Methylnaphthalene	4,400,000	73,000	2,900,000	µg/kg	<36
Naphthalene	4,400,000	10,000	25,000	µg/kg	<36
Nitrobenzene	110,000	1,800	790	µg/kg	<36
2-Nitroaniline	13,000	210	38	µg/kg	<83
3-Nitroaniline	13,000	210	33	µg/kg	<83
4-Nitroaniline	13,000	210	31	µg/kg	<83
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	<36
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	<83
N-nitrosodi-n-propylamine	2,600	9.4	1.3	µg/kg	<36
N-nitrosodiphenylamine	3,700,000	13,000	20,000	µg/kg	<36
Pentachlorophenol	150,000	100	5,000	µg/kg	<83
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	<36
Phenol	130,000,000	400,000	66,000	µg/kg	<36
Pyrene	6,600,000	13,000	2,200,000	µg/kg	<36
1,2,4-Trichlorobenzene	2,200,000	7,000	27,000	µg/kg	<36
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	<83
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	<36
Total Metals[9]					
Aluminum	190,000	NA[10]	NA	mg/kg[11]	4,100
Antimony	88	0.6	27	mg/kg	0.63
Arsenic	12	5	150	mg/kg	6.4
Barium	15,000	200	8,200	mg/kg	120
Beryllium	440	0.4	320	mg/kg	0.36
Boron	20,000	60	6.7	mg/kg	5.6
Cadmium	47	0.5	38	mg/kg	0.75
Chromium	190,000	10	190,000	mg/kg	5.5
Cobalt	4,400	73	8.1	mg/kg	4.3
Copper	8,200	100	36,000	mg/kg	9.9
Iron	66,000	NA	NA	mg/kg	12,000
Lead	500	0.5	450	mg/kg	8.3
Manganese	31,000	NA	NA	mg/kg	1,300
Mercury	66	0.2	10	mg/kg	0.01[7]
Molybdenum	--	--	--	mg/kg	4
Nickel	4,400	10	650	mg/kg	7.6
Selenium	1,100	5	26	mg/kg	<0.5
Silver	1,100	10	84	mg/kg	<0.2
Thallium	15	0.2	14	mg/kg	<2
Tin	130,000	2,200	240	mg/kg	2.7[7]
Tungsten	--	--	--	mg/kg	1.6[7]
Vanadium	1,500	26	26,000	mg/kg	6.1
Zinc	66,000	200	12,000	mg/kg	15

Table H-11
Area 5B Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-195
				Sample Depth (in bgs)[3]	14-16
				Sample Date	11/6/2003
				Units	
Additional Parameters					
Cyanide, Free[12]	4,400	20	200	mg/kg	<1.1
Cyanide, Total[13]	--	--	--	mg/kg	<1.1
Total Organic Carbon[14]	--	--	--	mg/kg	NS

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(9) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(10) NA - Not Applicable
(11) mg/kg - milligrams/kilogram
(12) Free Cyanide was analyzed by US Environmental Protection Agency Method 4500-1.
(13) Total Cyanide was analyzed by US Environmental Protection Agency Method 9012.
(14) Total Organic Carbon was analyzed by US Environmental Protection Agency Method 9060M.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-12
Area 5B Monitoring Well Soil Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MW-53	MW-53	MW-53	MW-53	MW-53	MW-54	MW-54	MW-54	MW-54	MW-54	MW-55	MW-55	MW-55
				Sample Depth (ft bgs)[3]	0-2	6-8	8-10	10-12	14-16	0-2	4-6	6-8	8-10	12-14	0-2	6-8	12-14
				Sample Date	10/24/2003	10/24/2003	10/24/2003	10/24/2003	10/24/2003	10/31/2003	10/31/2003	10/31/2003	10/31/2003	10/31/2003	10/27/2003	10/27/2003	10/27/2003
				Units													
Volatile Organic Compounds[4]																	
Benzene	41,000	500	130	µg/kg[5]	<5.2	NS[6]	<5	NS	17	<6	NS	<5	NS	<5.1	<5	<6.4	2.4[7]
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	<5.2	NS	<5	NS	<5	<6	NS	<5	NS	<5.1	<5	<6.4	<5
Toluene	7,600,000	100,000	44,000	µg/kg	<5.2	NS	<5	NS	<5	4.7[7]	NS	<5	NS	<5.1	<5	<6.4	<5
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	<5.2	NS	<5	NS	<5	<6	NS	<5	NS	<5.1	<5	<6.4	<5
Semi-Volatile Organic Compounds[8]																	
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	200	NS	<45	NS	<36	NS	NS	<42	NS	<37	<410	<43	<38
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	2,900	NS	<45	NS	<36	NS	NS	<42	NS	<37	<410	<43	22[7]
Anthracene	66,000,000	6,600	350,000	µg/kg	3,700	NS	<45	NS	<36	NS	NS	<42	NS	<37	210[7]	<43	28[7]
Benzo(a)anthracene	25,000	90	79,000	µg/kg	5,500	NS	<45	NS	<36	NS	NS	<42	NS	<37	1,000	<43	35[7]
Benzo(a)pyrene	2,500	20	46,000	µg/kg	3,300	NS	<45	NS	<36	NS	NS	<42	NS	<37	890	<43	<38
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	2,900	NS	<45	NS	<36	NS	NS	<42	NS	<37	1,300	<43	27[7]
Benzo(k)fluoranthene	13,000,000	26	180,000	µg/kg	4,700	NS	<45	NS	<36	NS	NS	<42	NS	<37	410	<43	<38
Benzo(g,h,i)perylene	250,000	55	610,000	µg/kg	1,500	NS	<45	NS	<36	NS	NS	<42	NS	<37	550	<43	<38
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	NS	<42	NS	<40	NS	NS	<40	NS	<44	NS	NS	NS	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	NS	<42	NS	<40	NS	NS	<40	NS	<44	NS	NS	NS	NS
Chrysene	2,500,000	190	230,000	µg/kg	4,400	NS	<45	NS	<36	NS	NS	<42	NS	<37	1,000	<43	25[7]
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	NS	<42	NS	<40	NS	NS	<40	NS	<44	NS	NS	NS	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	NS	<42	NS	<40	NS	NS	<40	NS	<44	NS	NS	NS	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	870	NS	<45	NS	<36	NS	NS	<42	NS	<37	<410	<43	<38
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	NS	<42	NS	<40	NS	NS	<40	NS	<44	NS	NS	NS	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	NS	<42	NS	<40	NS	NS	<40	NS	<44	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	--[9]	--	--	µg/kg	NS	<85	NS	<83	NS	NS	<83	NS	<87	NS	NS	NS	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	NS	<85	NS	<83	NS	NS	<83	NS	<87	NS	NS	NS	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	9,300	NS	<45	NS	<36	NS	NS	<42	NS	<37	2,200	<43	92
Fluorene	8,800,000	150,000	3,000,000	µg/kg	1,700	NS	<45	NS	<36	NS	NS	<42	NS	<37	<410	<43	25[7]
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	1,800	NS	<45	NS	<36	NS	NS	<42	NS	<37	510	<43	<38
Naphthalene	4,400,000	10,000	25,000	µg/kg	<380	NS	<45	NS	<36	NS	NS	<42	NS	<37	<410	<43	<38
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	NS	<42	NS	<40	NS	NS	<40	NS	<44	NS	NS	NS	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	NS	<85	NS	<83	NS	NS	<83	NS	<87	NS	NS	NS	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	NS	<83	NS	<83	NS	NS	<83	NS	<83	NS	NS	NS	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	8,700	NS	<45	NS	<36	NS	NS	<42	NS	<37	980	<43	100
Phenol	130,000,000	400,000	66,000	µg/kg	NS	<42	NS	<40	NS	NS	<40	NS	<44	NS	NS	NS	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	6,800	NS	<45	NS	<36	NS	NS	<42	NS	<37	1,800	<43	55
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	NS	<85	NS	<83	NS	NS	<83	NS	<87	NS	NS	NS	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	NS	<42	NS	<40	NS	NS	<40	NS	<44	NS	NS	NS	NS
Total Metals[10]																	
Aluminum	190,000	NA[11]	NA	mg/kg[12]	11,000	NS	11,000	NS	17,000	NS	NS	9,800	NS	17,000	17,000	15,000	11,000
Antimony	88	0.6	27	mg/kg	<0.5	NS	0.16[7]	NS	0.78	NS	NS	<0.52	NS	<0.5	2	1.5	7.2
Arsenic	12	5	150	mg/kg	26	NS	9.5	NS	1.4	NS	NS	9.4	NS	1.3	34	6.1	14
Barium	15,000	200	8,200	mg/kg	2,700	NS	210	NS	86	NS	NS	180	NS	110	250	230	150
Beryllium	440	0.4	320	mg/kg	1.3	NS	1	NS	1.1	NS	NS	0.98	NS	1	1.3	1.3	1.9
Boron	20,000	60	6.7	mg/kg	370	NS	8.5	NS	5.6	NS	NS	4[7]	NS	4.6[7]	4,800	11	14
Cadmium	47	0.5	38	mg/kg	1.4	NS	0.53	NS	1.7	NS	NS	3.8	NS	3.7	<0.24	<0.21	<0.2
Chromium	190,000	10	190,000	mg/kg	92	NS	16	NS	22	NS	NS	15	NS	26	150	21	24
Cobalt	4,400	73	8.1	mg/kg	6.6	NS	17	NS	17	NS	NS	11	NS	16	5.9	14	24
Copper	8,200	100	36,000	mg/kg	210	NS	20	NS	40	NS	NS	20	NS	45	84	19	22
Iron	66,000	NA	NA	mg/kg	18,000	NS	33,000	NS	64,000	NS	NS	29,000	NS	28,000	24,000	25,000	94,000
Lead	500	0.5	450	mg/kg	130	NS	14	NS	14	NS	NS	14	NS	14	130	20	19

