

APPENDIX M

Ecological Specific EPCs

Table M.1 - Detailed Baseline Case Exposure Point Concentrations

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	--	1.41E-03	--	4.00E-04	--	--	--	--	3.00E-04
Benzo(a)fluorene	--	--	--	--	--	--	--	--	--
Benzo(b)fluorene	--	--	--	--	--	--	--	--	--
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.36E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.00E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.03E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.00E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.10E-04	3.00E-04
Perylene	1.00E-02	2.00E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.76E-06	3.67E-07	8.66E-07	5.90E-07	3.24E-09	1.96E-06	4.76E-08	6.05E-08	8.16E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.00E-02	8.41E-04	1.64E-03	1.00E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.67E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.07E-03	2.81E-03	6.34E-02	1.00E-05	7.00E-04	1.37E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.50E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.92E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.01E-04
O-Terphenyl	--	--	--	--	--	--	--	--	--
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.00E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.00E-04	5.00E-01	5.53E-02	1.63E-01	2.15E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	--	--	--	--	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.00E-04	6.00E+00	5.85E-03	1.44E-02	2.80E-02
Lead	1.69E+01	4.10E-01	1.26E+00	4.40E-02	1.00E-03	1.30E+01	1.45E-01	3.14E-01	7.00E-02
Mercury - Inorganic	7.00E-02	2.23E-02	1.90E-02	2.00E-03	1.00E-04	5.00E-02	9.41E-03	6.14E-03	9.35E-02
Methyl Mercury	1.40E-03	2.88E-05	1.19E-02	4.69E-04	1.50E-05	--	--	--	9.35E-02
Nickel	1.23E+01	6.00E-01	2.08E+00	3.11E-01	6.00E-03	1.00E+01	7.87E-02	3.40E-01	4.80E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.00E-04	2.00E-01	9.00E-04	--	1.00E-02
Thallium	1.00E+00	2.00E-02	1.60E-01	1.00E-02	3.00E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.60E-02	1.00E-03	5.00E+00	1.35E-02	--	5.00E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.50E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

140,000 TONNES/YEAR

Table M.2 - Detailed Project Alone Exposure Point Concentrations for the Darlington Provincial Park Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	8.81E-08	1.91E-08	4.34E-09	6.87E-11	3.58E-10	7.01E-08	1.18E-09	2.88E-10	1.42E-10
Acenaphthylene	2.06E-08	4.00E-09	1.01E-09	1.96E-11	4.71E-10	8.27E-08	1.39E-09	3.36E-10	2.36E-10
Anthracene	8.69E-08	8.72E-09	4.25E-09	5.07E-11	1.12E-10	1.05E-07	1.77E-09	4.10E-10	1.78E-10
Fluoranthene	8.60E-07	6.71E-08	4.20E-08	4.83E-10	1.41E-09	2.77E-06	4.66E-08	1.03E-08	7.07E-09
Fluorene	8.76E-08	1.32E-08	4.30E-09	6.70E-11	8.00E-10	2.47E-07	4.15E-09	9.87E-10	6.36E-10
Phenanthrene	8.85E-07	9.60E-08	4.33E-08	5.66E-10	3.07E-09	3.26E-06	5.49E-08	1.27E-08	4.87E-09
High Molecular Weight PAHs									
Benz(a)anthracene	4.78E-08	2.41E-08	1.16E-09	1.06E-10	3.77E-11	5.40E-07	9.08E-09	1.89E-09	9.47E-10
Benzo(a)pyrene	8.45E-08	1.22E-07	1.03E-08	4.72E-10	5.08E-11	1.97E-06	3.43E-08	3.37E-08	2.55E-09
Benzo(e)pyrene	2.30E-07	1.00E-05	2.81E-08	3.21E-08	2.24E-10	3.57E-06	--	5.87E-08	3.10E-08
Benzo(a)fluorene	9.45E-08	2.59E-08	2.30E-09	1.39E-10	7.89E-10	3.13E-06	--	1.13E-08	9.93E-09
Benzo(b)fluorene	6.52E-08	5.39E-08	1.59E-09	2.37E-10	5.72E-10	2.33E-06	--	8.12E-09	1.61E-08
Benzo(b)fluoranthene	1.10E-07	7.36E-09	2.68E-09	4.79E-11	4.39E-11	1.84E-06	3.10E-08	6.22E-09	2.93E-09
Benzo(g,h,i)perylene	1.19E-06	1.52E-05	1.45E-07	4.74E-08	1.87E-10	3.37E-05	5.67E-07	5.51E-07	2.96E-08
Benzo(k)fluoranthene	9.59E-08	4.92E-08	2.34E-09	1.97E-10	1.80E-11	7.15E-07	1.20E-08	2.42E-09	1.14E-09
Chrysene	1.77E-07	2.33E-08	4.32E-09	1.31E-10	6.81E-11	1.09E-06	1.84E-08	3.83E-09	1.71E-09
Dibenz(a,c)anthracene	1.50E-07	1.83E-06	1.83E-08	5.10E-09	2.27E-10	1.77E-05	2.97E-07	2.84E-07	5.69E-08
Dibenz(a,h)anthracene	5.27E-08	1.23E-06	6.43E-09	3.83E-09	1.23E-11	8.80E-07	1.48E-08	1.44E-08	1.95E-09
Indeno(1,2,3-cd)pyrene	2.54E-07	1.55E-07	3.10E-08	4.78E-10	4.78E-11	5.88E-06	9.90E-08	9.54E-08	9.54E-09
Perylene	4.97E-08	7.45E-06	6.06E-09	2.59E-08	2.70E-11	8.67E-07	1.51E-08	1.45E-08	2.41E-09
Pyrene	4.40E-06	2.81E-07	1.07E-07	2.13E-09	2.21E-09	6.02E-06	1.01E-07	2.26E-08	8.81E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.54E-08	2.07E-09	7.56E-09	7.44E-10	5.79E-13	9.01E-08	2.18E-09	2.77E-09	1.83E-08
PCB									
Aroclor 1254 (Total PCBs)	1.64E-05	1.81E-07	--	3.17E-07	7.22E-10	7.09E-05	--	--	1.42E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.26E-08	5.55E-09	1.57E-09	1.24E-08	1.82E-08	2.76E-07	8.31E-08	1.17E-08	2.19E-07
1,2,4-Trichlorobenzene	9.33E-10	1.98E-10	1.15E-10	5.67E-10	4.95E-10	3.29E-08	5.39E-10	1.34E-09	3.12E-08
1,2,4,5-Tetrachlorobenzene	3.96E-08	2.66E-09	4.84E-09	2.97E-09	7.34E-10	2.22E-07	3.97E-09	8.44E-09	2.32E-07
Pentachlorobenzene	6.15E-07	2.65E-08	1.50E-07	2.72E-08	1.52E-09	7.37E-06	1.31E-07	2.71E-07	1.13E-06
Hexachlorobenzene	1.70E-08	1.13E-09	4.15E-09	1.67E-09	5.20E-10	1.66E-06	2.97E-08	6.04E-08	5.20E-07
Pentachlorophenol	2.89E-07	7.54E-05	6.77E-07	5.05E-08	1.09E-07	2.58E-06	5.06E-08	9.54E-08	6.13E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.37E-11	1.32E-11	1.89E-12	1.03E-09	3.07E-09	1.87E-08	1.47E-08	8.44E-10	9.71E-09
Chloroform	2.26E-11	6.15E-11	5.06E-12	4.27E-10	3.80E-09	7.97E-09	1.40E-08	3.87E-10	1.90E-09
Dichloromethane	4.04E-09	2.78E-08	2.57E-09	4.51E-08	1.33E-06	5.31E-07	1.28E-06	2.74E-08	1.33E-07
Trichlorofluoromethane (Freon 11)	1.04E-09	1.47E-09	1.61E-10	2.68E-07	1.17E-06	5.34E-06	5.88E-06	2.48E-07	1.85E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	5.04E-11	7.13E-11	7.78E-12	2.36E-09	1.03E-08	5.55E-08	6.11E-08	2.58E-09	1.63E-08
Other Organics									
Bromoform	1.91E-10	3.15E-10	3.15E-11	8.76E-08	4.55E-07	2.29E-06	2.86E-06	1.08E-07	5.35E-07
O-Terphenyl	2.79E-07	3.99E-08	6.80E-08	2.53E-08	1.77E-09	1.31E-05	2.96E-07	4.65E-07	2.94E-06
Inorganics									
Antimony	1.87E-04	1.02E-04	2.99E-05	1.24E-06	2.06E-06	9.26E-05	4.75E-07	1.05E-06	4.12E-04
Arsenic	1.85E-05	1.07E-05	3.88E-07	2.54E-07	3.16E-07	9.17E-06	4.47E-08	9.47E-07	1.58E-05
Barium	1.31E-04	7.00E-05	1.91E-06	1.26E-07	1.59E-06	6.52E-05	1.32E-06	8.92E-06	1.59E-05
Beryllium	1.18E-04	9.09E-06	8.47E-07	1.53E-07	8.66E-08	6.84E-05	6.25E-06	9.04E-06	8.66E-06
Boron	7.27E-04	6.55E-03	1.16E-04	5.92E-05	1.15E-04	3.46E-04	6.27E-06	7.91E-05	--
Cadmium	7.75E-04	4.49E-04	1.18E-03	6.51E-07	5.15E-06	3.86E-04	4.27E-05	1.26E-04	6.19E-03
Chromium (Total)	6.52E-05	5.40E-05	3.19E-06	3.45E-06	1.69E-06	3.22E-05	1.72E-07	1.38E-06	3.39E-04
Chromium VI	9.28E-06	7.68E-06	4.54E-07	4.91E-07	2.41E-07	4.58E-06	2.44E-08	--	8.90E-06
Cobalt	3.95E-04	1.46E-04	7.71E-06	3.61E-05	4.35E-06	1.96E-04	1.91E-07	4.70E-07	4.35E-04
Lead	1.80E-02	2.00E-03	1.34E-03	9.10E-06	1.19E-05	1.07E-02	1.20E-04	2.58E-04	1.25E-03
Mercury - Inorganic	1.37E-03	2.10E-05	3.72E-04	4.71E-06	6.59E-08	3.34E-03	6.10E-04	4.10E-04	4.73E-05
Methyl Mercury	4.71E-05	5.93E-06	4.01E-04	6.44E-08	9.35E-10	1.17E-05	2.08E-07	5.21E-05	1.54E-04
Nickel	8.46E-03	2.34E-03	1.43E-03	1.81E-04	6.47E-05	4.21E-03	3.31E-05	1.43E-04	1.01E-02
Selenium	3.74E-06	1.15E-05	5.89E-07	2.91E-07	3.61E-07	1.81E-06	1.19E-07	1.13E-06	6.14E-05
Silver	4.28E-05	9.68E-05	1.40E-05	3.28E-06	2.52E-06	2.09E-05	9.42E-08	--	2.23E-04
Thallium	4.11E-03	9.44E-04	6.58E-04	4.97E-04	2.88E-05	2.05E-03	6.57E-07	--	--
Tin	4.45E-03	5.52E-04	3.67E-04	6.56E-04	9.19E-06	2.30E-03	6.21E-06	--	2.76E-02
Vanadium	4.25E-04	3.00E-05	2.86E-06	1.30E-06	2.58E-07	2.58E-04	1.63E-07	3.81E-06	4.13E-05
Zinc	1.85E-02	9.38E-03	1.35E-02	1.03E-05	1.49E-04	9.21E-03	8.19E-04	4.30E-03	1.38E-01

Table M.3 - Detailed Project Alone Exposure Point Concentrations for the Second Marsh Wildlife Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.27E-08	1.14E-08	2.60E-09	4.04E-11	1.44E-10	2.81E-08	4.74E-10	1.16E-10	5.72E-11
Acenaphthylene	1.23E-08	2.39E-09	6.07E-10	9.73E-12	8.45E-11	1.48E-08	2.50E-10	6.04E-11	4.23E-11
Anthracene	5.20E-08	5.22E-09	2.54E-09	3.01E-11	5.26E-11	4.95E-08	8.33E-10	1.93E-10	8.34E-11
Fluoranthene	5.15E-07	3.98E-08	2.51E-08	2.96E-10	1.40E-09	2.75E-06	4.63E-08	1.03E-08	7.03E-09
Fluorene	5.24E-08	7.87E-09	2.57E-09	3.92E-11	4.00E-10	1.23E-07	2.08E-09	4.94E-10	3.18E-10
Phenanthrene	5.30E-07	5.73E-08	2.59E-08	3.46E-10	2.48E-09	2.63E-06	4.43E-08	1.03E-08	3.93E-09
High Molecular Weight PAHs									
Benz(a)anthracene	2.86E-08	1.43E-08	6.98E-10	6.28E-11	2.39E-11	3.42E-07	5.75E-09	1.20E-09	5.99E-10
Benzo(a)pyrene	5.06E-08	7.12E-08	6.17E-09	2.77E-10	8.87E-11	3.44E-06	5.98E-08	5.87E-08	4.44E-09
Benzo(e)pyrene	1.38E-07	5.78E-06	1.68E-08	1.86E-08	6.48E-10	1.03E-05	--	1.70E-07	8.94E-08
Benzo(a)fluorene	5.65E-08	1.51E-08	1.38E-09	7.75E-11	2.02E-10	8.01E-07	--	2.88E-09	2.55E-09
Benzo(b)fluorene	3.90E-08	3.12E-08	9.52E-10	1.35E-10	1.60E-10	6.50E-07	--	2.27E-09	4.51E-09
Benzo(b)fluoranthene	6.57E-08	4.33E-09	1.60E-09	2.84E-11	3.14E-11	1.32E-06	2.21E-08	4.45E-09	2.09E-09
Benzo(g,h,i)perylene	7.15E-07	8.76E-06	8.71E-08	2.74E-08	5.59E-10	1.01E-04	1.70E-06	1.65E-06	8.86E-08
Benzo(k)fluoranthene	5.76E-08	2.87E-08	1.40E-09	1.16E-10	4.68E-11	1.86E-06	3.12E-08	6.29E-09	2.95E-09
Chrysene	1.06E-07	1.39E-08	2.59E-09	7.80E-11	3.65E-11	5.86E-07	9.86E-09	2.06E-09	9.17E-10
Dibenz(a,c)anthracene	8.99E-08	1.07E-06	1.10E-08	2.98E-09	5.93E-10	4.63E-05	7.79E-07	7.43E-07	1.49E-07
Dibenz(a,h)anthracene	3.16E-08	7.10E-07	3.85E-09	2.21E-09	3.67E-11	2.62E-06	4.42E-08	4.29E-08	5.81E-09
Indeno(1,2,3-cd)pyrene	1.52E-07	9.26E-08	1.85E-08	2.92E-10	1.37E-10	1.69E-05	2.84E-07	2.73E-07	2.73E-08
Perylene	2.98E-08	4.30E-06	3.63E-09	1.50E-08	9.71E-11	3.12E-06	5.43E-08	5.21E-08	8.66E-09
Pyrene	2.64E-06	1.68E-07	6.45E-08	1.29E-09	2.30E-09	6.26E-06	1.05E-07	2.35E-08	9.16E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	6.97E-09	1.10E-09	3.43E-09	3.80E-10	3.01E-13	4.68E-08	1.13E-09	1.44E-09	9.51E-09
PCB									
Aroclor 1254 (Total PCBs)	9.87E-06	1.07E-07	--	1.90E-07	4.20E-10	4.12E-05	--	--	5.77E-05
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	7.51E-09	3.32E-09	9.40E-10	6.53E-09	9.49E-09	1.44E-07	4.34E-08	6.11E-09	1.14E-07
1,2,4-Trichlorobenzene	5.58E-10	1.18E-10	6.87E-11	2.80E-10	2.37E-10	1.57E-08	2.58E-10	6.40E-10	1.49E-08
1,2,4,5-Tetrachlorobenzene	2.37E-08	1.59E-09	2.89E-09	1.53E-09	2.71E-10	8.22E-08	1.47E-09	3.12E-09	8.57E-08
Pentachlorobenzene	3.68E-07	1.58E-08	8.98E-08	1.59E-08	7.33E-10	3.54E-06	6.32E-08	1.30E-07	5.43E-07
Hexachlorobenzene	1.02E-08	6.64E-10	2.48E-09	9.53E-10	2.88E-10	9.23E-07	1.65E-08	3.35E-08	2.88E-07
Pentachlorophenol	1.73E-07	4.35E-05	4.05E-07	2.94E-08	1.53E-07	3.61E-06	7.09E-08	1.34E-07	8.58E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	8.19E-12	7.89E-12	1.13E-12	6.17E-10	1.84E-09	1.12E-08	8.83E-09	5.06E-10	5.82E-09
Chloroform	1.35E-11	3.68E-11	3.03E-12	2.26E-10	2.01E-09	4.23E-09	7.44E-09	2.05E-10	1.01E-09
Dichloromethane	2.42E-09	1.66E-08	1.54E-09	2.14E-08	6.28E-07	2.51E-07	6.05E-07	1.30E-08	6.28E-08
Trichlorofluoromethane (Freon 11)	6.23E-10	8.82E-10	9.62E-11	1.59E-07	6.91E-07	3.16E-06	3.48E-06	1.47E-07	1.10E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	3.01E-11	4.26E-11	4.65E-12	1.41E-09	6.11E-09	3.30E-08	3.63E-08	1.53E-09	9.68E-09
Other Organics									
Bromoform	1.14E-10	1.89E-10	1.88E-11	5.13E-08	2.66E-07	1.34E-06	1.67E-06	6.30E-08	3.13E-07
O-Terphenyl	1.67E-07	2.32E-08	4.07E-08	1.39E-08	5.20E-10	3.83E-06	9.06E-08	1.36E-07	8.62E-07
Inorganics									
Antimony	8.42E-05	4.30E-05	1.35E-05	5.74E-07	2.20E-06	9.89E-05	5.07E-07	1.12E-06	4.40E-04
Arsenic	8.35E-06	4.31E-06	1.75E-07	1.20E-07	3.38E-07	9.79E-06	4.78E-08	1.01E-06	1.69E-05
Barium	5.93E-05	2.91E-05	8.63E-07	5.90E-08	1.70E-06	6.96E-05	1.41E-06	9.52E-06	1.70E-05
Beryllium	5.31E-05	3.71E-06	3.82E-07	6.79E-08	1.09E-07	8.62E-05	7.88E-06	1.14E-05	1.09E-05
Boron	3.27E-04	2.77E-03	5.24E-05	2.75E-05	1.23E-04	3.69E-04	6.70E-06	8.46E-05	--
Cadmium	3.50E-04	1.94E-04	5.34E-04	2.99E-07	5.50E-06	4.13E-04	4.57E-05	1.34E-04	6.62E-03
Chromium (Total)	2.94E-05	2.17E-05	1.44E-06	1.64E-06	1.81E-06	3.44E-05	1.83E-07	1.48E-06	3.62E-04
Chromium VI	4.18E-06	3.09E-06	2.05E-07	2.33E-07	2.57E-07	4.89E-06	2.61E-08	--	9.51E-06
Cobalt	1.78E-04	5.89E-05	3.47E-06	1.70E-05	4.65E-06	2.09E-04	2.04E-07	5.02E-07	4.65E-04
Lead	8.13E-03	8.43E-04	6.06E-04	4.05E-06	1.53E-05	1.38E-02	1.54E-04	3.33E-04	1.60E-03
Mercury - Inorganic	7.55E-04	9.32E-06	2.04E-04	2.50E-06	1.51E-07	7.80E-03	1.37E-03	9.58E-04	1.09E-04
Methyl Mercury	2.13E-05	2.63E-06	1.81E-04	2.87E-08	4.99E-09	4.55E-06	8.10E-08	2.03E-05	4.22E-04
Nickel	3.81E-03	9.54E-04	6.46E-04	8.46E-05	6.91E-05	4.49E-03	3.54E-05	1.53E-04	1.08E-02
Selenium	1.68E-06	4.61E-06	2.65E-07	1.38E-07	3.86E-07	1.93E-06	1.27E-07	1.21E-06	6.57E-05
Silver	1.93E-05	3.97E-05	6.31E-06	1.55E-06	2.70E-06	2.24E-05	1.01E-07	--	2.39E-04
Thallium	1.85E-03	3.80E-04	2.96E-04	2.34E-04	3.08E-05	2.19E-03	7.02E-07	--	--
Tin	2.01E-03	2.28E-04	1.66E-04	2.99E-04	1.02E-05	2.56E-03	6.91E-06	--	3.07E-02
Vanadium	1.92E-04	1.22E-05	1.29E-06	3.75E-07	3.38E-07	3.38E-04	2.13E-07	4.98E-06	5.40E-05
Zinc	8.36E-03	3.99E-03	6.07E-03	4.75E-06	1.59E-04	9.84E-03	8.74E-04	4.59E-03	1.48E-01

Table M.4 - Detailed Project Alone Exposure Point Concentrations for the Darlington Waterfront Trail Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.32E-07	2.85E-08	6.48E-09	1.43E-10	4.83E-09	9.46E-07	1.59E-08	3.88E-09	1.92E-09
Acenaphthylene	3.08E-08	5.97E-09	1.52E-09	6.18E-11	3.95E-09	6.93E-07	1.17E-08	2.82E-09	1.98E-09
Anthracene	1.30E-07	1.30E-08	6.35E-09	8.76E-11	1.07E-09	1.01E-06	1.70E-08	3.93E-09	1.70E-09
Fluoranthene	1.28E-06	1.01E-07	6.27E-08	8.58E-10	1.09E-08	2.14E-05	3.60E-07	7.98E-08	5.46E-08
Fluorene	1.31E-07	1.97E-08	6.41E-09	1.80E-10	8.31E-09	2.56E-06	4.31E-08	1.02E-08	6.60E-09
Phenanthrene	1.32E-06	1.44E-07	6.47E-08	1.11E-09	2.51E-08	2.67E-05	4.49E-07	1.04E-07	3.98E-08
High Molecular Weight PAHs									
Benz(a)anthracene	7.13E-08	3.64E-08	1.74E-09	1.64E-10	3.19E-10	4.57E-06	7.70E-08	1.60E-08	8.02E-09
Benzo(a)pyrene	1.26E-07	1.84E-07	1.54E-08	7.23E-10	5.30E-10	2.05E-05	3.57E-07	3.51E-07	2.66E-08
Benzo(e)pyrene	3.44E-07	1.53E-05	4.19E-08	4.91E-08	1.82E-09	2.90E-05	--	4.76E-07	2.51E-07
Benzo(a)fluorene	1.41E-07	3.94E-08	3.44E-09	3.03E-10	6.94E-09	2.75E-05	--	9.90E-08	8.74E-08
Benzo(b)fluorene	9.74E-08	8.22E-08	2.38E-09	4.21E-10	4.75E-09	1.93E-05	--	6.75E-08	1.34E-07
Benzo(b)fluoranthene	1.64E-07	1.11E-08	4.00E-09	8.00E-11	5.61E-10	2.35E-05	3.96E-07	7.95E-08	3.74E-08
Benzo(g,h,i)perylene	1.78E-06	2.32E-05	2.17E-07	7.26E-08	2.46E-09	4.43E-04	7.45E-06	7.24E-06	3.89E-07
Benzo(k)fluoranthene	1.43E-07	7.47E-08	3.50E-09	3.02E-10	1.56E-10	6.21E-06	1.04E-07	2.10E-08	9.87E-09
Chrysene	2.65E-07	3.50E-08	6.46E-09	2.06E-10	7.67E-10	1.23E-05	2.07E-07	4.32E-08	1.93E-08
Dibenz(a,c)anthracene	2.24E-07	2.78E-06	2.74E-08	7.79E-09	2.85E-09	2.23E-04	3.74E-06	3.58E-06	7.17E-07
Dibenz(a,h)anthracene	7.88E-08	1.88E-06	9.61E-09	5.86E-09	1.37E-10	9.79E-06	1.65E-07	1.60E-07	2.17E-08
Indeno(1,2,3-cd)pyrene	3.79E-07	2.33E-07	4.63E-08	7.38E-10	5.97E-10	1.35E-05	1.24E-06	1.19E-06	1.19E-07
Perylene	7.42E-08	1.14E-05	9.05E-09	3.96E-08	2.53E-10	8.12E-06	1.41E-07	1.36E-07	2.25E-08
Pyrene	6.58E-06	4.21E-07	1.61E-07	3.34E-09	1.33E-08	3.61E-05	6.07E-07	1.36E-07	5.28E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.53E-08	2.78E-09	7.54E-09	9.37E-10	3.29E-12	5.12E-07	1.23E-08	1.58E-08	1.04E-07
PCB									
Aroclor 1254 (Total PCBs)	2.46E-05	2.73E-07	--	4.85E-07	6.82E-09	6.69E-04	--	--	1.87E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.87E-08	8.29E-09	2.35E-09	2.62E-07	4.21E-07	6.39E-06	1.93E-06	2.72E-07	5.07E-06
1,2,4-Trichlorobenzene	1.39E-09	2.97E-10	1.71E-10	1.11E-08	1.10E-08	7.32E-07	1.20E-08	2.98E-08	6.96E-07
1,2,4,5-Tetrachlorobenzene	5.91E-08	3.98E-09	7.22E-09	1.82E-08	1.06E-08	3.22E-06	5.75E-08	1.22E-07	3.36E-06
Pentachlorobenzene	9.19E-07	3.96E-08	2.24E-07	8.31E-08	2.92E-08	1.41E-04	2.52E-06	5.19E-06	2.16E-05
Hexachlorobenzene	2.54E-08	1.71E-09	6.20E-09	1.83E-08	1.07E-08	3.43E-05	6.12E-07	1.25E-06	1.07E-05
Pentachlorophenol	4.32E-07	1.15E-04	1.01E-06	7.70E-08	1.12E-07	2.66E-06	5.21E-08	9.82E-08	6.31E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.05E-11	1.97E-11	2.83E-12	2.39E-08	7.13E-08	4.34E-07	3.42E-07	1.96E-08	2.26E-07
Chloroform	3.37E-11	9.18E-11	7.56E-12	1.06E-08	9.50E-08	2.00E-07	3.51E-07	9.67E-09	4.76E-08
Dichloromethane	6.04E-09	4.15E-08	3.84E-09	1.17E-06	3.46E-05	1.39E-05	3.34E-05	7.14E-07	3.46E-06
Trichlorofluoromethane (Freon 11)	1.56E-09	2.20E-09	2.40E-10	6.31E-06	2.75E-05	1.26E-04	1.38E-04	5.83E-06	4.36E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	7.52E-11	1.06E-10	1.16E-11	5.53E-08	2.41E-07	1.30E-06	1.43E-06	6.04E-08	3.82E-07
Other Organics									
Bromoform	2.85E-10	4.71E-10	4.70E-11	2.08E-06	1.08E-05	5.44E-05	6.77E-05	2.55E-06	1.27E-05
O-Terphenyl	4.16E-07	6.07E-08	1.02E-07	6.47E-08	1.91E-08	1.41E-04	2.93E-06	5.02E-06	3.17E-05
Inorganics									
Antimony	1.86E-04	9.09E-05	2.97E-05	1.09E-06	1.30E-06	5.86E-05	3.01E-07	6.62E-07	2.61E-04
Arsenic	1.84E-05	8.91E-06	3.86E-07	2.11E-07	2.00E-07	5.80E-06	2.83E-08	5.99E-07	9.99E-06
Barium	1.31E-04	6.11E-05	1.90E-06	1.10E-07	1.01E-06	4.12E-05	8.36E-07	5.64E-06	1.01E-05
Beryllium	1.17E-04	7.71E-06	8.42E-07	1.40E-07	9.74E-08	7.69E-05	7.03E-06	1.02E-05	9.74E-06
Boron	7.22E-04	5.89E-03	1.16E-04	5.27E-05	7.28E-05	2.18E-04	3.96E-06	5.00E-05	--
Cadmium	7.71E-04	4.18E-04	1.18E-03	6.06E-07	3.29E-06	2.47E-04	2.73E-05	8.02E-05	3.95E-03
Chromium (Total)	6.48E-05	4.47E-05	3.17E-06	2.82E-06	1.07E-06	2.03E-05	1.08E-07	8.75E-07	2.14E-04
Chromium VI	9.22E-06	6.36E-06	4.51E-07	4.01E-07	1.52E-07	2.89E-06	1.54E-08	--	5.63E-06
Cobalt	3.92E-04	1.22E-04	7.66E-06	3.01E-05	2.75E-06	1.24E-04	1.21E-07	2.97E-07	2.75E-04
Lead	1.79E-02	1.79E-03	1.34E-03	8.49E-06	1.42E-05	1.28E-02	1.43E-04	3.08E-04	1.49E-03
Mercury - Inorganic	1.89E-03	2.09E-05	5.13E-04	6.19E-06	5.05E-07	2.56E-02	3.99E-03	3.15E-03	3.63E-04
Methyl Mercury	4.69E-05	5.89E-06	3.99E-04	6.41E-08	7.17E-09	4.26E-06	7.58E-08	1.90E-05	1.18E-03
Nickel	8.41E-03	1.98E-03	1.42E-03	1.54E-04	4.11E-05	2.67E-03	2.11E-05	9.09E-05	6.42E-03
Selenium	3.71E-06	9.49E-06	5.85E-07	2.35E-07	2.28E-07	1.14E-06	7.54E-08	7.15E-07	3.88E-05
Silver	4.26E-05	8.29E-05	1.39E-05	2.77E-06	1.60E-06	1.32E-05	5.95E-08	--	1.41E-04
Thallium	4.08E-03	7.83E-04	6.53E-04	4.18E-04	1.84E-05	1.30E-03	4.19E-07	--	--
Tin	4.43E-03	4.79E-04	3.65E-04	5.90E-04	6.88E-06	1.72E-03	4.65E-06	--	2.06E-02
Vanadium	4.23E-04	2.52E-05	2.84E-06	1.19E-06	3.23E-07	3.23E-04	2.04E-07	4.76E-06	5.17E-05
Zinc	1.84E-02	8.53E-03	1.34E-02	9.34E-06	9.44E-05	5.85E-03	5.20E-04	2.73E-03	8.79E-02

Table M.5 - Detailed Project Alone Exposure Point Concentrations for the McLaughlin Bay Wildlife Reserve Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	6.08E-08	1.32E-08	3.00E-09	4.62E-11	1.19E-10	2.34E-08	3.94E-10	9.60E-11	4.75E-11
Acenaphthylene	1.42E-08	2.77E-09	7.01E-10	1.10E-11	6.68E-11	1.17E-08	1.97E-10	4.77E-11	3.35E-11
Anthracene	6.00E-08	6.04E-09	2.93E-09	3.46E-11	4.48E-11	4.21E-08	7.09E-10	1.64E-10	7.10E-11
Fluoranthene	5.94E-07	4.84E-08	2.90E-08	3.47E-10	1.33E-09	2.62E-06	4.41E-08	9.77E-09	6.69E-09
Fluorene	6.05E-08	9.15E-09	2.97E-09	4.40E-11	3.43E-10	1.06E-07	1.78E-09	4.23E-10	2.73E-10
Phenanthrene	6.11E-07	6.72E-08	2.99E-08	3.96E-10	2.26E-09	2.40E-06	4.04E-08	9.36E-09	3.59E-09
High Molecular Weight PAHs									
Benz(a)anthracene	3.29E-08	1.79E-08	8.04E-10	7.83E-11	2.22E-11	3.18E-07	5.34E-09	1.11E-09	5.57E-10
Benzo(a)pyrene	5.83E-08	9.33E-08	7.12E-09	3.62E-10	9.61E-11	3.72E-06	6.48E-08	6.36E-08	4.81E-09
Benzo(e)pyrene	1.59E-07	8.03E-06	1.94E-08	2.58E-08	9.34E-10	1.49E-05	--	2.45E-07	1.29E-07
Benzo(a)fluorene	6.52E-08	2.01E-08	1.59E-09	9.94E-11	1.73E-10	6.87E-07	--	2.47E-09	2.18E-09
Benzo(b)fluorene	4.50E-08	4.28E-08	1.10E-09	1.82E-10	1.40E-10	5.67E-07	--	1.98E-09	3.93E-09
Benzo(b)fluoranthene	7.57E-08	5.54E-09	1.85E-09	3.46E-11	2.75E-11	1.15E-06	1.94E-08	3.89E-09	1.83E-09
Benzo(g,h,i)perylene	8.23E-07	1.22E-05	1.00E-07	3.80E-08	7.37E-10	1.33E-04	2.24E-06	2.17E-06	1.17E-07
Benzo(k)fluoranthene	6.61E-08	3.81E-08	1.61E-09	1.52E-10	6.48E-11	2.57E-06	4.33E-08	8.71E-09	4.09E-09
Chrysene	1.22E-07	1.67E-08	2.98E-09	9.22E-11	3.14E-11	5.04E-07	8.48E-09	1.77E-09	7.88E-10
Dibenz(a,c)anthracene	1.04E-07	1.43E-06	1.27E-08	3.98E-09	7.14E-10	5.57E-05	9.37E-07	8.95E-07	1.79E-07
Dibenz(a,h)anthracene	3.64E-08	9.84E-07	4.44E-09	3.07E-09	5.03E-11	3.60E-06	6.06E-08	5.89E-08	7.97E-09
Indeno(1,2,3-cd)pyrene	1.75E-07	1.12E-07	1.74E-08	3.50E-10	1.77E-10	3.66E-05	3.52E-07	3.52E-07	3.52E-08
Perylene	3.43E-08	5.98E-06	4.18E-09	2.08E-08	1.57E-10	5.03E-06	8.75E-08	8.40E-08	1.40E-08
Pyrene	3.03E-06	1.97E-07	7.41E-08	1.49E-09	2.27E-09	6.17E-06	1.04E-07	2.32E-08	9.03E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	6.68E-09	1.43E-09	3.28E-09	4.62E-10	2.33E-13	3.63E-08	8.78E-10	1.12E-09	7.37E-09
PCB									
Aroclor 1254 (Total PCBs)	1.13E-05	1.32E-07	--	2.21E-07	3.62E-10	3.55E-05	--	--	9.38E-05
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	8.67E-09	3.85E-09	1.09E-09	5.60E-09	7.79E-09	1.18E-07	3.56E-08	5.02E-09	9.37E-08
1,2,4-Trichlorobenzene	6.44E-10	1.39E-10	7.93E-11	2.44E-10	1.93E-10	1.28E-08	2.11E-10	5.22E-10	1.22E-08
1,2,4,5-Tetrachlorobenzene	2.73E-08	1.85E-09	3.34E-09	1.61E-09	1.99E-10	6.03E-08	1.08E-09	2.29E-09	6.29E-08
Pentachlorobenzene	4.25E-07	1.85E-08	1.04E-07	1.81E-08	6.04E-10	2.92E-06	5.21E-08	1.07E-07	4.48E-07
Hexachlorobenzene	1.17E-08	8.44E-10	2.86E-09	9.83E-10	2.38E-10	7.61E-07	1.36E-08	2.76E-08	2.38E-07
Pentachlorophenol	2.00E-07	6.05E-05	4.68E-07	4.08E-08	1.95E-07	4.63E-06	9.07E-08	1.71E-07	1.10E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	9.46E-12	9.17E-12	1.31E-12	5.07E-10	1.51E-09	9.21E-09	7.26E-09	4.16E-10	4.79E-09
Chloroform	1.56E-11	4.25E-11	3.49E-12	1.86E-10	1.65E-09	3.47E-09	6.11E-09	1.68E-10	8.28E-10
Dichloromethane	2.79E-09	1.92E-08	1.77E-09	1.76E-08	5.15E-07	2.06E-07	4.96E-07	1.06E-08	5.15E-08
Trichlorofluoromethane (Freon 11)	7.19E-10	1.02E-09	1.11E-10	1.30E-07	5.68E-07	2.59E-06	2.85E-06	1.20E-07	9.00E-07
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	3.48E-11	4.93E-11	5.37E-12	1.16E-09	5.02E-09	2.71E-08	2.98E-08	1.26E-09	7.96E-09
Other Organics									
Bromoform	1.32E-10	2.18E-10	2.17E-11	4.21E-08	2.19E-07	1.10E-06	1.37E-06	5.17E-08	2.57E-07
O-Terphenyl	1.92E-07	3.12E-08	4.70E-08	1.77E-08	4.39E-10	3.23E-06	7.70E-08	1.15E-07	7.29E-07
Inorganics									
Antimony	8.13E-05	4.05E-05	1.30E-05	5.57E-07	2.43E-06	1.09E-04	5.61E-07	1.24E-06	4.86E-04
Arsenic	8.07E-06	4.00E-06	1.69E-07	1.16E-07	3.74E-07	1.08E-05	5.28E-08	1.12E-06	1.87E-05
Barium	5.73E-05	2.73E-05	8.34E-07	5.72E-08	1.88E-06	7.70E-05	1.56E-06	1.05E-05	1.88E-05
Beryllium	5.12E-05	3.46E-06	3.69E-07	6.58E-08	1.43E-07	1.13E-04	1.03E-05	1.49E-05	1.43E-05
Boron	3.17E-04	2.62E-03	5.07E-05	2.66E-05	1.36E-04	4.09E-04	7.42E-06	9.37E-05	--
Cadmium	3.38E-04	1.85E-04	5.16E-04	2.89E-07	6.10E-06	4.57E-04	5.06E-05	1.49E-04	7.33E-03
Chromium (Total)	2.84E-05	2.01E-05	1.39E-06	1.59E-06	2.00E-06	3.81E-05	2.03E-07	1.64E-06	4.01E-04
Chromium VI	4.04E-06	2.86E-06	1.98E-07	2.26E-07	2.85E-07	5.41E-06	2.88E-08	--	1.05E-05
Cobalt	1.72E-04	5.47E-05	3.36E-06	1.65E-05	5.14E-06	2.31E-04	2.26E-07	5.55E-07	5.14E-04
Lead	7.84E-03	7.95E-04	5.84E-04	3.92E-06	2.03E-05	1.83E-02	2.04E-04	4.41E-04	2.13E-03
Mercury - Inorganic	9.35E-04	9.97E-06	2.53E-04	3.02E-06	2.27E-07	1.17E-02	2.01E-03	1.44E-03	1.63E-04
Methyl Mercury	2.05E-05	2.81E-06	1.74E-04	2.99E-08	7.51E-09	2.52E-06	4.48E-08	1.12E-05	6.34E-04
Nickel	3.68E-03	8.88E-04	6.24E-04	8.21E-05	7.65E-05	4.97E-03	3.92E-05	1.69E-04	1.19E-02
Selenium	1.63E-06	4.27E-06	2.56E-07	1.34E-07	4.28E-07	2.14E-06	1.41E-07	1.34E-06	7.27E-05
Silver	1.87E-05	3.71E-05	6.11E-06	1.50E-06	2.99E-06	2.48E-05	1.11E-07	--	2.64E-04
Thallium	1.79E-03	3.52E-04	2.86E-04	2.27E-04	3.41E-05	2.42E-03	7.78E-07	--	--
Tin	1.94E-03	2.14E-04	1.60E-04	2.89E-04	1.19E-05	2.97E-03	8.03E-06	--	3.56E-02
Vanadium	1.85E-04	1.13E-05	1.24E-06	5.56E-07	4.53E-07	4.53E-04	2.86E-07	6.68E-06	7.25E-05
Zinc	8.07E-03	3.78E-03	5.86E-03	4.60E-06	1.76E-04	1.09E-02	9.68E-04	5.08E-03	1.64E-01

Table M.6 - Detailed Project Alone Exposure Point Concentrations for the Bowmanville Valley Cons. Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	4.38E-08	9.50E-09	2.16E-09	3.86E-11	6.45E-10	1.26E-07	2.13E-09	5.19E-10	2.57E-10
Acenaphthylene	1.03E-08	2.00E-09	5.05E-10	1.46E-11	7.12E-10	1.25E-07	2.10E-09	5.09E-10	3.57E-10
Anthracene	4.32E-08	4.36E-09	2.11E-09	2.70E-11	1.83E-10	1.72E-07	2.89E-09	6.69E-10	2.89E-10
Fluoranthene	4.28E-07	3.61E-08	2.09E-08	2.74E-10	2.09E-09	4.11E-06	6.91E-08	1.53E-08	1.05E-08
Fluorene	4.36E-08	6.62E-09	2.14E-09	4.50E-11	1.40E-09	4.31E-07	7.25E-09	1.72E-09	1.11E-09
Phenanthrene	4.40E-07	4.90E-08	2.15E-08	3.31E-10	4.82E-09	5.12E-06	8.62E-08	1.99E-08	7.65E-09
High Molecular Weight PAHs									
Benz(a)anthracene	2.37E-08	1.35E-08	5.79E-10	5.96E-11	4.38E-11	6.27E-07	1.06E-08	2.20E-09	1.10E-09
Benzo(a)pyrene	4.20E-08	7.23E-08	5.13E-09	2.81E-10	5.23E-11	2.03E-06	3.53E-08	3.47E-08	2.62E-09
Benzo(e)pyrene	1.14E-07	6.45E-06	1.40E-08	2.07E-08	2.48E-10	3.95E-06	--	6.49E-08	3.42E-08
Benzo(a)fluorene	4.70E-08	1.58E-08	1.15E-09	9.58E-11	1.16E-09	4.61E-06	--	1.66E-08	1.47E-08
Benzo(b)fluorene	3.24E-08	3.42E-08	7.91E-10	1.57E-10	8.22E-10	3.34E-06	--	1.17E-08	2.32E-08
Benzo(b)fluoranthene	5.46E-08	4.25E-09	1.33E-09	2.74E-11	4.97E-11	2.08E-06	3.50E-08	7.04E-09	3.31E-09
Benzo(g,h,i)perylene	5.93E-07	9.78E-06	7.23E-08	3.05E-08	1.69E-10	3.05E-05	5.13E-07	4.98E-07	2.68E-08
Benzo(k)fluoranthene	4.77E-08	2.98E-08	1.16E-09	1.18E-10	1.67E-11	6.62E-07	1.11E-08	2.24E-09	1.05E-09
Chrysene	8.81E-08	1.22E-08	2.15E-09	6.89E-11	8.81E-11	1.41E-06	2.38E-08	4.96E-09	2.21E-09
Dibenz(a,c)anthracene	7.47E-08	1.12E-06	9.11E-09	3.12E-09	2.25E-10	1.76E-05	2.95E-07	2.82E-07	5.65E-08
Dibenz(a,h)anthracene	2.62E-08	7.89E-07	3.20E-09	2.46E-09	1.15E-11	8.27E-07	1.39E-08	1.35E-08	1.83E-09
Indeno(1,2,3-cd)pyrene	1.26E-07	8.17E-08	1.54E-08	2.58E-10	4.40E-11	5.41E-06	9.11E-08	8.77E-08	8.77E-09
Perylene	2.47E-08	4.80E-06	3.01E-09	1.67E-08	2.73E-11	8.77E-07	1.53E-08	1.47E-08	2.43E-09
Pyrene	2.19E-06	1.43E-07	5.34E-08	1.10E-09	2.79E-09	7.58E-06	1.28E-07	2.85E-08	1.11E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.21E-08	1.47E-09	5.95E-09	5.47E-10	6.75E-13	1.05E-07	2.54E-09	3.24E-09	2.14E-08
PCB									
Aroclor 1254 (Total PCBs)	8.15E-06	9.99E-08	--	1.64E-07	6.01E-10	5.89E-05	--	--	1.18E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.24E-09	2.78E-09	7.81E-10	1.83E-08	2.87E-08	4.35E-07	1.31E-07	1.85E-08	3.45E-07
1,2,4-Trichlorobenzene	4.64E-10	1.02E-10	5.71E-11	8.27E-10	7.87E-10	8.58E-08	8.58E-10	2.13E-09	4.97E-08
1,2,4,5-Tetrachlorobenzene	1.97E-08	1.34E-09	2.40E-09	2.20E-09	8.51E-10	2.58E-07	4.60E-09	9.79E-09	2.69E-07
Pentachlorobenzene	3.06E-07	1.35E-08	7.47E-08	1.69E-08	2.42E-09	1.17E-05	2.08E-07	4.29E-07	1.79E-06
Hexachlorobenzene	8.46E-09	6.45E-10	2.06E-09	1.87E-09	8.05E-10	2.57E-06	4.59E-08	9.35E-08	8.05E-07
Pentachlorophenol	1.44E-07	4.86E-05	3.37E-07	3.25E-08	8.18E-08	1.94E-06	3.80E-08	7.16E-08	4.60E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	6.81E-12	6.64E-12	9.41E-13	1.46E-09	4.35E-09	2.64E-08	2.08E-08	1.20E-09	1.38E-08
Chloroform	1.12E-11	3.07E-11	2.52E-12	6.48E-10	5.78E-09	1.21E-08	2.14E-08	5.89E-10	2.90E-09
Dichloromethane	2.01E-09	1.38E-08	1.28E-09	7.19E-08	2.13E-06	8.50E-07	2.05E-06	4.38E-08	2.13E-07
Trichlorofluoromethane (Freon 11)	5.18E-10	7.37E-10	8.00E-11	3.77E-07	1.64E-06	7.50E-06	8.26E-06	3.48E-07	2.60E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.50E-11	3.56E-11	3.87E-12	3.37E-09	1.47E-08	7.93E-08	8.73E-08	3.68E-09	2.33E-08
Other Organics									
Bromoform	9.50E-11	1.57E-10	1.56E-11	1.23E-07	6.37E-07	3.21E-06	3.99E-06	1.50E-07	7.48E-07
O-Terphenyl	1.39E-07	2.47E-08	3.38E-08	1.84E-08	2.62E-09	1.93E-05	4.31E-07	6.88E-07	4.35E-06
Inorganics									
Antimony	1.47E-04	8.84E-05	2.35E-05	1.08E-06	2.41E-06	1.08E-04	5.56E-07	1.23E-06	4.82E-04
Arsenic	1.46E-05	9.58E-06	3.06E-07	2.32E-07	3.70E-07	1.07E-05	5.24E-08	1.11E-06	1.85E-05
Barium	1.03E-04	6.11E-05	1.51E-06	1.12E-07	1.86E-06	7.63E-05	1.55E-06	1.04E-05	1.86E-05
Beryllium	9.25E-05	8.10E-06	6.66E-07	1.32E-07	1.13E-07	8.93E-05	8.17E-06	1.18E-05	1.13E-05
Boron	5.72E-04	5.59E-03	9.15E-05	5.13E-05	1.35E-04	4.05E-04	7.34E-06	9.27E-05	--
Cadmium	6.10E-04	3.73E-04	9.31E-04	5.45E-07	6.03E-06	4.52E-04	5.00E-05	1.47E-04	7.25E-03
Chromium (Total)	5.13E-05	4.89E-05	2.51E-06	3.20E-06	1.98E-06	3.77E-05	2.01E-07	1.62E-06	3.97E-04
Chromium VI	7.30E-06	6.95E-06	3.57E-07	4.55E-07	2.82E-07	5.36E-06	2.86E-08	--	1.04E-05
Cobalt	3.11E-04	1.31E-04	6.06E-06	3.29E-05	5.09E-06	2.29E-04	2.24E-07	5.50E-07	5.09E-04
Lead	1.42E-02	1.72E-03	1.06E-03	7.66E-06	1.58E-05	1.42E-02	1.58E-04	3.42E-04	1.65E-03
Mercury - Inorganic	8.55E-04	1.77E-05	2.32E-04	3.21E-06	6.96E-08	3.53E-03	6.44E-04	4.34E-04	5.01E-05
Methyl Mercury	3.71E-05	5.00E-06	3.15E-04	5.33E-08	9.89E-10	5.43E-06	9.67E-08	2.42E-05	1.63E-04
Nickel	6.66E-03	2.09E-03	1.13E-03	1.62E-04	7.58E-05	4.93E-03	3.88E-05	1.67E-04	1.18E-02
Selenium	2.94E-06	1.04E-05	4.63E-07	2.71E-07	4.23E-07	2.12E-06	1.40E-07	1.32E-06	7.19E-05
Silver	3.37E-05	8.57E-05	1.10E-05	2.98E-06	2.95E-06	2.45E-05	1.10E-07	--	2.62E-04
Thallium	3.23E-03	8.53E-04	5.17E-04	4.52E-04	3.37E-05	2.40E-03	7.69E-07	--	--
Tin	3.50E-03	4.84E-04	2.89E-04	5.67E-04	1.11E-05	2.76E-03	7.47E-06	--	3.32E-02
Vanadium	3.35E-04	2.69E-05	2.25E-06	1.12E-06	3.45E-07	3.45E-04	2.18E-07	5.10E-06	5.53E-05
Zinc	1.46E-02	7.95E-03	1.06E-02	8.79E-06	1.74E-04	1.08E-02	9.58E-04	5.03E-03	1.62E-01

