

**TABLE 1-1 POTENTIAL ARARS AND TO-BE-CONSIDERED GUIDANCE
FORT TOTTEN COAST GUARD STATION**

Standard, Requirement, Criteria, or Limitation	Citation	Description of Requirement and Potential ARAR Type	Applicable or Relevant and Appropriate Requirement	Comment
State Ambient Water Quality Regulations	6 NYCRR Parts 700-706	NYDEC ambient water quality criteria promulgated and placed into regulation	Relevant and Appropriate	Some but not all of the AWQC for the state are promulgated. Only those values that are promulgated are potential ARARs, the other non- promulgated values are TBC items.
State Sanitary Code	NYCRR Part 5- 1.51	NYDOH regulations for water after treatment at a municipal drinking-water treatment plant	Relevant and Appropriate	The regulation is not applicable because there is no municipal drinking-water treatment plant being addressed. However, because the groundwater at the site could be used as a drinking water source, the regulations are relevant and appropriate.
State Groundwater Classification Standards	NYCRR Part 703	NYDEC regulations for groundwater.	Relevant and Appropriate	The regulation is not applicable because there are no public water supplies in the immediate area that use the groundwater as a drinking water source. However, the state has classified groundwater as "GA" indicating that it could be a source of drinking water.

**Table 3-1. R.I. Supplemental Sampling: Ft. Totten Surface Soil,
Polycyclic Aromatic Hydrocarbons (PAHs) and Semivolatiles (SVOCs)**
(Sampled 6/21/04; Method: EPA SW-846: 8270)

COMPOUND	NYSDEC TAGM (mg/kg)	Ad2004-SS-1-SH Depth: 0" - 12"	Ad2004-SS-1-DP Depth: 12" - 24"	Ad2004-SS-2-SH Depth: 0" - 12"	Ad2004-SS-2-DP Depth: 12" - 24"
2-METHYLNAPHTHALENE	36.4	<0.0064 (U)	<0.0064 (U)	0.011 (J)	0.045
ACENAPHTHENE	50.0	0.006 (J)	<0.00579 (U)	0.011 (J)	0.018 (J)
ACENAPHTHYLENE	41.0	0.0089 (J)	<0.0067 (U)	0.061	0.16
ANTHRACENE	50.0	0.021 (J)	0.013 (J)	0.048	0.1
BENZO[A]ANTHRACENE	0.224 or MDL	0.13	0.075	0.43	0.61
BENZO[A]PYRENE	0.061 or MDL	0.14 (J)	0.1	0.35	0.5
BENZO[B]FLUORANTHENE	1.1	0.11 (J)	0.073 (J)	0.28	0.45
BENZO[GHI]PERYLENE	50.0	0.11 (J)	0.073 (J)	0.26 (J)	0.31 (J)
BENZO[K]FLUORANTHENE	1.1	0.061 (J)	0.049 (J)	0.18 (J)	0.23 (J)
BIS(2-ETHYLHEXYL) PHTHALATE	50.0	0.11 (J)	0.074 (J)	0.058 (J)	0.11 (J)
BUTYL BENZYL PHTHALATE	50.0	0.034	0.015 (J)	0.016 (J)	0.031 (J)
CARBAZOLE	None	0.011 (J)	0.0075 (J)	0.029 (J)	0.04
CHRYSENE	0.4	0.11 (J)	0.08 (J)	0.38 (J)	0.51 (J)
DIBENZ[A,H]ANTHRACENE	0.014 or MDL	0.036 (J)	0.026 (J)	0.14 (J)	0.19 (J)
DIBENZOFURAN	6.2	<0.00803 (U)	<0.00803 (U)	<0.00803 (U)	0.016 (J)
DI-N-BUTYL PHTHALATE	8.1	0.049	0.06	0.053	0.091
DI-N-OCTYL PHTHALATE	50.0	0.01 (J)	<0.00691 (U)	<0.00691 (U)	<0.00628 (U)
FLUORANTHENE	50.0	0.19	0.12	0.59	1
FLUORENE	50.0	<0.0107 (U)	<0.0107 (U)	0.012 (J)	0.036
INDENO[1,2,3-CD]PYRENE	3.2	0.14 (J)	0.072 (J)	0.35 (J)	0.44 (J)
NAPHTHALENE	13.0	<0.00589 (U)	<0.00589 (U)	0.011 (J)	0.018 (J)
o-DICHLOROBENZENE	7.9	<0.00369 (U)	<0.00369 (U)	<0.00369 (U)	<0.00335 (U)
p-CHLORO-M-CRESOL	None	<0.00551 (U)	0.008 (J)	0.056 (J)	0.066 (J)
PENTACHLOROPHENOL	1.0 or MDL	<0.00552 (U)	<0.00552 (U)	<0.00552 (U)	<0.00502 (U)
p-CRESOL	None	<0.00537 (U)	<0.00537 (U)	<0.00537 (U)	<0.00488 (U)
PHENANTHRENE	50.0	0.092	0.064	0.17	0.44
PYRENE	50.0	0.2 (J)	0.13 (J)	0.56 (J)	0.79 (J)

**Table 3-1. R.I. Supplemental Sampling: Ft. Totten Surface Soil,
Polycyclic Aromatic Hydrocarbons (PAHs) and Semivolatiles (SVOCs)**
(Sampled 6/21/04; Method: EPA SW-846: 8270)

COMPOUND	NYSDEC TAGM (mg/kg)	Ad2004-SS-3-SH Depth: 0" - 12"	Ad2004-SS-3-DP Depth: 12" - 24"	Ad2004-SS-4-SH Depth: 0" - 12"	Ad2004-SS-4-DP Depth: 12" - 24"
2-METHYLNAPHTHALENE	36.4	<0.00725 (U)	<0.0109U	<0.00664 (U)	<0.00725 (U)
ACENAPHTHENE	50.0	<0.00631U	<0.00947 (U)	0.018 (J)	<0.00631 (U)
ACENAPHTHYLENE	41.0	0.012 (J)	<0.011U	<0.0067 (U)	<0.00731 (U)
ANTHRACENE	50.0	0.016 (J)	<0.013 (U)	0.059	<0.00868 (U)
BENZ[A]ANTHRACENE	0.224 or MDL	0.12	<0.0151U	0.33	<0.0101 (U)
BENZO[A]PYRENE	0.061 or MDL	0.12 (J)	<0.015 (U)	0.29 (J)	<0.01U
BENZO[B]FLUORANTHENE	1.1	0.099 (J)	<0.0355 (U)	0.28	<0.0236 (U)
BENZO[GHI]PERYLENE	50.0	0.097J	<0.014 (U)	0.23 (J)	<0.00934 (U)
BENZO[K]FLUORANTHENE	1.1	0.057 (J)	<0.0241 (UJ)	0.26 (J)	<0.0161 (UJ)
BIS(2-ETHYLHEXYL) PHTHALATE	50.0	0.041	0.063 (J)	0.028 (J)	0.24
BUTYL BENZYL PHTHALATE	50.0	0.016 (J)	<0.0124 (U)	<0.00756 (U)	<0.00824 (U)
CARBAZOLE	None	0.011 (J)	<0.012 (U)	0.052	<0.00799 (U)
CHRYSENE	0.4	0.12 (J)	<0.0124 (U)	0.32 (J)	<0.00827 (UJ)
DIBENZ[A,H]ANTHRACENE	0.014 or MDL	0.033 (J)	<0.0275 (U)	0.1 (J)	<0.0184 (U)
DIBENZOFURAN	6.2	<0.00876 (U)	<0.0131 (U)	0.016 (J)	<0.00876 (U)
DI-N-BUTYL PHTHALATE	8.1	0.036	0.032 (J)	0.028 (J)	0.042 (J)
DI-N-OCTYL PHTHALATE	50.0	<0.00754 (U)	<0.0113 (U)	<0.00691 (U)	<0.00754 (U)
FLUORANTHENE	50.0	0.19	0.018 (J)	0.76	<0.0109 (U)
FLUORENE	50.0	<0.0116 (U)	<0.0175 (U)	0.021 (J)	<0.0116 (U)
INDENO[1,2,3-CD]PYRENE	3.2	0.12 (J)	<0.0179 (UJ)	0.24 (J)	<0.0119 (UJ)
NAPHTHALENE	13.0	<0.00642 (U)	<0.00963 (U)	0.011 (J)	<0.00642 (U)
O-DICHLOROBENZENE	7.9	<0.00402 (U)	<0.00603 (U)	<0.00369 (U)	<0.00402 (U)
P-CHLORO-M-CRESOL	None	0.068 (J)	<0.00902 (U)	<0.00551 (U)	<0.00601 (U)
PENTACHLOROPHENOL	1.0 or MDL	<0.00602 (U)	<0.00904 (U)	<0.00552 (U)	<0.00602 (U)
P-CRESOL	None	<0.00586 (U)	<0.00878 (U)	<0.00537 (U)	<0.00586 (U)
PHENANTHRENE	50.0	0.082	<0.0138 (U)	0.49	<0.0092 (U)
PYRENE	50.0	0.2 (J)	0.015 (J)	0.58 (J)	<0.0749 (UJ)

**Table 3-1. R.I. Supplemental Sampling: Ft. Totten Surface Soil,
Polycyclic Aromatic Hydrocarbons (PAHs) and Semivolatiles (SVOCs)**
(Sampled 6/21/04; Method: EPA SW-846: 8270)

COMPOUND	NYSDEC TAGM (mg/kg)	Ad2004-SS-5-SH Depth: 0" - 12"	Ad2004-SS-25-SH QC Duplicate of Ad2004-SS-5-SH	Ad2004-SS-5-DP Depth: 12" - 24"	Ad2004-SS-6-SH Depth: 0" - 12"
2-METHYLNAPHTHALENE	36.4	0.0091 (J)	0.014 (J)	<0.00725 (U)	0.011 (J)
ACENAPHTHENE	50.0	0.014 (J)	0.03 (J)	<0.00631 (U)	0.022 (J)
ACENAPHTHYLENE	41.0	0.27	0.34	<0.00731 (U)	0.18
ANTHRACENE	50.0	0.15	0.28	<0.00868 (U)	0.12
BENZO[A]ANTHRACENE	0.224 or MDL	1	1.4	0.028 (J)	0.97
BENZO[A]PYRENE	0.061 or MDL	1.1	0.93	0.041 (J)	1.5
BENZO[B]FLUORANTHENE	1.1	0.88	0.71	0.036 (J)	1.2
BENZO[GHI]PERYLENE	50.0	0.74	0.84	0.033 (J)	0.69
BENZO[K]FLUORANTHENE	1.1	0.93	0.42	0.029 (J)	0.6
BIS(2-ETHYLHEXYL) PHTHALATE	50.0	0.057 (J)	0.12	0.039	0.094
BUTYL BENZYL PHTHALATE	50.0	0.012 (J)	<0.00756	<0.00824 (U)	0.013 (J)
CARBAZOLE	None	0.061	0.08	<0.00799 (U)	0.062
CHRYSENE	0.4	1.1	1.4	0.033 (J)	0.88
DIBENZO[A,H]ANTHRACENE	0.014 or MDL	0.39	0.25	<0.0184 (U)	0.078
DIBENZOFURAN	6.2	0.011 (J)	0.0085 (J)	<0.00876 (U)	0.016 (J)
DI-N-BUTYL PHTHALATE	8.1	0.046	0.036	0.068	0.12
DI-N-OCTYL PHTHALATE	50.0	<0.00691 (U)	<0.00691 (U)	<0.00754 (U)	<0.00691 (U)
FLUORANTHENE	50.0	1.6	1.8	0.04	1.9
FLUORENE	50.0	0.04	0.031 (J)	<0.0116 (U)	0.032 (J)
INDENO[1,2,3-CD]PYRENE	3.2	0.82	1	0.024 (J)	0.75
NAPHTHALENE	13.0	0.012 (J)	0.01 (J)	<0.00642 (U)	0.022 (J)
O-DICHLOROBENZENE	7.9	<0.00369 (U)	<0.00369 (U)	<0.00402 (U)	<0.00369 (U)
P-CHLORO-M-CRESOL	None	0.0059 (J)	0.0094 (J)	<0.00601 (U)	0.0082 (J)
PENTACHLOROPHENOL	1.0 or MDL	<0.00552 (U)	<0.00552 (U)	<0.00602 (U)	0.022 (J)
P-CRESOL	None	<0.00537 (U)	<0.00537 (U)	<0.00586 (U)	<0.00537 (U)
PHENANTHRENE	50.0	0.49	0.51	0.012 (J)	0.5
PYRENE	50.0	1.4	1.8	0.038 (J)	1.8

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COMPOUND	NYSDEC TAGM (mg/kg)	Ad2004-SS-6-DP Depth: 12" -- 24"	Ad2004-SS-7-SH Depth: 0" -- 12"	Ad2004-SS-7-DP Depth: 12" -- 24"	Ad2004-SS-8-SH Depth: 0" -- 12"
2-METHYLNAPHTHALENE	36.4	<0.00664 (U)	<0.00664 (U)	<0.00664 (U)	0.0071 (J)
ACENAPHTHENE	50.0	<0.00579 (U)	<0.00579 (U)	<0.00579 (U)	0.0086 (J)
ACENAPHTHYLENE	41.0	0.016 (J)	0.017 (J)	0.026 (J)	0.029 (J)
ANTHRACENE	50.0	<0.00795 (U)	0.017 (J)	0.016 (J)	0.031 (J)
BENZ[A]ANTHRACENE	0.224 or MDL	0.13	0.14	0.33	0.2
BENZO[A]PYRENE	0.061 or MDL	0.15 (J)	0.16 (J)	0.3 (J)	0.19
BENZO[B]FLUORANTHENE	1.1	0.13 (J)	0.093 (J)	0.19 (J)	0.2
BENZO[GHI]PERYLENE	50.0	0.14 (J)	0.12 (J)	0.25 (J)	0.14
BENZO[K]FLUORANTHENE	1.1	0.14 (J)	0.081 (J)	0.18 (J)	0.092
BIS(2-ETHYLHEXYL) PHTHALATE	50.0	0.17 (J)	0.062 (J)	0.026 (J)	0.15
BUTYL BENZYL PHTHALATE	50.0	<0.00756 (U)	0.016 (J)	<0.00756 (U)	<0.00756 (U)
CARBAZOLE	None	<0.00733 (U)	0.01 (J)	0.023 (J)	0.02 (J)
CHRYSENE	0.4	0.12 (J)	0.16 (J)	0.29 (J)	0.22
DIBENZO[A,H]ANTHRACENE	0.014 or MDL	0.058 (J)	<0.0168 (U)	0.12 (J)	0.044 (J)
DIBENZOFURAN	6.2	<0.00803 (U)	<0.00803 (U)	<0.00803 (U)	<0.00803 (U)
DI-N-BUTYL PHTHALATE	8.1	0.16	0.19	0.23	0.056
DI-N-OCTYL PHTHALATE	50.0	<0.00691 (U)	<0.00691 (U)	<0.00691 (U)	<0.00691 (U)
FLUORANTHENE	50.0	0.17	0.21	0.44	0.33
FLUORENE	50.0	<0.0107 (U)	<0.0107 (U)	<0.0107 (U)	0.014 (J)
INDENO[1,2,3-CD]PYRENE	3.2	0.12 (J)	0.14 (J)	0.28 (J)	0.14
NAPHTHALENE	13.0	<0.00589 (U)	<0.00589 (U)	0.0072 (J)	0.0089 (J)
O-DICHLOROBENZENE	7.9	<0.00369 (U)	<0.00369 (U)	<0.00369 (U)	<0.00369 (U)
P-CHLORO-M-CRESOL	None	<0.00551 (U)	<0.00551 (U)	<0.00551 (U)	<0.00551 (U)
PENTACHLOROPHENOL	1.0 or MDL	<0.00552 (U)	<0.00552 (U)	<0.00552 (U)	<0.00552 (U)
P-CRESOL	None	<0.00537 (U)	<0.00537 (U)	<0.00537 (U)	<0.00537 (U)
PHENANTHRENE	50.0	0.03 (J)	0.07	0.058	0.18
PYRENE	50.0	0.16 (J)	0.23 (J)	0.44 (J)	0.38

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Polycyclic Aromatic Hydrocarbons (PAHs) and Semivolatiles (SVOCs)**
(Sampled 6/21/04; Method: EPA SW-846: 8270)

COMPOUND	NYSDEC TAGM (mg/kg)	Ad2004-SS-8-DP Depth: 12" - 24"	Ad2004-SS-9-SH Depth: 0" - 12"	Ad2004-SS-9-SH QC Duplicate of Ad2004-SS-9-SH	Ad2004-SS-9-DP Depth: 12" - 24"
2-METHYLNAPHTHALENE	36.4	0.056	<0.00725 (U)	<0.00725 (U)	<0.00725 (U)
ACENAPHTHENE	50.0	0.011 (J)	<0.00631 (U)	<0.00631 (U)	<0.00631 (U)
ACENAPHTHYLENE	41.0	0.049	<0.00731 (U)	<0.00731 (U)	<0.00731 (U)
ANTHRACENE	50.0	0.045	<0.00868 (U)	<0.00868 (U)	<0.00868 (U)
BENZO[ANTHRACENE]	0.224 or MDL	0.39	0.031 (J)	0.021 (J)	<0.0101 (U)
BENZO[A]PYRENE	0.061 or MDL	0.36	0.038 (J)	0.023 (J)	<0.01 (U)
BENZO[B]FLUORANTHENE	1.1	0.36	0.037 (J)	0.024 (J)	<0.0236 (U)
BENZO[GHI]PERYLENE	50.0	0.26	<0.00934 (U)	<0.00934 (U)	<0.00934 (U)
BENZO[K]FLUORANTHENE	1.1	0.21	0.019 (J)	<0.0161 (U)	<0.0161 (U)
BIS(2-ETHYLHEXYL) PHTHALATE	50.0	0.089	0.026 (J)	0.026 (J)	0.021 (J)
BUTYL BENZYL PHTHALATE	50.0	0.0086 (J)	0.012 (J)	<0.00824 (U)	<0.00824 (U)
CARBAZOLE	None	0.028 (J)	<0.00799 (U)	<0.00799 (U)	<0.00799 (U)
CHRYSENE	0.4	0.48	0.036 (J)	0.019 (J)	<0.00827 (U)
DIBENZO[A,H]ANTHRACENE	0.014 or MDL	0.084	<0.0184 (U)	<0.0184 (U)	<0.0184 (U)
DIBENZOFURAN	6.2	0.0084 (J)	<0.00876 (U)	<0.00876 (U)	<0.00876 (U)
DI-N-BUTYL PHTHALATE	8.1	0.032 (J)	0.34	0.033	0.32
DI-N-OCTYL PHTHALATE	50.0	<0.00691 (U)	<0.00754 (U)	<0.00754 (U)	<0.00754 (U)
FLUORANTHENE	50.0	0.75	0.039	0.033	<0.0109 (U)
FLUORENE	50.0	0.028 (J)	<0.0116 (U)	<0.0116 (U)	<0.0116 (U)
INDENO[1,2,3-CD]PYRENE	3.2	0.29	<0.0119 (U)	<0.0119 (U)	<0.0119 (U)
NAPHTHALENE	13.0	0.08	<0.00642 (U)	<0.00642 (U)	<0.00642 (U)
o-DICHLOROBENZENE	7.9	<0.00369 (U)	<0.00402 (U)	<0.00402 (U)	<0.00402 (U)
p-CHLORO-M-CRESOL	None	<0.00551 (U)	<0.00601 (U)	0.0096 (J)	<0.00601 (U)
PENTACHLOROPHENOL	1.0 or MDL	<0.00552 (U)	<0.00602 (U)	<0.00602 (U)	<0.00602 (U)
p-CRESOL	None	<0.00537 (U)	<0.00586 (U)	<0.00586 (U)	<0.00586 (U)
PHENANTHRENE	50.0	0.45	0.021 (J)	0.016 (J)	<0.0092 (U)
PYRENE	50.0	0.76	0.04 (J)	0.038	0.0095 (J)

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Polycyclic Aromatic Hydrocarbons (PAHs) and Semivolatiles (SVOCs)**
(Sampled 6/21/04; Method: EPA SW-846: 8270)

COMPOUND	NYSDEC TAGM (mg/kg)	Ad2004-SS-10-SH Depth: 0" - 12"	Ad2004-SS-10-DP Depth: 12" - 24"	Ad2004-SS-11-SH Depth: 0" - 12"	Ad2004-SS-31-SH QC Duplicate of Ad2004-SS-11-SH
2-METHYLNAPHTHALENE	36.4	<0.00725 (U)	<0.00725 (U)	0.015 (J)	0.096
ACENAPHTHENE	50.0	<0.00631 (U)	<0.00631 (U)	0.046	0.19
ACENAPHTHYLENE	41.0	0.016 (J)	<0.00731 (U)	0.024 (J)	0.038
ANTHRACENE	50.0	0.012 (J)	<0.00868 (U)	0.16	0.54
BENZ[A]ANTHRACENE	0.224 or MDL	0.089	<0.0101 (U)	0.55	1.4
BENZO[A]PYRENE	0.061 or MDL	0.14	<0.01 (U)	0.37	1.2
BENZO[B]FLUORANTHENE	1.1	0.073	<0.0236 (U)	0.5	<0.66 (JN)
BENZO[G]HIOPERYLENE	50.0	0.069 (J)	<0.00934 (U)	0.36	<0.56 (JN)
BENZO[K]FLUORANTHENE	1.1	0.068 (J)	<0.0161 (UJ)	0.092 (J)	<0.3 (JN)
BIS(2-ETHYLHEXYL) PHTHALATE	50.0	0.053 (J)	0.32	0.39	0.34
BUTYL BENZYL PHTHALATE	50.0	0.024 (J)	0.023 (J)	0.078	<0.00824 (U)
CARBAZOLE	None	<0.00799 (U)	<0.00799 (U)	0.068	0.22
CHRYSENE	0.4	0.12 (J)	<0.00827 (UJ)	0.54 (J)	1.3
DIBENZ[A,H]ANTHRACENE	0.014 or MDL	<0.0184 (U)	<0.0184 (U)	<0.0184 (U)	0.078 (JN)
DIBENZOFURAN	6.2	<0.00876 (U)	<0.00876 (U)	0.017 (J)	0.13
DI-N-BUTYL PHTHALATE	8.1	0.34	0.29	0.35	0.066
DI-N-OCTYL PHTHALATE	50.0	<0.00754 (U)	<0.00754 (U)	<0.00754 (U)	<0.00754 (JN)
FLUORANTHENE	50.0	0.16	<0.0109 (U)	1	2.7
FLUORENE	50.0	<0.0116 (U)	<0.0116 (U)	0.045	0.25
INDENO[1,2,3-CD]PYRENE	3.2	0.086 (J)	<0.0119 (UJ)	0.39 (J)	1 (JN)
NAPHTHALENE	13.0	<0.00642 (U)	<0.00642 (U)	0.019 (J)	0.13
o-DICHLOROBENZENE	7.9	<0.00402 (U)	<0.00402 (U)	<0.00402 (U)	<0.00402 (U)
p-CHLORO-M-CRESOL	None	0.0067 (J)	<0.00601 (U)	0.0079 (J)	0.015 (J)
PENTACHLOROPHENOL	1.0 or MDL	<0.00602 (U)	<0.00602 (U)	<0.00602 (U)	<0.00602 (U)
p-CRESOL	None	<0.00586 (U)	<0.00586 (U)	<0.00586 (U)	<0.00586 (U)
PHENANTHRENE	50.0	0.056	<0.0092 (U)	0.49	2.5
PYRENE	50.0	0.16 (J)	<0.0749 (UJ)	0.95	2.6

**Table 3-1. R.I. Supplemental Sampling: Ft. Totten Surface Soil,
Polycyclic Aromatic Hydrocarbons (PAHs) and Semivolatiles (SVOCs)**
(Sampled 6/21/04; Method: EPA SW-846: 8270)

COMPOUND	NYSDEC TAGM (mg/kg)	Ad2004-SS-13-SH QA Duplicate Ad2004-SS-11-SH	Ad2004-SS-11-DP Depth: 12" - 24"	Ad2004-SS-31-DP QC Duplicate of Ad2004-SS-11-DP	Ad2004-SS-B11-SH Depth: 0" - 12" Re-sampled 8/26/04	Ad2004-SS-B11-DP Depth: 12" - 24" Re-sampled 8/26/04
2-METHYLNAPHTHALENE	36.4	<0.0406 (U)	0.02 (J)	0.014 (J)	<0.00982 (U)	0.014 (J)
ACENAPHTHENE	50.0	<0.0406 (U)	0.049	0.057	0.029 (J)	0.068 (J)
ACENAPHTHYLENE	41.0	<0.0406 (U)	0.024 (J)	0.016 (J)	0.022 (J)	0.014 (J)
ANTHRACENE	50.0	<0.0406 (U)	0.13	0.11	0.11	0.18 (J)
BENZ[A]ANTHRACENE	0.224 or MDL	0.411	0.56	0.51	0.34	0.54 (J)
BENZO[A]PYRENE	0.061 or MDL	<0.0406 (U)	0.57	0.35	0.31	0.38 (J)
BENZO[B]FLUORANTHENE	1.1	0.615	0.49	0.26	0.36	0.35 (J)
BENZO[GH]PERYLENE	50.0	<0.0406 (U)	0.4	0.24	0.2	0.25 (J)
BENZO[K]FLUORANTHENE	1.1	<0.0406 (U)	0.19 (J)	0.22	0.23	0.3 (J)
BIS(2-ETHYLHEXYL) PHTHALATE	50.0	<0.0406 (U)	0.15	0.19	0.12	0.1 (J)
BUTYL BENZYL PHTHALATE	50.0	<0.0406 (U)	<0.00824 (U)	<0.00824 (U)	<0.00209 (U)	<0.00209 (U)
CARBAZOLE	None	<0.0406 (U)	0.053	0.068	0.038	0.065 (J)
CHRYSENE	0.4	0.482	0.41 (J)	0.38	0.31	0.43
DIBENZO[A,H]ANTHRACENE	0.014 or MDL	<0.0406 (U)	<0.0184 (U)	0.09	0.055 (J)	0.068 (J)
DIBENZOFURAN	6.2	<0.0406 (U)	0.015	0.016 (J)	0.011 (J)	0.03 (J)
DI-N-BUTYL PHTHALATE	8.1	<0.0406 (U)	0.36	0.035	0.26	0.18 (J)
DI-N-OCTYL PHTHALATE	50.0	<0.0406 (U)	<0.00754 (U)	<0.00754 (U)	<0.00125 (U)	<0.00125 (U)
FLUORANTHENE	50.0	0.818	0.69	0.7	0.61	0.87
FLUORENE	50.0	<0.0406 (U)	0.035	0.04	0.026 (J)	0.062
INDENO[1,2,3-CD]PYRENE	3.2	<0.0406 (U)	0.46 (J)	0.31	0.2	0.28
NAPHTHALENE	13.0	<0.0406 (U)	0.029 (J)	0.022 (J)	0.0099 (J)	0.026 (J)
o-DICHLOROBENZENE	7.9	<0.0406 (U)	0.0061 (J)	<0.00402 (U)	<0.00436 (U)	<0.00436 (U)
p-CHLORO-M-CRESOL	None	<0.0406 (U)	0.0078 (J)	0.0092 (J)	0.0066 (J)	0.0064 (J)
PENTACHLOROPHENOL	1.0 or MDL	<0.0406 (U)	<0.00602 (U)	<0.00602 (U)	<0.00653 (U)	<0.00653 (U)
p-CRESOL	None	<0.0406 (U)	<0.00586 (U)	0.0078 (J)	<0.00278 (U)	<0.00278 (U)
PHENANTHRENE	50.0	0.596	0.37	0.39	0.3	0.59
PYRENE	50.0	0.81	0.73 (J)	0.8	0.5	0.86

Table 3-1. R.I. Supplemental Sampling: Ft. Totten Surface Soil, Polycyclic Aromatic Hydrocarbons (PAHs) and Semivolatiles (SVOCs)
(Sampled 6/21/04; Method: EPA SW-846: 8270)

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

JN Presumptive estimated because retention times are outside of the retention window.

The un-detected (U) results of the Primary and Duplicate Samples are reported at the Method Detection Limit and the un-detected (U) results of the QA Split Samples are reported at the Reporting Limit/Practical

Table 3-2. R.I. Supplemental Sampling: Ft. Totten Surface Soil,**TAL Metals**

(Sampled 6/21/04; Methods: EPA SW-846 6000 & 7000 Series)

COMPOUND	NYSDEC TAGM (mg/kg)	Ad2004-SS-1-SH Depth: 0" – 12"	Ad2004-SS-1-DP Depth: 12" – 24"	Ad2004-SS-2-SH Depth: 0" – 12"	Ad2004-SS-2-DP Depth: 12" – 24"	Ad2004-SS-3-SH Depth: 0" – 12"	Ad2004-SS-3-DP Depth: 12" – 24"
ALUMINUM	SB	10400	14800	9820	9680	15500	14900
ANTIMONY	SB	0.68	0.61	0.59	0.64	0.7	0.07 (J)
ARSENIC	7.5 or SB	5.3	10	4.2	4.4	5.4	2.1
BARIUM	300 or SB	56	80	47	58	37	46
BERYLLIUM	0.16 or SB	0.046 (J)	0.11 (J)	0.087 (J)	0.18 (J)	0.097 (J)	0.28 (J)
CADMIUM	1 or SB	0.99	0.84	0.35 (J)	0.46 (J)	0.12 (J)	0.07 (J)
CALCIUM	SB	3660	3340	2180	2390	430	314
CHROMIUM	10 or SB	20	25	15	16	21	19
COBALT	30 or SB	6.7	7.5	5.4	6.4	6.4	6.7
COPPER	25 or SB	38	2470	50	63	32	10
IRON	2000 or SB	18400	20100	13300	16200	17900	17100
LEAD	SB (500)	286	139	120	176	51	14
MAGNESIUM	SB	3110	3380	2710	2465	2730	2690
MANGANESE	SB	317	339	183	228	306	293
MERCURY	0.1	0.56	0.8	2	2.7	0.52	0.077 (J)
NICKEL	13 or SB	17 (J)	20 (J)	13 (J)	15 (J)	17 (J)	16 (J)
POTASSIUM	SB	1390 (J)	1450 (J)	741 (J)	833 (J)	696 (J)	668 (J)
SELENIUM	2 or SB	0.37 (J)	0.62 (J)	0.37 (J)	0.51 (J)	0.93 (J)	0.43 (J)
SILVER	SB	<0.362 (U)	<0.362 (U)	<0.362 (U)	<0.362 (U)	<0.362 (U)	<0.362 (U)
SODIUM	SB	43 (J)	68	60	119	<31.4 (U)	<31.4 (U)
THALLIUM	SB	0.14 (J)	0.19 (J)	0.13 (J)	0.14 (J)	0.2 (J)	0.13 (J)
VANADIUM	150 or SB	26 (J)	36 (J)	26 (J)	27 (J)	27 (J)	22 (J)
ZINC	20 or SB	173	231	91	105	43	43

SB = Site Background

N/A = Not Analyzed

Bold sample results exceed the New York State Department of Environmental Conservation (NYSDEC) Technical Guidance and Memorandum (TAGM) 4046 standards.

Table 3-2. R.I. Supplemental Sampling: Ft. Totten Surface Soil, TAL Metals (Sampled 6/21/04; Methods: EPA SW-846 6000 & 7000 Series)							
COMPOUND	NYSDEC TAGM (mg/kg)	Ad2004-SS-4-SH Depth: 0" – 12"	Ad2004-SS-4-DP Depth: 12" – 24"	Ad2004-SS-5-SH Depth: 0" – 12"	Ad2004-SS-5-DP Depth: 12" – 24"	Ad2004-SS-6-SH Depth: 0" – 12"	Ad2004-SS-6-DP Depth: 12" – 24"
ALUMINUM	SB	15100	13600	14000	21300	14500	18400
ANTIMONY	SB	0.63	0.098J	0.61	0.15 (J)	0.71	0.23 (J)
ARSENIC	7.5 or SB	3.8	2.4	7.9	2.4	6.9	3
BARIUM	300 or SB	45	25	105	73	74	61
BERYLLIUM	0.16 or SB	0.13 (J)	0.14 (J)	0.17 (J)	0.11 (J)	0.1 (J)	0.053 (J)
CADMIUM	1 or SB	0.16 (J)	0.051 (J)	0.49 (J)	0.047 (J)	0.37 (J)	0.13 (J)
CALCIUM	SB	552	440	4090	1430	2970	1460
CHROMIUM	10 or SB	21	16	21	33	20	31
COBALT	30 or SB	8.1	7.3	7.6	12	7.7	11
COPPER	25 or SB	28	15	34	23	37	21
IRON	2000 or SB	21500	22100	17800	30800	17900	25900
LEAD	SB (500)	45	8.6	171	14	108	24
MAGNESIUM	SB	3500	3780	4060	5670	3390	4280
MANGANESE	SB	266	198	466	485	424	452
MERCURY	0.1	0.24	<0.0077 (U)	0.38	0.021 (J)	0.29	0.068 (J)
NICKEL	13 or SB	18 (J)	13 (J)	19 (J)	24 (J)	17 (J)	22 (J)
POTASSIUM	SB	1110 (J)	1200 (J)	1330 (J)	3330 (J)	967 (J)	1450 (J)
SELENIUM	2 or SB	0.43 (J)	0.094 (J)	0.59 (J)	0.19 (J)	0.52 (J)	0.38 (J)
SILVER	SB	<0.362 (U)	<0.362 (U)	<0.362 (U)	<0.362 (U)	<0.362 (U)	<0.362 (U)
SODIUM	SB	<31.4 (U)	<31.4 (U)	404	229	157	32 (J)
THALLIUM	SB	0.16 (J)	0.092 (J)	0.18 (J)	0.25 (J)	0.18 (J)	0.19 (J)
VANADIUM	150 or SB	29 (J)	24 (J)	32 (J)	40 (J)	35 (J)	37 (J)
ZINC	20 or SB	55	40	144	44	98	49

SB = Site Background N/A = Not Analyzed

Bold sample results exceed the New York State Department of Environmental Conservation (NYSDEC) Technical Guidance and Memorandum (TAGM) 4046 standards.