Table H-12
Area 5B Monitoring Well Soil Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MW-53	MW-53	MW-53	MW-53	MW-53	MW-54	MW-54	MW-54	MW-54	MW-54	MW-55	MW-55	MW-55
				Sample Depth (ft bgs)[3]	0-2	6-8	8-10	10-12	14-16	0-2	4-6	6-8	8-10	12-14	0-2	6-8	12-14
				Sample Date	10/24/2003	10/24/2003	10/24/2003	10/24/2003	10/24/2003	10/31/2003	10/31/2003	10/31/2003	10/31/2003	10/31/2003	10/27/2003	10/27/2003	10/27/2003
				Units													
Manganese	31,000	NA	NA	mg/kg	2,100	NS	1,300	NS	1,700	NS	NS	850	NS	380	2,300	310	1,700
Mercury	66	0.2	10	mg/kg	0.046[7]	NS	0.032[7]	NS	0.0089[7]	NS	NS	0.026[7]	NS	0.011[7]	0.056[7]	0.04[7]	0.03[7]
Molybdenum	--	--	--	mg/kg	2,900	NS	67	NS	6.2	NS	NS	17	NS	0.055[7]	3,200	62	15
Nickel	4,400	10	650	mg/kg	52	NS	24	NS	37	NS	NS	21	NS	44	40	25	32
Selenium	1,100	5	26	mg/kg	6.7	NS	0.97[7]	NS	<0.54	NS	NS	<0.52	NS	<0.5	7.5	1.6	4.3
Silver	1,100	10	84	mg/kg	0.68	NS	0.15[7]	NS	0.062[7]	NS	NS	0.14[7]	NS	<0.2	<0.24	<0.21	<0.2
Thallium	15	0.2	14	mg/kg	<2	NS	<2.2	NS	<2.2	NS	NS	1.9[7]	NS	2.7	<2.4	<2.1	<2
Tin	130,000	2,200	240	mg/kg	13	NS	3.3[7]	NS	4.3[7]	NS	NS	2.7[7]	NS	3.1[7]	6[7]	3.4[7]	2.4[7]
Tungsten	--	--	--	mg/kg	480	NS	13	NS	10[7]	NS	NS	2.1[7]	NS	2.9[7]	370	11	3.7[7]
Vanadium	1,500	26	26,000	mg/kg	62	NS	23	NS	32	NS	NS	21	NS	20	75	28	32
Zinc	66,000	200	12,000	mg/kg	140	NS	49	NS	89	NS	NS	51	NS	93	96	77	74
Inorganic Parameters																	
Cyanide, Free[13]	4,400	20	200	mg/kg	<1.2	NS	<1.3	NS	<1.1	NS	NS	<1.3	NS	<1.1	<1.2	<1.3	<1.1
Cyanide, Total[14]	--	--	--	mg/kg	<1.2	NS	<1.3	NS	<1.1	NS	NS	<1.3	NS	<1.1	<1.2	<1.3	<1.1
Total Organic Carbon[15]	--	--	--	mg/kg	NS	9,580	NS	4,510	NS	NS	3,440	NS	9,480	NS	NS	NS	NS

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(9) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram
(13) Free Cyanide was analyzed by US Environmental Protection Agency Method 4500-1.
(14) Total Cyanide was analyzed by US Environmental Protection Agency Method 9012.
(15) Total Organic Carbon was analyzed by US Environmental Protection Agency Method 9060M.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential

Table H-13
Area 5C Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	MPSB-148 0-2 10/28/2003	MPSB-148 6-8 10/28/2003	MPSB-148 18-20 10/28/2003
Volatile Organic Compounds[4]							
Benzene	41,000	500	130	µg/kg[5]	3.7[6]	38	16
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	<5	14	<5.7
Toluene	7,600,000	100,000	44,000	µg/kg	3[6]	65	23
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	<5	98	45
Semi-Volatile Organic Compounds[7]							
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	<220	17,000	77[6]
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	440	200,000	1,100
Anthracene	66,000,000	6,600	350,000	µg/kg	330	150,000	1,100
Benzo(a)anthracene	25,000	90	79,000	µg/kg	540	**100,000**	720
Benzo(a)pyrene	2,500	20	46,000	µg/kg	380	**57,000**	370
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	660	**95,000**	620
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	190[6]	30,000	210
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	210[6]	22,000	140
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	NS[8]	NS	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	NS	NS	NS
Chrysene	2,500,000	190	230,000	µg/kg	380	70,000	520
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	NS	NS	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	NS	NS	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	<220	**4,100[6]**	61[6]
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	NS	NS	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	NS	NS	NS
4,6-Dinitro-2-methylphenol	--[9]	--	--	µg/kg	NS	NS	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	NS	NS	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	1,000	260,000	1,800
Fluorene	8,800,000	150,000	3,000,000	µg/kg	140[6]	170,000	1,100
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	240	**29,000**	190
Naphthalene	4,400,000	10,000	25,000	µg/kg	<220	**190,000**	790
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	NS	NS	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	NS	NS	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	NS	NS	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	760	400,000	2,900
Phenol	130,000,000	400,000	66,000	µg/kg	NS	NS	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	690	150,000	1,100
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	NS	NS	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	NS	NS	NS
Total Metals[10]							
Aluminum	190,000	NA[11]	NA	mg/kg[12]	11,000	5,900	8,900
Antimony	88	0.6	27	mg/kg	0.16[6]	0.12[6]	<0.5
Arsenic	12	5	150	mg/kg	**19**	8.7	12
Barium	15,000	200	8,200	mg/kg	110	240	150
Beryllium	440	0.4	320	mg/kg	0.7	0.5	1
Boron	20,000	60	6.7	mg/kg	6.3	6.6	3.8[6]
Cadmium	47	0.5	38	mg/kg	1.8	4.8	4.4
Chromium	190,000	10	190,000	mg/kg	14	8	15
Cobalt	4,400	73	8.1	mg/kg	5.2	4.2	13

Table H-13
Area 5C Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	MPSB-148 0-2 10/28/2003	MPSB-148 6-8 10/28/2003	MPSB-148 18-20 10/28/2003
Copper	8,200	100	36,000	mg/kg	27	17	21
Iron	66,000	NA	NA	mg/kg	13,000	27,000	33,000
Lead	500	0.5	450	mg/kg	16	9	14
Manganese	31,000	NA	NA	mg/kg	240	1,000	570
Mercury	66	0.2	10	mg/kg	0.018[6]	0.028[6]	0.029[6]
Molybdenum	--	--	--	mg/kg	26	2.8	2.4
Nickel	4,400	10	650	mg/kg	19	12	21
Selenium	1,100	5	26	mg/kg	<0.5	<0.57	<0.5
Silver	1,100	10	84	mg/kg	<0.2	<0.23	0.13[6]
Thallium	15	0.2	14	mg/kg	0.062[6]	3.7	3.6
Tin	130,000	2,200	240	mg/kg	4.3[6]	4.2[6]	3.6[6]
Tungsten	--	--	--	mg/kg	4.7[6]	2.1[6]	1.4[6]
Vanadium	1,500	26	26,000	mg/kg	18	9.7	19
Zinc	66,000	200	12,000	mg/kg	37	26	48
Additional Parameters							
Cyanide, Free[13]	4,400	20	200	mg/kg	<1.1	<1.2	<1.3
Cyanide, Total[14]	--	--	--	mg/kg	<1.1	<1.2	<1.3