Table M.7 - Detailed Project Alone Exposure Point Concentrations for the Eco Baseline Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.89E-07	4.09E-08	9.32E-09	1.42E-10	2.24E-10	4.38E-08	7.37E-10	1.80E-10	8.90E-11
Acenaphthylene	4.43E-08	8.43E-09	2.18E-09	3.40E-11	2.47E-10	4.33E-08	7.29E-10	1.76E-10	1.24E-10
Anthracene	1.86E-07	1.85E-08	9.11E-09	1.06E-10	5.72E-11	5.38E-08	9.05E-10	2.09E-10	9.06E-11
Fluoranthene	1.84E-06	1.17E-07	9.01E-08	8.92E-10	6.01E-10	1.18E-06	1.99E-08	4.40E-09	3.01E-09
Fluorene	1.88E-07	2.76E-08	9.22E-09	1.27E-10	4.00E-10	1.23E-07	2.07E-09	4.93E-10	3.17E-10
Phenanthrene	1.90E-06	1.93E-07	9.29E-08	1.10E-09	1.32E-09	1.40E-06	2.36E-08	5.46E-09	2.09E-09
High Molecular Weight PAHs									
Benz(a)anthracene	1.02E-07	3.63E-08	2.50E-09	1.65E-10	2.02E-11	2.89E-07	4.87E-09	1.02E-09	5.08E-10
Benzo(a)pyrene	1.81E-07	1.43E-07	2.21E-08	5.67E-10	3.73E-11	1.45E-06	2.52E-08	2.47E-08	1.87E-09
Benzo(e)pyrene	4.94E-07	6.99E-06	6.02E-08	2.25E-08	1.22E-10	1.94E-06	--	3.19E-08	1.68E-08
Benzo(a)fluorene	2.03E-07	2.72E-08	4.94E-09	1.62E-10	3.70E-10	1.46E-06	--	5.27E-09	4.65E-09
Benzo(b)fluorene	1.40E-07	4.28E-08	3.41E-09	2.03E-10	2.56E-10	1.04E-06	--	3.64E-09	7.23E-09
Benzo(b)fluoranthene	2.35E-07	9.94E-09	5.74E-09	8.06E-11	3.81E-11	1.60E-06	2.69E-08	5.39E-09	2.54E-09
Benzo(g,h,i)perylene	2.56E-06	1.06E-05	3.12E-07	3.34E-08	2.28E-10	4.11E-05	6.92E-07	6.73E-07	3.62E-08
Benzo(k)fluoranthene	2.05E-07	5.30E-08	5.01E-09	2.31E-10	1.36E-11	5.39E-07	9.06E-09	1.82E-09	8.56E-10
Chrysene	3.80E-07	4.38E-08	9.27E-09	2.54E-10	4.72E-11	7.57E-07	1.27E-08	2.66E-09	1.19E-09
Dibenz(a,c)anthracene	3.22E-07	1.87E-06	3.93E-08	5.20E-09	2.13E-10	1.66E-05	2.80E-07	2.67E-07	5.35E-08
Dibenz(a,h)anthracene	1.13E-07	8.84E-07	1.38E-08	2.77E-09	1.13E-11	8.12E-07	1.37E-08	1.33E-08	1.80E-09
Indeno(1,2,3-cd)pyrene	5.44E-07	2.85E-07	6.64E-08	9.05E-10	5.27E-11	1.09E-06	1.05E-07	1.05E-07	1.05E-08
Perylene	1.07E-07	5.20E-06	1.30E-08	1.81E-08	1.85E-11	5.94E-07	1.03E-08	9.93E-09	1.65E-09
Pyrene	9.43E-06	5.66E-07	2.30E-07	4.37E-09	9.50E-10	2.58E-06	4.35E-08	9.72E-09	3.78E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	2.73E-08	1.87E-09	1.35E-08	8.50E-10	5.90E-13	9.19E-08	2.22E-09	2.83E-09	1.87E-08
PCB									
Aroclor 1254 (Total PCBs)	3.51E-05	2.86E-07	--	6.47E-07	8.47E-10	8.32E-05	--	--	1.66E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	2.69E-08	1.17E-08	3.37E-09	1.27E-08	1.67E-08	2.52E-07	7.61E-08	1.07E-08	2.00E-07
1,2,4-Trichlorobenzene	2.00E-09	3.94E-10	2.46E-10	5.93E-10	4.46E-10	2.96E-08	4.86E-10	1.21E-09	2.82E-08
1,2,4,5-Tetrachlorobenzene	8.49E-08	5.59E-09	1.04E-08	5.07E-09	7.05E-10	2.14E-07	3.81E-09	8.11E-09	2.23E-07
Pentachlorobenzene	1.32E-06	5.39E-08	3.22E-07	5.40E-08	1.28E-09	6.19E-06	1.10E-07	2.28E-07	9.49E-07
Hexachlorobenzene	3.65E-08	1.60E-09	8.90E-09	2.20E-09	4.53E-10	1.45E-06	2.58E-08	5.27E-08	4.53E-07
Pentachlorophenol	6.21E-07	5.26E-05	1.45E-06	3.51E-08	3.88E-08	9.19E-07	1.80E-08	3.40E-08	2.18E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.94E-11	2.77E-11	4.06E-12	1.02E-09	3.03E-09	1.84E-08	1.45E-08	8.34E-10	9.59E-09
Chloroform	4.84E-11	1.31E-10	1.09E-11	4.20E-10	3.72E-09	7.80E-09	1.37E-08	3.78E-10	1.86E-09
Dichloromethane	8.67E-09	5.96E-08	5.51E-09	4.44E-08	1.30E-06	5.19E-07	1.25E-06	2.68E-08	1.30E-07
Trichlorofluoromethane (Freon 11)	2.24E-09	3.13E-09	3.45E-10	2.70E-07	1.18E-06	5.38E-06	5.92E-06	2.50E-07	1.87E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.08E-10	1.51E-10	1.67E-11	2.34E-09	1.01E-08	5.47E-08	6.02E-08	2.54E-09	1.61E-08
Other Organics									
Bromoform	4.10E-10	6.77E-10	6.75E-11	8.92E-08	4.63E-07	2.34E-06	2.91E-06	1.10E-07	5.44E-07
O-Terphenyl	5.98E-07	3.79E-08	1.46E-07	3.03E-08	9.97E-10	7.34E-06	1.70E-07	2.62E-07	1.65E-06
Inorganics									
Antimony	3.33E-04	1.60E-04	5.32E-05	1.86E-06	6.09E-07	2.74E-05	1.41E-07	3.10E-07	1.22E-04
Arsenic	3.30E-05	1.56E-05	6.92E-07	3.49E-07	9.35E-08	2.71E-06	1.32E-08	2.80E-07	4.68E-06
Barium	2.34E-04	1.07E-04	3.41E-06	1.86E-07	4.71E-07	1.93E-05	3.91E-07	2.64E-06	4.71E-06
Beryllium	2.09E-04	1.35E-05	1.51E-06	2.41E-07	2.65E-08	2.09E-05	1.91E-06	2.77E-06	2.65E-06
Boron	1.30E-03	1.04E-02	2.07E-04	9.04E-05	3.40E-05	1.02E-04	1.85E-06	2.34E-05	--
Cadmium	1.38E-03	7.42E-04	2.11E-03	1.06E-06	1.53E-06	1.14E-04	1.27E-05	3.72E-05	1.83E-03
Chromium (Total)	1.16E-04	7.78E-05	5.69E-06	4.63E-06	5.01E-07	9.52E-06	5.07E-08	4.09E-07	1.00E-04
Chromium VI	1.65E-05	1.11E-05	8.09E-07	6.58E-07	7.12E-08	1.35E-06	7.21E-09	--	2.63E-06
Cobalt	7.03E-04	2.12E-04	1.37E-05	5.01E-05	1.29E-06	5.80E-05	5.65E-08	1.39E-07	1.29E-04
Lead	3.21E-02	3.15E-03	2.39E-03	1.48E-05	3.66E-06	3.30E-03	3.68E-05	7.95E-05	3.83E-04
Mercury - Inorganic	1.95E-03	2.65E-05	5.27E-04	6.50E-06	3.56E-08	1.81E-03	3.35E-04	2.22E-04	2.56E-05
Methyl Mercury	8.39E-05	7.48E-06	7.13E-04	9.08E-08	5.06E-10	3.94E-06	7.02E-08	1.76E-05	8.34E-05
Nickel	1.51E-02	3.46E-03	2.55E-03	1.25E-04	1.92E-05	1.25E-03	9.81E-06	4.24E-05	2.99E-03
Selenium	6.66E-06	1.65E-05	1.05E-06	3.84E-07	1.07E-07	5.34E-07	3.52E-08	3.34E-07	1.82E-05
Silver	7.63E-05	1.45E-04	2.50E-05	4.62E-06	7.46E-07	6.19E-06	2.78E-08	--	6.60E-05
Thallium	7.32E-03	1.36E-03	1.17E-03	6.96E-04	8.54E-06	6.06E-04	1.95E-07	--	--
Tin	7.93E-03	8.40E-04	6.54E-04	1.01E-03	2.75E-06	6.87E-04	1.86E-06	--	8.24E-03
Vanadium	7.57E-04	4.39E-05	5.09E-06	2.05E-06	7.97E-08	7.97E-05	5.02E-08	1.18E-06	1.27E-05
Zinc	3.30E-02	1.51E-02	2.40E-02	1.61E-05	4.40E-05	2.73E-03	2.43E-04	1.27E-03	4.10E-02

Table M.8 - Detailed Project Alone Exposure Point Concentrations for the Baseline Road & Rundle Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.58E-07	3.43E-08	7.80E-09	1.24E-10	6.76E-10	1.32E-07	2.23E-09	5.44E-10	2.69E-10
Acenaphthylene	3.70E-08	7.21E-09	1.82E-09	3.54E-11	8.60E-10	1.51E-07	2.54E-09	6.15E-10	4.31E-10
Anthracene	1.56E-07	1.57E-08	7.63E-09	9.13E-11	2.16E-10	2.03E-07	3.42E-09	7.92E-10	3.43E-10
Fluoranthene	1.54E-06	1.26E-07	7.54E-08	8.96E-10	2.92E-09	5.74E-06	9.66E-08	2.14E-08	1.47E-08
Fluorene	1.57E-07	2.38E-08	7.71E-09	1.22E-10	1.59E-09	4.89E-07	8.23E-09	1.96E-09	1.26E-09
Phenanthrene	1.59E-06	1.75E-07	7.77E-08	1.04E-09	6.32E-09	6.71E-06	1.13E-07	2.61E-08	1.00E-08
High Molecular Weight PAHs									
Benz(a)anthracene	8.57E-08	4.65E-08	2.09E-09	2.04E-10	8.38E-11	1.20E-06	2.02E-08	4.21E-09	2.11E-09
Benzo(a)pyrene	1.52E-07	2.43E-07	1.85E-08	9.40E-10	1.19E-10	4.63E-06	8.05E-08	7.90E-08	5.98E-09
Benzo(e)pyrene	4.13E-07	2.10E-05	5.04E-08	6.74E-08	4.99E-10	7.95E-06	--	1.31E-07	6.89E-08
Benzo(a)fluorene	1.70E-07	5.25E-08	4.14E-09	2.79E-10	1.65E-09	6.55E-06	--	2.36E-08	2.08E-08
Benzo(b)fluorene	1.17E-07	1.12E-07	2.86E-09	4.89E-10	1.22E-09	4.95E-06	--	1.73E-08	3.43E-08
Benzo(b)fluoranthene	1.97E-07	1.44E-08	4.81E-09	9.08E-11	9.41E-11	3.94E-06	6.63E-08	1.33E-08	6.27E-09
Benzo(g,h,i)perylene	2.14E-06	3.18E-05	2.61E-07	9.95E-08	4.57E-10	8.25E-05	1.39E-06	1.35E-06	7.25E-08
Benzo(k)fluoranthene	1.72E-07	9.93E-08	4.20E-09	3.95E-10	3.98E-11	1.58E-06	2.66E-08	5.35E-09	2.51E-09
Chrysene	3.18E-07	4.32E-08	7.76E-09	2.40E-10	1.36E-10	2.19E-06	3.69E-08	7.68E-09	3.43E-09
Dibenz(a,c)anthracene	2.70E-07	3.72E-06	3.29E-08	1.04E-08	5.57E-10	4.34E-05	7.31E-07	6.98E-07	1.40E-07
Dibenz(a,h)anthracene	9.47E-08	2.57E-06	1.16E-08	8.02E-09	2.90E-11	2.08E-06	3.50E-08	3.40E-08	4.60E-09
Indeno(1,2,3-cd)pyrene	4.56E-07	2.88E-07	5.56E-08	9.03E-10	1.15E-10	1.42E-05	2.39E-07	2.30E-07	2.30E-08
Perylene	8.92E-08	1.56E-05	1.09E-08	5.44E-08	6.19E-11	1.99E-06	3.46E-08	3.32E-08	5.52E-09
Pyrene	7.91E-06	5.13E-07	1.93E-07	3.86E-09	4.33E-09	1.18E-05	1.98E-07	4.43E-08	1.72E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	2.43E-08	4.03E-09	1.20E-08	1.38E-09	1.07E-12	1.67E-07	4.03E-09	5.13E-09	3.39E-08
PCB									
Aroclor 1254 (Total PCBs)	2.95E-05	3.45E-07	--	5.78E-07	1.39E-09	1.36E-04	--	--	2.72E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	2.25E-08	1.00E-08	2.82E-09	2.35E-08	3.48E-08	5.28E-07	1.59E-07	2.24E-08	4.18E-07
1,2,4-Trichlorobenzene	1.68E-09	3.62E-10	2.06E-10	1.07E-09	9.35E-10	6.21E-08	1.02E-09	2.53E-09	5.90E-08
1,2,4,5-Tetrachlorobenzene	7.11E-08	4.80E-09	8.68E-09	5.24E-09	1.24E-09	3.77E-07	6.71E-09	1.43E-08	3.93E-07
Pentachlorobenzene	1.10E-06	4.81E-08	2.70E-07	4.94E-08	2.92E-09	1.41E-05	2.52E-07	5.19E-07	2.16E-06
Hexachlorobenzene	3.05E-08	2.20E-09	7.45E-09	3.20E-09	1.00E-09	3.21E-06	5.72E-08	1.16E-07	1.00E-06
Pentachlorophenol	5.19E-07	1.58E-04	1.22E-06	1.06E-07	1.80E-07	4.25E-06	8.35E-08	1.57E-07	1.01E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.46E-11	2.39E-11	3.40E-12	2.00E-09	5.97E-09	3.63E-08	2.86E-08	1.64E-09	1.89E-08
Chloroform	4.05E-11	1.11E-10	9.08E-12	8.22E-10	7.31E-09	1.54E-08	2.70E-08	7.45E-10	3.67E-09
Dichloromethane	7.26E-09	4.99E-08	4.61E-09	8.62E-08	2.54E-06	1.02E-06	2.45E-06	5.24E-08	2.54E-07
Trichlorofluoromethane (Freon 11)	1.87E-09	2.66E-09	2.89E-10	5.22E-07	2.27E-06	1.04E-05	1.14E-05	4.82E-07	3.60E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	9.04E-11	1.28E-10	1.40E-11	4.59E-09	2.00E-08	1.08E-07	1.19E-07	5.01E-09	3.17E-08
Other Organics									
Bromoform	3.43E-10	5.66E-10	5.65E-11	1.70E-07	8.85E-07	4.46E-06	5.55E-06	2.09E-07	1.04E-06
O-Terphenyl	5.00E-07	8.16E-08	1.22E-07	5.04E-08	3.67E-09	2.70E-05	5.96E-07	9.63E-07	6.09E-06
Inorganics									
Antimony	2.94E-04	1.60E-04	4.71E-05	1.92E-06	2.97E-06	1.33E-04	6.84E-07	1.51E-06	5.93E-04
Arsenic	2.92E-05	1.65E-05	6.12E-07	3.91E-07	4.55E-07	1.32E-05	6.44E-08	1.36E-06	2.28E-05
Barium	2.07E-04	1.09E-04	3.02E-06	1.96E-07	2.29E-06	9.39E-05	1.90E-06	1.28E-05	2.29E-05
Beryllium	1.85E-04	1.41E-05	1.34E-06	2.39E-07	1.30E-07	1.02E-04	9.35E-06	1.35E-05	1.30E-05
Boron	1.15E-03	1.02E-02	1.83E-04	9.19E-05	1.66E-04	4.98E-04	9.03E-06	1.14E-04	--
Cadmium	1.22E-03	7.02E-04	1.87E-03	1.02E-06	7.42E-06	5.57E-04	6.15E-05	1.81E-04	8.92E-03
Chromium (Total)	1.03E-04	8.35E-05	5.03E-06	5.30E-06	2.44E-06	4.64E-05	2.47E-07	1.99E-06	4.88E-04
Chromium VI	1.46E-05	1.19E-05	7.16E-07	7.54E-07	3.47E-07	6.59E-06	3.51E-08	--	1.28E-05
Cobalt	6.22E-04	2.25E-04	1.22E-05	5.56E-05	6.27E-06	2.82E-04	2.75E-07	6.77E-07	6.27E-04
Lead	2.84E-02	3.12E-03	2.12E-03	1.42E-05	1.79E-05	1.61E-02	1.80E-04	3.89E-04	1.87E-03
Mercury - Inorganic	2.58E-03	3.52E-05	6.99E-04	8.65E-06	1.50E-07	7.60E-03	1.34E-03	9.33E-04	1.08E-04
Methyl Mercury	7.44E-05	9.94E-06	6.32E-04	1.06E-07	2.13E-09	1.40E-05	2.49E-07	6.23E-05	3.51E-04
Nickel	1.33E-02	3.63E-03	2.26E-03	2.79E-04	9.33E-05	6.06E-03	4.77E-05	2.06E-04	1.46E-02
Selenium	5.89E-06	1.77E-05	9.28E-07	4.46E-07	5.21E-07	2.60E-06	1.72E-07	1.63E-06	8.85E-05
Silver	6.75E-05	1.50E-04	2.21E-05	5.07E-06	3.63E-06	3.02E-05	1.36E-07	--	3.22E-04
Thallium	6.48E-03	1.46E-03	1.04E-03	7.67E-04	4.15E-05	2.95E-03	9.47E-07	--	--
Tin	7.02E-03	8.57E-04	5.79E-04	1.02E-03	1.34E-05	3.34E-03	9.04E-06	--	4.01E-02
Vanadium	6.71E-04	4.64E-05	4.51E-06	2.03E-06	3.90E-07	3.90E-04	2.46E-07	5.75E-06	6.23E-05
Zinc	2.92E-02	1.46E-02	2.12E-02	1.60E-05	2.14E-04	1.33E-02	1.18E-03	6.19E-03	1.99E-01

Table M.9 - Detailed Project Alone Exposure Point Concentrations for the Baseline Road & Courtice Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.90E-07	4.11E-08	9.36E-09	1.45E-10	4.78E-10	9.37E-08	1.58E-09	3.85E-10	1.90E-10
Acenaphthylene	4.45E-08	8.55E-09	2.19E-09	3.90E-11	7.12E-10	1.25E-07	2.11E-09	5.09E-10	3.57E-10
Anthracene	1.87E-07	1.87E-08	9.16E-09	1.08E-10	1.72E-10	1.61E-07	2.71E-09	6.28E-10	2.72E-10
Fluoranthene	1.85E-06	1.32E-07	9.05E-08	9.83E-10	2.50E-09	4.90E-06	8.25E-08	1.83E-08	1.25E-08
Fluorene	1.89E-07	2.81E-08	9.26E-09	1.38E-10	1.22E-09	3.76E-07	6.32E-09	1.50E-09	9.67E-10
Phenanthrene	1.91E-06	2.01E-07	9.33E-08	1.18E-09	5.27E-09	5.59E-06	9.41E-08	2.18E-08	8.35E-09
High Molecular Weight PAHs									
Benz(a)anthracene	1.03E-07	4.47E-08	2.51E-09	1.99E-10	7.42E-11	1.06E-06	1.79E-08	3.73E-09	1.86E-09
Benzo(a)pyrene	1.82E-07	2.07E-07	2.22E-08	8.08E-10	1.05E-10	4.08E-06	7.09E-08	6.97E-08	5.27E-09
Benzo(e)pyrene	4.96E-07	1.48E-05	6.05E-08	4.74E-08	4.53E-10	7.22E-06	--	1.19E-07	6.26E-08
Benzo(a)fluorene	2.04E-07	4.26E-08	4.97E-09	2.41E-10	1.37E-09	5.42E-06	--	1.95E-08	1.72E-08
Benzo(b)fluorene	1.41E-07	8.19E-08	3.43E-09	3.71E-10	1.03E-09	4.18E-06	--	1.46E-08	2.90E-08
Benzo(b)fluoranthene	2.37E-07	1.31E-08	5.77E-09	9.29E-11	7.59E-11	3.18E-06	5.35E-08	1.08E-08	5.06E-09
Benzo(g,h,i)perylene	2.57E-06	2.24E-05	3.14E-07	7.01E-08	4.05E-10	7.30E-05	1.23E-06	1.19E-06	6.42E-08
Benzo(k)fluoranthene	2.07E-07	8.14E-08	5.04E-09	3.35E-10	3.72E-11	1.48E-06	2.49E-08	5.00E-09	2.35E-09
Chrysene	3.82E-07	4.74E-08	9.32E-09	2.69E-10	1.09E-10	1.75E-06	2.94E-08	6.13E-09	2.73E-09
Dibenz(a,c)anthracene	3.24E-07	2.98E-06	3.95E-08	8.29E-09	4.82E-10	3.76E-05	6.32E-07	6.03E-07	1.21E-07
Dibenz(a,h)anthracene	1.14E-07	1.83E-06	1.39E-08	5.70E-09	2.60E-11	1.86E-06	3.14E-08	3.05E-08	4.12E-09
Indeno(1,2,3-cd)pyrene	5.47E-07	3.12E-07	6.67E-08	9.84E-10	1.02E-10	1.26E-05	2.12E-07	2.04E-07	2.04E-08
Perylene	1.07E-07	1.10E-05	1.31E-08	3.82E-08	5.59E-11	1.80E-06	3.12E-08	3.00E-08	4.98E-09
Pyrene	9.50E-06	5.89E-07	2.32E-07	4.52E-09	4.03E-09	1.10E-05	1.85E-07	4.13E-08	1.61E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	2.46E-08	2.98E-09	1.21E-08	1.10E-09	8.97E-13	1.40E-07	3.37E-09	4.30E-09	2.84E-08
PCB									
Aroclor 1254 (Total PCBs)	3.54E-05	3.42E-07	--	6.70E-07	1.22E-09	1.20E-04	--	--	2.40E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	2.71E-08	1.19E-08	3.39E-09	1.30E-08	1.71E-08	2.59E-07	7.80E-08	1.10E-08	2.05E-07
1,2,4-Trichlorobenzene	2.01E-09	4.12E-10	2.47E-10	6.33E-10	4.82E-10	3.20E-08	5.25E-10	1.30E-09	3.04E-08
1,2,4,5-Tetrachlorobenzene	8.53E-08	5.68E-09	1.04E-08	5.11E-09	7.05E-10	2.14E-07	3.81E-09	8.11E-09	2.23E-07
Pentachlorobenzene	1.33E-06	5.57E-08	3.24E-07	5.55E-08	1.66E-09	8.05E-06	1.44E-07	2.96E-07	1.23E-06
Hexachlorobenzene	3.66E-08	2.05E-09	8.94E-09	2.49E-09	5.20E-10	1.66E-06	2.97E-08	6.05E-08	5.20E-07
Pentachlorophenol	6.23E-07	1.11E-04	1.46E-06	7.46E-08	2.28E-07	5.40E-06	1.06E-07	2.00E-07	1.28E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.95E-11	2.82E-11	4.08E-12	8.62E-10	2.57E-09	1.56E-08	1.23E-08	7.06E-10	8.12E-09
Chloroform	4.86E-11	1.32E-10	1.09E-11	3.81E-10	3.37E-09	7.07E-09	1.24E-08	3.43E-10	1.69E-09
Dichloromethane	8.71E-09	5.99E-08	5.54E-09	4.19E-08	1.22E-06	4.90E-07	1.18E-06	2.52E-08	1.22E-07
Trichlorofluoromethane (Freon 11)	2.25E-09	3.16E-09	3.47E-10	2.22E-07	9.67E-07	4.42E-06	4.86E-06	2.05E-07	1.53E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.09E-10	1.53E-10	1.68E-11	2.00E-09	8.66E-09	4.68E-08	5.15E-08	2.17E-09	1.37E-08
Other Organics									
Bromoform	4.12E-10	6.80E-10	6.78E-11	7.20E-08	3.74E-07	1.89E-06	2.35E-06	8.84E-08	4.40E-07
O-Terphenyl	6.01E-07	6.36E-08	1.47E-07	4.38E-08	2.88E-09	2.12E-05	4.71E-07	7.54E-07	4.77E-06
Inorganics									
Antimony	2.98E-04	1.45E-04	4.77E-05	1.78E-06	3.19E-06	1.44E-04	7.37E-07	1.62E-06	6.39E-04
Arsenic	2.96E-05	1.41E-05	6.20E-07	3.47E-07	4.90E-07	1.42E-05	6.94E-08	1.47E-06	2.45E-05
Barium	2.10E-04	9.71E-05	3.06E-06	1.80E-07	2.47E-06	1.01E-04	2.05E-06	1.38E-05	2.47E-05
Beryllium	1.88E-04	1.22E-05	1.35E-06	2.22E-07	1.32E-07	1.05E-04	9.57E-06	1.38E-05	1.32E-05
Boron	1.16E-03	9.39E-03	1.86E-04	8.60E-05	1.79E-04	5.36E-04	9.73E-06	1.23E-04	--
Cadmium	1.24E-03	6.68E-04	1.89E-03	9.82E-07	7.98E-06	5.99E-04	6.62E-05	1.95E-04	9.60E-03
Chromium (Total)	1.04E-04	7.06E-05	5.10E-06	4.66E-06	2.63E-06	4.99E-05	2.66E-07	2.15E-06	5.25E-04
Chromium VI	1.48E-05	1.00E-05	7.25E-07	6.62E-07	3.74E-07	1.05E-06	3.78E-08	--	1.38E-05
Cobalt	6.30E-04	1.92E-04	1.23E-05	4.96E-05	6.75E-06	3.04E-04	2.96E-07	7.29E-07	6.75E-04
Lead	2.88E-02	2.85E-03	2.14E-03	1.35E-05	1.82E-05	1.64E-02	1.83E-04	3.95E-04	1.90E-03
Mercury - Inorganic	2.37E-03	2.83E-05	6.41E-04	7.71E-06	1.10E-07	5.60E-03	1.00E-03	6.88E-04	7.94E-05
Methyl Mercury	7.53E-05	7.98E-06	6.40E-04	9.15E-08	1.57E-09	1.76E-05	3.13E-07	7.83E-05	2.59E-04
Nickel	1.35E-02	3.14E-03	2.29E-03	2.52E-04	1.00E-04	6.53E-03	5.14E-05	2.22E-04	1.57E-02
Selenium	5.96E-06	1.50E-05	9.40E-07	3.89E-07	5.61E-07	2.80E-06	1.85E-07	1.75E-06	9.53E-05
Silver	6.84E-05	1.31E-04	2.24E-05	4.55E-06	3.91E-06	3.25E-05	1.46E-07	--	3.47E-04
Thallium	6.56E-03	1.24E-03	1.05E-03	6.87E-04	4.47E-05	3.17E-03	1.02E-06	--	--
Tin	7.11E-03	7.60E-04	5.87E-04	9.51E-04	1.42E-05	3.55E-03	9.61E-06	--	4.26E-02
Vanadium	6.79E-04	3.98E-05	4.56E-06	1.88E-06	3.93E-07	3.93E-04	2.48E-07	5.81E-06	6.30E-05
Zinc	2.96E-02	1.36E-02	2.15E-02	1.52E-05	2.31E-04	1.43E-02	1.27E-03	6.66E-03	2.15E-01

Table M.10 - Detailed Project Alone Exposure Point Concentrations for the Soper Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	3.33E-08	7.22E-09	1.64E-09	2.82E-11	3.68E-10	7.22E-08	1.21E-09	2.96E-10	1.47E-10
Acenaphthylene	7.79E-09	1.53E-09	3.83E-10	9.55E-12	3.85E-10	6.76E-08	1.14E-09	2.75E-10	1.93E-10
Anthracene	3.28E-08	3.32E-09	1.61E-09	2.00E-11	9.78E-11	9.19E-08	1.55E-09	3.58E-10	1.55E-10
Fluoranthene	3.25E-07	2.84E-08	1.59E-08	2.04E-10	1.08E-09	2.12E-06	3.57E-08	7.91E-09	5.41E-09
Fluorene	3.31E-08	5.06E-09	1.62E-09	3.06E-11	7.44E-10	2.29E-07	3.86E-09	9.17E-10	5.91E-10
Phenanthrene	3.34E-07	3.77E-08	1.64E-08	2.37E-10	2.48E-09	2.63E-06	4.43E-08	1.03E-08	3.93E-09
High Molecular Weight PAHs									
Benz(a)anthracene	1.80E-08	1.09E-08	4.40E-10	4.74E-11	2.52E-11	3.60E-07	6.06E-09	1.26E-09	6.32E-10
Benzo(a)pyrene	3.19E-08	5.93E-08	3.90E-09	2.30E-10	3.25E-11	1.26E-06	2.19E-08	2.15E-08	1.63E-09
Benzo(e)pyrene	8.70E-08	5.44E-06	1.06E-08	1.75E-08	1.44E-10	2.29E-06	--	3.76E-08	1.98E-08
Benzo(a)fluorene	3.57E-08	1.30E-08	8.71E-10	7.28E-11	6.26E-10	2.48E-06	--	8.93E-09	7.88E-09
Benzo(b)fluorene	2.46E-08	2.87E-08	6.01E-10	1.27E-10	4.39E-10	1.78E-06	--	6.23E-09	1.24E-08
Benzo(b)fluoranthene	4.15E-08	3.44E-09	1.01E-09	2.15E-11	3.15E-11	1.32E-06	2.22E-08	4.45E-09	2.10E-09
Benzo(g,h,i)perylene	4.51E-07	8.25E-06	5.50E-08	2.58E-08	1.12E-10	2.02E-05	3.40E-07	3.31E-07	1.78E-08
Benzo(k)fluoranthene	3.62E-08	2.46E-08	8.84E-10	9.68E-11	1.03E-11	4.07E-07	6.85E-09	1.38E-09	6.48E-10
Chrysene	6.70E-08	9.49E-09	1.63E-09	5.30E-11	5.26E-11	8.45E-07	1.42E-08	2.96E-09	1.32E-09
Dibenz(a,c)anthracene	5.68E-08	9.26E-07	6.92E-09	2.59E-09	1.46E-10	1.14E-05	1.91E-07	1.83E-07	3.66E-08
Dibenz(a,h)anthracene	1.99E-08	6.65E-07	2.43E-09	2.07E-09	7.40E-12	5.30E-07	8.92E-09	8.66E-09	1.17E-09
Indeno(1,2,3-cd)pyrene	9.59E-08	6.38E-08	1.17E-08	2.01E-10	2.88E-11	3.55E-06	5.97E-08	5.75E-08	5.76E-09
Perylene	1.88E-08	4.05E-06	2.29E-09	1.41E-08	1.67E-11	5.36E-07	9.33E-09	8.97E-09	1.49E-09
Pyrene	1.66E-06	1.10E-07	4.06E-08	8.33E-10	1.44E-09	3.91E-06	6.57E-08	1.47E-08	5.72E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	8.63E-09	1.17E-09	4.24E-09	4.24E-10	4.10E-13	6.39E-08	1.55E-09	1.97E-09	1.30E-08
PCB									
Aroclor 1254 (Total PCBs)	6.20E-06	7.97E-08	--	1.26E-07	3.89E-10	3.82E-05	--	--	7.63E-05
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	4.74E-09	2.12E-09	5.94E-10	1.33E-08	2.09E-08	3.16E-07	9.54E-08	1.34E-08	2.51E-07
1,2,4-Trichlorobenzene	3.53E-10	7.85E-11	4.34E-11	5.90E-10	5.60E-10	3.72E-08	6.10E-10	1.51E-09	3.53E-08
1,2,4,5-Tetrachlorobenzene	1.50E-08	1.02E-09	1.83E-09	1.66E-09	6.36E-10	1.93E-07	3.44E-09	7.31E-09	2.01E-07
Pentachlorobenzene	2.32E-07	1.03E-08	5.67E-08	1.26E-08	1.61E-09	7.79E-06	1.39E-07	2.86E-07	1.19E-06
Hexachlorobenzene	6.42E-09	5.21E-10	1.57E-09	1.37E-09	5.64E-10	1.81E-06	3.22E-08	6.56E-08	5.64E-07
Pentachlorophenol	1.09E-07	4.10E-05	2.56E-07	2.74E-08	3.99E-08	9.45E-07	1.86E-08	3.49E-08	2.25E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	5.17E-12	5.07E-12	7.15E-13	1.16E-09	3.48E-09	2.12E-08	1.67E-08	9.56E-10	1.10E-08
Chloroform	8.52E-12	2.33E-11	1.91E-12	4.94E-10	4.41E-09	9.27E-09	1.63E-08	4.49E-10	2.21E-09
Dichloromethane	1.53E-09	1.05E-08	9.71E-10	5.33E-08	1.57E-06	6.30E-07	1.52E-06	3.25E-08	1.57E-07
Trichlorofluoromethane (Freon 11)	3.94E-10	5.62E-10	6.08E-11	3.05E-07	1.33E-06	6.07E-06	6.68E-06	2.82E-07	2.10E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.90E-11	2.71E-11	2.94E-12	2.68E-09	1.17E-08	6.31E-08	6.94E-08	2.93E-09	1.85E-08
Other Organics									
Bromoform	7.22E-11	1.19E-10	1.19E-11	9.97E-08	5.18E-07	2.61E-06	3.25E-06	1.22E-07	6.09E-07
O-Terphenyl	1.05E-07	2.05E-08	2.57E-08	1.38E-08	1.49E-09	1.10E-05	2.50E-07	3.91E-07	2.47E-06
Inorganics									
Antimony	1.05E-04	6.31E-05	1.68E-05	7.46E-07	1.10E-06	4.97E-05	2.55E-07	5.61E-07	2.21E-04
Arsenic	1.04E-05	6.83E-06	2.18E-07	1.58E-07	1.69E-07	4.91E-06	2.40E-08	5.08E-07	8.47E-06
Barium	7.37E-05	4.36E-05	1.07E-06	7.70E-08	8.52E-07	3.49E-05	7.09E-07	4.78E-06	8.52E-06
Beryllium	6.60E-05	5.78E-06	4.75E-07	9.27E-08	5.26E-08	4.16E-05	3.80E-06	5.49E-06	5.26E-06
Boron	4.08E-04	3.98E-03	6.52E-05	3.55E-05	6.17E-05	1.85E-04	3.36E-06	4.24E-05	--
Cadmium	4.35E-04	2.66E-04	6.64E-04	3.82E-07	2.76E-06	2.07E-04	2.29E-05	6.74E-05	3.32E-03
Chromium (Total)	3.66E-05	3.49E-05	1.79E-06	2.17E-06	9.08E-07	1.72E-05	9.19E-08	7.42E-07	1.82E-04
Chromium VI	5.20E-06	4.96E-06	2.55E-07	3.09E-07	1.29E-07	2.45E-06	1.31E-08	--	4.77E-06
Cobalt	2.21E-04	9.35E-05	4.32E-06	2.25E-05	2.33E-06	1.05E-04	1.02E-07	2.52E-07	2.33E-04
Lead	1.01E-02	1.22E-03	7.53E-04	5.42E-06	7.35E-06	6.61E-03	7.39E-05	1.60E-04	7.69E-04
Mercury - Inorganic	6.61E-04	1.31E-05	1.79E-04	2.44E-06	4.35E-08	2.21E-03	4.07E-04	2.71E-04	3.13E-05
Methyl Mercury	2.64E-05	3.69E-06	2.25E-04	3.89E-08	6.18E-10	2.11E-06	3.76E-08	9.42E-06	1.02E-04
Nickel	4.74E-03	1.49E-03	8.04E-04	1.11E-04	3.47E-05	2.26E-03	1.78E-05	7.67E-05	5.42E-03
Selenium	2.09E-06	7.41E-06	3.30E-07	1.84E-07	1.94E-07	9.68E-07	6.39E-08	6.06E-07	3.29E-05
Silver	2.40E-05	6.11E-05	7.86E-06	2.04E-06	1.35E-06	1.12E-05	5.05E-08	--	1.20E-04
Thallium	2.30E-03	6.09E-04	3.69E-04	3.09E-04	1.55E-05	1.10E-03	3.52E-07	--	--
Tin	2.50E-03	3.45E-04	2.06E-04	3.96E-04	5.08E-06	1.27E-03	3.44E-06	--	1.52E-02
Vanadium	2.39E-04	1.92E-05	1.60E-06	7.90E-07	1.61E-07	1.61E-04	1.02E-07	2.38E-06	2.58E-05
Zinc	1.04E-02	5.67E-03	7.55E-03	6.12E-06	7.97E-05	4.94E-03	4.39E-04	2.30E-03	7.42E-02

Table M.11 - Detailed Project Alone Exposure Point Concentrations for the Bowmanville Marsh Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	3.81E-08	8.26E-09	1.88E-09	3.33E-11	5.34E-10	1.05E-07	1.76E-09	4.30E-10	2.13E-10
Acenaphthylene	8.91E-09	1.76E-09	4.38E-10	1.21E-11	5.57E-10	9.78E-08	1.65E-09	3.98E-10	2.79E-10
Anthracene	3.76E-08	3.82E-09	1.84E-09	2.34E-11	1.50E-10	1.41E-07	2.37E-09	5.48E-10	2.37E-10
Fluoranthene	3.72E-07	3.57E-08	1.81E-08	2.53E-10	1.79E-09	3.52E-06	5.93E-08	1.31E-08	8.99E-09
Fluorene	3.78E-08	5.86E-09	1.86E-09	3.84E-11	1.14E-09	3.52E-07	5.93E-09	1.41E-07	9.08E-10
Phenanthrene	3.83E-07	4.46E-08	1.87E-08	2.90E-10	4.03E-09	4.28E-06	7.19E-08	1.67E-08	6.38E-09
High Molecular Weight PAHs									
Benz(a)anthracene	2.06E-08	1.42E-08	5.04E-10	6.15E-11	4.96E-11	7.11E-07	1.20E-08	2.49E-09	1.25E-09
Benzo(a)pyrene	3.65E-08	8.16E-08	4.46E-09	3.14E-10	7.29E-11	2.83E-06	4.91E-08	4.83E-08	3.65E-09
Benzo(e)pyrene	9.95E-08	7.92E-06	1.21E-08	2.54E-08	2.86E-10	4.56E-06	--	7.50E-08	3.95E-08
Benzo(a)fluorene	4.08E-08	1.82E-08	9.96E-10	1.01E-10	1.07E-09	4.23E-06	--	1.52E-08	1.34E-08
Benzo(b)fluorene	2.82E-08	4.13E-08	6.87E-10	1.82E-10	7.61E-10	3.09E-06	--	1.08E-08	2.14E-08
Benzo(b)fluoranthene	4.75E-08	4.62E-09	1.16E-09	2.67E-11	6.45E-11	2.70E-06	4.55E-08	9.13E-09	4.30E-09
Benzo(g,h,i)perylene	5.16E-07	1.20E-05	6.29E-08	3.75E-08	5.14E-10	5.14E-05	8.65E-07	8.41E-07	4.52E-08
Benzo(k)fluoranthene	4.15E-08	3.43E-08	1.01E-09	1.33E-10	2.23E-11	8.85E-07	1.49E-08	3.00E-09	1.41E-09
Chrysene	7.66E-08	1.16E-08	1.87E-09	6.34E-11	9.42E-11	1.51E-06	2.54E-08	5.30E-09	2.37E-09
Dibenz(a,c)anthracene	6.49E-08	1.30E-06	7.92E-09	3.63E-09	3.55E-10	2.77E-05	4.66E-07	4.45E-07	8.91E-08
Dibenz(a,h)anthracene	2.28E-08	9.66E-07	2.78E-09	3.01E-09	1.75E-11	1.26E-06	2.11E-08	2.05E-08	2.78E-09
Indeno(1,2,3-cd)pyrene	1.10E-07	7.84E-08	1.34E-08	2.44E-10	7.16E-11	8.81E-06	1.48E-07	1.43E-07	1.43E-08
Perylene	2.15E-08	5.90E-06	2.62E-09	2.05E-08	3.63E-11	1.17E-06	2.03E-08	1.95E-08	3.24E-09
Pyrene	1.91E-06	1.31E-07	4.65E-08	9.78E-10	2.34E-09	6.36E-06	1.07E-07	2.39E-08	9.31E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	3.91E-09	1.34E-09	1.92E-09	4.02E-10	3.70E-13	5.76E-08	1.40E-09	1.77E-09	1.17E-08
PCB									
Aroclor 1254 (Total PCBs)	7.11E-06	1.03E-07	--	1.46E-07	7.79E-10	7.64E-05	--	--	1.53E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	5.42E-09	2.45E-09	6.79E-10	1.96E-08	3.10E-08	4.69E-07	1.41E-07	1.99E-08	3.72E-07
1,2,4-Trichlorobenzene	4.03E-10	9.34E-11	4.96E-11	8.52E-10	8.18E-10	5.43E-08	8.91E-10	2.21E-09	5.16E-08
1,2,4,5-Tetrachlorobenzene	1.71E-08	1.18E-09	2.09E-09	2.09E-09	8.66E-10	2.63E-07	4.68E-09	9.96E-09	2.74E-07
Pentachlorobenzene	2.66E-07	1.22E-08	6.49E-08	1.49E-08	2.46E-09	1.19E-05	2.12E-07	4.36E-07	1.82E-06
Hexachlorobenzene	7.35E-09	6.93E-10	1.79E-09	1.81E-09	8.60E-10	2.75E-06	4.91E-08	1.00E-07	8.60E-07
Pentachlorophenol	1.25E-07	5.97E-05	2.93E-07	3.99E-08	4.83E-08	1.14E-06	2.25E-08	4.23E-08	2.72E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	5.92E-12	5.87E-12	8.18E-13	1.80E-09	5.37E-09	3.27E-08	2.58E-08	1.48E-09	1.70E-08
Chloroform	9.74E-12	2.68E-11	2.19E-12	7.42E-10	6.63E-09	1.39E-08	2.45E-08	6.75E-10	3.32E-09
Dichloromethane	1.75E-09	1.20E-08	1.11E-09	7.85E-08	2.32E-06	9.29E-07	2.24E-06	4.79E-08	2.32E-07
Trichlorofluoromethane (Freon 11)	4.50E-10	6.47E-10	6.95E-11	4.72E-07	2.06E-06	9.39E-06	1.03E-05	4.36E-07	3.26E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.18E-11	3.12E-11	3.36E-12	4.13E-09	1.80E-08	9.71E-08	1.07E-07	4.51E-09	2.85E-08
Other Organics									
Bromoform	8.26E-11	1.36E-10	1.36E-11	1.54E-07	8.02E-07	4.04E-06	5.03E-06	1.90E-07	9.42E-07
O-Terphenyl	1.20E-07	2.91E-08	2.94E-08	1.87E-08	2.57E-09	1.89E-05	4.23E-07	6.75E-07	4.27E-06
Inorganics									
Antimony	4.74E-05	2.54E-05	7.58E-06	3.08E-07	5.23E-07	2.35E-05	1.21E-07	2.66E-07	1.05E-04
Arsenic	4.70E-06	2.62E-06	9.86E-08	6.27E-08	8.03E-08	2.33E-06	1.14E-08	2.40E-07	4.01E-06
Barium	3.34E-05	1.73E-05	4.86E-07	3.15E-08	4.04E-07	1.66E-05	3.36E-07	2.26E-06	4.04E-06
Beryllium	2.99E-05	2.24E-06	2.15E-07	3.84E-08	2.70E-08	2.13E-05	1.95E-06	2.82E-06	2.70E-06
Boron	1.84E-04	1.63E-03	2.95E-05	1.48E-05	2.92E-05	8.77E-05	1.59E-06	2.01E-05	--
Cadmium	1.97E-04	1.12E-04	3.01E-04	1.64E-07	1.31E-06	9.83E-05	1.09E-05	3.20E-05	1.58E-03
Chromium (Total)	1.65E-05	1.32E-05	8.10E-07	8.51E-07	4.30E-07	8.17E-06	4.36E-08	3.51E-07	8.60E-05
Chromium VI	2.35E-06	1.88E-06	1.15E-07	1.21E-07	6.12E-08	1.16E-06	6.19E-09	--	2.26E-06
Cobalt	1.00E-04	3.58E-05	1.96E-06	8.93E-06	1.11E-06	4.97E-05	4.85E-08	1.19E-07	1.11E-04
Lead	4.58E-03	4.97E-04	3.41E-04	2.29E-06	3.80E-06	3.42E-03	3.82E-05	8.26E-05	3.98E-04
Mercury - Inorganic	7.15E-04	7.88E-06	1.94E-04	2.31E-06	9.35E-08	4.74E-03	8.56E-04	5.82E-04	6.72E-05
Methyl Mercury	1.20E-05	2.22E-06	1.02E-04	2.20E-08	1.33E-09	2.45E-06	4.35E-08	1.09E-05	2.19E-04
Nickel	2.15E-03	5.76E-04	3.64E-04	4.48E-05	1.65E-05	1.07E-03	8.42E-06	3.64E-05	2.57E-03
Selenium	9.48E-07	2.81E-06	1.49E-07	7.15E-08	9.17E-08	4.59E-07	3.03E-08	2.87E-07	1.56E-05
Silver	1.09E-05	2.39E-05	3.56E-06	8.13E-07	6.41E-07	5.32E-06	2.39E-08	--	5.67E-05
Thallium	1.04E-03	2.31E-04	1.67E-04	1.23E-04	7.33E-06	5.20E-04	1.67E-07	--	--
Tin	1.13E-03	1.36E-04	9.33E-05	1.64E-04	2.46E-06	6.15E-04	1.66E-06	--	7.38E-03
Vanadium	1.08E-04	7.37E-06	7.26E-07	3.26E-07	8.41E-08	8.41E-05	5.31E-08	1.24E-06	1.35E-05
Zinc	4.70E-03	2.34E-03	3.42E-03	2.57E-06	3.78E-05	2.34E-03	2.08E-04	1.09E-03	3.52E-02

Table M.12 - Detailed Project Alone Exposure Point Concentrations for the South of Site, Eco Baseline S7 Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.24E-07	2.68E-08	6.11E-09	9.31E-11	1.47E-10	2.87E-08	4.83E-10	1.18E-10	5.83E-11
Acenaphthylene	2.90E-08	5.52E-09	1.43E-09	2.22E-11	1.62E-10	2.84E-08	4.78E-10	1.15E-10	8.10E-11
Anthracene	1.22E-07	1.21E-08	5.97E-09	6.91E-11	3.75E-11	3.52E-08	5.93E-10	1.37E-10	5.94E-11
Fluoranthene	1.21E-06	7.55E-08	5.90E-08	5.81E-10	3.94E-10	7.73E-07	1.30E-08	2.88E-09	1.97E-09
Fluorene	1.23E-07	1.81E-08	6.04E-09	8.31E-11	2.62E-10	8.08E-08	1.36E-09	3.23E-10	2.08E-10
Phenanthrene	1.24E-06	1.26E-07	6.09E-08	7.21E-10	8.65E-10	9.18E-07	1.54E-08	3.57E-09	1.37E-09
High Molecular Weight PAHs									
Benz(a)anthracene	6.71E-08	2.32E-08	1.64E-09	1.06E-10	1.32E-11	1.90E-07	3.19E-09	6.65E-10	3.33E-10
Benzo(a)pyrene	1.19E-07	8.97E-08	1.45E-08	3.57E-10	2.45E-11	9.48E-07	1.65E-08	1.62E-08	1.23E-09
Benzo(e)pyrene	3.24E-07	4.10E-06	3.95E-08	1.32E-08	7.99E-11	1.27E-06	--	2.09E-08	1.10E-08
Benzo(a)fluorene	1.33E-07	1.69E-08	3.24E-09	1.02E-10	2.42E-10	9.60E-07	--	3.46E-09	3.05E-09
Benzo(b)fluorene	9.17E-08	2.56E-08	2.24E-09	1.24E-10	1.68E-10	6.83E-07	--	2.38E-09	4.73E-09
Benzo(b)fluoranthene	1.54E-07	6.32E-09	3.76E-09	5.21E-11	2.50E-11	1.05E-06	1.76E-08	3.53E-09	1.66E-09
Benzo(g,h,i)perylene	1.68E-06	6.21E-06	2.04E-07	1.96E-08	1.50E-10	2.70E-05	4.54E-07	4.41E-07	2.37E-08
Benzo(k)fluoranthene	1.35E-07	3.30E-08	3.28E-09	1.45E-10	8.89E-12	3.53E-07	5.94E-09	1.20E-09	5.61E-10
Chrysene	2.49E-07	2.85E-08	6.07E-09	1.66E-10	3.09E-11	4.96E-07	8.35E-09	1.74E-09	7.77E-10
Dibenz(a,c)anthracene	2.11E-07	1.15E-06	2.58E-08	3.21E-09	1.40E-10	1.09E-05	1.83E-07	1.75E-07	3.51E-08
Dibenz(a,h)anthracene	7.41E-08	5.21E-07	9.04E-09	1.63E-09	7.43E-12	5.32E-07	8.96E-09	8.70E-09	1.18E-09
Indeno(1,2,3-cd)pyrene	3.57E-07	1.85E-07	4.35E-08	5.88E-10	3.45E-11	4.25E-06	7.15E-08	6.89E-08	6.89E-09
Perylene	6.98E-08	3.04E-06	8.51E-09	1.06E-08	1.21E-11	3.89E-07	6.77E-09	6.50E-09	1.08E-09
Pyrene	6.18E-06	3.70E-07	1.51E-07	2.86E-09	6.23E-10	1.69E-06	2.85E-08	6.37E-09	2.48E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.82E-08	1.16E-09	8.97E-09	5.45E-10	3.93E-13	6.12E-08	1.48E-09	1.88E-09	1.24E-08
PCB									
Aroclor 1254 (Total PCBs)	2.30E-05	1.84E-07	--	4.23E-07	5.55E-10	5.45E-05	--	--	1.09E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.77E-08	7.66E-09	2.21E-09	8.31E-09	1.09E-08	1.65E-07	4.99E-08	7.03E-09	1.31E-07
1,2,4-Trichlorobenzene	1.31E-09	2.57E-10	1.61E-10	3.88E-10	2.92E-10	1.94E-08	3.19E-10	7.90E-10	1.85E-08
1,2,4,5-Tetrachlorobenzene	5.57E-08	3.66E-09	6.80E-09	3.32E-09	4.62E-10	1.40E-07	2.50E-09	5.31E-09	1.46E-07
Pentachlorobenzene	8.65E-07	3.52E-08	2.11E-07	3.54E-08	8.39E-10	4.06E-06	7.24E-08	1.49E-07	6.22E-07
Hexachlorobenzene	2.39E-08	1.02E-09	5.83E-09	1.43E-09	2.97E-10	9.50E-07	1.69E-08	3.45E-08	2.97E-07
Pentachlorophenol	4.07E-07	3.08E-05	9.52E-07	2.06E-08	2.54E-08	6.02E-07	1.18E-08	2.23E-08	1.43E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.93E-11	1.81E-11	2.66E-12	6.67E-10	1.99E-09	1.21E-08	9.53E-09	5.46E-10	6.29E-09
Chloroform	3.17E-11	8.59E-11	7.11E-12	2.75E-10	2.43E-09	5.11E-09	9.00E-09	2.48E-10	1.22E-09
Dichloromethane	5.68E-09	3.90E-08	3.61E-09	2.91E-08	8.51E-07	3.40E-07	8.19E-07	1.75E-08	8.51E-08
Trichlorofluoromethane (Freon 11)	1.46E-09	2.05E-09	2.26E-10	1.77E-07	7.71E-07	3.52E-06	3.88E-06	1.64E-07	1.22E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	7.08E-11	9.90E-11	1.09E-11	1.53E-09	6.64E-09	3.58E-08	3.95E-08	1.66E-09	1.05E-08
Other Organics									
Bromoform	2.69E-10	4.43E-10	4.42E-11	5.85E-08	3.04E-07	1.53E-06	1.91E-06	7.18E-08	3.57E-07
O-Terphenyl	3.92E-07	2.32E-08	9.56E-08	1.92E-08	6.53E-10	4.81E-06	1.13E-07	1.71E-07	1.08E-06
Inorganics									
Antimony	2.22E-04	1.07E-04	3.55E-05	1.24E-06	4.06E-07	1.83E-05	9.37E-08	2.06E-07	8.12E-05
Arsenic	2.20E-05	1.04E-05	4.61E-07	2.33E-07	6.23E-08	1.81E-06	8.82E-09	1.87E-07	3.12E-06
Barium	1.56E-04	7.17E-05	2.27E-06	1.24E-07	3.14E-07	1.29E-05	2.61E-07	1.76E-06	3.14E-06
Beryllium	1.40E-04	9.00E-06	1.00E-06	1.61E-07	1.77E-08	1.40E-05	1.28E-06	1.85E-06	1.77E-06
Boron	8.63E-04	6.95E-03	1.38E-04	6.03E-05	2.27E-05	6.80E-05	1.23E-06	1.56E-05	--
Cadmium	9.20E-04	4.95E-04	1.41E-03	7.05E-07	1.02E-06	7.63E-05	8.44E-06	2.48E-05	1.22E-03
Chromium (Total)	7.75E-05	5.20E-05	3.79E-06	3.09E-06	3.34E-07	6.34E-06	3.38E-08	2.73E-07	6.68E-05
Chromium VI	1.10E-05	7.39E-06	5.39E-07	4.39E-07	4.75E-08	9.02E-07	4.81E-09	--	1.75E-06
Cobalt	4.69E-04	1.42E-04	9.15E-06	3.34E-05	8.59E-07	3.86E-05	3.77E-08	9.27E-08	8.59E-05
Lead	2.14E-02	2.10E-03	1.59E-03	9.88E-06	2.44E-06	2.20E-03	2.45E-05	5.30E-05	2.56E-04
Mercury - Inorganic	1.25E-03	1.74E-05	3.38E-04	4.18E-06	2.28E-08	1.16E-03	2.16E-04	1.42E-04	1.64E-05
Methyl Mercury	5.59E-05	4.92E-06	4.76E-04	5.99E-08	3.24E-10	2.63E-06	4.68E-08	1.17E-05	5.35E-05
Nickel	1.00E-02	2.31E-03	1.70E-03	1.72E-04	1.28E-05	8.31E-04	6.54E-06	2.82E-05	1.99E-03
Selenium	4.44E-06	1.10E-05	6.99E-07	2.56E-07	7.12E-08	3.56E-07	2.35E-08	2.23E-07	1.21E-05
Silver	5.09E-05	9.69E-05	1.66E-05	3.08E-06	4.97E-07	4.12E-06	1.86E-08	--	4.40E-05
Thallium	4.88E-03	9.10E-04	7.81E-04	4.64E-04	5.69E-06	4.04E-04	1.30E-07	--	--
Tin	5.28E-03	5.60E-04	4.36E-04	6.77E-04	1.83E-06	4.58E-04	1.24E-06	--	5.49E-03
Vanadium	5.05E-04	2.93E-05	3.39E-06	1.37E-06	5.31E-08	5.31E-05	3.35E-08	7.84E-07	8.50E-06
Zinc	2.20E-02	1.01E-02	1.60E-02	1.08E-05	2.93E-05	1.82E-03	1.62E-04	8.48E-04	2.73E-02