Table 3-2. R.I. Supplemental Sampling: Ft. Totten Surface Soil,

TAL Metals

(Sampled 6/21/04; Methods: EPA SW-846 6000 & 7000 Series)

COMPOUND	NYSDEC TAGM (mg/kg)	Ad2004-SS-7-SH Depth: 0" - 12"	Ad2004-SS-7-SH QC Duplicate of Ad2004-SS-7-SH	Ad2004-SS-7-DP Depth: 12" - 24"	Ad2004-SS-8-SH Depth: 0" - 12"	Ad2004-SS-8-DP Depth: 12" - 24"	Ad2004-SS-9-SH Depth: 0" - 12"
ALUMINUM	SB	13600	12500	11700	12400	11800	14400
ANTIMONY	SB	1.1	1.3	0.68	0.72	0.55	0.66
ARSENIC	7.5 or SB	5.1	5.3	3	5.5	4.9	3
BARIUM	300 or SB	95	94	88	138	120	97
BERYLLIUM	0.16 or SB	0.068 (J)	0.11 (J)	0.13 (J)	0.31 (J)	0.21 (J)	0.46 (J)
CADMIUM	1 or SB	0.32 (J)	0.33 (J)	0.13 (J)	0.54	0.44 (J)	0.23 (J)
CALCIUM	SB	2140	1810	2380	2870	2600	2320
CHROMIUM	10 or SB	19	18 (J)	20	20	21	19
COBALT	30 or SB	7.9	7.6	8.6	7.9	7.3	6.8
COPPER	25 or SB	35	32	29	37	30	19
IRON	2000 or SB	24900	18700	20900	19300	17900	15800
LEAD	SB (500)	222	208	152	305	298	93
MAGNESIUM	SB	3190	2430	3680	2700	2620	2370
MANGANESE	SB	566	412	440	471	380	617
MERCURY	0.1	0.79	0.65	0.27	0.43	0.3	0.14
NICKEL	13 or SB	18 (J)	17 (J)	19 (J)	20	17	17 (J)
POTASSIUM	SB	1340 (J)	1140	1680 (J)	1230	1060	588 (J)
SELENIUM	2 or SB	0.49 (J)	0.5 (J)	0.38 (J)	0.43 (J)	0.27 (J)	0.52 (J)
SILVER	SB	<0.362 (U)	1.7 (U)	<0.362 (U)	<0.45 (U)	<0.45 (U)	<0.362 (U)
SODIUM	SB	<31.4 (U)	40 (J)	55	72	70	38 (J)
THALLIUM	SB	0.17 (J)	0.17 (J)	0.17 (J)	0.16 (J)	0.15 (J)	0.15 (J)
VANADIUM	150 or SB	29 (J)	29 (J)	23 (J)	37	24	26 (J)
ZINC	20 or SB	148	151	71	199	200	69

SB = Site Background N/A = Not Analyzed

Bold sample results exceed the New York State Department of Environmental Conservation (NYSDEC) Technical Guidance and Memorandum (TAGM) 4046 standards.

Table 3-2. R.I. Supplemental Sampling: Ft. Totten Surface Soil,

TAL Metals

(Sampled 6/21/04; Methods: EPA SW-846 6000 & 7000 Series)

COMPOUND	NYSDEC TAGM (mg/kg)	Ad2004-SS-9-DP Depth: 12" - 24"	Ad2004-SS-10-SH Depth: 0" - 12"	Ad2004-SS-30-SH QC Duplicate of Ad2004-SS-10-SH	Ad2004-SS-10-DP Depth: 12" - 24"	Ad2004-SS-11-SH Depth: 0" - 12"	Ad2004-SS-31-SH QC Duplicate of Ad2004-SS-11-SH
ALUMINUM	SB	12600	12700	12600	17500	8460	8190
ANTIMONY	SB	0.34 (J)	0.73	0.77	0.19J	6.3	2.6
ARSENIC	7.5 or SB	2.1	4	4.1	3.9	6.7	6.8
BARIUM	300 or SB	64	256	220	56	449	268
BERYLLIUM	0.16 or SB	0.17 (J)	0.19 (J)	0.29 (J)	<0.0267 (U)	<0.0267 (U)	<0.0267 (U)
CADMIUM	1 or SB	0.049 (J)	1.4	1.3	0.06 (J)	2.4	2.6
CALCIUM	SB	1010	3810	3520	1310	13100	13700
CHROMIUM	10 or SB	17	19	19 (J)	24	30	32 (J)
COBALT	30 or SB	7.6	7.4	7.7	9.9	8.2	7.8
COPPER	25 or SB	9.6	36	38	15	346	315
IRON	2000 or SB	17100	16700	18200	29200	28600	25000
LEAD	SB (500)	11	1540	642	26	1160	1090
MAGNESIUM	SB	2670	2960	3450	3370	4280	4640
MANGANESE	SB	349	536	618	349	379	350
MERCURY	0.1	0.028 (J)	2.4	2.5	0.097 (J)	0.57	0.53
NICKEL	13 or SB	14 (J)	24 (J)	21 (J)	17 (J)	26 (J)	25 (J)
POTASSIUM	SB	626 (J)	1310 (J)	1230	1510 (J)	1380 (J)	1260
SELENIUM	2 or SB	0.19 (J)	0.67 (J)	0.7 (J)	0.14 (J)	0.7 (J)	0.75 (J)
SILVER	SB	<0.362 (U)	<0.362 (U)	<0.45 (U)	<0.362 (U)	0.66 (J)	2.7 (U)
SODIUM	SB	<31.4 (U)	80	101	<31.4 (U)	111	121
THALLIUM	SB	0.1 (J)	0.14 (J)	0.17 (J)	0.13 (J)	0.15 (J)	0.14 (J)
VANADIUM	150 or SB	21 (J)	24 (J)	23 (J)	31 (J)	30 (J)	30 (J)
ZINC	20 or SB	29	480	470	50	564	581

SB = Site Background

N/A = Not Analyzed

Bold sample results exceed the New York State Department of Environmental Conservation (NYSDEC) Technical Guidance and Memorandum (TAGM) 4046 standards.

Table 3-2. R.I. Supplemental Sampling: Ft. Totten Surface Soil, TAL Metals (Sampled 6/21/04; Methods: EPA SW-846 6000 & 7000 Series)					
COMPOUND	NYSDEC TAGM (mg/kg)	Ad2004-SS-13-SH QA Duplicate Ad2004-SS-11-SH	Ad2004-SS-11-DP Depth: 12" -- 24"	Ad2004-SS-31-DP QC Duplicate of Ad2004-SS-11-DP	Ad2004-SS-13-DP QA Duplicate Ad2004-SS-11-DP
ALUMINIUM	SB	8310J	8970	8900	8990
ANTIMONY	SB	4.1	8.9	7.2	3.12 (J)
ARSENIC	7.5 or SB	8.53	8.3	8.1	9.62
BARIUM	300 or SB	180 (J)	358	337	341 (J)
BERYLLIUM	0.16 or SB	0.447	0.095 (J)	0.26 (J)	0.657
CADMIUM	1 or SB	2.03	1.3	1.3	1.48
CALCIUM	SB	29700 (J)	12300	14100	10100 (J)
CHROMIUM	10 or SB	30.6	32	31 (J)	33.5 (J)
COBALT	30 or SB	7.4 (J)	9.7	9.2	8.46 (J)
COPPER	25 or SB	287	271	178	164
IRON	2000 or SB	25100 (J)	34100	31500	29300 (J)
LEAD	SB (500)	1020 (J)	1060	737	753 (J)
MAGNESIUM	SB	14000 (J)	6640	7620	6160 (J)
MANGANESE	SB	293 (J)	296	302	245 (J)
MERCURY	0.1	0.566	1	0.86	0.837
NICKEL	13 or SB	24.8 (J)	21 (J)	21 (J)	24
POTASSIUM	SB	1200 (J)	1040 (J)	912	868
SELENIUM	2 or SB	1.7	0.86 (J)	0.85 (J)	<1.65 (U)
SILVER	SB	1 (R)	0.39 (J)	1.5 (U)	0.638 (R)
SODIUM	SB	177 (J)	195	166	183 (J)
THALLIUM	SB	2.9	0.13 (J)	0.14 (J)	2.76
VANADIUM	150 or SB	27.5 (J)	29 (J)	30 (J)	29.3 (J)
ZINC	20 or SB	498 (J)	478	435	539 (J)

SB = Site Background N/A = Not Analyzed

Bold sample results exceed the New York State Department of Environmental Conservation (NYSDEC) Technical Guidance and Memorandum (TAGM) 4046 standards.

Table 3-2. R.I. Supplemental Sampling: Ft. Totten Surface Soil,

TAL Metals

(Sampled 6/21/04; Methods: EPA SW-846 6000 & 7000 Series)

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

Table 3 - 3. R.I. Supplemental Sampling: Ft. Totten Groundwater at Monitoring Well MW-4R, Polycyclic Aromatic Hydrocarbons (PAHs) and Semivolatiles (SVOCs)
(Sampled 8/04/04; Method: EPA SW-846: 8270)

COMPOUND	NYSDEC TOGS (ug/liter)	Ad2004-GW-MW4R-01	Ad2004-GW-MW4R-02 QC Duplicate of Ad2004-GW-MW4R-01	Ad2004-GW-MW4R-04 QA Duplicate of Ad2004-GW-MW4R-01
2-METHYLNAPHTHALENE	None	<0.0468 (U)	<0.0468 (U)	<1.05 (U)
ACENAPHTHENE	20, Guidance value	<0.0368 (U)	<0.0368 (U)	<1.05 (U)
ACENAPHTHYLENE	None	<0.0324 (U)	<0.0324 (U)	<1.05 (U)
ANTHRACENE	50, Guidance value	<0.0357 (U)	<0.0357 (U)	<1.05 (U)
BENZO[A]ANTHRACENE	0.002, Guidance value	<0.0397 (U)	0.12 (J)	<1.05 (U)
BENZO[A]PYRENE	Non-detect	<0.0504 (U)	0.14 (J)	<1.05 (U)
BENZO[B]FLUORANTHENE	0.002, Guidance value	0.063 (J)	0.2 (J)	<1.05 (U)
BENZO[G,H,I]PERYLENE	None	<0.0495 (U)	0.062 (J)	<1.05 (U)
BENZO[K]FLUORANTHENE	0.002, Guidance value	<0.043 (U)	0.08 (J)	<1.05 (U)
BIS(2-ETHYLHEXYL) PHTHALATE	5.0	<0.171 (U)	<0.171 (U)	<1.05 (U)
BUTYL BENZYL PHTHALATE	50, Guidance value	<0.15 (U)	<0.15 (U)	<1.05 (U)
CARBAZOLE	None	<0.0335 (U)	<0.0335 (U)	<1.05 (U)
CHRYSENE	0.002, Guidance value	0.038 (J)	0.15 (J)	<1.05 (U)
DIBENZ[A,H]ANTHRACENE	None	<0.0453 (U)	<0.0453 (U)	<1.05 (U)
DIBENZOFURAN	None	<0.0348 (U)	<0.0348 (U)	<1.05 (U)
DI-N-BUTYL PHTHALATE	50.0	<3.7 (U)	<3.7 (U)	<1.05 (U)
DI-N-OCTYL PHTHALATE	50, Guidance value	<0.0761 (U)	<0.0761 (U)	<1.05 (U)
DIETHYL PHTHALATE	50, Guidance value	<0.0709 (U)	<0.0709 (U)	<1.05 (U)
FLUORANTHENE	50, Guidance value	0.1 (J)	0.33 (J)	<1.05 (U)
FLUORENE	50, Guidance value	<0.0264 (U)	<0.0264 (U)	<1.05 (U)
INDENO[1,2,3-CD]PYRENE	0.002, Guidance value	<0.0417 (UJ)	0.075 (J)	<1.05 (U)
NAPHTHALENE	10, Guidance value	<0.0371 (U)	<0.0371 (U)	<1.05 (U)
o-DICHLOROBENZENE	3.0	<0.0373 (U)	<0.0373 (U)	<1.05 (U)
p-CHLORO-M-CRESOL	None	<0.0685 (U)	<0.0685 (U)	<1.05 (U)
PENTACHLOROPHENOL	1.0*	<0.067 (U)	<0.067 (U)	<1.05 (U)
p-CRESOL	None	<0.0349 (U)	<0.0349 (U)	<1.05 (U)
PHENANTHRENE	50, Guidance value	<0.036 (U)	0.11 (J)	<1.05 (U)
PYRENE	50, Guidance value	0.094 (J)	0.28 (J)	<1.05 (U)

Bold sample results exceed the New York State Department of Environmental Conservation (NYSDEC) Technical and Operational Guidance Series (TOGS) ambient water quality standards.

* = Standard is for the sum of all phenolic compounds.

U = Compound or analyte was analyzed for but not detected at or above the stated limit.

J = Estimated value

N = Presumptive evidence of presence of the constituent.

R = Quality control indicates the data is not usable.

UJ = Compound or analyte was analyzed for but not detected; sample detection limit is an estimated value.

The un-detected (U) results of the Primary and Duplicate Samples are reported at the Method Detection Limit
un-detected (U) results of the QA Split Samples are reported at the
Reporting Limit/Practical Quantitation Limit for PAHs and SVOCs.

**Table 3-4. R.I. Supplemental Sampling:
Building 615 Mercury Real-Time Air Sampling Results
(Sampled 6/26/04; Method: Zeeman Portable RA-915+)**

Sample I.D.	Height Above Floor (ft)	Mercury Air Conc. (ug/m3)	OSHA Limit (ug/m3)	NYSDEC Scree Level (ug/m3)
AD2004-BKGD-HG-01-H	6	0.001	100.0	1.0
AD2004-BKGD-HG-01-L	3	0.001	100.0	1.0
AD2004-BKGD-HG-02-H	6	0.003	100.0	1.0
AD2004-BKGD-HG-02-L	3	0.003	100.0	1.0
AD2004-REAL-HG-03-H	6	0.01	100.0	1.0
AD2004-REAL-HG-03-L	3	0.009	100.0	1.0
AD2004-REAL-HG-04-H	6	0.013	100.0	1.0
AD2004-REAL-HG-04-L	3	0.013	100.0	1.0
AD2004-REAL-HG-05-H	6	0.015	100.0	1.0
AD2004-REAL-HG-05-L	3	0.014	100.0	1.0
AD2004-REAL-HG-06-H	6	0.014	100.0	1.0
AD2004-REAL-HG-06-L	6	0.014	100.0	1.0
AD2004-REAL-HG-07-H	3	0.015	100.0	1.0
AD2004-REAL-HG-07-L	3	0.014	100.0	1.0
AD2004-REAL-HG-08-H	6	0.014	100.0	1.0
AD2004-REAL-HG-08-L	3	0.014	100.0	1.0
AD2004-REAL-HG-09-H	6	0.015	100.0	1.0
AD2004-REAL-HG-09-L	3	0.014	100.0	1.0
AD2004-REAL-HG-10-H	6	0.014	100.0	1.0
AD2004-REAL-HG-10-L	3	0.015	100.0	1.0
AD2004-REAL-HG-11-H	6	0.015	100.0	1.0
AD2004-REAL-HG-11-L	3	0.013	100.0	1.0
AD2004-REAL-HG-12-H	6	0.015	100.0	1.0
AD2004-REAL-HG-12-L	3	0.016	100.0	1.0
AD2004-REAL-HG-13H	6	0.015	100.0	1.0
AD2004-REAL-HG-13-L	3	0.016	100.0	1.0
AD2004-REAL-HG-14-H	6	0.015	100.0	1.0
AD2004-REAL-HG-14-L	6	0.016	100.0	1.0
AD2004-REAL-HG-15-H	3	0.014	100.0	1.0
AD2004-REAL-HG-15-L	3	0.016	100.0	1.0
AD2004-REAL-HG-16-H	6	0.015	100.0	1.0
AD2004-REAL-HG-16-L	3	0.016	100.0	1.0
AD2004-REAL-HG-17-H	6	0.015	100.0	1.0
AD2004-REAL-HG-17-L	3	0.016	100.0	1.0

**Table 3-4. R.I. Supplemental Sampling:
Building 615 Mercury Real-Time Air Sampling Results
(Sampled 6/26/04; Method: Zeeman Portable RA-915+)**

Sample I.D.	Height Above Floor (ft)	Mercury Air Conc. (ug/m3)	OSHA Limit (ug/m3)	NYSDEC Scree Level (ug/m3)
AD2004-REAL-HG-18-HH	6	0.017	100.0	1.0
AD2004-REAL-HG-18-MH	3	0.017	100.0	1.0
AD2004-REAL-HG-18-ML	1	0.015	100.0	1.0
AD2004-REAL-HG-18-LL	0	0.016	100.0	1.0
AD2004-REAL-HG-19-HH	6	0.016	100.0	1.0
AD2004-REAL-HG-19-MH	3	0.015	100.0	1.0
AD2004-REAL-HG-19-ML	1	0.016	100.0	1.0
AD2004-REAL-HG-19-LL	0	0.016	100.0	1.0
AD2004-REAL-HG-20-HH	6	0.015	100.0	1.0
AD2004-REAL-HG-20-MH	3	0.016	100.0	1.0
AD2004-REAL-HG-20-ML	1	0.016	100.0	1.0
AD2004-REAL-HG-20-LL	0	0.016	100.0	1.0
AD2004-REAL-HG-21-HH	6	0.016	100.0	1.0
AD2004-REAL-HG-21-MH	3	0.016	100.0	1.0
AD2004-REAL-HG-21-ML	1	0.015	100.0	1.0
AD2004-REAL-HG-21-LL	0	0.015	100.0	1.0
AD2004-REAL-HG-22-HH	6	0.015	100.0	1.0
AD2004-REAL-HG-22-MH	3	0.016	100.0	1.0
AD2004-REAL-HG-22-ML	1	0.015	100.0	1.0
AD2004-REAL-HG-22-LL	0	0.016	100.0	1.0
AD2004-REAL-HG-23H	6	0.016	100.0	1.0
AD2004-REAL-HG-23-L	3	0.016	100.0	1.0
AD2004-REAL-HG-24-H	6	0.015	100.0	1.0
AD2004-REAL-HG-24-L	6	0.016	100.0	1.0
AD2004-REAL-HG-25-H	3	0.016	100.0	1.0
AD2004-REAL-HG-25-L	3	0.015	100.0	1.0
AD2004-REAL-HG-26-H	6	0.016	100.0	1.0
AD2004-REAL-HG-26-L	3	0.016	100.0	1.0
AD2004-REAL-HG-27-H	6	0.016	100.0	1.0
AD2004-REAL-HG-27-L	3	0.015	100.0	1.0
AD2004-REAL-HG-28-H	6	0.015	100.0	1.0
AD2004-REAL-HG-28-L	3	0.015	100.0	1.0
AD2004-REAL-HG-29-H	6	0.014	100.0	1.0
AD2004-REAL-HG-29-L	3	0.015	100.0	1.0

**Table 3-4. R.I. Supplemental Sampling:
Building 615 Mercury Real-Time Air Sampling Results
(Sampled 6/26/04; Method: Zeeman Portable RA-915+)**

Sample I.D.	Height Above Floor (ft)	Mercury Air Conc. (ug/m3)	OSHA Limit (ug/m3)	NYSDEC Scree Level (ug/m3)
AD2004-REAL-HG-30-H	6	0.012	100.0	1.0
AD2004-REAL-HG-30-L	3	0.012	100.0	1.0
AD2004-REAL-HG-31-H	6	0.012	100.0	1.0
AD2004-REAL-HG-31-L	3	0.011	100.0	1.0
AD2004-REAL-HG-32-H	6	0.012	100.0	1.0
AD2004-REAL-HG-32-L	3	0.012	100.0	1.0
AD2004-REAL-HG-33H	6	0.009	100.0	1.0
AD2004-REAL-HG-33-L	3	0.009	100.0	1.0
AD2004-REAL-HG-34-H	6	0.01	100.0	1.0
AD2004-REAL-HG-34-L	6	0.009	100.0	1.0
AD2004-REAL-HG-35-H	3	0.008	100.0	1.0
AD2004-REAL-HG-35-L	3	0.008	100.0	1.0
AD2004-REAL-HG-36-H	6	0.007	100.0	1.0
AD2004-REAL-HG-36-L	3	0.006	100.0	1.0
AD2004-REAL-HG-37-H	6	0.008	100.0	1.0
AD2004-REAL-HG-37-L	3	0.009	100.0	1.0
AD2004-REAL-HG-38-H	6	0.009	100.0	1.0
AD2004-REAL-HG-38-L	3	0.009	100.0	1.0
AD2004-REAL-HG-39-H	6	0.009	100.0	1.0
AD2004-REAL-HG-39-L	3	0.009	100.0	1.0
AD2004-REAL-HG-40-H	6	0.009	100.0	1.0
AD2004-REAL-HG-40-L	3	0.009	100.0	1.0
AD2004-REAL-HG-41-H	6	0.013	100.0	1.0
AD2004-REAL-HG-41-L	3	0.013	100.0	1.0
AD2004-REAL-HG-42-H	6	0.008	100.0	1.0
AD2004-REAL-HG-42-L	3	0.008	100.0	1.0
AD2004-REAL-HG-43H	6	0.024	100.0	1.0
AD2004-REAL-HG-43-L	3	0.022	100.0	1.0
AD2004-REAL-HG-44-HH	6	0.019	100.0	1.0
AD2004-REAL-HG-44-MH	3	0.017	100.0	1.0
AD2004-REAL-HG-44-ML	0	0.038	100.0	1.0
AD2004-REAL-HG-44-LL	-0.5'	0.082	100.0	1.0

* Inside drainpipe

**Table 3-5. R.I. Supplemental Sampling:
Building 615 Mercury Air Samples, with Laboratory Analysis
(Sampled 6/28/04; Method: NIOSH 6009)**

Sample I.D.	Height Above Floor (ft)	Mercury Air Conc. (ug/m3)	Laboratory Flag	OSHA Limit (ug/m3)	NYSDEC Screen Level (ug/m3)
AD2004-AIR-HG-01-H	6	0.55	U	100.0	1.0
AD2004-AIR-HG-01-L	3	0.61	U	100.0	1.0
AD2004-AIR-HG-02-H	6	0.60	U	100.0	1.0
AD2004-AIR-HG-02-L	3	0.64	U	100.0	1.0
AD2004-AIR-HG-03-H	6	0.57	U	100.0	1.0
AD2004-AIR-HG-03-L	3	0.55	U	100.0	1.0
AD2004-AIR-HG-04-H	6	0.54	U	100.0	1.0
AD2004-AIR-HG-24-H*	6	0.54	U	100.0	1.0
AD2004-AIR-HG-04-L	3	0.57	U	100.0	1.0
AD2004-AIR-HG-24-L**	3	0.60	U	100.0	1.0
AD2004-AIR-HG-05-H	6	0.60	U	100.0	1.0
AD2004-AIR-HG-05-L	3	0.57	U	100.0	1.0
AD2004-AIR-HG-06-H	6	0.54	U	100.0	1.0
AD2004-AIR-HG-06-L	3	0.61	U	100.0	1.0
AD2004-AIR-HG-07-H	6	0.66	U	100.0	1.0
AD2004-AIR-HG-07-L	3	0.59	U	100.0	1.0
AD2004-AIR-HG-08-H	6	0.60	U	100.0	1.0
AD2004-AIR-HG-08-L	3	0.59	U	100.0	1.0
AD2004-AIR-HG-09-H	6	0.59	U	100.0	1.0
AD2004-AIR-HG-09-L	3	0.56	U	100.0	1.0
AD2004-AIR-HG-10-H	6	1.30	U	100.0	1.0
AD2004-AIR-HG-10-L	3	0.63	U	100.0	1.0
AD2004-BKGA-HG-01-H	6	0.57	U	100.0	1.0
AD2004-BKGA-HG-01-L	3	0.58	U	100.0	1.0
Field Blank	N/A	0.03	U	100.0	1.0

*QC duplicate of AD2004-AIR-HG-04-H

**Above is QC duplicate of AD2004-AIR-HG-04-L

N/A = Not Analyzed

U = Between instrument detection limit and contract required detection limit.

**Table 3-6. R.I. Supplemental Sampling: Ft. Totten,
Building 615 Drainpipe, Mercury**
(Methods: EPA SW-846: 7400)

COMPOUND	Ad2004-PS-01 Drainpipe end sample (~0.1' inside) Sampled 8/05/04	Ad2004-SD-615 Drainpipe sample (~17' inside) Sampled 8/30/04
ALUMINUM	N/A	N/A
ANTIMONY	N/A	N/A
ARSENIC	N/A	N/A
BARIUM	N/A	N/A
BERYLLIUM	N/A	N/A
CADMIUM	N/A	N/A
CALCIUM	N/A	N/A
CHROMIUM	N/A	N/A
COBALT	N/A	N/A
COPPER	N/A	N/A
IRON	N/A	N/A
LEAD	N/A	N/A
MAGNESIUM	N/A	N/A
MANGANESE	N/A	N/A
MERCURY	6.25	10
NICKEL	N/A	N/A
POTASSIUM	N/A	N/A
SELENIUM	N/A	N/A
SILVER	N/A	N/A
SODIUM	N/A	N/A
THALLIUM	N/A	N/A
VANADIUM	N/A	N/A
ZINC	N/A	N/A

N/A = Not Analyzed

TABLE 4-1 SUMMARY OF SAMPLES ASSOCIATED WITH EACH HHRA RISK AREA

Sample ID	Sample Date	Sample ID	Sample Date
Total Soil, Fill Area		Total Soil, Other Area (continued)	
FLA-SB-09-01	18-08-98	FSS-SB-03-01	21-08-98
FLA-SB-09-02	18-08-98	FSS-SB-03-02	21-08-98
FLA-SB-09-05	18-08-98	FSS-SB-03-04	21-08-98
FLA-SB-09-07	18-08-98	FSS-SB-03-05	21-08-98
FLA-SB-10-01	18-08-98	FSS-SB-03-07	21-08-98
FLA-SB-10-02	19-08-98	FSS-SB-04-01	22-08-98
FLA-SB-10-03	19-08-98	FSS-SB-04-03	24-08-98
FLA-SB-11-01	19-08-98	FSS-SB-05-01	22-08-98
FLA-SB-11-02	19-08-98	FSS-SB-05-02	22-08-98
FLA-SB-11-03	19-08-98	FSS-SB-05-03	22-08-98
FLA-SB-11-05	19-08-98	FSS-SB-06-01	25-08-98
FLA-SB-12-01	19-08-98	FSS-SB-06-02	25-08-98
FLA-SB-12-02	19-08-98	FSS-SB-06-03	25-08-98
FLA-SB-12-03	20-08-98	FSS-SB-07-01	24-08-98
FLA-SB-13-03	20-08-98	FSS-SB-07-02	24-08-98
FLA-SS-46-01	22-07-00	FSS-SB-07-04	24-08-98
FLA-SS-47-01	22-07-00	FSS-SB-07-05	24-08-98
FLA-SS-48-01	22-07-00	FSS-SB-07-07	24-08-98
FLA-SS-49-01	22-07-00	FSS-SB-08-01	25-08-98
FLA-SS-50-01	22-07-00	FSS-SB-08-02	25-08-98
FLA-SS-51-01	22-07-00	FSS-SB-08-03	25-08-98
FLA-SS-52-01	22-07-00	FSS-SS-01-01	21-07-00
FSS-SB-13-01	20-08-98	FSS-SS-02-01	21-07-00
FSS-SB-13-03	20-08-98	FSS-SS-03-01	21-07-00
SS-10-DP	21-06-04	FSS-SS-04-01	21-07-00
SS-10-SH	21-06-04	FSS-SS-05-01	21-07-00
SS-11-DP	21-06-04	FSS-SS-06-01	21-07-00
SS-11-SH	21-06-04	FSS-SS-07-01	21-07-00
SS-B11-DP	26-08-04	FSS-SS-08-01	21-07-00
SS-B11-SH	26-08-04	FSS-SS-09-01	21-07-00
Total Soil, Other Area		FSS-SS-10-01	21-07-00
FSS-SB-01-01	22-08-98	FSS-SS-11-01	21-07-00
FSS-SB-01-02	22-08-98	FSS-SS-12-01	21-07-00
FSS-SB-01-03	22-08-98	FSS-SS-13-01	21-07-00
FSS-SB-02-01	24-08-98	FSS-SS-14-01	21-07-00
FSS-SB-02-02	24-08-98	FSS-SS-15-01	21-07-00
FSS-SB-02-03	24-08-98	FSS-SS-16-01	21-07-00

TABLE 4-1 SUMMARY OF SAMPLES ASSOCIATED WITH EACH HHRA RISK AREA

Sample ID	Sample Date	Sample ID	Sample Date
Groundwater			
MW1-GW-01-01	20-08-98	MW4-GW-01-01	20-08-98
MW1-GW-01-01	12-07-00	GW-MW4R-01	04-08-04
MW1-GW-01-01	10-04-02	MW4-GW-01-01	14-07-00
MW2-GW-01-01	20-08-98	MW4-GW-01-01	25-04-02
MW2-GW-01-01	15-07-00	MW5-GW-01-01	20-08-98
MW2-GW-01-01	25-04-02	MW5-GW-01-01	13-07-00
MW3-GW-01-01	20-08-98	MW5-GW-01-01	10-04-02
MW3-GW-01-01	12-07-00	GW-MW4R-01	04-08-04
MW3-GW-01-01	10-04-02		

TABLE 4-2 SUMMARY OF TOTAL SOIL DATA, FILL AREA

CAS Number	Analyte	Minimum Concentration (mg/kg) ^(a)	Qualifier of Minimum	Maximum Concentration (mg/kg) ^(a)	Qualifier of Maximum	Maximum Location	Date Sampled	Sample Depth	Detection Frequency
193-39-5	INDENO[1,2,3-C,D]PYRENE	0.086	J	0.7		FLA-SS-48-01	07-22-00	SS	18/22
91-57-6	2-METHYLNAPHTHALENE	0.014		0.15	J	FLA-SB-11-05	08-19-98	16' - 18'	10/22
91-20-3	NAPHTHALENE	0.0099		0.16	J	FLA-SS-48-01	07-22-00	SS	15/22
85-01-8	PHENANTHRENE	0.056		2.7		FLA-SB-11-05	08-19-98	16' - 18'	18/22
129-00-0	PYRENE	0.089	J	2.7		FLA-SB-11-05	08-19-98	16' - 18'	19/22
SEMIVOLATILES									
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	0.038	J	1.8		FLA-SS-51-01	07-22-00	SS	18/22
85-68-7	BUTYLBENZYLPHTHALATE	0.023		0.078	/U	SS-11-SH	06-21-04	2-12 "	5/22
132-64-9	DIBENZOFURAN	0.011		0.28	J	FLA-SB-11-05	08-19-98	16' - 18'	6/22
84-74-2	DIBUTYLPHTHALATE	0.043	J	0.34		SS-10-SH	06-21-04	2-12 "	7/13
VOLATILES									
78-93-3	2-BUTANONE	0.0014	U	0.36	U	FLA-SB-11-03	19-08-98	2' - 3'	1/9
67-64-1	ACETONE	0.0084	J	0.7	J	FLA-SB-11-03	19-08-98	2' - 3'	9/9
71-43-2	BENZENE	0.0023	U	0.18	U	FLA-SB-11-03	19-08-98	2' - 3'	2/9
75-15-0	CARBON DISULFIDE	0.0023	U	0.18	U	FLA-SB-11-03	19-08-98	2' - 3'	1/9
108-88-3	TOLUENE	0.0022	J	0.18	U	FLA-SB-11-03	19-08-98	2' - 3'	1/9
79-01-6	TRICHLOROETHENE	0.0023	U	0.18	U	FLA-SB-11-03	19-08-98	2' - 3'	1/9
75-01-4	VINYL CHLORIDE	0.0023	U	0.18	U	FLA-SB-11-03	19-08-98	2' - 3'	1/9

(a) Reported concentration represents 1/2 the detection limit when the qualifier is "U".