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(7) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(8) NS - A sample was not collected from this interval for laboratory analysis.
(9) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B, 7196, and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram
(13) Free Cyanide was analyzed by US Environmental Protection Agency Method 4500-1.
(14) Total Cyanide was analyzed by US Environmental Protection Agency Method 9012.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-14
Area 5D Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-128	MPSB-128	MPSB-129	MPSB-129	MPSB-130	MPSB-130	MPSB-130	MPSB-130	MPSB-130	MPSB-133	MPSB-133	MPSB-133	MPSB-133	MPSB-134
				Sample Depth (ft bgs)[3]	14-16	16-18	6-8	12-14	0-2	4-6	8-10	10-12	16-18	0-2	2-4	4-6	12-14	0-2
				Sample Date	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003
				Units														
Volatile Organic Compounds[4]																		
Benzene	41,000	500	130	µg/kg[5]	<5.7	<5	14	<5.2	<5	NS[6]	<5.3	NS	<5	<5	<5.6	NS	<5	<5.2
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	<5.7	<5	6.5	<5.2	<5	NS	<5.3	NS	<5	<5	<5.6	NS	<5	<5.2
Toluene	7,600,000	100,000	44,000	µg/kg	<5.7	<5	23	<5.2	<5	NS	<5.3	NS	<5	<5	<5.6	NS	<5	<5.2
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	<5.7	<5	77	<5.2	4.6[7]	NS	<5.3	NS	<5	<5	<5.6	NS	<5	<5.2
Semi-Volatile Organic Compounds[7]																		
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	<46	<45	4,300	<44	1,700	NS	<45	NS	<38	1,800	90	NS	<430	700
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	<46	<45	85,000	<44	18,000	NS	38[7]	NS	40	9,400	100	NS	260[7]	5,400
Anthracene	66,000,000	6,600	350,000	µg/kg	<46	<45	66,000	<44	18,000	NS	50	NS	45	13,000	140	NS	260[7]	7,400
Benzo(a)anthracene	25,000	90	79,000	µg/kg	<46	<45	43,000	<44	22,000	NS	52	NS	48	19,000	240	NS	950	9,400
Benzo(a)pyrene	2,500	20	46,000	µg/kg	<46	<45	24,000	<44	12,000	NS	<45	NS	27[7]	12,000	160	NS	750	5,800
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	<46	<45	17,000	<44	19,000	NS	50	NS	47	18,000	250	NS	1,100	8,900
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	<46	<45	28,000	<44	7,500	NS	30[7]	NS	<38	5,500	66[7]	NS	350[7]	3,000
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	<46	<45	9,100	<44	5,500	NS	<45	NS	<38	6,100	84	NS	420	2,700
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	<46	<45	<1,600	<44	NS	<2,200	NS	<89	NS	<86	NS	<46	NS	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	<46	<45	<1,600	<44	NS	<2,200	NS	<89	NS	<86	NS	<46	NS	NS
Chrysene	2,500,000	190	230,000	µg/kg	<46	<45	30,000	<44	16,000	NS	40[7]	NS	41	15,000	190	NS	820	7,100
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	<46	<45	2,200	<44	NS	<2,200	NS	<89	NS	<86	NS	<46	NS	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	<46	<45	8,000	<44	NS	3,200	NS	<89	NS	<86	NS	<46	NS	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	<46	<45	7,100	<44	1,800	NS	<45	NS	<38	1,700	<90	NS	<430	800
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	<46	<45	<1,600	<44	NS	<2,200	NS	<89	NS	<86	NS	<46	NS	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	<46	<45	7,000	<44	NS	2,600	NS	<89	NS	<86	NS	<46	NS	NS
4,6-Dinitro-2-methylphenol	--[9]	--	--	µg/kg	<91	<90	<3,200	<88	NS	<4,400	NS	<180	NS	<170	NS	<92	NS	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	<91	<90	<3,200	<88	NS	<4,400	NS	<180	NS	<170	NS	<92	NS	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	<46	<45	150,000	28[7]	55,000	NS	120	NS	110	48,000	570	NS	1,900	21,000
Fluorene	8,800,000	150,000	3,000,000	µg/kg	<46	<45	70,000	<44	15,000	NS	33[7]	NS	39	9,000	86[7]	NS	<430	5,200
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	<46	<45	14,000	<44	6,700	NS	<45	NS	<38	6,800	89[7]	NS	420[7]	3,100
Naphthalene	4,400,000	10,000	25,000	µg/kg	<46	<45	48,000	<44	2,500	NS	<45	NS	21[7]	2,000	<90	NS	<430	1,600
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	<46	<45	<1,600	<44	NS	<2,200	NS	<89	NS	<86	NS	<46	NS	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	<91	<90	<3,200	<88	NS	<4,400	NS	83[7]	NS	86[7]	NS	<92	NS	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	<83	<83	<1,600	<83	NS	<2,200	NS	<89	NS	<86	NS	<83	NS	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	<46	<45	190,000	25[7]	55,000	NS	130	NS	140	43,000	460	NS	1,100	19,000
Phenol	130,000,000	400,000	66,000	µg/kg	<46	<45	2,500	<44	NS	1,400[7]	NS	<89	NS	<86	NS	<46	NS	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	<46	<45	81,000	<44	32,000	NS	77	NS	67	32,000	380	NS	1,500	14,000
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	<91	<90	<3,200	<88	NS	<4,400	NS	<180	NS	<170	NS	<92	NS	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	<46	<45	<1,600	<44	NS	<2,200	NS	<89	NS	<86	NS	<46	NS	NS
Total Metals[10]																		
Aluminum	190,000	NA[11]	NA	mg/kg[12]	13,000	12,000	1,700	13,000	11,000	NS	11,000	NS	15,000	13,000	13,000	NS	11,000	12,000
Antimony	88	0.6	27	mg/kg	2	1.7	<0.6	2	0.33[7]	NS	0.52[7]	NS	0.66	<0.54	0.37[7]	NS	0.52[7]	<0.51
Arsenic	12	5	150	mg/kg	8.2	8.6	13	9.5	130	NS	15	NS	11	33	9.2	NS	18	32
Barium	15,000	200	8,200	mg/kg	250	210	94	220	130	NS	140	NS	110	560	210	NS	220	460
Beryllium	440	0.4	320	mg/kg	1.2	1.2	0.14[7]	1.2	1	NS	1.1	NS	1.3	1.5	1.1	NS	0.94	0.59
Boron	20,000	60	6.7	mg/kg	4.5[7]	4.5[7]	87	21	16	NS	6.8	NS	3.9[7]	910	14	NS	7.9	840
Cadmium	47	0.5	38	mg/kg	<0.25	<0.25	0.0036[7]	<0.21	5	NS	0.16[7]	NS	0.7	2.2	0.18[7]	NS	0.49	4.1
Chromium	190,000	10	190,000	mg/kg	18	17	13	19	16	NS	16	NS	26	53	18	NS	21	79
Chromium VI	94	10	190	mg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Cobalt	4,400	73	8.1	mg/kg	15	14	1.2	12	8.3	NS	16	NS	28	7.8	13	NS	12	12
Copper	8,200	100	36,000	mg/kg	22	21	15	25	100	NS	20	NS	47	180	22	NS	30	480

Table H-14
Area 5D Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-128	MPSB-128	MPSB-129	MPSB-129	MPSB-130	MPSB-130	MPSB-130	MPSB-130	MPSB-130	MPSB-133	MPSB-133	MPSB-133	MPSB-133	MPSB-134
				Sample Depth (ft bgs)[3]	14-16	16-18	6-8	12-14	0-2	4-6	8-10	10-12	16-18	0-2	2-4	4-6	12-14	0-2
				Sample Date	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003	10/23/2003
				Units														
Iron	66,000	NA	NA	mg/kg	32,000	33,000	2,600	31,000	160,000	NS	27,000	NS	66,000	19,000	28,000	NS	24,000	24,000
Lead	500	0.5	450	mg/kg	16	15	23	21	56	NS	16	NS	21	210	19	NS	45	200
Magnesium	--	--	--	mg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Manganese	31,000	NA	NA	mg/kg	620	1,100	590	490	1,800	NS	960	NS	970	2,700	1,100	NS	940	1,700
Mercury	66	0.2	10	mg/kg	0.034[7]	0.033[7]	0.077[7]	0.039[7]	0.11	NS	0.028[7]	NS	0.012[7]	0.23	0.034[7]	NS	0.087[7]	0.22
Molybdenum	--	--	--	mg/kg	17	11	6200	380	3,200	NS	100	NS	7.2	6,900	170	NS	130	23,000
Nickel	4,400	10	650	mg/kg	26	26	4.7	25	25	NS	22	NS	40	35	24	NS	27	68
Selenium	1,100	5	26	mg/kg	2.1	2.1	1.7	2.2	<0.52	NS	0.97	NS	0.94	15	1.1	NS	1.2	19
Silver	1,100	10	84	mg/kg	<0.25	0.078[7]	0.15[7]	<0.21	0.61	NS	0.042[7]	NS	0.061[7]	1.5	0.026[7]	NS	0.18[7]	0.84
Thallium	15	0.2	14	mg/kg	<2.5	<2.5	<2.4	<2.1	3.9	NS	<2.5	NS	<2.1	<2.2	<2.4	NS	<2.2	<2
Tin	130,000	2,200	240	mg/kg	3.8[7]	4[7]	1.2[7]	3.6[7]	8.9[7]	NS	4.4[7]	NS	4.8[7]	25	4.5[7]	NS	6.7[7]	23
Titanium	--	--	--	mg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Tungsten	--	--	--	mg/kg	8[7]	7.9[7]	850	46	54	NS	4.6[7]	NS	2.2[7]	790	32	NS	38	860
Vanadium	1,500	26	26,000	mg/kg	25	24	15	26	44	NS	23	NS	30	66	25	NS	25	43
Zinc	66,000	200	12,000	mg/kg	66	64	18	64	90	NS	59	NS	91	190	66	NS	99	310
Additional Parameters																		
Cyanide, Free[13]	4,400	20	200	mg/kg	<1.4	<1.4	<1.2	<1.3	<1.1	NS	<1.4	NS	<1.1	<1.2	<1.4	NS	<1.3	<1.3
Cyanide, Total[14]	--	--	--	mg/kg	<1.4	<1.4	1.4	<1.3	1.9	NS	<1.4	NS	<1.1	<1.2	<1.4	NS	<1.3	<1.3
Total Organic Carbon[15]	--	--	--	mg/kg	11,900	11,300	27,100	7,350	NS	16,300	NS	21,100	NS	29,500	NS	12,500	NS	NS