Table M.13 - Detailed Project Alone Exposure Point Concentrations for the Sports Fields Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.33E-07	2.89E-08	6.57E-09	1.45E-10	4.89E-09	9.59E-07	1.61E-08	3.94E-09	1.95E-09
Acenaphthylene	3.12E-08	6.04E-09	1.54E-09	6.26E-11	4.00E-09	7.03E-07	1.18E-08	2.86E-09	2.01E-09
Anthracene	1.32E-07	1.32E-08	6.43E-09	8.87E-11	1.09E-09	1.02E-06	1.72E-08	3.99E-09	1.73E-09
Fluoranthene	1.30E-06	1.00E-07	6.36E-08	8.63E-10	1.10E-08	2.17E-05	3.65E-07	8.09E-08	5.54E-08
Fluorene	1.33E-07	1.99E-08	6.50E-09	1.83E-10	8.42E-09	2.60E-06	4.37E-08	1.04E-08	6.69E-09
Phenanthrene	1.34E-06	1.45E-07	6.55E-08	1.13E-09	2.55E-08	2.70E-05	4.55E-07	1.05E-07	4.04E-08
High Molecular Weight PAHs									
Benz(a)anthracene	7.23E-08	3.58E-08	1.76E-09	1.62E-10	3.24E-10	4.63E-06	7.80E-08	1.63E-08	8.13E-09
Benzo(a)pyrene	1.28E-07	1.79E-07	1.56E-08	7.03E-10	5.37E-10	2.08E-05	3.62E-07	3.56E-07	2.69E-08
Benzo(e)pyrene	3.49E-07	1.45E-05	4.25E-08	4.67E-08	1.84E-09	2.94E-05	--	4.83E-07	2.54E-07
Benzo(a)fluorene	1.43E-07	3.81E-08	3.49E-09	2.99E-10	7.03E-09	2.79E-05	--	1.00E-07	8.85E-08
Benzo(b)fluorene	9.87E-08	7.85E-08	2.41E-09	4.08E-10	4.82E-09	1.96E-05	--	6.84E-08	1.36E-07
Benzo(b)fluoranthene	1.66E-07	1.09E-08	4.05E-09	7.97E-11	5.69E-10	2.38E-05	4.01E-07	8.05E-08	3.79E-08
Benzo(g,h,i)perylene	1.81E-06	2.21E-05	2.20E-07	6.90E-08	2.49E-09	4.49E-04	7.55E-06	7.34E-06	3.95E-07
Benzo(k)fluoranthene	1.45E-07	7.23E-08	3.54E-09	2.93E-10	1.59E-10	6.29E-06	1.06E-07	2.13E-08	1.00E-08
Chrysene	2.68E-07	3.50E-08	6.55E-09	2.08E-10	7.78E-10	1.25E-05	2.10E-07	4.38E-08	1.95E-08
Dibenz(a,c)anthracene	2.27E-07	2.68E-06	2.77E-08	7.51E-09	2.89E-09	2.26E-04	3.79E-06	3.62E-06	7.26E-07
Dibenz(a,h)anthracene	7.99E-08	1.79E-06	9.74E-09	5.57E-09	1.39E-10	9.92E-06	1.67E-07	1.62E-07	2.20E-08
Indeno(1,2,3-cd)pyrene	3.84E-07	2.33E-07	4.69E-08	7.39E-10	6.05E-10	1.25E-05	1.25E-06	1.21E-06	1.21E-07
Perylene	7.52E-08	1.08E-05	9.17E-09	3.77E-08	2.56E-10	8.23E-06	1.43E-07	1.38E-07	2.28E-08
Pyrene	6.67E-06	4.24E-07	1.63E-07	3.37E-09	1.34E-08	3.66E-05	6.15E-07	1.38E-07	5.35E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.59E-08	2.69E-09	7.83E-09	9.19E-10	3.42E-12	5.32E-07	1.28E-08	1.64E-08	1.08E-07
PCB									
Aroclor 1254 (Total PCBs)	2.49E-05	2.70E-07	--	4.90E-07	6.91E-09	6.78E-04	--	--	1.90E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.90E-08	8.39E-09	2.38E-09	2.65E-07	4.27E-07	6.47E-06	1.95E-06	2.75E-07	5.13E-06
1,2,4-Trichlorobenzene	1.41E-09	2.99E-10	1.74E-10	1.13E-08	1.12E-08	7.42E-07	1.22E-08	3.02E-08	7.05E-07
1,2,4,5-Tetrachlorobenzene	5.99E-08	4.02E-09	7.32E-09	1.85E-08	1.08E-08	3.27E-06	5.82E-08	1.24E-07	3.41E-06
Pentachlorobenzene	9.31E-07	3.99E-08	2.27E-07	8.41E-08	2.96E-08	1.43E-04	2.55E-06	5.26E-06	2.19E-05
Hexachlorobenzene	2.57E-08	1.68E-09	6.28E-09	1.85E-08	1.09E-08	3.48E-05	6.20E-07	1.26E-06	1.09E-05
Pentachlorophenol	4.38E-07	1.10E-04	1.02E-06	7.32E-08	1.14E-07	2.69E-06	5.28E-08	9.95E-08	6.39E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.07E-11	2.00E-11	2.86E-12	2.42E-08	7.23E-08	4.40E-07	3.46E-07	1.99E-08	2.29E-07
Chloroform	3.41E-11	9.30E-11	7.66E-12	1.08E-08	9.63E-08	2.02E-07	3.56E-07	9.80E-09	4.83E-08
Dichloromethane	6.12E-09	4.21E-08	3.89E-09	1.19E-06	3.51E-05	1.40E-05	3.38E-05	7.24E-07	3.51E-06
Trichlorofluoromethane (Freon 11)	1.58E-09	2.23E-09	2.43E-10	6.40E-06	2.79E-05	1.27E-04	1.40E-04	5.91E-06	4.42E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	7.62E-11	1.08E-10	1.18E-11	5.60E-08	2.44E-07	1.32E-06	1.45E-06	6.12E-08	3.87E-07
Other Organics									
Bromoform	2.89E-10	4.77E-10	4.76E-11	2.10E-06	1.09E-05	5.51E-05	6.86E-05	2.58E-06	1.28E-05
O-Terphenyl	4.22E-07	5.84E-08	1.03E-07	6.43E-08	1.94E-08	1.43E-04	2.97E-06	5.08E-06	3.22E-05
Inorganics									
Antimony	1.93E-04	9.43E-05	3.08E-05	1.13E-06	1.35E-06	6.09E-05	3.12E-07	6.88E-07	2.71E-04
Arsenic	1.91E-05	9.24E-06	4.01E-07	2.18E-07	2.08E-07	6.02E-06	2.94E-08	6.22E-07	1.04E-05
Barium	1.36E-04	6.34E-05	1.98E-06	1.14E-07	1.04E-06	4.28E-05	8.68E-07	5.86E-06	1.04E-05
Beryllium	1.21E-04	8.00E-06	8.74E-07	1.45E-07	1.01E-07	7.99E-05	7.30E-06	1.06E-05	1.01E-05
Boron	7.50E-04	6.11E-03	1.20E-04	5.47E-05	7.56E-05	2.27E-04	4.12E-06	5.19E-05	--
Cadmium	8.00E-04	4.34E-04	1.22E-03	6.29E-07	3.41E-06	2.56E-04	2.83E-05	8.33E-05	4.10E-03
Chromium (Total)	6.73E-05	4.63E-05	3.29E-06	2.92E-06	1.11E-06	2.11E-05	1.13E-07	9.09E-07	2.22E-04
Chromium VI	9.57E-06	6.59E-06	4.68E-07	4.15E-07	1.58E-07	3.00E-06	1.60E-08	--	5.84E-06
Cobalt	4.07E-04	1.26E-04	7.95E-06	3.13E-05	2.86E-06	1.29E-04	1.25E-07	3.09E-07	2.86E-04
Lead	1.86E-02	1.85E-03	1.39E-03	8.81E-06	1.47E-05	1.33E-02	1.48E-04	3.20E-04	1.54E-03
Mercury - Inorganic	1.87E-03	2.10E-05	5.07E-04	6.13E-06	4.99E-07	2.53E-02	3.95E-03	3.11E-03	3.59E-04
Methyl Mercury	4.87E-05	5.92E-06	4.14E-04	6.50E-08	7.08E-09	4.42E-06	7.87E-08	1.97E-05	1.17E-03
Nickel	8.73E-03	2.05E-03	1.48E-03	4.27E-04	2.78E-05	2.78E-03	2.19E-05	9.44E-05	6.67E-03
Selenium	3.85E-06	9.83E-06	6.07E-07	2.43E-07	2.37E-07	1.19E-06	7.83E-08	7.42E-07	4.03E-05
Silver	4.42E-05	8.59E-05	1.45E-05	2.87E-06	1.66E-06	1.37E-05	6.18E-08	--	1.47E-04
Thallium	4.24E-03	8.11E-04	6.79E-04	4.33E-04	1.91E-05	1.35E-03	4.35E-07	--	--
Tin	4.60E-03	4.96E-04	3.79E-04	6.12E-04	7.14E-06	1.78E-03	4.83E-06	--	2.14E-02
Vanadium	4.39E-04	2.61E-05	2.95E-06	1.23E-06	3.35E-07	3.35E-04	2.11E-07	4.95E-06	5.36E-05
Zinc	1.91E-02	8.84E-03	1.39E-02	9.69E-06	9.80E-05	6.08E-03	5.40E-04	2.83E-03	9.13E-02

Table M.14 - Detailed Project Alone Exposure Point Concentrations for the Water Pollution Control Plant Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.53E-07	3.31E-08	7.54E-09	1.15E-10	1.81E-10	3.55E-08	5.97E-10	1.46E-10	7.21E-11
Acenaphthylene	3.58E-08	6.85E-09	1.76E-09	2.76E-11	2.00E-10	3.51E-08	5.90E-10	1.43E-10	1.00E-10
Anthracene	1.51E-07	1.50E-08	7.38E-09	8.56E-11	4.63E-11	4.35E-08	7.33E-10	1.70E-10	7.34E-11
Fluoranthene	1.49E-06	9.97E-08	7.29E-08	7.43E-10	4.87E-10	9.56E-07	1.61E-08	3.56E-09	2.44E-09
Fluorene	1.52E-07	2.25E-08	7.46E-09	1.03E-10	3.24E-10	9.98E-08	1.68E-09	3.99E-10	2.57E-10
Phenanthrene	1.54E-06	1.59E-07	7.52E-08	9.01E-10	1.07E-09	1.13E-06	1.91E-08	4.42E-09	1.69E-09
High Molecular Weight PAHs									
Benz(a)anthracene	8.29E-08	3.23E-08	2.02E-09	1.45E-10	1.64E-11	2.34E-07	3.95E-09	8.22E-10	4.11E-10
Benzo(a)pyrene	1.47E-07	1.38E-07	1.79E-08	5.45E-10	3.02E-11	1.17E-06	2.04E-08	2.00E-08	1.52E-09
Benzo(e)pyrene	4.00E-07	8.46E-06	4.88E-08	2.72E-08	9.88E-11	1.57E-06	--	2.59E-08	1.36E-08
Benzo(a)fluorene	1.64E-07	2.75E-08	4.00E-09	1.54E-10	2.99E-10	1.19E-06	--	4.27E-09	3.77E-09
Benzo(b)fluorene	1.13E-07	4.87E-08	2.76E-09	2.21E-10	2.08E-10	8.44E-07	--	2.95E-09	5.85E-09
Benzo(b)fluoranthene	1.91E-07	9.18E-09	4.65E-09	6.93E-11	3.08E-11	1.29E-06	2.17E-08	4.37E-09	2.06E-09
Benzo(g,h,i)perylene	2.07E-06	1.28E-05	2.53E-07	4.02E-08	1.85E-10	3.33E-05	5.61E-07	5.45E-07	2.93E-08
Benzo(k)fluoranthene	1.66E-07	5.31E-08	4.06E-09	2.24E-10	1.10E-11	4.36E-07	7.34E-09	1.48E-09	6.93E-10
Chrysene	3.08E-07	3.67E-08	7.50E-09	2.10E-10	3.82E-11	6.13E-07	1.03E-08	2.15E-09	9.60E-10
Dibenz(a,c)anthracene	2.61E-07	1.91E-06	3.18E-08	5.31E-09	1.72E-10	1.34E-05	2.26E-07	2.16E-07	4.33E-08
Dibenz(a,h)anthracene	9.15E-08	1.05E-06	1.12E-08	3.29E-09	9.18E-12	6.58E-07	1.11E-08	1.08E-08	1.46E-09
Indeno(1,2,3-cd)pyrene	4.41E-07	2.40E-07	5.38E-08	7.59E-10	4.26E-11	5.25E-06	8.83E-08	8.51E-08	8.51E-09
Perylene	8.62E-08	6.29E-06	1.05E-08	2.19E-08	1.50E-11	4.81E-07	8.37E-09	8.04E-09	1.33E-09
Pyrene	7.64E-06	4.65E-07	1.86E-07	3.56E-09	7.70E-10	2.09E-06	3.52E-08	7.87E-09	3.06E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	2.10E-08	1.91E-09	1.03E-08	7.76E-10	4.53E-13	7.06E-08	1.71E-09	2.17E-09	1.43E-08
PCB									
Aroclor 1254 (Total PCBs)	2.84E-05	2.51E-07	--	5.30E-07	6.86E-10	6.73E-05	--	--	1.35E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	2.18E-08	9.52E-09	2.73E-09	1.03E-08	1.35E-08	2.04E-07	6.16E-08	8.69E-09	1.62E-07
1,2,4-Trichlorobenzene	1.62E-09	3.25E-10	1.99E-10	4.81E-10	3.61E-10	2.40E-08	3.94E-10	9.76E-10	2.28E-08
1,2,4,5-Tetrachlorobenzene	6.88E-08	4.55E-09	8.40E-09	4.11E-09	5.71E-10	1.73E-07	3.08E-09	6.56E-09	1.80E-07
Pentachlorobenzene	1.07E-06	4.42E-08	2.61E-07	4.39E-08	1.04E-09	5.01E-06	8.94E-08	1.84E-07	7.69E-07
Hexachlorobenzene	2.95E-08	1.45E-09	7.21E-09	1.84E-09	3.67E-10	1.17E-06	2.09E-08	4.26E-08	3.67E-07
Pentachlorophenol	5.03E-07	6.37E-05	1.18E-06	4.25E-08	3.14E-08	7.44E-07	1.46E-08	2.75E-08	1.77E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.38E-11	2.26E-11	3.29E-12	8.24E-10	2.46E-09	1.49E-08	1.18E-08	6.75E-10	7.77E-09
Chloroform	3.92E-11	1.06E-10	8.79E-12	3.40E-10	3.01E-09	6.32E-09	1.11E-08	3.06E-10	1.51E-09
Dichloromethane	7.02E-09	4.82E-08	4.46E-09	3.60E-08	1.05E-06	4.20E-07	1.01E-06	2.17E-08	1.05E-07
Trichlorofluoromethane (Freon 11)	1.81E-09	2.54E-09	2.79E-10	2.19E-07	9.53E-07	4.35E-06	4.79E-06	2.02E-07	1.51E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.75E-11	1.23E-10	1.35E-11	1.89E-09	8.20E-09	4.43E-08	4.87E-08	2.06E-09	1.30E-08
Other Organics									
Bromoform	3.32E-10	5.48E-10	5.47E-11	7.22E-08	3.75E-07	1.89E-06	2.35E-06	8.87E-08	4.41E-07
O-Terphenyl	4.84E-07	3.99E-08	1.18E-07	2.82E-08	8.08E-10	5.95E-06	1.39E-07	2.12E-07	1.34E-06
Inorganics									
Antimony	2.55E-04	1.23E-04	4.09E-05	1.43E-06	4.68E-07	2.11E-05	1.08E-07	2.38E-07	9.36E-05
Arsenic	2.53E-05	1.20E-05	5.31E-07	2.68E-07	7.18E-08	2.08E-06	1.02E-08	2.15E-07	3.59E-06
Barium	1.80E-04	8.27E-05	2.62E-06	1.43E-07	3.61E-07	1.48E-05	3.00E-07	2.03E-06	3.61E-06
Beryllium	1.61E-04	1.04E-05	1.16E-06	1.85E-07	2.03E-08	1.61E-05	1.47E-06	2.13E-06	2.03E-06
Boron	9.94E-04	8.01E-03	1.59E-04	6.95E-05	2.61E-05	7.84E-05	1.42E-06	1.79E-05	--
Cadmium	1.06E-03	5.70E-04	1.62E-03	8.13E-07	1.17E-06	8.78E-05	9.72E-06	2.86E-05	1.41E-03
Chromium (Total)	8.92E-05	5.99E-05	4.37E-06	3.56E-06	3.84E-07	7.31E-06	3.89E-08	3.14E-07	7.69E-05
Chromium VI	1.27E-05	8.52E-06	6.21E-07	5.07E-07	5.47E-08	1.04E-06	5.54E-09	--	2.02E-06
Cobalt	5.40E-04	1.63E-04	1.05E-05	3.85E-05	9.89E-07	4.45E-05	4.34E-08	1.07E-07	9.89E-05
Lead	2.46E-02	2.43E-03	1.84E-03	1.14E-05	2.81E-06	2.53E-03	2.83E-05	6.11E-05	2.94E-04
Mercury - Inorganic	1.72E-03	2.20E-05	4.65E-04	5.66E-06	3.14E-08	1.59E-03	2.96E-04	1.96E-04	2.26E-05
Methyl Mercury	6.44E-05	6.20E-06	5.48E-04	7.32E-08	4.46E-10	3.03E-06	5.39E-08	1.35E-05	7.36E-05
Nickel	1.16E-02	2.66E-03	1.96E-03	1.47E-04	1.47E-05	9.57E-04	7.53E-06	3.25E-05	2.30E-03
Selenium	5.11E-06	1.27E-05	8.05E-07	2.96E-07	8.20E-08	4.10E-07	2.71E-08	2.57E-07	1.39E-05
Silver	5.86E-05	1.12E-04	1.92E-05	3.55E-06	5.72E-07	4.75E-06	2.14E-08	--	5.07E-05
Thallium	5.62E-03	1.05E-03	8.99E-04	5.35E-04	6.55E-06	4.65E-04	1.49E-07	--	--
Tin	6.09E-03	6.46E-04	5.02E-04	7.80E-04	2.11E-06	5.27E-04	1.43E-06	--	6.33E-03
Vanadium	5.81E-04	3.38E-05	3.91E-06	1.58E-06	6.12E-08	6.12E-05	3.86E-08	9.03E-07	9.79E-06
Zinc	2.53E-02	1.16E-02	1.84E-02	1.24E-05	3.38E-05	2.10E-03	1.86E-04	9.77E-04	3.15E-02

Table M.15 - Detailed Project Alone Exposure Point Concentrations for the Future Industrial Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.64E-07	5.70E-08	1.30E-08	1.98E-10	3.12E-10	6.11E-08	1.03E-09	2.51E-10	1.24E-10
Acenaphthylene	6.17E-08	1.17E-08	3.04E-09	4.73E-11	3.44E-10	6.04E-08	1.02E-09	2.46E-10	1.72E-10
Anthracene	2.60E-07	2.57E-08	1.27E-08	1.47E-10	7.98E-11	7.50E-08	1.26E-09	2.92E-10	1.26E-10
Fluoranthene	2.57E-06	1.58E-07	1.26E-07	1.23E-09	8.38E-10	1.65E-06	2.77E-08	6.13E-09	4.20E-09
Fluorene	2.62E-07	3.84E-08	1.29E-08	1.77E-10	5.57E-10	1.72E-07	2.89E-09	6.87E-10	4.43E-10
Phenanthrene	2.65E-06	2.68E-07	1.30E-07	1.53E-09	1.84E-09	1.95E-06	3.29E-08	7.61E-09	2.92E-09
High Molecular Weight PAHs									
Benz(a)anthracene	1.43E-07	4.80E-08	3.48E-09	2.20E-10	2.82E-11	4.04E-07	6.79E-09	1.42E-09	7.08E-10
Benzo(a)pyrene	2.53E-07	1.80E-07	3.08E-08	7.18E-10	5.21E-11	2.02E-06	3.51E-08	3.45E-08	2.61E-09
Benzo(e)pyrene	6.89E-07	7.36E-06	8.40E-08	2.37E-08	1.70E-10	2.71E-06	--	4.45E-08	2.35E-08
Benzo(a)fluorene	2.83E-07	3.33E-08	6.90E-09	2.07E-10	5.15E-10	2.04E-06	--	7.35E-09	6.49E-09
Benzo(b)fluorene	1.95E-07	4.77E-08	4.76E-09	2.36E-10	3.57E-10	1.45E-06	--	5.07E-09	1.01E-08
Benzo(b)fluoranthene	3.28E-07	1.29E-08	8.01E-09	1.09E-10	5.31E-11	2.23E-06	3.74E-08	7.52E-09	3.54E-09
Benzo(g,h,i)perylene	3.57E-06	1.11E-05	4.35E-07	3.53E-08	3.18E-10	5.74E-05	9.66E-07	9.38E-07	5.04E-08
Benzo(k)fluoranthene	2.87E-07	6.53E-08	6.99E-09	2.90E-10	1.89E-11	7.51E-07	1.26E-08	2.54E-09	1.19E-09
Chrysene	5.30E-07	6.01E-08	1.29E-08	3.50E-10	6.58E-11	1.06E-06	1.78E-08	3.70E-09	1.65E-09
Dibenz(a,c)anthracene	4.50E-07	2.26E-06	5.48E-08	6.30E-09	2.97E-10	2.32E-05	3.90E-07	3.72E-07	7.46E-08
Dibenz(a,h)anthracene	1.58E-07	9.43E-07	1.92E-08	2.96E-09	1.58E-11	1.13E-06	1.91E-08	1.85E-08	2.51E-09
Indeno(1,2,3-cd)pyrene	7.59E-07	3.90E-07	9.26E-08	1.24E-09	7.35E-11	9.04E-06	1.52E-07	1.47E-07	1.47E-08
Perylene	1.49E-07	5.47E-06	1.81E-08	1.90E-08	2.58E-11	8.28E-07	1.44E-08	1.38E-08	2.30E-09
Pyrene	1.32E-05	7.83E-07	3.21E-07	6.07E-09	1.32E-09	3.60E-06	6.06E-08	1.36E-08	5.27E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	3.91E-08	2.28E-09	1.93E-08	1.11E-09	8.45E-13	1.32E-07	3.18E-09	4.05E-09	2.67E-08
PCB									
Aroclor 1254 (Total PCBs)	4.90E-05	3.83E-07	--	8.97E-07	1.18E-09	1.16E-04	--	--	2.32E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	3.76E-08	1.63E-08	4.70E-09	1.77E-08	2.32E-08	3.52E-07	1.06E-07	1.50E-08	2.79E-07
1,2,4-Trichlorobenzene	2.79E-09	5.44E-10	3.44E-10	8.25E-10	6.22E-10	4.13E-08	6.78E-10	1.68E-09	3.93E-08
1,2,4,5-Tetrachlorobenzene	1.18E-07	7.77E-09	1.45E-08	7.07E-09	9.83E-10	2.98E-07	5.31E-09	1.13E-08	3.11E-07
Pentachlorobenzene	1.84E-06	7.47E-08	4.49E-07	7.51E-08	1.79E-09	8.64E-06	1.54E-07	3.17E-07	1.32E-06
Hexachlorobenzene	5.09E-08	2.10E-09	1.24E-08	3.01E-09	6.32E-10	2.02E-06	3.61E-08	7.34E-08	6.32E-07
Pentachlorophenol	8.66E-07	5.53E-05	2.03E-06	3.70E-08	5.42E-08	1.28E-06	2.52E-08	4.74E-08	3.05E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	4.10E-11	3.85E-11	5.66E-12	1.42E-09	4.23E-09	2.57E-08	2.03E-08	1.16E-09	1.34E-08
Chloroform	6.75E-11	1.83E-10	1.51E-11	5.86E-10	5.18E-09	1.09E-08	1.92E-08	5.28E-10	2.60E-09
Dichloromethane	1.21E-08	8.31E-08	7.69E-09	6.20E-08	1.81E-06	7.24E-07	1.74E-06	3.73E-08	1.81E-07
Trichlorofluoromethane (Freon 11)	3.12E-09	4.35E-09	4.81E-10	3.77E-07	1.64E-06	7.50E-06	8.26E-06	3.48E-07	2.60E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.51E-10	2.10E-10	2.33E-11	3.26E-09	1.41E-08	7.63E-08	8.40E-08	3.54E-09	2.24E-08
Other Organics									
Bromoform	5.72E-10	9.44E-10	9.42E-11	1.24E-07	6.46E-07	3.26E-06	4.06E-06	1.53E-07	7.59E-07
O-Terphenyl	8.34E-07	4.50E-08	2.04E-07	3.90E-08	1.39E-09	1.02E-05	2.34E-07	3.65E-07	2.31E-06
Inorganics									
Antimony	4.76E-04	2.29E-04	7.62E-05	2.67E-06	8.72E-07	3.93E-05	2.01E-07	4.44E-07	1.74E-04
Arsenic	4.73E-05	2.22E-05	9.91E-07	4.99E-07	1.34E-07	3.88E-06	1.89E-08	4.01E-07	6.69E-06
Barium	3.35E-04	1.54E-04	4.88E-06	2.67E-07	6.74E-07	2.76E-05	5.60E-07	3.78E-06	6.74E-06
Beryllium	3.00E-04	1.93E-05	2.16E-06	3.45E-07	3.79E-08	3.00E-05	2.74E-06	3.96E-06	3.79E-06
Boron	1.85E-03	1.49E-02	2.97E-04	1.29E-04	4.87E-05	1.46E-04	2.65E-06	3.35E-05	--
Cadmium	1.98E-03	1.06E-03	3.02E-03	1.51E-06	2.18E-06	1.64E-04	1.81E-05	5.33E-05	2.63E-03
Chromium (Total)	1.66E-04	1.11E-04	8.15E-06	6.62E-06	7.17E-07	1.36E-05	7.26E-08	5.86E-07	1.43E-04
Chromium VI	2.37E-05	1.58E-05	1.16E-06	9.41E-07	1.02E-07	1.94E-06	1.03E-08	--	3.77E-06
Cobalt	1.01E-03	3.03E-04	1.97E-05	7.16E-05	1.84E-06	8.30E-05	8.09E-08	1.99E-07	1.84E-04
Lead	4.59E-02	4.51E-03	3.42E-03	2.12E-05	5.24E-06	4.72E-03	5.27E-05	1.14E-04	5.49E-04
Mercury - Inorganic	2.59E-03	3.66E-05	7.03E-04	8.72E-06	4.75E-08	2.41E-03	4.44E-04	2.96E-04	3.41E-05
Methyl Mercury	1.20E-04	1.03E-05	1.02E-03	1.27E-07	6.74E-10	5.64E-06	1.00E-07	2.52E-05	1.11E-04
Nickel	2.16E-02	4.95E-03	3.66E-03	3.69E-04	2.74E-05	1.78E-03	1.40E-05	6.06E-05	4.28E-03
Selenium	9.53E-06	2.36E-05	1.50E-06	5.49E-07	1.53E-07	7.64E-07	5.04E-08	4.78E-07	2.60E-05
Silver	1.09E-04	2.08E-04	3.58E-05	6.60E-06	1.07E-06	8.86E-06	3.99E-08	--	9.45E-05
Thallium	1.05E-02	1.95E-03	1.68E-03	9.95E-04	1.22E-05	8.68E-04	2.79E-07	--	--
Tin	1.14E-02	1.20E-03	9.36E-04	1.45E-03	3.93E-06	9.83E-04	2.66E-06	--	1.18E-02
Vanadium	1.08E-03	6.28E-05	7.28E-06	2.93E-06	1.14E-07	1.14E-04	7.19E-08	1.68E-06	1.83E-05
Zinc	4.73E-02	2.16E-02	3.43E-02	2.31E-05	6.30E-05	3.91E-03	3.47E-04	1.82E-03	5.87E-02

Table M.16 - Detailed Project Alone Exposure Point Concentrations for the Harmony Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.55E-08	5.51E-09	1.25E-09	1.90E-11	1.37E-11	2.69E-09	4.52E-11	1.10E-11	5.46E-12
Acenaphthylene	5.96E-09	1.16E-09	2.93E-10	4.74E-12	4.41E-11	7.75E-09	1.30E-10	3.15E-11	2.21E-11
Anthracene	2.51E-08	2.52E-09	1.23E-09	1.43E-11	5.69E-12	5.35E-09	9.00E-11	2.08E-11	9.02E-12
Fluoranthene	2.49E-07	1.96E-08	1.21E-08	1.35E-10	6.25E-11	1.23E-07	2.07E-09	4.58E-10	3.13E-10
Fluorene	2.53E-08	3.81E-09	1.24E-09	1.70E-11	2.36E-11	7.27E-09	1.22E-10	2.91E-11	1.87E-11
Phenanthrene	2.56E-07	2.79E-08	1.25E-08	1.54E-10	1.18E-10	1.25E-07	2.11E-09	4.88E-10	1.87E-10
High Molecular Weight PAHs									
Benz(a)anthracene	1.38E-08	7.07E-09	3.37E-10	3.09E-11	1.62E-12	2.32E-08	3.90E-10	8.13E-11	4.07E-11
Benzo(a)pyrene	2.44E-08	3.61E-08	2.98E-09	1.40E-10	1.75E-12	6.77E-08	1.18E-09	1.16E-09	8.76E-11
Benzo(e)pyrene	6.65E-08	3.03E-06	8.11E-09	9.73E-09	1.19E-11	1.89E-07	--	3.10E-09	1.64E-09
Benzo(a)fluorene	2.73E-08	7.75E-09	6.66E-10	3.82E-11	2.78E-11	1.10E-07	--	3.97E-10	3.50E-10
Benzo(b)fluorene	1.88E-08	1.62E-08	4.60E-10	6.90E-11	2.02E-11	8.22E-08	--	2.87E-10	5.70E-10
Benzo(b)fluoranthene	3.17E-08	2.17E-09	7.74E-10	1.39E-11	1.88E-12	7.89E-08	1.33E-09	2.67E-10	1.26E-10
Benzo(g,h,i)perylene	3.45E-07	4.60E-06	4.20E-08	1.44E-08	6.61E-12	1.19E-06	2.01E-08	1.95E-08	1.05E-09
Benzo(k)fluoranthene	2.77E-08	1.47E-08	6.76E-10	5.87E-11	1.22E-12	4.82E-08	8.12E-10	1.63E-10	7.67E-11
Chrysene	5.12E-08	6.74E-09	1.25E-09	3.75E-11	3.51E-12	5.64E-08	9.49E-10	1.98E-10	8.82E-11
Dibenz(a,c)anthracene	4.34E-08	5.47E-07	5.30E-09	1.52E-09	4.96E-12	3.87E-07	6.52E-09	6.22E-09	1.25E-09
Dibenz(a,h)anthracene	1.52E-08	3.72E-07	1.86E-09	1.16E-09	5.21E-13	3.73E-08	6.27E-10	6.10E-10	8.25E-11
Indeno(1,2,3-cd)pyrene	7.34E-08	4.48E-08	8.95E-09	1.40E-10	1.74E-12	2.14E-07	3.60E-09	3.46E-09	3.46E-10
Perylene	1.44E-08	2.26E-06	1.75E-09	7.85E-09	1.30E-12	4.17E-08	7.25E-10	6.96E-10	1.16E-10
Pyrene	1.27E-06	8.16E-08	3.11E-08	6.11E-10	2.07E-10	5.63E-07	9.48E-09	2.12E-09	8.25E-10
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	3.97E-09	5.97E-10	1.95E-09	2.09E-10	5.13E-14	7.98E-09	1.93E-10	2.46E-10	1.62E-09
PCB									
Aroclor 1254 (Total PCBs)	4.74E-06	5.31E-08	--	9.23E-08	7.93E-11	7.78E-06	--	--	1.09E-05
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	3.63E-09	1.61E-09	4.54E-10	6.51E-10	5.19E-10	7.87E-09	2.37E-09	3.35E-10	6.24E-09
1,2,4-Trichlorobenzene	2.70E-10	5.76E-11	3.32E-11	3.97E-11	1.88E-11	1.25E-09	2.05E-11	5.09E-11	1.19E-09
1,2,4,5-Tetrachlorobenzene	1.14E-08	7.70E-10	1.40E-09	7.08E-10	1.06E-10	3.21E-08	5.72E-10	1.22E-09	3.35E-08
Pentachlorobenzene	1.78E-07	7.68E-09	4.34E-08	7.28E-09	5.64E-11	2.73E-07	4.86E-09	1.00E-08	4.18E-08
Hexachlorobenzene	4.91E-09	3.34E-10	1.20E-09	2.79E-10	1.69E-11	5.41E-08	9.65E-10	1.97E-09	1.69E-08
Pentachlorophenol	8.36E-08	2.28E-05	1.96E-07	1.53E-08	2.96E-08	7.01E-07	1.38E-08	2.59E-08	1.66E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	3.96E-12	3.82E-12	5.47E-13	2.54E-11	7.48E-11	4.55E-10	3.58E-10	2.06E-11	2.37E-10
Chloroform	6.52E-12	1.78E-11	1.46E-12	1.10E-11	9.31E-11	1.95E-10	3.44E-10	9.47E-12	4.66E-11
Dichloromethane	1.17E-09	8.03E-09	7.42E-10	1.16E-09	3.20E-08	1.28E-08	3.08E-08	6.59E-10	3.20E-09
Trichlorofluoromethane (Freon 11)	3.01E-10	4.26E-10	4.65E-11	6.53E-09	2.83E-08	1.29E-07	1.42E-07	6.01E-09	4.49E-08
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.46E-11	2.06E-11	2.25E-12	5.92E-11	2.51E-10	1.36E-09	1.49E-09	6.30E-11	3.98E-10
Other Organics									
Bromoform	5.52E-11	9.11E-11	9.09E-12	2.13E-09	1.10E-08	5.55E-08	6.92E-08	2.60E-09	1.29E-08
O-Terphenyl	8.05E-08	1.20E-08	1.97E-08	6.78E-09	5.26E-11	3.87E-07	9.95E-09	1.38E-08	8.72E-08
Inorganics									
Antimony	4.82E-05	2.59E-05	7.71E-06	3.12E-07	5.05E-07	2.27E-05	1.16E-07	2.57E-07	1.01E-04
Arsenic	4.78E-06	2.66E-06	1.00E-07	6.34E-08	7.76E-08	2.25E-06	1.10E-08	2.32E-07	3.88E-06
Barium	3.39E-05	1.76E-05	4.94E-07	3.19E-08	3.90E-07	1.60E-05	3.24E-07	2.19E-06	3.90E-06
Beryllium	3.03E-05	2.28E-06	2.18E-07	3.87E-08	1.90E-08	1.50E-05	1.37E-06	1.99E-06	1.90E-06
Boron	1.87E-04	1.66E-03	3.00E-05	1.50E-05	2.83E-05	8.48E-05	1.54E-06	1.94E-05	--
Cadmium	2.00E-04	1.14E-04	3.05E-04	1.66E-07	1.26E-06	9.46E-05	1.05E-05	3.08E-05	1.52E-03
Chromium (Total)	1.68E-05	1.35E-05	8.24E-07	8.61E-07	4.15E-07	7.89E-06	4.21E-08	3.40E-07	8.31E-05
Chromium VI	2.39E-06	1.91E-06	1.17E-07	1.22E-07	5.91E-08	1.12E-06	5.98E-09	--	2.18E-06
Cobalt	1.02E-04	3.64E-05	1.99E-06	9.04E-06	1.07E-06	4.80E-05	4.68E-08	1.15E-07	1.07E-04
Lead	4.65E-03	5.05E-04	3.46E-04	2.31E-06	2.57E-06	2.31E-03	2.59E-05	5.59E-05	2.69E-04
Mercury - Inorganic	3.64E-04	5.51E-06	9.85E-05	1.24E-06	4.65E-09	2.36E-04	4.43E-05	2.90E-05	3.34E-06
Methyl Mercury	1.22E-05	1.55E-06	1.03E-04	1.68E-08	6.60E-11	9.82E-07	1.75E-08	4.38E-06	1.09E-05
Nickel	2.18E-03	5.86E-04	3.70E-04	4.53E-05	1.59E-05	1.03E-03	8.12E-06	3.51E-05	2.48E-03
Selenium	9.63E-07	2.86E-06	1.52E-07	7.23E-08	8.86E-08	4.43E-07	2.92E-08	2.77E-07	1.51E-05
Silver	1.10E-05	2.43E-05	3.62E-06	8.23E-07	6.19E-07	5.14E-06	2.31E-08	--	5.48E-05
Thallium	1.06E-03	2.35E-04	1.70E-04	1.25E-04	7.06E-06	5.01E-04	1.61E-07	--	--
Tin	1.15E-03	1.39E-04	9.48E-05	1.66E-04	2.20E-06	5.50E-04	1.49E-06	--	6.60E-03
Vanadium	1.10E-04	7.49E-06	7.37E-07	3.29E-07	5.50E-08	5.50E-05	3.46E-08	8.11E-07	8.79E-06
Zinc	4.78E-03	2.38E-03	3.47E-03	2.61E-06	3.64E-05	2.26E-03	2.01E-04	1.05E-03	3.39E-02

Table M.17 - Detailed Project Alone Exposure Point Concentrations for the Farewell Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.91E-08	6.30E-09	1.43E-09	2.30E-11	1.51E-10	2.95E-08	4.97E-10	1.21E-10	5.99E-11
Acenaphthylene	6.81E-09	1.32E-09	3.35E-10	6.74E-12	1.83E-10	3.21E-08	5.39E-10	1.30E-10	9.15E-11
Anthracene	2.87E-08	2.88E-09	1.40E-09	1.69E-11	4.86E-11	4.56E-08	7.68E-10	1.78E-10	7.70E-11
Fluoranthene	2.84E-07	2.18E-08	1.39E-08	1.62E-10	6.92E-10	1.36E-06	2.29E-08	5.07E-09	3.47E-09
Fluorene	2.89E-08	4.34E-09	1.42E-09	2.33E-11	3.65E-10	1.12E-07	1.89E-09	4.50E-10	2.90E-10
Phenanthrene	2.92E-07	3.16E-08	1.43E-08	1.93E-10	1.50E-09	1.59E-06	2.67E-08	6.19E-09	2.37E-09
High Molecular Weight PAHs									
Benz(a)anthracene	1.58E-08	7.71E-09	3.85E-10	3.43E-11	1.86E-11	2.67E-07	4.49E-09	9.37E-10	4.68E-10
Benzo(a)pyrene	2.79E-08	3.85E-08	3.41E-09	1.50E-10	2.49E-11	9.66E-07	1.68E-08	1.65E-08	1.25E-09
Benzo(e)pyrene	7.60E-08	3.14E-06	9.27E-09	1.01E-08	1.09E-10	1.74E-06	--	2.86E-08	1.51E-08
Benzo(a)fluorene	3.12E-08	8.21E-09	7.61E-10	4.74E-11	3.82E-10	1.52E-06	--	5.45E-09	4.81E-09
Benzo(b)fluorene	2.15E-08	1.69E-08	5.25E-10	7.69E-11	2.85E-10	1.16E-06	--	4.05E-09	8.04E-09
Benzo(b)fluoranthene	3.63E-08	2.35E-09	8.84E-10	1.60E-11	1.92E-11	8.05E-07	1.35E-08	2.72E-09	1.28E-09
Benzo(g,h,i)perylene	3.94E-07	4.76E-06	4.81E-08	1.49E-08	8.82E-11	1.59E-05	2.68E-07	2.60E-07	1.40E-08
Benzo(k)fluoranthene	3.17E-08	1.56E-08	7.73E-10	6.29E-11	7.99E-12	3.17E-07	5.34E-09	1.07E-09	5.04E-10
Chrysene	5.85E-08	7.54E-09	1.43E-09	4.29E-11	2.89E-11	4.63E-07	7.79E-09	1.62E-09	7.25E-10
Dibenz(a,c)anthracene	4.96E-08	5.78E-07	6.05E-09	1.61E-09	1.13E-10	8.80E-06	1.48E-07	1.41E-07	2.84E-08
Dibenz(a,h)anthracene	1.74E-08	3.85E-07	2.12E-09	1.20E-09	5.78E-12	4.14E-07	6.96E-09	6.76E-09	9.16E-10
Indeno(1,2,3-cd)pyrene	8.39E-08	5.00E-08	1.02E-08	1.58E-10	2.26E-11	4.67E-06	4.67E-08	4.50E-08	4.50E-09
Perylene	1.64E-08	2.33E-06	2.00E-09	8.12E-09	1.29E-11	4.14E-07	7.21E-09	6.92E-09	1.15E-09
Pyrene	1.45E-06	9.24E-08	3.55E-08	7.07E-10	9.76E-10	2.66E-06	4.47E-08	9.99E-09	3.89E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	4.28E-09	6.18E-10	2.10E-09	2.19E-10	1.82E-13	2.83E-08	6.86E-10	8.71E-10	5.75E-09
PCB									
Aroclor 1254 (Total PCBs)	5.42E-06	5.85E-08	--	1.06E-07	2.52E-10	2.47E-05	--	--	4.95E-05
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	4.15E-09	1.83E-09	5.19E-10	5.53E-09	8.34E-09	1.26E-07	3.81E-08	5.38E-09	1.00E-07
1,2,4-Trichlorobenzene	3.08E-10	6.51E-11	3.79E-11	2.44E-10	2.20E-10	1.46E-08	2.40E-10	5.95E-10	1.39E-08
1,2,4,5-Tetrachlorobenzene	1.31E-08	8.77E-10	1.60E-09	1.01E-09	2.60E-10	7.89E-08	1.41E-09	2.99E-09	8.23E-08
Pentachlorobenzene	2.03E-07	8.71E-09	4.96E-08	9.40E-09	6.71E-10	3.24E-06	5.78E-08	1.19E-07	4.97E-07
Hexachlorobenzene	5.62E-09	3.64E-10	1.37E-09	6.90E-10	2.36E-10	7.57E-07	1.35E-08	2.75E-08	2.36E-07
Pentachlorophenol	9.56E-08	2.36E-05	2.24E-07	1.58E-08	3.18E-08	7.52E-07	1.48E-08	2.78E-08	1.79E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	4.52E-12	4.36E-12	6.25E-13	4.94E-10	1.47E-09	8.97E-09	7.07E-09	4.05E-10	4.66E-09
Chloroform	7.45E-12	2.03E-11	1.67E-12	1.99E-10	1.78E-09	3.73E-09	6.57E-09	1.81E-10	8.91E-10
Dichloromethane	1.34E-09	9.18E-09	8.48E-10	2.07E-08	6.09E-07	2.44E-07	5.87E-07	1.26E-08	6.09E-08
Trichlorofluoromethane (Freon 11)	3.44E-10	4.87E-10	5.31E-11	1.29E-07	5.62E-07	2.57E-06	2.83E-06	1.19E-07	8.91E-07
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.66E-11	2.35E-11	2.57E-12	1.13E-09	4.93E-09	2.66E-08	2.93E-08	1.23E-09	7.81E-09
Other Organics									
Bromoform	6.31E-11	1.04E-10	1.04E-11	4.22E-08	2.19E-07	1.10E-06	1.38E-06	5.18E-08	2.57E-07
O-Terphenyl	9.21E-08	1.26E-08	2.25E-08	8.82E-09	8.22E-10	6.05E-06	1.41E-07	2.16E-07	1.36E-06
Inorganics									
Antimony	5.19E-05	2.71E-05	8.31E-06	3.27E-07	4.99E-07	2.25E-05	1.15E-07	2.54E-07	9.98E-05
Arsenic	5.15E-06	2.75E-06	1.08E-07	6.55E-08	7.66E-08	2.22E-06	1.08E-08	2.30E-07	3.83E-06
Barium	3.66E-05	1.84E-05	5.32E-07	3.33E-08	3.85E-07	1.58E-05	3.20E-07	2.16E-06	3.85E-06
Beryllium	3.27E-05	2.36E-06	2.35E-07	4.09E-08	2.34E-08	1.84E-05	1.69E-06	2.44E-06	2.34E-06
Boron	2.02E-04	1.74E-03	3.23E-05	1.57E-05	2.79E-05	8.37E-05	1.52E-06	1.92E-05	--
Cadmium	2.16E-04	1.21E-04	3.29E-04	1.76E-07	1.25E-06	9.37E-05	1.04E-05	3.05E-05	1.50E-03
Chromium (Total)	1.81E-05	1.39E-05	8.88E-07	8.86E-07	4.10E-07	7.80E-06	4.16E-08	3.35E-07	8.21E-05
Chromium VI	2.58E-06	1.97E-06	1.26E-07	1.26E-07	5.84E-08	1.11E-06	5.91E-09	--	2.16E-06
Cobalt	1.10E-04	3.76E-05	2.14E-06	9.35E-06	1.05E-06	4.75E-05	4.63E-08	1.14E-07	1.05E-04
Lead	5.01E-03	5.31E-04	3.73E-04	2.46E-06	3.26E-06	2.93E-03	3.27E-05	7.07E-05	3.41E-04
Mercury - Inorganic	3.73E-04	5.68E-06	1.01E-04	1.29E-06	2.22E-08	1.13E-03	2.10E-04	1.39E-04	1.60E-05
Methyl Mercury	1.31E-05	1.60E-06	1.11E-04	1.76E-08	3.16E-10	1.14E-06	2.02E-08	5.06E-06	5.21E-05
Nickel	2.35E-03	6.07E-04	3.99E-04	4.71E-05	1.57E-05	1.02E-03	8.03E-06	3.47E-05	2.45E-03
Selenium	1.04E-06	2.95E-06	1.64E-07	7.43E-08	8.76E-08	4.38E-07	2.89E-08	2.74E-07	1.49E-05
Silver	1.19E-05	2.52E-05	3.90E-06	8.53E-07	6.11E-07	5.07E-06	2.28E-08	--	5.41E-05
Thallium	1.14E-03	2.43E-04	1.83E-04	1.29E-04	6.99E-06	4.96E-04	1.59E-07	--	--
Tin	1.24E-03	1.45E-04	1.02E-04	1.75E-04	2.29E-06	5.72E-04	1.55E-06	--	6.86E-03
Vanadium	1.18E-04	7.75E-06	7.95E-07	3.48E-07	7.14E-08	7.14E-05	4.50E-08	1.05E-06	1.14E-05
Zinc	5.15E-03	2.51E-03	3.74E-03	2.75E-06	3.60E-05	2.23E-03	1.99E-04	1.04E-03	3.36E-02

Table M.18 - Detailed Project Alone Exposure Point Concentrations for the Farm A Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.51E-07	3.28E-08	7.46E-09	1.64E-10	5.55E-09	1.09E-06	1.83E-08	4.47E-09	2.21E-09
Acenaphthylene	3.55E-08	6.83E-09	1.74E-09	7.10E-11	4.54E-09	7.98E-07	1.34E-08	3.25E-09	2.28E-09
Anthracene	1.49E-07	1.49E-08	7.31E-09	1.01E-10	1.24E-09	1.16E-06	1.96E-08	4.53E-09	1.96E-09
Fluoranthene	1.48E-06	1.09E-07	7.22E-08	9.58E-10	1.25E-08	2.46E-05	4.15E-07	9.19E-08	6.29E-08
Fluorene	1.51E-07	2.25E-08	7.38E-09	2.07E-10	9.56E-09	2.95E-06	4.96E-08	1.18E-08	7.60E-09
Phenanthrene	1.52E-06	1.62E-07	7.44E-08	1.27E-09	2.89E-08	3.07E-05	5.17E-07	1.20E-07	4.58E-08
High Molecular Weight PAHs									
Benz(a)anthracene	8.21E-08	3.76E-08	2.00E-09	1.72E-10	3.68E-10	5.26E-06	8.86E-08	1.85E-08	9.23E-09
Benzo(a)pyrene	1.45E-07	1.80E-07	1.77E-08	7.10E-10	6.10E-10	2.36E-05	4.11E-07	4.04E-07	3.06E-08
Benzo(e)pyrene	3.96E-07	1.36E-05	4.83E-08	4.38E-08	2.09E-09	3.33E-05	--	5.48E-07	2.89E-07
Benzo(a)fluorene	1.62E-07	3.76E-08	3.96E-09	3.17E-10	7.99E-09	3.17E-05	--	1.14E-07	1.01E-07
Benzo(b)fluorene	1.12E-07	7.46E-08	2.73E-09	4.05E-10	5.47E-09	2.22E-05	--	7.77E-08	1.54E-07
Benzo(b)fluoranthene	1.89E-07	1.12E-08	4.60E-09	8.62E-11	6.46E-10	2.71E-05	4.55E-07	9.15E-08	4.31E-08
Benzo(g,h,i)perylene	2.05E-06	2.07E-05	2.50E-07	6.47E-08	2.83E-09	5.10E-04	8.58E-06	8.34E-06	4.48E-07
Benzo(k)fluoranthene	1.65E-07	7.16E-08	4.03E-09	2.94E-10	1.80E-10	7.14E-06	1.20E-07	2.42E-08	1.14E-08
Chrysene	3.05E-07	3.85E-08	7.44E-09	2.31E-10	8.83E-10	1.42E-05	2.38E-07	4.97E-08	2.22E-08
Dibenz(a,c)anthracene	2.58E-07	2.64E-06	3.15E-08	7.38E-09	3.28E-09	2.56E-04	4.31E-06	4.12E-06	8.25E-07
Dibenz(a,h)anthracene	9.07E-08	1.68E-06	1.11E-08	5.24E-09	1.57E-10	1.13E-05	1.90E-07	1.84E-07	2.49E-08
Indeno(1,2,3-cd)pyrene	4.37E-07	2.55E-07	5.32E-08	8.11E-10	6.87E-10	8.46E-05	1.42E-06	1.37E-06	1.37E-07
Perylene	8.54E-08	1.01E-05	1.04E-08	3.53E-08	2.91E-10	9.35E-06	1.63E-07	1.56E-07	2.59E-08
Pyrene	7.58E-06	4.75E-07	1.85E-07	3.80E-09	1.53E-08	4.15E-05	6.99E-07	1.56E-07	6.08E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.93E-08	2.65E-09	9.48E-09	9.54E-10	4.14E-12	6.44E-07	1.55E-08	1.98E-08	1.31E-07
PCB									
Aroclor 1254 (Total PCBs)	2.83E-05	2.86E-07	--	5.50E-07	7.85E-09	7.70E-04	--	--	2.16E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	2.16E-08	9.49E-09	2.70E-09	3.01E-07	4.85E-07	7.35E-06	2.22E-06	3.13E-07	5.83E-06
1,2,4-Trichlorobenzene	1.60E-09	3.33E-10	1.97E-10	1.28E-08	1.27E-08	8.43E-07	1.38E-08	3.43E-08	8.01E-07
1,2,4,5-Tetrachlorobenzene	6.80E-08	4.54E-09	8.31E-09	2.10E-08	1.22E-08	3.71E-06	6.62E-08	1.41E-07	3.87E-06
Pentachlorobenzene	1.06E-06	4.48E-08	2.58E-07	9.53E-08	3.36E-08	1.63E-04	2.90E-06	5.97E-06	2.49E-05
Hexachlorobenzene	2.92E-08	1.74E-09	7.13E-09	2.09E-08	1.23E-08	3.95E-05	7.04E-07	1.44E-06	1.23E-05
Pentachlorophenol	4.97E-07	1.03E-04	1.16E-06	6.87E-08	1.29E-07	3.06E-06	6.00E-08	1.13E-07	7.26E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.35E-11	2.25E-11	3.25E-12	2.75E-08	8.21E-08	4.99E-07	3.93E-07	2.26E-08	2.60E-07
Chloroform	3.88E-11	1.05E-10	8.70E-12	1.22E-08	1.09E-07	2.30E-07	4.04E-07	1.11E-08	5.48E-08
Dichloromethane	6.95E-09	4.78E-08	4.41E-09	1.35E-06	3.99E-05	1.59E-05	3.84E-05	8.22E-07	3.99E-06
Trichlorofluoromethane (Freon 11)	1.79E-09	2.52E-09	2.76E-10	7.26E-06	3.16E-05	1.45E-04	1.59E-04	6.71E-06	5.02E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.66E-11	1.22E-10	1.34E-11	6.36E-08	2.77E-07	1.50E-06	1.65E-06	6.95E-08	4.39E-07
Other Organics									
Bromoform	3.28E-10	5.42E-10	5.41E-11	2.39E-06	1.24E-05	6.26E-05	7.79E-05	2.93E-06	1.46E-05
O-Terphenyl	4.79E-07	5.68E-08	1.17E-07	6.91E-08	2.20E-08	1.62E-04	3.35E-06	5.77E-06	3.65E-05
Inorganics									
Antimony	2.33E-04	1.14E-04	3.73E-05	1.37E-06	1.64E-06	7.37E-05	3.78E-07	8.33E-07	3.28E-04
Arsenic	2.31E-05	1.11E-05	4.85E-07	2.64E-07	2.51E-07	7.29E-06	3.56E-08	7.53E-07	1.26E-05
Barium	1.64E-04	7.66E-05	2.39E-06	1.38E-07	1.26E-06	5.18E-05	1.05E-06	7.09E-06	1.26E-05
Beryllium	1.47E-04	9.65E-06	1.06E-06	1.75E-07	1.22E-07	9.67E-05	8.84E-06	1.28E-05	1.22E-05
Boron	9.08E-04	7.39E-03	1.45E-04	6.61E-05	9.16E-05	2.75E-04	4.98E-06	6.29E-05	--
Cadmium	9.69E-04	5.25E-04	1.48E-03	7.61E-07	4.13E-06	3.10E-04	3.43E-05	1.01E-04	4.97E-03
Chromium (Total)	8.15E-05	5.59E-05	3.99E-06	3.53E-06	1.35E-06	2.56E-05	1.36E-07	1.10E-06	2.69E-04
Chromium VI	1.16E-05	7.95E-06	5.67E-07	5.01E-07	1.92E-07	1.94E-06	--	--	7.08E-06
Cobalt	4.93E-04	1.52E-04	9.63E-06	3.77E-05	3.46E-06	1.56E-04	1.52E-07	3.74E-07	3.46E-04
Lead	2.25E-02	2.24E-03	1.68E-03	1.07E-05	1.78E-05	1.61E-02	1.79E-04	3.88E-04	1.87E-03
Mercury - Inorganic	1.98E-03	2.34E-05	5.36E-04	6.54E-06	5.28E-07	2.68E-02	4.14E-03	3.29E-03	3.79E-04
Methyl Mercury	5.90E-05	6.59E-06	5.01E-04	7.42E-08	7.49E-09	5.35E-06	9.53E-08	2.39E-05	1.23E-03
Nickel	1.06E-02	2.48E-03	1.79E-03	3.36E-04	5.17E-05	3.36E-03	2.65E-05	1.14E-04	8.07E-03
Selenium	4.67E-06	1.19E-05	7.35E-07	2.94E-07	2.87E-07	1.44E-06	9.48E-08	8.99E-07	4.88E-05
Silver	5.35E-05	1.04E-04	1.75E-05	3.46E-06	2.01E-06	1.66E-05	7.49E-08	--	1.78E-04
Thallium	5.14E-03	9.78E-04	8.22E-04	5.23E-04	2.31E-05	1.64E-03	5.26E-07	--	--
Tin	5.57E-03	5.99E-04	4.59E-04	7.40E-04	8.65E-06	2.16E-03	5.84E-06	--	2.59E-02
Vanadium	5.32E-04	3.15E-05	3.57E-06	1.49E-06	4.06E-07	4.06E-04	2.56E-07	5.99E-06	6.49E-05
Zinc	2.32E-02	1.07E-02	1.68E-02	1.17E-05	1.19E-04	7.36E-03	6.54E-04	3.43E-03	1.11E-01