U = Compound was analyzed for but not detected.

N = Spiked sample recovery was not within normal limits.

B = Reported value is less than the Contract Required Detection Limit (CRDL), but greater than the Instrument Detection Limit (IDL).

* = Duplicate Analyses were not within normal limits.

J = Reported value is estimated.

TABLE 4-3 SUMMARY OF TOTAL SOIL DATA, OTHER AREA

CAS Number	Analyte	Minimum Concentration (mg/kg) ^(a)	Qualifier of Minimum	Maximum Concentration (mg/kg) ^(a)	Qualifier of Maximum	Maximum Location	Date Sampled	Sample Depth	Detection Frequency
PAH									
83-32-9	ACENAPHTHENE	0.006		0.14	J	FSS-SS-31-01	07-21-00	SS	10/70
208-96-8	ACENAPHTHYLENE	0.0089		1.5		FSS-SS-12-01	07-21-00	SS	35/70
120-12-7	ANTHRACENE	0.013		0.39		FSS-SS-12-01	07-21-00	SS	39/70
56-55-3	BENZ[A]ANTHRACENE	0.026	/	4.1		FSS-SS-12-01	07-21-00	SS	58/70
50-32-8	BENZO[A]PYRENE	0.0305	J/	6.3	D	FSS-SS-12-01	07-21-00	SS	58/70
205-99-2	BENZO[B]FLUORANTHENE	0.0305	/	8.8	D	FSS-SS-12-01	07-21-00	SS	59/70
191-24-2	BENZO[G,H,I]PERYLENE	0.033	J	4.1		FSS-SS-15-01	07-21-00	SS	56/70
207-08-9	BENZO[K]FLUORANTHENE	0.019	J/U	2.7		FSS-SS-12-01	07-21-00	SS	56/70
218-01-9	CHRYSENE	0.0275	J/	4.6	D	FSS-SS-12-01	07-21-00	SS	58/70
53-70-3	DIBENZO[A,H]ANTHRACENE	0.026	J	1		FSS-SS-12-01	07-21-00	SS	29/70
206-44-0	FLUORANTHENE	0.018		6.4	D	FSS-SS-12-01	07-21-00	SS	60/70
86-73-7	FLUORENE	0.012		0.21	J	FSS-SS-31-01	07-21-00	SS	14/70
193-39-5	INDENO[1,2,3-C]DIPYRENE	0.024	J	4.1		FSS-SS-15-01	07-21-00	SS	57/70
91-57-6	2-METHYLNAPHTHALENE	0.0071		0.33	J	FSS-SS-17-01	07-21-00	SS	24/70
91-20-3	NAPHTHALENE	0.0072		0.29	J	FSS-SS-12-01	07-21-00	SS	30/70
85-01-8	PHENANTHRENE	0.012		1.4		FSS-SS-31-01	07-21-00	SS	59/70
129-00-0	PYRENE	0.0095	J	7.7	D	FSS-SS-12-01	07-21-00	SS	61/70
SEMIVOLATILES									
95-57-8	2-CHLOROPHENOL	0.39	J	0.39	J	FSS-SS-03-01	07-21-00	SS	1/53
	4-CHLOROPHENYL PHENYL ETHER	0.38	J	0.38	J	FSS-SS-04-01	07-21-00	SS	1/53
7005-72-3	4-METHYLPHENOL	0.055	J	0.055	J	FSS-SS-29-01	07-21-00	SS	1/53
106-44-5	BIS(2-ETHYLHEXYL)PHTHALATE	0.021	J	74	D	FSS-SS-20-01	07-21-00	SS	63/70
117-81-7	BUTYLBENZYL PHTHALATE	0.0086		0.3	J	FSS-SS-29-01	07-21-00	SS	31/70
85-68-7	DIBENZOFURAN	0.0084		0.16	J	FSS-SS-31-01	07-21-00	SS	11/70
132-64-9	DIBUTYL PHTHALATE	0.028		0.32		SS-09-DP	06-21-04	12-24 "	26/53
84-74-2		0.01		0.24	J	FSS-SS-20-01	07-21-00	SS	2/53
117-84-0	DIOCTYL PHTHALATE								

TABLE 4.4 SUMMARY OF GROUNDWATER DATA

CAS Number	Analyte	Minimum Concentration (mg/L) ^(a)	Qualifier of Minimum	Maximum Concentration (mg/L) ^(a)	Qualifier of Maximum	Maximum Location	Date Sampled	Detection Frequency
INORGANICS								
7429-90-5	ALUMINUM	0.05		0.7965		MW4-GW-01-01	08-20-98	13/15
7440-36-0	ANTIMONY	0.001	B	0.0038	B	MW1-GW-01-01	08-20-98	3/15
7440-39-3	BARIUM	0.015		0.224		MW1-GW-01-01	08-20-98	13/15
7440-43-9	CADMIUM	0.0003	B	0.0004	B	MW1-GW-01-01	07-12-00	3/15
7440-70-2	CALCIUM	7.89		76.3		MW1-GW-01-01	08-20-98	15/15
7440-47-3	CHROMIUM	0.0016	B	0.051		MW1-GW-01-01	04-10-02	10/15
7440-48-4	COBALT	0.003		0.003		MW2-GW-01-01	04-25-02	1/15
7440-50-8	COPPER	0.0011	B	0.014		MW4-GW-01-01	04-25-02	5/15
7439-89-6	IRON	0.0747	B	1.85		MW1-GW-01-01	08-20-98	13/15
7439-92-1	LEAD	0.0014	B	0.013		MW4-GW-01-01	04-25-02	7/15
7439-95-4	MAGNESIUM	2.88		41.9		MW1-GW-01-01	08-20-98	15/15
7439-96-5	MANGANESE	0.0047	B	0.0605		MW1-GW-01-01	08-20-98	7/15
7440-02-0	NICKEL	0.003	B	0.204		MW1-GW-01-01	08-20-98	8/15
7440-09-7	POTASSIUM	0.552	B	4.26		MW1-GW-01-01	07-12-00	15/15
7782-49-2	SELENIUM	0.0023	B/B	0.004	B	MW4-GW-01-01	07-14-00	4/15
7440-23-5	SODIUM	6.7		110		MW4-GW-01-01	04-25-02	15/15
7440-62-2	VANADIUM	0.0009		0.0009		MW1-GW-01-01	04-10-02	1/15
7440-66-6	ZINC	0.0046	B	0.04		MW4-GW-01-01	04-25-02	6/15
PAH								
83-32-9	ACENAPHTHENE	0.0008	J	0.0008	J	MW4-GW-01-01	25-04-02	1/10
120-12-7	ANTHRACENE	0.0001	U	0.002		MW4-GW-01-01	25-04-02	2/11
56-55-3	BENZ[A]ANTHRACENE	0.00002	J	0.01		MW4-GW-01-01	25-04-02	3/11
50-32-8	BENZO[A]PYRENE	0.00014	U/	0.01		MW4-GW-01-01	25-04-02	2/10
205-99-2	BENZO[B]FLUORANTHENE	0.00003		0.02		MW4-GW-01-01	25-04-02	3/11
191-24-2	BENZO[G,H]PERYLENE	0.000062	U/	0.009		MW4-GW-01-01	25-04-02	3/11
207-08-9	BENZO[K]FLUORANTHENE	0.00001		0.006		MW4-GW-01-01	25-04-02	3/11
218-01-9	CHRYSENE	0.00001		0.014		MW4-GW-01-01	25-04-02	3/11
53-70-3	DIBENZ[A,H]ANTHRACENE	0.0005	P	0.002		MW4-GW-01-01	25-04-02	2/11
206-44-0	FLUORANTHENE	0.000215	/	0.032		MW4-GW-01-01	25-04-02	3/11
86-73-7	FLUORENE	0.0009	J	0.0009	J	MW4-GW-01-01	25-04-02	1/11
193-39-5	INDENO[1,2,3-C,D]PYRENE	0.00004		0.01	U	MW4-GW-01-01	25-04-02	3/11
91-20-3	NAPHTHALENE	0.0009	J	0.0009	J	MW4-GW-01-01	25-04-02	1/11
85-01-8	PHENANTHRENE	0.00011	U/	0.017		MW4-GW-01-01	25-04-02	3/11
129-00-0	PYRENE	0.000187	/	0.023		MW4-GW-01-01	25-04-02	3/11

TABLE 4-5 MEDIUM-SPECIFIC EXPOSURE POINT CONCENTRATION SUMMARY (FORT TOTTEN COAST GUARD STATION-TOTAL SOIL-FILL AREA)

Scenario Timeframe: Current/Future												
Medium: Total Soil												
Exposure Medium: Total Soil												
Exposure Point: Total Soil												
Chemical of Potential Concern	Units	Arithmetic Mean	Distribution Tests				95% UCL of Mean	Maximum Detected Concentration	Maximum Qualifier	Reasonable Maximum Exposure		
			W	Prob	W-Log	Prob				Medium EPC Value	Medium EPC Statistic	Medium EPC Rationale
INORGANICS												
Aluminum	mg/kg	6.81E+03	0.74	0.0001	0.87	0.0083	8.01E+03	1.75E+04		8.01E+03	95%UCLM	EPA 1989
Antimony	mg/kg	1.66E+00	0.70	0.0000	0.99	0.9870	2.69E+00	8.05E+00	/	2.69E+00	95%UCLM	EPA 1989
Arsenic	mg/kg	4.84E+00	0.93	0.1500	0.70	0.0000	5.89E+00	9.50E+00		5.89E+00	95%UCLM	EPA 1989
Barium	mg/kg	1.69E+02	0.93	0.1400	0.94	0.2011	2.08E+02	3.59E+02	/	2.08E+02	95%UCLM	EPA 1989
Beryllium	mg/kg	2.78E-01	0.96	0.6184	0.73	0.0001	3.33E-01	5.40E-01	B	3.33E-01	95%UCLM	EPA 1989
Cadmium	mg/kg	7.23E-01	0.88	0.0177	0.80	0.0007	9.72E-01	2.50E+00		9.72E-01	95%UCLM	EPA 1989
Chromium	mg/kg	2.10E+01	0.95	0.3570	0.97	0.6660	2.33E+01	3.15E+01	/J	2.33E+01	95%UCLM	EPA 1989
Cobalt	mg/kg	6.29E+00	0.93	0.1520	0.96	0.6070	7.01E+00	1.01E+01		7.01E+00	95%UCLM	EPA 1989
Copper	mg/kg	8.84E+01	0.84	0.0024	0.96	0.5600	1.65E+02	3.31E+02	/	1.65E+02	95%UCLM	EPA 1989
Lead	mg/kg	4.17E+02	0.92	0.0698	0.82	0.0012	5.52E+02	1.13E+03	/	5.52E+02	95%UCLM	EPA 1989
Manganese	mg/kg	2.79E+02	0.89	0.0236	0.90	0.0367	3.16E+02	5.77E+02	/	3.16E+02	95%UCLM	EPA 1989
Mercury	mg/kg	6.78E-01	0.88	0.0139	0.85	0.0039	8.94E-01	2.45E+00	/	8.94E-01	95%UCLM	EPA 1989
Nickel	mg/kg	1.97E+01	0.94	0.1960	0.97	0.7350	2.13E+01	3.15E+01		2.13E+01	95%UCLM	EPA 1989
Selenium	mg/kg	4.01E-01	0.85	0.0038	0.83	0.0020	5.14E-01	1.10E+00		5.14E-01	95%UCLM	EPA 1989
Silver	mg/kg	2.09E-01	0.76	0.0002	0.87	0.0087	2.81E-01	6.60E-01	/U	2.81E-01	95%UCLM	EPA 1989
Thallium	mg/kg	1.15E-01	0.92	0.1130	0.96	0.5440	1.32E-01	2.30E-01	B	1.32E-01	95%UCLM	EPA 1989
Vanadium	mg/kg	2.33E+01	0.96	0.5389	0.96	0.4901	2.53E+01	3.30E+01		2.53E+01	95%UCLM	EPA 1989
Zinc	mg/kg	3.08E+02	0.93	0.1510	0.85	0.0035	3.91E+02	8.50E+02		3.91E+02	95%UCLM	EPA 1989
PAH												
2-Methylnaphthalene	mg/kg	6.52E-02	0.81	0.0008	0.83	0.0018	8.47E-02	1.50E-01	J	8.47E-02	95%UCLM	EPA 1989
Acenaphthene	mg/kg	1.17E-01	0.86	0.0052	0.79	0.0003	1.49E-01	3.70E-01	J	1.49E-01	95%UCLM	EPA 1989
Acenaphthylene	mg/kg	5.46E-02	0.58	0.0000	0.81	0.0008	7.28E-02	5.30E-02	J	5.30E-02	Maximum	EPA 1989
Anthracene	mg/kg	1.42E-01	0.57	0.0000	0.90	0.0256	2.07E-01	8.80E-01		2.07E-01	95%UCLM	EPA 1989
Benzo(a)anthracene	mg/kg	3.85E-01	0.92	0.0770	0.84	0.0027	4.93E-01	1.10E+00		4.93E-01	95%UCLM	EPA 1989
Benzo(a)pyrene	mg/kg	3.78E-01	0.96	0.3970	0.79	0.0003	4.68E-01	8.70E-01		4.68E-01	95%UCLM	EPA 1989
Benzo(b)fluoranthene	mg/kg	4.57E-01	0.94	0.2210	0.82	0.0009	5.72E-01	1.10E+00		5.72E-01	95%UCLM	EPA 1989
Benzo(g,h,i)perylene	mg/kg	2.59E-01	0.96	0.5480	0.78	0.0003	3.17E-01	6.30E-01		3.17E-01	95%UCLM	EPA 1989
Benzo(k)fluoranthene	mg/kg	1.92E-01	0.97	0.7540	0.83	0.0013	2.32E-01	4.30E-01		2.32E-01	95%UCLM	EPA 1989
Chrysene	mg/kg	4.18E-01	0.93	0.1510	0.80	0.0005	5.27E-01	1.20E+00		5.27E-01	95%UCLM	EPA 1989
Dibenz(a,h)anthracene	mg/kg	1.09E-01	0.91	0.0514	0.82	0.0009	1.33E-01	1.80E-01	J	1.33E-01	95%UCLM	EPA 1989
Fluoranthene	mg/kg	6.42E-01	0.89	0.0209	0.84	0.0025	8.28E-01	1.90E+00		8.28E-01	95%UCLM	EPA 1989

TABLE 4-6 MEDIUM-SPECIFIC EXPOSURE POINT CONCENTRATION SUMMARY (FORT TOTTEN COAST GUARD STATION-TOTAL SOIL-OTHER AREA)

Scenario Timeframe: Current/Future													
Medium: Total Soil													
Exposure Medium: Total Soil													
Exposure Point: Total soil													
Chemical of Potential Concern	Units	Arithmetic Mean	Distribution Tests				95% UCL of Mean	Maximum Detected Concentration	Maximum Qualifier	Reasonable Maximum Exposure			
			W	Prob	W-Log	Prob				Distribution	Medium EPC Value	Medium EPC Statistic	Medium EPC Rationale
INORGANICS													
Aluminum	mg/kg	8.66E+03	0.91	0.0000	0.96	0.0226	BOOTSTRAP	9.31E+03	2.13E+04		9.31E+03	95%UCLM	EPA 1989
Antimony	mg/kg	5.73E-01	0.92	0.0001	0.95	0.0030	BOOTSTRAP	6.35E-01	1.80E+00	N	6.35E-01	95%UCLM	EPA 1989
Arsenic	mg/kg	4.90E+00	0.88	0.0000	0.81	0.0000	BOOTSTRAP	5.47E+00	1.92E+01		5.47E+00	95%UCLM	EPA 1989
Barium	mg/kg	7.50E+01	0.80	0.0000	0.98	0.2540	LOGNORMAL	8.18E+01	2.95E+02		8.18E+01	95%UCLM	EPA 1989
Beryllium	mg/kg	2.63E-01	0.98	0.2356	0.94	0.0013	NORMAL	2.85E-01	5.30E-01	B / B	2.85E-01	95%UCLM	EPA 1989
Cadmium	mg/kg	2.91E-01	0.87	0.0000	0.93	0.0002	BOOTSTRAP	3.39E-01	9.90E-01		3.39E-01	95%UCLM	EPA 1989
Chromium	mg/kg	1.87E+01	0.93	0.0005	0.89	0.0000	BOOTSTRAP	1.96E+01	3.32E+01	*	1.96E+01	95%UCLM	EPA 1989
Cobalt	mg/kg	6.32E+00	0.51	0.0000	0.91	0.0000	BOOTSTRAP	7.02E+00	3.55E+01		7.02E+00	95%UCLM	EPA 1989
Copper	mg/kg	6.74E+01	0.14	0.0000	0.81	0.0000	BOOTSTRAP	1.18E+02	2.47E+03		1.18E+02	95%UCLM	EPA 1989
Lead	mg/kg	1.79E+02	0.88	0.0000	0.84	0.0000	BOOTSTRAP	2.06E+02	7.93E+02		2.06E+02	95%UCLM	EPA 1989
Manganese	mg/kg	3.00E+02	0.99	0.7010	0.90	0.0000	NORMAL	3.21E+02	6.17E+02		3.21E+02	95%UCLM	EPA 1989
Mercury	mg/kg	7.37E-01	0.65	0.0000	0.93	0.0002	BOOTSTRAP	9.29E-01	5.00E+00		9.29E-01	95%UCLM	EPA 1989
Nickel	mg/kg	1.60E+01	0.91	0.0000	0.97	0.0315	BOOTSTRAP	1.68E+01	3.37E+01		1.68E+01	95%UCLM	EPA 1989
Selenium	mg/kg	5.02E-01	0.94	0.0007	0.90	0.0000	BOOTSTRAP	5.54E-01	1.30E+00	/	5.54E-01	95%UCLM	EPA 1989
Silver	mg/kg	1.57E-01	0.27	0.0000	0.77	0.0000	BOOTSTRAP	2.10E-01	2.40E+00		2.10E-01	95%UCLM	EPA 1989
Thallium	mg/kg	1.06E-01	0.86	0.0000	0.90	0.0000	BOOTSTRAP	1.15E-01	3.10E-01	B	1.15E-01	95%UCLM	EPA 1989
Vanadium	mg/kg	2.69E+01	0.98	0.1261	0.99	0.6238	NORMAL	2.82E+01	4.77E+01		2.82E+01	95%UCLM	EPA 1989
Zinc	mg/kg	1.07E+02	0.96	0.0100	0.95	0.0057	BOOTSTRAP	1.18E+02	2.31E+02		1.18E+02	95%UCLM	EPA 1989
PAH													
2-Methylnaphthalene	mg/kg	9.27E-02	0.85	0.0000	0.85	0.0000	BOOTSTRAP	1.09E-01	3.30E-01	J	1.09E-01	95%UCLM	EPA 1989
Acenaphthene	mg/kg	1.14E-01	0.84	0.0000	0.77	0.0000	BOOTSTRAP	1.30E-01	1.40E-01	J	1.30E-01	95%UCLM	EPA 1989
Acenaphthylene	mg/kg	1.47E-01	0.52	0.0000	0.93	0.0008	BOOTSTRAP	1.94E-01	1.50E+00		1.94E-01	95%UCLM	EPA 1989
Anthracene	mg/kg	1.01E-01	0.83	0.0000	0.90	0.0000	BOOTSTRAP	1.18E-01	3.90E-01	/	1.18E-01	95%UCLM	EPA 1989
Benzo(a)anthracene	mg/kg	4.30E-01	0.55	0.0000	0.97	0.1060	LOGNORMAL	7.40E-01	4.10E+00		7.40E-01	95%UCLM	EPA 1989
Benzo(a)pyrene	mg/kg	5.33E-01	0.46	0.0000	0.97	0.0632	LOGNORMAL	8.97E-01	6.30E+00	D	8.97E-01	95%UCLM	EPA 1989
Benzo(b)fluoranthene	mg/kg	7.38E-01	0.45	0.0000	0.98	0.3310	LOGNORMAL	1.24E+00	8.80E+00	D	1.24E+00	95%UCLM	EPA 1989
Benzo(g,h,i)perylene	mg/kg	3.49E-01	0.47	0.0000	0.94	0.0016	BOOTSTRAP	4.76E-01	4.10E+00		4.76E-01	95%UCLM	EPA 1989
Benzo(k)fluoranthene	mg/kg	2.77E-01	0.52	0.0000	0.98	0.2590	LOGNORMAL	3.83E-01	2.70E+00		3.83E-01	95%UCLM	EPA 1989
Chrysene	mg/kg	4.99E-01	0.57	0.0000	0.95	0.0086	BOOTSTRAP	6.47E-01	4.60E+00	D	6.47E-01	95%UCLM	EPA 1989
Dibenz(a,h)anthracene	mg/kg	1.39E-01	0.57	0.0000	0.92	0.0002	BOOTSTRAP	1.71E-01	1.00E+00		1.71E-01	95%UCLM	EPA 1989

TABLE 4-7 MEDIUM-SPECIFIC EXPOSURE POINT CONCENTRATION SUMMARY (FORT TOTTEN COAST GUARD STATION-
GROUNDWATER)

Scenario Timeframe: Current/Future												
Medium: Groundwater												
Exposure Medium: Groundwater												
Exposure Point: Groundwater												
Chemical of Potential Concern	Units	Arithmetic Mean	Distribution Tests				95% UCL of Mean	Maximum Detected Concentration	Maximum Qualifier	Reasonable Maximum Exposure		
			Distribution Tests							Medium EPC Value	Medium EPC Statistic	Medium EPC Rationale
			W	Prob	W-Log	Distribution						
INORGANICS												
Aluminum	mg/L	2.69E-01	0.87	0.0338	0.93	0.2834	LOGNORMAL	1.40E+00	5.00E-02	7.97E-01	Maximum	EPA 1989
Antimony	mg/L	8.20E-04	0.59	0.0000	0.83	0.0106	BOOTSTRAP	1.34E-03	1.00E-03	1.34E-03	95%UCLM	EPA 1989
Barium	mg/L	6.09E-02	0.82	0.0065	0.94	0.4100	LOGNORMAL	1.48E-01	1.50E-02	1.48E-01	95%UCLM	EPA 1989
Cadmium	mg/L	1.60E-04	0.59	0.0000	0.60	0.0000	BOOTSTRAP	2.09E-04	3.00E-04	2.09E-04	95%UCLM	EPA 1989
Calcium	mg/L	3.98E+01	0.96	0.6480	0.91	0.1450	NORMAL	4.89E+01	7.89E+00	4.89E+01	95%UCLM	EPA 1989
Chromium	mg/L	1.57E-02	0.59	0.0000	0.91	0.1410	LOGNORMAL	1.81E-01	1.60E-03	5.10E-02	Maximum	EPA 1989
Cobalt	mg/L	2.79E-03	0.60	0.0000	0.58	0.0000	BOOTSTRAP	3.50E-03	3.00E-03	3.00E-03	Maximum	EPA 1989
Copper	mg/L	2.79E-03	0.63	0.0000	0.87	0.0364	BOOTSTRAP	4.63E-03	1.10E-03	4.63E-03	95%UCLM	EPA 1989
Iron	mg/L	5.60E-01	0.84	0.0120	0.84	0.0107	BOOTSTRAP	8.21E-01	7.47E-02	8.21E-01	95%UCLM	EPA 1989
Lead	mg/L	2.67E-03	0.63	0.0000	0.86	0.0241	BOOTSTRAP	4.36E-03	1.40E-03	4.36E-03	95%UCLM	EPA 1989
Magnesium	mg/L	2.14E+01	0.97	0.8850	0.88	0.0545	NORMAL	2.66E+01	2.88E+00	2.66E+01	95%UCLM	EPA 1989
Manganese	mg/L	1.18E-02	0.68	0.0001	0.91	0.1241	LOGNORMAL	4.24E-01	4.70E-03	6.05E-02	Maximum	EPA 1989
Nickel	mg/L	2.42E-02	0.48	0.0000	0.97	0.9090	LOGNORMAL	1.91E-01	3.00E-03	1.91E-01	95%UCLM	EPA 1989
Potassium	mg/L	2.09E+00	0.90	0.1080	0.96	0.7778	NORMAL	2.60E+00	5.52E-01	2.60E+00	95%UCLM	EPA 1989
Selenium	mg/L	1.45E-03	0.78	0.0022	0.84	0.0122	BOOTSTRAP	1.97E-03	2.30E-03	1.97E-03	95%UCLM	EPA 1989
Sodium	mg/L	2.88E+01	0.74	0.0006	0.92	0.1724	LOGNORMAL	5.23E+01	6.70E+00	5.23E+01	95%UCLM	EPA 1989
Vanadium	mg/L	1.93E-03	0.63	0.0000	0.60	0.0000	BOOTSTRAP	2.50E-03	9.00E-04	9.00E-04	Maximum	EPA 1989
Zinc	mg/L	8.03E-03	0.70	0.0003	0.83	0.0087	BOOTSTRAP	1.32E-02	4.60E-03	1.32E-02	95%UCLM	EPA 1989
PAH												
Acenaphthene	mg/L	2.09E-03	0.41	0.0000	0.85	0.0536	LOGNORMAL	1.36E+00	8.00E-04	8.00E-04	Maximum	EPA 1989
Anthracene	mg/L	2.39E-03	0.52	0.0000	0.87	0.0853	LOGNORMAL	2.94E+00	1.10E-03	2.00E-03	Maximum	EPA 1989
Benzo(a)anthracene	mg/L	9.57E-04	0.36	0.0000	0.72	0.0007	BOOTSTRAP	2.52E-03	2.00E-05	2.52E-03	95%UCLM	EPA 1989
Benzo(a)pyrene	mg/L	1.05E-03	0.38	0.0000	0.77	0.0061	BOOTSTRAP	2.78E-03	1.40E-04	2.78E-03	95%UCLM	EPA 1989
Benzo(b)fluoranthene	mg/L	1.87E-03	0.35	0.0000	0.75	0.0022	BOOTSTRAP	5.00E-03	3.00E-05	5.00E-03	95%UCLM	EPA 1989
Benzo(g,h,i)perylene	mg/L	1.18E-03	0.50	0.0000	0.81	0.0145	BOOTSTRAP	2.63E-03	6.20E-05	2.63E-03	95%UCLM	EPA 1989
Benzo(k)fluoranthene	mg/L	5.87E-04	0.36	0.0000	0.75	0.0024	BOOTSTRAP	1.53E-03	1.00E-05	1.53E-03	95%UCLM	EPA 1989
Chrysene	mg/L	1.31E-03	0.35	0.0000	0.71	0.0006	BOOTSTRAP	3.50E-03	1.00E-05	3.50E-03	95%UCLM	EPA 1989
Dibenz(a,h)anthracene	mg/L	2.32E-03	0.40	0.0000	0.86	0.0572	LOGNORMAL	3.63E-01	5.00E-04	2.00E-03	Maximum	EPA 1989
Fluoranthene	mg/L	3.24E-03	0.39	0.0000	0.83	0.0265	BOOTSTRAP	8.21E-03	2.15E-04	8.21E-03	95%UCLM	EPA 1989
Fluorene	mg/L	1.32E-03	0.38	0.0000	0.83	0.0214	BOOTSTRAP	3.38E-03	9.00E-04	9.00E-04	Maximum	EPA 1989

**TABLE 4-8 VALUES USED FOR RESIDENT ADULT DAILY TOTAL SOIL INTAKE
EQUATIONS, FORT TOTTEN**

Scenario Timeframe: Future Medium: Total Soil Exposure Medium: Total Soil Exposure Point: Fort Totten Receptor Population: Resident Receptor Age: Adult
--

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference
Ingestion	CR	Ingestion Rate	mg/day	100	USEPA 1991
	EF	Exposure Frequency	day/yr	350	USEPA 1991
	ED-NC	Exposure Duration	yr	30	USEPA 1989
	ED-C	Exposure Duration	yr	24	USEPA 1991
	BW	Body Weight	kg	70	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	10950	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989
	CF	Conversion Factor	kg/mg	0.000001	USEPA 1989
Dermal	SA	Surface Area for Contact	cm2/event	5700	USEPA 2000
	AF	Adherence Factor	mg/cm2	0.07	USEPA 2000
	EF	Exposure Frequency	event/yr	350	USEPA 1991
	ED-NC	Exposure Duration	yr	30	USEPA 1989
	ED-C	Exposure Duration	yr	24	USEPA 1991
	BW	Body Weight	kg	70	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	10950	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989
	CF	Conversion Factor	kg/mg	0.000001	USEPA 1989
Inhalation	IR	Inhalation Rate	m3/hr	0.833	USEPA 1991
	ET	Exposure Time	hr/day	24	BPJ
	EF	Exposure Frequency	day/yr	350	USEPA 1991
	ED-NC	Exposure Duration	yr	30	USEPA 1989
	ED-C	Exposure Duration	yr	24	USEPA 1991
	BW	Body Weight	kg	70	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	10950	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989

Note : BPJ = Best Professional Judgement

**TABLE 4-9 VALUES USED FOR RESIDENT ADULT DAILY TOTAL GROUNDWATER
INTAKE EQUATIONS, FORT TOTTEN**

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Groundwater
Exposure Point: Fort Totten
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference
Ingestion	CR	Ingestion Rate	L/day	2	USEPA 1991
	EF	Exposure Frequency	day/yr	350	USEPA 1991
	ED-NC	Exposure Duration	yr	30	USEPA 1989
	ED-C	Exposure Duration	yr	24	USEPA 1991
	BW	Body Weight	kg	70	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	10950	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989
Dermal	SA	Surface Area for Contact	cm2	18000	USEPA 1992
	PC	Permeability Coefficient	cm/hr	chemical-specific	USEPA 1997a
	ET	Event Time	hr/day		
	EF	Exposure Frequency	day/yr	350	USEPA 1991
	ED-NC	Exposure Duration	yr	30	USEPA 1989
	ED-C	Exposure Duration	yr	24	USEPA 1991
	BW	Body Weight	kg	70	USEPA 1991
	AT-NC	Averaging time - Noncancer	days	10950	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989
	CF	Conversion Factor	L/cm3	0.001	USEPA 1989

TABLE 4-10 VALUES USED FOR RESIDENT ADULT DAILY TOTAL SHOWERING INTAKE EQUATIONS, FORT TOTTEN

Scenario Timeframe: Future
Medium: Groundwater
Exposure Medium: Air
Exposure Point: Showering
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference
Inhalation	VR	Ventilation Rate	L/min	11	USEPA 1997a
	BW	Body Weight	kg	70	USEPA 1989
	EF	Exposure Frequency	event/yr	350	USEPA 1989
	ED	Exposure Duration	yr	30	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	10,950	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25,550	USEPA 1989
Parameters in the Shower Model					
		Liquid Phase t.c. CO ₂	cm/h	20	Liss and Slater 1974
		Gas Phase t.c. H ₂ O	cm/h	3,000	Liss and Slater 1974
		Water Viscosity at 20C	cp	1.002	CRC 1979
		Water Viscosity at 45C	cp	0.596	CRC 1979
		Shower Temp	K	318	Foster and Chrostowski 1987
		Droplet Diameter	mm	1	Foster and Chrostowski 1987
		Drop Time	s	2	Foster and Chrostowski 1987
		Shower Flow Rate	L/min	10	Foster and Chrostowski 1987
		Shower Stall Volume	m ³	6	Foster and Chrostowski 1987
		Shower Duration	min	15	USEPA 1997a
		Air Exchange Rate	min ⁻¹	0.0166667	Foster and Chrostowski 1987
		RT	atm-m ³ /mol	0.024	
		Duration in Shower Room	min	20	BPJ

BPJ = Best Professional Judgement

**TABLE 4-11 VALUES USED FOR RESIDENT ADULT HOMEGROWN VEGETABLE INTAKE
EQUATIONS, FORT TOTTEN**

Scenario Timeframe: Future
Medium: Total Soil
Exposure Medium: Vegetables
Exposure Point: Fort Totten
Receptor Population: Resident
Receptor Age: Adult

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference
Ingestion	CR _{ag}	Consumption rate of exposed aboveground produce	kg/kg-day	0.0003	USEPA 1998c
	CR _{pp}	Consumption rate of protected aboveground produce	kg/kg-day	0.00057	USEPA 1998c
	CR _{bg}	Consumption rate of belowground produce in kg/kg day.	kg/kg-day	0.00014	USEPA 1998c
	F _{ag}	Fraction of produce that is contaminated	unitless	0.25	USEPA 1998c
	EF	Exposure Frequency	day/yr	60	BPJ ¹
	ED-NC	Exposure Duration	yr	30	USEPA 1989
	ED-C	Exposure Duration	yr	24	USEPA 1991
	BW	Body Weight	kg	70	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	8,760	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989

1. Assumed consumption of home grown vegetables for 2 months out of the year.

**TABLE 4-12 VALUES USED FOR RESIDENT CHILD DAILY TOTAL SOIL INTAKE
EQUATIONS, FORT TOTTEN**

Scenario Timeframe: Future Medium: Total Soil Exposure Medium: Total Soil Exposure Point: Fort Totten Receptor Population: Resident Receptor Age: Child
--