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(9) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B, 7196, and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram
(13) Free Cyanide was analyzed by US Environmental Protection Agency Method 4500-1.
(14) Total Cyanide was analyzed by US Environmental Protection Agency Method 9012.
(15) Total Organic Carbon was analyzed by US Environmental Protection Agency Method 9060M.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-14
Area 5D Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-135	MPSB-137	MPSB-139	MPSB-140	MPSB-142	MPSB-143	MPSB-143	MPSB-143	MPSB-143	MPSB-143	MPSB-145	MPSB-146	MPSB-146	MPSB-146
				Sample Depth (ft bgs)[3]	0-2	0-2	0-2	0-2	0-2	0-2	2-4	4-6	6-8	16-18	0-2	6-8	8-10	10-12
				Sample Date	10/27/2003	10/24/2003	10/24/2003	10/27/2003	10/27/2003	10/27/2003	10/27/2003	10/27/2003	10/27/2003	10/27/2003	10/27/2003	10/28/2003	10/28/2003	10/28/2003
				Units														
Volatile Organic Compounds[4]																		
Benzene	41,000	500	130	µg/kg[5]	<5	<5.2	<5	<5	<5.4	<6	NS	<5	<290	12	4,400	NS	<5	<5.6
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	<5	<5.2	<5	<5	<5.4	<6	NS	<5	<290	<5	27	NS	<5	<5.6
Toluene	7,600,000	100,000	44,000	µg/kg	2.4[7]	<5.2	<5	<5	<5.4	<6	NS	<5	<290	2.4[7]	6,500	NS	<5	<5.6
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	<5	<5.2	<5	<5	<5.4	<6	NS	<5	210[7]	<5	540	NS	<5	<5.6
Semi-Volatile Organic Compounds[7]																		
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	<420	<400	<360	<2,100	<400	970	NS	NS	67,000	79	24,000	NS	<44	<43
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	440	990	330[7]	2,700	1,600	13,000	NS	NS	120,000	290	380,000	NS	<44	<43
Anthracene	66,000,000	6,600	350,000	µg/kg	680	1,200	570	3,200	2,000	13,000	NS	NS	100,000	290	290,000	NS	<44	<43
Benzo(a)anthracene	25,000	90	79,000	µg/kg	2,000	2,500	1,200	4,300	2,900	13,000	NS	NS	74,000	280	210,000	NS	<44	<43
Benzo(a)pyrene	2,500	20	46,000	µg/kg	1,700	2,000	810	2,600	1,700	7,000	NS	NS	40,000	130	100,000	NS	<44	<43
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	2,200	2,200	1,200	4,400	2,700	11,000	NS	NS	64,000	250	150,000	NS	<44	<43
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	810	2,500	570	1,100[7]	870	3,100	NS	NS	<44,000	71[7]	40,000	NS	<44	<43
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	1,000	1,300	510	1,300	780	2,600	NS	NS	<44,000	88	37,000	NS	<44	<43
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	NS	NS	NS	NS	NS	NS	<96	NS	<180	NS	NS	<440	NS	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	NS	NS	NS	NS	NS	NS	<96	NS	<180	NS	NS	<440	NS	NS
Chrysene	2,500,000	190	230,000	µg/kg	1,700	2,300	1,000	3,300	2,200	9,200	NS	NS	51,000	210	150,000	NS	<44	<43
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	NS	NS	NS	NS	NS	NS	<96	NS	830	NS	NS	490	NS	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	NS	NS	NS	NS	NS	NS	<96	NS	2,200	NS	NS	1,400	NS	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	250[7]	630	<360	<2,100	280[7]	1,100	NS	NS	240	<72	14,000[7]	NS	<44	<43
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	NS	NS	NS	NS	NS	NS	<96	NS	<180	NS	NS	<440	NS	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	NS	NS	NS	NS	NS	NS	<96	NS	<44,000	NS	NS	1,700	NS	NS
4,6-Dinitro-2-methylphenol	--[9]	--	--	µg/kg	NS	NS	NS	NS	NS	NS	<190	NS	<350	NS	NS	<890	NS	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	NS	NS	NS	NS	NS	NS	<190	NS	<350	NS	NS	<890	NS	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	3,800	6,100	2,900	11,000	7,200	32,000	NS	NS	190,000	710	580,000	NS	<44	<43
Fluorene	8,800,000	150,000	3,000,000	µg/kg	290[7]	490	290[7]	2,300	1,300	12,000	NS	NS	130,000	290	300,000	NS	<44	<43
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	910	1,300	510	1,500[7]	900	3,400	NS	NS	2,500	77	49,000	NS	<44	<43
Naphthalene	4,400,000	10,000	25,000	µg/kg	<420	<400	<360	<2,100	350[7]	4,000	NS	NS	110,000	170	310,000	NS	34[7]	<43
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	NS	NS	NS	NS	NS	NS	<96	NS	<180	NS	NS	<440	NS	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	NS	NS	NS	NS	NS	NS	<190	NS	<350	NS	NS	<890	NS	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	NS	NS	NS	NS	NS	NS	<96	NS	<180	NS	NS	<440	NS	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	2,000	3,500	2,200	10,000	6,000	36,000	NS	NS	310,000	910	830,000	NS	<44	33[7]
Phenol	130,000,000	400,000	66,000	µg/kg	NS	NS	NS	NS	NS	NS	<96	NS	610	NS	NS	290[7]	NS	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	2,700	2,800	1,900	6,600	3,900	18,000	NS	NS	110,000	370	290,000	NS	<44	<43
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	NS	NS	NS	NS	NS	NS	<190	NS	<350	NS	NS	<890	NS	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	NS	NS	NS	NS	NS	NS	<96	NS	<180	NS	NS	<440	NS	NS
Total Metals[10]																		
Aluminum	190,000	NA[11]	NA	mg/kg[12]	13,000	15,000	11,000	15,000	26,000	14,000	NS	NS	9,200	10,000	12,000	NS	11,000	7,700
Antimony	88	0.6	27	mg/kg	5.4	<0.58	11	3.2	3.7	3.4	NS	NS	2	2.7	2.7	NS	<0.66	0.47[7]
Arsenic	12	5	150	mg/kg	32	120	1	41	71	82	NS	NS	33	21	71	NS	12	2.5
Barium	15,000	200	8,200	mg/kg	1,400	430	180	480	450	380	NS	NS	240	130	230	NS	310	220
Beryllium	440	0.4	320	mg/kg	2	2.6	0.47	3	4	1.7	NS	NS	0.74	1	1.1	NS	1	0.91
Boron	20,000	60	6.7	mg/kg	620	300	70	120	88	110	NS	NS	8.8	18	7.5	NS	<6.6	4.4[7]
Cadmium	47	0.5	38	mg/kg	<0.23	1.9	<0.2	<0.21	<0.23	0.59	NS	NS	0.67	<0.2	<0.23	NS	6.6	1.6
Chromium	190,000	10	190,000	mg/kg	95	93	31	61	28	41	NS	NS	13	14	20	NS	15	13
Chromium VI	94	10	190	mg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	<0.66	NS
Cobalt	4,400	73	8.1	mg/kg	11	9.4	4.1	8	5.3	7.9	NS	NS	9.5	11	14	NS	11	7.8
Copper	8,200	100	36,000	mg/kg	190	190	130	71	76	93	NS	NS	34	34	22	NS	20	17

Table H-14
Area 5D Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-135	MPSB-137	MPSB-139	MPSB-140	MPSB-142	MPSB-143	MPSB-143	MPSB-143	MPSB-143	MPSB-143	MPSB-145	MPSB-146	MPSB-146	MPSB-146
				Sample Depth (ft bgs)[3]	0-2	0-2	0-2	0-2	0-2	0-2	2-4	4-6	6-8	16-18	0-2	6-8	8-10	10-12
				Sample Date	10/27/2003	10/24/2003	10/24/2003	10/27/2003	10/27/2003	10/27/2003	10/27/2003	10/27/2003	10/27/2003	10/27/2003	10/27/2003	10/28/2003	10/28/2003	10/28/2003
				Units														
Iron	66,000	NA	NA	mg/kg	32,000	25,000	25,000	23,000	22,000	19,000	NS	NS	20,000	39,000	34,000	NS	50,000	12,000
Lead	500	0.5	450	mg/kg	230	300	150	110	110	200	NS	NS	72	22	33	NS	15	12
Magnesium	--	--	--	mg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	1,600	NS
Manganese	31,000	NA	NA	mg/kg	5,200	2,700	1,300	7,900	2,400	5,000	NS	NS	640	790	780	NS	530	110
Mercury	66	0.2	10	mg/kg	0.24	0.098[7]	0.063[7]	0.073[7]	0.11	0.12	NS	NS	0.12	0.024[7]	0.044[7]	NS	<0.10	0.023[7]
Molybdenum	--	--	--	mg/kg	4,800	7,300	13,000	2,600	2,300	2,800	NS	NS	57	62	95	NS	<1.3	<1.1
Nickel	4,400	10	650	mg/kg	34	45	39	17	13	29	NS	NS	16	25	25	NS	21	17
Selenium	1,100	5	26	mg/kg	20	16	7.3	13	12	12	NS	NS	2.5	2.6	3.4	NS	<0.66	<0.57
Silver	1,100	10	84	mg/kg	1.1	1.5	2	1.1	0.18[7]	1.8	NS	NS	0.071[7]	<0.2	<0.23	NS	<0.26	0.041[7]
Thallium	15	0.2	14	mg/kg	<2.3	<2.3	<2	<2.1	<2.3	0.17[7]	NS	NS	<2.2	<2	<2.3	NS	5.6	<2.3
Tin	130,000	2,200	240	mg/kg	32	19	9.7[7]	8.6[7]	9.5[7]	12	NS	NS	17	3[7]	4.7[7]	NS	<13	4.1[7]
Titanium	--	--	--	mg/kg	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	78	NS
Tungsten	--	--	--	mg/kg	1300	1200	420	570	590	650	NS	NS	13	19	27	NS	<13	1.9[7]
Vanadium	1,500	26	26,000	mg/kg	86	77	23	75	54	69	NS	NS	18	14	25	NS	23	18
Zinc	66,000	200	12,000	mg/kg	250	240	240	130	110	200	NS	NS	160	61	80	NS	56	43
Additional Parameters																		
Cyanide, Free[13]	4,400	20	200	mg/kg	<1.3	<1.2	<1.1	<1.2	<1.2	<1.3	NS	NS	<1.4	<1.1	<1.3	NS	<1.3	<1.3
Cyanide, Total[14]	--	--	--	mg/kg	<1.3	<1.2	<1.1	<1.2	<1.2	<1.3	NS	NS	<1.4	<1.1	<1.3	NS	<1.3	<1.3
Total Organic Carbon[15]	--	--	--	mg/kg	NS	NS	NS	NS	NS	NS	35,300	NS	54,800	NS	NS	26,400	NS	NS