Table M.19 - Detailed Project Alone Exposure Point Concentrations for the Farm B Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	7.21E-08	1.56E-08	3.55E-09	5.64E-11	3.08E-10	6.04E-08	1.02E-09	2.48E-10	1.23E-10
Acenaphthylene	1.69E-08	3.30E-09	8.31E-10	1.62E-11	3.92E-10	6.89E-08	1.16E-09	2.80E-10	1.97E-10
Anthracene	7.11E-08	7.18E-09	3.48E-09	4.17E-11	9.87E-11	9.28E-08	1.56E-09	3.61E-10	1.56E-10
Fluoranthene	7.04E-07	5.95E-08	3.44E-08	4.17E-10	1.33E-09	2.62E-06	4.41E-08	9.77E-09	6.68E-09
Fluorene	7.17E-08	1.09E-08	3.52E-09	5.60E-11	7.23E-10	2.23E-07	3.75E-09	8.92E-10	5.74E-10
Phenanthrene	7.25E-07	8.07E-08	3.54E-08	4.75E-10	2.88E-09	3.06E-06	5.15E-08	1.19E-08	4.57E-09
High Molecular Weight PAHs									
Benz(a)anthracene	3.91E-08	2.23E-08	9.54E-10	9.73E-11	3.82E-11	5.47E-07	9.21E-09	1.92E-09	9.60E-10
Benzo(a)pyrene	6.92E-08	1.19E-07	8.44E-09	4.62E-10	5.44E-11	2.11E-06	3.67E-08	3.60E-08	2.73E-09
Benzo(e)pyrene	1.88E-07	1.07E-05	2.30E-08	3.42E-08	2.28E-10	3.63E-06	--	5.96E-08	3.14E-08
Benzo(a)fluorene	7.73E-08	2.61E-08	1.89E-09	1.36E-10	7.54E-10	2.99E-06	--	1.08E-08	9.49E-09
Benzo(b)fluorene	5.34E-08	5.65E-08	1.30E-09	2.45E-10	5.55E-10	2.26E-06	--	7.88E-09	1.57E-08
Benzo(b)fluoranthene	8.99E-08	7.01E-09	2.19E-09	4.30E-11	4.29E-11	1.80E-06	3.02E-08	6.07E-09	2.86E-09
Benzo(g,h,i)perylene	9.77E-07	1.62E-05	1.19E-07	5.05E-08	2.09E-10	3.76E-05	6.33E-07	6.15E-07	3.31E-08
Benzo(k)fluoranthene	7.85E-08	4.92E-08	1.92E-09	1.94E-10	1.21E-11	7.21E-07	1.21E-08	2.44E-09	1.15E-09
Chrysene	1.45E-07	2.01E-08	3.54E-09	1.11E-10	6.22E-11	9.99E-07	1.68E-08	3.50E-09	1.56E-09
Dibenz(a,c)anthracene	1.23E-07	1.85E-06	1.50E-08	5.15E-09	2.54E-10	1.98E-05	3.33E-07	3.18E-07	6.38E-08
Dibenz(a,h)anthracene	4.32E-08	1.31E-06	5.27E-09	4.07E-09	1.32E-11	9.47E-07	1.59E-08	1.55E-08	2.10E-09
Indeno(1,2,3-cd)pyrene	2.08E-07	1.35E-07	2.53E-08	4.20E-10	5.26E-11	1.09E-07	1.05E-07	1.05E-07	1.05E-08
Perylene	4.07E-08	7.94E-06	4.96E-09	2.76E-08	2.82E-11	9.07E-07	1.58E-08	1.52E-08	2.52E-09
Pyrene	3.61E-06	2.37E-07	8.80E-08	1.77E-09	1.98E-09	5.37E-06	9.04E-08	2.02E-08	7.87E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	7.73E-09	1.86E-09	3.80E-09	5.90E-10	3.42E-13	5.31E-08	1.29E-09	1.64E-09	1.08E-08
PCB									
Aroclor 1254 (Total PCBs)	1.34E-05	1.65E-07	--	2.66E-07	6.32E-10	6.20E-05	--	--	1.24E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.03E-08	4.58E-09	1.29E-09	1.07E-08	1.59E-08	2.41E-07	7.25E-08	1.02E-08	1.91E-07
1,2,4-Trichlorobenzene	7.64E-10	1.68E-10	9.39E-11	4.87E-10	4.26E-10	2.83E-08	4.65E-10	1.15E-09	2.69E-08
1,2,4,5-Tetrachlorobenzene	3.24E-08	2.20E-09	3.96E-09	2.39E-09	5.66E-10	1.72E-07	3.06E-09	6.51E-09	1.79E-07
Pentachlorobenzene	5.04E-07	2.22E-08	1.23E-07	2.26E-08	1.33E-09	6.44E-06	1.15E-07	2.36E-07	9.87E-07
Hexachlorobenzene	1.39E-08	1.07E-09	3.40E-09	1.48E-09	4.57E-10	1.46E-06	2.61E-08	5.31E-08	4.57E-07
Pentachlorophenol	2.37E-07	8.04E-05	5.54E-07	5.37E-08	8.19E-08	1.94E-06	3.81E-08	7.17E-08	4.61E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.12E-11	1.09E-11	1.55E-12	9.11E-10	2.72E-09	1.65E-08	1.30E-08	7.48E-10	8.61E-09
Chloroform	1.85E-11	5.05E-11	4.14E-12	3.75E-10	3.33E-09	7.00E-09	1.23E-08	3.39E-10	1.67E-09
Dichloromethane	3.31E-09	2.28E-08	2.10E-09	3.93E-08	1.16E-06	4.63E-07	1.12E-06	2.39E-08	1.16E-07
Trichlorofluoromethane (Freon 11)	8.53E-10	1.21E-09	1.32E-10	2.38E-07	1.04E-06	4.74E-06	5.21E-06	2.20E-07	1.64E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	4.12E-11	5.86E-11	6.36E-12	2.09E-09	9.11E-09	4.92E-08	5.41E-08	2.28E-09	1.44E-08
Other Organics									
Bromoform	1.56E-10	2.58E-10	2.58E-11	7.77E-08	4.04E-07	2.03E-06	2.53E-06	9.54E-08	4.74E-07
O-Terphenyl	2.28E-07	4.08E-08	5.57E-08	2.44E-08	1.67E-09	1.23E-05	2.80E-07	4.39E-07	2.78E-06
Inorganics									
Antimony	9.37E-05	4.66E-05	1.50E-05	5.69E-07	9.44E-07	4.25E-05	2.18E-07	4.80E-07	1.89E-04
Arsenic	9.30E-06	4.60E-06	1.95E-07	1.12E-07	1.45E-07	4.20E-06	2.05E-08	4.34E-07	7.25E-06
Barium	6.60E-05	3.14E-05	9.61E-07	5.76E-08	7.29E-07	2.99E-05	6.06E-07	4.09E-06	7.29E-06
Beryllium	5.90E-05	3.98E-06	4.25E-07	7.10E-08	4.12E-08	3.26E-05	2.98E-06	4.31E-06	4.12E-06
Boron	3.65E-04	3.01E-03	5.84E-05	2.74E-05	5.28E-05	1.58E-04	2.88E-06	3.63E-05	--
Cadmium	3.89E-04	2.13E-04	5.94E-04	3.11E-07	2.36E-06	1.77E-04	1.96E-05	5.76E-05	2.84E-03
Chromium (Total)	3.27E-05	2.31E-05	1.60E-06	1.50E-06	7.77E-07	1.48E-05	7.87E-08	6.35E-07	1.55E-04
Chromium VI	4.65E-06	3.29E-06	2.28E-07	2.14E-07	1.12E-07	2.10E-06	1.12E-08	--	4.08E-06
Cobalt	1.98E-04	6.29E-05	3.87E-06	1.60E-05	2.00E-06	8.98E-05	8.76E-08	2.16E-07	2.00E-04
Lead	9.04E-03	9.15E-04	6.74E-04	4.31E-06	5.70E-06	5.13E-03	5.73E-05	1.24E-04	5.97E-04
Mercury - Inorganic	1.12E-03	1.22E-05	3.03E-04	3.60E-06	6.51E-08	3.30E-03	6.03E-04	4.05E-04	4.68E-05
Methyl Mercury	2.37E-05	3.43E-06	2.01E-04	3.60E-08	9.24E-10	4.45E-06	7.92E-08	1.98E-05	1.52E-04
Nickel	4.25E-03	1.02E-03	7.19E-04	8.09E-05	2.97E-05	1.93E-03	1.52E-05	6.56E-05	4.63E-03
Selenium	1.87E-06	4.91E-06	2.95E-07	1.26E-07	1.66E-07	8.28E-07	5.47E-08	5.19E-07	2.82E-05
Silver	2.15E-05	4.27E-05	7.03E-06	1.46E-06	1.16E-06	9.60E-06	4.32E-08	--	1.02E-04
Thallium	2.06E-03	4.05E-04	3.30E-04	2.21E-04	1.32E-05	9.38E-04	3.01E-07	--	--
Tin	2.24E-03	2.46E-04	1.84E-04	3.04E-04	4.25E-06	1.06E-03	2.88E-06	--	1.28E-02
Vanadium	2.13E-04	1.30E-05	1.43E-06	6.02E-07	1.24E-07	1.24E-04	7.82E-08	1.83E-06	1.98E-05
Zinc	9.30E-03	4.35E-03	6.75E-03	4.83E-06	6.82E-05	4.23E-03	3.76E-04	1.97E-03	6.35E-02

Table M.20 - Detailed Project Alone Exposure Point Concentrations for the Farm C Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	4.80E-08	1.04E-08	2.37E-09	3.80E-11	2.49E-10	4.87E-08	8.20E-10	2.00E-10	9.89E-11
Acenaphthylene	1.13E-08	2.17E-09	5.53E-10	1.11E-11	3.01E-10	5.29E-08	8.91E-10	2.15E-10	1.51E-10
Anthracene	4.74E-08	4.75E-09	2.32E-09	2.79E-11	8.02E-11	7.54E-08	1.27E-09	2.94E-10	1.27E-10
Fluoranthene	4.69E-07	3.53E-08	2.29E-08	2.65E-10	1.14E-09	2.24E-06	3.77E-08	8.36E-09	5.72E-09
Fluorene	4.78E-08	7.15E-09	2.34E-09	3.84E-11	6.02E-10	1.86E-07	3.12E-09	7.42E-10	4.78E-10
Phenanthrene	4.83E-07	5.18E-08	2.36E-08	3.18E-10	2.47E-09	2.62E-06	4.41E-08	1.02E-08	3.92E-09
High Molecular Weight PAHs									
Benz(a)anthracene	2.60E-08	1.24E-08	6.35E-10	5.51E-11	3.08E-11	4.41E-07	7.42E-09	1.55E-09	7.73E-10
Benzo(a)pyrene	4.61E-08	6.07E-08	5.62E-09	2.37E-10	4.12E-11	1.60E-06	2.78E-08	2.73E-08	2.06E-09
Benzo(e)pyrene	1.26E-07	4.79E-06	1.53E-08	1.54E-08	1.80E-10	2.87E-06	--	4.72E-08	2.49E-08
Benzo(a)fluorene	5.15E-08	1.28E-08	1.26E-09	7.52E-11	6.31E-10	2.50E-06	--	9.01E-09	7.94E-09
Benzo(b)fluorene	3.56E-08	2.60E-08	8.68E-10	1.19E-10	4.71E-10	1.91E-06	--	6.68E-09	1.33E-08
Benzo(b)fluoranthene	5.99E-08	3.73E-09	1.46E-09	2.58E-11	3.17E-11	1.33E-06	2.24E-08	4.49E-09	2.12E-09
Benzo(g,h,i)perylene	6.51E-07	7.27E-06	7.94E-08	2.27E-08	1.46E-10	2.63E-05	4.42E-07	4.29E-07	2.31E-08
Benzo(k)fluoranthene	5.23E-08	2.44E-08	1.28E-09	9.90E-11	1.32E-11	5.24E-07	8.81E-09	1.77E-09	8.33E-10
Chrysene	9.67E-08	1.24E-08	2.36E-09	7.04E-11	4.76E-11	7.64E-07	1.29E-08	2.68E-09	1.20E-09
Dibenz(a,c)anthracene	8.20E-08	9.01E-07	1.00E-08	2.52E-09	1.86E-10	1.45E-05	2.45E-07	2.34E-07	4.68E-08
Dibenz(a,h)anthracene	2.88E-08	5.90E-07	3.51E-09	1.84E-09	9.54E-12	6.83E-07	1.15E-08	1.12E-08	1.51E-09
Indeno(1,2,3-cd)pyrene	1.38E-07	8.18E-08	1.69E-08	2.59E-10	3.72E-11	4.58E-06	7.71E-08	7.43E-08	7.43E-09
Perylene	2.71E-08	3.57E-06	3.30E-09	1.24E-08	2.13E-11	6.84E-07	1.19E-08	1.14E-08	1.90E-09
Pyrene	2.40E-06	1.52E-07	5.86E-08	1.16E-09	1.61E-09	4.38E-06	7.38E-08	1.65E-08	6.42E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	7.22E-09	9.66E-10	3.55E-09	3.50E-10	3.07E-13	4.77E-08	1.16E-09	1.47E-09	9.70E-09
PCB									
Aroclor 1254 (Total PCBs)	8.95E-06	9.39E-08	--	1.73E-07	4.16E-10	4.08E-05	--	--	8.17E-05
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.85E-09	3.02E-09	8.57E-10	9.12E-09	1.38E-08	2.09E-07	6.30E-08	8.88E-09	1.66E-07
1,2,4-Trichlorobenzene	5.09E-10	1.07E-10	6.26E-11	4.03E-10	3.63E-10	2.41E-08	3.96E-10	9.82E-10	2.29E-08
1,2,4,5-Tetrachlorobenzene	2.16E-08	1.45E-09	2.64E-09	1.67E-09	4.30E-10	1.30E-07	2.32E-09	4.94E-09	1.36E-07
Pentachlorobenzene	3.36E-07	1.43E-08	8.19E-08	1.55E-08	1.11E-09	5.36E-06	9.55E-08	1.97E-07	8.21E-07
Hexachlorobenzene	9.27E-09	5.78E-10	2.26E-09	1.13E-09	3.90E-10	1.25E-06	2.23E-08	4.54E-08	3.90E-07
Pentachlorophenol	1.58E-07	3.61E-05	3.69E-07	2.42E-08	5.24E-08	1.24E-06	2.44E-08	4.59E-08	2.95E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	7.47E-12	7.18E-12	1.03E-12	8.16E-10	2.44E-09	1.48E-08	1.17E-08	6.69E-10	7.70E-09
Chloroform	1.23E-11	3.35E-11	2.76E-12	3.29E-10	2.93E-09	6.16E-09	1.08E-08	2.99E-10	1.47E-09
Dichloromethane	2.20E-09	1.52E-08	1.40E-09	3.41E-08	1.01E-06	4.02E-07	9.69E-07	2.07E-08	1.01E-07
Trichlorofluoromethane (Freon 11)	5.68E-10	8.02E-10	8.77E-11	2.13E-07	9.29E-07	4.24E-06	4.67E-06	1.97E-07	1.47E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.75E-11	3.88E-11	4.24E-12	1.87E-09	8.13E-09	4.39E-08	4.83E-08	2.04E-09	1.29E-08
Other Organics									
Bromoform	1.04E-10	1.72E-10	1.72E-11	6.97E-08	3.62E-07	1.82E-06	2.27E-06	8.55E-08	4.25E-07
O-Terphenyl	1.52E-07	1.96E-08	3.71E-08	1.40E-08	1.36E-09	9.99E-06	2.29E-07	3.56E-07	2.25E-06
Inorganics									
Antimony	8.76E-05	4.56E-05	1.40E-05	5.51E-07	8.42E-07	3.79E-05	1.94E-07	4.28E-07	1.68E-04
Arsenic	8.69E-06	4.62E-06	1.82E-07	1.10E-07	1.29E-07	3.75E-06	1.83E-08	3.87E-07	6.46E-06
Barium	6.17E-05	3.09E-05	8.98E-07	5.60E-08	6.50E-07	2.66E-05	5.40E-07	3.65E-05	6.50E-06
Beryllium	5.52E-05	3.97E-06	3.97E-07	6.89E-08	3.94E-08	3.11E-05	2.84E-06	4.12E-06	3.94E-06
Boron	3.41E-04	2.93E-03	5.45E-05	2.65E-05	4.71E-05	1.41E-04	2.56E-06	3.23E-05	--
Cadmium	3.64E-04	2.04E-04	5.55E-04	2.97E-07	2.11E-06	1.58E-04	1.75E-05	5.14E-05	2.53E-03
Chromium (Total)	3.06E-05	2.33E-05	1.50E-06	1.49E-06	6.92E-07	1.32E-05	7.01E-08	5.66E-07	1.38E-04
Chromium VI	4.35E-06	3.31E-06	2.13E-07	2.12E-07	9.85E-08	1.87E-06	9.97E-09	--	3.64E-06
Cobalt	1.85E-04	6.31E-05	3.61E-06	1.57E-05	1.78E-06	8.01E-05	7.81E-08	1.92E-07	1.78E-04
Lead	8.45E-03	8.93E-04	6.30E-04	4.14E-06	5.49E-06	4.94E-03	5.52E-05	1.19E-04	5.75E-04
Mercury - Inorganic	6.34E-04	9.30E-06	1.72E-04	2.17E-06	3.78E-08	1.92E-03	3.55E-04	2.36E-04	2.72E-05
Methyl Mercury	2.21E-05	2.62E-06	1.88E-04	2.90E-08	5.37E-10	1.92E-06	3.41E-08	8.54E-06	8.85E-05
Nickel	3.97E-03	1.02E-03	6.72E-04	7.92E-05	2.65E-05	1.72E-03	1.35E-05	5.85E-05	4.13E-03
Selenium	1.75E-06	4.95E-06	2.76E-07	1.25E-07	1.48E-07	7.38E-07	4.87E-08	4.62E-07	2.51E-05
Silver	2.01E-05	4.24E-05	6.57E-06	1.43E-06	1.03E-06	8.56E-06	3.85E-08	--	9.13E-05
Thallium	1.93E-03	4.08E-04	3.08E-04	2.17E-04	1.18E-05	8.37E-04	2.69E-07	--	--
Tin	2.09E-03	2.43E-04	1.72E-04	2.94E-04	3.86E-06	9.65E-04	2.61E-06	--	1.16E-02
Vanadium	1.99E-04	1.30E-05	1.34E-06	5.85E-07	1.20E-07	1.20E-04	7.59E-08	1.78E-06	1.93E-05
Zinc	8.69E-03	4.22E-03	6.31E-03	4.64E-06	6.08E-05	3.77E-03	3.35E-04	1.76E-03	5.66E-02

Table M.21 - Detailed Project Alone Exposure Point Concentrations for the Robinson Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	9.41E-08	2.04E-08	4.64E-09	7.34E-11	3.82E-10	7.49E-08	1.26E-09	3.07E-10	1.52E-10
Acenaphthylene	2.20E-08	4.27E-09	1.08E-09	2.09E-11	5.03E-10	8.83E-08	1.49E-09	3.59E-10	2.52E-10
Anthracene	9.28E-08	9.31E-09	4.54E-09	5.41E-11	1.20E-10	1.12E-07	1.89E-09	4.38E-10	1.90E-10
Fluoranthene	9.19E-07	7.03E-08	4.49E-08	5.11E-10	1.51E-09	2.96E-06	4.98E-08	1.10E-08	7.55E-09
Fluorene	9.36E-08	1.40E-08	4.59E-09	7.15E-11	8.55E-10	2.64E-07	4.44E-09	1.05E-09	6.79E-10
Phenanthrene	9.46E-07	1.02E-07	4.63E-08	6.02E-10	3.28E-09	3.49E-06	5.87E-08	1.36E-08	5.21E-09
High Molecular Weight PAHs									
Benz(a)anthracene	5.10E-08	2.49E-08	1.24E-09	1.10E-10	4.03E-11	5.77E-07	9.71E-09	2.02E-09	1.01E-09
Benzo(a)pyrene	9.03E-08	1.24E-07	1.10E-08	4.81E-10	5.43E-11	2.11E-06	3.66E-08	3.60E-08	2.72E-09
Benzo(e)pyrene	2.46E-07	9.97E-06	3.00E-08	3.20E-08	2.40E-10	3.82E-06	--	6.27E-08	3.31E-08
Benzo(a)fluorene	1.01E-07	2.63E-08	2.46E-09	1.43E-10	8.43E-10	3.34E-06	--	1.20E-08	1.06E-08
Benzo(b)fluorene	6.97E-08	5.39E-08	1.70E-09	2.38E-10	6.11E-10	2.48E-06	--	8.67E-09	1.72E-08
Benzo(b)fluoranthene	1.17E-07	7.56E-09	2.86E-09	5.00E-11	4.69E-11	1.97E-06	3.31E-08	6.64E-09	3.13E-09
Benzo(g,h,i)perylene	1.27E-06	1.51E-05	1.55E-07	4.72E-08	2.00E-10	3.60E-05	6.06E-07	5.89E-07	3.17E-08
Benzo(k)fluoranthene	1.02E-07	4.99E-08	2.50E-09	2.01E-10	1.93E-11	7.64E-07	1.29E-08	2.59E-09	1.21E-09
Chrysene	1.89E-07	2.46E-08	4.62E-09	1.38E-10	7.27E-11	1.17E-06	1.96E-08	4.09E-09	1.83E-09
Dibenz(a,c)anthracene	1.61E-07	1.85E-06	1.96E-08	5.15E-09	2.42E-10	1.89E-05	3.18E-07	3.03E-07	6.08E-08
Dibenz(a,h)anthracene	5.64E-08	1.22E-06	6.87E-09	3.82E-09	1.31E-11	9.41E-07	1.58E-08	1.54E-08	2.08E-09
Indeno(1,2,3-cd)pyrene	2.71E-07	1.63E-07	3.31E-08	5.12E-10	5.11E-11	6.29E-06	1.06E-07	1.02E-07	1.02E-08
Perylene	5.31E-08	7.42E-06	6.47E-09	2.58E-08	2.88E-11	9.26E-07	1.61E-08	1.55E-08	2.57E-09
Pyrene	4.70E-06	2.99E-07	1.15E-07	2.27E-09	2.36E-09	6.43E-06	1.08E-07	2.42E-08	9.41E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.12E-08	1.85E-09	5.49E-09	6.32E-10	4.21E-13	6.55E-08	1.59E-09	2.02E-09	1.33E-08
PCB									
Aroclor 1254 (Total PCBs)	1.75E-05	1.88E-07	--	3.37E-07	7.71E-10	7.57E-05	--	--	1.51E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.34E-08	5.92E-09	1.68E-09	1.32E-08	1.94E-08	2.94E-07	8.88E-08	1.25E-08	2.34E-07
1,2,4-Trichlorobenzene	9.97E-10	2.10E-10	1.23E-10	6.06E-10	5.29E-10	3.51E-08	5.76E-10	1.43E-09	3.34E-08
1,2,4,5-Tetrachlorobenzene	4.23E-08	2.84E-09	5.17E-09	3.17E-09	7.84E-10	2.38E-07	4.24E-09	9.02E-09	2.48E-07
Pentachlorobenzene	6.58E-07	2.81E-08	1.60E-07	2.90E-08	1.63E-09	7.88E-06	1.40E-07	2.89E-07	1.21E-06
Hexachlorobenzene	1.82E-08	1.17E-09	4.43E-09	1.77E-09	5.55E-10	1.78E-06	3.17E-08	6.45E-08	5.55E-07
Pentachlorophenol	3.09E-07	7.51E-05	7.24E-07	5.03E-08	1.16E-07	2.76E-06	5.41E-08	1.02E-07	6.55E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.46E-11	1.41E-11	2.02E-12	1.10E-09	3.28E-09	1.99E-08	1.57E-08	9.01E-10	1.04E-08
Chloroform	2.41E-11	6.57E-11	5.41E-12	4.56E-10	4.06E-09	8.52E-09	1.50E-08	4.13E-10	2.03E-09
Dichloromethane	4.32E-09	2.97E-08	2.75E-09	4.82E-08	1.42E-06	5.67E-07	1.37E-06	2.92E-08	1.42E-07
Trichlorofluoromethane (Freon 11)	1.11E-09	1.57E-09	1.72E-10	2.87E-07	1.25E-06	5.71E-06	6.28E-06	2.65E-07	1.98E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	5.38E-11	7.61E-11	8.31E-12	2.53E-09	1.10E-08	5.93E-08	6.53E-08	2.75E-09	1.74E-08
Other Organics									
Bromoform	2.04E-10	3.37E-10	3.36E-11	9.36E-08	4.86E-07	2.45E-06	3.05E-06	1.15E-07	5.71E-07
O-Terphenyl	2.98E-07	4.02E-08	7.27E-08	2.60E-08	1.89E-09	1.40E-05	3.15E-07	4.97E-07	3.14E-06
Inorganics									
Antimony	1.36E-04	6.62E-05	2.17E-05	8.17E-07	1.50E-06	6.73E-05	3.45E-07	7.60E-07	2.99E-04
Arsenic	1.35E-05	6.47E-06	2.82E-07	1.60E-07	2.30E-07	6.66E-06	3.25E-08	6.88E-07	1.15E-05
Barium	9.55E-05	4.45E-05	1.39E-06	8.25E-08	1.15E-06	4.73E-05	9.60E-07	6.48E-06	1.15E-05
Beryllium	8.55E-05	5.60E-06	6.15E-07	1.01E-07	6.29E-08	4.97E-05	4.54E-06	6.57E-06	6.29E-06
Boron	5.28E-04	4.29E-03	8.45E-05	3.94E-05	8.37E-05	2.51E-04	4.56E-06	5.75E-05	--
Cadmium	5.63E-04	3.05E-04	8.60E-04	4.48E-07	3.74E-06	2.80E-04	3.10E-05	9.12E-05	4.50E-03
Chromium (Total)	4.74E-05	3.24E-05	2.32E-06	2.14E-06	1.23E-06	2.34E-05	1.25E-07	1.01E-06	2.46E-04
Chromium VI	6.74E-06	4.61E-06	3.30E-07	3.05E-07	1.77E-07	3.32E-06	1.77E-08	--	6.47E-06
Cobalt	2.87E-04	8.83E-05	5.60E-06	2.28E-05	3.16E-06	1.42E-04	1.39E-07	3.41E-07	3.16E-04
Lead	1.31E-02	1.30E-03	9.76E-04	6.17E-06	8.65E-06	7.78E-03	8.69E-05	1.88E-04	9.05E-04
Mercury - Inorganic	1.28E-03	1.46E-05	3.47E-04	4.14E-06	6.15E-08	3.12E-03	5.71E-04	3.83E-04	4.42E-05
Methyl Mercury	3.43E-05	4.11E-06	2.91E-04	4.54E-08	8.73E-10	8.49E-06	1.51E-07	3.78E-05	1.44E-04
Nickel	6.15E-03	1.44E-03	1.04E-03	1.16E-04	4.70E-05	3.06E-03	2.41E-05	1.04E-04	7.33E-03
Selenium	2.71E-06	6.89E-06	4.28E-07	1.79E-07	2.62E-07	1.31E-06	8.66E-08	8.22E-07	4.46E-05
Silver	3.11E-05	6.02E-05	1.02E-05	2.09E-06	1.83E-06	1.52E-05	6.84E-08	--	1.62E-04
Thallium	2.99E-03	5.68E-04	4.78E-04	3.15E-04	2.09E-05	1.49E-03	4.77E-07	--	--
Tin	3.24E-03	3.48E-04	2.67E-04	4.35E-04	6.68E-06	1.67E-03	4.51E-06	--	2.00E-02
Vanadium	3.09E-04	1.83E-05	2.08E-06	8.59E-07	1.87E-07	1.87E-04	1.18E-07	2.77E-06	3.00E-05
Zinc	1.35E-02	6.21E-03	9.78E-03	6.94E-06	1.08E-04	6.69E-03	5.95E-04	3.12E-03	1.01E-01

Table M.22 - Detailed Project Alone Exposure Point Concentrations for the Bennett Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.72E-08	5.91E-09	1.34E-09	2.26E-11	2.48E-10	4.87E-08	8.19E-10	2.00E-10	9.88E-11
Acenaphthylene	6.38E-09	1.26E-09	3.14E-10	7.28E-12	2.61E-10	4.59E-08	7.73E-10	1.87E-10	1.31E-10
Anthracene	2.69E-08	2.74E-09	1.32E-09	1.61E-11	5.99E-11	5.63E-08	9.47E-10	2.19E-10	9.49E-11
Fluoranthene	2.66E-07	2.53E-08	1.30E-08	1.70E-10	6.17E-10	1.21E-06	2.04E-08	4.52E-09	3.09E-09
Fluorene	2.71E-08	4.19E-09	1.33E-09	2.33E-11	4.43E-10	1.37E-07	2.30E-09	5.46E-10	3.52E-10
Phenanthrene	2.74E-07	3.18E-08	1.34E-08	1.88E-10	1.41E-09	1.49E-06	2.51E-08	5.81E-09	2.23E-09
High Molecular Weight PAHs									
Benz(a)anthracene	1.48E-08	1.00E-08	3.61E-10	4.32E-11	1.84E-11	2.63E-07	4.43E-09	9.24E-10	4.62E-10
Benzo(a)pyrene	2.62E-08	5.73E-08	3.19E-09	2.21E-10	3.07E-11	1.19E-06	2.07E-08	2.03E-08	1.54E-09
Benzo(e)pyrene	7.13E-08	5.54E-06	8.70E-09	1.78E-08	1.10E-10	1.75E-06	--	2.88E-08	1.52E-08
Benzo(a)fluorene	2.92E-08	1.28E-08	7.12E-10	6.50E-11	3.90E-10	1.55E-06	--	5.57E-09	4.91E-09
Benzo(b)fluorene	2.02E-08	2.89E-08	4.92E-10	1.24E-10	2.69E-10	1.09E-06	--	3.82E-09	7.59E-09
Benzo(b)fluoranthene	3.40E-08	3.25E-09	8.29E-10	1.87E-11	3.18E-11	1.33E-06	2.24E-08	4.50E-09	2.12E-09
Benzo(g,h,i)perylene	3.70E-07	8.40E-06	4.51E-08	2.62E-08	1.47E-10	2.64E-05	4.45E-07	4.32E-07	2.32E-08
Benzo(k)fluoranthene	2.98E-08	2.40E-08	7.27E-10	9.35E-11	9.59E-12	3.81E-07	6.41E-09	1.29E-09	6.05E-10
Chrysene	5.50E-08	8.21E-09	1.34E-09	4.47E-11	4.25E-11	6.82E-07	1.15E-08	2.39E-09	1.07E-09
Dibenz(a,c)anthracene	4.65E-08	9.12E-07	5.67E-09	2.54E-09	1.65E-10	1.28E-05	2.16E-07	2.06E-07	4.14E-08
Dibenz(a,h)anthracene	1.64E-08	6.76E-07	1.99E-09	2.11E-09	8.11E-12	5.80E-07	9.77E-09	9.49E-09	1.28E-09
Indeno(1,2,3-cd)pyrene	7.87E-08	5.56E-08	9.59E-09	1.73E-10	3.54E-11	4.35E-06	7.33E-08	7.06E-08	7.06E-09
Perylene	1.54E-08	4.13E-06	1.88E-09	1.44E-08	1.52E-11	4.89E-07	8.50E-09	8.17E-09	1.36E-09
Pyrene	1.37E-06	9.35E-08	3.34E-08	6.88E-10	8.39E-10	2.28E-06	3.84E-08	8.58E-09	3.34E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	3.04E-09	9.46E-10	1.49E-09	2.88E-10	2.19E-13	3.41E-08	8.26E-10	1.05E-09	6.93E-09
PCB									
Aroclor 1254 (Total PCBs)	5.12E-06	7.31E-08	--	1.05E-07	4.59E-10	4.51E-05	--	--	1.26E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	3.88E-09	1.75E-09	4.86E-10	9.88E-09	1.54E-08	2.34E-07	7.06E-08	9.95E-09	1.86E-07
1,2,4-Trichlorobenzene	2.89E-10	6.66E-11	3.55E-11	4.53E-10	4.29E-10	2.85E-08	4.67E-10	1.16E-09	2.71E-08
1,2,4,5-Tetrachlorobenzene	1.22E-08	8.43E-10	1.49E-09	1.43E-09	5.74E-10	1.74E-07	3.10E-09	6.60E-09	1.82E-07
Pentachlorobenzene	1.90E-07	8.67E-09	4.64E-08	9.88E-09	1.28E-09	6.19E-06	1.10E-07	2.27E-07	9.49E-07
Hexachlorobenzene	5.26E-09	4.89E-10	1.28E-09	1.00E-09	4.31E-10	1.38E-06	2.46E-08	5.01E-08	4.31E-07
Pentachlorophenol	8.94E-08	4.18E-05	2.09E-07	2.79E-08	3.48E-08	8.24E-07	1.62E-08	3.05E-08	1.96E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	4.23E-12	4.19E-12	5.85E-13	7.61E-10	2.28E-09	1.38E-08	1.09E-08	6.25E-10	7.19E-09
Chloroform	6.97E-12	1.92E-11	1.56E-12	3.56E-10	3.18E-09	6.68E-09	1.18E-08	3.24E-10	1.59E-09
Dichloromethane	1.25E-09	8.61E-09	7.94E-10	4.04E-08	1.20E-06	4.78E-07	1.15E-06	2.47E-08	1.20E-07
Trichlorofluoromethane (Freon 11)	3.22E-10	4.62E-10	4.97E-11	1.98E-07	8.61E-07	3.93E-06	4.33E-06	1.83E-07	1.36E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.56E-11	2.23E-11	2.40E-12	1.78E-09	7.73E-09	4.18E-08	4.60E-08	1.94E-09	1.23E-08
Other Organics									
Bromoform	5.91E-11	9.75E-11	9.73E-12	6.44E-08	3.34E-07	1.69E-06	2.10E-06	7.90E-08	3.93E-07
O-Terphenyl	8.62E-08	2.04E-08	2.10E-08	1.19E-08	1.04E-09	7.66E-06	1.77E-07	2.73E-07	1.73E-06
Inorganics									
Antimony	3.66E-05	1.98E-05	5.86E-06	2.40E-07	4.15E-07	1.87E-05	9.57E-08	2.11E-07	8.30E-05
Arsenic	3.63E-06	2.05E-06	7.61E-08	4.90E-08	6.37E-08	1.85E-06	9.01E-09	1.91E-07	3.19E-06
Barium	2.58E-05	1.35E-05	3.75E-07	2.45E-08	3.20E-07	1.31E-05	2.66E-07	1.80E-06	3.20E-06
Beryllium	2.31E-05	1.75E-06	1.66E-07	2.97E-08	1.78E-08	1.40E-05	1.28E-06	1.85E-06	1.78E-06
Boron	1.42E-04	1.27E-03	2.28E-05	1.15E-05	2.32E-05	6.96E-05	1.26E-06	1.59E-05	--
Cadmium	1.52E-04	8.73E-05	2.32E-04	1.27E-07	1.04E-06	7.78E-05	8.61E-06	2.53E-05	1.25E-03
Chromium (Total)	1.28E-05	1.04E-05	6.26E-07	6.66E-07	3.41E-07	6.48E-06	3.46E-08	2.79E-07	6.83E-05
Chromium VI	1.82E-06	1.47E-06	8.90E-08	9.22E-08	4.92E-08	9.22E-07	4.92E-09	--	1.79E-06
Cobalt	7.74E-05	2.80E-05	1.51E-06	6.98E-06	8.77E-07	3.95E-05	3.85E-08	9.47E-08	8.77E-05
Lead	3.54E-03	3.87E-04	2.64E-04	1.77E-06	2.45E-06	2.20E-03	2.46E-05	5.31E-05	2.56E-04
Mercury - Inorganic	4.96E-04	5.84E-06	1.34E-04	1.62E-06	4.15E-08	2.10E-03	3.88E-04	2.58E-04	2.98E-05
Methyl Mercury	9.27E-06	1.65E-06	7.88E-05	1.64E-08	5.89E-10	1.88E-06	3.35E-08	8.39E-06	9.71E-05
Nickel	1.66E-03	4.50E-04	2.81E-04	3.50E-05	1.30E-05	8.48E-04	6.67E-06	2.88E-05	2.03E-03
Selenium	7.32E-07	2.20E-06	1.15E-07	5.60E-08	7.28E-08	3.64E-07	2.40E-08	2.28E-07	1.24E-05
Silver	8.39E-06	1.86E-05	2.75E-06	6.35E-07	5.08E-07	4.22E-06	1.90E-08	--	4.50E-05
Thallium	8.06E-04	1.81E-04	1.29E-04	9.62E-05	5.81E-06	4.12E-04	1.32E-07	--	--
Tin	8.75E-04	1.06E-04	7.22E-05	1.28E-04	1.86E-06	4.65E-04	1.26E-06	--	5.58E-03
Vanadium	8.36E-05	5.76E-06	5.62E-07	2.53E-07	5.32E-08	5.32E-05	3.35E-08	7.85E-07	8.51E-06
Zinc	3.64E-03	1.82E-03	2.64E-03	2.00E-06	2.99E-05	1.86E-03	1.65E-04	8.66E-04	2.79E-02

Table M.23 - Detailed Project Alone Exposure Point Concentrations for the Oshawa Creek Conservation Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	3.26E-08	7.07E-09	1.61E-09	2.77E-11	3.77E-10	7.39E-08	1.24E-09	3.03E-10	1.50E-10
Acenaphthylene	7.63E-09	1.49E-09	3.75E-10	9.67E-12	4.10E-10	7.20E-08	1.21E-09	2.93E-10	2.05E-10
Anthracene	3.22E-08	3.25E-09	1.57E-09	1.98E-11	1.16E-10	1.09E-07	1.83E-09	4.23E-10	1.83E-10
Fluoranthene	3.18E-07	2.73E-08	1.55E-08	2.09E-10	1.73E-09	3.40E-06	5.72E-08	1.27E-08	8.68E-09
Fluorene	3.24E-08	4.94E-09	1.59E-09	3.19E-11	8.94E-10	2.76E-07	4.64E-09	1.10E-09	7.10E-10
Phenanthrene	3.28E-07	3.67E-08	1.60E-08	2.49E-10	3.72E-09	3.95E-06	6.65E-08	1.54E-08	5.90E-09
High Molecular Weight PAHs									
Benz(a)anthracene	1.77E-08	1.03E-08	4.31E-10	4.57E-11	4.82E-11	6.91E-07	1.16E-08	2.42E-09	1.21E-09
Benzo(a)pyrene	3.13E-08	5.56E-08	3.82E-09	2.17E-10	6.52E-11	2.53E-06	4.40E-08	4.32E-08	3.27E-09
Benzo(e)pyrene	8.52E-08	5.03E-06	1.04E-08	1.61E-08	2.80E-10	4.47E-06	--	7.34E-08	3.87E-08
Benzo(a)fluorene	3.49E-08	1.22E-08	8.53E-10	7.53E-11	9.58E-10	3.80E-06	--	1.37E-08	1.21E-08
Benzo(b)fluorene	2.41E-08	2.66E-08	5.89E-10	1.24E-10	7.26E-10	2.95E-06	--	1.03E-08	2.04E-08
Benzo(b)fluoranthene	4.06E-08	3.25E-09	9.91E-10	2.13E-11	4.77E-11	2.00E-06	3.36E-08	6.75E-09	3.18E-09
Benzo(g,h,i)perylene	4.42E-07	7.62E-06	5.39E-08	2.38E-08	2.28E-10	4.12E-05	6.93E-07	6.73E-07	3.62E-08
Benzo(k)fluoranthene	3.55E-08	2.30E-08	8.66E-10	9.12E-11	1.96E-11	7.77E-07	1.31E-08	2.63E-09	1.23E-09
Chrysene	6.56E-08	9.15E-09	1.60E-09	5.19E-11	6.96E-11	1.12E-06	1.88E-08	3.92E-09	1.75E-09
Dibenz(a,c)anthracene	5.56E-08	8.64E-07	6.78E-09	2.42E-09	3.00E-10	2.34E-05	3.94E-07	3.76E-07	7.54E-08
Dibenz(a,h)anthracene	1.95E-08	6.14E-07	2.38E-09	1.92E-09	1.48E-11	1.06E-06	1.79E-08	1.74E-08	2.35E-09
Indeno(1,2,3-cd)pyrene	9.40E-08	6.14E-08	1.15E-08	1.96E-10	5.83E-11	7.17E-06	1.21E-07	1.16E-07	1.16E-08
Perylene	1.84E-08	3.74E-06	2.24E-09	1.30E-08	3.31E-11	1.06E-06	1.85E-08	1.78E-08	2.95E-09
Pyrene	1.63E-06	1.07E-07	3.98E-08	8.28E-10	2.28E-09	6.20E-06	1.04E-07	2.33E-08	9.07E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	3.79E-09	8.86E-10	1.86E-09	2.85E-10	3.12E-13	4.86E-08	1.18E-09	1.50E-09	9.87E-09
PCB									
Aroclor 1254 (Total PCBs)	6.08E-06	7.61E-08	--	1.24E-07	5.45E-10	5.35E-05	--	--	7.49E-05
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	4.64E-09	2.07E-09	5.81E-10	1.68E-08	2.66E-08	4.03E-07	1.21E-07	1.71E-08	3.20E-07
1,2,4-Trichlorobenzene	3.45E-10	7.62E-11	4.25E-11	7.10E-10	6.80E-10	4.52E-08	7.41E-10	1.84E-09	4.29E-08
1,2,4,5-Tetrachlorobenzene	1.46E-08	9.95E-10	1.79E-09	1.72E-09	6.90E-10	2.09E-07	3.73E-09	7.94E-09	2.18E-07
Pentachlorobenzene	2.28E-07	1.01E-08	5.56E-08	1.30E-08	1.97E-09	9.51E-06	1.70E-07	3.50E-07	1.46E-06
Hexachlorobenzene	6.29E-09	4.93E-10	1.53E-09	1.66E-09	7.31E-10	2.34E-06	4.17E-08	8.50E-08	7.31E-07
Pentachlorophenol	1.07E-07	3.79E-05	2.51E-07	2.53E-08	3.99E-08	9.46E-07	1.86E-08	3.50E-08	2.25E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	5.07E-12	4.95E-12	7.00E-13	1.67E-09	5.00E-09	3.04E-08	2.40E-08	1.37E-09	1.58E-08
Chloroform	8.34E-12	2.28E-11	1.87E-12	6.54E-10	5.84E-09	1.23E-08	2.16E-08	5.95E-10	2.93E-09
Dichloromethane	1.50E-09	1.03E-08	9.50E-10	6.62E-08	1.96E-06	7.83E-07	1.89E-06	4.04E-08	1.96E-07
Trichlorofluoromethane (Freon 11)	3.85E-10	5.49E-10	5.95E-11	4.40E-07	1.92E-06	8.76E-06	9.64E-06	4.06E-07	3.04E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.86E-11	2.65E-11	2.88E-12	3.82E-09	1.66E-08	8.98E-08	9.89E-08	4.17E-09	2.64E-08
Other Organics									
Bromoform	7.07E-11	1.17E-10	1.16E-11	1.44E-07	7.48E-07	3.77E-06	4.70E-06	1.77E-07	8.79E-07
O-Terphenyl	1.03E-07	1.91E-08	2.52E-08	1.44E-08	2.06E-09	1.52E-05	3.42E-07	5.41E-07	3.42E-06
Inorganics									
Antimony	4.60E-05	2.37E-05	7.36E-06	2.88E-07	4.82E-07	2.17E-05	1.11E-07	2.45E-07	9.63E-05
Arsenic	4.56E-06	2.39E-06	9.56E-08	5.75E-08	7.39E-08	2.14E-06	1.05E-08	2.22E-07	3.70E-06
Barium	3.24E-05	1.60E-05	4.71E-07	2.93E-08	3.72E-07	1.52E-05	3.09E-07	2.09E-06	3.72E-06
Beryllium	2.90E-05	2.05E-06	2.09E-07	3.61E-08	2.81E-08	2.22E-05	2.03E-06	2.94E-06	2.81E-06
Boron	1.79E-04	1.52E-03	2.86E-05	1.38E-05	2.69E-05	8.08E-05	1.47E-06	1.85E-05	--
Cadmium	1.91E-04	1.07E-04	2.92E-04	1.55E-07	1.21E-06	9.07E-05	1.00E-05	2.95E-05	1.45E-03
Chromium (Total)	1.61E-05	1.20E-05	7.86E-07	7.77E-07	3.96E-07	7.53E-06	4.01E-08	3.24E-07	7.92E-05
Chromium VI	2.28E-06	1.71E-06	1.12E-07	1.11E-07	5.63E-08	1.07E-06	5.70E-09	--	2.08E-06
Cobalt	9.72E-05	3.26E-05	1.90E-06	8.21E-06	1.02E-06	4.58E-05	4.47E-08	1.10E-07	1.02E-04
Lead	4.44E-03	4.64E-04	3.31E-04	2.17E-06	4.02E-06	3.62E-03	4.04E-05	8.73E-05	4.21E-04
Mercury - Inorganic	5.16E-04	6.07E-06	1.40E-04	1.72E-06	6.46E-08	3.27E-03	5.99E-04	4.02E-04	4.64E-05
Methyl Mercury	1.16E-05	1.71E-06	9.87E-05	1.79E-08	9.17E-10	7.61E-07	1.36E-08	3.40E-06	1.51E-04
Nickel	2.08E-03	5.27E-04	3.53E-04	4.14E-05	1.52E-05	9.86E-04	7.76E-06	3.35E-05	2.37E-03
Selenium	9.19E-07	2.55E-06	1.45E-07	6.51E-08	8.45E-08	4.23E-07	2.79E-08	2.64E-07	1.44E-05
Silver	1.05E-05	2.19E-05	3.45E-06	7.49E-07	5.90E-07	4.90E-06	2.20E-08	--	5.23E-05
Thallium	1.01E-03	2.10E-04	1.62E-04	1.13E-04	6.76E-06	4.80E-04	1.54E-07	--	--
Tin	1.10E-03	1.26E-04	9.05E-05	1.54E-04	2.35E-06	5.87E-04	1.59E-06	--	7.04E-03
Vanadium	1.05E-04	6.73E-06	7.04E-07	3.07E-07	8.99E-08	8.99E-05	5.67E-08	1.33E-06	1.44E-05
Zinc	4.56E-03	2.20E-03	3.31E-03	2.43E-06	3.48E-05	2.16E-03	1.92E-04	1.01E-03	3.24E-02