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference
Ingestion	CR	Ingestion Rate	mg/day	200	USEPA 1991
	EF	Exposure Frequency	day/yr	350	USEPA 1991
	ED	Exposure Duration	yr	6	USEPA 1991
	BW	Body Weight	kg	15	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	2190	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989
	CF	Conversion Factor	kg/mg	0.000001	USEPA 1989
Dermal	SA	Surface Area for Contact	cm2/event	2800	USEPA 2000
	AF	Adherence Factor	mg/cm2	0.2	USEPA 2000
	EF	Exposure Frequency	event/yr	350	USEPA 1991
	ED	Exposure Duration	yr	6	USEPA 1991
	BW	Body Weight	kg	15	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	2190	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989
Inhalation	CF	Conversion Factor	kg/mg	0.000001	USEPA 1989
	IR	Inhalation Rate	m3/hr	0.417	USEPA 1991
	ET	Exposure Time	hr/day	24	BPJ
	EF	Exposure Frequency	day/yr	350	USEPA 1991
	ED	Exposure Duration	yr	6	USEPA 1991
	BW	Body Weight	kg	15	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	2190	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989

Note : BPJ = Best Professional Judgement

**TABLE 4-13 VALUES USED FOR RESIDENT CHILD DAILY TOTAL GROUNDWATER
INTAKE EQUATIONS, FORT TOTTEN**

Scenario Timeframe: Future Medium: Groundwater Exposure Medium: Groundwater Exposure Point: Fort Totten Receptor Population: Resident Receptor Age: Child
--

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference
Ingestion	CR	Ingestion Rate	L/day	1	USEPA 1991
	EF	Exposure Frequency	day/yr	350	USEPA 1991
	ED	Exposure Duration	yr	6	USEPA 1991
	BW	Body Weight	kg	15	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	2190	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989
Dermal	SA	Surface Area for Contact	cm2	6600	USEPA 2000
	PC	Permeability Coefficient	cm/hr	chemical-specific	
	ET	Event Time	hr/day	1	USEPA 1992
	EF	Exposure Frequency	day/yr	350	USEPA 1991
	ED	Exposure Duration	yr	6	USEPA 1991
	BW	Body Weight	kg	15	USEPA 1991
	AT-NC	Averaging time - Noncancer	days	2190	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989
	CF	Conversion Factor	L/cm3	0.001	USEPA 1989

TABLE 4-14 VALUES USED FOR RESIDENT CHILD HOMEGROWN VEGETABLE INTAKE EQUATIONS, FORT TOTTEN

Scenario Timeframe: Future
Medium: Total Soil
Exposure Medium: Vegetables
Exposure Point: Fort Totten
Receptor Population: Resident
Receptor Age: Child

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference
Ingestion	CR _{ag}	Consumption rate of exposed aboveground produce	kg/kg-day	0.00042	USEPA 1998c
	CR _{pp}	Consumption rate of protected aboveground produce	kg/kg-day	0.00077	USEPA 1998c
	CR _{bg}	Consumption rate of belowground produce in kg/kg day.	kg/kg-day	0.00022	USEPA 1998c
	F _{ag}	Fraction of produce that is contaminated	unitless	0.25	USEPA 1998c
	EF	Exposure Frequency	day/yr	60	BPJ ¹
	ED	Exposure Duration	yr	6	USEPA 1989
	BW	Body Weight	kg	15	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	2,190	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989

1. Assumed consumption of home grown vegetables for 2 months out of the year.

**TABLE 4-15 VALUES USED FOR ADOLESCENT RECREATION USER DAILY TOTAL
SOIL INTAKE EQUATIONS, FORT TOTTEN**

Scenario Timeframe: Current/Future Medium: Total Soil Exposure Medium: Total Soil Exposure Point: Fort Totten Receptor Population: Recreational User Receptor Age: Adolescent
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Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference
Ingestion	CR	Ingestion Rate	mg/day	200	BPJ
	EF	Exposure Frequency	day/yr	141	BPJ
	ED	Exposure Duration	yr	9	BPJ
	BW	Body Weight	kg	36	USEPA 1997a
	AT-NC	Averaging time - Noncancer	days	3285	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989
	CF	Conversion Factor	kg/mg	0.000001	USEPA 1989
Dermal	SA	Surface Area for Contact	cm2/event	2900	USEPA 1992
	AF	Adherence Factor	mg/cm2	0.3	USEPA 2000
	EF	Exposure Frequency	event/yr	141	BPJ
	ED	Exposure Duration	yr	9	BPJ
	BW	Body Weight	kg	36	BPJ
	AT-NC	Averaging time - Noncancer	days	3285	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989
Inhalation	CF	Conversion Factor	kg/mg	0.000001	USEPA 1989
	IR	Inhalation Rate	m3/hr	0.833	USEPA 1991
	ET	Exposure Time	hr/day	10	BPJ
	EF	Exposure Frequency	day/yr	141	BPJ
	ED	Exposure Duration	yr	9	BPJ
	BW	Body Weight	kg	36	USEPA 1997a
	AT-NC	Averaging time - Noncancer	days	2190	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989

Note : BPJ = Best Professional Judgement

**TABLE 4-16 VALUES USED FOR CONSTRUCTION WORKER DAILY TOTAL SOIL
INTAKE EQUATIONS, FORT TOTTEN**

Scenario Timeframe: Future Medium: Total Soil Exposure Medium: Total Soil Exposure Point: Fort Totten Receptor Population: Construction Worker Receptor Age: Adult

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference
Ingestion	CR	Ingestion Rate	mg/day	480	USEPA 1997a
	EF	Exposure Frequency	day/yr	150	BPJ
	ED	Exposure Duration	yr	1	BPJ
	BW	Body Weight	kg	70	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	365	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989
	CF	Conversion Factor	kg/mg	0.000001	USEPA 1989
Dermal	SA	Surface Area for Contact	cm2/event	3300	USEPA 2000
	AF	Adherence Factor	mg/cm2	0.3	USEPA 2000
	EF	Exposure Frequency	event/yr	150	BPJ
	ED	Exposure Duration	yr	1	BPJ
	BW	Body Weight	kg	70	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	365	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989
Inhalation	CF	Conversion Factor	kg/mg	0.000001	USEPA 1989
	IR	Inhalation Rate	m3/hr	0.833	USEPA 1991
	ET	Exposure Time	hr/day	8	BPJ
	EF	Exposure Frequency	day/yr	150	BPJ
	ED	Exposure Duration	yr	1	BPJ
	BW	Body Weight	kg	70	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	365	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989

Note : BPJ = Best Professional Judgement

**TABLE 4-17 VALUES USED FOR COMMERCIAL WORKER DAILY TOTAL SOIL
INTAKE EQUATIONS, FORT TOTTEN**

Scenario Timeframe: Future Medium: Total Soil Exposure Medium: Total Soil Exposure Point: Fort Totten Receptor Population: Commercial Worker Receptor Age: Adult

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/Reference
Ingestion	CR	Ingestion Rate	mg/day	50	USEPA 1991
	EF	Exposure Frequency	day/yr	250	USEPA 1991
	ED	Exposure Duration	yr	25	USEPA 1991
	BW	Body Weight	kg	70	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	9125	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989
	CF	Conversion Factor	kg/mg	0.000001	USEPA 1989
Dermal	SA	Surface Area for Contact	cm2/event	5700	USEPA 2000
	AF	Adherence Factor	mg/cm2	0.1	USEPA 2000
	EF	Exposure Frequency	event/yr	250	USEPA 1991
	ED	Exposure Duration	yr	25	USEPA 1991
	BW	Body Weight	kg	70	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	9125	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989
	CF	Conversion Factor	kg/mg	0.000001	USEPA 1989
Inhalation	IR	Inhalation Rate	m3/hr	0.833	USEPA 1991
	ET	Exposure Time	hr/day	8	BPJ
	EF	Exposure Frequency	day/yr	250	USEPA 1991
	ED	Exposure Duration	yr	25	USEPA 1991
	BW	Body Weight	kg	70	USEPA 1989
	AT-NC	Averaging time - Noncancer	days	9125	USEPA 1989
	AT-C	Averaging Time - Cancer	days	25550	USEPA 1989

Note : BPJ = Best Professional Judgement

TABLE 4-18 ACCUMULATION FACTORS USED TO CALCULATE COPC CONCENTRATIONS IN HOME GROWN PRODUCE

COPC	Combustion Guidance (USEPA 1998c)			Baes et al. (1984)		Travis and Arms (1988)		Comments
	Br _{ag}	Br _{rootveg}	VG _{rootveg}	B _v	B _t	Log K _{ow}	B _t	
METALS								
Aluminum	NA	NA	NA	0.004	0.00065	NA	NA	
Antimony	0.0319	0.03	1.0	NA	NA	NA	NA	
Arsenic	0.00633	0.008	1.0	NA	NA	NA	NA	
Barium	0.0322	0.015	1.0	NA	NA	NA	NA	
Beryllium	0.00258	0.0015	1.0	NA	NA	NA	NA	
Cadmium	0.125	0.064	1.0	NA	NA	NA	NA	
Chromium	0.00488	0.0045	1.0	NA	NA	NA	NA	
Cobalt	NA	NA	NA	0.02	0.007	NA	NA	
Copper	NA	NA	NA	NA	NA	NA	NA	Use regression (see text)
Lead	0.0136	0.009	1.0	NA	NA	NA	NA	
Manganese	NA	NA	NA	0.25	0.05	NA	NA	
Mercury	0.0145	0.036	1.0	NA	NA	NA	NA	Based on mercuric chloride
Nickel	0.0093	0.008	1.0	NA	NA	NA	NA	
Selenium	0.016	0.0195	1.0	NA	NA	NA	NA	
Silver	0.138	0.10	1.0	NA	NA	NA	NA	
Thallium	0.00086	0.0004	1.0	NA	NA	NA	NA	
Vanadium	NA	NA	NA	0.0055	0.003	NA	NA	
Zinc	0.046	0.044	1.0	NA	NA	NA	NA	
Polycyclic Aromatic Hydrocarbons (PAH)								
Acenaphthene	0.196	5.48	1.0	NA	NA	NA	NA	
Acenaphthylene	NA	NA	NA	NA	NA	4.07	0.172	
Anthracene	0.101	2.76	0.01	NA	NA	NA	NA	
Benzo(a)anthracene	0.0202	2.11	0.01	NA	NA	NA	NA	
Benzo(a)pyrene	0.0111	1.26	0.01	NA	NA	NA	NA	
Benzo(b)fluoranthene	0.01007	1.66	0.01	NA	NA	NA	NA	
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	6.58	0.0061	
Benzo(k)fluoranthene	0.0101	1.66	0.01	NA	NA	NA	NA	
Chrysene	0.0187	2.05	0.01	NA	NA	NA	NA	

TABLE 4-18 (continued)

COPC	Combustion Guidance (USEPA 1998c)				Baes et al. (1984)		Travis and Arms (1988)		Comments
	Br _{ag}	Br _{rootveg}	VG _{rootveg}		B _v	B _t	Log K _{ow}	B _t	
Dibenz(a,h)anthracene	0.0064	1.43	0.01		NA	NA	NA	NA	
Fluoranthene	0.0446	3.9	0.01		NA	NA	NA	NA	
Fluorene	0.151	4.96	0.01		NA	NA	NA	NA	
Indeno(1,2,3-c,d)pyrene	0.0039	1.19	0.01		NA	NA	NA	NA	
2-Methylnaphthalene	0.435	8.23	1.0		NA	NA	NA	NA	Used naphthalene as surrogate
Naphthalene	0.435	8.23	1.0		NA	NA	NA	NA	
Phenanthrene	0.0908	1.49	0.01		NA	NA	NA	NA	
Pyrene	0.0498	2.44	0.01		NA	NA	NA	NA	
Semivolatile Organic Chemicals									
2-Chlorophenol	2.18	4.4	1.0		NA	NA	NA	NA	
4-Chlorophenylphenylether	0.068	1.48	0.01		NA	NA	NA	NA	Used 3-Chlorophenylphenylether as surrogate
4-Methylphenol	2.93	29.4	1.0		NA	NA	NA	NA	
Bis(2-ethylhexyl)phthalate	0.038	2.13	0.01		NA	NA	NA	NA	
Butylbenzylphthalate	0.109	4.27	0.01		NA	NA	NA	NA	
Carbazole	NA	NA	NA		NA	NA	3.72	0.274	
Dibenzofuran	NA	NA	NA		NA	NA	4.12	0.161	
Dibutylphthalate	0.0724	64.3	0.01		NA	NA	NA	NA	
Diocetylphthalate	0.00016	0.393	0.01		NA	NA	NA	NA	
Volatile Organic Chemicals									
2-Butanone	26.7	286	1.0		NA	NA	NA	NA	
Acetone	52	680	1.0		NA	NA	NA	NA	
Benzene	2.25	26.7	1.0		NA	NA	NA	NA	
Carbon disulfide	2.7	27.9	1.0		NA	NA	NA	NA	
Chloroform	2.89	25.8	1.0		NA	NA	NA	NA	
Ethyl benzene	0.607	32	1.0		NA	NA	NA	NA	
Toluene	1.11	23.3	1.0		NA	NA	NA	NA	
Trichloroethene	1.52	21.2	1.0		NA	NA	NA	NA	
Vinyl chloride	8.42	72.9	1.0		NA	NA	NA	NA	

NA = Not Applicable

TABLE 4-19 SUMMARY OF MODELED PRODUCE CONCENTRATIONS (mg/kg dry)

COPC	Soil	Aboveground Produce	Protected Produce	Belowground Produce
Fill Area				
METALS				
ALUMINUM	8010	32.04	5.2065	32.04
ANTIMONY	2.69	0.085811	0.085811	0.0807
ARSENIC	5.89	0.0372837	0.0372837	0.04712
BARIUM	208	6.6976	6.6976	3.12
BERYLLIUM	0.333	0.00085914	0.00085914	0.0004995
CADMIUM	0.972	0.1215	0.1215	0.062208
CHROMIUM	23.3	0.113704	0.113704	0.10485
COBALT	7.01	0.1402	0.04907	0.1402
COPPER	165	14.59592699	14.59592699	14.59592699
LEAD	552	7.5072	7.5072	4.968
MANGANESE	316	79	15.8	79
MERCURY	0.894	0.012963	0.012963	0.032184
NICKEL	21.3	0.198303	0.198303	0.1704
SELENIUM	0.514	0.008224	0.008224	0.010023
SILVER	0.281	0.038778	0.038778	0.0281
THALLIUM	0.132	0.000113256	0.000113256	0.0000528
VANADIUM	25.3	0.13915	0.0759	0.13915
ZINC	391	17.986	17.986	17.204
PAH				
ACENAPHTHENE	0.149	0.029502	0.029502	0.81652
ACENAPHTHYLENE	0.053	0.009116243	0.009116243	0.009116243
ANTHRACENE	0.207	0.020907	0.020907	0.0057132
BENZ[A]ANTHRACENE	0.493	0.0099586	0.0099586	0.0104023
BENZO[A]PYRENE	0.468	0.0051948	0.0051948	0.0058968
BENZO[B]FLUORANTHENE	0.572	0.00576004	0.00576004	0.0094952
BENZO[G,H,I]PERYLENE	0.317	0.001931164	0.001931164	0.001931164
BENZO[K]FLUORANTHENE	0.232	0.0023432	0.0023432	0.0038512
CHRYSENE	0.527	0.00983382	0.00983382	0.0108035
DIBENZ[A,H]ANTHRACENE	0.133	0.00084588	0.00084588	0.0019019
FLUORANTHENE	0.828	0.0369288	0.0369288	0.032292
FLUORENE	0.155	0.023405	0.023405	0.007688
INDENO[1,2,3-C,D]PYRENE	0.345	0.0013455	0.0013455	0.0041055
2-METHYLNAPHTHALENE	0.085	0.036975	0.036975	0.69955
NAPHTHALENE	0.103	0.044805	0.044805	0.84769
PHENANTHRENE	1.67	0.151636	0.151636	0.024883
PYRENE	0.962	0.0479076	0.0479076	0.0234728
SEMIVOLATILES				
BIS(2-ETHYLHEXYL)PHTHALATE	0.372	0.014136	0.014136	0.0079236
BUTYLBENZYLPHTHALATE	0.078	0.008502	0.008502	0.0033306
DIBENZOFURAN	0.131	0.021081975	0.021081975	0.021081975
DIBUTYLPHTHALATE	0.246	0.0178104	0.0178104	0.158178
VOLATILES				
2-BUTANONE	0.01	0.267	0.267	2.86
ACETONE	0.7	36.4	36.4	476
BENZENE	0.0043	0.009675	0.009675	0.11481
CARBON DISULFIDE	0.01	0.027	0.027	0.279

TABLE 4-19 (Continued)

COPC	Soil	Aboveground Produce	Protected Produce	Belowground Produce
TOLUENE	0.0022	0.002442	0.002442	0.05126
TRICHLOROETHENE	0.0033	0.005016	0.005016	0.06996
VINYL CHLORIDE	0.01	0.0842	0.0842	0.729
Other Area				
METALS				
ALUMINUM	9310	37.24	6.0515	37.24
ANTIMONY	0.635	0.0202565	0.0202565	0.01905
ARSENIC	5.47	0.0346251	0.0346251	0.04376
BARIUM	81.8	2.63396	2.63396	1.227
BERYLLIUM	0.285	0.0007353	0.0007353	0.0004275
CADMIUM	0.339	0.042375	0.042375	0.021696
CHROMIUM	19.6	0.095648	0.095648	0.0882
COBALT	7.02	0.1404	0.04914	0.1404
COPPER	118	12.78982256	12.78982256	12.78982256
LEAD	206	2.8016	2.8016	1.854
MANGANESE	321	80.25	16.05	80.25
MERCURY	0.929	0.0134705	0.0134705	0.033444
NICKEL	16.8	0.156408	0.156408	0.1344
SELENIUM	0.554	0.008864	0.008864	0.010803
SILVER	0.21	0.02898	0.02898	0.021
THALLIUM	0.115	0.00009867	0.00009867	0.000046
VANADIUM	28.2	0.1551	0.0846	0.1551
ZINC	118	5.428	5.428	5.192
PAH				
ACENAPHTHENE	0.13	0.02574	0.02574	0.7124
ACENAPHTHYLENE	0.194	0.033368888	0.033368888	0.033368888
ANTHRACENE	0.118	0.011918	0.011918	0.0032568
BENZ[A]ANTHRACENE	0.74	0.014948	0.014948	0.015614
BENZO[A]PYRENE	0.897	0.0099567	0.0099567	0.0113022
BENZO[B]FLUORANTHENE	1.24	0.0124868	0.0124868	0.020584
BENZO[G,H,I]PERYLENE	0.476	0.002899793	0.002899793	0.002899793
BENZO[K]FLUORANTHENE	0.383	0.0038683	0.0038683	0.0063578
CHRYSENE	0.647	0.01207302	0.01207302	0.0132635
DIBENZ[A,H]ANTHRACENE	0.171	0.00108756	0.00108756	0.0024453
FLUORANTHENE	0.868	0.0387128	0.0387128	0.033852
FLUORENE	1.24	0.18724	0.18724	0.061504
INDENO[1,2,3-C,D]PYRENE	0.517	0.0020163	0.0020163	0.0061523
2-METHYLNAPHTHALENE	0.109	0.047415	0.047415	0.89707
NAPHTHALENE	0.0994	0.043239	0.043239	0.818062
PHENANTHRENE	0.356	0.0323248	0.0323248	0.0053044
PYRENE	1.1	0.05478	0.05478	0.02684
SEMIVOLATILES				
2-CHLOROPHENOL	0.155	0.3379	0.3379	0.682
4-CHLOROPHENYL PHENYL ETHER	0.156	0.010608	0.010608	0.0023088
4-METHYLPHENOL	0.055	0.16115	0.16115	1.617
BIS(2-ETHYLHEXYL)PHTHALATE	3.14	0.11932	0.11932	0.066882
BUTYLBENZYLPHTHALATE	0.095	0.010355	0.010355	0.0040565
DIBENZOFURAN	0.122	0.019633595	0.019633595	0.019633595

TABLE 4-19 (Continued)

COPC	Soil	Aboveground Produce	Protected Produce	Belowground Produce
DIBUTYLPHTHALATE	0.157	0.0113668	0.0113668	0.100951
DIOCTYLPHTHALATE	0.152	0.000023864	0.000023864	0.00059736
VOLATILES				
2-BUTANONE	0.004	0.1068	0.1068	1.144
ACETONE	0.0729	3.7908	3.7908	49.572
BENZENE	0.00286	0.006435	0.006435	0.076362
CHLOROFORM	0.0011	0.003179	0.003179	0.02838
ETHYLBENZENE	0.00253	0.00153571	0.00153571	0.08096
TRICHLOROETHENE	0.0022	0.003344	0.003344	0.04664
VINYL CHLORIDE	0.00437	0.0367954	0.0367954	0.318573

TABLE 4-20 NON-CANCER TOXICITY DATA - ORAL/DERMAL, FORT TOTTEN

Chemical of Potential Concern	Chronic/ Subchronic	Oral RfD Value (mg/kg- day)	Oral to Dermal Adjustment Factor (GI ABS) (1)	Adjusted Dermal RD (2) (mg/kg bw-day)	Primary Target Organ	Combined Uncertainty/Modifi- ng Factors	Sources of RfD: Target Organ	Dates of RfD: Target Organ (3) (mm/dd/yy)
Inorganics								
ALUMINUM	Subchronic	1.00E+00	1	1.00E+00	Central Nervous System	100/3	EPA-NCEA	30-05-97
ANTIMONY	Chronic	4.00E-04	0.15	6.00E-05	Blood glucose and cholesterol	1000/1	IRIS	26-07-01
BARIUM	Chronic	7.00E-02	0.07	4.90E-03	Kidneys	3/1	IRIS	26-07-01
CADMIUM	Chronic	5.00E-04	0.025	1.25E-05	Kidneys	10/1	IRIS	27-07-01
CHROMIUM	Chronic	3.00E-03	0.025	7.50E-05	Central Nervous System	300/3	IRIS	27-07-01
COBALT		6.00E-02	1	6.00E-02	provisional value		EPA-NCEA	
COPPER		3.70E-02	1	3.70E-02			IRIS	27-07-01
LEAD		NA	1	NA				
MANGANESE	Chronic	2.40E-02	0.04	9.60E-04	Central Nervous System	1/1	IRIS	27-07-01
NICKEL		2.00E-02	0.04	8.00E-04	None	300/1	IRIS	27-07-01
SELENIUM		5.00E-03	1	5.00E-03	None	3/1	IRIS	27-07-01
VANADIUM	Chronic	7.00E-03	0.026	1.82E-04	Hair	100/1	IRIS	27-07-01
ZINC	Chronic	3.00E-01	1	3.00E-01		3/1	IRIS	27-07-01
PAHs								
ACENAPHTHENE		6.00E-02	NA	NA	Liver	3000/1	IRIS	26-07-01
ANTHRACENE		3.00E-01	NA	NA	None	3000/1	IRIS	26-07-01
BENZO(A)ANTHRACENE		NA	NA	NA				
BENZO(A)PYRENE		NA	NA	NA				
BENZO(B)FLUORANTHENE		NA	NA	NA				
BENZO(G,H,I)PERYLENE		3.00E-02	NA	NA	Based on pyrene	3000/1	IRIS	26-07-01
BENZO(K)FLUORANTHENE		NA	NA	NA				
CHRYSENE		NA	NA	NA				
DIBENZ(A,H)ANTHRACENE		NA	NA	NA				
FLUORANTHENE		4.00E-02	NA	NA	Liver	3000/1	IRIS	27-07-01
FLUORENE		4.00E-02	NA	NA	Liver and blood	3000/1	IRIS	27-07-01
INDENO(1,2,3-CD)PYRENE		NA	NA	NA				
2-METHYLNAPHTHALENE	Chronic	2.00E-02	1	2.00E-02	Based on naphthalene	3000/1	IRIS	27-07-01
NAPHTHALENE	Chronic	2.00E-02	NA	NA	None	3000/1	IRIS	27-07-01
PHENANTHRENE	Chronic	2.00E-02	NA	NA	Based on naphthalene	3000/1	IRIS	27-07-01
PYRENE	Chronic	3.00E-02	NA	NA	Kidney	3000/1	IRIS	27-07-01
Pesticides								
DIELDRIN	Chronic	5.00E-05	1	5.00E-05	Liver	100/1	IRIS	09-07-02
HEPTACHLOR EPOXIDE	Chronic	1.30E-05	1	1.30E-05	Liver, Central Nervous System	1000/1	IRIS	27-07-01
Semivolatiles								
BIS(2-ETHYLHEXYL)PHTHALATE		2.00E-02	1	2.00E-02	Liver	1000/1	IRIS	27-07-01
BUTYLBENZYLPHTHALATE		2.00E-01	1	2.00E-01	None	1000/1	IRIS	26-07-01
DI(2-ETHYLHEXYL)ADIPATE	Chronic	6.00E-01	1	6.00E-01	Liver	300/1	IRIS	09-07-02
DIBENZOFURAN	Chronic	4.00E-03	1	4.00E-03	Liver, Kidney	300/1	EPA-NCEA	19-07-99
DIBUTYLPHTHALATE		1.00E-01	1	1.00E-01	None	1000/1	IRIS	27-07-01
DIETHYLPHTHALATE	Chronic	8.00E-01	1	8.00E-01	Decreased organ weight	1000/1	IRIS	09-07-02
DIMETHYLPHTHALATE		1.00E+01	1	1.00E+01			EPA-NCEA	

TABLE 4-21 NON-CANCER TOXICITY DATA - INHALATION, FORT TOTTEN
Non-Cancer Toxicity Data - Inhalation
Fort Totten

Chemical of Potential Concern	Chronic/ Subchronic	Value Inhalation (RfC) (mg/kg-day)	Adjusted Inhalation RfD (1)	Primary Target Organ	Combined Uncertainty/Modifying Factors	Sources of RfC:RfD: Target Organ	Dates (2) (mm/dd/yy)
Inorganics							
ALUMINUM	Chronic	1.40E-03	1	Respiratory System	NA	EPA-NCEA	30-05-97
ANTIMONY		NA	0.15				
BARIUM	Chronic	1.40E-04	0.07	Kidneys	10/1	EPA-NCEA	07-10-99
CADMIUM		NA	0.025				
CHROMIUM		NA	0.025				
COBALT		NA	1				
COPPER		NA	1				
LEAD		NA	1				
MANGANESE	Chronic	1.40E-05	0.04	Central Nervous System	1000/1	IRIS	27-07-01
NICKEL		NA	0.04				
SELENIUM		NA	1				
VANADIUM		NA	0.026				
ZINC		NA	1				
PAHs							
ACENAPHTHENE		6.00E-02	NA	Liver	3000/1	IRIS	26-07-01
ANTHRACENE		3.00E-01	NA	None	3000/1	IRIS	26-07-01
BENZ(A)ANTHRACENE		NA	NA				
BENZO(A)PYRENE		NA	NA				
BENZO(B)FLOURANTHENE		NA	NA				
BENZO(G,H,I)PERYLENE		3.00E-02	NA	Based on pyrene	3000/1	IRIS	26-07-01
BENZO(K)FLOURANTHENE		NA	NA				
CHRYSENE		NA	NA				
DIBENZ(A,H)ANTHRACENE		NA	NA				
FLUORANTHENE		4.00E-02	NA	Liver	3000/1	IRIS	27-07-01
FLUORENE		4.00E-02	NA	Liver and blood	3000/1	IRIS	27-07-01
INDENO(1,2,3-CD)PYRENE		NA	NA				
2-METHYLNAPHTHALENE		NA	1				
NAPHTHALENE	Chronic	8.60E-04	NA	Respiratory System	3000/1	IRIS	10-07-02
PHENANTHRENE	Chronic	8.60E-04	NA	Based on naphthalene	3000/1	IRIS	10-07-02
PYRENE		3.00E-02	NA	Kidneys	3000/1	IRIS	27-07-01
Pesticides							
DIELDRIN		NA	1				

TABLE 4-22 CANCER TOXICITY DATA - ORAL/DERMAL, FORT TOTTEN

Chemical of Potential Concern	Oral Cancer Slope Factor	Oral to Dermal Adjustment Factor (GI ABS) ⁽¹⁾	Adjusted Cancer Slope Factor ⁽²⁾	Units	Weight of Evidence/Cancer Guideline Description	Source	Date ⁽³⁾ (mm/dd/yy)
Inorganics							
ALUMINUM	NA	1	NA	per (mg/kg-day)	D	EPA-NCEA	30-03-97
ANTIMONY	NA	0.15	NA	per (mg/kg-day)	D	IRIS	26-07-01
BARIUM	NA	0.07	NA	per (mg/kg-day)	D	IRIS	26-07-01
CADMIUM	NA	0.025	NA	per (mg/kg-day)	B1	IRIS	27-07-01
CHROMIUM	NA	0.025	NA	per (mg/kg-day)	A	IRIS	27-07-01
COBALT	NA	1	NA	per (mg/kg-day)	Not Classified	IRIS	27-07-01
COPPER	NA	1	NA	per (mg/kg-day)	D	IRIS	27-07-01
LEAD	NA	1	NA	per (mg/kg-day)	D	IRIS	27-07-01
MANGANESE	NA	0.04	NA	per (mg/kg-day)	D	IRIS	27-07-01
NICKEL	NA	0.04	NA	per (mg/kg-day)	Not Classified	IRIS	27-07-01
SELENIUM	NA	1	NA	per (mg/kg-day)	D	IRIS	27-07-01
VANADIUM	NA	0.026	NA	per (mg/kg-day)	Not Classified	IRIS	27-07-01
ZINC	NA	1	NA	per (mg/kg-day)	D	IRIS	27-07-01
PAHs							
ACENAPHTHENE	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
ANTHRACENE	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
BENZ(A)ANTHRACENE	0.73	NA	NA	per (mg/kg-day)	B2	IRIS	26-07-01
BENZO(A)PYRENE	7.3	NA	NA	per (mg/kg-day)	B2	IRIS	26-07-01
BENZO(B)FLOURANTHENE	0.73	NA	NA	per (mg/kg-day)	B2	IRIS	27-07-01
BENZO(G,H,I)PERYLENE	NA	NA	NA	per (mg/kg-day)	D	IRIS	26-07-01
BENZO(K)FLOURANTHENE	0.073	NA	NA	per (mg/kg-day)	B2	IRIS	26-07-01
CHRYSENE	0.0073	NA	NA	per (mg/kg-day)	B2	IRIS	27-07-01
DIBENZ(A, H)ANTHRACENE	7.3	NA	NA	per (mg/kg-day)	B2	EPA-NCEA	27-07-01
FLUORANTHENE	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
FLUORENE	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
INDENO(1,2,3-CD)PYRENE	0.73	NA	NA	per (mg/kg-day)	B2	IRIS	27-07-01
2-METHYLNAPHTHALENE	NA	1	NA	per (mg/kg-day)	C	EPA-NCEA	23-05-01
NAPHTHALENE	NA	NA	NA	per (mg/kg-day)	C	IRIS	27-07-01
PHENANTHRENE	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
PYRENE	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
Pesticides							
DIELDRIN	16	1	1.60E+01	per (mg/kg-day)	B2	IRIS	10-07-02
Semivolatiles							
BIS(2-ETHYLHEXYL)PHTHALATE	0.014	1	1.40E-02	per (mg/kg-day)	B2	IRIS	26-07-01
BUTYLBENZYLPHTHALATE	NA	1	NA	per (mg/kg-day)	C	IRIS	26-07-01
DI(2-ETHYLHEXYL)ADIPATE	0.0012	1	1.20E-03	per (mg/kg-day)	C	IRIS	10-07-02
DIBENZOFURAN	NA	1	NA	per (mg/kg-day)	D	IRIS	27-07-01
DIBUTYLPHTHALATE	NA	1	NA	per (mg/kg-day)	D	IRIS	27-07-01
DIETHYLPHTHALATE	NA	1	NA	per (mg/kg-day)	D	IRIS	10-07-02
DIMETHYLPHTHALATE	NA	1	NA	per (mg/kg-day)	D	IRIS	10-07-02