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(9) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B, 7196, and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram
(13) Free Cyanide was analyzed by US Environmental Protection Agency Method 4500-1.
(14) Total Cyanide was analyzed by US Environmental Protection Agency Method 9012.
(15) Total Organic Carbon was analyzed by US Environmental Protection Agency Method 9060M.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-14
Area 5D Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	MPSB-146 12-14 10/28/2003	MPSB-147 2-4 10/27/2003	MPSB-147 14-16 10/27/2003
Volatile Organic Compounds[4]							
Benzene	41,000	500	130	µg/kg[5]	NS	9,100	15
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	NS	1,100	3.6[7]
Toluene	7,600,000	100,000	44,000	µg/kg	NS	13,000	22
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	NS	22,000	12
Semi-Volatile Organic Compounds[7]							
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	NS	160,000	50[7]
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	NS	1,800,000	620
Anthracene	66,000,000	6,600	350,000	µg/kg	NS	1,300,000	520
Benzo(a)anthracene	25,000	90	79,000	µg/kg	NS	830,000	370
Benzo(a)pyrene	2,500	20	46,000	µg/kg	NS	410,000	190
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	NS	600,000	290
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	NS	230,000	120
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	NS	150,000	84[7]
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	<38	NS	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	<38	NS	NS
Chrysene	2,500,000	190	230,000	µg/kg	NS	580,000	260
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	<38	NS	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	<38	NS	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	NS	57,000	<85
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	<38	NS	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	<38	NS	NS
4,6-Dinitro-2-methylphenol	--[9]	--	--	µg/kg	<83	NS	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	<83	NS	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	NS	2,400,000	960
Fluorene	8,800,000	150,000	3,000,000	µg/kg	NS	1,500,000	520
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	NS	200,000	97
Naphthalene	4,400,000	10,000	25,000	µg/kg	NS	1,700,000	640
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	<38	NS	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	<83	NS	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	<83	NS	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	NS	3,500,000	1,300
Phenol	130,000,000	400,000	66,000	µg/kg	<38	NS	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	NS	1,300,000	500
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	<83	NS	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	<38	NS	NS
Total Metals[10]							
Aluminum	190,000	NA[11]	NA	mg/kg[12]	NS	9,300	11,000
Antimony	88	0.6	27	mg/kg	NS	1.6	1.1
Arsenic	12	5	150	mg/kg	NS	67	15
Barium	15,000	200	8,200	mg/kg	NS	220	210
Beryllium	440	0.4	320	mg/kg	NS	0.79	1
Boron	20,000	60	6.7	mg/kg	NS	24	10
Cadmium	47	0.5	38	mg/kg	NS	<0.28	<0.24
Chromium	190,000	10	190,000	mg/kg	NS	16	16
Chromium VI	94	10	190	mg/kg	NS	NS	NS
Cobalt	4,400	73	8.1	mg/kg	NS	9.4	8.8
Copper	8,200	100	36,000	mg/kg	NS	28	28

Table H-14
Area 5D Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	MPSB-146 12-14 10/28/2003	MPSB-147 2-4 10/27/2003	MPSB-147 14-16 10/27/2003
Iron	66,000	NA	NA	mg/kg	NS	20,000	17,000
Lead	500	0.5	450	mg/kg	NS	65	27
Magnesium	--	--	--	mg/kg	NS	NS	NS
Manganese	31,000	NA	NA	mg/kg	NS	570	340
Mercury	66	0.2	10	mg/kg	NS	0.11	0.035[7]
Molybdenum	--	--	--	mg/kg	NS	230	3.5
Nickel	4,400	10	650	mg/kg	NS	22	22
Selenium	1,100	5	26	mg/kg	NS	3.8	1.7
Silver	1,100	10	84	mg/kg	NS	<0.28	<0.24
Thallium	15	0.2	14	mg/kg	NS	<2.8	<2.4
Tin	130,000	2,200	240	mg/kg	NS	7.9[7]	4.1[7]
Titanium	--	--	--	mg/kg	NS	NS	NS
Tungsten	--	--	--	mg/kg	NS	50	2.9[7]
Vanadium	1,500	26	26,000	mg/kg	NS	19	14
Zinc	66,000	200	12,000	mg/kg	NS	190	74
Additional Parameters							
Cyanide, Free[13]	4,400	20	200	mg/kg	NS	<1.5	<1.3
Cyanide, Total[14]	--	--	--	mg/kg	NS	<1.5	<1.3
Total Organic Carbon[15]	--	--	--	mg/kg	19,800	NS	NS

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(9) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B, 7196, and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram
(13) Free Cyanide was analyzed by US Environmental Protection Agency Method 4500-1.
(14) Total Cyanide was analyzed by US Environmental Protection Agency Method 9012.
(15) Total Organic Carbon was analyzed by US Environmental Protection Agency Method 9060M.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-15
Area 5D Monitoring Well Soil Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	MW-51 4-6 10/28/2003	MW-51 6-8 10/28/2003	MW-51 8-10 10/28/2003	MW-51 14-16 10/28/2003	MW-52 4-6 10/28/2003	MW-52 6-8 10/28/2003	MW-52 10-12 10/28/2003	MW-52 14-16 10/28/2003
Volatile Organic Compounds[4]												
Benzene	41,000	500	130	µg/kg[5]	<5	NS[6]	NS	<5	<5	NS	NS	<5
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	<5	NS	NS	<5	<5	NS	NS	<5
Toluene	7,600,000	100,000	44,000	µg/kg	<5	NS	NS	<5	<5	NS	NS	<5
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	16	NS	NS	<5	<5	NS	NS	<5
Semi-Volatile Organic Compounds[8]												
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	<43	NS	NS	<36	<88	NS	NS	<37
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	29[7]	NS	NS	<36	250	NS	NS	<37
Anthracene	66,000,000	6,600	350,000	µg/kg	46	NS	NS	<36	230	NS	NS	<37
Benzo(a)anthracene	25,000	90	79,000	µg/kg	100	NS	NS	<36	610	NS	NS	25[7]
Benzo(a)pyrene	2,500	20	46,000	µg/kg	55	NS	NS	<36	270	NS	NS	<37
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	120	NS	NS	<36	600	NS	NS	28[7]
Benzo(k)fluoranthene	13,000,000	26	180,000	µg/kg	38[7]	NS	NS	<36	260	NS	NS	<37
Benzo(g,h,i)perylene	250,000	55	610,000	µg/kg	38[7]	NS	NS	<36	160	NS	NS	<37
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	NS	<84	<43	NS	NS	<84	<38	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	NS	<84	<43	NS	NS	<84	<38	NS
Chrysene	2,500,000	190	230,000	µg/kg	98	NS	NS	<36	480	NS	NS	30[7]
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	NS	<84	<43	NS	NS	<84	<38	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	NS	<84	<43	NS	NS	<84	<38	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	<43	NS	NS	<36	60[7]	NS	NS	<37
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	NS	<84	<43	NS	NS	<84	<38	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	NS	<84	<43	NS	NS	<84	<38	NS
4,6-Dinitro-2-methylphenol	--[9]	--	--	µg/kg	NS	<170	<86	NS	NS	<170	<83	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	NS	<170	<86	NS	NS	<170	<83	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	270	NS	NS	<36	1,500	NS	NS	50
Fluorene	8,800,000	150,000	3,000,000	µg/kg	31[7]	NS	NS	<36	100	NS	NS	<37
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	37[7]	NS	NS	<36	200	NS	NS	<37
Naphthalene	4,400,000	10,000	25,000	µg/kg	72	NS	NS	<36	<88	NS	NS	23[7]
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	NS	<84	<43	NS	NS	<84	<38	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	NS	<170	<86	NS	NS	<170	<83	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	NS	<84	<83	NS	NS	<84	<83	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	170	NS	NS	<36	870	NS	NS	92
Phenol	130,000,000	400,000	66,000	µg/kg	NS	<84	<43	NS	NS	<84	<38	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	190	NS	NS	<36	870	NS	NS	42
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	NS	<170	<86	NS	NS	<170	<83	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	NS	<84	<43	NS	NS	<84	<38	NS
Total Metals[10]												
Aluminum	190,000	NA[11]	NA	mg/kg[12]	16,000	NS	NS	20,000	11,000	NS	NS	17,000
Antimony	88	0.6	27	mg/kg	<0.51	NS	NS	<0.52	<0.52	NS	NS	<0.55
Arsenic	12	5	150	mg/kg	23	NS	NS	1.9	12	NS	NS	6.2
Barium	15,000	200	8,200	mg/kg	330	NS	NS	130	210	NS	NS	110
Beryllium	440	0.4	320	mg/kg	1.6	NS	NS	1	1	NS	NS	1.1
Boron	20,000	60	6.7	mg/kg	69	NS	NS	6.5	16	NS	NS	5.2
Cadmium	47	0.5	38	mg/kg	3.7	NS	NS	4.3	3.7	NS	NS	5
Chromium	190,000	10	190,000	mg/kg	25	NS	NS	26	19	NS	NS	5
Chromium VI	94	10	190	mg/kg	NS	NS	NS	NS	<0.66	NS	NS	NS
Cobalt	4,400	73	8.1	mg/kg	12	NS	NS	20	12	NS	NS	19
Copper	8,200	100	36,000	mg/kg	44	NS	NS	43	35	NS	NS	56
Iron	66,000	NA	NA	mg/kg	25,000	NS	NS	31,000	28,000	NS	NS	35,000

Table H-15
Area 5D Monitoring Well Soil Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MW-51	MW-51	MW-51	MW-51	MW-52	MW-52	MW-52	MW-52
				Sample Depth (ft bgs)[3]	4-6	6-8	8-10	14-16	4-6	6-8	10-12	14-16
				Sample Date	10/28/2003	10/28/2003	10/28/2003	10/28/2003	10/28/2003	10/28/2003	10/28/2003	10/28/2003
				Units								
Lead	500	0.5	450	mg/kg	66	NS	NS	11	50	NS	NS	26
Magnesium	--	--	--		NS	NS	NS	NS	2,700	NS	NS	NS
Manganese	31,000	NA	NA	mg/kg	1,400	NS	NS	150	680	NS	NS	370
Mercury	66	0.2	10	mg/kg	0.036[7]	NS	NS	0.019[7]	0.065[7]	NS	NS	0.051[7]
Molybdenum	--	--	--	mg/kg	630	NS	NS	12	520	NS	NS	11
Nickel	4,400	10	650	mg/kg	21	NS	NS	44	21	NS	NS	42
Selenium	1,100	5	26	mg/kg	1.3	NS	NS	<0.52	0.082[7]	NS	NS	<0.55
Silver	1,100	10	84	mg/kg	<0.2	NS	NS	<0.21	0.35	NS	NS	0.11[7]
Thallium	15	0.2	14	mg/kg	0.8[7]	NS	NS	3.3	2.1	NS	NS	2.9
Tin	130,000	2,200	240	mg/kg	11	NS	NS	2.9[7]	6[7]	NS	NS	4.4[7]
Titanium	--	--	--		NS	NS	NS	NS	82	NS	NS	NS
Tungsten	--	--	--	mg/kg	590	NS	NS	14	34	NS	NS	5.6[7]
Vanadium	1,500	26	26,000	mg/kg	31	NS	NS	24	23	NS	NS	24
Zinc	66,000	200	12,000	mg/kg	71	NS	NS	87	77	NS	NS	97
Inorganic Parameters												
Cyanide, Free[13]	4,400	20	200	mg/kg	<1.3	NS	NS	<1.1	<1.3	NS	NS	<1.1
Cyanide, Total[14]	--	--	--	mg/kg	<1.3	NS	NS	<1.1	1.3	NS	NS	<1.1
Total Organic Carbon[15]	--	--	--	mg/kg	NS	8,790	14,800	NS	NS	29,300	8,830	NS