Table M.24 - Detailed Project Case Exposure Point Concentrations for the Darlington Provincial Park Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	2.30E-07	1.42E-03	2.81E-08	4.00E-04	2.24E-10	3.57E-06	--	5.87E-08	3.00E-04
Benzo(a)fluorene	9.45E-08	2.59E-08	2.30E-09	2.33E-09	7.89E-10	3.13E-06	--	1.13E-08	9.93E-09
Benzo(b)fluorene	6.52E-08	5.39E-08	1.59E-09	4.59E-09	5.72E-10	2.33E-06	--	8.12E-09	1.61E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.07E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.69E-07	8.75E-07	5.90E-07	3.24E-09	2.05E-06	4.97E-08	6.32E-08	8.35E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.01E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.14E-03	2.81E-03	6.34E-02	1.01E-05	7.03E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.51E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.94E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	2.79E-07	3.99E-08	6.80E-08	2.70E-08	1.77E-09	1.31E-05	2.96E-07	4.65E-07	2.94E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.04E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.65E-01	2.25E-01	1.05E-04	5.00E-01	5.53E-02	1.63E-01	2.77E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	9.28E-06	7.68E-06	4.54E-07	4.91E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.04E-04	6.00E+00	5.85E-03	1.44E-02	2.84E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.12E-02
Mercury - Inorganic	7.14E-02	2.23E-02	1.93E-02	2.00E-03	1.00E-04	5.33E-02	9.75E-03	6.55E-03	9.35E-02
Methyl Mercury	1.45E-03	3.47E-05	1.23E-02	4.69E-04	1.50E-05	1.17E-05	2.08E-07	5.21E-05	9.37E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.06E-03	1.00E+01	7.87E-02	3.40E-01	4.90E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.03E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.00E+00	2.09E-02	1.61E-01	1.05E-02	3.29E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.67E-02	1.01E-03	5.00E+00	1.35E-02	--	7.76E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.25 - Detailed Project Case Exposure Point Concentrations for the Second Marsh Wildlife Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.38E-07	1.42E-03	1.68E-08	4.00E-04	6.48E-10	1.03E-05	--	1.70E-07	3.00E-04
Benzo(a)fluorene	5.65E-08	1.51E-08	1.38E-09	1.35E-09	2.02E-10	8.01E-07	--	2.88E-09	2.55E-09
Benzo(b)fluorene	3.90E-08	3.12E-08	9.52E-10	2.65E-09	1.60E-10	6.50E-07	--	2.27E-09	4.51E-09
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.04E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.69E-07	8.70E-07	5.90E-07	3.24E-09	2.01E-06	4.87E-08	6.19E-08	8.26E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.00E-02	8.41E-04	1.64E-03	1.01E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.11E-03	2.81E-03	6.34E-02	1.02E-05	7.04E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.51E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.94E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.01E-04
O-Terphenyl	1.67E-07	2.32E-08	4.07E-08	1.49E-08	5.20E-10	3.83E-06	9.06E-08	1.36E-07	8.62E-07
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.04E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.06E-04	5.00E-01	5.53E-02	1.63E-01	2.81E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	4.18E-06	3.09E-06	2.05E-07	2.33E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.05E-04	6.00E+00	5.85E-03	1.44E-02	2.85E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.16E-02
Mercury - Inorganic	7.08E-02	2.23E-02	1.92E-02	2.00E-03	1.00E-04	5.78E-02	1.02E-02	7.10E-03	9.36E-02
Methyl Mercury	1.42E-03	3.14E-05	1.21E-02	4.69E-04	1.50E-05	4.55E-06	8.10E-08	2.03E-05	9.39E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.07E-03	1.00E+01	7.87E-02	3.40E-01	4.91E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.03E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.00E+00	2.04E-02	1.60E-01	1.02E-02	3.31E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.63E-02	1.01E-03	5.00E+00	1.35E-02	--	8.07E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.26 - Detailed Project Case Exposure Point Concentrations for the Darlington Waterfront Trail Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	3.44E-07	1.43E-03	4.19E-08	4.00E-04	1.82E-09	2.90E-05	--	4.76E-07	3.00E-04
Benzo(a)fluorene	1.41E-07	3.94E-08	3.44E-09	3.62E-09	6.94E-09	2.75E-05	--	9.90E-08	8.74E-08
Benzo(b)fluorene	9.74E-08	8.22E-08	2.38E-09	7.06E-09	4.75E-09	1.93E-05	--	6.75E-08	1.34E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.49E-04	8.25E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.45E-04	8.07E-04	3.01E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.12E-04	3.00E-04
Perylene	1.00E-02	2.11E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.70E-07	8.75E-07	5.90E-07	3.24E-09	2.48E-06	5.95E-08	7.62E-08	9.20E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.07E-02	8.41E-04	1.64E-03	1.19E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.81E-04	3.73E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.18E-03	2.81E-03	6.33E-02	1.01E-05	7.03E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.53E-03	1.00E-01	2.41E-01	5.16E-03	7.85E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.03E-03	2.01E-02	2.21E-02	9.34E-04	8.36E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.03E-03	5.11E-04	2.01E-02	2.50E-02	9.40E-04	6.14E-04
O-Terphenyl	4.16E-07	6.07E-08	1.02E-07	6.73E-08	1.91E-08	1.41E-04	2.93E-06	5.02E-06	3.17E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.03E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.65E-01	2.25E-01	1.03E-04	5.00E-01	5.53E-02	1.63E-01	2.55E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	9.22E-06	6.36E-06	4.51E-07	4.01E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.15E-02
Mercury - Inorganic	7.19E-02	2.23E-02	1.95E-02	2.01E-03	1.01E-04	7.56E-02	1.18E-02	9.29E-03	9.39E-02
Methyl Mercury	1.45E-03	3.47E-05	1.23E-02	4.69E-04	1.50E-05	4.26E-06	7.58E-08	1.90E-05	9.47E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.04E-03	1.00E+01	7.87E-02	3.40E-01	4.86E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.08E-02	1.61E-01	1.04E-02	3.18E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.66E-02	1.01E-03	5.00E+00	1.35E-02	--	7.06E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.27 - Detailed Project Case Exposure Point Concentrations for the McLaughlin Bay Wildlife Reserve Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.59E-07	1.42E-03	1.94E-08	4.00E-04	9.34E-10	1.49E-05	--	2.45E-07	3.00E-04
Benzo(a)fluorene	6.52E-08	2.01E-08	1.59E-09	1.79E-09	1.73E-10	6.87E-07	--	2.47E-09	2.18E-09
Benzo(b)fluorene	4.50E-08	4.28E-08	1.10E-09	3.64E-09	1.40E-10	5.67E-07	--	1.98E-09	3.93E-09
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.44E-04	8.20E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.06E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.69E-07	8.70E-07	5.90E-07	3.24E-09	2.00E-06	4.85E-08	6.16E-08	8.24E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.00E-02	8.41E-04	1.64E-03	1.01E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.67E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.13E-03	2.81E-03	6.34E-02	1.02E-05	7.05E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.51E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.93E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.01E-04
O-Terphenyl	1.92E-07	3.12E-08	4.70E-08	1.90E-08	4.39E-10	3.23E-06	7.70E-08	1.15E-07	7.29E-07
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.05E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.06E-04	5.00E-01	5.53E-02	1.63E-01	2.88E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	4.04E-06	2.86E-06	1.98E-07	2.26E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.05E-04	6.00E+00	5.85E-03	1.44E-02	2.85E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.21E-02
Mercury - Inorganic	7.09E-02	2.23E-02	1.92E-02	2.00E-03	1.00E-04	6.17E-02	1.06E-02	7.58E-03	9.37E-02
Methyl Mercury	1.42E-03	3.16E-05	1.21E-02	4.69E-04	1.50E-05	2.52E-06	4.48E-08	1.12E-05	9.41E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.08E-03	1.00E+01	7.87E-02	3.40E-01	4.92E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.03E-04	2.00E-01	9.00E-04	--	1.03E-02
Thallium	1.00E+00	2.04E-02	1.60E-01	1.02E-02	3.34E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.63E-02	1.01E-03	5.00E+00	1.35E-02	--	8.56E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.28 - Detailed Project Case Exposure Point Concentrations for the Bowmanville Valley Cons. Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.14E-07	1.42E-03	1.40E-08	4.00E-04	2.48E-10	3.95E-06	--	6.49E-08	3.00E-04
Benzo(a)fluorene	4.70E-08	1.58E-08	1.15E-09	1.42E-09	1.16E-09	4.61E-06	--	1.66E-08	1.47E-08
Benzo(b)fluorene	3.24E-08	3.42E-08	7.91E-10	2.91E-09	8.22E-10	3.34E-06	--	1.17E-08	2.32E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.05E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.69E-07	8.73E-07	5.90E-07	3.24E-09	2.07E-06	5.01E-08	6.37E-08	8.38E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.01E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.12E-03	2.81E-03	6.34E-02	1.01E-05	7.02E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.52E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.95E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	1.39E-07	2.47E-08	3.38E-08	1.94E-08	2.62E-09	1.93E-05	4.31E-07	6.88E-07	4.35E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.05E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.64E-01	2.25E-01	1.06E-04	5.00E-01	5.53E-02	1.63E-01	2.88E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	7.30E-06	6.95E-06	3.57E-07	4.55E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.05E-04	6.00E+00	5.85E-03	1.44E-02	2.85E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.17E-02
Mercury - Inorganic	7.09E-02	2.23E-02	1.92E-02	2.00E-03	1.00E-04	5.35E-02	9.77E-03	6.58E-03	9.36E-02
Methyl Mercury	1.44E-03	3.38E-05	1.22E-02	4.69E-04	1.50E-05	5.43E-06	9.67E-08	2.42E-05	9.37E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.08E-03	1.00E+01	7.87E-02	3.40E-01	4.92E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.03E-04	2.00E-01	9.00E-04	--	1.03E-02
Thallium	1.00E+00	2.09E-02	1.61E-01	1.05E-02	3.34E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.66E-02	1.01E-03	5.00E+00	1.35E-02	--	8.32E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.29 - Detailed Project Case Exposure Point Concentrations for the Eco Baseline Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	4.94E-07	1.42E-03	6.02E-08	4.00E-04	1.22E-10	1.94E-06	--	3.19E-08	3.00E-04
Benzo(a)fluorene	2.03E-07	2.72E-08	4.94E-09	2.52E-09	3.70E-10	1.46E-06	--	5.27E-09	4.65E-09
Benzo(b)fluorene	1.40E-07	4.28E-08	3.41E-09	3.71E-09	2.56E-10	1.04E-06	--	3.64E-09	7.23E-09
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.05E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.79E-06	3.69E-07	8.82E-07	5.90E-07	3.24E-09	2.06E-06	4.98E-08	6.33E-08	8.35E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.02E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.12E-03	2.81E-03	6.33E-02	1.00E-05	7.01E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.51E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.94E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	5.98E-07	3.79E-08	1.46E-07	3.20E-08	9.97E-10	7.34E-06	1.70E-07	2.62E-07	1.65E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.01E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.02E-04	5.00E-01	5.53E-02	1.63E-01	2.33E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.65E-05	1.11E-05	8.09E-07	6.58E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.01E-04	6.00E+00	5.85E-03	1.44E-02	2.81E-02
Lead	1.69E+01	4.13E-01	1.26E+00	4.40E-02	1.00E-03	1.30E+01	1.45E-01	3.14E-01	7.04E-02
Mercury - Inorganic	7.19E-02	2.23E-02	1.95E-02	2.01E-03	1.00E-04	5.18E-02	9.59E-03	6.36E-03	9.35E-02
Methyl Mercury	1.48E-03	3.63E-05	1.26E-02	4.69E-04	1.50E-05	3.94E-06	7.02E-08	1.76E-05	9.36E-02
Nickel	1.23E+01	6.03E-01	2.08E+00	3.11E-01	6.02E-03	1.00E+01	7.87E-02	3.40E-01	4.83E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.01E+00	2.14E-02	1.61E-01	1.07E-02	3.09E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.26E-01	9.70E-02	1.00E-03	5.00E+00	1.35E-02	--	5.82E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.50E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

Table M.30 - Detailed Project Case Exposure Point Concentrations for the Baseline Road & Rundle Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	4.13E-07	1.43E-03	5.04E-08	4.00E-04	4.99E-10	7.95E-06	--	1.31E-07	3.00E-04
Benzo(a)fluorene	1.70E-07	5.25E-08	4.14E-09	4.69E-09	1.65E-09	6.55E-06	--	2.36E-08	2.08E-08
Benzo(b)fluorene	1.17E-07	1.12E-07	2.86E-09	9.52E-09	1.22E-09	4.95E-06	--	1.73E-08	3.43E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.39E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.04E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.16E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.79E-06	3.71E-07	8.80E-07	5.91E-07	3.24E-09	2.13E-06	5.15E-08	6.56E-08	8.50E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.03E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.23E-03	2.81E-03	6.33E-02	1.02E-05	7.04E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.53E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.96E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	5.00E-07	8.16E-08	1.22E-07	5.39E-08	3.67E-09	2.70E-05	5.96E-07	9.63E-07	6.09E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.06E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.07E-04	5.01E-01	5.54E-02	1.63E-01	3.04E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.46E-05	1.19E-05	7.16E-07	7.54E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.06E-04	6.00E+00	5.85E-03	1.44E-02	2.86E-02
Lead	1.69E+01	4.13E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.19E-02
Mercury - Inorganic	7.26E-02	2.23E-02	1.97E-02	2.01E-03	1.00E-04	5.76E-02	1.02E-02	7.08E-03	9.36E-02
Methyl Mercury	1.47E-03	3.87E-05	1.25E-02	4.69E-04	1.50E-05	1.40E-05	2.49E-07	6.23E-05	9.39E-02
Nickel	1.23E+01	6.04E-01	2.08E+00	3.11E-01	6.09E-03	1.00E+01	7.88E-02	3.40E-01	4.95E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.04E-04	2.00E-01	9.00E-04	--	1.03E-02
Thallium	1.01E+00	2.15E-02	1.61E-01	1.08E-02	3.42E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.70E-02	1.01E-03	5.00E+00	1.35E-02	--	9.01E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.31 - Detailed Project Case Exposure Point Concentrations for the Baseline Road & Courtice Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	4.96E-07	1.42E-03	6.05E-08	4.00E-04	4.53E-10	7.22E-06	--	1.19E-07	3.00E-04
Benzo(a)fluorene	2.04E-07	4.26E-08	4.97E-09	3.86E-09	1.37E-09	5.42E-06	--	1.95E-08	1.72E-08
Benzo(b)fluorene	1.41E-07	8.19E-08	3.43E-09	7.01E-09	1.03E-09	4.18E-06	--	1.46E-08	2.90E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.11E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.79E-06	3.70E-07	8.80E-07	5.91E-07	3.24E-09	2.10E-06	5.09E-08	6.48E-08	8.45E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.02E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.18E-03	2.81E-03	6.33E-02	1.02E-05	7.05E-04	1.38E-05	2.61E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.51E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.94E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	6.01E-07	6.36E-08	1.47E-07	4.66E-08	2.88E-09	2.12E-05	4.71E-07	7.54E-07	4.77E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.06E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.08E-04	5.01E-01	5.54E-02	1.63E-01	3.11E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	1.48E-05	1.00E-05	7.25E-07	6.62E-07	1.07E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.07E-04	6.00E+00	5.85E-03	1.44E-02	2.87E-02
Lead	1.69E+01	4.13E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.19E-02
Mercury - Inorganic	7.24E-02	2.23E-02	1.96E-02	2.01E-03	1.00E-04	5.56E-02	9.97E-03	6.83E-03	9.36E-02
Methyl Mercury	1.48E-03	3.67E-05	1.25E-02	4.69E-04	1.50E-05	1.76E-05	3.13E-07	7.83E-05	9.38E-02
Nickel	1.23E+01	6.03E-01	2.08E+00	3.11E-01	6.10E-03	1.00E+01	7.88E-02	3.40E-01	4.96E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.04E-04	2.00E-01	9.00E-04	--	1.03E-02
Thallium	1.01E+00	2.12E-02	1.61E-01	1.07E-02	3.45E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.70E-02	1.01E-03	5.00E+00	1.35E-02	--	9.26E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.32 - Detailed Project Case Exposure Point Concentrations for the Soper Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	8.70E-08	1.42E-03	1.06E-08	4.00E-04	1.44E-10	2.29E-06	--	3.76E-08	3.00E-04
Benzo(a)fluorene	3.57E-08	1.30E-08	8.71E-10	1.17E-09	6.26E-10	2.48E-06	--	8.93E-09	7.88E-09
Benzo(b)fluorene	2.46E-08	2.87E-08	6.01E-10	2.44E-09	4.39E-10	1.78E-06	--	6.23E-09	1.24E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.10E-04	3.00E-04
Perylene	1.00E-02	2.04E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.69E-07	8.71E-07	5.90E-07	3.24E-09	2.03E-06	4.91E-08	6.24E-08	8.29E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.00E-02	8.41E-04	1.64E-03	1.01E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.11E-03	2.81E-03	6.34E-02	1.00E-05	7.01E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.52E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.95E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	1.05E-07	2.05E-08	2.57E-08	1.47E-08	1.49E-09	1.10E-05	2.50E-07	3.91E-07	2.47E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.02E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.03E-04	5.00E-01	5.53E-02	1.63E-01	2.48E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	5.20E-06	4.96E-06	2.55E-07	3.09E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.02E-04	6.00E+00	5.85E-03	1.44E-02	2.82E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.08E-02
Mercury - Inorganic	7.07E-02	2.23E-02	1.91E-02	2.00E-03	1.00E-04	5.22E-02	9.63E-03	6.41E-03	9.35E-02
Methyl Mercury	1.43E-03	3.25E-05	1.21E-02	4.69E-04	1.50E-05	2.11E-06	3.76E-08	9.42E-06	9.36E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.03E-03	1.00E+01	7.87E-02	3.40E-01	4.85E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.06E-02	1.60E-01	1.03E-02	3.15E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.64E-02	1.01E-03	5.00E+00	1.35E-02	--	6.52E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.33 - Detailed Project Case Exposure Point Concentrations for the Bowmanville Marsh Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	9.95E-08	1.42E-03	1.21E-08	4.00E-04	2.86E-10	4.56E-06	--	7.50E-08	3.00E-04
Benzo(a)fluorene	4.08E-08	1.82E-08	9.96E-10	1.62E-09	1.07E-09	4.23E-06	--	1.52E-08	1.34E-08
Benzo(b)fluorene	2.82E-08	4.13E-08	6.87E-10	3.51E-09	7.61E-10	3.09E-06	--	1.08E-08	2.14E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.06E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.69E-07	8.68E-07	5.90E-07	3.24E-09	2.02E-06	4.90E-08	6.22E-08	8.28E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.02E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.13E-03	2.81E-03	6.34E-02	1.00E-05	7.01E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.52E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.96E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	1.20E-07	2.91E-08	2.94E-08	1.99E-08	2.57E-09	1.89E-05	4.23E-07	6.75E-07	4.27E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.01E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.01E-04	5.00E-01	5.53E-02	1.63E-01	2.31E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	2.35E-06	1.88E-06	1.15E-07	1.21E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.01E-04	6.00E+00	5.85E-03	1.44E-02	2.81E-02
Lead	1.69E+01	4.10E-01	1.26E+00	4.40E-02	1.00E-03	1.30E+01	1.45E-01	3.14E-01	7.04E-02
Mercury - Inorganic	7.07E-02	2.23E-02	1.92E-02	2.00E-03	1.00E-04	5.47E-02	9.89E-03	6.73E-03	9.36E-02
Methyl Mercury	1.41E-03	3.10E-05	1.20E-02	4.69E-04	1.50E-05	2.45E-06	4.35E-08	1.09E-05	9.37E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.02E-03	1.00E+01	7.87E-02	3.40E-01	4.83E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.02E-02	1.60E-01	1.01E-02	3.07E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.62E-02	1.00E-03	5.00E+00	1.35E-02	--	5.74E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.50E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

Table M.34 - Detailed Project Case Exposure Point Concentrations for the South of Site, Eco Baseline S7 Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	3.24E-07	1.41E-03	3.95E-08	4.00E-04	7.99E-11	1.27E-06	--	2.09E-08	3.00E-04
Benzo(a)fluorene	1.33E-07	1.69E-08	3.24E-09	1.57E-09	2.42E-10	9.60E-07	--	3.46E-09	3.05E-09
Benzo(b)fluorene	9.17E-08	2.56E-08	2.24E-09	2.23E-09	1.68E-10	6.83E-07	--	2.38E-09	4.73E-09
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.10E-04	3.00E-04
Perylene	1.00E-02	2.03E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.69E-07	8.77E-07	5.90E-07	3.24E-09	2.03E-06	4.91E-08	6.23E-08	8.29E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.01E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.10E-03	2.81E-03	6.33E-02	1.00E-05	7.01E-04	1.37E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.51E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.94E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.01E-04
O-Terphenyl	3.92E-07	2.32E-08	9.56E-08	2.02E-08	6.53E-10	4.81E-06	1.13E-07	1.71E-07	1.08E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.01E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.65E-01	2.25E-01	1.01E-04	5.00E-01	5.53E-02	1.63E-01	2.27E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.10E-05	7.39E-06	5.39E-07	4.39E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.01E-04	6.00E+00	5.85E-03	1.44E-02	2.81E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.00E-03	1.30E+01	1.45E-01	3.14E-01	7.03E-02
Mercury - Inorganic	7.12E-02	2.23E-02	1.93E-02	2.00E-03	1.00E-04	5.12E-02	9.53E-03	6.29E-03	9.35E-02
Methyl Mercury	1.46E-03	3.37E-05	1.24E-02	4.69E-04	1.50E-05	2.63E-06	4.68E-08	1.17E-05	9.36E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.01E-03	1.00E+01	7.87E-02	3.40E-01	4.82E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.00E-04	2.00E-01	9.00E-04	--	1.00E-02
Thallium	1.00E+00	2.09E-02	1.61E-01	1.05E-02	3.06E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.67E-02	1.00E-03	5.00E+00	1.35E-02	--	5.55E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.50E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

Table M.35 - Detailed Project Case Exposure Point Concentrations for the Sports Fields Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	3.49E-07	1.42E-03	4.25E-08	4.00E-04	1.84E-09	2.94E-05	--	4.83E-07	3.00E-04
Benzo(a)fluorene	1.43E-07	3.81E-08	3.49E-09	3.51E-09	7.03E-09	2.79E-05	--	1.00E-07	8.85E-08
Benzo(b)fluorene	9.87E-08	7.85E-08	2.41E-09	6.75E-09	4.82E-09	1.96E-05	--	6.84E-08	1.36E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.49E-04	8.25E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.45E-04	8.07E-04	3.01E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.12E-04	3.00E-04
Perylene	1.00E-02	2.11E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.70E-07	8.75E-07	5.90E-07	3.24E-09	2.50E-06	6.00E-08	7.68E-08	9.24E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.07E-02	8.41E-04	1.64E-03	1.19E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.81E-04	3.73E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.18E-03	2.81E-03	6.33E-02	1.01E-05	7.03E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.54E-03	1.00E-01	2.41E-01	5.16E-03	7.85E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.03E-03	2.01E-02	2.22E-02	9.34E-04	8.37E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.03E-03	5.11E-04	2.01E-02	2.50E-02	9.41E-04	6.14E-04
O-Terphenyl	4.22E-07	5.84E-08	1.03E-07	6.68E-08	1.94E-08	1.43E-04	2.97E-06	5.08E-06	3.22E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.03E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.65E-01	2.25E-01	1.03E-04	5.00E-01	5.53E-02	1.63E-01	2.56E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	9.57E-06	6.59E-06	4.68E-07	4.15E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.15E-02
Mercury - Inorganic	7.19E-02	2.23E-02	1.95E-02	2.01E-03	1.00E-04	7.53E-02	1.18E-02	9.25E-03	9.39E-02
Methyl Mercury	1.45E-03	3.47E-05	1.23E-02	4.69E-04	1.50E-05	4.42E-06	7.87E-08	1.97E-05	9.47E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.04E-03	1.00E+01	7.87E-02	3.40E-01	4.87E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.08E-02	1.61E-01	1.04E-02	3.19E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.66E-02	1.01E-03	5.00E+00	1.35E-02	--	7.14E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.36 - Detailed Project Case Exposure Point Concentrations for the Water Pollution Control Plant Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	4.00E-07	1.42E-03	4.88E-08	4.00E-04	9.88E-11	1.57E-06	--	2.59E-08	3.00E-04
Benzo(a)fluorene	1.64E-07	2.75E-08	4.00E-09	2.51E-09	2.99E-10	1.19E-06	--	4.27E-09	3.77E-09
Benzo(b)fluorene	1.13E-07	4.87E-08	2.76E-09	4.18E-09	2.08E-10	8.44E-07	--	2.95E-09	5.85E-09
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.06E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.69E-07	8.78E-07	5.90E-07	3.24E-09	2.03E-06	4.93E-08	6.26E-08	8.31E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.01E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.13E-03	2.81E-03	6.33E-02	1.00E-05	7.01E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.51E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.94E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	4.84E-07	3.99E-08	1.18E-07	3.00E-08	8.08E-10	5.95E-06	1.39E-07	2.12E-07	1.34E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.01E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.01E-04	5.00E-01	5.53E-02	1.63E-01	2.29E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.27E-05	8.52E-06	6.21E-07	5.07E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.01E-04	6.00E+00	5.85E-03	1.44E-02	2.81E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.00E-03	1.30E+01	1.45E-01	3.14E-01	7.03E-02
Mercury - Inorganic	7.17E-02	2.23E-02	1.94E-02	2.01E-03	1.00E-04	5.16E-02	9.57E-03	6.34E-03	9.35E-02
Methyl Mercury	1.46E-03	3.50E-05	1.24E-02	4.69E-04	1.50E-05	3.03E-06	5.39E-08	1.35E-05	9.36E-02
Nickel	1.23E+01	6.03E-01	2.08E+00	3.11E-01	6.01E-03	1.00E+01	7.87E-02	3.40E-01	4.82E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.01E+00	2.10E-02	1.61E-01	1.05E-02	3.07E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.68E-02	1.00E-03	5.00E+00	1.35E-02	--	5.63E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.50E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

Table M.37 - Detailed Project Case Exposure Point Concentrations for the Future Industrial Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	6.89E-07	1.42E-03	8.40E-08	4.00E-04	1.70E-10	2.71E-06	--	4.45E-08	3.00E-04
Benzo(a)fluorene	2.83E-07	3.33E-08	6.90E-09	3.10E-09	5.15E-10	2.04E-06	--	7.35E-09	6.49E-09
Benzo(b)fluorene	1.95E-07	4.77E-08	4.76E-09	4.16E-09	3.57E-10	1.45E-06	--	5.07E-09	1.01E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.05E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.80E-06	3.70E-07	8.89E-07	5.91E-07	3.24E-09	2.10E-06	5.07E-08	6.45E-08	8.43E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.02E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.12E-03	2.81E-03	6.33E-02	1.01E-05	7.01E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.52E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.95E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	8.34E-07	4.50E-08	2.04E-07	4.11E-08	1.39E-09	1.02E-05	2.34E-07	3.65E-07	2.31E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.02E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.02E-01	3.78E-01	7.66E-01	2.25E-01	1.02E-04	5.00E-01	5.53E-02	1.63E-01	2.41E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	2.37E-05	1.58E-05	1.16E-06	9.41E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.02E-04	6.00E+00	5.85E-03	1.44E-02	2.82E-02
Lead	1.70E+01	4.15E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.05E-02
Mercury - Inorganic	7.26E-02	2.23E-02	1.97E-02	2.01E-03	1.00E-04	5.24E-02	9.65E-03	6.44E-03	9.35E-02
Methyl Mercury	1.52E-03	3.91E-05	1.29E-02	4.69E-04	1.50E-05	5.64E-06	1.00E-07	2.52E-05	9.36E-02
Nickel	1.23E+01	6.05E-01	2.08E+00	3.11E-01	6.03E-03	1.00E+01	7.87E-02	3.40E-01	4.84E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.01E+00	2.19E-02	1.62E-01	1.10E-02	3.12E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.26E-01	9.75E-02	1.00E-03	5.00E+00	1.35E-02	--	6.18E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.38 - Detailed Project Case Exposure Point Concentrations for the Harmony Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	6.65E-08	1.41E-03	8.11E-09	4.00E-04	1.19E-11	1.89E-07	--	3.10E-09	3.00E-04
Benzo(a)fluorene	2.73E-08	7.75E-09	6.66E-10	6.91E-10	2.78E-11	1.10E-07	--	3.97E-10	3.50E-10
Benzo(b)fluorene	1.88E-08	1.62E-08	4.60E-10	1.38E-09	2.02E-11	8.22E-08	--	2.87E-10	5.70E-10
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.36E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.03E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.00E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.10E-04	3.00E-04
Perylene	1.00E-02	2.02E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.68E-07	8.69E-07	5.90E-07	3.24E-09	1.97E-06	4.78E-08	6.07E-08	8.18E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.00E-02	8.41E-04	1.64E-03	1.00E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.67E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.09E-03	2.81E-03	6.34E-02	1.00E-05	7.01E-04	1.37E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.50E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.92E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.01E-04
O-Terphenyl	8.05E-08	1.20E-08	1.97E-08	7.29E-09	5.26E-11	3.87E-07	9.95E-09	1.38E-08	8.72E-08
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.01E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.01E-04	5.00E-01	5.53E-02	1.63E-01	2.30E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	2.39E-06	1.91E-06	1.17E-07	1.22E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.01E-04	6.00E+00	5.85E-03	1.44E-02	2.81E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.00E-03	1.30E+01	1.45E-01	3.14E-01	7.03E-02
Mercury - Inorganic	7.04E-02	2.23E-02	1.91E-02	2.00E-03	1.00E-04	5.02E-02	9.43E-03	6.17E-03	9.35E-02
Methyl Mercury	1.41E-03	3.03E-05	1.20E-02	4.69E-04	1.50E-05	9.82E-07	1.75E-08	4.38E-06	9.35E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.02E-03	1.00E+01	7.87E-02	3.40E-01	4.82E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.02E-02	1.60E-01	1.01E-02	3.07E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.62E-02	1.00E-03	5.00E+00	1.35E-02	--	5.66E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.50E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

Table M.39 - Detailed Project Case Exposure Point Concentrations for the Farewell Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	7.60E-08	1.41E-03	9.27E-09	4.00E-04	1.09E-10	1.74E-06	--	2.86E-08	3.00E-04
Benzo(a)fluorene	3.12E-08	8.21E-09	7.61E-10	7.40E-10	3.82E-10	1.52E-06	--	5.45E-09	4.81E-09
Benzo(b)fluorene	2.15E-08	1.69E-08	5.25E-10	1.44E-09	2.85E-10	1.16E-06	--	4.05E-09	8.04E-09
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.36E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.00E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.10E-04	3.00E-04
Perylene	1.00E-02	2.02E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.68E-07	8.69E-07	5.90E-07	3.24E-09	1.99E-06	4.83E-08	6.13E-08	8.22E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.00E-02	8.41E-04	1.64E-03	1.00E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.67E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.09E-03	2.81E-03	6.34E-02	1.00E-05	7.01E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.51E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.93E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.01E-04
O-Terphenyl	9.21E-08	1.26E-08	2.25E-08	9.36E-09	8.22E-10	6.05E-06	1.41E-07	2.16E-07	1.36E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.01E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.01E-04	5.00E-01	5.53E-02	1.63E-01	2.30E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	2.58E-06	1.97E-06	1.26E-07	1.26E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.01E-04	6.00E+00	5.85E-03	1.44E-02	2.81E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.00E-03	1.30E+01	1.45E-01	3.14E-01	7.03E-02
Mercury - Inorganic	7.04E-02	2.23E-02	1.91E-02	2.00E-03	1.00E-04	5.11E-02	9.53E-03	6.28E-03	9.35E-02
Methyl Mercury	1.41E-03	3.04E-05	1.20E-02	4.69E-04	1.50E-05	1.14E-06	2.02E-08	5.06E-06	9.36E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.02E-03	1.00E+01	7.87E-02	3.40E-01	4.82E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.02E-02	1.60E-01	1.01E-02	3.07E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.62E-02	1.00E-03	5.00E+00	1.35E-02	--	5.69E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.50E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

Table M.40 - Detailed Project Case Exposure Point Concentrations for the Farm A Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	3.96E-07	1.42E-03	4.83E-08	4.00E-04	2.09E-09	3.33E-05	--	5.48E-07	3.00E-04
Benzo(a)fluorene	1.62E-07	3.76E-08	3.96E-09	3.50E-09	7.99E-09	3.17E-05	--	1.14E-07	1.01E-07
Benzo(b)fluorene	1.12E-07	7.46E-08	2.73E-09	6.44E-09	5.47E-09	2.22E-05	--	7.77E-08	1.54E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.05E-02	8.50E-04	8.26E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.03E-02	8.46E-04	8.07E-04	3.01E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.12E-04	3.00E-04
Perylene	1.00E-02	2.10E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.70E-07	8.77E-07	5.90E-07	3.25E-09	2.61E-06	6.26E-08	8.03E-08	9.47E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.08E-02	8.41E-04	1.64E-03	1.22E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.02E-02	1.81E-04	3.73E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.65E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.17E-03	2.81E-03	6.33E-02	1.01E-05	7.03E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.94E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.88E-04	1.54E-03	1.00E-01	2.41E-01	5.16E-03	7.90E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.03E-03	2.01E-02	2.22E-02	9.35E-04	8.43E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.03E-03	5.12E-04	2.01E-02	2.50E-02	9.41E-04	6.16E-04
O-Terphenyl	4.79E-07	5.68E-08	1.17E-07	7.16E-08	2.20E-08	1.62E-04	3.35E-06	5.77E-06	3.65E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.03E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.04E-04	5.00E-01	5.53E-02	1.63E-01	2.65E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.16E-05	7.95E-06	5.67E-07	5.01E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.19E-02
Mercury - Inorganic	7.20E-02	2.23E-02	1.95E-02	2.01E-03	1.01E-04	7.68E-02	1.19E-02	9.43E-03	9.39E-02
Methyl Mercury	1.46E-03	3.54E-05	1.24E-02	4.69E-04	1.50E-05	5.35E-06	9.53E-08	2.39E-05	9.47E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.05E-03	1.00E+01	7.87E-02	3.40E-01	4.88E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.01E+00	2.10E-02	1.61E-01	1.05E-02	3.23E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.67E-02	1.01E-03	5.00E+00	1.35E-02	--	7.59E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.41 - Detailed Project Case Exposure Point Concentrations for the Farm B Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.88E-07	1.42E-03	2.30E-08	4.00E-04	2.28E-10	3.63E-06	--	5.96E-08	3.00E-04
Benzo(a)fluorene	7.73E-08	2.61E-08	1.89E-09	2.32E-09	7.54E-10	2.99E-06	--	1.08E-08	9.49E-09
Benzo(b)fluorene	5.34E-08	5.65E-08	1.30E-09	4.80E-09	5.55E-10	2.26E-06	--	7.88E-09	1.57E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.08E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.69E-07	8.71E-07	5.90E-07	3.24E-09	2.02E-06	4.89E-08	6.21E-08	8.27E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.01E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.15E-03	2.81E-03	6.34E-02	1.01E-05	7.02E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.51E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.94E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	2.28E-07	4.08E-08	5.57E-08	2.62E-08	1.67E-09	1.23E-05	2.80E-07	4.39E-07	2.78E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.02E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.02E-04	5.00E-01	5.53E-02	1.63E-01	2.43E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	4.65E-06	3.29E-06	2.28E-07	2.14E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.02E-04	6.00E+00	5.85E-03	1.44E-02	2.82E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.06E-02
Mercury - Inorganic	7.11E-02	2.23E-02	1.93E-02	2.00E-03	1.00E-04	5.33E-02	9.74E-03	6.55E-03	9.35E-02
Methyl Mercury	1.42E-03	3.22E-05	1.21E-02	4.69E-04	1.50E-05	4.45E-06	7.92E-08	1.98E-05	9.37E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.03E-03	1.00E+01	7.87E-02	3.40E-01	4.85E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.04E-02	1.60E-01	1.02E-02	3.13E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.63E-02	1.00E-03	5.00E+00	1.35E-02	--	6.28E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.42 - Detailed Project Case Exposure Point Concentrations for the Farm C Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.26E-07	1.41E-03	1.53E-08	4.00E-04	1.80E-10	2.87E-06	--	4.72E-08	3.00E-04
Benzo(a)fluorene	5.15E-08	1.28E-08	1.26E-09	1.16E-09	6.31E-10	2.50E-06	--	9.01E-09	7.94E-09
Benzo(b)fluorene	3.56E-08	2.60E-08	8.68E-10	2.22E-09	4.71E-10	1.91E-06	--	6.68E-09	1.33E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.04E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.68E-07	8.70E-07	5.90E-07	3.24E-09	2.01E-06	4.87E-08	6.19E-08	8.26E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.00E-02	8.41E-04	1.64E-03	1.01E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.10E-03	2.81E-03	6.34E-02	1.01E-05	7.01E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.51E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.94E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	1.52E-07	1.96E-08	3.71E-08	1.49E-08	1.36E-09	9.99E-06	2.29E-07	3.56E-07	2.25E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.02E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.02E-04	5.00E-01	5.53E-02	1.63E-01	2.40E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	4.35E-06	3.31E-06	2.13E-07	2.12E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.02E-04	6.00E+00	5.85E-03	1.44E-02	2.82E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.06E-02
Mercury - Inorganic	7.06E-02	2.23E-02	1.91E-02	2.00E-03	1.00E-04	5.19E-02	9.61E-03	6.38E-03	9.35E-02
Methyl Mercury	1.42E-03	3.14E-05	1.21E-02	4.69E-04	1.50E-05	1.92E-06	3.41E-08	8.54E-06	9.36E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.03E-03	1.00E+01	7.87E-02	3.40E-01	4.84E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.04E-02	1.60E-01	1.02E-02	3.12E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.63E-02	1.00E-03	5.00E+00	1.35E-02	--	6.16E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.43 - Detailed Project Case Exposure Point Concentrations for the Robinson Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	2.46E-07	1.42E-03	3.00E-08	4.00E-04	2.40E-10	3.82E-06	--	6.27E-08	3.00E-04
Benzo(a)fluorene	1.01E-07	2.63E-08	2.46E-09	2.36E-09	8.43E-10	3.34E-06	--	1.20E-08	1.06E-08
Benzo(b)fluorene	6.97E-08	5.39E-08	1.70E-09	4.59E-09	6.11E-10	2.48E-06	--	8.67E-09	1.72E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.07E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.69E-07	8.73E-07	5.90E-07	3.24E-09	2.03E-06	4.91E-08	6.25E-08	8.30E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.02E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.14E-03	2.81E-03	6.34E-02	1.01E-05	7.03E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.51E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.94E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	2.98E-07	4.02E-08	7.27E-08	2.78E-08	1.89E-09	1.40E-05	3.15E-07	4.97E-07	3.14E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.03E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.64E-01	2.25E-01	1.04E-04	5.00E-01	5.53E-02	1.63E-01	2.60E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	6.74E-06	4.61E-06	3.30E-07	3.05E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.09E-02
Mercury - Inorganic	7.13E-02	2.23E-02	1.93E-02	2.00E-03	1.00E-04	5.31E-02	9.73E-03	6.53E-03	9.35E-02
Methyl Mercury	1.43E-03	3.29E-05	1.22E-02	4.69E-04	1.50E-05	8.49E-06	1.51E-07	3.78E-05	9.36E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.05E-03	1.00E+01	7.87E-02	3.40E-01	4.87E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.00E+00	2.06E-02	1.60E-01	1.03E-02	3.21E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.64E-02	1.01E-03	5.00E+00	1.35E-02	--	7.00E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.44 - Detailed Project Case Exposure Point Concentrations for the Bennett Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	7.13E-08	1.42E-03	8.70E-09	4.00E-04	1.10E-10	1.75E-06	--	2.88E-08	3.00E-04
Benzo(a)fluorene	2.92E-08	1.28E-08	7.12E-10	1.13E-09	3.90E-10	1.55E-06	--	5.57E-09	4.91E-09
Benzo(b)fluorene	2.02E-08	2.89E-08	4.92E-10	2.45E-09	2.69E-10	1.09E-06	--	3.82E-09	7.59E-09
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.04E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.68E-07	8.68E-07	5.90E-07	3.24E-09	2.00E-06	4.84E-08	6.15E-08	8.23E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.00E-02	8.41E-04	1.64E-03	1.01E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.11E-03	2.81E-03	6.34E-02	1.00E-05	7.01E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.51E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.94E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	8.62E-08	2.04E-08	2.10E-08	1.28E-08	1.04E-09	7.66E-06	1.77E-07	2.73E-07	1.73E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.01E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.01E-04	5.00E-01	5.53E-02	1.63E-01	2.27E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.82E-06	1.47E-06	8.90E-08	9.47E-08	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.01E-04	6.00E+00	5.85E-03	1.44E-02	2.81E-02
Lead	1.69E+01	4.10E-01	1.26E+00	4.40E-02	1.00E-03	1.30E+01	1.45E-01	3.14E-01	7.03E-02
Mercury - Inorganic	7.05E-02	2.23E-02	1.91E-02	2.00E-03	1.00E-04	5.21E-02	9.62E-03	6.40E-03	9.35E-02
Methyl Mercury	1.41E-03	3.04E-05	1.20E-02	4.69E-04	1.50E-05	1.88E-06	3.35E-08	8.39E-06	9.36E-02
Nickel	1.23E+01	6.00E-01	2.08E+00	3.11E-01	6.01E-03	1.00E+01	7.87E-02	3.40E-01	4.82E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.00E-02
Thallium	1.00E+00	2.02E-02	1.60E-01	1.01E-02	3.06E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.61E-02	1.00E-03	5.00E+00	1.35E-02	--	5.56E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.50E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

Table M.45 - Detailed Project Case Exposure Point Concentrations for the Oshawa Creek Conservation Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	8.52E-08	1.42E-03	1.04E-08	4.00E-04	2.80E-10	4.47E-06	--	7.34E-08	3.00E-04
Benzo(a)fluorene	3.49E-08	1.22E-08	8.53E-10	1.10E-09	9.58E-10	3.80E-06	--	1.37E-08	1.21E-08
Benzo(b)fluorene	2.41E-08	2.66E-08	5.89E-10	2.26E-09	7.26E-10	2.95E-06	--	1.03E-08	2.04E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.04E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.68E-07	8.68E-07	5.90E-07	3.24E-09	2.01E-06	4.88E-08	6.20E-08	8.26E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.01E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.11E-03	2.81E-03	6.34E-02	1.00E-05	7.01E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.52E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.95E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	1.03E-07	1.91E-08	2.52E-08	1.52E-08	2.06E-09	1.52E-05	3.42E-07	5.41E-07	3.42E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.01E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.01E-04	5.00E-01	5.53E-02	1.63E-01	2.30E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	2.28E-06	1.71E-06	1.12E-07	1.11E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.01E-04	6.00E+00	5.85E-03	1.44E-02	2.81E-02
Lead	1.69E+01	4.10E-01	1.26E+00	4.40E-02	1.00E-03	1.30E+01	1.45E-01	3.14E-01	7.04E-02
Mercury - Inorganic	7.05E-02	2.23E-02	1.91E-02	2.00E-03	1.00E-04	5.33E-02	9.74E-03	6.55E-03	9.35E-02
Methyl Mercury	1.41E-03	3.05E-05	1.20E-02	4.69E-04	1.50E-05	7.61E-07	1.36E-08	3.40E-06	9.37E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.02E-03	1.00E+01	7.87E-02	3.40E-01	4.82E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.02E-02	1.60E-01	1.01E-02	3.07E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.62E-02	1.00E-03	5.00E+00	1.35E-02	--	5.70E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.50E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

Table M.46 - Detailed Process Upset Case Exposure Point Concentrations for the Darlington Provincial Park Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.47E-07	5.34E-08	1.22E-08	1.92E-10	1.00E-09	1.96E-07	3.30E-09	8.06E-10	3.99E-10
Acenaphthylene	5.78E-08	1.12E-08	2.84E-09	5.48E-11	1.32E-09	2.31E-07	3.89E-09	9.42E-10	6.60E-10
Anthracene	2.43E-07	2.44E-08	1.19E-08	1.42E-10	3.14E-10	2.95E-07	4.96E-09	1.15E-09	4.97E-10
Fluoranthene	2.41E-06	1.88E-07	1.18E-07	1.35E-09	3.95E-09	7.76E-06	1.31E-07	2.89E-08	1.98E-08
Fluorene	2.45E-07	3.69E-08	1.20E-08	1.88E-10	2.24E-09	6.91E-07	1.16E-08	2.76E-09	1.78E-09
Phenanthrene	2.48E-06	2.69E-07	1.21E-07	1.58E-09	8.61E-09	9.14E-06	1.54E-07	3.56E-08	1.36E-08
High Molecular Weight PAHs									
Benz(a)anthracene	1.34E-07	6.75E-08	3.26E-09	2.97E-10	1.06E-10	1.51E-06	2.54E-08	5.30E-09	2.65E-09
Benzo(a)pyrene	2.37E-07	3.40E-07	2.89E-08	1.32E-09	1.42E-10	5.52E-06	9.59E-08	9.42E-08	7.13E-09
Benzo(e)pyrene	6.45E-07	2.80E-05	7.86E-08	9.00E-08	6.28E-10	1.00E-05	--	1.64E-07	8.67E-08
Benzo(a)fluorene	2.64E-07	7.26E-08	6.45E-09	3.90E-10	2.21E-09	8.76E-06	--	3.15E-08	2.78E-08
Benzo(b)fluorene	1.83E-07	1.51E-07	4.46E-09	6.63E-10	1.60E-09	6.51E-06	--	2.27E-08	4.51E-08
Benzo(b)fluoranthene	3.07E-07	2.06E-08	7.50E-09	1.34E-10	1.23E-10	5.15E-06	8.67E-08	1.74E-08	8.20E-09
Benzo(g,h,i)perylene	3.34E-06	4.25E-05	4.07E-07	1.33E-07	5.24E-10	9.44E-05	1.59E-06	1.54E-06	8.30E-08
Benzo(k)fluoranthene	2.68E-07	1.38E-07	6.55E-09	5.53E-10	5.04E-11	2.00E-06	3.37E-08	6.78E-09	3.18E-09
Chrysene	4.96E-07	6.53E-08	1.21E-08	3.66E-10	1.91E-10	3.06E-06	5.15E-08	1.07E-08	4.79E-09
Dibenz(a,c)anthracene	4.21E-07	5.12E-06	5.13E-08	1.43E-08	6.34E-10	4.95E-05	8.32E-07	7.95E-07	1.59E-07
Dibenz(a,h)anthracene	1.48E-07	3.44E-06	1.80E-08	1.07E-08	3.44E-11	2.47E-06	4.15E-08	4.03E-08	5.46E-09
Indeno(1,2,3-cd)pyrene	7.11E-07	4.34E-07	8.67E-08	1.36E-09	1.34E-10	2.77E-05	2.77E-07	2.67E-07	2.67E-08
Perylene	1.39E-07	2.09E-05	1.70E-08	7.26E-08	7.56E-11	2.43E-06	4.22E-08	4.06E-08	6.74E-09
Pyrene	1.23E-05	7.87E-07	3.01E-07	5.97E-09	6.19E-09	1.68E-05	2.83E-07	6.34E-08	2.47E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	4.30E-08	5.79E-09	2.12E-08	2.08E-09	1.62E-12	2.52E-07	6.09E-09	7.76E-09	5.13E-08
PCB									
Aroclor 1254 (Total PCBs)	4.59E-05	5.05E-07	--	8.88E-07	2.02E-09	1.98E-04	--	--	3.97E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	3.52E-08	1.55E-08	4.40E-09	3.46E-08	5.09E-08	7.72E-07	2.33E-07	3.28E-08	6.12E-07
1,2,4-Trichlorobenzene	2.61E-09	5.55E-10	3.21E-10	1.59E-09	1.39E-09	9.20E-08	1.51E-09	3.74E-09	8.74E-08
1,2,4,5-Tetrachlorobenzene	1.11E-07	7.45E-09	1.35E-08	8.32E-09	2.06E-09	6.23E-07	1.11E-08	2.36E-08	6.50E-07
Pentachlorobenzene	1.72E-06	7.41E-08	4.21E-07	7.61E-08	4.27E-09	2.06E-05	3.68E-07	7.58E-07	3.16E-06
Hexachlorobenzene	4.76E-08	3.16E-09	1.16E-08	4.67E-09	1.46E-09	4.66E-06	8.30E-08	1.69E-07	1.46E-06
Pentachlorophenol	8.10E-07	2.11E-04	1.90E-06	1.41E-07	3.05E-07	7.23E-06	1.42E-07	2.67E-07	1.72E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	3.84E-11	3.70E-11	5.30E-12	2.88E-09	8.59E-09	5.23E-08	4.12E-08	2.36E-09	2.72E-08
Chloroform	6.31E-11	1.72E-10	1.42E-11	1.19E-09	1.06E-08	2.23E-08	3.93E-08	1.08E-09	5.33E-09
Dichloromethane	1.13E-08	7.78E-08	7.19E-09	1.26E-07	3.72E-06	1.49E-06	3.58E-06	7.66E-08	3.72E-07
Trichlorofluoromethane (Freon 11)	2.92E-09	4.13E-09	4.50E-10	7.51E-07	3.27E-06	1.50E-05	1.65E-05	6.94E-07	5.19E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.41E-10	2.00E-10	2.18E-11	6.62E-09	2.88E-08	1.55E-07	1.71E-07	7.21E-09	4.56E-08
Other Organics									
Bromoform	5.35E-10	8.83E-10	8.81E-11	2.45E-07	1.27E-06	6.42E-06	8.00E-06	3.01E-07	1.50E-06
O-Terphenyl	7.81E-07	1.12E-07	1.90E-07	7.08E-08	4.97E-09	3.66E-05	7.98E-07	1.30E-06	8.24E-06
Inorganics									
Antimony	2.71E-04	1.49E-04	4.33E-05	1.79E-06	2.98E-06	1.34E-04	6.89E-07	1.52E-06	5.97E-04
Arsenic	2.69E-05	1.54E-05	5.63E-07	3.68E-07	4.58E-07	1.33E-05	6.48E-08	1.37E-06	2.29E-05
Barium	1.91E-04	1.01E-04	2.78E-06	1.83E-07	2.30E-06	9.45E-05	1.92E-06	1.29E-05	2.30E-05
Beryllium	1.71E-04	1.32E-05	1.23E-06	2.22E-07	1.26E-07	9.92E-05	9.06E-06	1.31E-05	1.26E-05
Boron	1.05E-03	9.49E-03	1.69E-04	8.58E-05	1.67E-04	5.01E-04	9.09E-06	1.15E-04	--
Cadmium	1.12E-03	6.51E-04	1.72E-03	9.45E-07	7.46E-06	5.60E-04	6.19E-05	1.82E-04	8.97E-03
Chromium (Total)	9.46E-05	7.83E-05	4.63E-06	5.00E-06	2.46E-06	4.67E-05	2.49E-07	2.01E-06	4.91E-04
Chromium VI	1.35E-05	1.11E-05	6.59E-07	7.12E-07	3.49E-07	6.64E-06	3.54E-08	--	1.29E-05
Cobalt	5.73E-04	2.11E-04	1.12E-05	5.23E-05	6.31E-06	2.84E-04	2.77E-07	6.81E-07	6.31E-04
Lead	2.61E-02	2.90E-03	1.95E-03	1.32E-05	1.73E-05	1.55E-02	1.73E-04	3.75E-04	1.81E-03
Mercury - Inorganic	1.99E-03	3.05E-05	5.39E-04	6.83E-06	9.55E-08	4.84E-03	8.74E-04	5.95E-04	6.86E-05
Methyl Mercury	6.84E-05	8.60E-06	5.81E-04	9.34E-08	1.36E-09	1.69E-05	3.02E-07	7.55E-05	2.24E-04
Nickel	1.23E-02	3.40E-03	2.08E-03	2.62E-04	9.38E-05	6.10E-03	4.80E-05	2.07E-04	1.46E-02
Selenium	5.42E-06	1.66E-05	8.54E-07	4.21E-07	5.24E-07	2.62E-06	1.73E-07	1.64E-06	8.91E-05
Silver	6.21E-05	1.40E-04	2.03E-05	4.76E-06	3.66E-06	3.04E-05	1.37E-07	--	3.24E-04
Thallium	5.96E-03	1.37E-03	9.54E-04	7.21E-04	4.18E-05	2.97E-03	9.52E-07	--	--
Tin	6.46E-03	8.00E-04	5.33E-04	9.51E-04	1.33E-05	3.33E-03	9.01E-06	--	4.00E-02
Vanadium	6.17E-04	4.35E-05	4.14E-06	1.89E-06	3.74E-07	3.74E-04	2.36E-07	5.52E-06	5.98E-05
Zinc	2.69E-02	1.36E-02	1.95E-02	1.49E-05	2.15E-04	1.34E-02	1.19E-03	6.23E-03	2.01E-01

Table M.47 - Detailed Process Upset Case Exposure Point Concentrations for the Second Marsh Wildlife Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.48E-07	3.20E-08	7.28E-09	1.13E-10	4.02E-10	7.88E-08	1.33E-09	3.23E-10	1.60E-10
Acenaphthylene	3.46E-08	6.69E-09	1.70E-09	2.72E-11	2.37E-10	4.15E-08	6.99E-10	1.69E-10	1.19E-10
Anthracene	1.46E-07	1.46E-08	7.12E-09	8.44E-11	1.47E-10	1.39E-07	2.33E-09	5.40E-10	2.34E-10
Fluoranthene	1.44E-06	1.11E-07	7.04E-08	8.29E-10	3.93E-09	7.71E-06	1.30E-07	2.88E-08	1.97E-08
Fluorene	1.47E-07	2.20E-08	7.20E-09	1.10E-10	1.12E-09	3.46E-07	5.82E-09	1.38E-09	8.90E-10
Phenanthrene	1.48E-06	1.60E-07	7.26E-08	9.69E-10	6.95E-09	7.37E-06	1.24E-07	2.87E-08	1.10E-08
High Molecular Weight PAHs									
Benz(a)anthracene	8.01E-08	3.99E-08	1.95E-09	1.76E-10	6.68E-11	9.56E-07	1.61E-08	3.35E-09	1.68E-09
Benzo(a)pyrene	1.42E-07	1.99E-07	1.73E-08	7.76E-10	2.48E-10	9.62E-06	1.67E-07	1.64E-07	1.24E-08
Benzo(e)pyrene	3.86E-07	1.62E-05	4.71E-08	5.19E-08	1.81E-09	2.89E-05	--	4.75E-07	2.50E-07
Benzo(a)fluorene	1.58E-07	4.23E-08	3.86E-09	2.17E-10	5.66E-10	2.24E-06	--	8.08E-09	7.13E-09
Benzo(b)fluorene	1.09E-07	8.73E-08	2.67E-09	3.77E-10	4.48E-10	1.82E-06	--	6.36E-09	1.26E-08
Benzo(b)fluoranthene	1.84E-07	1.21E-08	4.49E-09	7.95E-11	8.79E-11	3.68E-06	6.20E-08	1.25E-08	5.86E-09
Benzo(g,h,i)perylene	2.00E-06	2.45E-05	2.44E-07	7.67E-08	1.57E-09	2.82E-04	4.75E-06	4.62E-06	2.48E-07
Benzo(k)fluoranthene	1.61E-07	8.04E-08	3.93E-09	3.25E-10	1.31E-10	5.20E-06	8.74E-08	1.76E-08	8.26E-09
Chrysene	2.97E-07	3.90E-08	7.25E-09	2.18E-10	1.02E-10	1.64E-06	2.76E-08	5.76E-09	2.57E-09
Dibenz(a,c)anthracene	2.52E-07	2.99E-06	3.07E-08	8.33E-09	1.66E-09	1.30E-04	2.18E-06	2.08E-06	4.17E-07
Dibenz(a,h)anthracene	8.85E-08	1.99E-06	1.08E-08	6.20E-09	1.03E-10	7.35E-06	1.24E-07	1.20E-07	1.63E-08
Indeno(1,2,3-cd)pyrene	4.26E-07	2.59E-07	5.19E-08	8.17E-10	3.84E-10	4.72E-05	7.95E-07	7.66E-07	7.66E-08
Perylene	8.33E-08	1.20E-05	1.02E-08	4.19E-08	2.72E-10	8.74E-06	1.52E-07	1.46E-07	2.42E-08
Pyrene	7.40E-06	4.71E-07	1.81E-07	3.61E-09	6.44E-09	1.75E-05	2.95E-07	6.59E-08	2.56E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.95E-08	3.08E-09	9.60E-09	1.06E-09	8.42E-13	1.31E-07	3.17E-09	4.04E-09	2.66E-08
PCB									
Aroclor 1254 (Total PCBs)	2.76E-05	2.99E-07	--	5.33E-07	1.18E-09	1.15E-04	--	--	1.61E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	2.10E-08	9.29E-09	2.63E-09	1.83E-08	2.66E-08	4.03E-07	1.21E-07	1.71E-08	3.19E-07
1,2,4-Trichlorobenzene	1.56E-09	3.31E-10	1.92E-10	7.84E-10	6.63E-10	4.40E-08	7.23E-10	1.79E-09	4.18E-08
1,2,4,5-Tetrachlorobenzene	6.63E-08	4.45E-09	8.10E-09	4.29E-09	7.59E-10	2.30E-07	4.10E-09	8.73E-09	2.40E-07
Pentachlorobenzene	1.03E-06	4.42E-08	2.52E-07	4.46E-08	2.05E-09	9.93E-06	1.77E-07	3.65E-07	1.52E-06
Hexachlorobenzene	2.85E-08	1.86E-09	6.95E-09	2.67E-09	8.08E-10	2.58E-06	4.61E-08	9.39E-08	8.08E-07
Pentachlorophenol	4.85E-07	1.22E-04	1.13E-06	8.22E-08	4.27E-07	1.01E-05	1.98E-07	3.74E-07	2.40E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.29E-11	2.21E-11	3.17E-12	1.73E-09	5.16E-09	3.14E-08	2.47E-08	1.42E-09	1.63E-08
Chloroform	3.78E-11	1.03E-10	8.47E-12	6.34E-10	5.64E-09	1.18E-08	2.08E-08	5.74E-10	2.82E-09
Dichloromethane	6.77E-09	4.66E-08	4.30E-09	5.98E-08	1.76E-06	7.04E-07	1.69E-06	3.63E-08	1.76E-07
Trichlorofluoromethane (Freon 11)	1.74E-09	2.47E-09	2.69E-10	4.44E-07	1.94E-06	8.85E-06	9.73E-06	4.10E-07	3.07E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.44E-11	1.19E-10	1.30E-11	3.93E-09	1.71E-08	9.24E-08	1.02E-07	4.29E-09	2.71E-08
Other Organics									
Bromoform	3.20E-10	5.28E-10	5.27E-11	1.44E-07	7.46E-07	3.76E-06	4.68E-06	1.76E-07	8.77E-07
O-Terphenyl	4.67E-07	6.49E-08	1.14E-07	3.90E-08	1.45E-09	1.07E-05	2.44E-07	3.82E-07	2.41E-06
Inorganics									
Antimony	1.22E-04	6.23E-05	1.95E-05	8.33E-07	3.19E-06	1.43E-04	7.35E-07	1.62E-06	6.37E-04
Arsenic	1.21E-05	6.25E-06	2.54E-07	1.74E-07	4.90E-07	1.42E-05	6.93E-08	1.47E-06	2.45E-05
Barium	8.59E-05	4.22E-05	1.25E-06	8.56E-08	2.46E-06	1.01E-04	2.05E-06	1.38E-05	2.46E-05
Beryllium	7.70E-05	5.38E-06	5.54E-07	9.85E-08	1.58E-07	1.25E-04	1.14E-05	1.65E-05	1.58E-05
Boron	4.75E-04	4.02E-03	7.60E-05	3.98E-05	1.79E-04	5.36E-04	9.72E-06	1.23E-04	--
Cadmium	5.07E-04	2.81E-04	7.74E-04	4.33E-07	7.98E-06	5.99E-04	6.62E-05	1.95E-04	9.60E-03
Chromium (Total)	4.26E-05	3.15E-05	2.09E-06	2.37E-06	2.62E-06	4.99E-05	2.66E-07	2.14E-06	5.25E-04
Chromium VI	6.06E-06	4.47E-06	2.97E-07	3.37E-07	3.78E-07	7.09E-06	3.78E-08	--	1.38E-05
Cobalt	2.58E-04	8.53E-05	5.04E-06	2.47E-05	6.74E-06	3.03E-04	2.96E-07	7.28E-07	6.74E-04
Lead	1.18E-02	1.22E-03	8.79E-04	5.87E-06	2.22E-05	2.00E-02	2.23E-04	4.82E-04	2.33E-03
Mercury - Inorganic	1.09E-03	1.35E-05	2.96E-04	3.62E-06	2.19E-07	1.13E-02	1.94E-03	1.39E-03	1.57E-04
Methyl Mercury	3.09E-05	3.81E-06	2.62E-04	4.17E-08	7.24E-09	6.59E-06	1.17E-07	2.94E-05	6.12E-04
Nickel	5.53E-03	1.38E-03	9.37E-04	6.52E-04	1.00E-04	6.52E-03	5.13E-05	2.22E-04	1.56E-02
Selenium	2.44E-06	6.68E-06	3.84E-07	2.00E-07	5.60E-07	2.80E-06	1.85E-07	1.75E-06	9.52E-05
Silver	2.80E-05	5.76E-05	9.16E-06	2.24E-06	3.91E-06	3.25E-05	1.46E-07	--	3.46E-04
Thallium	2.69E-03	5.51E-04	4.30E-04	3.39E-04	4.46E-05	3.17E-03	1.02E-06	--	--
Tin	2.91E-03	3.31E-04	2.40E-04	4.33E-04	1.48E-05	3.71E-03	1.00E-05	--	4.45E-02
Vanadium	2.78E-04	1.76E-05	1.87E-06	8.34E-07	4.90E-07	4.90E-04	3.09E-07	7.23E-06	7.83E-05
Zinc	1.21E-02	5.79E-03	8.80E-03	6.89E-06	2.30E-04	1.43E-02	1.27E-03	6.65E-03	2.14E-01