TABLE 4-23 CANCER TOXICITY DATA - INHALATION, FORT TOTTEN

Chemical of Potential Concern	Chronic/ Subchronic	Adjustment	Inhalation Cancer Slope Factor	Units	Weight of Evidence/Cancer Guideline Description	Source	Date ⁽¹⁾
Inorganics							
ALUMINUM	NA	NA	NA	per (mg/kg-day)	D	EPA-NCEA	30-05-97
ANTIMONY	NA	NA	NA	per (mg/kg-day)	D	IRIS	26-07-01
BARIUM	NA	NA	NA	per (mg/kg-day)	D	IRIS	26-07-01
CADMIUM	NA	NA	6.30E+00	per (mg/kg-day)	A	IRIS	27-07-01
CHROMIUM	NA	NA	2.90E+02	per (mg/kg-day)	D	IRIS	27-07-01
COBALT	NA	NA	NA	per (mg/kg-day)	Not Classified	IRIS	27-07-01
COPPER	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
LEAD	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
MANGANESE	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
NICKEL	NA	NA	NA	per (mg/kg-day)	Not Classified	IRIS	27-07-01
SELENIUM	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
VANADIUM	NA	NA	NA	per (mg/kg-day)	Not Classified	IRIS	27-07-01
ZINC	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
PAHs							
ACENAPHTHENE	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
ANTHRACENE	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
BENZO(A)ANTHRACENE	NA	NA	3.10E-01	per (mg/kg-day)	B2	IRIS	26-07-01
BENZO(A)PYRENE	NA	NA	3.10E+00	per (mg/kg-day)	B2	IRIS	26-07-01
BENZO(B)FLOURANTHENE	NA	NA	3.10E-01	per (mg/kg-day)	B2	IRIS	27-07-01
BENZO(G,H,I)PERYLENE	NA	NA	NA	per (mg/kg-day)	D	IRIS	26-07-01
BENZO(K)FLOURANTHENE	NA	NA	3.10E-02	per (mg/kg-day)	B2	IRIS	26-07-01
CHRYSENE	NA	NA	3.10E-03	per (mg/kg-day)	B2	IRIS	27-07-01
DIBENZ(A,H)ANTHRACENE	NA	NA	3.10E+00	per (mg/kg-day)	B2	EPA-NCEA	27-07-01
FLUORANTHENE	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
FLUORENE	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
INDENO(1,2,3-CD)PYRENE	NA	NA	3.10E-01	per (mg/kg-day)	B2	IRIS	27-07-01
2-METHYLNAPHTHALENE	NA	NA	NA	per (mg/kg-day)	C	EPA-NCEA	23-05-01
NAPHTHALENE	NA	NA	NA	per (mg/kg-day)	C	IRIS	27-07-01
PHENANTHRENE	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
PYRENE	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
Pesticides							
DIELDRIN	NA	NA	1.60E+01	per (mg/kg-day)	B2	IRIS	10-07-02
Semivolatiles							
BIS(2-ETHYLHEXYL)PHTHALATE	NA	NA	NA	per (mg/kg-day)			
BUTYLBENZYLPHTHALATE	NA	NA	NA	per (mg/kg-day)			
DI(2-ETHYLHEXYL)ADIPATE	NA	NA	NA	per (mg/kg-day)	C	IRIS	10-07-02
DIBENZOFURAN	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
DIBUTYLPHTHALATE	NA	NA	NA	per (mg/kg-day)	D	IRIS	27-07-01
DIETHYLPHTHALATE	NA	NA	NA	per (mg/kg-day)	D	IRIS	10-07-02
DIMETHYLPHTHALATE	NA	NA	NA	per (mg/kg-day)	D	IRIS	10-07-02

TABLE 4-24 CHEMICAL-SPECIFIC PARAMETERS, FORT TOTTEN

Chemical of Potential Concern	Absorption Factor	Reference	Permeability Constant (cm/hr)	Reference ⁽¹⁾
Inorganics				
ALUMINUM	NA	USEPA 2000a	1.00E-03	On-line Database
ANTIMONY	NA	USEPA 2000a	1.00E-03	On-line Database
BARIUM	NA	USEPA 2000a	1.00E-03	On-line Database
CADMIUM	0.001	USEPA 2000a	1.10E-03	EPA 2000a Guidance
CHROMIUM	NA	USEPA 2000a	1.00E-03	EPA 2000a Guidance
COBALT	NA	USEPA 2000a	1.00E-03	On-line Database
COPPER	NA	USEPA 2000a	1.00E-03	On-line Database
LEAD	NA	USEPA 2000a	1.30E-04	EPA 2000a Guidance
MANGANESE	NA	USEPA 2000a	1.00E-03	On-line Database
NICKEL	NA	USEPA 2000a	2.70E-04	On-line Database
SELENIUM	NA	USEPA 2000a	1.00E-03	On-line Database
VANADIUM	NA	USEPA 2000a	1.00E-03	On-line Database
ZINC	NA	USEPA 2000a	1.00E-03	On-line Database
PAHs				
ACENAPHTHENE	0.13	USEPA 2000a	2.50E-01	On-line Database
ANTHRACENE	0.13	USEPA 2000a	2.20E-01	On-line Database
BENZ(A)ANTHRACENE	0.13	USEPA 2000a	5.20E-01	EPA 2000a Guidance
BENZO(A)PYRENE	0.13	USEPA 2000a	7.70E-01	EPA 2000a Guidance
BENZO(B)FLUORANTHENE	0.13	USEPA 2000a	7.80E-01	EPA 2000a Guidance
BENZO(G,H,I)PERYLENE	0.13	USEPA 2000a	1.80E+00	On-line Database
BENZO(K)FLUORANTHENE	0.13	USEPA 2000a	6.00E-01	On-line Database
CHRYSENE	0.13	USEPA 2000a	5.20E-01	EPA 2000a Guidance
DIBENZ(A,H)ANTHRACENE	0.13	USEPA 2000a	1.70E+00	On-line Database
FLUORANTHENE	0.13	USEPA 2000a	2.40E-01	EPA 2000a Guidance
FLUORENE	0.13	USEPA 2000a	2.50E-01	On-line Database
INDENO(1,2,3-CD)PYRENE	0.13	USEPA 2000a	1.20E+00	EPA 2000a Guidance
2-METHYLNAPHTHALENE	0.1	USEPA 2000a	1.50E-01	On-line Database
NAPHTHALENE	0.13	USEPA 2000a	4.90E-02	EPA 2000a Guidance
PHENANTHRENE	0.13	USEPA 2000a	1.50E-01	EPA 2000a Guidance
PYRENE	0.13	USEPA 2000a	3.20E-01	On-line Database
Pesticides				
DIELDRIN	0.1	USEPA 2000a	1.30E-02	EPA 2000a Guidance
Semivolatiles				
BIS(2-ETHYLHEXYL)PHTHALATE	0.1	USEPA 2000a	2.30E-02	On-line Database
BUTYLBENZYLPHTHALATE	0.1	USEPA 2000a	7.10E-02	On-line Database
DI(2-ETHYLHEXYL)ADIPATE	0.1	USEPA 2000a	3.60E+00	On-line Database
DIBENZOFURAN	0.1	USEPA 2000a	1.50E-01	On-line Database
DIBUTYLPHTHALATE	0.1	USEPA 2000a	2.60E-02	EPA 2000a Guidance
DIETHYLPHTHALATE	0.1	USEPA 2000a	4.10E-02	EPA 2000a Guidance
DIMETHYLPHTHALATE	0.1	USEPA 2000a	1.40E-03	EPA 2000a Guidance

**TABLE 4-25 SUMMARY OF NONCANCER RISKS FOR RESIDENT ADULTS AT FORT TOTTEN -- REASONABLE
MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF NONCANCER RISKS**

Site Number:

Fill Area

Chemical of Concern	Incidental Ingestion of Total Soil	Dermal Contact with Total Soil	Inhalation of Particulates from Total Soil	Total Soil	Ingestion of Vegetables	Total	Percent Contribution Of Each COC
	HQ	HQ	HQ		HQ	HI	
Inorganics							
ALUMINUM	1.10E-02	--	1.19E-03	1.22E-02	7.01E-04	1.29E-02	4.3%
ANTIMONY	9.21E-03	--	--	9.21E-03	8.83E-03	1.80E-02	6.0%
ARSENIC	2.69E-02	3.22E-03	--	3.01E-02	5.35E-03	3.55E-02	11.9%
BARIUM	4.07E-03	--	3.08E-04	4.38E-03	3.68E-03	8.06E-03	2.7%
BERYLLIUM	2.28E-04	--	1.21E-05	2.40E-04	1.68E-05	2.57E-04	0.1%
CADMIUM	2.66E-03	4.25E-04	--	3.09E-03	9.40E-03	1.25E-02	4.2%
CHROMIUM	1.06E-02	--	--	1.06E-02	1.56E-03	1.22E-02	4.1%
COBALT	1.60E-04	--	--	1.60E-04	6.14E-05	2.21E-04	0.1%
COPPER	6.11E-03	--	--	6.11E-03	1.64E-02	2.25E-02	7.5%
MANGANESE	1.80E-02	--	4.68E-03	2.27E-02	7.49E-02	9.77E-02	32.7%
MERCURY	1.22E-02	--	--	1.22E-02	6.49E-03	1.87E-02	6.3%
NICKEL	1.46E-03	--	--	1.46E-03	4.04E-04	1.86E-03	0.6%
SELENIUM	1.41E-04	--	--	1.41E-04	7.03E-05	2.11E-04	0.1%
SILVER	7.70E-05	--	--	7.70E-05	3.10E-04	3.87E-04	0.1%
THALLIUM	2.74E-03	--	--	2.74E-03	6.60E-05	2.81E-03	0.9%
VANADIUM	4.95E-03	--	--	4.95E-03	6.13E-04	5.56E-03	1.9%
ZINC	1.79E-03	--	--	1.79E-03	2.47E-03	4.26E-03	1.4%
PAHs							
ACENAPHTHENE	3.40E-06	--	5.15E-10	3.40E-06	9.59E-05	9.93E-05	0.0%
ACENAPHTHYLENE	3.63E-06	--	1.28E-08	3.64E-06	1.89E-05	2.26E-05	0.0%
ANTHRACENE	9.45E-07	--	1.43E-10	9.45E-07	2.60E-06	3.55E-06	0.0%
BENZ(A)ANTHRACENE	--	--	--	--	--	0.00E+00	0.0%
BENZO(A)PYRENE	--	--	--	--	--	0.00E+00	0.0%
BENZO(B)FLUORANTHENE	--	--	--	--	--	0.00E+00	0.0%
BENZO(G,H,I)PERYLENE	1.45E-05	--	2.19E-09	1.45E-05	2.67E-06	1.71E-05	0.0%
BENZO(K)FLUORANTHENE	--	--	--	--	--	0.00E+00	0.0%
CHRYSENE	--	--	--	--	--	0.00E+00	0.0%
DIBENZ(A, H)ANTHRACENE	--	--	--	--	--	0.00E+00	0.0%
FLUORANTHENE	2.84E-05	--	4.29E-09	2.84E-05	3.77E-05	6.60E-05	0.0%
FLUORENE	5.31E-06	--	8.04E-10	5.31E-06	2.20E-05	2.73E-05	0.0%
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	0.00E+00	0.0%
2-METHYLNAPHTHALENE	5.80E-06	--	--	5.80E-06	2.67E-04	2.73E-04	0.1%
NAPHTHALENE	7.05E-06	--	2.48E-08	7.08E-06	3.24E-04	3.31E-04	0.1%
PHENANTHRENE	1.14E-04	--	4.03E-07	1.15E-04	2.78E-04	3.93E-04	0.1%
PYRENE	4.39E-05	--	6.65E-09	4.39E-05	6.16E-05	1.06E-04	0.0%
Semivolatiles							
BIS(2-ETHYLHEXYL)PHTHALATE	2.55E-05	1.02E-05	3.51E-09	3.56E-05	2.75E-05	6.32E-05	0.0%
BUTYLBENZYLPHTHALATE	5.34E-07	2.13E-07	8.09E-11	7.47E-07	1.62E-06	2.36E-06	0.0%
DIBENZOFURAN	4.49E-05	1.79E-05	6.79E-09	6.28E-05	2.19E-04	2.82E-04	0.1%
DIBUTYLPHTHALATE	3.37E-06	1.34E-06	5.10E-10	4.71E-06	1.55E-05	2.02E-05	0.0%
Volatiles							
2-BUTANONE	2.28E-08	--	7.15E-12	2.28E-08	4.33E-05	4.34E-05	0.0%
ACETONE	9.59E-06	--	1.45E-09	9.59E-06	4.04E-02	4.04E-02	13.5%
BENZENE	1.96E-06	--	5.25E-10	1.96E-06	3.35E-04	3.37E-04	0.1%
CARBON DISULFIDE	1.37E-07	--	1.04E-11	1.37E-07	2.57E-05	2.58E-05	0.0%
TOLUENE	1.51E-08	--	4.15E-12	1.51E-08	1.91E-06	1.93E-06	0.0%
TRICHLOROETHENE	7.53E-07	--	1.14E-10	7.54E-07	9.70E-05	9.77E-05	0.0%
VINYL CHLORIDE	4.57E-06	--	7.15E-11	4.57E-06	2.40E-03	2.41E-03	0.8%
Cumulative Risk	1.13E-01	3.67E-03	6.19E-03	1.23E-01	1.76E-01	2.99E-01	100%

**TABLE 4-26 SUMMARY OF NONCANCER RISKS FOR RESIDENT CHILDREN AT FORT TOTTEN -- REASONABLE
MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF NONCANCER RISKS**

Site Number: Fill Area

Chemical of Concern	Incidental Ingestion of Total Soil	Dermal Contact with Total Soil	Inhalation of Particulates from Total Soil	Total Soil	Ingestion of Vegetables	Total	Percent Contribution Of Each COC
	HQ	HQ	HQ		HQ	HI	
Inorganics							
ALUMINUM	1.02E-01	--	2.77E-03	1.02E-01	1.01E-03	1.03E-01	8%
ANTIMONY	8.60E-02	--	--	8.60E-02	1.23E-02	9.83E-02	8%
ARSENIC	2.51E-01	2.11E-02	--	2.72E-01	7.50E-03	2.80E-01	21%
BARIUM	3.80E-02	--	7.20E-04	3.80E-02	5.08E-03	4.31E-02	3%
BERYLLIUM	2.13E-03	--	2.83E-05	2.13E-03	2.33E-05	2.15E-03	0%
CADMIUM	2.49E-02	2.78E-03	--	2.76E-02	1.30E-02	4.06E-02	3%
CHROMIUM	9.93E-02	--	--	9.93E-02	2.17E-03	1.01E-01	8%
COBALT	1.49E-03	--	--	1.49E-03	8.73E-05	1.58E-03	0%
COPPER	5.70E-02	--	--	5.70E-02	2.29E-02	7.99E-02	6%
MANGANESE	1.68E-01	--	1.09E-02	1.68E-01	1.07E-01	2.76E-01	21%
MERCURY	1.14E-01	--	--	1.14E-01	9.25E-03	1.24E-01	9%
NICKEL	1.36E-02	--	--	1.36E-02	5.62E-04	1.42E-02	1%
SELENIUM	1.31E-03	--	--	1.31E-03	9.86E-05	1.41E-03	0%
SILVER	7.19E-04	--	--	7.19E-04	4.30E-04	1.15E-03	0%
THALLIUM	2.56E-02	--	--	2.56E-02	9.12E-05	2.57E-02	2%
VANADIUM	4.62E-02	--	--	4.62E-02	8.66E-04	4.71E-02	4%
ZINC	1.67E-02	--	--	1.67E-02	3.45E-03	2.01E-02	2%
PAHs							
ACENAPHTHENE	3.18E-05	--	1.20E-09	3.18E-05	1.47E-04	1.79E-04	0%
ACENAPHTHYLENE	3.39E-05	--	2.99E-08	3.39E-05	2.64E-05	6.03E-05	0%
ANTHRACENE	8.82E-06	--	3.34E-10	8.82E-06	3.58E-06	1.24E-05	0%
BENZ(A)ANTHRACENE	--	--	--	--	--	0.00E+00	0%
BENZO(A)PYRENE	--	--	--	--	--	0.00E+00	0%
BENZO(B)FLOURANTHENE	--	--	--	--	--	0.00E+00	0%
BENZO(G,H,I)PERYLENE	1.35E-04	--	5.12E-09	1.35E-04	3.73E-06	1.39E-04	0%
BENZO(K)FLOURANTHENE	--	--	--	--	--	0.00E+00	0%
CHRYSENE	--	--	--	--	--	0.00E+00	0%
DIBENZ[A, H]ANTHRACENE	--	--	--	--	--	0.00E+00	0%
FLUORANTHENE	2.65E-04	--	1.00E-08	2.65E-04	5.24E-05	3.17E-04	0%
FLUORENE	4.95E-05	--	1.88E-09	4.95E-05	3.04E-05	7.99E-05	0%
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	0.00E+00	0%
2-METHYLNAPHTHALENE	5.41E-05	--	--	5.41E-05	4.07E-04	4.61E-04	0%
NAPHTHALENE	6.58E-05	--	5.80E-08	6.58E-05	4.93E-04	5.59E-04	0%
PHENANTHRENE	1.07E-03	--	9.41E-07	1.07E-03	3.82E-04	1.45E-03	0%
PYRENE	4.10E-04	--	1.55E-08	4.10E-04	8.52E-05	4.95E-04	0%
Semivolatiles							
BIS(2-ETHYLHEXYL)PHTHALATE	2.38E-04	6.66E-05	8.20E-09	3.04E-04	3.81E-05	3.43E-04	0%
BUTYLBENZYLPHTHALATE	4.99E-06	1.40E-06	1.89E-10	6.38E-06	2.23E-06	8.61E-06	0%
DIBENZOFURAN	4.19E-04	1.17E-04	1.59E-08	5.36E-04	3.05E-04	8.41E-04	0%
DIBUTYLPHTHALATE	3.15E-05	8.81E-06	1.19E-09	4.03E-05	2.30E-05	6.33E-05	0%
Volatiles							
2-BUTANONE	2.13E-07	--	1.67E-11	2.13E-07	4.33E-05	4.35E-05	0%
ACETONE	8.95E-05	--	3.39E-09	8.95E-05	4.04E-02	4.05E-02	3%
BENZENE	1.83E-05	--	1.23E-09	1.83E-05	3.35E-04	3.54E-04	0%
CARBON DISULFIDE	1.28E-06	--	2.42E-11	1.28E-06	2.57E-05	2.70E-05	0%
TOLUENE	1.41E-07	--	9.69E-12	1.41E-07	1.91E-06	2.05E-06	0%
TRICHLOROETHENE	7.03E-06	--	2.67E-10	7.03E-06	9.70E-05	1.04E-04	0%
VINYL CHLORIDE	4.26E-05	--	1.67E-10	4.26E-05	2.40E-03	2.44E-03	0%
Cumulative Risk	1.05E+00	2.41E-02	1.45E-02	1.08E+00	2.32E-01	1.31E+00	100.0%

TABLE 4-27 BREAKDOWN OF NONCANCER RISK BY TARGET ORGAN, RESIDENT CHILDREN NONCANCER EFFECTS

Site Number:		Fill Area		
Chemical of Concern	Total Soil	Ingestion of Vegetables	Total	Target Organ
	HI	HI	HI	
Inorganics				
ARSENIC	2.72E-01	7.50E-03	2.80E-01	Skin
MANGANESE	1.68E-01	1.07E-01	2.75E-01	Central Nervous System
MERCURY	1.14E-01	9.25E-03	1.23E-01	Autoimmune
Cumulative Risk	5.54E-01	1.24E-01	6.78E-01	
			0.28	Skin
			0.28	Central Nervous System
			0.12	Autoimmune

**TABLE 4-28 SUMMARY OF CANCER RISKS FOR RESIDENT ADULT AND CHILDREN AT FORT TOTTEN --
REASONABLE MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF CANCER RISKS**

Site Number: Fill Area

Chemical of Concern	Incidental Ingestion of Total soil	Dermal Contact With Total Soil	Inhalation of Particulates from Total Soil	Total Soil	Ingestion of Vegetables	Total	Percent Contribution Of Each COC
	Risk	Risk	Risk		Risk	Risk	
Inorganics							
ALUMINUM	--	--	--	--	--	0.00E+00	0.0%
ANTIMONY	--	--	--	--	--	0.00E+00	0.0%
ARSENIC	1.38E-05	1.31E-06	9.96E-09	1.52E-05	1.11E-06	1.63E-05	50.1%
BARIUM	--	--	--	--	--	0.00E+00	0.0%
BERYLLIUM	--	--	3.15E-10	3.15E-10	--	3.15E-10	0.0%
CADMIUM	--	--	6.90E-10	6.90E-10	--	6.90E-10	0.0%
CHROMIUM	--	--	7.61E-07	7.61E-07	--	7.61E-07	2.3%
COBALT	--	--	--	--	--	0.00E+00	0.0%
COPPER	--	--	--	--	--	0.00E+00	0.0%
MANGANESE	--	--	--	--	--	0.00E+00	0.0%
MERCURY	--	--	--	--	--	0.00E+00	0.0%
NICKEL	--	--	--	--	--	0.00E+00	0.0%
SELENIUM	--	--	--	--	--	0.00E+00	0.0%
SILVER	--	--	--	--	--	0.00E+00	0.0%
THALLIUM	--	--	--	--	--	0.00E+00	0.0%
VANADIUM	--	--	--	--	--	0.00E+00	0.0%
ZINC	--	--	--	--	--	0.00E+00	0.0%
PAHs							
ACENAPHTHENE	--	--	--	--	--	0.00E+00	0.0%
ACENAPHTHYLENE	--	--	--	--	--	0.00E+00	0.0%
ANTHRACENE	--	--	--	--	--	0.00E+00	0.0%
BENZO(A)ANTHRACENE	5.63E-07	--	1.72E-11	5.63E-07	1.40E-07	7.04E-07	2.2%
BENZO(A)PYRENE	5.35E-06	--	1.63E-10	5.35E-06	7.42E-07	6.09E-06	18.7%
BENZO(B)FLOURANTHENE	6.77E-07	--	2.07E-11	6.77E-07	8.82E-08	7.65E-07	2.4%
BENZO(G,H,I)PERYLENE	--	--	--	--	--	0.00E+00	0.0%
BENZO(K)FLOURANTHENE	2.65E-08	--	8.10E-13	2.65E-08	3.59E-09	3.01E-08	0.1%
CHRYSENE	6.02E-09	--	1.84E-13	6.02E-09	1.40E-09	7.42E-09	0.0%
DIBENZ[A, H]ANTHRACENE	1.52E-06	--	4.65E-11	1.52E-06	1.40E-07	1.66E-06	5.1%
FLUORANTHENE	--	--	--	--	--	0.00E+00	0.0%
FLUORENE	--	--	--	--	--	0.00E+00	0.0%
INDENO(1,2,3-CD)PYRENE	3.94E-07	--	1.21E-11	3.94E-07	2.44E-08	4.19E-07	1.3%
2-METHYLNAPHTHALENE	--	--	--	--	--	0.00E+00	0.0%
NAPHTHALENE	--	--	--	--	--	0.00E+00	0.0%
PHENANTHRENE	--	--	--	--	--	0.00E+00	0.0%
PYRENE	--	--	--	--	--	0.00E+00	0.0%
Semivolatiles							
BIS(2-ETHYLHEXYL)PHTHALATE	1.10E-08	3.47E-09	--	1.44E-08	3.56E-09	1.80E-08	0.1%
BUTYLBENZYLPHTHALATE	--	--	--	--	--	0.00E+00	0.0%
DIBENZOFURAN	--	--	--	--	--	0.00E+00	0.0%
DIBUTYLPHTHALATE	--	--	--	--	--	0.00E+00	0.0%
Volatiles							
2-BUTANONE	--	--	--	--	--	0.00E+00	0.0%
ACETONE	--	--	--	--	--	0.00E+00	0.0%
BENZENE	3.70E-10	--	1.31E-14	3.70E-10	2.61E-08	2.65E-08	0.1%
CARBON DISULFIDE	--	--	--	--	--	0.00E+00	0.0%
TOLUENE	--	--	--	--	--	0.00E+00	0.0%
TRICHLOROETHENE	5.68E-11	--	2.23E-15	5.68E-11	3.02E-09	3.08E-09	0.0%
VINYL CHLORIDE	2.35E-08	--	3.49E-14	2.35E-08	5.08E-06	5.11E-06	15.7%
Cumulative Risk	2.31E-05	1.31E-06	7.30E-07	2.51E-05	7.38E-06	3.25E-05	100%

**TABLE 4-29 SUMMARY OF NONCANCER RISKS FOR RECREATIONAL USERS AT FORT TOTTEN – REASONABLE
MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF NONCANCER RISKS**

Site Number: Fill Area

Chemical of Concern	Incidental Ingestion of Surface Soil	Dermal Contact with Surface Soil	Inhalation of Particulates from Surface Soil	Total Surface Soil	Total	Percent Contribution Of Each COC
	HQ	HQ	HQ		HI	
Inorganics						
ALUMINUM	1.72E-02	--	5.81E-04	1.78E-02	1.78E-02	9.9%
ANTIMONY	1.44E-02	--	--	1.44E-02	1.44E-02	8.0%
ARSENIC	4.21E-02	3.90E-05	--	4.22E-02	4.22E-02	23.5%
BARIUM	6.38E-03	--	1.51E-04	6.53E-03	6.53E-03	3.6%
BERYLLIUM	3.57E-04	--	5.93E-06	3.63E-04	3.63E-04	0.2%
CADMIUM	4.17E-03	5.15E-06	--	4.18E-03	4.18E-03	2.3%
CHROMIUM	1.67E-02	--	--	1.67E-02	1.67E-02	9.3%
COBALT	2.51E-04	--	--	2.51E-04	2.51E-04	0.1%
COPPER	9.57E-03	--	--	9.57E-03	9.57E-03	5.3%
MANGANESE	2.83E-02	--	2.29E-03	3.05E-02	3.05E-02	17.0%
MERCURY	1.92E-02	--	--	1.92E-02	1.92E-02	10.7%
NICKEL	2.29E-03	--	--	2.29E-03	2.29E-03	1.3%
SELENIUM	2.21E-04	--	--	2.21E-04	2.21E-04	0.1%
SILVER	1.21E-04	--	--	1.21E-04	1.21E-04	0.1%
THALLIUM	4.29E-03	--	--	4.29E-03	4.29E-03	2.4%
VANADIUM	7.76E-03	--	--	7.76E-03	7.76E-03	4.3%
ZINC	2.80E-03	--	--	2.80E-03	2.80E-03	1.6%
PAHs						
ACENAPHTHENE	5.33E-06	--	2.52E-10	5.33E-06	5.33E-06	0.0%
ACENAPHTHYLENE	5.69E-06	--	6.26E-09	5.69E-06	5.69E-06	0.0%
ANTHRACENE	1.48E-06	--	7.01E-11	1.48E-06	1.48E-06	0.0%
BENZ(A)ANTHRACENE	--	--	--	--	0.00E+00	0.0%
BENZO(A)PYRENE	--	--	--	--	0.00E+00	0.0%
BENZO(B)FLOURANTHENE	--	--	--	--	0.00E+00	0.0%
BENZO(G,H,I)PERYLENE	2.27E-05	--	1.07E-09	2.27E-05	2.27E-05	0.0%
BENZO(K)FLOURANTHENE	--	--	--	--	0.00E+00	0.0%
CHRYSENE	--	--	--	--	0.00E+00	0.0%
DIBENZ(A, H)ANTHRACENE	--	--	--	--	0.00E+00	0.0%
FLUORANTHENE	4.44E-05	--	2.10E-09	4.44E-05	4.44E-05	0.0%
FLUORENE	8.32E-06	--	3.94E-10	8.32E-06	8.32E-06	0.0%
INDENO(1,2,3-CD)PYRENE	--	--	--	--	0.00E+00	0.0%
2-METHYLNAPHTHALENE	9.09E-06	--	--	9.09E-06	9.09E-06	0.0%
NAPHTHALENE	1.11E-05	--	1.22E-08	1.11E-05	1.11E-05	0.0%
PHENANTHRENE	1.79E-04	--	1.97E-07	1.79E-04	1.79E-04	0.1%
PYRENE	6.88E-05	--	3.26E-09	6.88E-05	6.88E-05	0.0%
Semivolatiles						
BIS(2-ETHYLHEXYL)PHTHALATE	3.99E-05	1.23E-07	1.72E-09	4.00E-05	4.00E-05	0.0%
BUTYLBENZYLPHTHALATE	8.37E-07	2.58E-09	3.96E-11	8.40E-07	8.40E-07	0.0%
DIBENZOFURAN	7.03E-05	2.17E-07	3.33E-09	7.05E-05	7.05E-05	0.0%
DIBUTYLPHTHALATE	5.28E-06	1.63E-08	2.50E-10	5.30E-06	5.30E-06	0.0%
Volatiles						
2-BUTANONE	3.58E-08	--	3.50E-12	3.58E-08	3.58E-08	0.0%
ACETONE	1.50E-05	--	7.11E-10	1.50E-05	1.50E-05	0.0%
BENZENE	3.08E-06	--	2.57E-10	3.08E-06	3.08E-06	0.0%
CARBON DISULFIDE	2.15E-07	--	5.08E-12	2.15E-07	2.15E-07	0.0%
TOLUENE	2.36E-08	--	2.03E-12	2.36E-08	2.36E-08	0.0%
TRICHLOROETHENE	1.18E-06	--	5.59E-11	1.18E-06	1.18E-06	0.0%
VINYL CHLORIDE	7.15E-06	--	3.50E-11	7.15E-06	7.15E-06	0.0%
Cumulative Risk	1.77E-01	4.45E-05	3.03E-03	1.80E-01	1.80E-01	100%

**TABLE 4-30 SUMMARY OF CANCER RISKS FOR RECREATIONAL USERS AT FORT TOTTEN -- REASONABLE
MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF CANCER RISKS**

Site Number: Fill Area

Chemical of Concern	Incidental Ingestion of Surface Soil	Dermal Contact with Surface Soil	Inhalation of Particulates from Surface Soil	Total Surface Soil	Total	Percent Contribution Of Each COC
	Risk	Risk	Risk		Risk	
Inorganics						
ALUMINUM	--	--	--	--	0.00E+00	0.0%
ANTIMONY	--	--	--	--	0.00E+00	0.0%
ARSENIC	2.44E-06	2.26E-09	7.69E-10	2.44E-06	2.44E-06	60.9%
BARIUM	--	--	--	--	0.00E+00	0.0%
BERYLLIUM	--	--	2.44E-11	2.44E-11	2.44E-11	0.0%
CADMIUM	--	--	5.33E-11	5.33E-11	5.33E-11	0.0%
CHROMIUM	--	--	5.88E-08	5.88E-08	5.88E-08	1.5%
COBALT	--	--	--	--	0.00E+00	0.0%
COPPER	--	--	--	--	0.00E+00	0.0%
MANGANESE	--	--	--	--	0.00E+00	0.0%
MERCURY	--	--	--	--	0.00E+00	0.0%
NICKEL	--	--	--	--	0.00E+00	0.0%
SELENIUM	--	--	--	--	0.00E+00	0.0%
SILVER	--	--	--	--	0.00E+00	0.0%
THALLIUM	--	--	--	--	0.00E+00	0.0%
VANADIUM	--	--	--	--	0.00E+00	0.0%
ZINC	--	--	--	--	0.00E+00	0.0%
PAHs						
ACENAPHTHENE	--	--	--	--	0.00E+00	0.0%
ACENAPHTHYLENE	--	--	--	--	0.00E+00	0.0%
ANTHRACENE	--	--	--	--	0.00E+00	0.0%
BENZ(A)ANTHRACENE	9.93E-08	--	1.33E-12	9.93E-08	9.93E-08	2.5%
BENZO(A)PYRENE	9.43E-07	--	1.26E-11	9.43E-07	9.43E-07	23.5%
BENZO(B)FLOURANTHENE	1.19E-07	--	1.60E-12	1.19E-07	1.19E-07	3.0%
BENZO(G,H,I)PERYLENE	--	--	--	--	0.00E+00	0.0%
BENZO(K)FLOURANTHENE	4.67E-09	--	6.26E-14	4.67E-09	4.67E-09	0.1%
CHRYSENE	1.06E-09	--	1.42E-14	1.06E-09	1.06E-09	0.0%
DIBENZ[A, H]ANTHRACENE	2.68E-07	--	3.59E-12	2.68E-07	2.68E-07	6.7%
FLUORANTHENE	--	--	--	--	0.00E+00	0.0%
FLUORENE	--	--	--	--	0.00E+00	0.0%
INDENO(1,2,3-CD)PYRENE	6.95E-08	--	9.31E-13	6.95E-08	6.95E-08	1.7%
2-METHYLNAPHTHALENE	--	--	--	--	0.00E+00	0.0%
NAPHTHALENE	--	--	--	--	0.00E+00	0.0%
PHENANTHRENE	--	--	--	--	0.00E+00	0.0%
PYRENE	--	--	--	--	0.00E+00	0.0%
Semivolatiles						
BIS(2-ETHYLHEXYL)PHTHALATE	1.44E-09	4.43E-12	--	1.44E-09	1.44E-09	0.0%
BUTYLBENZYLPHTHALATE	--	--	--	--	0.00E+00	0.0%
DIBENZOFURAN	--	--	--	--	0.00E+00	0.0%
DIBUTYLPHTHALATE	--	--	--	--	0.00E+00	0.0%
Volatiles						
2-BUTANONE	--	--	--	--	0.00E+00	0.0%
ACETONE	--	--	--	--	0.00E+00	0.0%
BENZENE	6.53E-11	--	1.01E-15	6.53E-11	6.53E-11	0.0%
CARBON DISULFIDE	--	--	--	--	0.00E+00	0.0%
TOLUENE	--	--	--	--	0.00E+00	0.0%
TRICHLOROETHENE	1.00E-11	--	1.72E-16	1.00E-11	1.00E-11	0.0%
VINYL CHLORIDE	4.14E-09	--	2.70E-15	4.14E-09	4.14E-09	0.1%
Cumulative Risk	3.95E-06	2.26E-09	5.97E-08	4.01E-06	4.01E-06	100%