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(9) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram
(13) Free Cyanide was analyzed by US Environmental Protection Agency Method 4500-1.
(14) Total Cyanide was analyzed by US Environmental Protection Agency Method 9012.
(15) Total Organic Carbon was analyzed by US Environmental Protection Agency Method 9060M.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential

Table H-16
Area 5E Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-150	MPSB-151	MPSB-151	MPSB-152	MPSB-152	MPSB-152	MPSB-153	MPSB-153
				Sample Depth (ft bgs)[3]	8-10	14-16	20-22	0-2	4-6	12-14	6-8	10-12
				Sample Date	10/23/2003	10/23/2003	10/23/2003	11/4/2003	11/4/2003	11/4/2003	10/23/2003	10/23/2003
				Units								
Volatile Organic Compounds[4]												
Benzene	41,000	500	130	µg/kg[5]	<5	<5.3	<5	<5.1	<5	<5	<5.1	<5
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	<5	<5.3	<5	<5.1	<5	<5	<5.1	<5
Toluene	7,600,000	100,000	44,000	µg/kg	<5	<5.3	<5	<5.1	<5	<5	<5.1	<5
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	<5	220	<5	<5.1	<5	<5	<5.1	<5
Semi-Volatile Organic Compounds[7]												
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	<37	<440	<43	<41	<36	<43	38[7]	<39
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	<37	<440	<43	<41	<36	<43	160	<39
Anthracene	66,000,000	6,600	350,000	µg/kg	<37	<440	<43	<41	<36	<43	160	<39
Benzo(a)anthracene	25,000	90	79,000	µg/kg	<37	<440	<43	<41	<36	<43	310	21[7]
Benzo(a)pyrene	2,500	20	46,000	µg/kg	<37	<440	<43	<41	<36	<43	190	52
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	<37	<440	<43	<41	<36	<43	190	27[7]
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	<37	<440	<43	<41	<36	<43	250	<39
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	<37	<440	<43	<41	<36	<43	87	37[7]
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	NS[8]	NS	NS	NS	NS	NS	NS	NS
2-Chlorophenol	330,000	4,000	4,400	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS
Chrysene	2,500,000	190	230,000	µg/kg	25[7]	<440	<43	<41	<36	<43	270	41
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	<37	<440	<43	<41	<36	<43	49	<39
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS
4,6-Dinitro-2-methylphenol	--[9]	--	--	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	30[7]	<440	<43	<41	<36	<43	770	29[7]
Fluorene	8,800,000	150,000	3,000,000	µg/kg	<37	<440	<43	<41	<36	<43	110	<39
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	<37	<440	<43	<41	<36	<43	100	<39
Naphthalene	4,400,000	10,000	25,000	µg/kg	<37	<440	<43	<41	<36	70	85	<39
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS
Pentachlorophenol	150,000	100	5,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	<37	<440	29[7]	<41	<36	<43	500	120
Phenol	130,000,000	400,000	66,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS
Pyrene	6,600,000	13,000	2,200,000	µg/kg	22[7]	<440	<43	<41	<36	<43	430	32[7]
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	NS	NS	NS	NS	NS	NS	NS	NS
Total Metals[10]												
Aluminum	190,000	NA[11]	NA	mg/kg[12]	14,000	13,000	11,000	11,000	17,000	11,000	7,600	8,300
Antimony	88	0.6	27	mg/kg	0.18[7]	0.82	0.33[7]	1	<0.50	<0.66	0.21[7]	0.5
Arsenic	12	5	150	mg/kg	3.8	11	33	10	1.3	6.4	19	21
Barium	15,000	200	8,200	mg/kg	170	190	170	180	120	180	120	330
Beryllium	440	0.4	320	mg/kg	1.5	1.2	1.5	1	1	1.1	0.88	1.8
Boron	20,000	60	6.7	mg/kg	1.6[7]	2.8[7]	3.6[7]	9.4	11	16	28	14
Cadmium	47	0.5	38	mg/kg	0.7	0.37	1.1	<0.24	<0.20	<0.26	0.6	2.7
Chromium	190,000	10	190,000	mg/kg	25	18	19	16	23	16	21	25

Table H-16
Area 5E Soil Boring Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-150	MPSB-151	MPSB-151	MPSB-152	MPSB-152	MPSB-152	MPSB-153	MPSB-153
				Sample Depth (ft bgs)[3]	8-10	14-16	20-22	0-2	4-6	12-14	6-8	10-12
				Sample Date	10/23/2003	10/23/2003	10/23/2003	11/4/2003	11/4/2003	11/4/2003	10/23/2003	10/23/2003
				Units								
Cobalt	4,400	73	8.1	mg/kg	15	15	20	14	16	16	14	33
Copper	8,200	100	36,000	mg/kg	29	22	23	21	56	19	19	24
Iron	66,000	NA	NA	mg/kg	47,000	30,000	55,000	30,000	26,000	30,000	34,000	110,000
Lead	500	0.5	450	mg/kg	18	15	19	21	26	18	24	29
Manganese	31,000	NA	NA	mg/kg	580	1,700	1,300	1,100	190	440	940	2,100
Mercury	66	0.2	10	mg/kg	0.018[7]	0.034[7]	0.027[7]	<0.10	<0.10	<0.10	0.033[7]	0.031[7]
Molybdenum	--	--	--	mg/kg	0.21[7]	3	28	160	1.4	4.5	310	6.7
Nickel	4,400	10	650	mg/kg	32	26	28	23	42	23	22	31
Selenium	1,100	5	26	mg/kg	0.46[7]	1.1	1.6	0.78	2.2	1.4	1.4	<0.5
Silver	1,100	10	84	mg/kg	0.1[7]	0.14[7]	0.24	<0.24	<0.20	<0.26	0.18[7]	0.38
Thallium	15	0.2	14	mg/kg	<2	<2.4	<2.3	<2.4	<2.0	<2.6	<2.2	<2
Tin	130,000	2,200	240	mg/kg	3.8[7]	4.2[7]	4.4[7]	<12	<10	<13	5.8[7]	4.4[7]
Tungsten	--	--	--	mg/kg	1.8[7]	3.1[7]	2.4[7]	<12	<10	<13	19	1.5[7]
Vanadium	1,500	26	26,000	mg/kg	31	25	30	24	20	24	23	42
Zinc	66,000	200	12,000	mg/kg	85	59	69	61	85	55	52	72
Additional Parameters												
Cyanide, Free[13]	4,400	20	200	mg/kg	<1.1	<1.3	<1.3	<1.2	<1.1	<1.3	<1.2	<1.2
Cyanide, Total[14]	--	--	--	mg/kg	<1.1	<1.3	<1.3	<1.2	<1.1	<1.3	2.3	<1.2