Table M.48 - Detailed Process Upset Case Exposure Point Concentrations for the Darlington Waterfront Trail Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	3.68E-07	7.98E-08	1.82E-08	4.00E-10	1.35E-08	2.65E-06	4.46E-08	1.09E-08	5.38E-09
Acenaphthylene	8.62E-08	1.67E-08	4.24E-09	1.73E-10	1.11E-08	1.94E-06	3.27E-08	7.90E-09	5.54E-09
Anthracene	3.63E-07	3.65E-08	1.78E-08	2.45E-10	3.01E-09	2.83E-06	4.76E-08	1.10E-08	4.77E-09
Fluoranthene	3.60E-06	2.82E-07	1.76E-07	2.40E-09	3.05E-08	6.00E-05	1.01E-06	2.24E-07	1.53E-07
Fluorene	3.66E-07	5.51E-08	1.80E-08	5.05E-10	2.33E-08	7.17E-06	1.21E-07	2.87E-08	1.85E-08
Phenanthrene	3.70E-06	4.02E-07	1.81E-07	3.12E-09	7.04E-08	7.47E-05	1.26E-06	2.91E-07	1.12E-07
High Molecular Weight PAHs									
Benz(a)anthracene	2.00E-07	1.02E-07	4.87E-09	4.59E-10	8.94E-10	1.28E-05	2.15E-07	4.49E-08	2.25E-08
Benzo(a)pyrene	3.54E-07	5.16E-07	4.31E-08	2.02E-09	1.48E-09	5.75E-05	1.00E-06	9.83E-07	7.44E-08
Benzo(e)pyrene	9.63E-07	4.29E-05	1.17E-07	1.38E-07	5.09E-09	8.11E-05	--	1.33E-06	7.03E-07
Benzo(a)fluorene	3.95E-07	1.10E-07	9.63E-09	8.48E-10	1.94E-08	7.70E-05	--	2.77E-07	2.45E-07
Benzo(b)fluorene	2.73E-07	2.30E-07	6.65E-09	1.18E-09	1.33E-08	5.41E-05	--	1.89E-07	3.75E-07
Benzo(b)fluoranthene	4.59E-07	3.11E-08	1.12E-08	2.24E-10	1.57E-09	6.58E-05	1.11E-06	2.22E-07	1.05E-07
Benzo(g,h,i)perylene	4.99E-06	6.50E-05	6.09E-07	2.03E-07	6.88E-09	1.24E-03	2.09E-05	2.03E-05	1.09E-06
Benzo(k)fluoranthene	4.01E-07	2.09E-07	9.79E-09	8.45E-10	4.38E-10	1.74E-05	2.92E-07	5.89E-08	2.76E-08
Chrysene	7.41E-07	9.79E-08	1.81E-08	5.78E-10	2.15E-09	3.45E-05	5.80E-07	1.21E-07	5.40E-08
Dibenz(a,c)anthracene	6.28E-07	7.79E-06	7.66E-08	2.18E-08	7.99E-09	6.23E-04	1.05E-05	1.00E-05	2.01E-06
Dibenz(a,h)anthracene	2.21E-07	5.26E-06	2.69E-08	1.64E-08	3.83E-10	2.74E-05	4.61E-07	4.48E-07	6.06E-08
Indeno(1,2,3-cd)pyrene	1.06E-06	6.51E-07	1.30E-07	2.07E-09	3.46E-09	2.06E-04	3.46E-06	3.33E-06	3.34E-07
Perylene	2.08E-07	3.19E-05	2.53E-08	1.11E-07	7.08E-10	2.27E-05	3.96E-07	3.80E-07	6.31E-08
Pyrene	1.84E-05	1.18E-06	4.50E-07	9.35E-09	3.71E-08	1.01E-04	1.70E-06	3.80E-07	1.48E-07
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	4.29E-08	7.80E-09	2.12E-08	2.62E-09	9.21E-12	1.43E-06	3.41E-08	4.41E-08	2.91E-07
PCB									
Aroclor 1254 (Total PCBs)	6.88E-05	7.63E-07	--	1.36E-06	1.91E-08	1.87E-03	--	--	5.25E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	5.25E-08	2.32E-08	6.57E-09	7.33E-07	1.18E-06	1.79E-05	5.39E-06	7.60E-07	1.42E-05
1,2,4-Trichlorobenzene	3.90E-09	8.31E-10	4.80E-10	3.12E-08	3.09E-08	2.05E-06	3.36E-08	8.34E-08	1.95E-06
1,2,4,5-Tetrachlorobenzene	1.66E-07	1.11E-08	2.02E-08	5.10E-08	2.98E-08	9.02E-06	1.61E-07	3.42E-07	9.42E-06
Pentachlorobenzene	2.57E-06	1.11E-07	6.28E-07	2.33E-07	8.18E-08	3.95E-04	7.04E-06	1.45E-05	6.06E-05
Hexachlorobenzene	7.11E-08	4.78E-09	1.73E-08	5.11E-08	3.00E-08	9.61E-05	1.71E-06	3.49E-06	3.00E-05
Pentachlorophenol	1.21E-06	3.23E-04	2.83E-06	2.16E-07	3.14E-07	7.44E-06	1.46E-07	2.75E-07	1.77E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	5.73E-11	5.53E-11	7.91E-12	6.68E-08	2.00E-07	1.21E-06	9.57E-07	5.49E-08	6.32E-07
Chloroform	9.43E-11	2.57E-10	2.12E-11	2.98E-08	2.66E-07	5.59E-07	9.84E-07	2.71E-08	1.33E-07
Dichloromethane	1.69E-08	1.16E-07	1.07E-08	3.27E-06	9.70E-05	3.88E-05	9.34E-05	2.00E-06	9.70E-06
Trichlorofluoromethane (Freon 11)	4.36E-09	6.17E-09	6.72E-10	1.77E-05	7.70E-05	3.52E-04	3.87E-04	1.63E-05	1.22E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.11E-10	2.98E-10	3.25E-11	1.55E-07	6.74E-07	3.64E-06	4.01E-06	1.69E-07	1.07E-06
Other Organics									
Bromoform	7.99E-10	1.32E-09	1.32E-10	5.81E-06	3.02E-05	1.52E-04	1.90E-04	7.14E-06	3.55E-05
O-Terphenyl	1.17E-06	1.70E-07	2.84E-07	1.81E-07	5.35E-08	3.94E-04	7.90E-06	1.40E-05	8.89E-05
Inorganics									
Antimony	2.69E-04	1.32E-04	4.30E-05	1.58E-06	1.89E-06	8.50E-05	4.36E-07	9.60E-07	3.78E-04
Arsenic	2.67E-05	1.29E-05	5.60E-07	3.05E-07	2.90E-07	8.41E-06	4.10E-08	8.68E-07	1.45E-05
Barium	1.89E-04	8.86E-05	2.76E-06	1.60E-07	1.46E-06	5.98E-05	1.21E-06	8.18E-06	1.46E-05
Beryllium	1.70E-04	1.12E-05	1.22E-06	2.02E-07	1.41E-07	1.12E-04	1.02E-05	1.47E-05	1.41E-05
Boron	1.05E-03	8.55E-03	1.68E-04	7.65E-05	1.06E-04	3.17E-04	5.75E-06	7.25E-05	--
Cadmium	1.12E-03	6.06E-04	1.71E-03	8.79E-07	4.77E-06	3.57E-04	3.95E-05	1.16E-04	5.73E-03
Chromium (Total)	9.40E-05	6.48E-05	4.60E-06	4.09E-06	1.55E-06	2.95E-05	1.57E-07	1.27E-06	3.11E-04
Chromium VI	1.34E-05	9.22E-06	6.54E-07	5.81E-07	2.21E-07	4.20E-06	2.24E-08	--	8.16E-06
Cobalt	5.69E-04	1.76E-04	1.11E-05	4.37E-05	3.99E-06	1.80E-04	1.75E-07	4.31E-07	3.99E-04
Lead	2.60E-02	2.59E-03	1.94E-03	1.23E-05	2.06E-05	1.85E-02	2.07E-04	4.47E-04	2.16E-03
Mercury - Inorganic	2.75E-03	3.03E-05	7.44E-04	8.97E-06	7.32E-07	3.71E-02	5.42E-03	4.56E-03	5.26E-04
Methyl Mercury	6.80E-05	8.54E-06	5.78E-04	9.29E-08	1.04E-08	6.17E-06	1.10E-07	2.75E-05	1.71E-03
Nickel	1.22E-02	2.87E-03	2.07E-03	2.23E-04	5.97E-05	3.88E-03	3.05E-05	1.32E-04	9.31E-03
Selenium	5.38E-06	1.38E-05	8.48E-07	3.41E-07	3.31E-07	1.66E-06	1.09E-07	1.04E-06	5.63E-05
Silver	6.17E-05	1.20E-04	2.02E-05	4.01E-06	2.31E-06	1.92E-05	8.63E-08	--	2.05E-04
Thallium	5.92E-03	1.13E-03	9.48E-04	6.06E-04	2.66E-05	1.89E-03	6.07E-07	--	--
Tin	6.42E-03	6.94E-04	5.30E-04	8.56E-04	9.97E-06	2.49E-03	6.74E-06	--	2.99E-02
Vanadium	6.13E-04	3.65E-05	4.12E-06	1.72E-06	4.68E-07	4.68E-04	2.95E-07	6.91E-06	7.49E-05
Zinc	2.67E-02	1.24E-02	1.94E-02	1.35E-05	1.37E-04	8.49E-03	7.54E-04	3.96E-03	1.27E-01

Table M.49 - Detailed Process Upset Case Exposure Point Concentrations for the McLaughlin Bay Wildlife Reserve Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.70E-07	3.69E-08	8.40E-09	1.29E-10	3.34E-10	6.55E-08	1.10E-09	2.69E-10	1.33E-10
Acenaphthylene	3.99E-08	7.76E-09	1.96E-09	3.07E-11	1.87E-10	3.28E-08	5.53E-10	1.34E-10	9.37E-11
Anthracene	1.68E-07	1.69E-08	8.21E-09	9.69E-11	1.25E-10	1.18E-07	1.98E-09	4.59E-10	1.99E-10
Fluoranthene	1.66E-06	1.36E-07	8.11E-08	9.72E-10	3.73E-09	7.34E-06	1.23E-07	2.74E-08	1.87E-08
Fluorene	1.69E-07	2.56E-08	8.30E-09	1.23E-10	9.61E-10	2.96E-07	4.99E-09	1.19E-09	7.63E-10
Phenanthrene	1.71E-06	1.88E-07	8.37E-08	1.11E-09	6.34E-09	6.73E-06	1.13E-07	2.62E-08	1.00E-08
High Molecular Weight PAHs									
Benz(a)anthracene	9.23E-08	5.02E-08	2.25E-09	2.19E-10	6.21E-11	8.89E-07	1.50E-08	3.12E-09	1.56E-09
Benzo(a)pyrene	1.63E-07	2.61E-07	1.99E-08	1.01E-09	2.69E-10	1.04E-05	1.81E-07	1.78E-07	1.35E-08
Benzo(e)pyrene	4.45E-07	2.25E-05	5.43E-08	7.22E-08	2.62E-09	4.17E-05	--	6.85E-07	3.61E-07
Benzo(a)fluorene	1.83E-07	5.63E-08	4.45E-09	2.78E-10	4.85E-10	1.92E-06	--	6.92E-09	6.11E-09
Benzo(b)fluorene	1.26E-07	1.20E-07	3.08E-09	5.09E-10	3.91E-10	1.59E-06	--	5.55E-09	1.10E-08
Benzo(b)fluoranthene	2.12E-07	1.55E-08	5.17E-09	9.69E-11	7.70E-11	3.23E-06	5.43E-08	1.09E-08	5.13E-09
Benzo(g,h,i)perylene	2.31E-06	3.41E-05	2.81E-07	1.06E-07	2.06E-09	3.72E-04	6.26E-06	6.09E-06	3.27E-07
Benzo(k)fluoranthene	1.85E-07	1.07E-07	4.51E-09	4.26E-10	1.81E-10	7.20E-06	1.21E-07	2.44E-08	1.14E-08
Chrysene	3.42E-07	4.68E-08	8.35E-09	2.58E-10	8.79E-11	1.41E-06	2.37E-08	4.95E-09	2.21E-09
Dibenz(a,c)anthracene	2.91E-07	3.99E-06	3.54E-08	1.11E-08	2.00E-09	1.56E-04	2.62E-06	2.51E-06	5.02E-07
Dibenz(a,h)anthracene	1.02E-07	2.75E-06	1.24E-08	8.59E-09	1.41E-10	1.01E-05	1.70E-07	1.65E-07	2.23E-08
Indeno(1,2,3-cd)pyrene	4.91E-07	3.13E-07	5.98E-08	9.81E-10	4.95E-10	6.09E-05	1.02E-06	9.87E-07	9.87E-08
Perylene	9.60E-08	1.67E-05	1.17E-08	5.82E-08	4.38E-10	1.41E-05	2.45E-07	2.35E-07	3.91E-08
Pyrene	8.50E-06	5.51E-07	2.07E-07	4.17E-09	6.35E-09	1.73E-05	2.91E-07	6.50E-08	2.53E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.87E-08	3.99E-09	9.21E-09	1.29E-09	6.52E-13	1.02E-07	2.46E-09	3.13E-09	2.06E-08
PCB									
Aroclor 1254 (Total PCBs)	3.16E-05	3.70E-07	--	6.18E-07	1.01E-09	9.94E-05	--	--	2.63E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	2.43E-08	1.08E-08	3.04E-09	1.57E-08	2.18E-08	3.31E-07	9.97E-08	1.41E-08	2.62E-07
1,2,4-Trichlorobenzene	1.80E-09	3.90E-10	2.22E-10	6.82E-10	5.41E-10	3.59E-08	5.90E-10	1.46E-09	3.42E-08
1,2,4,5-Tetrachlorobenzene	7.65E-08	5.17E-09	9.35E-09	4.51E-09	5.57E-10	1.69E-07	3.01E-09	6.41E-09	1.76E-07
Pentachlorobenzene	1.19E-06	5.18E-08	2.90E-07	5.08E-08	1.69E-09	8.18E-06	1.46E-07	3.00E-07	1.25E-06
Hexachlorobenzene	3.29E-08	2.36E-09	8.02E-09	2.75E-09	6.66E-10	2.13E-06	3.80E-08	7.74E-08	6.66E-07
Pentachlorophenol	5.59E-07	1.69E-04	1.31E-06	1.14E-07	5.47E-07	1.30E-05	2.54E-07	4.79E-07	3.08E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.65E-11	2.57E-11	3.66E-12	1.42E-09	4.24E-09	2.58E-08	2.03E-08	1.17E-09	1.34E-08
Chloroform	4.36E-11	1.19E-10	9.78E-12	5.22E-10	4.63E-09	9.72E-09	1.71E-08	4.71E-10	2.32E-09
Dichloromethane	7.82E-09	5.38E-08	4.97E-09	4.92E-08	1.44E-06	5.77E-07	1.39E-06	2.97E-08	1.44E-07
Trichlorofluoromethane (Freon 11)	2.01E-09	2.86E-09	3.11E-10	3.65E-07	1.59E-06	7.26E-06	7.99E-06	3.37E-07	2.52E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	9.74E-11	1.38E-10	1.50E-11	3.24E-09	1.41E-08	7.59E-08	8.36E-08	3.52E-09	2.23E-08
Other Organics									
Bromoform	3.69E-10	6.10E-10	6.08E-11	1.18E-07	6.12E-07	3.09E-06	3.84E-06	1.45E-07	7.19E-07
O-Terphenyl	5.39E-07	8.74E-08	1.31E-07	4.95E-08	1.23E-09	9.05E-06	2.08E-07	3.23E-07	2.04E-06
Inorganics									
Antimony	1.18E-04	5.87E-05	1.89E-05	8.07E-07	3.52E-06	1.59E-04	8.13E-07	1.79E-06	7.05E-04
Arsenic	1.17E-05	5.81E-06	2.45E-07	1.69E-07	5.42E-07	1.57E-05	7.66E-08	1.62E-06	2.71E-05
Barium	8.30E-05	3.96E-05	1.21E-06	8.30E-08	2.72E-06	1.12E-04	2.26E-06	1.53E-05	2.72E-05
Beryllium	7.42E-05	5.01E-06	5.34E-07	9.54E-08	2.07E-07	1.63E-04	1.49E-05	2.16E-05	2.07E-05
Boron	4.59E-04	3.80E-03	7.35E-05	3.86E-05	1.98E-04	5.93E-04	1.08E-05	1.36E-04	--
Cadmium	4.89E-04	2.68E-04	7.47E-04	4.19E-07	8.84E-06	6.63E-04	7.33E-05	2.16E-04	1.06E-02
Chromium (Total)	4.12E-05	2.92E-05	2.02E-06	2.30E-06	2.90E-06	5.52E-05	2.94E-07	2.37E-06	5.81E-04
Chromium VI	5.86E-06	4.15E-06	2.87E-07	3.27E-07	4.13E-07	7.85E-06	4.18E-08	--	1.53E-05
Cobalt	2.49E-04	7.93E-05	4.87E-06	2.39E-05	7.45E-06	3.35E-04	3.27E-07	8.05E-07	7.45E-04
Lead	1.14E-02	1.15E-03	8.47E-04	5.68E-06	2.94E-05	2.65E-02	2.96E-04	6.39E-04	3.08E-03
Mercury - Inorganic	1.36E-03	1.44E-05	3.67E-04	4.38E-06	3.29E-07	1.70E-02	2.80E-03	2.09E-03	2.37E-04
Methyl Mercury	2.98E-05	4.08E-06	2.53E-04	4.33E-08	1.09E-08	3.65E-06	6.50E-08	1.63E-05	9.20E-04
Nickel	5.34E-03	1.29E-03	9.05E-04	1.19E-04	1.11E-04	7.21E-03	5.68E-05	2.45E-04	1.73E-02
Selenium	2.36E-06	6.19E-06	3.72E-07	1.94E-07	6.20E-07	3.10E-06	2.05E-07	1.94E-06	1.05E-04
Silver	2.71E-05	5.38E-05	8.85E-06	2.17E-06	4.33E-06	3.59E-05	1.62E-07	--	3.83E-04
Thallium	2.59E-03	5.10E-04	4.15E-04	3.29E-04	4.95E-05	3.51E-03	1.13E-06	--	--
Tin	2.81E-03	3.10E-04	2.32E-04	4.19E-04	1.72E-05	4.31E-03	1.16E-05	--	5.17E-02
Vanadium	2.68E-04	1.64E-05	1.80E-06	8.06E-07	6.57E-07	6.57E-04	4.14E-07	9.69E-06	1.05E-04
Zinc	1.17E-02	5.48E-03	8.50E-03	6.67E-06	2.55E-04	1.58E-02	1.40E-03	7.36E-03	2.37E-01

Table M.50 - Detailed Process Upset Case Exposure Point Concentrations for the Bowmanville Valley Cons. Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.23E-07	2.66E-08	6.05E-09	1.08E-10	1.81E-09	3.54E-07	5.96E-09	1.45E-09	7.19E-10
Acenaphthylene	2.87E-08	5.61E-09	1.41E-09	4.09E-11	1.99E-09	3.50E-07	5.89E-09	1.43E-09	9.99E-10
Anthracene	1.21E-07	1.22E-08	5.92E-09	7.56E-11	5.11E-10	4.81E-07	8.09E-09	1.87E-09	8.10E-10
Fluoranthene	1.20E-06	1.01E-07	5.85E-08	7.68E-10	5.85E-09	1.15E-05	1.93E-07	4.29E-08	2.93E-08
Fluorene	1.22E-07	1.85E-08	5.98E-09	1.26E-10	3.91E-09	1.21E-06	2.03E-08	4.83E-09	3.11E-09
Phenanthrene	1.23E-06	1.37E-07	6.03E-08	9.27E-10	1.35E-08	1.43E-05	2.41E-07	5.59E-08	2.14E-08
High Molecular Weight PAHs									
Benz(a)anthracene	6.65E-08	3.79E-08	1.62E-09	1.67E-10	1.23E-10	1.76E-06	2.96E-08	6.16E-09	3.08E-09
Benzo(a)pyrene	1.18E-07	2.02E-07	1.44E-08	7.86E-10	1.47E-10	5.68E-06	9.88E-08	9.70E-08	7.35E-09
Benzo(e)pyrene	3.21E-07	1.81E-05	3.91E-08	5.79E-08	6.94E-10	1.10E-05	--	1.82E-07	9.58E-08
Benzo(a)fluorene	1.32E-07	4.42E-08	3.21E-09	2.68E-10	3.26E-09	1.29E-05	--	4.65E-08	4.10E-08
Benzo(b)fluorene	9.08E-08	9.56E-08	2.22E-09	4.40E-10	2.30E-09	9.36E-06	--	3.27E-08	6.49E-08
Benzo(b)fluoranthene	1.53E-07	1.19E-08	3.73E-09	7.66E-11	1.39E-10	5.83E-06	9.81E-08	1.97E-08	9.28E-09
Benzo(g,h,i)perylene	1.66E-06	2.74E-05	2.03E-07	8.55E-08	4.73E-10	8.53E-05	1.44E-06	1.39E-06	7.50E-08
Benzo(k)fluoranthene	1.33E-07	8.34E-08	3.26E-09	3.31E-10	4.67E-11	1.85E-06	3.12E-08	6.27E-09	2.94E-09
Chrysene	2.47E-07	3.42E-08	6.02E-09	1.93E-10	2.47E-10	3.96E-06	6.66E-08	1.39E-08	6.20E-09
Dibenz(a,c)anthracene	2.09E-07	3.13E-06	2.55E-08	8.74E-09	6.30E-10	4.92E-05	8.27E-07	7.90E-07	1.58E-07
Dibenz(a,h)anthracene	7.34E-08	2.21E-06	8.95E-09	6.88E-09	3.23E-11	2.31E-06	3.90E-08	3.78E-08	5.12E-09
Indeno(1,2,3-cd)pyrene	3.53E-07	2.29E-07	4.31E-08	7.21E-10	1.23E-10	2.55E-05	2.46E-07	2.46E-07	2.46E-08
Perylene	6.92E-08	1.34E-05	8.44E-09	4.67E-08	7.64E-11	2.46E-06	4.27E-08	4.10E-08	6.81E-09
Pyrene	6.13E-06	4.02E-07	1.50E-07	3.09E-09	7.81E-09	2.12E-05	3.57E-07	7.99E-08	3.11E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	3.39E-08	4.11E-09	1.67E-08	1.53E-09	1.89E-12	2.94E-07	7.10E-09	9.06E-09	5.98E-08
PCB									
Aroclor 1254 (Total PCBs)	2.28E-05	2.80E-07	--	4.58E-07	1.68E-09	1.65E-04	--	--	3.30E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.75E-08	7.79E-09	2.19E-09	5.11E-08	8.03E-08	1.22E-06	3.67E-07	5.17E-08	9.65E-07
1,2,4-Trichlorobenzene	1.30E-09	2.85E-10	1.60E-10	2.32E-09	2.20E-09	1.46E-07	2.40E-09	5.96E-09	1.39E-07
1,2,4,5-Tetrachlorobenzene	5.51E-08	3.74E-09	6.73E-09	6.15E-09	2.38E-09	7.22E-07	1.29E-08	2.74E-08	7.53E-07
Pentachlorobenzene	8.57E-07	3.77E-08	2.09E-07	4.72E-08	6.77E-09	3.27E-05	5.83E-07	1.20E-06	5.02E-06
Hexachlorobenzene	2.37E-08	1.81E-09	5.78E-09	5.22E-09	2.25E-09	7.21E-06	1.29E-07	2.62E-07	2.25E-06
Pentachlorophenol	4.03E-07	1.36E-04	9.43E-07	9.11E-08	2.29E-07	5.42E-06	1.06E-07	2.00E-07	1.29E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.91E-11	1.86E-11	2.64E-12	4.08E-09	1.22E-08	7.40E-08	5.83E-08	3.35E-09	3.85E-08
Chloroform	3.14E-11	8.59E-11	7.05E-12	1.81E-09	1.62E-08	3.40E-08	5.99E-08	1.65E-09	8.11E-09
Dichloromethane	5.63E-09	3.87E-08	3.58E-09	2.01E-07	5.95E-06	2.38E-06	5.73E-06	1.23E-07	5.95E-07
Trichlorofluoromethane (Freon 11)	1.45E-09	2.06E-09	2.24E-10	1.06E-06	4.60E-06	2.10E-05	2.31E-05	9.75E-07	7.29E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	7.01E-11	9.98E-11	1.08E-11	9.45E-09	4.11E-08	2.22E-07	2.44E-07	1.03E-08	6.52E-08
Other Organics									
Bromoform	2.66E-10	4.39E-10	4.38E-11	3.43E-07	1.78E-06	8.98E-06	1.12E-05	4.21E-07	2.09E-06
O-Terphenyl	3.88E-07	6.91E-08	9.47E-08	5.14E-08	7.34E-09	5.41E-05	1.16E-06	1.93E-06	1.22E-05
Inorganics									
Antimony	2.13E-04	1.28E-04	3.41E-05	1.56E-06	3.49E-06	1.57E-04	8.06E-07	1.78E-06	6.99E-04
Arsenic	2.11E-05	1.39E-05	4.43E-07	3.37E-07	5.37E-07	1.56E-05	7.59E-08	1.61E-06	2.68E-05
Barium	1.50E-04	8.86E-05	2.18E-06	1.62E-07	2.70E-06	1.11E-04	2.24E-06	1.51E-05	2.70E-05
Beryllium	1.34E-04	1.18E-05	9.66E-07	1.91E-07	1.64E-07	1.30E-04	1.18E-05	1.71E-05	1.64E-05
Boron	8.29E-04	8.10E-03	1.33E-04	7.45E-05	1.96E-04	5.87E-04	1.06E-05	1.34E-04	--
Cadmium	8.85E-04	5.41E-04	1.35E-03	7.90E-07	8.74E-06	6.56E-04	7.25E-05	2.13E-04	1.05E-02
Chromium (Total)	7.44E-05	7.09E-05	3.64E-06	4.64E-06	2.88E-06	5.46E-05	2.91E-07	2.35E-06	5.75E-04
Chromium VI	1.06E-05	1.01E-05	5.18E-07	6.60E-07	4.09E-07	7.77E-06	4.14E-08	--	1.51E-05
Cobalt	4.50E-04	1.90E-04	8.79E-06	4.77E-05	7.39E-06	3.32E-04	3.24E-07	7.98E-07	7.39E-04
Lead	2.06E-02	2.49E-03	1.53E-03	1.11E-05	2.29E-05	2.06E-02	2.30E-04	4.96E-04	2.39E-03
Mercury - Inorganic	1.24E-03	2.57E-05	3.36E-04	4.65E-06	1.01E-07	5.12E-03	9.22E-04	6.29E-04	7.26E-05
Methyl Mercury	5.38E-05	7.26E-06	4.57E-04	7.73E-08	1.43E-09	7.87E-06	1.40E-07	3.51E-05	2.36E-04
Nickel	9.65E-03	3.03E-03	1.64E-03	2.36E-04	1.10E-04	7.14E-03	5.62E-05	2.43E-04	1.71E-02
Selenium	4.26E-06	1.51E-05	6.72E-07	3.93E-07	6.14E-07	3.07E-06	2.02E-07	1.92E-06	1.04E-04
Silver	4.89E-05	1.24E-04	1.60E-05	4.32E-06	4.28E-06	3.56E-05	1.60E-07	--	3.79E-04
Thallium	4.69E-03	1.24E-03	7.50E-04	6.55E-04	4.89E-05	3.47E-03	1.12E-06	--	--
Tin	5.08E-03	7.02E-04	4.19E-04	8.23E-04	1.60E-05	4.01E-03	1.08E-05	--	4.81E-02
Vanadium	4.85E-04	3.90E-05	3.26E-06	1.62E-06	5.01E-07	5.01E-04	3.16E-07	7.39E-06	8.02E-05
Zinc	2.11E-02	1.15E-02	1.54E-02	1.28E-05	2.52E-04	1.56E-02	1.39E-03	7.29E-03	2.35E-01

Table M.51 - Detailed Process Upset Case Exposure Point Concentrations for the Eco Baseline Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.29E-07	1.14E-07	2.61E-08	3.98E-10	6.26E-10	1.23E-07	2.06E-09	5.04E-10	2.49E-10
Acenaphthylene	1.24E-07	2.36E-08	6.10E-09	9.51E-11	6.91E-10	1.21E-07	2.04E-09	4.94E-10	3.46E-10
Anthracene	5.22E-07	5.18E-08	2.55E-08	2.96E-10	1.60E-10	1.51E-07	2.53E-09	5.86E-10	2.54E-10
Fluoranthene	5.17E-06	3.27E-07	2.52E-07	2.50E-09	1.68E-09	3.30E-06	5.56E-08	1.23E-08	8.43E-09
Fluorene	5.26E-07	7.72E-08	2.58E-08	3.55E-10	1.12E-09	3.45E-07	5.81E-09	1.38E-09	8.89E-10
Phenanthrene	5.32E-06	5.42E-07	2.60E-07	3.09E-09	3.69E-09	3.92E-06	6.60E-08	1.53E-08	5.86E-09
High Molecular Weight PAHs									
Benz(a)anthracene	2.87E-07	1.02E-07	6.99E-09	4.61E-10	5.66E-11	8.11E-07	1.36E-08	2.84E-09	1.42E-09
Benzo(a)pyrene	5.08E-07	4.00E-07	6.19E-08	1.59E-09	1.05E-10	4.05E-06	7.05E-08	6.92E-08	5.24E-09
Benzo(e)pyrene	1.38E-06	1.96E-05	1.69E-07	6.29E-08	3.41E-10	5.44E-06	--	8.94E-08	4.71E-08
Benzo(a)fluorene	5.67E-07	7.63E-08	1.38E-08	4.54E-10	1.03E-09	4.10E-06	--	1.48E-08	1.30E-08
Benzo(b)fluorene	3.92E-07	1.20E-07	9.56E-09	5.70E-10	7.18E-10	2.92E-06	--	1.02E-08	2.02E-08
Benzo(b)fluoranthene	6.59E-07	2.78E-08	1.61E-08	2.26E-10	1.07E-10	4.47E-06	7.52E-08	1.51E-08	7.11E-09
Benzo(g,h,i)perylene	7.16E-06	2.97E-05	8.74E-07	9.35E-08	6.39E-10	1.15E-04	1.94E-06	1.88E-06	1.01E-07
Benzo(k)fluoranthene	5.75E-07	1.48E-07	1.40E-08	6.47E-10	3.80E-11	1.51E-06	2.54E-08	5.11E-09	2.40E-09
Chrysene	1.06E-06	1.23E-07	2.60E-08	7.11E-10	1.32E-10	2.12E-06	3.57E-08	7.44E-09	3.32E-09
Dibenz(a,c)anthracene	9.03E-07	5.23E-06	1.10E-07	1.45E-08	5.96E-10	4.65E-05	7.83E-07	7.47E-07	1.50E-07
Dibenz(a,h)anthracene	3.17E-07	2.47E-06	3.86E-08	7.74E-09	3.18E-11	2.27E-06	3.83E-08	3.72E-08	5.03E-09
Indeno(1,2,3-cd)pyrene	1.52E-06	7.99E-07	1.86E-07	1.82E-09	1.48E-10	3.05E-05	2.94E-07	2.94E-07	2.94E-08
Perylene	2.98E-07	1.45E-05	3.64E-08	5.06E-08	5.18E-11	1.66E-06	2.89E-08	2.78E-08	4.61E-09
Pyrene	2.64E-05	1.58E-06	6.45E-07	1.22E-08	2.66E-09	7.24E-06	1.22E-07	2.72E-08	1.06E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	7.65E-08	5.24E-09	3.79E-08	2.38E-09	1.65E-12	2.57E-07	6.21E-09	7.92E-09	5.23E-08
PCB									
Aroclor 1254 (Total PCBs)	9.83E-05	8.02E-07	--	1.81E-06	2.37E-09	2.33E-04	--	--	4.66E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	7.54E-08	3.28E-08	9.44E-09	3.55E-08	4.66E-08	7.07E-07	2.13E-07	3.00E-08	5.61E-07
1,2,4-Trichlorobenzene	5.61E-09	1.10E-09	6.90E-10	1.66E-09	1.25E-09	8.30E-08	1.36E-09	3.38E-09	7.88E-08
1,2,4,5-Tetrachlorobenzene	2.38E-07	1.56E-08	2.90E-08	1.42E-08	1.97E-09	5.98E-07	1.07E-08	2.27E-08	6.24E-07
Pentachlorobenzene	3.70E-06	1.51E-07	9.02E-07	1.51E-07	3.59E-09	1.73E-05	3.09E-07	6.37E-07	2.66E-06
Hexachlorobenzene	1.02E-07	4.48E-09	2.49E-08	6.15E-09	1.27E-09	4.06E-06	7.24E-08	1.47E-07	1.27E-06
Pentachlorophenol	1.74E-06	1.47E-04	4.07E-06	9.83E-08	1.09E-07	2.57E-06	5.05E-08	9.52E-08	6.11E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	8.23E-11	7.76E-11	1.14E-11	2.85E-09	8.50E-09	5.17E-08	4.07E-08	2.33E-09	2.69E-08
Chloroform	1.35E-10	3.67E-10	3.04E-11	1.18E-09	1.04E-08	2.18E-08	3.85E-08	1.06E-09	5.21E-09
Dichloromethane	2.43E-08	1.67E-07	1.54E-08	1.24E-07	3.64E-06	1.45E-06	3.50E-06	7.49E-08	3.64E-07
Trichlorofluoromethane (Freon 11)	6.26E-09	8.75E-09	9.66E-10	7.57E-07	3.30E-06	1.51E-05	1.66E-05	6.99E-07	5.22E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	3.03E-10	4.23E-10	4.67E-11	6.54E-09	2.84E-08	1.53E-07	1.69E-07	7.11E-09	4.50E-08
Other Organics									
Bromoform	1.15E-09	1.89E-09	1.89E-10	2.50E-07	1.30E-06	6.54E-06	8.14E-06	3.07E-07	1.52E-06
O-Terphenyl	1.67E-06	1.06E-07	4.09E-07	8.47E-08	2.79E-09	2.06E-05	4.58E-07	7.32E-07	4.63E-06
Inorganics									
Antimony	4.82E-04	2.32E-04	7.72E-05	2.70E-06	8.83E-07	3.98E-05	2.04E-07	4.49E-07	1.77E-04
Arsenic	4.79E-05	2.26E-05	1.00E-06	5.06E-07	1.36E-07	3.93E-06	1.92E-08	4.06E-07	6.78E-06
Barium	3.40E-04	1.56E-04	4.94E-06	2.70E-07	6.82E-07	2.80E-05	5.67E-07	3.83E-06	6.82E-06
Beryllium	3.04E-04	1.96E-05	2.19E-06	3.50E-07	3.84E-08	3.04E-05	2.78E-06	4.02E-06	3.84E-06
Boron	1.88E-03	1.51E-02	3.01E-04	1.31E-04	4.94E-05	1.48E-04	2.69E-06	3.39E-05	--
Cadmium	2.00E-03	1.08E-03	3.06E-03	1.53E-06	2.21E-06	1.66E-04	1.84E-05	5.40E-05	2.66E-03
Chromium (Total)	1.69E-04	1.13E-04	8.25E-06	6.71E-06	7.26E-07	1.38E-05	7.35E-08	5.94E-07	1.45E-04
Chromium VI	2.40E-05	1.61E-05	1.17E-06	9.55E-07	1.03E-07	1.05E-06	1.05E-08	--	3.82E-06
Cobalt	1.02E-03	3.08E-04	1.99E-05	7.26E-05	1.87E-06	8.41E-05	8.20E-08	2.02E-07	1.87E-04
Lead	4.65E-02	4.57E-03	3.47E-03	2.15E-05	5.31E-06	4.78E-03	5.34E-05	1.15E-04	5.56E-04
Mercury - Inorganic	2.82E-03	3.85E-05	7.65E-04	9.42E-06	5.17E-08	2.62E-03	4.82E-04	3.22E-04	3.71E-05
Methyl Mercury	1.22E-04	1.09E-05	1.03E-03	1.32E-07	7.34E-10	5.71E-06	1.02E-07	2.55E-05	1.21E-04
Nickel	2.18E-02	5.02E-03	3.70E-03	3.74E-04	2.78E-05	1.42E-03	1.42E-05	6.14E-05	4.34E-03
Selenium	9.65E-06	2.40E-05	1.52E-06	5.57E-07	1.55E-07	7.74E-07	5.11E-08	4.85E-07	2.63E-05
Silver	1.11E-04	2.11E-04	3.62E-05	6.69E-06	1.08E-06	8.97E-06	4.04E-08	--	9.58E-05
Thallium	1.06E-02	1.98E-03	1.70E-03	1.01E-03	1.24E-05	8.79E-04	2.82E-07	--	--
Tin	1.15E-02	1.22E-03	9.48E-04	1.47E-03	3.98E-06	9.96E-04	2.69E-06	--	1.19E-02
Vanadium	1.10E-03	6.37E-05	7.38E-06	2.97E-06	1.16E-07	1.16E-04	7.28E-08	1.71E-06	1.85E-05
Zinc	4.79E-02	2.19E-02	3.48E-02	2.34E-05	6.38E-05	3.96E-03	3.52E-04	1.85E-03	5.94E-02

Table M.52 - Detailed Process Upset Case Exposure Point Concentrations for the Baseline Road & Rundle Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	4.43E-07	9.60E-08	2.18E-08	3.46E-10	1.89E-09	3.71E-07	6.24E-09	1.52E-09	7.53E-10
Acenaphthylene	1.04E-07	2.02E-08	5.10E-09	9.91E-11	2.41E-09	4.23E-07	7.12E-09	1.72E-09	1.21E-09
Anthracene	4.37E-07	4.40E-08	2.14E-08	2.56E-10	6.06E-10	5.69E-07	9.58E-09	2.22E-09	9.60E-10
Fluoranthene	4.32E-06	3.53E-07	2.11E-07	2.51E-09	8.19E-09	1.61E-05	2.71E-07	6.00E-09	4.10E-08
Fluorene	4.40E-07	6.66E-08	2.16E-08	3.43E-10	4.44E-09	1.37E-06	2.30E-08	5.48E-09	3.53E-09
Phenanthrene	4.45E-06	4.90E-07	2.18E-07	2.90E-09	1.77E-08	1.88E-05	3.16E-07	7.32E-08	2.81E-08
High Molecular Weight PAHs									
Benz(a)anthracene	2.40E-07	1.30E-07	5.86E-09	5.70E-10	2.35E-10	3.36E-06	5.66E-08	1.18E-08	5.90E-09
Benzo(a)pyrene	4.25E-07	6.80E-07	5.18E-08	2.63E-09	3.34E-10	1.30E-05	2.25E-07	2.21E-07	1.68E-08
Benzo(e)pyrene	1.16E-06	5.88E-05	1.41E-07	1.89E-07	1.40E-09	2.23E-05	--	3.66E-07	1.93E-07
Benzo(a)fluorene	4.75E-07	1.47E-07	1.16E-08	7.81E-10	4.63E-09	1.83E-05	--	6.60E-08	5.82E-08
Benzo(b)fluorene	3.28E-07	3.13E-07	8.00E-09	1.37E-09	3.41E-09	1.39E-05	--	4.84E-08	9.61E-08
Benzo(b)fluoranthene	5.52E-07	4.04E-08	1.35E-08	2.54E-10	2.63E-10	1.10E-05	1.86E-07	3.73E-08	1.76E-08
Benzo(g,h,i)perylene	6.00E-06	8.92E-05	7.32E-07	2.79E-07	1.28E-09	2.31E-04	3.88E-06	3.78E-06	2.03E-07
Benzo(k)fluoranthene	4.82E-07	2.78E-07	1.18E-08	1.11E-09	1.12E-10	4.43E-06	7.45E-08	1.50E-08	7.04E-09
Chrysene	8.91E-07	1.21E-07	2.17E-08	6.72E-10	3.82E-10	6.13E-06	1.03E-07	2.15E-08	9.60E-09
Dibenz(a,c)anthracene	7.55E-07	1.04E-05	9.21E-08	2.90E-08	1.56E-09	1.22E-04	2.05E-06	1.95E-06	3.92E-07
Dibenz(a,h)anthracene	2.65E-07	7.20E-06	3.23E-08	2.25E-08	8.13E-11	5.82E-06	9.79E-08	9.51E-08	1.29E-08
Indeno(1,2,3-cd)pyrene	1.28E-06	8.07E-07	1.56E-07	2.53E-09	3.23E-10	6.69E-05	6.45E-07	6.45E-07	6.45E-08
Perylene	2.50E-07	4.38E-05	3.05E-08	1.52E-07	1.73E-10	5.57E-06	9.68E-08	9.31E-08	1.54E-08
Pyrene	2.21E-05	1.44E-06	5.41E-07	1.08E-08	1.21E-08	3.30E-05	5.55E-07	1.24E-07	4.83E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	6.80E-08	1.13E-08	3.36E-08	3.86E-09	3.00E-12	4.67E-07	1.12E-08	1.44E-08	9.49E-08
PCB									
Aroclor 1254 (Total PCBs)	8.26E-05	9.67E-07	--	1.62E-06	3.88E-09	3.81E-04	--	--	7.61E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.31E-08	2.80E-08	7.90E-09	6.59E-08	9.75E-08	1.48E-06	4.46E-07	6.28E-08	1.17E-06
1,2,4-Trichlorobenzene	4.69E-09	1.01E-09	5.77E-10	2.99E-09	2.62E-09	1.74E-07	2.85E-09	7.07E-09	1.65E-07
1,2,4,5-Tetrachlorobenzene	1.99E-07	1.34E-08	2.43E-08	1.47E-08	3.48E-09	1.05E-06	1.88E-08	4.00E-08	1.10E-06
Pentachlorobenzene	3.09E-06	1.35E-07	7.55E-07	1.38E-07	8.17E-09	3.95E-05	7.05E-07	1.45E-06	6.06E-06
Hexachlorobenzene	8.55E-08	6.16E-09	2.09E-08	8.95E-09	2.81E-09	8.98E-06	1.60E-07	3.26E-07	2.81E-06
Pentachlorophenol	1.45E-06	4.43E-04	3.40E-06	2.96E-07	5.03E-07	1.19E-05	2.34E-07	4.40E-07	2.83E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	6.88E-11	6.68E-11	9.51E-12	5.60E-09	1.67E-08	1.02E-07	8.01E-08	4.59E-09	5.29E-08
Chloroform	1.13E-10	3.10E-10	2.54E-11	2.30E-09	2.05E-08	4.30E-08	7.57E-08	2.08E-09	1.03E-08
Dichloromethane	2.03E-08	1.40E-07	1.29E-08	2.41E-07	7.11E-06	2.84E-06	6.85E-06	1.47E-07	7.11E-07
Trichlorofluoromethane (Freon 11)	5.24E-09	7.43E-09	8.08E-10	1.46E-06	6.36E-06	2.91E-05	3.20E-05	1.35E-06	1.01E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.53E-10	3.59E-10	3.91E-11	1.29E-08	5.59E-08	3.02E-07	3.32E-07	1.40E-08	8.86E-08
Other Organics									
Bromoform	9.61E-10	1.59E-09	1.58E-10	4.77E-07	2.48E-06	1.25E-05	1.56E-05	5.86E-07	2.91E-06
O-Terphenyl	1.40E-06	2.28E-07	3.42E-07	1.41E-07	1.03E-08	7.57E-05	1.61E-06	2.70E-06	1.71E-05
Inorganics									
Antimony	4.27E-04	2.31E-04	6.83E-05	2.78E-06	4.30E-06	1.94E-04	9.92E-07	2.19E-06	8.60E-04
Arsenic	4.24E-05	2.39E-05	8.88E-07	5.66E-07	6.60E-07	1.92E-05	9.34E-08	1.98E-06	3.30E-05
Barium	3.01E-04	1.58E-04	4.38E-06	2.84E-07	3.32E-06	1.36E-04	2.76E-06	1.86E-05	3.32E-05
Beryllium	2.69E-04	2.04E-05	1.94E-06	3.46E-07	1.88E-07	1.48E-04	1.36E-05	1.96E-05	1.88E-05
Boron	1.66E-03	1.48E-02	2.66E-04	1.33E-04	2.41E-04	7.22E-04	1.31E-05	1.65E-04	--
Cadmium	1.77E-03	1.02E-03	2.71E-03	1.48E-06	1.08E-05	8.07E-04	8.92E-05	2.62E-04	1.29E-02
Chromium (Total)	1.49E-04	1.21E-04	7.30E-06	7.69E-06	3.54E-06	6.72E-05	3.58E-07	2.89E-06	7.08E-04
Chromium VI	2.12E-05	1.72E-05	1.04E-06	1.09E-06	5.03E-07	9.56E-06	5.10E-08	--	1.86E-05
Cobalt	9.03E-04	3.27E-04	1.76E-05	8.07E-05	9.09E-06	4.09E-04	3.99E-07	9.82E-07	9.09E-04
Lead	4.12E-02	4.52E-03	3.07E-03	2.06E-05	2.60E-05	2.34E-02	2.61E-04	5.63E-04	2.72E-03
Mercury - Inorganic	3.74E-03	5.11E-05	1.01E-03	1.25E-05	2.17E-07	1.10E-02	1.89E-03	1.35E-03	1.56E-04
Methyl Mercury	1.08E-04	1.44E-05	9.16E-04	1.54E-07	3.08E-09	2.03E-05	3.61E-07	9.04E-05	5.08E-04
Nickel	1.93E-02	5.26E-03	3.28E-03	4.04E-04	1.35E-04	8.79E-03	6.92E-05	2.99E-04	2.11E-02
Selenium	8.54E-06	2.57E-05	1.35E-06	6.47E-07	7.55E-07	3.77E-06	2.49E-07	2.36E-06	1.28E-04
Silver	9.79E-05	2.18E-04	3.20E-05	7.35E-06	5.27E-06	4.37E-05	1.97E-07	--	4.67E-04
Thallium	9.39E-03	2.12E-03	1.50E-03	1.11E-03	6.02E-05	4.27E-03	1.37E-06	--	--
Tin	1.02E-02	1.24E-03	8.40E-04	1.48E-03	1.94E-05	4.85E-03	1.31E-05	--	5.81E-02
Vanadium	9.72E-04	6.73E-05	6.53E-06	2.94E-06	5.65E-07	5.65E-04	3.56E-07	8.34E-06	9.04E-05
Zinc	4.24E-02	2.12E-02	3.08E-02	2.32E-05	3.11E-04	1.93E-02	1.71E-03	8.98E-03	2.89E-01