TABLE 4-31 SUMMARY OF NONCANCER RISKS FOR COMMERCIAL WORKERS AT FORT TOTTEN – REASONABLE MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF NONCANCER RISKS

Site Number:

Fill Area

Chemical of Concern	Incidental Ingestion of Surface Soil	Dermal Contact with Surface Soil	Inhalation of Particulates from Surface Soil	Total Surface Soil	Total	Percent Contribution Of Each COC
	HQ	HQ	HQ		HI	
Inorganics						
ALUMINUM	3.92E-03	--	2.83E-04	4.20E-03	4.20E-03	9%
ANTIMONY	3.29E-03	--	--	3.29E-03	3.29E-03	7%
ARSENIC	9.61E-03	3.29E-03	--	1.29E-02	1.29E-02	28%
BARIUM	1.45E-03	--	7.34E-05	1.53E-03	1.53E-03	3%
BERYLLIUM	8.15E-05	--	2.89E-06	8.43E-05	8.43E-05	0%
CADMIUM	9.51E-04	4.34E-04	--	1.38E-03	1.38E-03	3%
CHROMIUM	3.80E-03	--	--	3.80E-03	3.80E-03	8%
COBALT	5.72E-05	--	--	5.72E-05	5.72E-05	0%
COPPER	2.18E-03	--	--	2.18E-03	2.18E-03	5%
MANGANESE	6.44E-03	--	1.11E-03	7.56E-03	7.56E-03	17%
MERCURY	4.37E-03	--	--	4.37E-03	4.37E-03	10%
NICKEL	5.21E-04	--	--	5.21E-04	5.21E-04	1%
SELENIUM	5.03E-05	--	--	5.03E-05	5.03E-05	0%
SILVER	2.75E-05	--	--	2.75E-05	2.75E-05	0%
THALLIUM	9.78E-04	--	--	9.78E-04	9.78E-04	2%
VANADIUM	1.77E-03	--	--	1.77E-03	1.77E-03	4%
ZINC	6.38E-04	--	--	6.38E-04	6.38E-04	1%
PAHs						
ACENAPHTHENE	1.21E-06	--	1.23E-10	1.22E-06	1.22E-06	0%
ACENAPHTHYLENE	1.30E-06	--	3.04E-09	1.30E-06	1.30E-06	0%
ANTHRACENE	3.38E-07	--	3.41E-11	3.38E-07	3.38E-07	0%
BENZ(A)ANTHRACENE	--	--	--	--	0.00E+00	0%
BENZO(A)PYRENE	--	--	--	--	0.00E+00	0%
BENZO(B)FLOURANTHENE	--	--	--	--	0.00E+00	0%
BENZO(G,H,I)PERYLENE	5.17E-06	--	5.22E-10	5.17E-06	5.17E-06	0%
BENZO(K)FLOURANTHENE	--	--	--	--	0.00E+00	0%
CHRYSENE	--	--	--	--	0.00E+00	0%
DIBENZ(A, H)ANTHRACENE	--	--	--	--	0.00E+00	0%
FLUORANTHENE	1.01E-05	--	1.02E-09	1.01E-05	1.01E-05	0%
FLUORENE	1.90E-06	--	1.91E-10	1.90E-06	1.90E-06	0%
INDENO(1,2,3-CD)PYRENE	--	--	--	--	0.00E+00	0%
2-METHYLNAPHTHALENE	2.07E-06	--	--	2.07E-06	2.07E-06	0%
NAPHTHALENE	2.52E-06	--	5.92E-09	2.53E-06	2.53E-06	0%
PHENANTHRENE	4.09E-05	--	9.59E-08	4.09E-05	4.09E-05	0%
PYRENE	1.57E-05	--	1.58E-09	1.57E-05	1.57E-05	0%
Semivolatiles						
BIS(2-ETHYLHEXYL)PHTHALATE	9.10E-06	1.04E-05	8.35E-10	1.95E-05	1.95E-05	0%
BUTYLBENZYLPHTHALATE	1.91E-07	2.18E-07	1.93E-11	4.08E-07	4.08E-07	0%
DIBENZOFURAN	1.60E-05	1.83E-05	1.62E-09	3.43E-05	3.43E-05	0%
DIBUTYLPHTHALATE	1.20E-06	1.37E-06	1.22E-10	2.58E-06	2.58E-06	0%
Volatiles						
2-BUTANONE	8.15E-09	--	1.70E-12	8.16E-09	8.16E-09	0%
ACETONE	3.42E-06	--	3.46E-10	3.43E-06	3.43E-06	0%
BENZENE	7.01E-07	--	1.25E-10	7.01E-07	7.01E-07	0%
CARBON DISULFIDE	4.89E-08	--	2.47E-12	4.89E-08	4.89E-08	0%
TOLUENE	5.38E-09	--	9.88E-13	5.38E-09	5.38E-09	0%
TRICHLOROETHENE	2.69E-07	--	2.72E-11	2.69E-07	2.69E-07	0%
VINYL CHLORIDE	1.63E-06	--	1.70E-11	1.63E-06	1.63E-06	0%
Cumulative Risk	4.03E-02	3.75E-03	1.47E-03	4.55E-02	4.55E-02	100%

TABLE 4-32 SUMMARY OF CANCER RISKS FOR COMMERCIAL WORKERS AT FORT TOTTEN -- REASONABLE MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF CANCER RISKS

Site Number:

Fill Area

Chemical of Concern	Incidental Ingestion of Surface Soil	Dermal Contact with Surface Soil	Inhalation of Particulates from Surface Soil	Total Surface Soil	Total	Percent Contribution Of Each COC
	Risk	Risk	Risk		Risk	
Inorganics						
ALUMINUM	--	--	--	--	0.00E+00	0.0%
ANTIMONY	--	--	--	--	0.00E+00	0.0%
ARSENIC	1.54E-06	5.28E-07	1.56E-09	2.07E-06	2.07E-06	65.8%
BARIUM	--	--	--	--	0.00E+00	0.0%
BERYLLIUM	--	--	4.93E-11	4.93E-11	4.93E-11	0.0%
CADMIUM	--	--	1.08E-10	1.08E-10	1.08E-10	0.0%
CHROMIUM	--	--	1.19E-07	1.19E-07	1.19E-07	3.8%
COBALT	--	--	--	--	0.00E+00	0.0%
COPPER	--	--	--	--	0.00E+00	0.0%
MANGANESE	--	--	--	--	0.00E+00	0.0%
MERCURY	--	--	--	--	0.00E+00	0.0%
NICKEL	--	--	--	--	0.00E+00	0.0%
SELENIUM	--	--	--	--	0.00E+00	0.0%
SILVER	--	--	--	--	0.00E+00	0.0%
THALLIUM	--	--	--	--	0.00E+00	0.0%
VANADIUM	--	--	--	--	0.00E+00	0.0%
ZINC	--	--	--	--	0.00E+00	0.0%
PAHs						
ACENAPHTHENE	--	--	--	--	0.00E+00	0.0%
ACENAPHTHYLENE	--	--	--	--	0.00E+00	0.0%
ANTHRACENE	--	--	--	--	0.00E+00	0.0%
BENZ(A)ANTHRACENE	6.29E-08	--	2.70E-12	6.29E-08	6.29E-08	2.0%
BENZO(A)PYRENE	5.97E-07	--	2.56E-11	5.97E-07	5.97E-07	19.0%
BENZO(B)FLOURANTHENE	7.55E-08	--	3.24E-12	7.55E-08	7.55E-08	2.4%
BENZO(G,H,I)PERYLENE	--	--	--	--	0.00E+00	0.0%
BENZO(K)FLOURANTHENE	2.96E-09	--	1.27E-13	2.96E-09	2.96E-09	0.1%
CHRYSENE	6.72E-10	--	2.88E-14	6.72E-10	6.72E-10	0.0%
DIBENZ[A, H]ANTHRACENE	1.70E-07	--	7.27E-12	1.70E-07	1.70E-07	5.4%
FLUORANTHENE	--	--	--	--	0.00E+00	0.0%
FLUORENE	--	--	--	--	0.00E+00	0.0%
INDENO(1,2,3-CD)PYRENE	4.40E-08	--	1.89E-12	4.40E-08	4.40E-08	1.4%
2-METHYLNAPHTHALENE	--	--	--	--	0.00E+00	0.0%
NAPHTHALENE	--	--	--	--	0.00E+00	0.0%
PHENANTHRENE	--	--	--	--	0.00E+00	0.0%
PYRENE	--	--	--	--	0.00E+00	0.0%
Semivolatiles						
BIS(2-ETHYLHEXYL)PHTHALATE	9.10E-10	1.04E-09	--	1.95E-09	1.95E-09	0.1%
BUTYLBENZYLPHTHALATE	--	--	--	--	0.00E+00	0.0%
DIBENZOFURAN	--	--	--	--	0.00E+00	0.0%
DIBUTYLPHTHALATE	--	--	--	--	0.00E+00	0.0%
Volatiles						
2-BUTANONE	--	--	--	--	0.00E+00	0.0%
ACETONE	--	--	--	--	0.00E+00	0.0%
BENZENE	4.13E-11	--	2.05E-15	4.13E-11	4.13E-11	0.0%
CARBON DISULFIDE	--	--	--	--	0.00E+00	0.0%
TOLUENE	--	--	--	--	0.00E+00	0.0%
TRICHLOROETHENE	6.34E-12	--	3.49E-16	6.34E-12	6.34E-12	0.0%
VINYL CHLORIDE	2.62E-09	--	5.47E-15	2.62E-09	2.62E-09	0.1%
Cumulative Risk	2.50E-06	5.29E-07	1.21E-07	3.15E-06	3.15E-06	100%

**TABLE 4-33 SUMMARY OF NONCANCER RISKS FOR CONSTRUCTION WORKERS AT FORT TOTTEN -
REASONABLE MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF NONCANCER RISKS**

Site Number:

Fill Area

Chemical of Concern	Incidental Ingestion of Total Soil	Dermal Contact with Total Soil	Inhalation of Particulates from Surface Soil	Total Soil	Percent Contribution Of Each COC
	HQ	HQ	HQ		
Inorganics					
ALUMINUM	2.26E-02	--	1.70E-04	2.27E-02	10%
ANTIMONY	1.90E-02	--	--	1.90E-02	8%
ARSENIC	5.53E-02	3.42E-03	--	5.88E-02	25%
BARIUM	8.37E-03	--	4.40E-05	8.42E-03	4%
BERYLLIUM	4.69E-04	--	1.73E-06	4.71E-04	0%
CADMIUM	5.48E-03	4.52E-04	--	5.93E-03	3%
CHROMIUM	2.19E-02	--	--	2.19E-02	9%
COBALT	3.29E-04	--	--	3.29E-04	0%
COPPER	1.26E-02	--	--	1.26E-02	5%
MANGANESE	3.71E-02	--	6.69E-04	3.78E-02	16%
MERCURY	2.52E-02	--	--	2.52E-02	11%
NICKEL	3.00E-03	--	--	3.00E-03	1%
SELENIUM	2.90E-04	--	--	2.90E-04	0%
SILVER	1.58E-04	--	--	1.58E-04	0%
THALLIUM	5.64E-03	--	--	5.64E-03	2%
VANADIUM	1.02E-02	--	--	1.02E-02	4%
ZINC	3.67E-03	--	--	3.67E-03	2%
PAHs					
ACENAPHTHENE	7.00E-06	--	7.36E-11	7.00E-06	0%
ACENAPHTHYLENE	7.47E-06	--	1.83E-09	7.47E-06	0%
ANTHRACENE	1.94E-06	--	2.05E-11	1.94E-06	0%
BENZ(A)ANTHRACENE	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--
BENZO(G,H,I)PERYLENE	2.98E-05	--	3.13E-10	2.98E-05	0%
BENZO(K)FLUORANTHENE	--	--	--	--	--
CHRYSENE	--	--	--	--	--
DIBENZ(A, H)ANTHRACENE	--	--	--	--	--
FLUORANTHENE	5.83E-05	--	6.14E-10	5.83E-05	0%
FLUORENE	1.09E-05	--	1.15E-10	1.09E-05	0%
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--
2-METHYLNAPHTHALENE	1.19E-05	--	--	1.19E-05	0%
NAPHTHALENE	1.45E-05	--	3.55E-09	1.45E-05	0%
PHENANTHRENE	2.35E-04	--	5.76E-08	2.35E-04	0%
PYRENE	9.04E-05	--	9.50E-10	9.04E-05	0%
Semivolatiles					
BIS(2-ETHYLHEXYL)PHTHALATE	5.24E-05	1.08E-05	5.01E-10	6.32E-05	0%
BUTYLBENZYLPHTHALATE	1.10E-06	2.27E-07	1.16E-11	1.33E-06	0%
DIBENZOFURAN	9.23E-05	1.90E-05	9.71E-10	1.11E-04	0%
DIBUTYLPHTHALATE	6.93E-06	1.43E-06	7.29E-11	8.36E-06	0%
Volatiles					
2-BUTANONE	4.70E-08	--	1.02E-12	4.70E-08	0%
ACETONE	1.97E-05	--	2.07E-10	1.97E-05	0%
BENZENE	4.04E-06	--	7.50E-11	4.04E-06	0%
CARBON DISULFIDE	2.82E-07	--	1.48E-12	2.82E-07	0%
TOLUENE	3.10E-08	--	5.93E-13	3.10E-08	0%
TRICHLOROETHENE	1.55E-06	--	1.63E-11	1.55E-06	0%
VINYL CHLORIDE	9.39E-06	--	1.02E-11	9.39E-06	0%
Cumulative Risk	2.32E-01	3.91E-03	8.84E-04	2.37E-01	100%

**TABLE 4-34 SUMMARY OF CANCER RISKS FOR CONSTRUCTION WORKERS AT FORT TOTTEN --
REASONABLE MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF CANCER RISKS**

Site Number:

Fill Area

Chemical of Concern	Incidental Ingestion of Total Soil	Dermal Contact with Total Soil	Inhalation of Particulates from Surface Soil	Total Soil	Percent Contribution Of Each COC
	Risk	Risk	Risk		
Inorganics					
ALUMINUM	--	--	--	--	--
ANTIMONY	--	--	--	--	--
ARSENIC	3.56E-07	2.20E-08	3.74E-11	3.78E-07	63%
BARIUM	--	--	--	--	--
BERYLLIUM	--	--	1.18E-12	1.18E-12	0%
CADMIUM	--	--	2.59E-12	2.59E-12	0%
CHROMIUM	--	--	2.86E-09	2.86E-09	0%
COBALT	--	--	--	--	--
COPPER	--	--	--	--	--
LEAD	--	--	--	--	--
MANGANESE	--	--	--	--	--
MERCURY	--	--	--	--	--
NICKEL	--	--	--	--	--
SELENIUM	--	--	--	--	--
SILVER	--	--	--	--	--
THALLIUM	--	--	--	--	--
VANADIUM	--	--	--	--	--
ZINC	--	--	--	--	--
PAHs					
ACENAPHTHENE	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--
ANTHRACENE	--	--	--	--	--
BENZ(A)ANTHRACENE	1.45E-08	--	6.47E-14	1.45E-08	2%
BENZO(A)PYRENE	1.38E-07	--	6.14E-13	1.38E-07	23%
BENZO(B)FLOURANTHENE	1.74E-08	--	7.77E-14	1.74E-08	3%
BENZO(G,H,I)PERYLENE	--	--	--	--	--
BENZO(K)FLOURANTHENE	6.82E-10	--	3.05E-15	6.82E-10	0%
CHRYSENE	1.55E-10	--	6.92E-16	1.55E-10	0%
DIBENZ[A, H]ANTHRACENE	3.91E-08	--	1.75E-13	3.91E-08	7%
FLUORANTHENE	--	--	--	--	--
FLUORENE	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	1.01E-08	--	4.53E-14	1.01E-08	2%
2-METHYLNAPHTHALENE	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--
PYRENE	--	--	--	--	--
Semivolatiles					
BIS(2-ETHYLHEXYL)PHTHALATE	2.10E-10	4.32E-11	--	2.53E-10	0%
BUTYLBENZYLPHTHALATE	--	--	--	--	--
DIBENZOFURAN	--	--	--	--	--
DIBUTYLPHTHALATE	--	--	--	--	--
Volatiles					
2-BUTANONE	--	--	--	--	--
ACETONE	--	--	--	--	--
BENZENE	9.52E-12	--	4.92E-17	9.52E-12	0%
CARBON DISULFIDE	--	--	--	--	--
TOLUENE	--	--	--	--	--
TRICHLOROETHENE	1.46E-12	--	8.38E-18	1.46E-12	0%
VINYL CHLORIDE	6.04E-10	--	1.31E-16	6.04E-10	0%
Cumulative Risk	5.76E-07	2.21E-08	2.90E-09	6.01E-07	100%

TABLE 4-35 SUMMARY OF NONCANCER RISKS FOR RESIDENT ADULTS AT FORT TOTTEN – REASONABLE MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF NONCANCER RISKS

Site Number:

Other Area

Chemical of Concern	Incidental Ingestion of Total Soil	Dermal Contact with Total Soil	Inhalation of Particulates from Total Soil	Total Soil	Ingestion of Vegetables	Total	Percent Contribution Of Each COC
	HQ	HQ	HQ		HQ	HI	
Inorganics							
ALUMINUM	1.28E-02	--	1.38E-03	1.41E-02	8.15E-04	1.49E-02	6.4%
ANTIMONY	2.17E-03	--	--	2.17E-03	2.08E-03	4.26E-03	1.8%
ARSENIC	2.50E-02	2.99E-03	--	2.80E-02	4.97E-03	3.29E-02	14.1%
BARIUM	1.60E-03	--	1.21E-04	1.72E-03	1.45E-03	3.17E-03	1.4%
BERYLLIUM	1.95E-04	--	1.04E-05	2.06E-04	1.44E-05	2.20E-04	0.1%
CADMIUM	9.29E-04	1.48E-04	--	1.08E-03	3.28E-03	4.36E-03	1.9%
CHROMIUM	8.95E-03	--	--	8.95E-03	1.31E-03	1.03E-02	4.4%
COBALT	1.60E-04	--	--	1.60E-04	6.15E-05	2.22E-04	0.1%
COPPER	4.37E-03	--	--	4.37E-03	1.43E-02	1.87E-02	8.0%
MANGANESE	1.83E-02	--	4.76E-03	2.31E-02	7.61E-02	9.92E-02	42.4%
MERCURY	1.27E-02	--	--	1.27E-02	6.74E-03	1.95E-02	8.3%
NICKEL	1.15E-03	--	--	1.15E-03	3.18E-04	1.47E-03	0.6%
SELENIUM	1.52E-04	--	--	1.52E-04	7.58E-05	2.28E-04	0.1%
SILVER	5.75E-05	--	--	5.75E-05	2.31E-04	2.89E-04	0.1%
THALLIUM	2.39E-03	--	--	2.39E-03	5.75E-05	2.44E-03	1.0%
VANADIUM	5.52E-03	--	--	5.52E-03	6.84E-04	6.20E-03	2.7%
ZINC	5.39E-04	--	--	5.39E-04	7.46E-04	1.29E-03	0.5%
PAHs							
ACENAPHTHENE	2.97E-06	--	4.50E-10	2.97E-06	8.37E-05	8.66E-05	0.0%
ACENAPHTHYLENE	1.33E-05	--	4.68E-08	1.33E-05	6.93E-05	8.26E-05	0.0%
ANTHRACENE	5.39E-07	--	8.16E-11	5.39E-07	1.48E-06	2.02E-06	0.0%
BENZ(A)ANTHRACENE	--	--	--	--	--	0.00E+00	0.0%
BENZO(A)PYRENE	--	--	--	--	--	0.00E+00	0.0%
BENZO(B)FLOURANTHENE	--	--	--	--	--	0.00E+00	0.0%
BENZO(G,H,I)PERYLENE	2.17E-05	--	3.29E-09	2.17E-05	4.01E-06	2.58E-05	0.0%
BENZO(K)FLOURANTHENE	--	--	--	--	--	0.00E+00	0.0%
CHRYSENE	--	--	--	--	--	0.00E+00	0.0%
DIBENZ(A, H)ANTHRACENE	--	--	--	--	--	0.00E+00	0.0%
FLUORANTHENE	2.97E-05	--	4.50E-09	2.97E-05	3.95E-05	6.92E-05	0.0%
FLUORENE	4.25E-05	--	6.43E-09	4.25E-05	1.76E-04	2.19E-04	0.1%
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	0.00E+00	0.0%
2-METHYLNAPHTHALENE	7.47E-06	--	--	7.47E-06	3.43E-04	3.50E-04	0.1%
NAPHTHALENE	6.81E-06	--	2.40E-08	6.83E-06	3.13E-04	3.19E-04	0.1%
PHENANTHRENE	2.44E-05	--	8.59E-08	2.45E-05	5.93E-05	8.38E-05	0.0%
PYRENE	5.02E-05	--	7.61E-09	5.02E-05	7.04E-05	1.21E-04	0.1%
Semivolatiles							
BIS(2-ETHYLHEXYL)PHTHALATE	2.15E-04	8.58E-05	2.96E-08	3.01E-04	2.33E-04	5.33E-04	0.2%
BUTYLBENZYLPHTHALATE	6.50E-07	2.59E-07	9.84E-11	9.09E-07	1.97E-06	2.88E-06	0.0%
2-CHLOROPHENOL	4.25E-05	1.69E-05	6.43E-09	5.94E-05	3.20E-03	3.26E-03	1.4%
DIBENZOFURAN	4.18E-05	1.67E-05	6.33E-09	5.85E-05	2.04E-04	2.62E-04	0.1%
DIBUTYLPHTHALATE	2.15E-06	8.58E-07	3.26E-10	3.01E-06	9.87E-06	1.29E-05	0.0%
DIOCTYLPHTHALATE	1.04E-05	4.15E-06	1.58E-09	1.46E-05	2.15E-07	1.48E-05	0.0%
4-METHYLPHENOL	1.51E-05	6.01E-06	2.28E-09	2.11E-05	3.01E-03	3.03E-03	1.3%
Volatiles							
2-BUTANONE	9.13E-09	--	2.86E-12	9.14E-09	1.73E-05	1.73E-05	0.0%
ACETONE	9.99E-07	--	1.51E-10	9.99E-07	4.21E-03	4.21E-03	1.8%
BENZENE	1.31E-06	--	3.49E-10	1.31E-06	2.23E-04	2.24E-04	0.1%
CHLOROFORM	1.51E-07	--	2.65E-09	1.53E-07	2.77E-05	2.78E-05	0.0%
ETHYLBENZENE	3.47E-08	--	1.81E-12	3.47E-08	5.21E-06	5.24E-06	0.0%
TRICHLOROETHENE	5.02E-07	--	7.61E-11	5.02E-07	6.46E-05	6.52E-05	0.0%
VINYL CHLORIDE	2.00E-06	--	3.13E-11	2.00E-06	1.05E-03	1.05E-03	0.4%
Cumulative Risk	9.75E-02	3.27E-03	6.27E-03	1.07E-01	1.27E-01	2.34E-01	100%

TABLE 4-36 SUMMARY OF NONCANCER RISKS FOR RESIDENT CHILDREN AT FORT TOTTEN -- REASONABLE MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF NONCANCER RISKS

Site Number: Other Area

Chemical of Concern	Incidental Ingestion of Total Soil	Dermal Contact with Total Soil	Inhalation of Particulates from Total Soil	Total Soil	Ingestion of Vegetables	Total	Percent Contribution Of Each COC
	HQ	HQ	HQ		HQ	HI	
Inorganics							
ALUMINUM	1.19E-01	--	3.22E-03	1.22E-01	2.35E-03	1.25E-01	10%
ANTIMONY	2.03E-02	--	--	2.03E-02	4.51E-03	2.48E-02	3%
ARSENIC	2.33E-01	1.96E-02	--	2.53E-01	1.06E-02	2.63E-01	20%
BARIUM	1.49E-02	--	2.83E-04	1.52E-02	3.19E-03	1.84E-02	1%
BERYLLIUM	1.82E-03	--	2.42E-05	1.85E-03	3.15E-05	1.88E-03	0%
CADMIUM	8.67E-03	9.71E-04	--	9.64E-03	7.22E-03	1.69E-02	2%
CHROMIUM	8.35E-02	--	--	8.35E-02	2.83E-03	8.64E-02	7%
COBALT	1.50E-03	--	--	1.50E-03	1.62E-04	1.66E-03	0%
COPPER	4.08E-02	--	--	4.08E-02	3.10E-02	7.17E-02	4%
MANGANESE	1.71E-01	--	1.11E-02	1.82E-01	2.15E-01	3.97E-01	32%
MERCURY	1.19E-01	--	--	1.19E-01	1.39E-02	1.33E-01	10%
NICKEL	1.07E-02	--	--	1.07E-02	6.91E-04	1.14E-02	1%
SELENIUM	1.42E-03	--	--	1.42E-03	1.62E-04	1.58E-03	0%
SILVER	5.37E-04	--	--	5.37E-04	5.05E-04	1.04E-03	0%
THALLIUM	2.23E-02	--	--	2.23E-02	1.27E-04	2.24E-02	2%
VANADIUM	5.15E-02	--	--	5.15E-02	1.67E-03	5.32E-02	4%
ZINC	5.03E-03	--	--	5.03E-03	1.61E-03	6.64E-03	1%
PAHs							
ACENAPHTHENE	2.77E-05	--	1.05E-09	2.77E-05	1.42E-04	1.70E-04	0%
ACENAPHTHYLENE	1.24E-04	--	1.09E-07	1.24E-04	1.49E-04	2.74E-04	0%
ANTHRACENE	5.03E-06	--	1.91E-10	5.03E-06	3.30E-06	8.33E-06	0%
BENZ(A)ANTHRACENE	--	--	--	--	--	--	0%
BENZO(A)PYRENE	--	--	--	--	--	--	0%
BENZO(B)FLUORANTHENE	--	--	--	--	--	--	0%
BENZO(G,H,I)PERYLENE	2.03E-04	--	7.69E-09	2.03E-04	8.66E-06	2.12E-04	0%
BENZO(K)FLUORANTHENE	--	--	--	--	--	--	0%
CHRYSENE	--	--	--	--	--	--	0%
DIBENZ[A, H]ANTHRACENE	--	--	--	--	--	--	0%
FLUORANTHENE	2.77E-04	--	1.05E-08	2.77E-04	8.56E-05	3.63E-04	0%
FLUORENE	3.96E-04	--	1.50E-08	3.96E-04	3.91E-04	7.87E-04	0%
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--	--	0%
2-METHYLNAPHTHALENE	6.97E-05	--	--	6.97E-05	5.96E-04	6.66E-04	0%
NAPHTHALENE	6.35E-05	--	5.60E-08	6.36E-05	5.44E-04	6.08E-04	0%
PHENANTHRENE	2.28E-04	--	2.01E-07	2.28E-04	1.33E-04	3.60E-04	0%
PYRENE	4.69E-04	--	1.78E-08	4.69E-04	1.55E-04	6.24E-04	0%
Semivolatiles							
BIS(2-ETHYLHEXYL)PHTHALATE	2.68E-03	7.52E-04	9.25E-08	3.44E-03	5.11E-04	3.95E-03	0%
BUTYLBENZYLPHTHALATE	7.35E-06	2.06E-06	2.79E-10	9.41E-06	4.35E-06	1.38E-05	0%
CARBAZOLE	--	--	--	--	--	0.00E+00	0%
2-CHLOROPHENOL	5.40E-04	1.51E-04	2.05E-08	6.91E-04	9.09E-03	9.78E-03	1%
4-CHLOROPHENYL PHENYL ETHE	--	--	--	--	--	0.00E+00	0%
DIBENZOFURAN	4.99E-04	1.40E-04	1.89E-08	6.38E-04	6.68E-03	7.31E-03	0%
DIBUTYLPHTHALATE	8.44E-06	2.36E-06	3.20E-10	1.08E-05	1.83E-05	2.91E-05	0%
DIOCTYLPHTHALATE	1.28E-04	3.60E-05	4.87E-09	1.64E-04	3.66E-07	1.65E-04	0%
4-METHYLPHENOL	1.41E-04	3.94E-05	5.33E-09	1.80E-04	5.52E-03	5.70E-03	0%
Volatiles							
2-BUTANONE	8.52E-08	--	6.69E-12	8.52E-08	3.16E-05	3.17E-05	0%
ACETONE	9.32E-06	--	3.53E-10	9.32E-06	7.54E-03	7.54E-03	1%
BENZENE	1.22E-05	--	8.15E-10	1.22E-05	4.03E-04	4.15E-04	0%
CHLOROFORM	1.41E-06	--	6.20E-09	1.41E-06	5.13E-05	5.27E-05	0%
ETHYLBENZENE	3.23E-07	--	4.23E-12	3.23E-07	8.56E-06	8.88E-06	0%
TRICHLOROETHENE	4.69E-06	--	1.78E-10	4.69E-06	1.15E-04	1.20E-04	0%
VINYL CHLORIDE	1.86E-05	--	7.30E-11	1.86E-05	1.95E-03	1.97E-03	0%
Cumulative Risk	9.11E-01	2.17E-02	1.46E-02	9.47E-01	3.30E-01	1.28E+00	100.0%

TABLE 4-37 BREAKDOWN OF NONCANCER RISK BY TARGET ORGAN, RESIDENT CHILDREN NONCANCER EFFECTS

Site Number:		Other Area		
Chemical of Concern	Total Soil	Ingestion of Vegetables	Total	Target Organ
	HI	HI	HI	
Inorganics				
ARSENIC	2.26E-01	1.14E-02	2.38E-01	Skin
MANGANESE	1.71E-01	2.12E-01	3.83E-01	Central Nervous System
MERCURY	1.10E-01	1.34E-02	1.23E-01	Autoimmune
Cumulative HI per Target Organ	5.07E-01	2.36E-01	7.44E-01	
			0.24	Skin
			0.38	Central Nervous System
			0.12	Autoimmune

**TABLE 4-38 SUMMARY OF CANCER RISKS FOR RESIDENT ADULT AND CHILDREN AT FORT TOTTEN --
REASONABLE MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF CANCER RISKS**

Site Number: Other Area

Chemical of Concern	Incidental Ingestion of Total soil	Dermal Contact With Total Soil	Inhalation of Particulates from Total Soil	Total Soil	Ingestion of Vegetables	Total	Percent Contribution Of Each COC
	Risk	Risk	Risk		Risk	Risk	
Inorganics							
ALUMINUM	--	--	--	--	--	0.00E+00	0.0%
ANTIMONY	--	--	--	--	--	0.00E+00	0.0%
ARSENIC	1.28E-05	1.22E-06	9.25E-09	1.46E-05	7.66E-07	1.54E-05	40.1%
BARIUM	--	--	--	--	--	0.00E+00	0.0%
BERYLLIUM	--	--	2.70E-10	3.01E-10	--	3.01E-10	0.0%
CADMIUM	--	--	2.41E-10	2.39E-10	--	2.39E-10	0.0%
CHROMIUM	--	--	6.40E-07	6.24E-07	--	6.24E-07	1.5%
COBALT	--	--	--	--	--	0.00E+00	0.0%
COPPER	--	--	--	--	--	0.00E+00	0.0%
MANGANESE	--	--	--	--	--	0.00E+00	0.0%
MERCURY	--	--	--	--	--	0.00E+00	0.0%
NICKEL	--	--	--	--	--	0.00E+00	0.0%
SELENIUM	--	--	--	--	--	0.00E+00	0.0%
SILVER	--	--	--	--	--	0.00E+00	0.0%
THALLIUM	--	--	--	--	--	0.00E+00	0.0%
VANADIUM	--	--	--	--	--	0.00E+00	0.0%
ZINC	--	--	--	--	--	0.00E+00	0.0%
PAHs							
ACENAPHTHENE	--	--	--	--	--	0.00E+00	0.0%
ACENAPHTHYLENE	--	--	--	--	--	0.00E+00	0.0%
ANTHRACENE	--	--	--	--	--	0.00E+00	0.0%
BENZ(A)ANTHRACENE	8.46E-07	--	2.58E-11	8.46E-07	1.56E-07	1.00E-06	2.8%
BENZO(A)PYRENE	1.03E-05	--	3.13E-10	1.03E-05	1.05E-06	1.13E-05	31.0%
BENZO(B)FLUORANTHENE	1.42E-06	--	4.33E-11	1.42E-06	1.41E-07	1.56E-06	4.5%
BENZO(G,H,I)PERYLENE	--	--	--	--	--	0.00E+00	0.0%
BENZO(K)FLUORANTHENE	4.38E-08	--	1.34E-12	4.38E-08	4.38E-09	4.81E-08	0.2%
CHRYSENE	7.39E-09	--	2.26E-13	7.39E-09	1.27E-09	8.67E-09	0.0%
DIBENZ[A, H]ANTHRACENE	1.95E-06	--	5.97E-11	1.95E-06	1.33E-07	2.09E-06	6.6%
FLUORANTHENE	--	--	--	--	--	0.00E+00	0.0%
FLUORENE	--	--	--	--	--	0.00E+00	0.0%
INDENO(1,2,3-CD)PYRENE	5.91E-07	--	1.81E-11	5.91E-07	2.69E-08	6.18E-07	1.9%
2-METHYLNAPHTHALENE	--	--	--	--	--	0.00E+00	0.0%
NAPHTHALENE	--	--	--	--	--	0.00E+00	0.0%
PHENANTHRENE	--	--	--	--	--	0.00E+00	0.0%
PYRENE	--	--	--	--	--	0.00E+00	0.0%
Semivolatiles							
BIS(2-ETHYLHEXYL)PHTHALATE	6.88E-08	2.17E-08	--	1.21E-07	9.54E-08	2.17E-07	0.5%
BUTYLBENZYLPHTHALATE	--	--	--	--	--	0.00E+00	0.0%
2-CHLOROPHENOL	--	--	--	--	--	0.00E+00	0.0%
4-CHLOROPHENYL PHENYL ETHER	--	--	--	--	--	0.00E+00	0.0%
DIBENZOFURAN	--	--	--	--	--	0.00E+00	0.0%
DIBUTYLPHTHALATE	--	--	--	--	--	0.00E+00	0.0%
DIOCTYLPHTHALATE	--	--	--	--	--	0.00E+00	0.0%
4-METHYLPHENOL	--	--	--	--	--	0.00E+00	0.0%
Volatiles							
2-BUTANONE	--	--	--	--	--	0.00E+00	0.0%
ACETONE	--	--	--	--	--	0.00E+00	0.0%
BENZENE	2.46E-10	--	8.70E-15	2.46E-10	3.54E-08	3.57E-08	0.1%
CHLOROFORM	1.05E-11	--	9.98E-15	1.05E-11	1.65E-09	1.66E-09	0.0%
ETHYLBENZENE	--	--	--	--	--	0.00E+00	0.0%
TRICHLOROETHENE	3.79E-11	--	1.49E-15	3.79E-11	4.07E-09	4.11E-09	0.0%
VINYL CHLORIDE	1.03E-08	--	1.53E-14	1.03E-08	4.62E-06	4.63E-06	10.8%
Cumulative Risk	2.88E-05	1.30E-06	6.35E-07	3.07E-05	1.20E-05	4.28E-05	100%