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) NS - A sample was not collected from this interval for laboratory analysis.
(9) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram
(13) Free Cyanide was analyzed by US Environmental Protection Agency Method 4500-1.
(14) Total Cyanide was analyzed by US Environmental Protection Agency Method 9012.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-17
Area 7A Soil Boring and Test Pit Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-182	MPSB-182	MPSB-183	MPSB-183	MPSB-184	MPSB-184	MPSB-185	MPSB-185	MPSB-186	MPSB-186	TP-1	TP-1	TP-2	TP-2
				Sample Depth (ft bgs)[3]	0-2	4-6	0-2	4-6	0-2	4-6	0-2	4-6	0-2	4-6	0-2	8	0-2	8
				Sample Date	11/3/2003	11/3/2003	11/3/2003	11/3/2003	11/4/2003	11/4/2003	11/4/2003	11/4/2003	11/4/2003	11/4/2003	9/18/2003	9/18/2003	9/18/2003	9/18/2003
				Units														
Volatile Organic Compounds[4]																		
Benzene	41,000	500	130	µg/kg[5]	1.9[6]	<5	10	<5	<5	<5	41	66	<6.1	34	<5	15	1.8[6]	19
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	<5	<5	5.9	<5	<5	<5	29	9.5	<6.1	<5	<5	1.4[6]	<5	2.8[6]
Toluene	7,600,000	100,000	44,000	µg/kg	3.1[6]	<5	34	<5	9.8	<5	130	49	<6.1	25	<5	10	<5	17
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	<5	<5	16	<5	5.0	<5	86	23	<6.1	11	<5	3.7[6]	<5	8.3
Semi-Volatile Organic Compounds[7]																		
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	<42	<36	<43	<39	<44	<38	<43	<38	<43	<39	<41	<34	<40	<41
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	<42	88	<43	<39	<44	<38	<43	<38	<43	<39	<41	<34	28[6]	33[6]
Anthracene	66,000,000	6,600	350,000	µg/kg	<42	84	<43	<39	<44	<38	<43	<38	<43	<39	<41	<34	25[6]	28[6]
Benzo(a)anthracene	25,000	90	79,000	µg/kg	<42	110	<43	<39	<44	<38	<43	<38	<43	<39	<41	<34	61	80
Benzo(a)pyrene	2,500	20	46,000	µg/kg	<42	57	<43	<39	<44	<38	<43	<38	<43	<39	<41	<34	39[6]	59
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	<42	98	<43	<39	<44	<38	<43	<38	<43	<39	<41	<34	60	85
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	<42	37	<43	<39	<44	<38	<43	<38	<43	<39	<41	<34	<40	25[6]
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	<42	27[6]	<43	35[6]	<44	<38	<43	<38	<43	<39	<41	<34	<40	28[6]
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	NS[8]	<36	NS	<39	NS	<38	NS	<38	NS	<39	<41	<34	<40	<41
2-Chlorophenol	330,000	4,000	4,400	µg/kg	NS	<36	NS	<39	NS	<38	NS	<38	NS	<39	<41	<34	<40	<41
Chrysene	2,500,000	190	230,000	µg/kg	<42	76	<43	<39	<44	<38	<43	<38	<43	<39	<41	<34	46	53
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	NS	<36	NS	<39	NS	<38	NS	<38	NS	<39	<41	<34	<40	<41
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	NS	<36	NS	<39	NS	<38	NS	<38	NS	<39	<41	<34	<40	<41
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	<42	<36	<43	<39	<44	<38	<43	<38	<43	<39	<41	<34	<40	<41
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	NS	<36	NS	<39	NS	<38	NS	<38	NS	<39	<41	<34	<40	<41
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	NS	<36	NS	<39	NS	<38	NS	<38	NS	<39	<41	<34	<40	<41
4,6-Dinitro-2-methylphenol	--[9]	--	--	µg/kg	NS	<83	NS	<83	NS	<83	NS	<83	NS	<83	<83	<83	<83	<83
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	NS	<83	NS	<83	NS	<83	NS	<83	NS	<83	<83	<83	<83	<83
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	28[6]	270	<43	20[6]	<44	<38	<43	<38	<43	<39	<41	<34	120	160
Fluorene	8,800,000	150,000	3,000,000	µg/kg	<42	64	<43	<39	<44	<38	<43	<38	<43	<39	<41	<34	<40	<41
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	<42	31[6]	<43	<39	<44	<38	<43	<38	<43	<39	<41	<34	24[6]	37[6]
Naphthalene	4,400,000	10,000	25,000	µg/kg	<42	19[6]	<43	34[6]	<44	<38	<43	<38	<43	<39	<41	<34	<40	<41
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	NS	<36	NS	<39	NS	<38	NS	<38	NS	<39	<41	<34	<40	<41
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	NS	<83	NS	<83	NS	<83	NS	<83	NS	<83	<83	<83	<83	<83
Pentachlorophenol	150,000	100	5,000	µg/kg	NS	<83	NS	<83	NS	<83	NS	<83	NS	<83	<83	<83	<83	<83
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	22[6]	230	<43	120	<44	<38	<43	<38	<43	<39	<41	<34	64	64
Phenol	130,000,000	400,000	66,000	µg/kg	NS	<36	NS	<39	NS	<38	NS	<38	NS	<39	<41	<34	<40	<41
Pyrene	6,600,000	13,000	2,200,000	µg/kg	23[6]	170	<43	33[6]	<44	<38	<43	<38	<43	<39	<41	<34	75	97
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	NS	<83	NS	<83	NS	<83	NS	<83	NS	<83	<83	<83	<83	<83
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	NS	<36	NS	<39	NS	<38	NS	<38	NS	<39	<41	<34	<40	<41
Total Metals[10]																		
Aluminum	190,000	NA[11]	NA	mg/kg[12]	14,000	10,000	14,000	8,200	9,800	7,200	9,500	11,000	15,000	15,000	19,000	9,500	16,000	14,000
Antimony	88	0.6	27	mg/kg	0.49[6]	0.62	1	0.65	<0.62	<0.56	0.58	<0.50	<0.62	<0.50	1.8	4	2.1	1.3
Arsenic	12	5	150	mg/kg	5.4	7.8	19	10	17	15	11	6.1	18	7.6	32	4.5	27	18
Barium	15,000	200	8,200	mg/kg	720	220	370	180	2,100	160	370	180	260	220	170	350	310	350
Beryllium	440	0.4	320	mg/kg	2.1	1.2	1.3	1.2	0.79	1.1	1.3	0.95	0.99	1.3	1.1	1.2	1.4	1.2
Boron	20,000	60	6.7	mg/kg	11	27	6.6	6.1	<6.2	<5.6	6.0	22	7.9	27	4.3[6]	6.4	4.8[6]	8.8
Cadmium	47	0.5	38	mg/kg	<0.21	<0.21	<0.22	0.028[6]	1.5	<0.23	<0.23	1.2	0.41	<0.20	0.23	1.3	0.53	0.54
Chromium	190,000	10	190,000	mg/kg	17	14	22	13	13	14	14	16	19	23	25	18	21	21
Cobalt	4,400	73	8.1	mg/kg	6.4	16	12	20	10	6.6	12	11	7.5	14	9	16	22	17
Copper	8,200	100	36,000	mg/kg	75	29	34	56	20	66	41	26	25	60	33	27	37	42
Iron	66,000	NA	NA	mg/kg	7,700	41,000	51,000	10,000	33,000	6,500	7,000	29,000	21,000	14,000	35,000	86,000	36,000	26,000

Table H-17
Area 7A Soil Boring and Test Pit Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification	MPSB-182	MPSB-182	MPSB-183	MPSB-183	MPSB-184	MPSB-184	MPSB-185	MPSB-185	MPSB-186	MPSB-186	TP-1	TP-1	TP-2	TP-2
				Sample Depth (ft bgs)[3]	0-2	4-6	0-2	4-6	0-2	4-6	0-2	4-6	0-2	4-6	0-2	8	0-2	8
				Sample Date	11/3/2003	11/3/2003	11/3/2003	11/3/2003	11/4/2003	11/4/2003	11/4/2003	11/4/2003	11/4/2003	11/4/2003	9/18/2003	9/18/2003	9/18/2003	9/18/2003
				Units														
Lead	500	0.5	450	mg/kg	15	11	20	17	15	16	11	10	19	17	17	13	19	20
Manganese	31,000	NA	NA	mg/kg	190	1,200	580	150	1,200	63	56	1,200	360	560	180	3,700	920	650
Mercury	66	0.2	10	mg/kg	0.01[6]	0.012[6]	0.059[6]	0.059[6]	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.051[6]	0.014[6]	0.052[6]	0.045[6]
Molybdenum	--	--	--	mg/kg	3	2.7	110	5.8	62	6.9	7.3	2.2	13	1.7	5.6	4	30	3.9
Nickel	4,400	10	650	mg/kg	16	35	48	44	31	17	20	27	24	41	34	38	42	39
Selenium	1,100	5	26	mg/kg	1.2	<0.54	0.065[6]	1.6	<0.62	<0.56	<0.58	<0.50	<0.62	0.62	1.7	1.3	1.4	0.69
Silver	1,100	10	84	mg/kg	<0.21	<0.21	<0.22	<0.21	<0.25	<0.23	<0.23	<0.20	<0.25	<0.20	0.25	1.1	0.3	0.082[6]
Thallium	15	0.2	14	mg/kg	<2.1	1.5[6]	0.28[6]	<2.1	<2.5	<2.3	<2.3	<2.0	<2.5	<2.0	<2.3	<2	<2	<2.2
Tin	130,000	2,200	240	mg/kg	3.7[6]	3.7[6]	5.8[6]	4.2[6]	<12	<11	<12	<10	<12	<10	3.9[6]	2.3[6]	2.8[6]	3.1[6]
Tungsten	--	--	--	mg/kg	2[6]	3.1[6]	16	3.3[6]	<12	<11	<12	<10	<12	<10	1.4[6]	1[6]	1.5[6]	1[6]
Vanadium	1,500	26	26,000	mg/kg	23	22	24	18	15	25	16	20	24	24	29	41	28	27
Zinc	66,000	200	12,000	mg/kg	36	73	71	91	48	61	39	65	87	85	64	75	85	77
Additional Parameters																		
Cyanide, Free[13]	4,400	20	200	mg/kg	<1.3	<1.1	<1.3	<1.2	<1.3	<1.2	<1.3	<1.1	<1.3	<1.2	<1.3	<1	<1.2	<1.2
Cyanide, Total[14]	--	--	--	mg/kg	<1.3	<1.1	<1.3	<1.2	<1.3	<1.2	<1.3	<1.1	<1.3	<1.2	<1.3	<1	<1.2	<1.2
Total Organic Carbon[15]	--	--	--	mg/kg	NS	46,000	NS	22,700	NS	41,200	NS	38,700	NS	23,300	11,300	NS	NS	NS

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(9) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram
(13) Free Cyanide was analyzed by US Environmental Protection Agency Method 4500-1.
(14) Total Cyanide was analyzed by US Environmental Protection Agency Method 9012.
(15) Total Organic Carbon was analyzed by US Environmental Protection Agency Method 9060M.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.