Table M.53 - Detailed Process Upset Case Exposure Point Concentrations for the Baseline Road & Courtice Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.32E-07	1.15E-07	2.62E-08	4.06E-10	1.34E-09	2.62E-07	4.42E-09	1.08E-09	5.33E-10
Acenaphthylene	1.24E-07	2.39E-08	6.12E-09	1.09E-10	1.99E-09	3.50E-07	5.90E-09	1.43E-09	1.00E-09
Anthracene	5.24E-07	5.23E-08	2.56E-08	3.02E-10	4.81E-10	4.52E-07	7.60E-09	1.76E-09	7.62E-10
Fluoranthene	5.19E-06	3.69E-07	2.53E-07	2.75E-09	6.99E-09	1.37E-05	2.31E-07	5.12E-08	3.50E-08
Fluorene	5.29E-07	7.86E-08	2.59E-08	3.86E-10	3.41E-09	1.05E-06	1.77E-08	4.21E-09	2.71E-09
Phenanthrene	5.34E-06	5.63E-07	2.61E-07	3.31E-09	1.48E-08	1.57E-05	2.63E-07	6.10E-08	2.34E-08
High Molecular Weight PAHs									
Benz(a)anthracene	2.88E-07	1.25E-07	7.03E-09	5.58E-10	2.08E-10	2.98E-06	5.01E-08	1.04E-08	5.22E-09
Benzo(a)pyrene	5.10E-07	5.79E-07	6.22E-08	2.26E-09	2.95E-10	1.14E-05	1.99E-07	1.95E-07	1.48E-08
Benzo(e)pyrene	1.39E-06	4.14E-05	1.69E-07	1.33E-07	1.27E-09	2.02E-05	--	3.32E-07	1.75E-07
Benzo(a)fluorene	5.70E-07	1.19E-07	1.39E-08	6.74E-10	3.83E-09	1.52E-05	--	5.47E-08	4.82E-08
Benzo(b)fluorene	3.94E-07	2.29E-07	9.60E-09	1.04E-09	2.88E-09	1.17E-05	--	4.09E-08	8.12E-08
Benzo(b)fluoranthene	6.63E-07	3.67E-08	1.62E-08	2.60E-10	2.13E-10	8.91E-06	1.50E-07	3.01E-08	1.42E-08
Benzo(g,h,i)perylene	7.20E-06	6.27E-05	8.78E-07	1.96E-07	1.13E-09	2.04E-04	3.44E-06	3.34E-06	1.80E-07
Benzo(k)fluoranthene	5.79E-07	2.28E-07	1.41E-08	9.39E-10	1.04E-10	4.14E-06	6.96E-08	1.40E-08	6.58E-09
Chrysene	1.07E-06	1.33E-07	2.61E-08	7.54E-10	3.05E-10	4.89E-06	8.23E-08	1.72E-08	7.66E-09
Dibenz(a,c)anthracene	9.07E-07	8.34E-06	1.11E-07	2.32E-08	1.35E-09	1.05E-04	1.77E-06	1.69E-06	3.39E-07
Dibenz(a,h)anthracene	3.18E-07	5.11E-06	3.88E-08	1.59E-08	7.29E-11	5.22E-06	8.78E-08	8.53E-08	1.15E-08
Indeno(1,2,3-cd)pyrene	1.53E-06	8.74E-07	1.87E-07	2.75E-09	2.87E-10	3.53E-05	5.94E-07	5.72E-07	5.72E-08
Perylene	3.00E-07	3.08E-05	3.66E-08	1.07E-07	1.57E-10	5.03E-06	8.75E-08	8.40E-08	1.40E-08
Pyrene	2.66E-05	1.65E-06	6.49E-07	1.27E-08	1.13E-08	3.07E-05	5.17E-07	1.16E-07	4.50E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	6.88E-08	8.33E-09	3.41E-08	3.09E-09	2.51E-12	3.91E-07	9.41E-09	1.20E-08	7.94E-08
PCB									
Aroclor 1254 (Total PCBs)	9.91E-05	9.59E-07	--	1.88E-06	3.42E-09	3.36E-04	--	--	6.72E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	7.57E-08	3.32E-08	9.48E-09	3.63E-08	4.78E-08	7.25E-07	2.19E-07	3.08E-08	5.75E-07
1,2,4-Trichlorobenzene	5.63E-09	1.15E-09	6.93E-10	1.77E-09	1.35E-09	8.95E-08	1.47E-09	3.64E-09	8.51E-08
1,2,4,5-Tetrachlorobenzene	2.39E-07	1.59E-08	2.92E-08	1.43E-08	1.98E-09	5.99E-07	1.07E-08	2.27E-08	6.25E-07
Pentachlorobenzene	3.71E-06	1.56E-07	9.06E-07	1.55E-07	4.66E-09	2.25E-05	4.02E-07	8.28E-07	3.45E-06
Hexachlorobenzene	1.03E-07	5.74E-09	2.50E-08	6.97E-09	1.46E-09	4.66E-06	8.31E-08	1.69E-07	1.46E-06
Pentachlorophenol	1.75E-06	3.11E-04	4.09E-06	2.09E-07	6.39E-07	1.51E-05	2.97E-07	5.59E-07	3.59E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	8.26E-11	7.89E-11	1.14E-11	2.41E-09	7.19E-09	4.37E-08	3.45E-08	1.98E-09	2.27E-08
Chloroform	1.36E-10	3.70E-10	3.05E-11	1.07E-09	9.42E-09	1.98E-08	3.48E-08	9.60E-10	4.72E-09
Dichloromethane	2.44E-08	1.68E-07	1.55E-08	1.17E-07	3.43E-06	1.37E-06	3.30E-06	7.07E-08	3.43E-07
Trichlorofluoromethane (Freon 11)	6.29E-09	8.85E-09	9.70E-10	6.22E-07	2.71E-06	1.24E-05	1.36E-05	5.74E-07	4.29E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	3.04E-10	4.28E-10	4.69E-11	5.60E-09	2.43E-08	1.31E-07	1.44E-07	6.08E-09	3.85E-08
Other Organics									
Bromoform	1.15E-09	1.90E-09	1.90E-10	2.02E-07	1.05E-06	5.28E-06	6.57E-06	2.48E-07	1.23E-06
O-Terphenyl	1.68E-06	1.78E-07	4.10E-07	1.23E-07	8.05E-09	5.93E-05	1.27E-06	2.11E-06	1.34E-05
Inorganics									
Antimony	4.32E-04	2.10E-04	6.92E-05	2.59E-06	4.63E-06	2.08E-04	1.07E-06	2.35E-06	9.26E-04
Arsenic	4.29E-05	2.05E-05	8.99E-07	5.03E-07	7.11E-07	2.06E-05	1.01E-07	2.13E-06	3.56E-05
Barium	3.04E-04	1.41E-04	4.43E-06	2.61E-07	3.58E-06	1.47E-04	2.97E-06	2.01E-05	3.58E-05
Beryllium	2.72E-04	1.77E-05	1.96E-06	3.21E-07	1.92E-07	1.52E-04	1.39E-05	2.01E-05	1.92E-05
Boron	1.68E-03	1.36E-02	2.69E-04	1.25E-04	2.59E-04	7.77E-04	1.41E-05	1.78E-04	--
Cadmium	1.79E-03	9.68E-04	2.74E-03	1.42E-06	1.16E-05	8.68E-04	9.60E-05	2.82E-04	1.39E-02
Chromium (Total)	1.51E-04	1.02E-04	7.39E-06	6.75E-06	3.81E-06	7.24E-05	3.86E-07	3.11E-06	7.62E-04
Chromium VI	2.15E-05	1.46E-05	1.05E-06	9.60E-07	5.42E-07	1.03E-05	5.49E-08	--	2.00E-05
Cobalt	9.14E-04	2.79E-04	1.78E-05	7.20E-05	9.79E-06	4.41E-04	4.30E-07	1.06E-06	9.79E-04
Lead	4.17E-02	4.13E-03	3.11E-03	1.96E-05	2.64E-05	2.37E-02	2.65E-04	5.72E-04	2.76E-03
Mercury - Inorganic	3.43E-03	4.10E-05	9.29E-04	1.12E-05	1.60E-07	8.12E-03	1.43E-03	9.98E-04	1.15E-04
Methyl Mercury	1.09E-04	1.16E-05	9.28E-04	1.33E-07	2.27E-09	2.55E-05	4.54E-07	1.14E-04	3.75E-04
Nickel	1.96E-02	4.55E-03	3.32E-03	3.66E-04	1.46E-04	9.46E-03	7.45E-05	3.22E-04	2.27E-02
Selenium	8.65E-06	2.17E-05	1.36E-06	5.64E-07	8.13E-07	4.06E-06	2.68E-07	2.54E-06	1.38E-04
Silver	9.92E-05	1.91E-04	3.24E-05	6.60E-06	5.67E-06	4.71E-05	2.12E-07	--	5.03E-04
Thallium	9.51E-03	1.79E-03	1.52E-03	9.95E-04	6.48E-05	4.60E-03	1.48E-06	--	--
Tin	1.03E-02	1.10E-03	8.51E-04	1.38E-03	2.06E-05	5.15E-03	1.39E-05	--	6.18E-02
Vanadium	9.85E-04	5.78E-05	6.62E-06	2.72E-06	5.71E-07	5.71E-04	3.60E-07	8.42E-06	9.13E-05
Zinc	4.29E-02	1.97E-02	3.11E-02	2.20E-05	3.34E-04	2.07E-02	1.84E-03	9.66E-03	3.11E-01

Table M.54 - Detailed Process Upset Case Exposure Point Concentrations for the Soper Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	9.32E-08	2.02E-08	4.59E-09	7.89E-11	1.03E-09	2.02E-07	3.40E-09	8.30E-10	4.11E-10
Acenaphthylene	2.18E-08	4.28E-09	1.07E-09	2.67E-11	1.08E-09	1.89E-07	3.19E-09	7.70E-10	5.40E-10
Anthracene	9.19E-08	9.30E-09	4.50E-09	5.60E-11	2.74E-10	2.57E-07	4.33E-09	1.00E-09	4.34E-10
Fluoranthene	9.10E-07	7.96E-08	4.44E-08	5.72E-10	3.02E-09	5.94E-06	9.99E-08	2.21E-08	1.52E-08
Fluorene	9.27E-08	1.42E-08	4.54E-09	8.58E-11	2.08E-09	6.42E-07	1.08E-08	2.57E-09	1.65E-09
Phenanthrene	9.37E-07	1.06E-07	4.58E-08	6.65E-10	6.95E-09	7.37E-06	1.24E-07	2.87E-08	1.10E-08
High Molecular Weight PAHs									
Benz(a)anthracene	5.05E-08	3.04E-08	1.23E-09	1.33E-10	7.04E-11	1.01E-06	1.70E-08	3.54E-09	1.77E-09
Benzo(a)pyrene	8.94E-08	1.66E-07	1.09E-08	6.43E-10	9.09E-11	3.52E-06	6.13E-08	6.02E-08	4.56E-09
Benzo(e)pyrene	2.44E-07	1.52E-05	2.97E-08	4.89E-08	4.02E-10	6.40E-06	--	1.05E-07	5.55E-08
Benzo(a)fluorene	9.99E-08	3.65E-08	2.44E-09	2.04E-10	1.75E-09	6.95E-06	--	2.50E-08	2.21E-08
Benzo(b)fluorene	6.90E-08	8.03E-08	1.68E-09	3.56E-10	1.23E-09	4.99E-06	--	1.74E-08	3.46E-08
Benzo(b)fluoranthene	1.16E-07	9.64E-09	2.83E-09	6.03E-11	8.81E-11	3.69E-06	6.21E-08	1.25E-08	5.87E-09
Benzo(g,h,i)perylene	1.26E-06	2.31E-05	1.54E-07	7.21E-08	3.14E-10	5.66E-05	9.53E-07	9.26E-07	4.98E-08
Benzo(k)fluoranthene	1.01E-07	6.88E-08	2.48E-09	2.71E-10	2.87E-11	1.14E-06	1.92E-08	3.86E-09	1.81E-09
Chrysene	1.88E-07	2.66E-08	4.57E-09	1.48E-10	1.47E-10	2.37E-06	3.98E-08	8.30E-09	3.70E-09
Dibenz(a,c)anthracene	1.59E-07	2.59E-06	1.94E-08	7.24E-09	4.08E-10	3.18E-05	5.35E-07	5.11E-07	1.02E-07
Dibenz(a,h)anthracene	5.58E-08	1.86E-06	6.81E-09	5.80E-09	2.07E-11	1.48E-06	2.50E-08	2.43E-08	3.28E-09
Indeno(1,2,3-cd)pyrene	2.69E-07	1.79E-07	3.28E-08	5.62E-10	8.08E-11	9.94E-06	1.67E-07	1.61E-07	1.61E-08
Perylene	5.26E-08	1.13E-05	6.41E-09	3.94E-08	4.68E-11	1.50E-06	2.61E-08	2.51E-08	4.17E-09
Pyrene	4.66E-06	3.09E-07	1.14E-07	2.33E-09	4.02E-09	1.09E-05	1.84E-07	4.11E-08	1.60E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	2.42E-08	3.29E-09	1.19E-08	1.19E-09	1.15E-12	1.79E-07	4.32E-09	5.51E-09	3.63E-08
PCB									
Aroclor 1254 (Total PCBs)	1.74E-05	2.23E-07	--	3.52E-07	1.09E-09	1.07E-04	--	--	2.14E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.33E-08	5.94E-09	1.66E-09	3.73E-08	5.84E-08	8.86E-07	2.67E-07	3.77E-08	7.02E-07
1,2,4-Trichlorobenzene	9.87E-10	2.20E-10	1.21E-10	1.65E-09	1.57E-09	1.04E-07	1.71E-09	4.24E-09	9.89E-08
1,2,4,5-Tetrachlorobenzene	4.19E-08	2.85E-09	5.11E-09	4.64E-09	1.78E-09	5.39E-07	9.62E-09	2.05E-08	5.63E-07
Pentachlorobenzene	6.51E-07	2.89E-08	1.59E-07	3.52E-08	4.51E-09	2.18E-05	3.89E-07	8.02E-07	3.34E-06
Hexachlorobenzene	1.80E-08	1.46E-09	4.39E-09	3.85E-09	1.58E-09	5.06E-06	9.02E-08	1.84E-07	1.58E-06
Pentachlorophenol	3.06E-07	1.15E-04	7.16E-07	7.67E-08	1.12E-07	2.65E-06	5.19E-08	9.78E-08	6.29E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.45E-11	1.42E-11	2.00E-12	3.26E-09	9.74E-09	5.92E-08	4.67E-08	2.68E-09	3.08E-08
Chloroform	2.39E-11	6.53E-11	5.35E-12	1.38E-09	1.24E-08	2.59E-08	4.57E-08	1.26E-09	6.19E-09
Dichloromethane	4.28E-09	2.94E-08	2.72E-09	1.49E-07	4.41E-06	1.76E-06	4.25E-06	9.09E-08	4.41E-07
Trichlorofluoromethane (Freon 11)	1.10E-09	1.57E-09	1.70E-10	8.54E-07	3.72E-06	1.70E-05	1.87E-05	7.89E-07	5.89E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	5.33E-11	7.60E-11	8.22E-12	7.51E-09	3.27E-08	1.77E-07	1.94E-07	8.20E-09	5.18E-08
Other Organics									
Bromoform	2.02E-10	3.34E-10	3.33E-11	2.79E-07	1.45E-06	7.31E-06	9.10E-06	3.43E-07	1.70E-06
O-Terphenyl	2.95E-07	5.75E-08	7.19E-08	3.87E-08	4.17E-09	3.07E-05	6.74E-07	1.09E-06	6.92E-06
Inorganics									
Antimony	1.52E-04	9.14E-05	2.43E-05	1.08E-06	1.60E-06	7.20E-05	3.69E-07	8.14E-07	3.20E-04
Arsenic	1.51E-05	9.90E-06	3.16E-07	2.30E-07	2.46E-07	7.12E-06	3.48E-08	7.36E-07	1.23E-05
Barium	1.07E-04	6.32E-05	1.56E-06	1.12E-07	1.24E-06	5.07E-05	1.03E-06	6.93E-06	1.24E-05
Beryllium	9.57E-05	8.38E-06	6.89E-07	1.34E-07	7.63E-08	6.02E-05	5.51E-06	7.97E-06	7.63E-06
Boron	5.91E-04	5.77E-03	9.46E-05	5.15E-05	8.95E-05	2.69E-04	4.87E-06	6.15E-05	--
Cadmium	6.30E-04	3.86E-04	9.63E-04	5.53E-07	4.01E-06	3.01E-04	3.32E-05	9.78E-05	4.82E-03
Chromium (Total)	5.30E-05	5.06E-05	2.60E-06	3.15E-06	1.32E-06	2.50E-05	1.33E-07	1.08E-06	2.63E-04
Chromium VI	7.54E-06	7.19E-06	3.69E-07	4.48E-07	1.87E-07	3.56E-06	1.90E-08	--	6.92E-06
Cobalt	3.21E-04	1.36E-04	6.27E-06	3.26E-05	3.38E-06	1.52E-04	1.48E-07	3.65E-07	3.38E-04
Lead	1.47E-02	1.77E-03	1.09E-03	7.85E-06	1.07E-05	9.59E-03	1.07E-04	2.31E-04	1.12E-03
Mercury - Inorganic	9.59E-04	1.90E-05	2.60E-04	3.54E-06	6.31E-08	3.20E-03	5.85E-04	3.93E-04	4.53E-05
Methyl Mercury	3.83E-05	5.35E-06	3.26E-04	5.64E-08	8.95E-10	3.06E-06	5.45E-08	1.37E-05	1.48E-04
Nickel	6.88E-03	2.16E-03	1.17E-03	1.61E-04	5.03E-05	3.27E-03	2.58E-05	1.11E-04	7.85E-03
Selenium	3.04E-06	1.07E-05	4.79E-07	2.67E-07	2.81E-07	1.40E-06	9.26E-08	8.79E-07	4.77E-05
Silver	3.48E-05	8.86E-05	1.14E-05	2.95E-06	1.96E-06	1.63E-05	7.32E-08	--	1.74E-04
Thallium	3.34E-03	8.83E-04	5.35E-04	4.48E-04	2.24E-05	1.59E-03	5.11E-07	--	--
Tin	3.62E-03	5.01E-04	2.99E-04	5.74E-04	7.37E-06	1.84E-03	4.98E-06	--	2.21E-02
Vanadium	3.46E-04	2.78E-05	2.32E-06	1.15E-06	2.34E-07	2.34E-04	1.48E-07	3.45E-06	3.74E-05
Zinc	1.51E-02	8.22E-03	1.09E-02	8.87E-06	1.16E-04	7.17E-03	6.37E-04	3.34E-03	1.08E-01

Table M.55 - Detailed Process Upset Case Exposure Point Concentrations for the Bowmanville Marsh Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.07E-07	2.31E-08	5.25E-09	9.32E-11	1.50E-09	2.93E-07	4.93E-09	1.20E-09	5.95E-10
Acenaphthylene	2.50E-08	4.94E-09	1.23E-09	3.39E-11	1.56E-09	2.74E-07	4.61E-09	1.11E-09	7.81E-10
Anthracene	1.05E-07	1.07E-08	5.14E-09	6.55E-11	4.19E-10	3.94E-07	6.63E-09	1.53E-09	6.64E-10
Fluoranthene	1.04E-06	1.00E-07	5.08E-08	7.09E-10	5.02E-09	9.87E-06	1.66E-07	3.68E-08	2.52E-08
Fluorene	1.06E-07	1.64E-08	5.20E-09	1.08E-10	3.20E-09	9.87E-07	1.66E-08	3.95E-09	2.54E-09
Phenanthrene	1.07E-06	1.25E-07	5.24E-08	8.13E-10	1.13E-08	1.20E-05	2.01E-07	4.66E-08	1.79E-08
High Molecular Weight PAHs									
Benz(a)anthracene	5.78E-08	3.98E-08	1.41E-09	1.72E-10	1.39E-10	1.99E-06	3.35E-08	6.98E-09	3.49E-09
Benzo(a)pyrene	1.02E-07	2.29E-07	1.25E-08	8.80E-10	2.04E-10	7.91E-06	1.38E-07	1.35E-07	1.02E-08
Benzo(e)pyrene	2.79E-07	2.22E-05	3.40E-08	7.12E-08	8.02E-10	1.28E-05	--	2.10E-07	1.11E-07
Benzo(a)fluorene	1.14E-07	5.11E-08	2.79E-09	2.82E-10	2.99E-09	1.18E-05	--	4.26E-08	3.76E-08
Benzo(b)fluorene	7.89E-08	1.16E-07	1.92E-09	5.10E-10	2.13E-09	8.66E-06	--	3.02E-08	6.00E-08
Benzo(b)fluoranthene	1.33E-07	1.29E-08	3.24E-09	7.46E-11	1.81E-10	7.57E-06	1.27E-07	2.56E-08	1.20E-08
Benzo(g,h,i)perylene	1.44E-06	3.36E-05	1.76E-07	1.05E-07	7.98E-10	1.44E-04	2.42E-06	2.35E-06	1.27E-07
Benzo(k)fluoranthene	1.16E-07	9.59E-08	2.83E-09	3.73E-10	6.25E-11	2.48E-06	4.17E-08	8.40E-09	3.94E-09
Chrysene	2.15E-07	3.24E-08	5.23E-09	1.78E-10	2.64E-10	4.23E-06	7.12E-08	1.48E-08	6.63E-09
Dibenz(a,c)anthracene	1.82E-07	3.64E-06	2.22E-08	1.02E-08	9.93E-10	7.75E-05	1.30E-06	1.24E-06	2.49E-07
Dibenz(a,h)anthracene	6.39E-08	2.70E-06	7.79E-09	8.43E-09	4.91E-11	3.52E-06	5.92E-08	5.75E-08	7.79E-09
Indeno(1,2,3-cd)pyrene	3.07E-07	2.20E-07	3.75E-08	6.83E-10	2.00E-10	2.47E-05	4.15E-07	4.00E-07	4.00E-08
Perylene	6.01E-08	1.65E-05	7.33E-09	5.74E-08	1.02E-10	3.27E-06	5.69E-08	5.46E-08	9.07E-09
Pyrene	5.34E-06	3.66E-07	1.30E-07	2.74E-09	6.55E-09	1.78E-05	3.00E-07	6.70E-08	2.61E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.10E-08	3.74E-09	5.39E-09	1.13E-09	1.04E-12	1.61E-07	3.90E-09	4.97E-09	3.28E-08
PCB									
Aroclor 1254 (Total PCBs)	1.99E-05	2.89E-07	--	4.09E-07	2.18E-09	2.14E-04	--	--	4.28E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.52E-08	6.85E-09	1.90E-09	5.49E-08	8.67E-08	1.31E-06	3.96E-07	5.59E-08	1.04E-06
1,2,4-Trichlorobenzene	1.13E-09	2.62E-10	1.39E-10	2.39E-09	2.29E-09	1.52E-07	2.50E-09	6.19E-09	1.44E-07
1,2,4,5-Tetrachlorobenzene	4.79E-08	3.30E-09	5.85E-09	5.85E-09	2.43E-09	7.35E-07	1.31E-08	2.79E-08	7.67E-07
Pentachlorobenzene	7.44E-07	3.40E-08	1.82E-07	4.16E-08	6.88E-09	3.32E-05	5.93E-07	1.22E-06	5.10E-06
Hexachlorobenzene	2.06E-08	1.94E-09	5.02E-09	5.07E-09	2.41E-09	7.71E-06	1.37E-07	2.80E-07	2.41E-06
Pentachlorophenol	3.50E-07	1.67E-04	8.19E-07	1.12E-07	1.35E-07	3.20E-06	6.29E-08	1.18E-07	7.61E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.66E-11	1.64E-11	2.29E-12	5.04E-09	1.50E-08	9.15E-08	7.21E-08	4.14E-09	4.76E-08
Chloroform	2.73E-11	7.50E-11	6.12E-12	2.08E-09	1.86E-08	3.90E-08	6.86E-08	1.89E-09	9.31E-09
Dichloromethane	4.89E-09	3.37E-08	3.11E-09	2.20E-07	6.50E-06	2.60E-06	6.26E-06	1.34E-07	6.50E-07
Trichlorofluoromethane (Freon 11)	1.26E-09	1.81E-09	1.95E-10	1.32E-06	5.75E-06	2.63E-05	2.89E-05	1.22E-06	9.12E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	6.09E-11	8.75E-11	9.40E-12	1.16E-08	5.04E-08	2.72E-07	2.99E-07	1.26E-08	7.98E-08
Other Organics									
Bromoform	2.31E-10	3.82E-10	3.81E-11	4.32E-07	2.25E-06	1.13E-05	1.41E-05	5.31E-07	2.64E-06
O-Terphenyl	3.37E-07	8.14E-08	8.23E-08	5.22E-08	7.20E-09	5.30E-05	1.14E-06	1.89E-06	1.20E-05
Inorganics									
Antimony	6.87E-05	3.69E-05	1.10E-05	4.47E-07	7.58E-07	3.41E-05	1.75E-07	3.85E-07	1.52E-04
Arsenic	6.82E-06	3.79E-06	1.43E-07	9.09E-08	1.16E-07	3.38E-06	1.65E-08	3.49E-07	5.82E-06
Barium	4.84E-05	2.51E-05	7.04E-07	4.56E-08	5.85E-07	2.40E-05	4.87E-07	3.28E-06	5.85E-06
Beryllium	4.33E-05	3.25E-06	3.12E-07	5.57E-08	3.91E-08	3.09E-05	2.82E-06	4.09E-06	3.91E-06
Boron	2.67E-04	2.36E-03	4.28E-05	2.14E-05	4.24E-05	1.27E-04	2.31E-06	2.91E-05	--
Cadmium	2.85E-04	1.63E-04	4.36E-04	2.37E-07	1.90E-06	1.43E-04	1.58E-05	4.64E-05	2.28E-03
Chromium (Total)	2.40E-05	1.92E-05	1.17E-06	1.23E-06	6.24E-07	1.18E-05	6.31E-08	5.10E-07	1.25E-04
Chromium VI	3.41E-06	2.73E-06	1.67E-07	1.75E-07	8.87E-08	1.69E-06	8.98E-09	--	3.28E-06
Cobalt	1.45E-04	5.19E-05	2.84E-06	1.29E-05	1.60E-06	7.21E-05	7.03E-08	1.73E-07	1.60E-04
Lead	6.63E-03	7.21E-04	4.95E-04	3.32E-06	5.51E-06	4.96E-03	5.54E-05	1.20E-04	5.77E-04
Mercury - Inorganic	1.04E-03	1.14E-05	2.81E-04	3.36E-06	1.36E-07	6.87E-03	1.22E-03	8.45E-04	9.74E-05
Methyl Mercury	1.74E-05	3.22E-06	1.48E-04	3.19E-08	1.92E-09	3.55E-06	6.31E-08	1.58E-05	3.17E-04
Nickel	3.11E-03	8.36E-04	5.27E-04	6.49E-05	2.39E-05	1.55E-03	1.22E-05	5.27E-05	3.72E-03
Selenium	1.37E-06	4.08E-06	2.17E-07	1.04E-07	1.33E-07	6.65E-07	4.39E-08	4.16E-07	2.26E-05
Silver	1.58E-05	3.46E-05	5.16E-06	1.18E-06	9.29E-07	7.71E-06	3.47E-08	--	8.23E-05
Thallium	1.51E-03	3.36E-04	2.42E-04	1.79E-04	1.06E-05	7.55E-04	2.42E-07	--	--
Tin	1.64E-03	1.98E-04	1.35E-04	2.38E-04	3.57E-06	8.91E-04	2.41E-06	--	1.07E-02
Vanadium	1.57E-04	1.07E-05	1.05E-06	4.73E-07	1.22E-07	1.22E-04	7.69E-08	1.80E-06	1.95E-05
Zinc	6.82E-03	3.39E-03	4.95E-03	3.73E-06	5.48E-05	3.40E-03	3.02E-04	1.58E-03	5.10E-02

Table M.56 - Detailed Process Upset Case Exposure Point Concentrations for the South of Site, Eco Baseline S7 Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	3.47E-07	7.50E-08	1.71E-08	2.61E-10	4.10E-10	8.04E-08	1.35E-09	3.30E-10	1.63E-10
Acenaphthylene	8.12E-08	1.55E-08	4.00E-09	6.23E-11	4.52E-10	7.95E-08	1.34E-09	3.23E-10	2.27E-10
Anthracene	3.42E-07	3.39E-08	1.67E-08	1.94E-10	1.05E-10	9.86E-08	1.66E-09	3.84E-10	1.66E-10
Fluoranthene	3.38E-06	2.11E-07	1.65E-07	1.63E-09	1.10E-09	2.16E-06	3.64E-08	8.07E-09	5.52E-09
Fluorene	3.45E-07	5.05E-08	1.69E-08	2.33E-10	7.33E-10	2.26E-07	3.81E-09	9.04E-10	5.82E-10
Phenanthrene	3.48E-06	3.54E-07	1.70E-07	2.02E-09	2.42E-09	2.57E-06	4.32E-08	1.00E-08	3.84E-09
High Molecular Weight PAHs									
Benz(a)anthracene	1.88E-07	6.50E-08	4.58E-09	2.96E-10	3.71E-11	5.31E-07	8.94E-09	1.86E-09	9.32E-10
Benzo(a)pyrene	3.33E-07	2.51E-07	4.06E-08	9.99E-10	6.85E-11	2.66E-06	4.62E-08	4.54E-08	3.43E-09
Benzo(e)pyrene	9.06E-07	1.15E-05	1.11E-07	3.69E-08	2.24E-10	3.56E-06	--	5.86E-08	3.09E-08
Benzo(a)fluorene	3.72E-07	4.73E-08	9.07E-09	2.86E-10	6.78E-10	2.69E-06	--	9.67E-09	8.53E-09
Benzo(b)fluorene	2.57E-07	7.18E-08	6.26E-09	3.46E-10	4.70E-10	1.91E-06	--	6.68E-09	1.33E-08
Benzo(b)fluoranthene	4.32E-07	1.77E-08	1.05E-08	1.46E-10	6.99E-11	2.93E-06	4.93E-08	9.89E-09	4.66E-09
Benzo(g,h,i)perylene	4.69E-06	1.74E-05	5.73E-07	5.49E-08	4.19E-10	7.55E-05	1.27E-06	1.23E-06	6.64E-08
Benzo(k)fluoranthene	3.77E-07	9.23E-08	9.19E-09	4.06E-10	2.49E-11	9.88E-07	1.66E-08	3.35E-09	1.57E-09
Chrysene	6.97E-07	7.98E-08	1.70E-08	4.64E-10	8.66E-11	1.39E-06	2.34E-08	4.87E-09	2.18E-09
Dibenz(a,c)anthracene	5.92E-07	3.23E-06	7.21E-08	8.99E-09	3.91E-10	3.05E-05	5.13E-07	4.90E-07	9.82E-08
Dibenz(a,h)anthracene	2.07E-07	1.46E-06	2.53E-08	4.56E-09	2.08E-11	1.49E-06	2.51E-08	2.44E-08	3.30E-09
Indeno(1,2,3-cd)pyrene	9.99E-07	5.19E-07	1.22E-07	1.65E-09	9.67E-11	1.19E-05	2.00E-07	1.93E-07	1.93E-08
Perylene	1.95E-07	8.52E-06	2.38E-08	2.97E-08	3.39E-11	1.09E-06	1.90E-08	1.82E-08	3.02E-09
Pyrene	1.73E-05	1.03E-06	4.23E-07	8.00E-09	1.74E-09	4.74E-06	7.98E-08	1.78E-08	6.94E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	5.10E-08	3.26E-09	2.52E-08	1.52E-09	1.10E-12	1.71E-07	4.14E-09	5.28E-09	3.48E-08
PCB									
Aroclor 1254 (Total PCBs)	6.44E-05	5.16E-07	--	1.18E-06	1.55E-09	1.53E-04	--	--	3.05E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	4.94E-08	2.15E-08	6.19E-09	2.33E-08	3.06E-08	4.63E-07	1.40E-07	1.97E-08	3.67E-07
1,2,4-Trichlorobenzene	3.67E-09	7.19E-10	4.52E-10	1.09E-09	8.19E-10	5.44E-08	8.92E-10	2.21E-09	5.17E-08
1,2,4,5-Tetrachlorobenzene	1.56E-07	1.02E-08	1.90E-08	9.30E-09	1.29E-09	3.92E-07	6.99E-09	1.49E-08	4.09E-07
Pentachlorobenzene	2.42E-06	9.87E-08	5.91E-07	9.90E-08	2.35E-09	1.14E-05	2.03E-07	4.17E-07	1.74E-06
Hexachlorobenzene	6.69E-08	2.86E-09	1.63E-08	4.00E-09	8.31E-10	2.66E-06	4.74E-08	9.66E-08	8.31E-07
Pentachlorophenol	1.14E-06	8.63E-05	2.67E-06	5.77E-08	7.12E-08	1.69E-06	3.31E-08	6.24E-08	4.01E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	5.39E-11	5.08E-11	7.45E-12	1.87E-09	5.57E-09	3.38E-08	2.67E-08	1.53E-09	1.76E-08
Chloroform	8.88E-11	2.40E-10	1.99E-11	7.71E-10	6.82E-09	1.43E-08	2.52E-08	6.94E-10	3.42E-09
Dichloromethane	1.59E-08	1.09E-07	1.01E-08	8.15E-08	2.38E-06	9.53E-07	2.29E-06	4.91E-08	2.38E-07
Trichlorofluoromethane (Freon 11)	4.10E-09	5.73E-09	6.33E-10	4.96E-07	2.16E-06	9.87E-06	1.09E-05	4.58E-07	3.42E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.98E-10	2.77E-10	3.06E-11	4.29E-09	1.86E-08	1.00E-07	1.10E-07	4.66E-09	2.95E-08
Other Organics									
Bromoform	7.52E-10	1.24E-09	1.24E-10	1.64E-07	8.50E-07	4.28E-06	5.33E-06	2.01E-07	9.99E-07
O-Terphenyl	1.10E-06	6.51E-08	2.68E-07	5.37E-08	1.83E-09	1.35E-05	3.05E-07	4.80E-07	3.04E-06
Inorganics									
Antimony	3.21E-04	1.55E-04	5.14E-05	1.80E-06	5.89E-07	2.65E-05	1.36E-07	2.99E-07	1.18E-04
Arsenic	3.19E-05	1.51E-05	6.69E-07	3.37E-07	9.04E-08	2.62E-06	1.28E-08	2.71E-07	4.52E-06
Barium	2.26E-04	1.04E-04	3.30E-06	1.80E-07	4.55E-07	1.86E-05	3.78E-07	2.55E-06	4.55E-06
Beryllium	2.02E-04	1.31E-05	1.46E-06	2.33E-07	2.56E-08	2.02E-05	1.85E-06	2.68E-06	2.56E-06
Boron	1.25E-03	1.01E-02	2.00E-04	8.74E-05	3.29E-05	9.87E-05	1.79E-06	2.26E-05	--
Cadmium	1.33E-03	7.18E-04	2.04E-03	1.02E-06	1.47E-06	1.11E-04	1.22E-05	3.60E-05	1.77E-03
Chromium (Total)	1.12E-04	7.53E-05	5.50E-06	4.48E-06	4.84E-07	9.20E-06	4.90E-08	3.96E-07	9.68E-05
Chromium VI	1.60E-05	1.07E-05	7.82E-07	6.37E-07	6.88E-08	1.31E-06	6.97E-09	--	2.54E-06
Cobalt	6.80E-04	2.05E-04	1.33E-05	4.85E-05	1.24E-06	5.60E-05	5.46E-08	1.34E-07	1.24E-04
Lead	3.10E-02	3.05E-03	2.31E-03	1.43E-05	3.54E-06	3.18E-03	3.56E-05	7.68E-05	3.71E-04
Mercury - Inorganic	1.81E-03	2.53E-05	4.90E-04	6.07E-06	3.31E-08	1.68E-03	3.11E-04	2.06E-04	2.38E-05
Methyl Mercury	8.11E-05	7.13E-06	6.89E-04	8.69E-08	4.70E-10	3.81E-06	6.78E-08	1.70E-05	7.75E-05
Nickel	1.46E-02	3.35E-03	2.47E-03	1.85E-04	2.49E-04	1.20E-03	9.48E-06	4.09E-05	2.89E-03
Selenium	6.43E-06	1.60E-05	1.01E-06	3.72E-07	1.03E-07	5.16E-07	3.40E-08	3.23E-07	1.75E-05
Silver	7.38E-05	1.40E-04	2.41E-05	4.47E-06	7.21E-07	5.98E-06	2.69E-08	--	6.38E-05
Thallium	7.07E-03	1.32E-03	1.13E-03	6.73E-04	8.25E-06	5.86E-04	1.88E-07	--	--
Tin	7.66E-03	8.13E-04	6.32E-04	9.81E-04	2.65E-06	6.64E-04	1.79E-06	--	7.96E-03
Vanadium	7.32E-04	4.25E-05	4.92E-06	1.98E-06	7.70E-08	7.70E-05	4.86E-08	1.14E-06	1.23E-05
Zinc	3.19E-02	1.46E-02	2.32E-02	1.56E-05	4.25E-05	2.64E-03	2.34E-04	1.23E-03	3.96E-02

Table M.57 - Detailed Process Upset Case Exposure Point Concentrations for the Sports Fields Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	3.73E-07	8.08E-08	1.84E-08	4.05E-10	1.37E-08	2.68E-06	4.52E-08	1.10E-08	5.45E-09
Acenaphthylene	8.74E-08	1.69E-08	4.30E-09	1.75E-10	1.12E-08	1.97E-06	3.31E-08	8.01E-09	5.62E-09
Anthracene	3.68E-07	3.69E-08	1.80E-08	2.48E-10	3.05E-09	2.87E-06	4.82E-08	1.12E-08	4.83E-09
Fluoranthene	3.65E-06	2.81E-07	1.78E-07	2.42E-09	3.09E-08	6.08E-05	1.02E-06	2.27E-07	1.55E-07
Fluorene	3.71E-07	5.57E-08	1.82E-08	5.12E-10	2.36E-08	7.27E-06	1.22E-07	2.91E-08	1.87E-08
Phenanthrene	3.75E-06	4.05E-07	1.83E-07	3.15E-09	7.13E-08	7.57E-05	1.27E-06	2.95E-07	1.13E-07
High Molecular Weight PAHs									
Benz(a)anthracene	2.02E-07	1.00E-07	4.94E-09	4.54E-10	9.06E-10	1.30E-05	2.18E-07	4.55E-08	2.28E-08
Benzo(a)pyrene	3.58E-07	5.01E-07	4.37E-08	1.97E-09	1.50E-09	5.83E-05	1.01E-06	9.96E-07	7.54E-08
Benzo(e)pyrene	9.76E-07	4.07E-05	1.19E-07	1.31E-07	5.16E-09	8.22E-05	--	1.35E-06	7.13E-07
Benzo(a)fluorene	4.00E-07	1.07E-07	9.76E-09	8.38E-10	1.97E-08	7.80E-05	--	2.81E-07	2.48E-07
Benzo(b)fluorene	2.76E-07	2.20E-07	6.74E-09	1.14E-09	1.35E-08	5.48E-05	--	1.91E-07	3.80E-07
Benzo(b)fluoranthene	4.65E-07	3.05E-08	1.14E-08	2.23E-10	1.59E-09	6.67E-05	1.12E-06	2.25E-07	1.06E-07
Benzo(g,h,i)perylene	5.06E-06	6.18E-05	6.17E-07	1.93E-07	6.97E-09	1.26E-03	2.11E-05	2.06E-05	1.10E-06
Benzo(k)fluoranthene	4.07E-07	2.02E-07	9.92E-09	8.20E-10	4.44E-10	1.76E-05	2.96E-07	5.97E-08	2.80E-08
Chrysene	7.51E-07	9.81E-08	1.83E-08	5.81E-10	2.18E-09	3.49E-05	5.88E-07	1.23E-07	5.47E-08
Dibenz(a,c)anthracene	6.37E-07	7.51E-06	7.77E-08	2.10E-08	8.10E-09	6.31E-04	1.06E-05	1.01E-05	2.03E-06
Dibenz(a,h)anthracene	2.24E-07	5.00E-06	2.73E-08	1.56E-08	3.88E-10	2.78E-05	4.67E-07	4.54E-07	6.15E-08
Indeno(1,2,3-cd)pyrene	1.08E-06	6.51E-07	1.31E-07	1.69E-09	2.07E-09	3.51E-04	3.51E-06	3.38E-06	3.38E-07
Perylene	2.11E-07	3.03E-05	2.57E-08	1.05E-07	7.18E-10	2.31E-05	4.01E-07	3.85E-07	6.40E-08
Pyrene	1.87E-05	1.19E-06	4.56E-07	9.45E-09	3.76E-08	1.02E-04	1.72E-06	3.85E-07	1.50E-07
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	4.45E-08	7.52E-09	2.20E-08	2.57E-09	9.57E-12	1.49E-06	3.54E-08	4.58E-08	3.03E-07
PCB									
Aroclor 1254 (Total PCBs)	6.97E-05	7.55E-07	--	1.37E-06	1.94E-08	1.90E-03	--	--	5.32E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	5.32E-08	2.35E-08	6.66E-09	7.42E-07	1.20E-06	1.81E-05	5.47E-06	7.71E-07	1.44E-05
1,2,4-Trichlorobenzene	3.95E-09	8.36E-10	4.86E-10	3.16E-08	3.13E-08	2.08E-06	3.41E-08	8.45E-08	1.97E-06
1,2,4,5-Tetrachlorobenzene	1.68E-07	1.13E-08	2.05E-08	5.17E-08	3.02E-08	9.15E-06	1.63E-07	3.47E-07	9.54E-06
Pentachlorobenzene	2.61E-06	1.12E-07	6.36E-07	2.36E-07	8.29E-08	4.01E-04	7.14E-06	1.47E-05	6.14E-05
Hexachlorobenzene	7.20E-08	4.69E-09	1.76E-08	5.18E-08	3.04E-08	9.74E-05	1.74E-06	3.54E-06	3.04E-05
Pentachlorophenol	1.23E-06	3.07E-04	2.87E-06	2.05E-07	3.18E-07	7.54E-06	1.48E-07	2.79E-07	1.79E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	5.80E-11	5.59E-11	8.02E-12	6.77E-08	2.02E-07	1.23E-06	9.70E-07	5.56E-08	6.40E-07
Chloroform	9.55E-11	2.60E-10	2.14E-11	3.02E-08	2.70E-07	5.66E-07	9.97E-07	2.74E-08	1.35E-07
Dichloromethane	1.71E-08	1.18E-07	1.09E-08	3.32E-06	9.83E-05	3.93E-05	9.47E-05	2.03E-06	9.83E-06
Trichlorofluoromethane (Freon 11)	4.41E-09	6.24E-09	6.81E-10	1.79E-05	7.80E-05	3.57E-04	3.92E-04	1.65E-05	1.24E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.13E-10	3.02E-10	3.29E-11	1.57E-07	6.84E-07	3.69E-06	4.06E-06	1.71E-07	1.08E-06
Other Organics									
Bromoform	8.10E-10	1.34E-09	1.33E-10	5.89E-06	3.06E-05	1.54E-04	1.92E-04	7.24E-06	3.60E-05
O-Terphenyl	1.18E-06	1.63E-07	2.88E-07	1.80E-07	5.43E-08	4.00E-04	8.00E-06	1.42E-05	9.01E-05
Inorganics									
Antimony	2.79E-04	1.37E-04	4.47E-05	1.64E-06	1.96E-06	8.83E-05	4.53E-07	9.97E-07	3.92E-04
Arsenic	2.77E-05	1.34E-05	5.81E-07	3.16E-07	3.01E-07	8.73E-06	4.26E-08	9.02E-07	1.50E-05
Barium	1.97E-04	9.19E-05	2.86E-06	1.65E-07	1.51E-06	6.21E-05	1.26E-06	8.49E-06	1.51E-05
Beryllium	1.76E-04	1.16E-05	1.27E-06	2.10E-07	1.47E-07	1.16E-04	1.06E-05	1.53E-05	1.47E-05
Boron	1.09E-03	8.86E-03	1.74E-04	7.93E-05	1.10E-04	3.29E-04	5.97E-06	7.53E-05	--
Cadmium	1.16E-03	6.29E-04	1.77E-03	9.12E-07	4.95E-06	3.71E-04	4.11E-05	1.21E-04	5.95E-03
Chromium (Total)	9.76E-05	6.71E-05	4.78E-06	4.24E-06	1.61E-06	3.06E-05	1.63E-07	1.32E-06	3.22E-04
Chromium VI	1.39E-05	9.55E-06	6.79E-07	6.02E-07	2.29E-07	4.36E-06	2.32E-08	--	8.47E-06
Cobalt	5.91E-04	1.83E-04	1.15E-05	4.53E-05	4.15E-06	1.87E-04	1.82E-07	4.48E-07	4.15E-04
Lead	2.70E-02	2.69E-03	2.01E-03	1.28E-05	2.14E-05	1.92E-02	2.15E-04	4.64E-04	2.24E-03
Mercury - Inorganic	2.71E-03	3.04E-05	7.35E-04	8.89E-06	7.23E-07	3.67E-02	5.37E-03	4.51E-03	5.20E-04
Methyl Mercury	7.06E-05	8.58E-06	6.00E-04	9.42E-08	1.03E-08	6.41E-06	1.14E-07	2.86E-05	1.69E-03
Nickel	1.27E-02	2.98E-03	2.14E-03	2.31E-04	6.20E-05	4.03E-03	3.17E-05	1.37E-04	9.67E-03
Selenium	5.59E-06	1.43E-05	8.81E-07	3.53E-07	3.44E-07	1.72E-06	1.13E-07	1.08E-06	5.85E-05
Silver	6.41E-05	1.25E-04	2.10E-05	4.16E-06	2.40E-06	1.99E-05	8.97E-08	--	2.13E-04
Thallium	6.15E-03	1.18E-03	9.84E-04	6.28E-04	2.76E-05	1.96E-03	6.30E-07	--	--
Tin	6.67E-03	7.19E-04	5.50E-04	8.88E-04	1.04E-05	2.59E-03	7.00E-06	--	3.11E-02
Vanadium	6.37E-04	3.78E-05	4.28E-06	1.78E-06	4.86E-07	4.86E-04	3.06E-07	7.17E-06	7.78E-05
Zinc	2.77E-02	1.28E-02	2.01E-02	1.40E-05	1.42E-04	8.81E-03	7.83E-04	4.11E-03	1.32E-01

Table M.58 - Detailed Process Upset Case Exposure Point Concentrations for the Water Pollution Control Plant Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	4.28E-07	9.27E-08	2.11E-08	3.22E-10	5.07E-10	9.94E-08	1.67E-09	4.08E-10	2.02E-10
Acenaphthylene	1.00E-07	1.92E-08	4.94E-09	7.72E-11	5.59E-10	9.82E-08	1.65E-09	4.00E-10	2.80E-10
Anthracene	4.22E-07	4.20E-08	2.07E-08	2.40E-10	1.30E-10	1.22E-07	2.05E-09	4.75E-10	2.06E-10
Fluoranthene	4.18E-06	2.79E-07	2.04E-07	2.08E-09	1.36E-09	2.68E-06	4.50E-08	9.98E-09	6.83E-09
Fluorene	4.26E-07	6.29E-08	2.09E-08	2.89E-10	9.06E-10	2.80E-07	4.70E-09	1.12E-09	7.20E-10
Phenanthrene	4.30E-06	4.45E-07	2.11E-07	2.52E-09	2.99E-09	3.18E-06	5.35E-08	1.24E-08	4.74E-09
High Molecular Weight PAHs									
Benz(a)anthracene	2.32E-07	9.06E-08	5.66E-09	4.07E-10	4.58E-11	6.56E-07	1.10E-08	2.30E-09	1.15E-09
Benzo(a)pyrene	4.11E-07	3.88E-07	5.01E-08	1.53E-09	8.47E-11	3.28E-06	5.71E-08	5.61E-08	4.24E-09
Benzo(e)pyrene	1.12E-06	2.37E-05	1.37E-07	7.61E-08	2.77E-10	4.40E-06	--	7.24E-08	3.82E-08
Benzo(a)fluorene	4.59E-07	7.71E-08	1.12E-08	4.30E-10	8.38E-10	3.32E-06	--	1.20E-08	1.06E-08
Benzo(b)fluorene	3.17E-07	1.36E-07	7.74E-09	6.18E-10	5.81E-10	2.36E-06	--	8.25E-09	1.64E-08
Benzo(b)fluoranthene	5.34E-07	2.57E-08	1.30E-08	1.94E-10	8.64E-11	3.62E-06	6.09E-08	1.22E-08	5.76E-09
Benzo(g,h,i)perylene	5.80E-06	3.59E-05	7.07E-07	1.13E-07	5.18E-10	9.33E-05	1.57E-06	1.53E-06	8.20E-08
Benzo(k)fluoranthene	4.66E-07	1.49E-07	1.14E-08	6.28E-10	3.08E-11	1.22E-06	2.05E-08	4.14E-09	1.94E-09
Chrysene	8.61E-07	1.03E-07	2.10E-08	5.89E-10	1.07E-10	1.72E-06	2.89E-08	6.02E-09	2.69E-09
Dibenz(a,c)anthracene	7.31E-07	5.35E-06	8.91E-08	1.49E-08	4.83E-10	3.77E-05	6.34E-07	6.05E-07	1.21E-07
Dibenz(a,h)anthracene	2.56E-07	2.95E-06	3.13E-08	9.22E-09	2.57E-11	1.84E-06	3.10E-08	3.01E-08	4.08E-09
Indeno(1,2,3-cd)pyrene	1.23E-06	6.72E-07	1.51E-07	2.13E-09	1.19E-10	1.47E-05	2.47E-07	2.38E-07	2.38E-08
Perylene	2.41E-07	1.76E-05	2.95E-08	6.13E-08	4.19E-11	1.35E-06	2.34E-08	2.25E-08	3.74E-09
Pyrene	2.14E-05	1.30E-06	5.22E-07	9.98E-09	2.15E-09	5.86E-06	9.86E-08	2.20E-08	8.58E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	5.88E-08	5.34E-09	2.90E-08	2.17E-09	1.27E-12	1.98E-07	4.77E-09	6.08E-09	4.01E-08
PCB									
Aroclor 1254 (Total PCBs)	7.96E-05	7.03E-07	--	1.48E-06	1.92E-09	1.89E-04	--	--	3.77E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.11E-08	2.66E-08	7.64E-09	2.88E-08	3.77E-08	5.72E-07	1.73E-07	2.43E-08	4.54E-07
1,2,4-Trichlorobenzene	4.54E-09	9.09E-10	5.58E-10	1.35E-09	1.01E-09	6.72E-08	1.10E-09	2.73E-09	6.38E-08
1,2,4,5-Tetrachlorobenzene	1.93E-07	1.27E-08	2.35E-08	1.15E-08	1.60E-09	4.84E-07	8.64E-09	1.84E-08	5.05E-07
Pentachlorobenzene	2.99E-06	1.24E-07	7.30E-07	1.23E-07	2.90E-09	1.40E-05	2.50E-07	5.16E-07	2.15E-06
Hexachlorobenzene	8.27E-08	4.07E-09	2.02E-08	5.16E-09	1.03E-09	3.29E-06	5.86E-08	1.19E-07	1.03E-06
Pentachlorophenol	1.41E-06	1.78E-04	3.29E-06	1.19E-07	8.80E-08	2.08E-06	4.09E-08	7.70E-08	4.95E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	6.66E-11	6.31E-11	9.21E-12	2.31E-09	6.88E-09	4.18E-08	3.30E-08	1.89E-09	2.17E-08
Chloroform	1.10E-10	2.98E-10	2.46E-11	9.52E-10	8.42E-09	1.77E-08	3.11E-08	8.58E-10	4.22E-09
Dichloromethane	1.97E-08	1.35E-07	1.25E-08	1.01E-07	2.94E-06	1.18E-06	2.83E-06	6.07E-08	2.94E-07
Trichlorofluoromethane (Freon 11)	5.07E-09	7.11E-09	7.82E-10	6.13E-07	2.67E-06	1.22E-05	1.34E-05	5.66E-07	4.23E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.45E-10	3.43E-10	3.78E-11	5.29E-09	2.30E-08	1.24E-07	1.36E-07	5.75E-09	3.64E-08
Other Organics									
Bromoform	9.29E-10	1.53E-09	1.53E-10	2.02E-07	1.05E-06	5.29E-06	6.59E-06	2.48E-07	1.23E-06
O-Terphenyl	1.36E-06	1.12E-07	3.31E-07	7.91E-08	2.26E-09	1.66E-05	3.74E-07	5.93E-07	3.75E-06
Inorganics									
Antimony	3.70E-04	1.79E-04	5.93E-05	2.08E-06	6.78E-07	3.05E-05	1.56E-07	3.45E-07	1.36E-04
Arsenic	3.67E-05	1.74E-05	7.70E-07	3.89E-07	1.04E-07	3.02E-06	1.47E-08	3.12E-07	5.21E-06
Barium	2.61E-04	1.20E-04	3.80E-06	2.08E-07	5.24E-07	2.15E-05	4.36E-07	2.94E-06	5.24E-06
Beryllium	2.33E-04	1.51E-05	1.68E-06	2.69E-07	2.95E-08	2.33E-05	2.13E-06	3.08E-06	2.95E-06
Boron	1.44E-03	1.16E-02	2.31E-04	1.01E-04	3.79E-05	1.14E-04	2.06E-06	2.60E-05	--
Cadmium	1.54E-03	8.27E-04	2.35E-03	1.18E-06	1.70E-06	1.27E-04	1.41E-05	4.14E-05	2.04E-03
Chromium (Total)	1.29E-04	8.69E-05	6.33E-06	5.17E-06	5.58E-07	1.06E-05	5.65E-08	4.56E-07	1.12E-04
Chromium VI	1.84E-05	1.24E-05	9.01E-07	7.35E-07	7.93E-08	1.51E-06	8.03E-09	--	2.93E-06
Cobalt	7.83E-04	2.37E-04	1.53E-05	5.59E-05	1.43E-06	6.45E-05	6.29E-08	1.55E-07	1.43E-04
Lead	3.57E-02	3.52E-03	2.66E-03	1.65E-05	4.08E-06	3.67E-03	4.10E-05	8.85E-05	4.27E-04
Mercury - Inorganic	2.49E-03	3.19E-05	6.74E-04	8.20E-06	4.56E-08	2.31E-03	4.26E-04	2.84E-04	3.27E-05
Methyl Mercury	9.34E-05	8.98E-06	7.94E-04	1.06E-07	6.47E-10	4.39E-06	7.81E-08	1.96E-05	1.07E-04
Nickel	1.68E-02	3.86E-03	2.84E-03	2.87E-04	2.13E-05	1.09E-03	1.09E-05	4.72E-05	3.33E-03
Selenium	7.41E-06	1.85E-05	1.17E-06	4.29E-07	1.19E-07	5.94E-07	3.92E-08	3.72E-07	2.02E-05
Silver	8.50E-05	1.62E-04	2.78E-05	5.15E-06	8.30E-07	6.89E-06	3.10E-08	--	7.35E-05
Thallium	8.15E-03	1.52E-03	1.30E-03	7.76E-04	9.50E-06	6.75E-04	2.17E-07	--	--
Tin	8.83E-03	9.37E-04	7.28E-04	1.13E-03	3.06E-06	7.64E-04	2.07E-06	--	9.17E-03
Vanadium	8.43E-04	4.91E-05	5.66E-06	2.28E-06	8.87E-08	8.87E-05	5.59E-08	1.31E-06	1.42E-05
Zinc	3.68E-02	1.68E-02	2.67E-02	1.80E-05	4.90E-05	3.04E-03	2.70E-04	1.42E-03	4.56E-02