**TABLE 4-39 SUMMARY OF NONCANCER RISKS FOR RECREATIONAL USERS AT FORT TOTTEN --
REASONABLE MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF NONCANCER RISKS**

Site Number: Other Area

Chemical of Concern	Incidental Ingestion of Surface Soil	Dermal Contact with Surface Soil	Inhalation of Particulates from Surface Soil	Total	Percent Contribution Of Each COC
	HQ	HQ	HQ	HI	
Inorganics					
ALUMINUM	2.00E-02	--	6.75E-04	2.07E-02	13.3%
ANTIMONY	3.41E-03	--	--	3.41E-03	2.2%
ARSENIC	3.91E-02	3.62E-05	--	3.92E-02	25.1%
BARIUM	2.51E-03	--	5.93E-05	2.57E-03	1.6%
BERYLLIUM	3.06E-04	--	5.08E-06	3.11E-04	0.2%
CADMIUM	1.46E-03	1.80E-06	--	1.46E-03	0.9%
CHROMIUM	1.40E-02	--	--	1.40E-02	9.0%
COBALT	2.51E-04	--	--	2.51E-04	0.2%
COPPER	6.84E-03	--	--	6.84E-03	4.4%
MANGANESE	2.87E-02	--	2.33E-03	3.10E-02	19.9%
MERCURY	1.99E-02	--	--	1.99E-02	12.8%
NICKEL	1.80E-03	--	--	1.80E-03	1.2%
SELENIUM	2.38E-04	--	--	2.38E-04	0.2%
SILVER	9.01E-05	--	--	9.01E-05	0.1%
THALLIUM	3.74E-03	--	--	3.74E-03	2.4%
VANADIUM	8.65E-03	--	--	8.65E-03	5.5%
ZINC	8.44E-04	--	--	8.44E-04	0.5%
PAHs					
ACENAPHTHENE	4.65E-06	--	2.20E-10	4.65E-06	0.0%
ACENAPHTHYLENE	2.08E-05	--	2.29E-08	2.08E-05	0.0%
ANTHRACENE	8.44E-07	--	4.00E-11	8.44E-07	0.0%
BENZ(A)ANTHRACENE	--	--	--	0.00E+00	0.0%
BENZO(A)PYRENE	--	--	--	0.00E+00	0.0%
BENZO(B)FLOURANTHENE	--	--	--	0.00E+00	0.0%
BENZO(G,H,I)PERYLENE	3.41E-05	--	1.61E-09	3.41E-05	0.0%
BENZO(K)FLOURANTHENE	--	--	--	0.00E+00	0.0%
CHRYSENE	--	--	--	0.00E+00	0.0%
DIBENZ(A, H)ANTHRACENE	--	--	--	0.00E+00	0.0%
FLUORANTHENE	4.66E-05	--	2.20E-09	4.66E-05	0.0%
FLUORENE	6.65E-05	--	3.15E-09	6.65E-05	0.0%
INDENO(1,2,3-CD)PYRENE	--	--	--	0.00E+00	0.0%
2-METHYLNAPHTHALENE	1.17E-05	--	--	1.17E-05	0.0%
NAPHTHALENE	1.07E-05	--	1.17E-08	1.07E-05	0.0%
PHENANTHRENE	3.82E-05	--	4.20E-08	3.82E-05	0.0%
PYRENE	7.87E-05	--	3.72E-09	7.87E-05	0.1%
Semivolatiles					
BIS(2-ETHYLHEXYL)PHTHALATE	3.37E-04	1.04E-06	1.45E-08	3.38E-04	0.2%
BUTYLBENZYLPHthalATE	1.02E-06	3.14E-09	4.82E-11	1.02E-06	0.0%
2-CHLOROPHENOL	6.65E-05	2.05E-07	3.15E-09	6.67E-05	0.0%
DIBENZOFURAN	6.55E-05	2.02E-07	3.10E-09	6.57E-05	0.0%
DIBUTYLPHthalATE	3.37E-06	1.04E-08	1.59E-10	3.38E-06	0.0%
DIOCTYLPHthalATE	1.63E-05	5.03E-08	7.72E-10	1.64E-05	0.0%
4-METHYLPHENOL	2.36E-05	7.28E-08	1.12E-09	2.37E-05	0.0%
Volatiles					
2-BUTANONE	1.43E-08	--	1.40E-12	1.43E-08	0.0%
ACETONE	1.56E-06	--	7.40E-11	1.56E-06	0.0%
BENZENE	2.05E-06	--	1.71E-10	2.05E-06	0.0%
CHLOROFORM	2.36E-07	--	1.30E-09	2.37E-07	0.0%
ETHYLBENZENE	5.43E-08	--	8.86E-13	5.43E-08	0.0%
TRICHLOROETHENE	7.87E-07	--	3.72E-11	7.87E-07	0.0%
VINYL CHLORIDE	3.13E-06	--	1.53E-11	3.13E-06	0.0%
Cumulative Risk	1.53E-01	3.96E-05	3.07E-03	1.56E-01	100%

**TABLE 4-40 SUMMARY OF CANCER RISKS FOR RECREATIONAL USERS AT FORT TOTTEN --
REASONABLE MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF CANCER RISKS**

Site Number: Other Area

Chemical of Concern	Incidental Ingestion of Surface Soil	Dermal Contact with Surface Soil	Inhalation of Particulates from Surface Soil	Total	Percent Contribution Of Each COC
	Risk	Risk	Risk	Risk	
Inorganics					
ALUMINUM	--	--	--	0.00E+00	0.0%
ANTIMONY	--	--	--	0.00E+00	0.0%
ARSENIC	2.26E-06	2.10E-09	7.14E-10	2.27E-06	45.4%
BARIUM	--	--	--	0.00E+00	0.0%
BERYLLIUM	--	--	2.08E-11	2.08E-11	0.0%
CADMIUM	--	--	1.86E-11	1.86E-11	0.0%
CHROMIUM	--	--	4.95E-08	4.95E-08	1.0%
COBALT	--	--	--	0.00E+00	0.0%
COPPER	--	--	--	0.00E+00	0.0%
MANGANESE	--	--	--	0.00E+00	0.0%
MERCURY	--	--	--	0.00E+00	0.0%
NICKEL	--	--	--	0.00E+00	0.0%
SELENIUM	--	--	--	0.00E+00	0.0%
SILVER	--	--	--	0.00E+00	0.0%
THALLIUM	--	--	--	0.00E+00	0.0%
VANADIUM	--	--	--	0.00E+00	0.0%
ZINC	--	--	--	0.00E+00	0.0%
PAHs					
ACENAPHTHENE	--	--	--	0.00E+00	0.0%
ACENAPHTHYLENE	--	--	--	0.00E+00	0.0%
ANTHRACENE	--	--	--	0.00E+00	0.0%
BENZ(A)ANTHRACENE	1.49E-07	--	2.00E-12	1.49E-07	3.0%
BENZO(A)PYRENE	1.81E-06	--	2.42E-11	1.81E-06	36.2%
BENZO(B)FLUORANTHENE	2.50E-07	--	3.35E-12	2.50E-07	5.0%
BENZO(G,H,I)PERYLENE	--	--	--	0.00E+00	0.0%
BENZO(K)FLUORANTHENE	7.71E-09	--	1.03E-13	7.71E-09	0.2%
CHRYSENE	1.30E-09	--	1.75E-14	1.30E-09	0.0%
DIBENZ[A, H]ANTHRACENE	3.44E-07	--	4.62E-12	3.44E-07	6.9%
FLUORANTHENE	--	--	--	0.00E+00	0.0%
FLUORENE	--	--	--	0.00E+00	0.0%
INDENO(1,2,3-CD)PYRENE	1.04E-07	--	1.40E-12	1.04E-07	2.1%
2-METHYLNAPHTHALENE	--	--	--	0.00E+00	0.0%
NAPHTHALENE	--	--	--	0.00E+00	0.0%
PHENANTHRENE	--	--	--	0.00E+00	0.0%
PYRENE	--	--	--	0.00E+00	0.0%
Semivolatiles					
BIS(2-ETHYLHEXYL)PHTHALATE	1.21E-08	3.74E-11	--	1.22E-08	0.2%
BUTYLBENZYLPHTHALATE	--	--	--	0.00E+00	0.0%
2-CHLOROPHENOL	--	--	--	0.00E+00	0.0%
DIBENZOFURAN	--	--	--	0.00E+00	0.0%
DIBUTYLPHTHALATE	--	--	--	0.00E+00	0.0%
DIOCTYLPHTHALATE	--	--	--	0.00E+00	0.0%
4-METHYLPHENOL	--	--	--	0.00E+00	0.0%
Volatiles					
2-BUTANONE	--	--	--	0.00E+00	0.0%
ACETONE	--	--	--	0.00E+00	0.0%
BENZENE	4.34E-11	--	6.72E-16	4.34E-11	0.0%
CARBON DISULFIDE	--	--	--	0.00E+00	0.0%
CHLOROFORM	1.85E-12	--	7.71E-16	1.85E-12	0.0%
TOLUENE	--	--	--	0.00E+00	0.0%
TRICHLOROETHENE	6.68E-12	--	1.15E-16	6.68E-12	0.0%
VINYL CHLORIDE	1.81E-09	--	1.18E-15	1.81E-09	0.0%
Cumulative Risk	4.94E-06	2.13E-09	5.03E-08	4.99E-06	100%

**TABLE 4-41 SUMMARY OF NONCANCER RISKS FOR COMMERCIAL WORKERS AT FORT TOTTEN –
REASONABLE MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF NONCANCER RISKS**

Site Number:

Other Area

Chemical of Concern	Incidental Ingestion of Surface Soil	Dermal Contact with Surface Soil	Inhalation of Particulates from Surface Soil	Total	Percent Contribution Of Each COC
	HQ	HQ	HQ	HI	
Inorganics					
ALUMINUM	4.55E-03	--	3.28E-04	4.88E-03	12%
ANTIMONY	7.77E-04	--	--	7.77E-04	2%
ARSENIC	8.92E-03	3.05E-03	--	1.20E-02	30%
BARIUM	5.72E-04	--	2.89E-05	6.01E-04	2%
BERYLLIUM	6.97E-05	--	2.47E-06	7.22E-05	0%
CADMIUM	3.32E-04	1.51E-04	--	4.83E-04	1%
CHROMIUM	3.20E-03	--	--	3.20E-03	8%
COBALT	5.72E-05	--	--	5.72E-05	0%
COPPER	1.56E-03	--	--	1.56E-03	4%
MANGANESE	6.54E-03	--	1.13E-03	7.68E-03	19%
MERCURY	4.55E-03	--	--	4.55E-03	11%
NICKEL	4.11E-04	--	--	4.11E-04	1%
SELENIUM	5.42E-05	--	--	5.42E-05	0%
SILVER	2.05E-05	--	--	2.05E-05	0%
THALLIUM	8.52E-04	--	--	8.52E-04	2%
VANADIUM	1.97E-03	--	--	1.97E-03	5%
ZINC	1.92E-04	--	--	1.92E-04	0%
PAHs					
ACENAPHTHENE	1.06E-06	--	1.07E-10	1.06E-06	0%
ACENAPHTHYLENE	4.75E-06	--	1.11E-08	4.76E-06	0%
ANTHRACENE	1.92E-07	--	1.94E-11	1.92E-07	0%
BENZ(A)ANTHRACENE	--	--	--	0.00E+00	0%
BENZO(A)PYRENE	--	--	--	0.00E+00	0%
BENZO(B)FLUORANTHENE	--	--	--	0.00E+00	0%
BENZO(G,H,I)PERYLENE	7.76E-06	--	7.84E-10	7.76E-06	0%
BENZO(K)FLUORANTHENE	--	--	--	0.00E+00	0%
CHRYSENE	--	--	--	0.00E+00	0%
DIBENZ(A, H)ANTHRACENE	--	--	--	0.00E+00	0%
FLUORANTHENE	1.06E-05	--	1.07E-09	1.06E-05	0%
FLUORENE	1.52E-05	--	1.53E-09	1.52E-05	0%
INDENO(1,2,3-CD)PYRENE	--	--	--	0.00E+00	0%
2-METHYLNAPHTHALENE	2.67E-06	--	--	2.67E-06	0%
NAPHTHALENE	2.43E-06	--	5.71E-09	2.44E-06	0%
PHENANTHRENE	8.71E-06	--	2.04E-08	8.73E-06	0%
PYRENE	1.79E-05	--	1.81E-09	1.79E-05	0%
Semivolatiles					
BIS(2-ETHYLHEXYL)PHTHALATE	7.68E-05	8.76E-05	7.05E-09	1.64E-04	0%
BUTYLBENZYLPHTHALATE	2.32E-07	2.65E-07	2.34E-11	4.97E-07	0%
CARBAZOLE	--	--	--	0.00E+00	0%
2-CHLOROPHENOL	1.52E-05	1.73E-05	1.53E-09	3.25E-05	0%
4-CHLOROPHENYL PHENYL ETHER	--	--	--	0.00E+00	0%
DIBENZOFURAN	1.49E-05	1.70E-05	1.51E-09	3.19E-05	0%
DIBUTYLPHTHALATE	7.68E-07	8.76E-07	7.76E-11	1.64E-06	0%
DIOCTYLPHTHALATE	3.72E-06	4.24E-06	3.75E-10	7.96E-06	0%
4-METHYLPHENOL	5.38E-06	6.14E-06	5.43E-10	1.15E-05	0%
Volatiles					
2-BUTANONE	3.26E-09	--	6.81E-13	3.26E-09	0%
ACETONE	3.57E-07	--	3.60E-11	3.57E-07	0%
BENZENE	4.66E-07	--	8.31E-11	4.66E-07	0%
CHLOROFORM	5.38E-08	--	6.32E-10	5.44E-08	0%
ETHYLBENZENE	1.24E-08	--	4.31E-13	1.24E-08	0%
TRICHLOROETHENE	1.79E-07	--	1.81E-11	1.79E-07	0%
VINYL CHLORIDE	7.13E-07	--	7.44E-12	7.13E-07	0%
Cumulative Risk	3.48E-02	3.34E-03	1.49E-03	3.96E-02	100%

**TABLE 4-42 SUMMARY OF CANCER RISKS FOR COMMERCIAL WORKERS AT FORT TOTTEN --
REASONABLE MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF CANCER RISKS**

Site Number:

Other Area

Chemical of Concern	Incidental Ingestion of Surface Soil	Dermal Contact with Surface Soil	Inhalation of Particulates from Surface Soil	Total	Percent Contribution Of Each COC
	Risk	Risk	Risk	Risk	
Inorganics					
ALUMINUM	--	--	--	0.00E+00	0.0%
ANTIMONY	--	--	--	0.00E+00	0.0%
ARSENIC	1.43E-06	4.90E-07	1.45E-09	1.93E-06	51.6%
BARIUM	--	--	--	0.00E+00	0.0%
BERYLLIUM	--	--	4.22E-11	4.22E-11	0.0%
CADMIUM	--	--	3.77E-11	3.77E-11	0.0%
CHROMIUM	--	--	1.00E-07	1.00E-07	2.7%
COBALT	--	--	--	0.00E+00	0.0%
COPPER	--	--	--	0.00E+00	0.0%
MANGANESE	--	--	--	0.00E+00	0.0%
MERCURY	--	--	--	0.00E+00	0.0%
NICKEL	--	--	--	0.00E+00	0.0%
SELENIUM	--	--	--	0.00E+00	0.0%
SILVER	--	--	--	0.00E+00	0.0%
THALLIUM	--	--	--	0.00E+00	0.0%
VANADIUM	--	--	--	0.00E+00	0.0%
ZINC	--	--	--	0.00E+00	0.0%
PAHs					
ACENAPHTHENE	--	--	--	0.00E+00	0.0%
ACENAPHTHYLENE	--	--	--	0.00E+00	0.0%
ANTHRACENE	--	--	--	0.00E+00	0.0%
BENZ(A)ANTHRACENE	9.44E-08	--	4.05E-12	9.44E-08	2.5%
BENZO(A)PYRENE	1.14E-06	--	4.91E-11	1.14E-06	30.7%
BENZO(B)FLOURANTHENE	1.58E-07	--	6.78E-12	1.58E-07	4.2%
BENZO(G,H,I)PERYLENE	--	--	--	0.00E+00	0.0%
BENZO(K)FLOURANTHENE	4.89E-09	--	2.09E-13	4.89E-09	0.1%
CHRYSENE	8.25E-10	--	3.54E-14	8.25E-10	0.0%
DIBENZ[A, H]ANTHRACENE	2.18E-07	--	9.35E-12	2.18E-07	5.8%
FLUORANTHENE	--	--	--	0.00E+00	0.0%
FLUORENE	--	--	--	0.00E+00	0.0%
INDENO(1,2,3-CD)PYRENE	6.59E-08	--	2.83E-12	6.59E-08	1.8%
2-METHYLNAPHTHALENE	--	--	--	0.00E+00	0.0%
NAPHTHALENE	--	--	--	0.00E+00	0.0%
PHENANTHRENE	--	--	--	0.00E+00	0.0%
PYRENE	--	--	--	0.00E+00	0.0%
Semivolatiles					
BIS(2-ETHYLHEXYL)PHTHALATE	7.68E-09	8.76E-09	--	1.64E-08	0.4%
BUTYLBENZYLPHTHALATE	--	--	--	0.00E+00	0.0%
CARBAZOLE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.0%
2-CHLOROPHENOL	--	--	--	0.00E+00	0.0%
4-CHLOROPHENYL PHENYL ETHER	--	--	--	0.00E+00	0.0%
DIBENZOFURAN	--	--	--	0.00E+00	0.0%
DIBUTYLPHTHALATE	--	--	--	0.00E+00	0.0%
DIOCTYLPHTHALATE	--	--	--	0.00E+00	0.0%
4-METHYLPHENOL	--	--	--	0.00E+00	0.0%
Volatiles					
2-BUTANONE	--	--	--	0.00E+00	0.0%
ACETONE	--	--	--	0.00E+00	0.0%
BENZENE	2.75E-11	--	1.36E-15	2.75E-11	0.0%
CHLOROFORM	1.17E-12	--	1.56E-15	1.17E-12	0.0%
ETHYLBENZENE	--	--	--	0.00E+00	0.0%
TRICHLOROETHENE	4.23E-12	--	2.33E-16	4.23E-12	0.0%
VINYL CHLORIDE	1.15E-09	--	2.39E-15	1.15E-09	0.0%
Cumulative Risk	3.13E-06	4.99E-07	1.02E-07	3.73E-06	100%

TABLE 4-43 SUMMARY OF NONCANCER RISKS FOR CONSTRUCTION WORKERS AT FORT TOTTEN – REASONABLE MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF NONCANCER RISKS

Site Number:

Other Area

Chemical of Concern	Incidental Ingestion of Total Soil	Dermal Contact with Total Soil	Inhalation of Particulates from Total Soil	Total	Percent Contribution Of Each COC
	HQ	HQ	HQ	HI	
Inorganics					
ALUMINUM	2.62E-02	--	1.97E-04	2.64E-02	13%
ANTIMONY	4.47E-03	--	--	4.47E-03	2%
ARSENIC	5.14E-02	3.18E-03	--	5.46E-02	27%
BARIUM	3.29E-03	--	1.73E-05	3.31E-03	2%
BERYLLIUM	4.02E-04	--	1.48E-06	4.03E-04	0%
CADMIUM	1.91E-03	1.58E-04	--	2.07E-03	1%
CHROMIUM	1.84E-02	--	--	1.84E-02	9%
COBALT	3.30E-04	--	--	3.30E-04	0%
COPPER	8.99E-03	--	--	8.99E-03	4%
MANGANESE	3.77E-02	--	6.80E-04	3.84E-02	19%
MERCURY	2.62E-02	--	--	2.62E-02	13%
NICKEL	2.37E-03	--	--	2.37E-03	1%
SELENIUM	3.12E-04	--	--	3.12E-04	0%
SILVER	1.18E-04	--	--	1.18E-04	0%
THALLIUM	4.91E-03	--	--	4.91E-03	2%
VANADIUM	1.14E-02	--	--	1.14E-02	6%
ZINC	1.11E-03	--	--	1.11E-03	1%
PAHs					
ACENAPHTHENE	6.11E-06	--	6.42E-11	6.11E-06	0%
ACENAPHTHYLENE	2.73E-05	--	6.69E-09	2.73E-05	0%
ANTHRACENE	1.11E-06	--	1.17E-11	1.11E-06	0%
BENZ(A)ANTHRACENE	--	--	--	--	--
BENZO(A)PYRENE	--	--	--	--	--
BENZO(B)FLUORANTHENE	--	--	--	--	--
BENZO(G,H,I)PERYLENE	4.47E-05	--	4.70E-10	4.47E-05	0%
BENZO(K)FLUORANTHENE	--	--	--	--	--
CHRYSENE	--	--	--	--	--
DIBENZ(A, H)ANTHRACENE	--	--	--	--	--
FLUORANTHENE	6.12E-05	--	6.43E-10	6.12E-05	0%
FLUORENE	8.74E-05	--	9.19E-10	8.74E-05	0%
INDENO(1,2,3-CD)PYRENE	--	--	--	--	--
2-METHYLNAPHTHALENE	1.54E-05	--	--	1.54E-05	0%
NAPHTHALENE	1.40E-05	--	3.43E-09	1.40E-05	0%
PHENANTHRENE	5.02E-05	--	1.23E-08	5.02E-05	0%
PYRENE	1.03E-04	--	1.09E-09	1.03E-04	0%
Semivolatiles					
BIS(2-ETHYLHEXYL)PHTHALATE	4.42E-04	9.13E-05	4.23E-09	5.34E-04	0%
BUTYLBENZYLPHTHALATE	1.34E-06	2.76E-07	1.41E-11	1.61E-06	0%
CARBAZOLE	--	--	--	--	--
2-CHLOROPHENOL	8.74E-05	1.80E-05	9.19E-10	1.05E-04	0%
4-CHLOROPHENYL PHENYL ETHER	--	--	--	--	--
DIBENZOFURAN	8.59E-05	1.77E-05	9.04E-10	1.04E-04	0%
DIBUTYLPHTHALATE	4.42E-06	9.13E-07	4.65E-11	5.34E-06	0%
DIOCTYLPHTHALATE	2.14E-05	4.42E-06	2.25E-10	2.58E-05	0%
4-METHYLPHENOL	3.10E-05	6.39E-06	3.26E-10	3.74E-05	0%
Volatiles					
2-BUTANONE	1.88E-08	--	4.09E-13	1.88E-08	0%
ACETONE	2.05E-06	--	2.16E-11	2.05E-06	0%
BENZENE	2.69E-06	--	4.99E-11	2.69E-06	0%
CHLOROFORM	3.10E-07	--	3.79E-10	3.10E-07	0%
ETHYLBENZENE	7.13E-08	--	2.59E-13	7.13E-08	0%
TRICHLOROETHENE	1.03E-06	--	1.09E-11	1.03E-06	0%
VINYL CHLORIDE	4.10E-06	--	4.47E-12	4.10E-06	0%
Cumulative Risk	2.01E-01	3.48E-03	8.96E-04	2.05E-01	100%

**TABLE 4-44 SUMMARY OF CANCER RISKS FOR CONSTRUCTION WORKERS AT FORT TOTTEN --
REASONABLE MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF CANCER RISKS**

Site Number: Other Area

Chemical of Concern	Incidental Ingestion of Total Soil	Dermal Contact with Total Soil	Inhalation of Particulates from Total Soil	Total Soil	Percent Contribution Of Each COC
	Risk	Risk	Risk		
Inorganics					
ALUMINUM	--	--	--	--	--
ANTIMONY	--	--	--	--	--
ARSENIC	3.30E-07	2.04E-08	3.47E-11	3.51E-07	47%
BARIUM	--	--	--	--	--
BERYLLIUM	--	--	1.01E-12	1.01E-12	0%
CADMIUM	--	--	9.04E-13	9.04E-13	0%
CHROMIUM	--	--	2.41E-09	2.41E-09	0%
COBALT	--	--	--	--	--
COPPER	--	--	--	--	--
LEAD	--	--	--	--	--
MANGANESE	--	--	--	--	--
MERCURY	--	--	--	--	--
NICKEL	--	--	--	--	--
SELENIUM	--	--	--	--	--
SILVER	--	--	--	--	--
THALLIUM	--	--	--	--	--
VANADIUM	--	--	--	--	--
ZINC	--	--	--	--	--
PAHs					
ACENAPHTHENE	--	--	--	--	--
ACENAPHTHYLENE	--	--	--	--	--
ANTHRACENE	--	--	--	--	--
BENZ(A)ANTHRACENE	2.17E-08	--	9.71E-14	2.17E-08	3%
BENZO(A)PYRENE	2.64E-07	--	1.18E-12	2.64E-07	35%
BENZO(B)FLUORANTHENE	3.64E-08	--	1.63E-13	3.64E-08	5%
BENZO(G,H,I)PERYLENE	--	--	--	--	--
BENZO(K)FLUORANTHENE	1.13E-09	--	5.03E-15	1.13E-09	0%
CHRYSENE	1.90E-10	--	8.49E-16	1.90E-10	0%
DIBENZ[A, H]ANTHRACENE	5.03E-08	--	2.24E-13	5.03E-08	7%
FLUORANTHENE	--	--	--	--	--
FLUORENE	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	1.52E-08	--	6.79E-14	1.52E-08	2%
2-METHYLNAPHTHALENE	--	--	--	--	--
NAPHTHALENE	--	--	--	--	--
PHENANTHRENE	--	--	--	--	--
PYRENE	--	--	--	--	--
Semivolatiles					
BIS(2-ETHYLHEXYL)PHTHALATE	1.77E-09	3.65E-10	--	2.13E-09	0%
BUTYLBENZYLPHTHALATE	--	--	--	--	--
2-CHLOROPHENOL	--	--	--	--	--
4-CHLOROPHENYL PHENYL ETHER	--	--	--	--	--
DIBENZOFURAN	--	--	--	--	--
DIBUTYLPHTHALATE	--	--	--	--	--
DIOCTYLPHTHALATE	--	--	--	--	--
Volatiles					
2-BUTANONE	--	--	--	--	--
ACETONE	--	--	--	--	--
BENZENE	6.33E-12	--	3.27E-17	6.33E-12	0%
CARBON DISULFIDE	--	--	--	--	--
CHLOROFORM	2.70E-13	--	3.75E-17	2.70E-13	0%
TOLUENE	--	--	--	--	--
TRICHLOROETHENE	9.74E-13	--	5.59E-18	9.74E-13	0%
VINYL CHLORIDE	2.64E-10	--	5.74E-17	2.64E-10	0%
Cumulative Risk	7.21E-07	2.08E-08	2.45E-09	7.44E-07	100%

**TABLE 4-45 SUMMARY OF NONCANCER RISKS FOR RESIDENT ADULTS AT FORT TOTTEN – REASONABLE
MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF NONCANCER RISKS ACROSS GROUNDWATER**

Chemical of Concern	Ingestion of Groundwater	Dermal Contact with Groundwater	Inhalation of Volatiles from Groundwater	Total Groundwater	Total	Percent Contribution Of Each COC
	HQ	HQ	HQ		HI	
Inorganics						
ALUMINUM	2.18E-02	1.14E-04	--	2.19E-02	2.19E-02	0.4%
ANTIMONY	9.18E-02	3.19E-03	--	9.50E-02	9.50E-02	1.6%
BARIUM	5.81E-02	4.33E-03	--	6.24E-02	6.24E-02	1.0%
CADMIUM	1.15E-02	2.63E-03	--	1.41E-02	1.41E-02	0.2%
CHROMIUM	4.66E-01	9.72E-02	--	5.63E-01	5.63E-01	9.4%
COBALT	1.37E-03	7.15E-06	--	1.38E-03	1.38E-03	0.0%
COPPER	3.43E-03	1.79E-05	--	3.45E-03	3.45E-03	0.1%
MANGANESE	6.91E-02	9.01E-03	--	7.81E-02	7.81E-02	1.3%
NICKEL	2.62E-01	9.22E-03	--	2.71E-01	2.71E-01	4.5%
SELENIUM	1.08E-02	5.63E-05	--	1.09E-02	1.09E-02	0.2%
VANADIUM	3.52E-03	7.07E-04	--	4.23E-03	4.23E-03	0.1%
ZINC	1.21E-03	6.29E-06	--	1.21E-03	1.21E-03	0.0%
PAHs						
ACENAPHTHENE	3.65E-04	--	--	3.65E-04	3.65E-04	0.0%
ANTHRACENE	1.83E-04	--	--	1.83E-04	1.83E-04	0.0%
BENZ(A)ANTHRACENE	--	--	--	--	0.00E+00	0.0%
BENZO(A)PYRENE	--	--	--	--	0.00E+00	0.0%
BENZO(B)FLOURANTHENE	--	--	--	--	0.00E+00	0.0%
BENZO(G,H,I)PERYLENE	2.40E-03	--	--	2.40E-03	2.40E-03	0.0%
BENZO(K)FLOURANTHENE	--	--	--	--	0.00E+00	0.0%
CHRYSENE	--	--	--	--	0.00E+00	0.0%
DIBENZ(A, H)ANTHRACENE	--	--	--	--	0.00E+00	0.0%
FLUORANTHENE	5.62E-03	--	--	5.62E-03	5.62E-03	0.1%
FLUORENE	6.16E-04	--	--	6.16E-04	6.16E-04	0.0%
INDENO(1,2,3-CD)PYRENE	--	--	--	--	0.00E+00	0.0%
NAPHTHALENE	1.23E-03	--	--	1.23E-03	1.23E-03	0.0%
PHENANTHRENE	6.44E-03	--	--	6.44E-03	6.44E-03	0.1%
PYRENE	6.16E-03	--	--	6.16E-03	6.16E-03	0.1%
Pesticides/PCBs						
DIELDRIN	2.19E-01	1.49E-02	--	2.34E-01	2.34E-01	3.9%
Semivolatiles						
BIS(2-ETHYLHEXYL)PHTHALATE	1.92E-02	2.30E-03	--	2.15E-02	2.15E-02	0.4%
BUTYLBENZYLPHTHALATE	6.85E-05	2.54E-05	--	9.39E-05	9.39E-05	0.0%
DI(2-ETHYLHEXYL)ADIPATE	4.57E-06	8.58E-05	--	9.04E-05	9.04E-05	0.0%
DIBENZOFURAN	6.16E-03	4.83E-03	--	1.10E-02	1.10E-02	0.2%
DIBUTYLPHTHALATE	1.10E-03	1.49E-04	--	1.24E-03	1.24E-03	0.0%
DIETHYLPHTHALATE	1.03E-04	2.20E-06	--	1.05E-04	1.05E-04	0.0%
DIMETHYLPHTHALATE	2.74E-07	2.00E-09	--	2.76E-07	2.76E-07	0.0%
Volatiles						
ACETONE	1.38E-03	4.12E-06	2.13E-04	1.60E-03	1.60E-03	0.0%
BROMOFORM	4.11E-03	5.15E-05	--	4.16E-03	4.16E-03	0.1%
CHLOROETHANE	4.11E-05	1.35E-06	4.48E-06	4.69E-05	4.69E-05	0.0%
CHLOROFORM	6.30E-02	2.34E-03	4.51E+00	4.58E+00	4.58E+00	76.2%
CHLOROMETHANE	--	--	2.20E-03	2.20E-03	2.20E-03	0.0%
DIBROMOCHLOROMETHANE	6.85E-04	1.39E-05	--	6.99E-04	6.99E-04	0.0%
M&P XYLENES	4.11E-06	1.72E-06	2.74E-05	3.32E-05	3.32E-05	0.0%
METHYL-T-BUTYL ETHER	--	--	1.84E-05	1.84E-05	1.84E-05	0.0%
METHYLENE CHLORIDE	9.13E-05	1.72E-06	4.31E-06	9.74E-05	9.74E-05	0.0%
N-BUTYLBENZENE	6.85E-05	--	--	6.85E-05	6.85E-05	0.0%
P-ISOPROPYLTOLUENE	--	--	--	--	0.00E+00	0.0%
TERT-BUTYLALCOHOL	--	--	--	--	0.00E+00	0.0%
XYLENES	4.11E-06	2.04E-06	--	6.15E-06	6.15E-06	0.0%
Cumulative Risk	1.34E+00	1.51E-01	4.51E+00	6.00E+00	6.00E+00	100%