Table H-17
Area 7A Soil Boring and Test Pit Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	TP-3 0-2 9/18/2003	TP-3 8 9/18/2003	TP-4 0-2 9/18/2003	TP-4 8 9/18/2003	TP-5 0-2 9/18/2003	TP-5 8 9/18/2003	TP-6 0-2 9/18/2003	TP-6 8 9/18/2003
Volatile Organic Compounds[4]												
Benzene	41,000	500	130	µg/kg[5]	1.6[6]	9.3	<5	5.5	16	7.1	1.1[6]	<5
Ethyl benzene	10,000,000	70,000	46,000	µg/kg	<5	<5	<5	<5	2.3[6]	<5	<5	<5
Toluene	7,600,000	100,000	44,000	µg/kg	1.9[6]	6	<5	4.3[6]	18	5.7	<5	15
Xylenes, Total	8,000,000	1,000,000	990,000	µg/kg	<5	2.4[6]	<5	2.4[6]	6.4	2[6]	<5	<5
Semi-Volatile Organic Compounds[7]												
Acenaphthene	13,000,000	220,000	2,700,000	µg/kg	<42	<38	<41	<37	2,800	<38	<40	<85
Acenaphthylene	13,000,000	220,000	2,500,000	µg/kg	37[6]	32[6]	<41	<37	44,000	83	23[6]	190
Anthracene	66,000,000	6,600	350,000	µg/kg	27[6]	38	<41	<37	37,000	41	<40	240
Benzo(a)anthracene	25,000	90	79,000	µg/kg	56	36[6]	<41	<37	43,000	91	71	1,100
Benzo(a)pyrene	2,500	20	46,000	µg/kg	33[6]	19[6]	<41	<37	22,000	50	42	700
Benzo(b)fluoranthene	25,000	90	120,000	µg/kg	51	34[6]	<41	<37	37,000	95	76	1,400
Benzo(k)fluoranthene	250,000	26	180,000	µg/kg	<42	<38	<41	<37	11,000	24[6]	23[6]	480
Benzo(g,h,i)perylene	13,000,000	55	610,000	µg/kg	<42	<38	<41	<37	8,600	23[6]	20[6]	330
4-Chloro-3-methylphenol	1,100,000	18,000	37,000	µg/kg	<42	<38	<41	<37	<4,100	<38	<40	<85
2-Chlorophenol	330,000	4,000	4,400	µg/kg	<42	<38	<41	<37	<4,100	<38	<40	<85
Chrysene	2,500,000	190	230,000	µg/kg	40[6]	27[6]	<41	<37	30,000	66	54	790
o-Cresol (2-Methylphenol)	10,000,000	180,000	64,000	µg/kg	<42	<38	<41	<37	<4,100	<38	<40	<85
p-Cresol (4-Methylphenol)	1,100,000	18,000	4,200	µg/kg	<42	<38	<41	<37	<4,100	<38	<40	130
Dibenz(a,h)anthracene	2,500	9	41,000	µg/kg	<42	<38	<41	<37	3,900	<38	<40	150
2,4-Dichlorophenol	660,000	2,000	1,000	µg/kg	<42	<38	<41	<37	<4,100	<38	<40	<85
2,4-Dimethylphenol	4,400,000	73,000	32,000	µg/kg	<42	<38	<41	<37	<4,100	<38	<40	<85
4,6-Dinitro-2-methylphenol	--[9]	--	--	µg/kg	<84	<83	<83	<83	<8,300	<83	<83	<170
2,4-Dinitrophenol	440,000	1,900	210	µg/kg	<84	<83	<83	<83	<8,300	<83	<83	<170
Fluoranthene	8,800,000	26,000	3,200,000	µg/kg	120	83	33[6]	<37	120,000	190	120	1,100
Fluorene	8,800,000	150,000	3,000,000	µg/kg	<42	<38	<41	<37	20,000	<38	<40	86
Indeno(1,2,3-cd)pyrene	25,000	90	7,000,000	µg/kg	<42	<38	<41	<37	11,000	29[6]	25[6]	450
Naphthalene	4,400,000	10,000	25,000	µg/kg	<42	<38	<41	<37	<4,100	<38	<40	<85
2-Nitrophenol	1,800,000	29,000	5,900	µg/kg	<42	<38	<41	<37	<4,100	<38	<40	<85
4-Nitrophenol	1,800,000	6,000	4,100	µg/kg	<84	<83	<83	<83	<8,300	<83	<83	<170
Pentachlorophenol	150,000	100	5,000	µg/kg	<83	<83	<83	<83	<4,100	<83	<83	<85
Phenanthrene	66,000,000	110,000	10,000,000	µg/kg	53	41	<41	<37	92,000	81	39[6]	340
Phenol	130,000,000	400,000	66,000	µg/kg	<42	<38	<41	<37	<4,100	<38	<40	<85
Pyrene	6,600,000	13,000	2,200,000	µg/kg	74	52	23[7]	<37	62,000	120	85	1,300
2,4,5-Trichlorophenol	22,000,000	370,000	2,300,000	µg/kg	<84	<83	<83	<83	<8,300	<83	<83	<170
2,4,6-Trichlorophenol	66,000	1,100	3,100	µg/kg	<42	<38	<41	<37	<4,100	<38	<40	<85
Total Metals[10]												
Aluminum	190,000	NA[11]	NA	mg/kg[12]	20,000	10,000	17,000	10,000	13,000	12,000	12,000	12,000
Antimony	88	0.6	27	mg/kg	2.3	1.5	2.8	1.5	1.9	1.4	3.6	1.6
Arsenic	12	5	150	mg/kg	27	7.2	13	11	21	11	19	78
Barium	15,000	200	8,200	mg/kg	440	420	310	280	320	300	260	250
Beryllium	440	0.4	320	mg/kg	1.8	1	1.9	1	1.6	1.2	1.5	1
Boron	20,000	60	6.7	mg/kg	6.6	4.8	11	7.2	5.5	7	5.4[6]	5.7
Cadmium	47	0.5	38	mg/kg	0.52	0.33	0.98	0.64	0.6	0.56	1.2	0.46
Chromium	190,000	10	190,000	mg/kg	28	17	27	16	20	19	22	17
Cobalt	4,400	73	8.1	mg/kg	19	16	43	12	18	17	19	14
Copper	8,200	100	36,000	mg/kg	35	38	50	46	42	42	40	19
Iron	66,000	NA	NA	mg/kg	45,000	24,000	41,000	26,000	34,000	27,000	75,000	26,000

Table H-17
Area 7A Soil Boring and Test Pit Sample Analytical Results

Constituent	MSC[1] Residential 0-15 Feet	MSC[2] Soil-to-Groundwater Residential Used Aquifers 100 X GW MSC	Generic Value	Sample Identification / Sample Depth (ft bgs)[3] / Sample Date / Units	TP-3 0-2 9/18/2003	TP-3 8 9/18/2003	TP-4 0-2 9/18/2003	TP-4 8 9/18/2003	TP-5 0-2 9/18/2003	TP-5 8 9/18/2003	TP-6 0-2 9/18/2003	TP-6 8 9/18/2003
Lead	500	0.5	450	mg/kg	18	17	27	15	21	18	29	26
Manganese	31,000	NA	NA	mg/kg	1,700	510	570	940	750	810	1,100	400
Mercury	66	0.2	10	mg/kg	0.071[6]	0.03[6]	0.035[6]	0.023[6]	0.066[6]	0.029[6]	0.05[6]	0.037[6]
Molybdenum	--	--	--	mg/kg	12	0.38[6]	8.9	1.1	25	2.9	19	35
Nickel	4,400	10	650	mg/kg	52	38	120	29	36	38	52	24
Selenium	1,100	5	26	mg/kg	1.3	1.2	0.67	0.77	1.1	0.6	1.7	2.4
Silver	1,100	10	84	mg/kg	0.37	0.14[6]	0.23	0.21[6]	0.31	0.34	0.88	0.29
Thallium	15	0.2	14	mg/kg	<2.5	<2.1	<2.3	<2.3	<2.3	<2	<2.3	<2.3
Tin	130,000	2,200	240	mg/kg	3.6[6]	3.5[6]	3.1[6]	4.7[6]	3.7[6]	3.5[6]	4.1[6]	3.8[6]
Tungsten	--	--	--	mg/kg	0.99[6]	0.81[6]	1.6[6]	1.5[6]	3.9[6]	1.2[6]	2.3[6]	4.3[6]
Vanadium	1,500	26	26,000	mg/kg	32	17	70	24	32	23	44	25
Zinc	66,000	200	12,000	mg/kg	87	85	180	53	84	62	110	71
Additional Parameters												
Cyanide, Free[13]	4,400	20	200	mg/kg	<1.3	<1.1	<1.2	<1.1	<1.2	<1.1	<1.2	<1.3
Cyanide, Total[14]	--	--	--	mg/kg	<1.3	<1.1	<1.2	<1.1	<1.2	<1.1	<1.2	<1.3
Total Organic Carbon[15]	--	--	--	mg/kg	NS	NS	9,250	NS	NS	NS	NS	NS

Footnotes:
(1) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Direct Contact Numeric Values , 25 PA Code Chapter 250.
(2) MSC - Medium Specific Concentrations (MSCs) for Organic and Inorganic Regulated Substances in Soil, Appendix A, Tables 3 and 4 - Soil to Groundwater Numeric Values, 25 PA Code Chapter 250.
(3) ft bgs - feet below ground surface
(4) Volatile Organic Compunds were analyzed by US Environmental Protection Agency Method SW 846 8260B.
(5) µg/kg - micrograms/kilograms
(6) NS - A sample was not collected from this interval for laboratory analysis.
(7) Identified concentration is an estimated value below the laboratory reporting limit but above the method detection limit.
(8) Semi-Volatile Organic Compound were analyzed by US Environmental Protection Agency Method SW 846 8270C.
(9) -- Medium specific concentration not yet established by Pennsylvania Department of Environmental Protection.
(10) Total Metals were analyzed by US Environmental Protection Agency Method SW 846 6010B and 7471B.
(11) NA - Not Applicable
(12) mg/kg - milligrams/kilogram
(13) Free Cyanide was analyzed by US Environmental Protection Agency Method 4500-1.
(14) Total Cyanide was analyzed by US Environmental Protection Agency Method 9012.
(15) Total Organic Carbon was analyzed by US Environmental Protection Agency Method 9060M.

1.5 = Reported concentration exceeds MSC for Direct Contact.
1.5 = Reported concentration exceeds MSC for Soil-to-Groundwater Residential Use Aquifer.
1.5 = Reported concentration exceeds MSC for both Soil-toGroundwater Residential Used Aquifer and Direct Contact.