**TABLE 4-46 SUMMARY OF NONCANCER RISKS FOR RESIDENT CHILDREN AT FORT TOTTEN -- REASONABLE
MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF NONCANCER RISKS GROUNDWATER**

Chemical of Concern	Ingestion of Groundwater	Dermal Contact with Groundwater	Total Groundwater	Total	Percent Contribution Of Each COC
	HQ	HQ		HI	
Inorganics					
ALUMINUM	5.09E-02	3.36E-04	5.13E-02	5.13E-02	1%
ANTIMONY	2.14E-01	9.42E-03	2.24E-01	2.24E-01	6%
BARIUM	1.35E-01	1.28E-02	1.48E-01	1.48E-01	4%
CADMIUM	2.67E-02	7.76E-03	3.45E-02	3.45E-02	1%
CHROMIUM	1.09E+00	2.87E-01	1.37E+00	1.37E+00	38%
COBALT	3.20E-03	2.11E-05	3.22E-03	3.22E-03	0%
COPPER	8.00E-03	5.28E-05	8.05E-03	8.05E-03	0%
MANGANESE	1.61E-01	2.66E-02	1.88E-01	1.88E-01	5%
NICKEL	6.11E-01	2.72E-02	6.38E-01	6.38E-01	18%
SELENIUM	2.52E-02	1.66E-04	2.54E-02	2.54E-02	1%
VANADIUM	8.22E-03	2.09E-03	1.03E-02	1.03E-02	0%
ZINC	2.81E-03	1.86E-05	2.83E-03	2.83E-03	0%
PAHs					
ACENAPHTHENE	8.52E-04	--	8.52E-04	8.52E-04	0%
ANTHRACENE	4.26E-04	--	4.26E-04	4.26E-04	0%
BENZ(A)ANTHRACENE	--	--	--	0.00E+00	0%
BENZO(A)PYRENE	--	--	--	0.00E+00	0%
BENZO(B)FLOURANTHENE	--	--	--	0.00E+00	0%
BENZO(G,H,I)PERYLENE	5.60E-03	--	5.60E-03	5.60E-03	0%
BENZO(K)FLOURANTHENE	--	--	--	0.00E+00	0%
CHRYSENE	--	--	--	0.00E+00	0%
DIBENZ[A, H]ANTHRACENE	--	--	--	0.00E+00	0%
FLUORANTHENE	1.31E-02	--	1.31E-02	1.31E-02	0%
FLUORENE	1.44E-03	--	1.44E-03	1.44E-03	0%
INDENO(1,2,3-CD)PYRENE	--	--	--	0.00E+00	0%
2-METHYLNAPHTHALENE	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0%
NAPHTHALENE	2.88E-03	--	2.88E-03	2.88E-03	0%
PHENANTHRENE	1.50E-02	--	1.50E-02	1.50E-02	0%
PYRENE	1.44E-02	--	1.44E-02	1.44E-02	0%
Pesticides/PCBs					
DIELDRIN	5.11E-01	4.39E-02	5.55E-01	5.55E-01	16%
Semivolatiles					
BIS(2-ETHYLHEXYL)PHTHALATE	4.47E-02	6.79E-03	5.15E-02	5.15E-02	1%
BUTYLBENZYLPHTHALATE	1.60E-04	7.49E-05	2.35E-04	2.35E-04	0%
DI(2-ETHYLHEXYL)ADIPATE	1.07E-05	2.53E-04	2.64E-04	2.64E-04	0%
DIBENZOFURAN	1.44E-02	1.42E-02	2.86E-02	2.86E-02	1%
DIBUTYLPHTHALATE	2.56E-03	4.39E-04	3.00E-03	3.00E-03	0%
DIETHYLPHTHALATE	2.40E-04	6.49E-06	2.46E-04	2.46E-04	0%
DIMETHYLPHTHALATE	6.39E-07	5.91E-09	6.45E-07	6.45E-07	0%
Volatiles					
ACETONE	3.23E-03	1.21E-05	3.24E-03	3.24E-03	0%
BROMOFORM	9.59E-03	1.52E-04	9.74E-03	9.74E-03	0%
CHLOROETHANE	9.59E-05	3.99E-06	9.99E-05	9.99E-05	0%
CHLOROFORM	1.47E-01	6.89E-03	1.54E-01	1.54E-01	4%
CHLOROMETHANE	--	--	--	0.00E+00	0%
DIBROMOCHLOROMETHANE	1.60E-03	4.11E-05	1.64E-03	1.64E-03	0%
M&P XYLENES	9.59E-06	5.06E-06	1.47E-05	1.47E-05	0%
METHYL-T-BUTYL ETHER	--	--	--	0.00E+00	0%
METHYLENE CHLORIDE	2.13E-04	5.06E-06	2.18E-04	2.18E-04	0%
N-BUTYLBENZENE	1.60E-04	--	1.60E-04	1.60E-04	0%
P-ISOPROPYLTOLUENE	--	--	--	0.00E+00	0%
TERT-BUTYLALCOHOL	--	--	--	0.00E+00	0%
XYLENES	9.59E-06	6.01E-06	1.56E-05	1.56E-05	0%
Cumulative Risk	3.12E+00	4.46E-01	3.57E+00	3.57E+00	100.0%

**TABLE 4-47 SUMMARY OF CANCER RISKS FOR RESIDENT ADULT AND CHILDREN AT FORT TOTTEN – REASONABLE
MAXIMUM EXPOSURE (RME) SCENARIO, SUMMARY OF CANCER RISKS GROUNDWATER**

Chemical of Concern	Ingestion of Groundwater	Dermal Contact with Groundwater	Inhalation of Groundwater	Total Groundwater	Total	Percent Contribution Of Each COC
	Risk	Risk	Risk		Risk	
Inorganics						
ALUMINUM	--	--	0.00E+00	--	0.00E+00	0.0%
ANTIMONY	--	--	0.00E+00	--	0.00E+00	0.0%
BARIUM	--	--	0.00E+00	--	0.00E+00	0.0%
CADMIUM	--	--	0.00E+00	--	0.00E+00	0.0%
CHROMIUM	--	--	0.00E+00	--	0.00E+00	0.0%
COBALT	--	--	0.00E+00	--	0.00E+00	0.0%
COPPER	--	--	0.00E+00	--	0.00E+00	0.0%
MANGANESE	--	--	0.00E+00	--	0.00E+00	0.0%
NICKEL	--	--	0.00E+00	--	0.00E+00	0.0%
SELENIUM	--	--	0.00E+00	--	0.00E+00	0.0%
VANADIUM	--	--	0.00E+00	--	0.00E+00	0.0%
ZINC	--	--	0.00E+00	--	0.00E+00	0.0%
PAHs						
ACENAPHTHENE	--	--	0.00E+00	--	0.00E+00	0.0%
ANTHRACENE	--	--	0.00E+00	--	0.00E+00	0.0%
BENZ(A)ANTHRACENE	2.74E-05	--	0.00E+00	2.74E-05	2.74E-05	3.6%
BENZO(A)PYRENE	3.02E-04	--	0.00E+00	3.02E-04	3.02E-04	40.1%
BENZO(B)FLUORANTHENE	5.43E-05	--	0.00E+00	5.43E-05	5.43E-05	7.2%
BENZO(G,H,I)PERYLENE	--	--	0.00E+00	--	0.00E+00	0.0%
BENZO(K)FLUORANTHENE	1.66E-06	--	0.00E+00	1.66E-06	1.66E-06	0.2%
CHRYSENE	3.80E-07	--	0.00E+00	3.80E-07	3.80E-07	0.1%
DIBENZ(A, H)ANTHRACENE	2.17E-04	--	0.00E+00	2.17E-04	2.17E-04	28.8%
FLUORANTHENE	--	--	0.00E+00	--	0.00E+00	0.0%
FLUORENE	--	--	0.00E+00	--	0.00E+00	0.0%
INDENO(1,2,3-CD)PYRENE	2.73E-05	--	0.00E+00	2.73E-05	2.73E-05	3.6%
2-METHYLNAPHTHALENE	--	--	0.00E+00	--	0.00E+00	0.0%
NAPHTHALENE	--	--	0.00E+00	--	0.00E+00	0.0%
PHENANTHRENE	--	--	0.00E+00	--	0.00E+00	0.0%
PYRENE	--	--	0.00E+00	--	0.00E+00	0.0%
Pesticides/PCBs						
DIELDRIN	9.52E-05	7.09E-06	0.00E+00	1.02E-04	1.02E-04	13.6%
Semivolatiles						
BIS(2-ETHYLHEXYL)PHTHALATE	2.92E-06	3.84E-07	0.00E+00	3.30E-06	3.30E-06	0.4%
BUTYLBENZYLPHTHALATE	--	--	0.00E+00	--	0.00E+00	0.0%
DI(2-ETHYLHEXYL)ADIPATE	1.78E-09	3.68E-08	0.00E+00	3.86E-08	3.86E-08	0.0%
DIBENZOFURAN	--	--	0.00E+00	--	0.00E+00	0.0%
DIBUTYLPHTHALATE	--	--	0.00E+00	--	0.00E+00	0.0%
DIETHYLPHTHALATE	--	--	0.00E+00	--	0.00E+00	0.0%
DIMETHYLPHTHALATE	--	--	0.00E+00	--	0.00E+00	0.0%
Volatiles						
ACETONE	--	--	0.00E+00	--	0.00E+00	0.0%
BROMOFORM	3.52E-07	4.85E-09	5.01E-08	4.07E-07	4.07E-07	0.1%
CHLOROETHANE	2.59E-08	9.34E-10	0.00E+00	2.68E-08	2.68E-08	0.0%
CHLOROFORM	2.09E-06	8.49E-08	1.34E-05	1.56E-05	1.56E-05	2.1%
CHLOROMETHANE	4.67E-07	9.10E-09	8.58E-08	5.62E-07	5.62E-07	0.1%
DIBROMOCHLOROMETHANE	6.25E-07	1.40E-08	0.00E+00	6.39E-07	6.39E-07	0.1%
M&P XYLENES	--	--	0.00E+00	--	0.00E+00	0.0%
METHYL-T-BUTYL ETHER	6.11E-08	9.10E-10	0.00E+00	6.20E-08	6.20E-08	0.0%
METHYLENE CHLORIDE	2.23E-08	4.60E-10	2.62E-09	2.54E-08	2.54E-08	0.0%
N-BUTYLBENZENE	--	--	0.00E+00	--	0.00E+00	0.0%
P-ISOPROPYLTOLUENE	--	--	0.00E+00	--	0.00E+00	0.0%
TERT-BUTYLALCOHOL	--	--	0.00E+00	--	0.00E+00	0.0%
XYLENES	--	--	0.00E+00	--	0.00E+00	0.0%
Cumulative Risk	7.32E-04	7.62E-06	1.35E-05	7.53E-04	7.53E-04	100%

Table 5-1
ECOLOGICAL RISK SCREEN, FORT TOTTEN FILL AREA

Analyte	Units	Minimum Conc.	Maximum Conc.	Maximum Location	Detection Frequency	Screening Value	Screening Source	HQ	COPC
Metals									
Aluminum	mg/kg	4400	17500	SS-10-DP	16/16	600	e	29.2	YES
Antimony	mg/kg	0.35	8.05	SS-11-DP	16/16	5	b	1.6	YES
Arsenic	mg/kg	2.8	9.5	FLA-SS-48-01	16/16	37	a	0.3	
Barium	mg/kg	69.4	358.5	SS-11-SH	16/16	500	b	0.7	
Beryllium	mg/kg	0.19	0.54	FLA-SS-49-01	14/16	10	b	0.1	
Cadmium	mg/kg	ND	2.5	SS-11-SH	15/16	29	a	0.1	
Calcium	mg/kg	1800	22500	FLA-SS-47-01	16/16	EN	EN	EN	
Chromium	mg/kg	11.7	31.5	SS-11-DP	16/16	5	a	6.3	YES
Cobalt	mg/kg	3.7	9.9	SS-10-DP	16/16	20	b	0.5	
Copper	mg/kg	30.1	330.5	SS-11-SH	16/16	61	a	5.4	YES
Iron	mg/kg	10600	34300	FLA-SB-11-01	16/16	EN	EN	EN	
Lead	mg/kg	168	1125	SS-11-SH	16/16	50	b	22.5	YES
Magnesium	mg/kg	1970	7130	SS-11-DP	16/16	EN	EN	EN	
Manganese	mg/kg	212	577	SS-10-SH	16/16	500	b	1.2	YES
Mercury	mg/kg	0.25	2.45	SS-10-SH	16/16	0.1	c	24.5	YES
Nickel	mg/kg	12.8	25.5	SS-11-SH	16/16	30	b	0.9	
Potassium	mg/kg	716	1700	FLA-SB-12-01	12/12	EN	EN	EN	
Selenium	mg/kg	ND	1.1	FLA-SS-51-01	12/16	1	b	1.1	YES
Silver	mg/kg	ND	0.66	SS-11-SH	7/16	2	b	0.3	
Sodium	mg/kg	120	214	FLA-SB-11-01	15/16	EN	EN	EN	
Thallium	mg/kg	ND	0.18	FLA-SB-12-01	8/16	1	b	0.2	
Vanadium	mg/kg	18.5	33	FLA-SB-12-01	16/16	2	b	16.5	YES
Zinc	mg/kg	101	572.5	SS-11-SH	16/16	120	a	4.8	YES
PAH									
2-Methylnaphthalene	ug/kg	ND	88	FLA-SS-50-01	6/18	NA	NA	NA	
Acenaphthene	ug/kg	ND	130	FLA-SS-48-01	1/18	NA	NA	NA	
Acenaphthylene	ug/kg	ND	53	FLA-SS-47-01	5/18	NA	NA	NA	
Anthracene	ug/kg	51	350	SS-11-SH	15/18	NA	NA	NA	
Benz[a]anthracene	ug/kg	180	975	SS-11-SH	17/18	NA	NA	NA	

Table 5-1
ECOLOGICAL RISK SCREEN, FORT TOTTEN FILL AREA (Continued)

Analyte	Units	Minimum Conc.	Maximum Conc.	Maximum Location	Detection Frequency	Screening Value	Source	HQ	COPC
Benzo[a]pyrene	ug/kg	220	870	FLA-SS-48-01	17/18	NA	NA	NA	
Benzo[b]fluoranthene	ug/kg	320	1100	FLA-SS-48-01	17/18	NA	NA	NA	
Benzo[ghi]perylene	ug/kg	130	630	FLA-SS-48-01	17/18	NA	NA	NA	
Benzo[k]fluoranthene	ug/kg	120	430	FLA-SS-48-01	17/18	NA	NA	NA	
Chrysene	ug/kg	250	920	SS-11-SH	17/18	NA	NA	NA	
Dibenz[a,h]anthracene	ug/kg	ND	180	FLA-SS-48-01	10/18	NA	NA	NA	
Fluoranthene	ug/kg	330	1850	SS-11-SH	17/18	NA	NA	NA	
Fluorene	ug/kg	ND	147	SS-11-SH	7/18	NA	NA	NA	
Indeno[1,2,3-cd]pyrene	ug/kg	150	700	FLA-SS-48-01	17/18	NA	NA	NA	
Naphthalene	ug/kg	ND	160	FSS-SB-13-01	14/18	NA	NA	NA	
Phenanthrene	ug/kg	150	1495	SS-11-SH	17/18	NA	NA	NA	
Pyrene	ug/kg	350	1775	SS-11-SH	17/18	NA	NA	NA	
Total PAH	ug/kg	2624	11853	FLA-SS-48-01		20500	d	0.6	
Other SVOC									
bis(2-Ethylhexyl) phthalate	ug/kg	38	1800	FLA-SS-51-01	10/12	NA	NA	NA	
Butylbenzylphthalate	ug/kg	ND	78	SS-11-SH	2/7	NA	NA	NA	
Di-n-butyl phthalate	ug/kg	ND	340	SS-10-SH	7/13	NA	NA	NA	
Total Phthalates		47	2218	FLA-SS-51-01		30050	d	0.1	
1,2-Dichlorobenzene	ug/kg	ND	6	SS-11-DP	1/13	NSV	NSV	NSV	YES
4-Chloro-3-Methylphenol	ug/kg	ND	11	SS-11-SH	5/13	NSV	NSV	NSV	YES
4-Methylphenol	ug/kg	ND	7	SS-11-DP	1/13	NSV	NSV	NSV	YES
Carbazole	ug/kg	ND	144	SS-11-SH	8/13	NSV	NSV	NSV	YES
Dibenzofuran	ug/kg	ND	73	SS-11-SH	5/18	NSV	NSV	NSV	YES

EN=essential nutrient

NA=not applicable

NSC=no screening value

a=U.S. EPA 2000 (Eco-SSL)

b=Efroymson et al. 1997a

c=Efroymson et al. 1997b

d=RIVM 1995; 2000

e=Cikutovic et al. 1993

Table 5-2
STEP 1 ECOLOGICAL RISK SCREEN, FORT TOTTEN OTHER AREA

Analyte	Units	Minimum Conc.	Maximum Conc.	Maximum Location	Detection Frequency	Screening Value	Source	HQ	COPC
Metals									
Aluminum	mg/kg	2280	21300	SS-05-DP	71/71	600	e	35.5	YES
Antimony	mg/kg	ND	1.8	FSS-SB-04-01	68/71	5	b	0.4	
Arsenic	mg/kg	2	19.2	FSS-SS-13-01	71/71	37	a	0.5	
Barium	mg/kg	35.7	295	FSS-SB-04-01	71/71	500	b	0.6	
Beryllium	mg/kg	0.14	0.53	FSS-SB-01-01	71/71	10	b	0.1	
Cadmium	mg/kg	ND	0.99	SS-01-SH	64/71	29	a	0.0	
Calcium	mg/kg	290	13400	FSS-SB-05-01	71/71	EN	EN	EN	
Chromium	mg/kg	4.9	33	SS-05-DP	71/71	5	a	6.6	YES
Cobalt	mg/kg	3.1	35.5	FSS-SS-42-01	71/71	20	b	1.8	YES
Copper	mg/kg	9.5	2470	SS-01-DP	71/71	61	a	40.5	YES
Iron	mg/kg	5790	30800	SS-05-DP	71/71	EN	EN	EN	
Lead	mg/kg	13.6	793	FSS-SS-42-01	71/71	50	b	15.9	YES
Magnesium	mg/kg	485	7000	FSS-SB-05-01	71/71	EN	EN	EN	
Manganese	mg/kg	46.6	617	SS-09-SH	71/71	500	b	1.2	YES
Mercury	mg/kg	ND	5	FSS-SS-38-01	69/71	0.1	c	50.0	YES
Nickel	mg/kg	7	23.7	SS-05-DP	71/71	30	b	0.8	
Potassium	mg/kg	340	1450	FSS-SS-14-01	53/53	EN	EN	EN	
Selenium	mg/kg	0.18	1.3	FSS-SS-40-01	66/71	1	b	1.3	YES
Silver	mg/kg	ND	2.4	FSS-SS-44-01					
Sodium	mg/kg	97.1	404	FSS-SS-41-01	2/71	2	b	1.2	YES
Thallium	mg/kg	ND	0.25	SS-05-SH	65/71	EN	EN	EN	
Vanadium	mg/kg	11	47.7	SS-05-DP	24/71	1	b	0.3	
Zinc	mg/kg	37.6	231	FSS-SS-45-01	71/71	2	b	23.9	YES
Zinc	mg/kg	37.6	231	SS-01-DP	71/71	120	a	1.9	YES
PAH									
2-Methylnaphthalene	ug/kg	ND	330	FSS-SS-17-01	24/62	NA	NA	NA	
Acenaphthene	ug/kg	ND	140	FSS-SS-31-01	10/62	NA	NA	NA	
Acenaphthylene	ug/kg	ND	1500	FSS-SS-12-01	34/62	NA	NA	NA	

Table 5-2
STEP 1 ECOLOGICAL RISK SCREEN, FORT TOTTEN OTHER AREA (Continued)

Analyte	Units	Minimum Conc.	Maximum Conc.	Maximum Location	Detection Frequency	Screening Value	Source	HQ	COPC
Anthracene	ug/kg	ND	390	FSS-SS-12-01	39/62	NA	NA	NA	
Benz[a]anthracene	ug/kg	ND	4100	FSS-SS-12-01	57/62	NA	NA	NA	
Benzo[a]pyrene	ug/kg	ND	6300	FSS-SS-12-01	57/62	NA	NA	NA	
Benzo[b]fluoranthene	ug/kg	ND	8800	FSS-SS-12-01	58/62	NA	NA	NA	
Benzo[ghi]perylene	ug/kg	ND	4100	FSS-SS-15-01	55/62	NA	NA	NA	
Benzo[k]fluoranthene	ug/kg	ND	2700	FSS-SS-12-01	55/62	NA	NA	NA	
Chrysene	ug/kg	ND	4600	FSS-SS-12-01	57/62	NA	NA	NA	
Dibenz[a,h]anthracene	ug/kg	ND	1000	FSS-SS-12-01	29/62	NA	NA	NA	
Fluoranthene	ug/kg	ND	6400	FSS-SS-12-01	59/62	NA	NA	NA	
Fluorene	ug/kg	ND	210	FSS-SS-31-01	14/62	NA	NA	NA	
Indeno[1,2,3-cd]pyrene	ug/kg	ND	4100	FSS-SS-15-01	56/62	NA	NA	NA	
Naphthalene	ug/kg	ND	290	FSS-SS-12-01	30/62	NA	NA	NA	
Phenanthrene	ug/kg	ND	1400	FSS-SS-31-01	58/62	NA	NA	NA	
Pyrene	ug/kg	ND	7700	FSS-SS-12-01	60/62	NA	NA	NA	
Total PAH	ug/kg	958	54060			20500	d	2.6	YES
2-Chlorophenol	ug/kg	ND	390	FSS-SS-03-01	1/53	5000	d	0.1	
Benzyl butyl phthalate	ug/kg	ND	300	FSS-SS-29-01	31/62	NA	NA	NA	
bis(2-Ethylhexyl) phthalate	ug/kg	ND	74000	FSS-SS-20-01	61/62	NA	NA	NA	
Butylbenzylphthalate	ug/kg	ND	300	FSS-SS-29-01	31/62	NA	NA	NA	
Di-n-butyl phthalate	ug/kg	ND	320	SS-09-DP	26/53	NA	NA	NA	
Di-n-octyl phthalate	ug/kg	ND	240	FSS-SS-20-01	2/53	NA	NA	NA	
Total Phthalates	ug/kg	135	75550	FSS-SS-20-01		30050	d	2.5	YES
4-Chlorophenyl phenyl ether	ug/kg	ND	380	FSS-SS-04-01	1/53	NSV	NSV	NSV	YES
4-Methylphenol	ug/kg	ND	55	FSS-SS-29-01	1/53	20025	d	0.0	
4-Chloro-3-Methylphenol	ug/kg	ND	9.6	SS-09-SH	7/53	NSV	NSV	NSV	YES
Pentachlorophenol	ug/kg	ND	22	SS-06-SH	1/53	6000	c	0.0	
Carbazole	ug/kg	ND	170	FSS-SS-31-01	29/53	NSV	NSV	NSV	YES
Dibenzofuran	ug/kg	ND	160	FSS-SS-31-01	11/62	NSV	NSV	NSV	YES

EN=essential nutrient

NA=not applicable

NSC=no screening value

a=U.S. EPA 2000 (Eco-SSL)

b=Efroymson et al. 1997a

c=Efroymson et al. 1997b

d=RIVM 1995; 2000

e=Cikutovic et al. 1993

TABLE 5-3 FOOD-WEB RISK CALCULATION FOR WHITE-FOOTED MOUSE IN FILL AREA

COPC	Soil Concentration (mg/kg)	Water Concentration (mg/L)	Food Concentration (mg/kg)	Dose (mg/kg/day)	TRV (mg/kg/day)	HQ	HQ>1?
Aluminum	17500	0	17500	3550.349	2.086	1702.0	YES
Antimony	8.05	0	8.05	1.633	0.13	12.6	
Chromium	31.5	0	31.5	6.391	5466	0.0	YES
Copper	330.5	0	330.5	67.051	30.4	2.2	YES
Lead	1125	0	1125	228.237	15.98	14.3	YES
Manganese	577	0	577	117.060	176	0.7	
Mercury	2.45	0	2.45	0.497	14.26	0.0	
Selenium	1.1	0	1.1	0.223	0.399	0.6	
Vanadium	33	0	33	6.695	0.389	17.2	YES
Zinc	572.5	0	572.5	116.147	319.17	0.4	
1,2-Dichlorobenzene	0.006	0	0.006	0.001	No TRV	No TRV	
4-Chloro-3-Methylphenol	0.011	0	0.011	0.002	No TRV	No TRV	
4-Methylphenol	0.007	0	0.007	0.001	No TRV	No TRV	
Carbazole	0.144	0	0.144	0.029	No TRV	No TRV	
Dibenzofuran	0.073	0	0.073	0.015	No TRV	No TRV	

Note: TRVs from Sample et al. (1996)

Body wt.=0.01936 kg; food ingestion rate=0.0038507 kg/day; incidental soil ingestion rate=0.000077 kg/day

TABLE 5-4 FOOD-WEB RISK CALCULATION FOR WHITE-FOOTED MOUSE IN OTHER AREA

COPC	Soil Concentration (mg/kg)	Water Concentration (mg/L)	Food Concentration (mg/kg)	Dose (mg/kg/day)	TRV (mg/kg/day)	HQ	HQ>1?
Aluminum	21300	0	21300	4321.282	No TRV	No TRV	YES
Chromium	33	0	33	6.695	5466	0.0	
Cobalt	35.5	0	35.5	7.202	No TRV	No TRV	
Copper	2470	0	2470	501.106	30.4	16.5	YES
Lead	793	0	793	160.882	15.98	10.1	YES
Manganese	617	0	617	125.175	176	0.7	
Mercury	5	0	5	1.014	14.26	0.1	
Selenium	1.3	0	1.3	0.264	0.399	0.7	
Silver	2.4	0	2.4	0.487	No TRV	No TRV	
Vanadium	47.7	0	47.7	9.677	0.389	24.9	YES
Zinc	231	0	231	46.865	319.17	0.1	
Total PAH	54.06	0	54.06	10.968	1.08	10.2	YES
Total Phthalates	75.55	0	75.55	15.327	19.8	0.8	
4-Chlorophenyl phenyl ether	0.38	0	0.38	0.077	No TRV	No TRV	
4-Chloro-3-Methylphenol	0.0096	0	0.0096	0.002	No TRV	No TRV	
Carbazole	0.17	0	0.17	0.034	No TRV	No TRV	
Dibenzofuran	0.16	0	0.16	0.032	1.08	0.0	YES

Note: TRVs from Sample et al. (1996)

Benzo(a)pyrene TRV used for Total PAH

Body wt.=0.01936 kg; food ingestion rate=0.0038507 kg/day; incidental soil ingestion rate=0.000077 kg/day

TABLE 5-5 FOOD-WEB RISK CALCULATION FOR AMERICAN ROBIN IN FILL AREA

COPC	Soil Concentration (mg/kg)	Water Concentration (mg/L)	Food Concentration (mg/kg)	Dose (mg/kg/day)	TRV (mg/kg/day)	HQ	HQ>1?
Aluminum	17500	0	17500	30292.473	109.7	276.1	YES
Antimony	8.05	0	8.05	13.935	No TRV	No TRV	
Chromium	31.5	0	31.5	54.526	1	54.5	YES
Copper	330.5	0	330.5	572.095	47	12.2	YES
Lead	1125	0	1125	1947.373	3.85	505.8	YES
Manganese	577	0	577	998.786	997	1.0	YES
Mercury	2.45	0	2.45	4.241	0.45	9.4	YES
Selenium	1.1	0	1.1	1.904	0.4	4.8	YES
Vanadium	33	0	33	57.123	11.4	5.0	YES
Zinc	572.5	0	572.5	990.997	14.5	68.3	YES
1,2-Dichlorobenzene	0.006	0	0.006	0.010	1.8	0.0	
4-Chloro-3-Methylphenol	0.011	0	0.011	0.019	11.4	0.0	
4-Methylphenol	0.007	0	0.007	0.012	14.5	0.0	
Carbazole	0.144	0	0.144	0.249	No TRV	No TRV	
Dibenzofuran	0.073	0	0.073	0.126	No TRV	No TRV	

Note: TRVs from Sample et al. (1996)

Body wt.=0.08102 kg; food ingestion rate=0.126919 kg/day; incidental soil ingestion rate=0.0133265 kg/day

TABLE 5-6 FOOD-WEB RISK CALCULATION FOR AMERICAN ROBIN IN OTHER AREA

COPC	Soil Concentration (mg/kg)	Water Concentration (mg/L)	Food Concentration (mg/kg)	Dose (mg/kg/day)	TRV (mg/kg/day)	HQ	HQ>1?
Aluminum	21300	0	21300	36870.267	No TRV	No TRV	
Chromium	33	0	33	57.123	1	57.1	YES
Cobalt	35.5	0	35.5	61.450	No TRV	No TRV	
Copper	2470	0	2470	4275.566	47	91.0	YES
Lead	793	0	793	1372.682	3.85	356.5	YES
Manganese	617	0	617	1068.026	997	1.1	YES
Mercury	5	0	5	8.655	0.45	19.2	YES
Selenium	1.3	0	1.3	2.250	0.4	5.6	YES
Silver	2.4	0	2.4	4.154	No TRV	No TRV	
Vanadium	47.7	0	47.7	82.569	11.4	7.2	YES
Zinc	231	0	231	399.861	14.5	27.6	YES
Total PAH	54.06	0	54.06	93.578	No TRV	No TRV	
Total Phthalates	75.55	0	75.55	130.777	No TRV	No TRV	
4-Chlorophenyl phenyl ether	0.38	0	0.38	0.658	No TRV	No TRV	
4-Chloro-3-Methylphenol	0.0096	0	0.0096	0.017	No TRV	No TRV	
Carbazole	0.17	0	0.17	0.294	No TRV	No TRV	
Dibenzofuran	0.16	0	0.16	0.277	No TRV	No TRV	

Note: TRVs from Sample et al. (1996)

Body wt.=0.08102 kg; food ingestion rate=0.126919 kg/day; incidental soil ingestion rate=0.0133265 kg/day

TABLE 5-7 FOOD-WEB RISK CALCULATION FOR WHITE-FOOTED MOUSE IN PESTICIDE AREA

COPC	Soil Concentration (mg/kg)	Water Concentration (mg/L)	Food Concentration (mg/kg)	Dose (mg/kg/day)	TRV (mg/kg/day)	HQ	HQ>1?
Total DDT	1.1	0	1.1	0.223	1.6	0.1	
gamma-BHC	0.0052	0	0.0052	0.001	15.98	0.0	
Heptachlor epoxide	0.12	0	0.12	0.024	0.26	0.1	

Note: TRVs from Sample et al. (1996)

Body wt.=0.01936 kg; food ingestion rate=0.0038507 kg/day; incidental soil ingestion rate=0.000077 kg/day

TABLE 5-8 FOOD-WEB RISK CALCULATION FOR AMERICAN ROBIN IN PESTICIDE AREA

COPC	Soil Concentration (mg/kg)	Water Concentration (mg/L)	Food Concentration (mg/kg)	Dose (mg/kg/day)	TRV (mg/kg/day)	HQ	HQ>1?
Total DDT	1.1	0	1.1	1.904	0.003	634.7	YES
gamma-BHC	0.0052	0	0.0052	0.009	2	0.0	
Heptachlor epoxide	0.12	0	0.12	0.208	No TRV	No TRV	

Note: TRVs from Sample et al. (1996)

Body wt.=0.08102 kg; food ingestion rate=0.126919 kg/day; incidental soil ingestion rate=0.0133265 kg/day