Table M.59 - Detailed Process Upset Case Exposure Point Concentrations for the Future Industrial Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	7.38E-07	1.60E-07	3.64E-08	5.55E-10	8.73E-10	1.71E-07	2.88E-09	7.02E-10	3.48E-10
Acenaphthylene	1.73E-07	3.28E-08	8.50E-09	1.32E-10	9.63E-10	1.69E-07	2.85E-09	6.88E-10	4.83E-10
Anthracene	7.28E-07	7.21E-08	3.56E-08	4.12E-10	2.23E-10	2.10E-07	3.53E-09	8.18E-10	3.54E-10
Fluoranthene	7.20E-06	4.43E-07	3.52E-07	3.43E-09	2.35E-09	4.61E-06	7.75E-08	1.72E-08	1.18E-08
Fluorene	7.34E-07	1.07E-07	3.60E-08	4.94E-10	1.56E-09	4.81E-07	8.10E-09	1.92E-09	1.24E-09
Phenanthrene	7.42E-06	7.50E-07	3.63E-07	4.29E-09	5.15E-09	5.47E-06	9.20E-08	2.13E-08	8.17E-09
High Molecular Weight PAHs									
Benz(a)anthracene	4.00E-07	1.34E-07	9.76E-09	6.15E-10	7.89E-11	1.13E-06	1.90E-08	3.96E-09	1.98E-09
Benzo(a)pyrene	7.08E-07	5.04E-07	8.64E-08	2.01E-09	1.46E-10	5.65E-06	9.83E-08	9.66E-08	7.31E-09
Benzo(e)pyrene	1.93E-06	2.06E-05	2.35E-07	6.63E-08	4.76E-10	7.58E-06	--	1.25E-07	6.57E-08
Benzo(a)fluorene	7.91E-07	9.33E-08	1.93E-08	5.79E-10	1.44E-09	5.72E-06	--	2.06E-08	1.82E-08
Benzo(b)fluorene	5.46E-07	1.34E-07	1.33E-08	6.61E-10	1.00E-09	4.07E-06	--	1.42E-08	2.82E-08
Benzo(b)fluoranthene	9.19E-07	3.61E-08	2.24E-08	3.05E-10	1.49E-10	6.23E-06	1.05E-07	2.11E-08	9.91E-09
Benzo(g,h,i)perylene	9.99E-06	3.12E-05	1.22E-06	9.88E-08	8.91E-10	1.61E-04	2.70E-06	2.63E-06	1.41E-07
Benzo(k)fluoranthene	8.02E-07	1.83E-07	1.96E-08	8.13E-10	5.30E-11	2.10E-06	3.54E-08	7.12E-09	3.34E-09
Chrysene	1.48E-06	1.68E-07	3.62E-08	9.81E-10	1.84E-10	2.96E-06	4.98E-08	1.04E-08	4.63E-09
Dibenz(a,c)anthracene	1.26E-06	6.34E-06	1.54E-07	1.76E-08	8.32E-10	6.49E-05	1.09E-06	1.04E-06	2.09E-07
Dibenz(a,h)anthracene	4.42E-07	2.64E-06	5.39E-08	8.28E-09	4.43E-11	3.17E-06	5.34E-08	5.19E-08	7.02E-09
Indeno(1,2,3-cd)pyrene	2.13E-06	1.09E-06	2.59E-07	3.47E-09	2.06E-10	2.53E-05	4.26E-07	4.10E-07	4.11E-08
Perylene	4.16E-07	1.53E-05	5.07E-08	5.33E-08	7.22E-11	2.32E-06	4.03E-08	3.88E-08	6.43E-09
Pyrene	3.68E-05	2.19E-06	9.00E-07	1.70E-08	3.71E-09	1.01E-05	1.70E-07	3.80E-08	1.48E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.10E-07	6.37E-09	5.44E-08	3.11E-09	2.37E-12	3.68E-07	8.87E-09	1.13E-08	7.48E-08
PCB									
Aroclor 1254 (Total PCBs)	1.37E-04	1.07E-06	--	2.51E-06	3.31E-09	3.25E-04	--	--	6.49E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.05E-07	4.56E-08	1.32E-08	4.95E-08	6.50E-08	9.86E-07	2.97E-07	4.19E-08	7.82E-07
1,2,4-Trichlorobenzene	7.82E-09	1.52E-09	9.62E-10	2.31E-09	1.74E-09	1.16E-07	1.90E-09	4.71E-09	1.10E-07
1,2,4,5-Tetrachlorobenzene	3.32E-07	2.18E-08	4.05E-08	1.98E-08	2.75E-09	8.34E-07	1.49E-08	3.17E-08	8.71E-07
Pentachlorobenzene	5.16E-06	2.09E-07	1.26E-06	2.10E-07	5.00E-09	2.42E-05	4.31E-07	8.88E-07	3.71E-06
Hexachlorobenzene	1.42E-07	5.87E-09	3.48E-08	8.42E-09	1.77E-09	5.66E-06	1.01E-07	2.06E-07	1.77E-06
Pentachlorophenol	2.42E-06	1.55E-04	5.67E-06	1.04E-07	1.52E-07	3.59E-06	7.04E-08	1.33E-07	8.53E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.15E-10	1.08E-10	1.59E-11	3.98E-09	1.18E-08	7.20E-08	5.68E-08	3.26E-09	3.75E-08
Chloroform	1.89E-10	5.11E-10	4.24E-11	1.64E-09	1.45E-08	3.05E-08	5.36E-08	1.48E-09	7.27E-09
Dichloromethane	3.39E-08	2.33E-07	2.15E-08	1.74E-07	5.07E-06	2.03E-06	4.88E-06	1.05E-07	5.07E-07
Trichlorofluoromethane (Freon 11)	8.73E-09	1.22E-08	1.35E-09	1.06E-06	4.60E-06	2.10E-05	2.31E-05	9.75E-07	7.28E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	4.22E-10	5.89E-10	6.51E-11	9.12E-09	3.96E-08	2.14E-07	2.35E-07	9.91E-09	6.27E-08
Other Organics									
Bromoform	1.60E-09	2.64E-09	2.64E-10	3.48E-07	1.81E-06	9.12E-06	1.14E-05	4.28E-07	2.13E-06
O-Terphenyl	2.34E-06	1.26E-07	5.70E-07	1.09E-07	3.89E-09	2.87E-05	6.31E-07	1.02E-06	6.46E-06
Inorganics									
Antimony	6.91E-04	3.32E-04	1.10E-04	3.87E-06	1.26E-06	5.69E-05	2.92E-07	6.43E-07	2.53E-04
Arsenic	6.85E-05	3.22E-05	1.44E-06	7.23E-07	1.94E-07	5.63E-06	2.75E-08	5.82E-07	9.71E-06
Barium	4.86E-04	2.23E-04	7.08E-06	3.86E-07	9.77E-07	4.00E-05	8.12E-07	5.48E-06	9.77E-06
Beryllium	4.35E-04	2.80E-05	3.13E-06	5.00E-07	5.50E-08	4.35E-05	3.97E-06	5.75E-06	5.50E-06
Boron	2.69E-03	2.16E-02	4.30E-04	1.88E-04	7.07E-05	2.12E-04	3.85E-06	4.85E-05	--
Cadmium	2.87E-03	1.54E-03	4.37E-03	2.19E-06	3.17E-06	2.38E-04	2.63E-05	7.73E-05	3.81E-03
Chromium (Total)	2.41E-04	1.61E-04	1.18E-05	9.59E-06	1.04E-06	1.98E-05	1.05E-07	8.50E-07	2.08E-04
Chromium VI	3.43E-05	2.29E-05	1.68E-06	1.36E-06	1.48E-07	1.81E-06	1.50E-08	--	5.46E-06
Cobalt	1.46E-03	4.40E-04	2.85E-05	1.04E-04	2.67E-06	1.20E-04	1.17E-07	2.89E-07	2.67E-04
Lead	6.66E-02	6.54E-03	4.96E-03	3.07E-05	7.60E-06	6.84E-03	7.64E-05	1.65E-04	7.96E-04
Mercury - Inorganic	3.76E-03	5.31E-05	1.02E-03	1.26E-05	6.89E-08	3.49E-03	6.37E-04	4.29E-04	4.95E-05
Methyl Mercury	1.74E-04	1.50E-05	1.48E-03	1.84E-07	9.78E-10	8.18E-06	1.46E-07	3.65E-05	1.61E-04
Nickel	3.13E-02	7.18E-03	5.30E-03	5.34E-04	3.98E-05	2.59E-03	2.04E-05	8.79E-05	6.21E-03
Selenium	1.38E-05	3.42E-05	2.18E-06	7.96E-07	2.22E-07	1.11E-06	7.31E-08	6.94E-07	3.77E-05
Silver	1.58E-04	3.01E-04	5.19E-05	9.57E-06	1.55E-06	1.28E-05	5.78E-08	--	1.37E-04
Thallium	1.52E-02	2.83E-03	2.43E-03	1.44E-03	1.77E-05	1.26E-03	4.04E-07	--	--
Tin	1.65E-02	1.74E-03	1.36E-03	2.10E-03	5.70E-06	1.43E-03	3.85E-06	--	1.71E-02
Vanadium	1.57E-03	9.11E-05	1.06E-05	4.25E-06	1.65E-07	1.65E-04	1.04E-07	2.44E-06	2.65E-05
Zinc	6.85E-02	3.13E-02	4.97E-02	3.35E-05	9.14E-05	5.67E-03	5.03E-04	2.64E-03	8.51E-02

Table M.60 - Detailed Process Upset Case Exposure Point Concentrations for the Harmony Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	7.13E-08	1.54E-08	3.51E-09	5.32E-11	3.84E-11	7.53E-09	1.27E-10	3.09E-11	1.53E-11
Acenaphthylene	1.67E-08	3.24E-09	8.21E-10	1.33E-11	1.24E-10	2.17E-08	3.65E-10	8.83E-11	6.19E-11
Anthracene	7.03E-08	7.06E-09	3.44E-09	4.00E-11	1.59E-11	1.50E-08	2.52E-10	5.83E-11	2.52E-11
Fluoranthene	6.96E-07	5.49E-08	3.40E-08	3.79E-10	1.75E-10	3.44E-07	5.79E-09	1.28E-09	8.78E-10
Fluorene	7.09E-08	1.07E-08	3.48E-09	4.77E-11	6.60E-11	2.04E-08	3.43E-10	8.14E-11	5.24E-11
Phenanthrene	7.16E-07	7.80E-08	3.50E-08	4.31E-10	3.30E-10	3.51E-07	5.90E-09	1.37E-09	5.24E-10
High Molecular Weight PAHs									
Benz(a)anthracene	3.86E-08	1.98E-08	9.42E-10	8.65E-11	4.53E-12	6.49E-08	1.09E-09	2.28E-10	1.14E-10
Benzo(a)pyrene	6.84E-08	1.01E-07	8.34E-09	3.91E-10	4.89E-12	1.90E-07	3.30E-09	3.24E-09	2.45E-10
Benzo(e)pyrene	1.86E-07	8.49E-06	2.27E-08	2.72E-08	3.32E-11	5.29E-07	--	8.69E-09	4.58E-09
Benzo(a)fluorene	7.64E-08	2.17E-08	1.86E-09	1.07E-10	7.78E-11	3.08E-07	--	1.11E-09	9.80E-10
Benzo(b)fluorene	5.28E-08	4.55E-08	1.29E-09	1.93E-10	5.66E-11	2.30E-07	--	8.03E-10	1.59E-09
Benzo(b)fluoranthene	8.88E-08	6.08E-09	2.17E-09	3.89E-11	5.27E-12	2.21E-07	3.72E-09	7.47E-10	3.52E-10
Benzo(g,h,i)perylene	9.65E-07	1.29E-05	1.18E-07	4.02E-08	1.85E-11	3.34E-06	5.61E-08	5.46E-08	2.93E-09
Benzo(k)fluoranthene	7.76E-08	4.11E-08	1.89E-09	1.64E-10	3.40E-12	1.35E-07	2.27E-09	4.58E-10	2.15E-10
Chrysene	1.43E-07	1.89E-08	3.50E-09	1.05E-10	9.83E-12	1.58E-07	2.66E-09	5.54E-10	2.47E-10
Dibenz(a,c)anthracene	1.22E-07	1.53E-06	1.48E-08	4.26E-09	1.39E-11	1.08E-06	1.82E-08	1.74E-08	3.49E-09
Dibenz(a,h)anthracene	4.27E-08	1.04E-06	5.20E-09	3.24E-09	1.46E-12	1.04E-07	1.76E-09	1.71E-09	2.31E-10
Indeno(1,2,3-cd)pyrene	2.05E-07	1.25E-07	2.51E-08	3.93E-10	4.86E-12	5.98E-07	1.01E-08	9.70E-09	9.70E-10
Perylene	4.02E-08	6.32E-06	4.90E-09	2.20E-08	3.63E-12	1.17E-07	2.03E-09	1.95E-09	3.24E-10
Pyrene	3.56E-06	2.28E-07	8.70E-08	1.71E-09	5.80E-10	1.58E-06	2.65E-08	5.93E-09	2.31E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.11E-08	1.67E-09	5.46E-09	5.85E-10	1.44E-13	2.23E-08	5.41E-10	6.88E-10	4.54E-09
PCB									
Aroclor 1254 (Total PCBs)	1.33E-05	1.49E-07	--	2.58E-07	2.22E-10	2.18E-05	--	--	3.05E-05
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.02E-08	4.50E-09	1.27E-09	1.82E-09	1.45E-09	2.20E-08	6.65E-09	9.37E-10	1.75E-08
1,2,4-Trichlorobenzene	7.55E-10	1.61E-10	9.29E-11	1.11E-10	5.27E-11	3.50E-09	5.75E-11	1.43E-10	3.33E-09
1,2,4,5-Tetrachlorobenzene	3.20E-08	2.16E-09	3.91E-09	1.98E-09	2.97E-10	8.99E-08	1.60E-09	3.41E-09	9.38E-08
Pentachlorobenzene	4.98E-07	2.15E-08	1.21E-07	2.04E-08	1.58E-10	7.63E-07	1.36E-08	2.80E-08	1.17E-07
Hexachlorobenzene	1.38E-08	9.36E-10	3.36E-09	7.81E-10	4.73E-11	1.52E-07	2.70E-09	5.50E-09	4.73E-08
Pentachlorophenol	2.34E-07	6.39E-05	5.48E-07	4.28E-08	8.29E-08	1.96E-06	3.85E-08	7.26E-08	4.66E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.11E-11	1.07E-11	1.53E-12	7.12E-11	2.09E-10	1.27E-09	1.00E-09	5.76E-11	6.62E-10
Chloroform	1.82E-11	4.98E-11	4.09E-12	3.09E-11	2.61E-10	5.47E-10	9.63E-10	2.65E-11	1.31E-10
Dichloromethane	3.27E-09	2.25E-08	2.08E-09	3.25E-09	8.95E-08	3.58E-08	8.62E-08	1.85E-09	8.95E-09
Trichlorofluoromethane (Freon 11)	8.43E-10	1.19E-09	1.30E-10	1.83E-08	7.93E-08	3.63E-07	3.99E-07	1.68E-08	1.26E-07
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	4.07E-11	5.77E-11	6.29E-12	1.66E-10	7.04E-10	3.80E-09	4.18E-09	1.76E-10	1.12E-09
Other Organics									
Bromoform	1.55E-10	2.55E-10	2.55E-11	5.96E-09	3.09E-08	1.56E-07	1.94E-07	7.29E-09	3.63E-08
O-Terphenyl	2.26E-07	3.35E-08	5.50E-08	1.90E-08	1.47E-10	1.08E-06	2.68E-08	3.86E-08	2.44E-07
Inorganics									
Antimony	6.98E-05	3.75E-05	1.12E-05	4.53E-07	7.32E-07	3.29E-05	1.69E-07	3.72E-07	1.46E-04
Arsenic	6.93E-06	3.86E-06	1.45E-07	9.20E-08	1.12E-07	3.26E-06	1.59E-08	3.37E-07	5.62E-06
Barium	4.92E-05	2.55E-05	7.16E-07	4.62E-08	5.65E-07	2.32E-05	4.70E-07	3.17E-06	5.65E-06
Beryllium	4.40E-05	3.30E-06	3.17E-07	5.61E-08	2.76E-08	2.18E-05	1.99E-06	2.88E-06	2.76E-06
Boron	2.72E-04	2.40E-03	4.35E-05	2.17E-05	4.10E-05	1.23E-04	2.23E-06	2.81E-05	--
Cadmium	2.90E-04	1.66E-04	4.43E-04	2.41E-07	1.83E-06	1.37E-04	1.52E-05	4.46E-05	2.20E-03
Chromium (Total)	2.44E-05	1.95E-05	1.19E-06	1.25E-06	6.02E-07	1.14E-05	6.10E-08	4.92E-07	1.20E-04
Chromium VI	3.47E-06	2.78E-06	1.70E-07	1.78E-07	1.63E-06	8.68E-08	--	--	3.17E-06
Cobalt	1.48E-04	5.27E-05	2.88E-06	1.31E-05	1.55E-06	6.97E-05	6.79E-08	1.67E-07	1.55E-04
Lead	6.74E-03	7.33E-04	5.02E-04	3.35E-06	3.73E-06	3.36E-03	3.75E-05	8.10E-05	3.91E-04
Mercury - Inorganic	5.27E-04	7.98E-06	1.43E-04	1.80E-06	6.74E-09	3.42E-04	6.41E-05	4.20E-05	4.84E-06
Methyl Mercury	1.76E-05	2.25E-06	1.50E-04	2.44E-08	9.57E-11	1.42E-06	2.54E-08	6.35E-06	1.58E-05
Nickel	3.16E-03	8.50E-04	5.36E-04	6.57E-05	2.30E-05	1.50E-03	1.18E-05	5.08E-05	3.59E-03
Selenium	1.40E-06	4.15E-06	2.20E-07	1.05E-07	1.29E-07	6.43E-07	4.24E-08	4.02E-07	2.18E-05
Silver	1.60E-05	3.52E-05	5.24E-06	1.19E-06	8.97E-07	7.45E-06	3.35E-08	--	7.95E-05
Thallium	1.54E-03	3.41E-04	2.46E-04	1.81E-04	1.02E-05	7.27E-04	2.33E-07	--	--
Tin	1.67E-03	2.01E-04	1.37E-04	2.41E-04	3.19E-06	7.97E-04	2.16E-06	--	9.57E-03
Vanadium	1.59E-04	1.09E-05	1.07E-06	4.77E-07	7.97E-08	7.97E-05	5.02E-08	1.18E-06	1.27E-05
Zinc	6.93E-03	3.45E-03	5.03E-03	3.79E-06	5.28E-05	3.28E-03	2.91E-04	1.53E-03	4.92E-02

Table M.61 - Detailed Process Upset Case Exposure Point Concentrations for the Farewell Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	8.15E-08	1.76E-08	4.02E-09	6.44E-11	4.22E-10	8.26E-08	1.39E-09	3.39E-10	1.68E-10
Acenaphthylene	1.91E-08	3.69E-09	9.38E-10	1.89E-11	5.11E-10	8.98E-08	1.51E-09	3.65E-10	2.56E-10
Anthracene	8.04E-08	8.06E-09	3.93E-09	4.73E-11	1.36E-10	1.28E-07	2.15E-09	4.98E-10	2.15E-10
Fluoranthene	7.95E-07	6.11E-08	3.88E-08	4.54E-10	1.94E-09	3.80E-06	6.40E-08	1.42E-08	9.71E-09
Fluorene	8.10E-08	1.22E-08	3.97E-09	6.52E-11	1.02E-09	3.15E-07	5.30E-09	1.26E-09	8.11E-10
Phenanthrene	8.19E-07	8.83E-08	4.00E-08	5.41E-10	4.19E-09	4.45E-06	7.48E-08	1.73E-08	6.64E-09
High Molecular Weight PAHs									
Benz(a)anthracene	4.42E-08	2.16E-08	1.08E-09	9.59E-11	5.22E-11	7.48E-07	1.26E-08	2.62E-09	1.31E-09
Benzo(a)pyrene	7.82E-08	1.08E-07	9.54E-09	4.21E-10	6.98E-11	2.71E-06	4.71E-08	4.62E-08	3.50E-09
Benzo(e)pyrene	2.13E-07	8.78E-06	2.60E-08	2.82E-08	3.06E-10	4.87E-06	--	8.00E-08	4.22E-08
Benzo(a)fluorene	8.73E-08	2.30E-08	2.13E-09	1.33E-10	1.07E-09	4.24E-06	--	1.53E-08	1.35E-08
Benzo(b)fluorene	6.03E-08	4.74E-08	1.47E-09	2.15E-10	7.99E-10	3.25E-06	--	1.13E-08	2.25E-08
Benzo(b)fluoranthene	1.02E-07	6.58E-09	2.48E-09	4.47E-11	5.38E-11	2.25E-06	3.79E-08	7.62E-09	3.59E-09
Benzo(g,h,i)perylene	1.10E-06	1.33E-05	1.35E-07	4.16E-08	2.47E-10	4.45E-05	7.50E-07	7.28E-07	3.91E-08
Benzo(k)fluoranthene	8.87E-08	4.36E-08	2.16E-09	1.76E-10	2.24E-11	8.88E-07	1.49E-08	3.01E-09	1.41E-09
Chrysene	1.64E-07	2.11E-08	4.00E-09	1.20E-10	8.08E-11	1.30E-06	2.18E-08	4.55E-09	2.03E-09
Dibenz(a,c)anthracene	1.39E-07	1.62E-06	1.69E-08	4.52E-09	3.16E-10	2.47E-05	4.15E-07	3.96E-07	7.94E-08
Dibenz(a,h)anthracene	4.88E-08	1.08E-06	5.95E-09	3.36E-09	1.62E-11	1.16E-06	1.95E-08	1.89E-08	2.56E-09
Indeno(1,2,3-cd)pyrene	2.35E-07	1.40E-07	2.86E-08	4.43E-10	6.31E-11	7.77E-06	1.31E-07	1.26E-07	1.26E-08
Perylene	4.59E-08	6.54E-06	5.60E-09	2.27E-08	3.61E-11	1.16E-06	2.02E-08	1.94E-08	3.22E-09
Pyrene	4.07E-06	2.59E-07	9.94E-08	1.98E-09	2.73E-09	7.43E-06	1.25E-07	2.80E-08	1.09E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.20E-08	1.73E-09	5.89E-09	6.14E-10	5.09E-13	7.93E-08	1.92E-09	2.44E-09	1.61E-08
PCB									
Aroclor 1254 (Total PCBs)	1.52E-05	1.64E-07	--	2.95E-07	7.06E-10	6.92E-05	--	--	1.38E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.16E-08	5.13E-09	1.45E-09	1.55E-08	2.34E-08	3.54E-07	1.07E-07	1.51E-08	2.81E-07
1,2,4-Trichlorobenzene	8.63E-10	1.82E-10	1.06E-10	6.85E-10	6.16E-10	4.09E-08	6.72E-10	1.67E-09	3.89E-08
1,2,4,5-Tetrachlorobenzene	3.66E-08	2.46E-09	4.47E-09	2.83E-09	7.29E-10	2.21E-07	3.94E-09	8.38E-09	2.30E-07
Pentachlorobenzene	5.69E-07	2.44E-08	1.39E-07	2.63E-08	1.88E-09	9.08E-06	1.62E-07	3.34E-07	1.39E-06
Hexachlorobenzene	1.57E-08	1.02E-09	3.84E-09	1.93E-09	6.62E-10	2.12E-06	3.78E-08	7.70E-08	6.62E-07
Pentachlorophenol	2.68E-07	6.62E-05	6.26E-07	4.43E-08	8.89E-08	2.11E-06	4.13E-08	7.78E-08	5.00E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.27E-11	1.22E-11	1.75E-12	1.38E-09	4.13E-09	2.51E-08	1.98E-08	1.13E-09	1.31E-08
Chloroform	2.09E-11	5.68E-11	4.68E-12	5.58E-10	4.98E-09	1.04E-08	1.84E-08	5.07E-10	2.49E-09
Dichloromethane	3.74E-09	2.57E-08	2.38E-09	5.79E-08	1.71E-06	6.83E-07	1.64E-06	3.52E-08	1.71E-07
Trichlorofluoromethane (Freon 11)	9.63E-10	1.36E-09	1.49E-10	3.62E-07	1.57E-06	7.20E-06	7.92E-06	3.34E-07	2.50E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	4.66E-11	6.58E-11	7.19E-12	3.17E-09	1.38E-08	7.45E-08	8.20E-08	3.46E-09	2.19E-08
Other Organics									
Bromoform	1.77E-10	2.92E-10	2.91E-11	1.18E-07	6.14E-07	3.09E-06	3.85E-06	1.45E-07	7.21E-07
O-Terphenyl	2.58E-07	3.53E-08	6.29E-08	2.47E-08	2.30E-09	1.69E-05	3.80E-07	6.04E-07	3.82E-06
Inorganics									
Antimony	7.53E-05	3.93E-05	1.20E-05	4.75E-07	7.23E-07	3.26E-05	1.67E-07	3.68E-07	1.45E-04
Arsenic	7.47E-06	3.99E-06	1.57E-07	9.50E-08	1.11E-07	3.22E-06	1.57E-08	3.33E-07	5.55E-06
Barium	5.30E-05	2.67E-05	7.72E-07	4.83E-08	5.59E-07	2.29E-05	4.65E-07	3.13E-06	5.59E-06
Beryllium	4.74E-05	3.42E-06	3.41E-07	5.93E-08	3.39E-08	2.67E-05	2.45E-06	3.54E-06	3.39E-06
Boron	2.93E-04	2.53E-03	4.69E-05	2.28E-05	4.05E-05	1.21E-04	2.20E-06	2.78E-05	--
Cadmium	3.13E-04	1.76E-04	4.77E-04	2.55E-07	1.81E-06	1.36E-04	1.50E-05	4.42E-05	2.18E-03
Chromium (Total)	2.63E-05	2.01E-05	1.29E-06	1.28E-06	5.95E-07	1.13E-05	6.03E-08	4.86E-07	1.19E-04
Chromium VI	3.74E-06	2.86E-06	1.83E-07	1.83E-07	8.46E-08	1.61E-06	8.57E-09	--	3.13E-06
Cobalt	1.59E-04	5.45E-05	3.11E-06	1.36E-05	1.53E-06	6.88E-05	6.71E-08	1.65E-07	1.53E-04
Lead	7.26E-03	7.70E-04	5.41E-04	3.56E-06	4.72E-06	4.25E-03	4.75E-05	1.02E-04	4.94E-04
Mercury - Inorganic	5.41E-04	8.24E-06	1.46E-04	1.87E-06	3.22E-08	1.64E-03	3.03E-04	2.01E-04	2.32E-05
Methyl Mercury	1.90E-05	2.32E-06	1.62E-04	2.55E-08	4.58E-10	1.65E-06	2.93E-08	7.34E-06	7.55E-05
Nickel	3.41E-03	8.81E-04	5.78E-04	6.83E-05	2.28E-05	1.48E-03	1.16E-05	5.03E-05	3.55E-03
Selenium	1.51E-06	4.28E-06	2.37E-07	1.08E-07	1.27E-07	6.35E-07	4.19E-08	3.97E-07	2.16E-05
Silver	1.73E-05	3.66E-05	5.65E-06	1.24E-06	8.86E-07	7.36E-06	3.31E-08	--	7.85E-05
Thallium	1.66E-03	3.52E-04	2.65E-04	1.87E-04	1.01E-05	7.20E-04	2.31E-07	--	--
Tin	1.80E-03	2.10E-04	1.48E-04	2.53E-04	3.32E-06	8.29E-04	2.24E-06	--	9.95E-03
Vanadium	1.71E-04	1.12E-05	1.15E-06	5.04E-07	1.03E-07	1.03E-04	6.52E-08	1.53E-06	1.66E-05
Zinc	7.47E-03	3.64E-03	5.43E-03	3.99E-06	5.23E-05	3.24E-03	2.88E-04	1.51E-03	4.87E-02

Table M.62 - Detailed Process Upset Case Exposure Point Concentrations for the Farm A Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	4.24E-07	9.18E-08	2.09E-08	4.60E-10	1.56E-08	3.05E-06	5.13E-08	1.25E-08	6.19E-09
Acenaphthylene	9.93E-08	1.91E-08	4.88E-09	1.99E-10	1.27E-08	2.23E-06	3.76E-08	9.09E-09	6.38E-09
Anthracene	4.18E-07	4.18E-08	2.05E-08	2.82E-10	3.46E-09	3.26E-06	5.48E-08	1.27E-08	5.49E-09
Fluoranthene	4.14E-06	3.04E-07	2.02E-07	2.68E-09	3.51E-08	6.90E-05	1.16E-06	2.57E-07	1.76E-07
Fluorene	4.22E-07	6.29E-08	2.07E-08	5.80E-10	2.68E-08	8.26E-06	1.39E-07	3.30E-08	2.13E-08
Phenanthrene	4.26E-06	4.53E-07	2.08E-07	3.56E-09	8.10E-08	8.59E-05	1.45E-06	3.35E-07	1.28E-07
High Molecular Weight PAHs									
Benz(a)anthracene	2.30E-07	1.05E-07	5.61E-09	4.81E-10	1.03E-09	1.47E-05	2.48E-07	5.17E-08	2.59E-08
Benzo(a)pyrene	4.07E-07	5.03E-07	4.96E-08	1.99E-09	1.71E-09	6.62E-05	1.15E-06	1.13E-06	8.56E-08
Benzo(e)pyrene	1.11E-06	3.82E-05	1.35E-07	1.23E-07	5.86E-09	9.34E-05	--	1.53E-06	8.09E-07
Benzo(a)fluorene	4.54E-07	1.05E-07	1.11E-08	8.86E-10	2.24E-08	8.86E-05	--	3.19E-07	2.82E-07
Benzo(b)fluorene	3.14E-07	2.09E-07	7.66E-09	1.13E-09	1.53E-08	6.23E-05	--	2.17E-07	4.32E-07
Benzo(b)fluoranthene	5.28E-07	3.14E-08	1.29E-08	2.41E-10	1.81E-09	7.58E-05	1.28E-06	2.56E-07	1.21E-07
Benzo(g,h,i)perylene	5.74E-06	5.79E-05	7.01E-07	1.81E-07	7.92E-09	1.43E-03	2.40E-05	2.33E-05	1.25E-06
Benzo(k)fluoranthene	4.62E-07	2.00E-07	1.13E-08	8.24E-10	5.04E-10	2.00E-05	3.37E-07	6.77E-08	3.18E-08
Chrysene	8.53E-07	1.08E-07	2.08E-08	6.46E-10	2.47E-09	3.97E-05	6.68E-07	1.39E-07	6.21E-08
Dibenz(a,c)anthracene	7.23E-07	7.38E-06	8.82E-08	2.07E-08	9.19E-09	7.17E-04	1.21E-05	1.15E-05	2.31E-06
Dibenz(a,h)anthracene	2.54E-07	4.70E-06	3.10E-08	1.47E-08	4.40E-10	3.15E-05	5.31E-07	5.16E-07	6.98E-08
Indeno(1,2,3-cd)pyrene	1.22E-06	7.13E-07	1.49E-07	2.27E-09	1.92E-09	2.37E-04	3.98E-06	3.84E-06	3.84E-07
Perylene	2.39E-07	2.84E-05	2.92E-08	9.88E-08	8.15E-10	2.62E-05	4.55E-07	4.38E-07	7.26E-08
Pyrene	2.12E-05	1.33E-06	5.18E-07	1.07E-08	4.28E-08	1.16E-04	1.96E-06	4.37E-07	1.70E-07
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	5.39E-08	7.41E-09	2.66E-08	2.67E-09	1.16E-11	1.80E-06	4.27E-08	5.55E-08	3.66E-07
PCB									
Aroclor 1254 (Total PCBs)	7.92E-05	8.01E-07	--	1.54E-06	2.20E-08	2.16E-03	--	--	6.04E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.04E-08	2.66E-08	7.56E-09	8.43E-07	1.36E-06	2.06E-05	6.21E-06	8.75E-07	1.63E-05
1,2,4-Trichlorobenzene	4.49E-09	9.32E-10	5.52E-10	3.59E-08	3.55E-08	2.36E-06	3.87E-08	9.60E-08	2.24E-06
1,2,4,5-Tetrachlorobenzene	1.91E-07	1.27E-08	2.33E-08	5.87E-08	3.43E-08	1.04E-05	1.85E-07	3.94E-07	1.08E-05
Pentachlorobenzene	2.96E-06	1.25E-07	7.23E-07	2.67E-07	9.41E-08	4.55E-04	8.10E-06	1.67E-05	6.98E-05
Hexachlorobenzene	8.18E-08	4.87E-09	2.00E-08	5.86E-08	3.46E-08	1.11E-04	1.97E-06	4.02E-06	3.46E-05
Pentachlorophenol	1.39E-06	2.88E-04	3.26E-06	1.92E-07	3.62E-07	8.56E-06	1.68E-07	3.17E-07	2.03E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	6.59E-11	6.31E-11	9.11E-12	7.69E-08	2.30E-07	1.40E-06	1.10E-06	6.32E-08	7.27E-07
Chloroform	1.09E-10	2.95E-10	2.43E-11	3.43E-08	3.06E-07	6.43E-07	1.13E-06	3.12E-08	1.53E-07
Dichloromethane	1.95E-08	1.34E-07	1.24E-08	3.77E-06	1.12E-04	4.47E-05	1.08E-04	2.30E-06	1.12E-05
Trichlorofluoromethane (Freon 11)	5.01E-09	7.07E-09	7.74E-10	2.03E-05	8.86E-05	4.05E-04	4.46E-04	1.88E-05	1.40E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.42E-10	3.42E-10	3.74E-11	1.78E-07	7.76E-07	4.19E-06	4.61E-06	1.95E-07	1.23E-06
Other Organics									
Bromoform	9.20E-10	1.52E-09	1.51E-10	6.69E-06	3.48E-05	1.75E-04	2.18E-04	8.22E-06	4.09E-05
O-Terphenyl	1.34E-06	1.59E-07	3.27E-07	1.94E-07	6.16E-08	4.54E-04	9.05E-06	1.62E-05	1.02E-04
Inorganics									
Antimony	3.38E-04	1.65E-04	5.41E-05	1.99E-06	2.37E-06	1.07E-04	5.48E-07	1.21E-06	4.75E-04
Arsenic	3.36E-05	1.62E-05	7.04E-07	3.82E-07	3.64E-07	1.06E-05	5.16E-08	1.09E-06	1.82E-05
Barium	2.38E-04	1.11E-04	3.47E-06	2.00E-07	1.83E-06	7.52E-05	1.52E-06	1.03E-05	1.83E-05
Beryllium	2.13E-04	1.40E-05	1.54E-06	2.54E-07	1.78E-07	1.40E-04	1.28E-05	1.85E-05	1.78E-05
Boron	1.32E-03	1.07E-02	2.11E-04	9.59E-05	1.33E-04	3.98E-04	7.23E-06	9.12E-05	--
Cadmium	1.40E-03	7.61E-04	2.14E-03	1.10E-06	5.99E-06	4.49E-04	4.97E-05	1.46E-04	7.21E-03
Chromium (Total)	1.18E-04	8.10E-05	5.78E-06	5.11E-06	1.95E-06	3.71E-05	1.98E-07	1.60E-06	3.90E-04
Chromium VI	1.68E-05	1.15E-05	8.23E-07	7.27E-07	2.78E-07	5.28E-06	2.81E-08	--	1.03E-05
Cobalt	7.15E-04	2.21E-04	1.40E-05	5.47E-05	5.02E-06	2.26E-04	2.20E-07	5.42E-07	5.02E-04
Lead	3.27E-02	3.25E-03	2.43E-03	1.55E-05	2.59E-05	2.33E-02	2.60E-04	5.62E-04	2.71E-03
Mercury - Inorganic	2.87E-03	3.39E-05	7.77E-04	9.49E-06	7.65E-07	3.88E-02	5.62E-03	4.77E-03	5.50E-04
Methyl Mercury	8.55E-05	9.55E-06	7.27E-04	1.08E-07	1.09E-08	7.76E-06	1.38E-07	3.46E-05	1.79E-03
Nickel	1.53E-02	3.59E-03	2.60E-03	2.79E-04	7.50E-05	4.88E-03	3.84E-05	1.66E-04	1.17E-02
Selenium	6.77E-06	1.72E-05	1.07E-06	4.26E-07	4.17E-07	2.08E-06	1.37E-07	1.30E-06	7.08E-05
Silver	7.76E-05	1.50E-04	2.54E-05	5.02E-06	2.91E-06	2.41E-05	1.09E-07	--	2.58E-04
Thallium	7.45E-03	1.42E-03	1.19E-03	7.58E-04	3.35E-05	2.38E-03	7.63E-07	--	--
Tin	8.07E-03	8.69E-04	6.66E-04	1.07E-03	1.25E-05	3.13E-03	8.47E-06	--	3.76E-02
Vanadium	7.71E-04	4.57E-05	5.18E-06	2.16E-06	5.89E-07	5.89E-04	3.71E-07	8.69E-06	9.42E-05
Zinc	3.36E-02	1.55E-02	2.44E-02	1.70E-05	1.72E-04	1.07E-02	9.48E-04	4.98E-03	1.60E-01

Table M.63 - Detailed Process Upset Case Exposure Point Concentrations for the Farm B Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.02E-07	4.38E-08	9.95E-09	1.58E-10	8.63E-10	1.69E-07	2.85E-09	6.94E-10	3.43E-10
Acenaphthylene	4.73E-08	9.23E-09	2.33E-09	4.53E-11	1.10E-09	1.93E-07	3.25E-09	7.85E-10	5.50E-10
Anthracene	1.99E-07	2.01E-08	9.74E-09	1.17E-10	2.76E-10	2.60E-07	4.37E-09	1.01E-09	4.38E-10
Fluoranthene	1.97E-06	1.67E-07	9.62E-08	1.17E-09	3.73E-09	7.33E-06	1.23E-07	2.73E-08	1.87E-08
Fluorene	2.01E-07	3.05E-08	9.84E-09	1.57E-10	2.02E-09	6.24E-07	1.05E-08	2.50E-09	1.61E-09
Phenanthrene	2.03E-06	2.26E-07	9.92E-08	1.33E-09	8.08E-09	8.57E-06	1.44E-07	3.34E-08	1.28E-08
High Molecular Weight PAHs									
Benz(a)anthracene	1.09E-07	6.25E-08	2.67E-09	2.72E-10	1.07E-10	1.53E-06	2.58E-08	5.37E-09	2.69E-09
Benzo(a)pyrene	1.94E-07	3.34E-07	2.36E-08	1.29E-09	1.52E-10	5.91E-06	1.03E-07	1.01E-07	7.64E-09
Benzo(e)pyrene	5.28E-07	2.99E-05	6.44E-08	9.59E-08	6.38E-10	1.02E-05	--	1.67E-07	8.80E-08
Benzo(a)fluorene	2.16E-07	7.30E-08	5.28E-09	3.80E-10	2.11E-09	8.36E-06	--	3.01E-08	2.66E-08
Benzo(b)fluorene	1.49E-07	1.58E-07	3.65E-09	6.86E-10	1.55E-09	6.32E-06	--	2.21E-08	4.38E-08
Benzo(b)fluoranthene	2.52E-07	1.96E-08	6.14E-09	1.20E-10	1.20E-10	5.03E-06	8.47E-08	1.70E-08	8.01E-09
Benzo(g,h,i)perylene	2.73E-06	4.53E-05	3.34E-07	1.41E-07	5.84E-10	1.05E-04	1.77E-06	1.72E-06	9.26E-08
Benzo(k)fluoranthene	2.20E-07	1.38E-07	5.36E-09	5.44E-10	5.09E-11	2.02E-06	3.40E-08	6.83E-09	3.21E-09
Chrysene	4.06E-07	5.62E-08	9.91E-09	3.11E-10	1.74E-10	2.80E-06	4.71E-08	9.81E-09	4.38E-09
Dibenz(a,c)anthracene	3.44E-07	5.17E-06	4.20E-08	1.44E-08	7.11E-10	5.54E-05	9.33E-07	8.91E-07	1.79E-07
Dibenz(a,h)anthracene	1.21E-07	3.65E-06	1.47E-08	1.14E-08	3.70E-11	2.65E-06	4.46E-08	4.34E-08	5.87E-09
Indeno(1,2,3-cd)pyrene	5.82E-07	3.77E-07	7.10E-08	1.18E-09	1.47E-10	1.81E-05	3.05E-07	2.94E-07	2.94E-08
Perylene	1.14E-07	2.22E-05	1.39E-08	7.74E-08	7.91E-11	2.54E-06	4.42E-08	4.24E-08	7.05E-09
Pyrene	1.01E-05	6.62E-07	2.47E-07	4.96E-09	5.53E-09	1.50E-05	2.53E-07	5.66E-08	2.20E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	2.16E-08	5.20E-09	1.07E-08	1.65E-09	9.56E-13	1.49E-07	3.60E-09	4.58E-09	3.02E-08
PCB									
Aroclor 1254 (Total PCBs)	3.76E-05	4.62E-07	--	7.44E-07	1.77E-09	1.74E-04	--	--	3.47E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	2.88E-08	1.28E-08	3.60E-09	3.00E-08	4.44E-08	6.74E-07	2.03E-07	2.86E-08	5.34E-07
1,2,4-Trichlorobenzene	2.14E-09	4.69E-10	2.63E-10	1.36E-09	1.19E-09	7.93E-08	1.30E-09	3.23E-09	7.53E-08
1,2,4,5-Tetrachlorobenzene	9.07E-08	6.15E-09	1.11E-08	6.69E-09	1.59E-09	4.81E-07	8.57E-09	1.82E-08	5.01E-07
Pentachlorobenzene	1.41E-06	6.20E-08	3.44E-07	6.33E-08	3.73E-09	1.80E-05	3.21E-07	6.62E-07	2.76E-06
Hexachlorobenzene	3.90E-08	2.98E-09	9.51E-09	4.15E-09	1.28E-09	4.09E-06	7.30E-08	1.49E-07	1.28E-06
Pentachlorophenol	6.63E-07	2.25E-04	1.55E-06	1.50E-07	2.29E-07	5.43E-06	1.07E-07	2.01E-07	1.29E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	3.14E-11	3.06E-11	4.34E-12	2.55E-09	7.62E-09	4.63E-08	3.65E-08	2.09E-09	2.41E-08
Chloroform	5.17E-11	1.41E-10	1.16E-11	1.05E-09	9.34E-09	1.96E-08	3.45E-08	9.51E-10	4.68E-09
Dichloromethane	9.26E-09	6.37E-08	5.89E-09	1.10E-07	3.24E-06	1.30E-06	3.12E-06	6.69E-08	3.24E-07
Trichlorofluoromethane (Freon 11)	2.39E-09	3.40E-09	3.68E-10	6.66E-07	2.90E-06	1.33E-05	1.46E-05	6.15E-07	4.60E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.15E-10	1.64E-10	1.78E-11	5.86E-09	2.55E-08	1.38E-07	1.52E-07	6.39E-09	4.04E-08
Other Organics									
Bromoform	4.38E-10	7.23E-10	7.21E-11	2.18E-07	1.13E-06	5.69E-06	7.09E-06	2.67E-07	1.33E-06
O-Terphenyl	6.39E-07	1.14E-07	1.56E-07	6.84E-08	4.69E-09	3.45E-05	7.55E-07	1.23E-06	7.78E-06
Inorganics									
Antimony	1.36E-04	6.76E-05	2.17E-05	8.25E-07	1.37E-06	6.16E-05	3.16E-07	6.96E-07	2.74E-04
Arsenic	1.35E-05	6.68E-06	2.83E-07	1.62E-07	2.10E-07	6.10E-06	2.97E-08	6.30E-07	1.05E-05
Barium	9.57E-05	4.55E-05	1.39E-06	8.35E-08	1.06E-06	4.33E-05	8.79E-07	5.93E-06	1.06E-05
Beryllium	8.56E-05	5.77E-06	6.16E-07	1.03E-07	5.98E-08	4.72E-05	4.32E-06	6.25E-06	5.98E-06
Boron	5.29E-04	4.37E-03	8.46E-05	3.98E-05	7.66E-05	2.30E-04	4.17E-06	5.26E-05	--
Cadmium	5.64E-04	3.09E-04	8.62E-04	4.51E-07	3.43E-06	2.57E-04	2.84E-05	8.36E-05	4.12E-03
Chromium (Total)	4.75E-05	3.35E-05	2.32E-06	2.18E-06	1.13E-06	2.14E-05	1.14E-07	9.20E-07	2.25E-04
Chromium VI	6.75E-06	4.77E-06	3.30E-07	3.10E-07	1.62E-07	3.04E-06	1.62E-08	--	5.92E-06
Cobalt	2.87E-04	9.11E-05	5.61E-06	2.32E-05	2.89E-06	1.30E-04	1.27E-07	3.13E-07	2.89E-04
Lead	1.31E-02	1.33E-03	9.77E-04	6.25E-06	8.26E-06	7.44E-03	8.31E-05	1.79E-04	8.65E-04
Mercury - Inorganic	1.62E-03	1.77E-05	4.40E-04	5.22E-06	9.44E-08	4.78E-03	8.64E-04	5.88E-04	6.78E-05
Methyl Mercury	3.43E-05	4.98E-06	2.92E-04	5.22E-08	1.34E-09	6.45E-06	1.15E-07	2.88E-05	2.21E-04
Nickel	6.16E-03	1.48E-03	1.04E-03	1.17E-04	4.30E-05	2.80E-03	2.20E-05	9.51E-05	6.72E-03
Selenium	2.72E-06	7.12E-06	4.28E-07	1.82E-07	2.40E-07	1.20E-06	7.93E-08	7.52E-07	4.08E-05
Silver	3.12E-05	6.19E-05	1.02E-05	2.12E-06	1.68E-06	1.39E-05	6.26E-08	--	1.49E-04
Thallium	2.99E-03	5.87E-04	4.78E-04	3.20E-04	1.92E-05	1.36E-03	4.37E-07	--	--
Tin	3.24E-03	3.57E-04	2.67E-04	4.41E-04	6.17E-06	1.54E-03	4.17E-06	--	1.85E-02
Vanadium	3.10E-04	1.88E-05	2.08E-06	8.73E-07	1.13E-07	1.80E-04	1.13E-07	2.65E-06	2.88E-05
Zinc	1.35E-02	6.31E-03	9.79E-03	7.00E-06	9.88E-05	6.13E-03	5.45E-04	2.86E-03	9.20E-02

Table M.64 - Detailed Process Upset Case Exposure Point Concentrations for the Farm C Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.35E-07	2.91E-08	6.63E-09	1.06E-10	6.96E-10	1.36E-07	2.30E-09	5.60E-10	2.77E-10
Acenaphthylene	3.15E-08	6.09E-09	1.55E-09	3.12E-11	8.44E-10	1.48E-07	2.49E-09	6.03E-10	4.23E-10
Anthracene	1.33E-07	1.33E-08	6.49E-09	7.81E-11	2.24E-10	2.11E-07	3.55E-09	8.22E-10	3.56E-10
Fluoranthene	1.31E-06	9.88E-08	6.41E-08	7.43E-10	3.20E-09	6.28E-06	1.06E-07	2.34E-08	1.60E-08
Fluorene	1.34E-07	2.00E-08	6.56E-09	1.07E-10	1.69E-09	5.20E-07	8.75E-09	2.08E-07	1.34E-09
Phenanthrene	1.35E-06	1.45E-07	6.61E-08	8.91E-10	6.92E-09	7.34E-06	1.24E-07	2.86E-08	1.10E-08
High Molecular Weight PAHs									
Benz(a)anthracene	7.29E-08	3.47E-08	1.78E-09	1.54E-10	8.62E-11	1.23E-06	2.08E-08	4.33E-09	2.17E-09
Benzo(a)pyrene	1.29E-07	1.70E-07	1.57E-08	6.64E-10	1.15E-10	4.47E-06	7.77E-08	7.63E-08	5.78E-09
Benzo(e)pyrene	3.52E-07	1.34E-05	4.29E-08	4.31E-08	5.05E-10	8.04E-06	--	1.32E-07	6.97E-08
Benzo(a)fluorene	1.44E-07	3.59E-08	3.52E-09	2.10E-10	1.77E-09	7.00E-06	--	2.52E-08	2.22E-08
Benzo(b)fluorene	9.96E-08	7.29E-08	2.43E-09	3.34E-10	1.32E-09	5.36E-06	--	1.87E-08	3.72E-08
Benzo(b)fluoranthene	1.68E-07	1.05E-08	4.09E-09	7.24E-11	8.88E-11	3.72E-06	6.26E-08	1.26E-08	5.92E-09
Benzo(g,h,i)perylene	1.82E-06	2.04E-05	2.22E-07	6.37E-08	4.08E-10	7.35E-05	1.24E-06	1.20E-06	6.46E-08
Benzo(k)fluoranthene	1.46E-07	6.82E-08	3.57E-09	1.47E-10	3.69E-11	1.47E-06	2.47E-08	4.97E-09	2.33E-09
Chrysene	2.71E-07	3.46E-08	6.60E-09	1.97E-10	1.33E-10	2.14E-06	3.60E-08	7.51E-09	3.35E-09
Dibenz(a,c)anthracene	2.29E-07	2.52E-06	2.80E-08	7.05E-09	5.22E-10	4.07E-05	6.85E-07	6.54E-07	1.31E-07
Dibenz(a,h)anthracene	8.05E-08	1.65E-06	9.82E-09	5.15E-09	2.67E-11	1.91E-06	3.22E-08	3.13E-08	4.23E-09
Indeno(1,2,3-cd)pyrene	3.88E-07	2.29E-07	4.73E-08	7.25E-10	1.04E-10	1.28E-05	2.16E-07	2.08E-07	2.08E-08
Perylene	7.59E-08	9.99E-06	9.25E-09	3.48E-08	5.96E-11	1.91E-06	3.33E-08	3.20E-08	5.31E-09
Pyrene	6.72E-06	4.25E-07	1.64E-07	3.26E-09	4.51E-09	1.23E-05	2.07E-07	4.62E-08	1.80E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	2.02E-08	2.70E-09	9.95E-09	9.80E-10	8.59E-13	1.34E-07	3.23E-09	4.12E-09	2.72E-08
PCB									
Aroclor 1254 (Total PCBs)	2.51E-05	2.63E-07	--	4.86E-07	1.16E-09	1.14E-04	--	--	2.29E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.92E-08	8.45E-09	2.40E-09	2.55E-08	3.86E-08	5.85E-07	1.76E-07	2.49E-08	4.64E-07
1,2,4-Trichlorobenzene	1.43E-09	2.99E-10	1.75E-10	1.13E-09	1.02E-09	6.76E-08	1.11E-09	2.75E-09	6.42E-08
1,2,4,5-Tetrachlorobenzene	6.05E-08	4.05E-09	7.38E-09	4.67E-09	1.20E-09	3.65E-07	6.50E-09	1.38E-08	3.80E-07
Pentachlorobenzene	9.40E-07	4.01E-08	2.29E-07	4.34E-08	3.10E-09	1.50E-05	2.67E-07	5.51E-07	2.30E-06
Hexachlorobenzene	2.60E-08	1.62E-09	6.34E-09	3.17E-09	1.09E-09	3.50E-06	6.24E-08	1.27E-07	1.09E-06
Pentachlorophenol	4.42E-07	1.01E-04	1.03E-06	6.77E-08	1.47E-07	3.48E-06	6.82E-08	1.28E-07	8.25E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.09E-11	2.01E-11	2.89E-12	2.28E-09	6.82E-09	4.15E-08	3.27E-08	1.87E-09	2.16E-08
Chloroform	3.44E-11	9.38E-11	7.73E-12	9.22E-10	8.22E-09	1.73E-08	3.04E-08	8.37E-10	4.12E-09
Dichloromethane	6.17E-09	4.24E-08	3.92E-09	9.55E-08	2.82E-06	1.13E-06	2.71E-06	5.81E-08	2.82E-07
Trichlorofluoromethane (Freon 11)	1.59E-09	2.25E-09	2.46E-10	5.97E-07	2.60E-06	1.19E-05	1.31E-05	5.51E-07	4.12E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	7.69E-11	1.09E-10	1.19E-11	5.24E-09	2.28E-08	1.23E-07	1.35E-07	5.71E-09	3.61E-08
Other Organics									
Bromoform	2.92E-10	4.82E-10	4.80E-11	1.95E-07	1.01E-06	5.11E-06	6.36E-06	2.39E-07	1.19E-06
O-Terphenyl	4.26E-07	5.48E-08	1.04E-07	3.93E-08	3.80E-09	2.80E-05	6.17E-07	9.97E-07	6.31E-06
Inorganics									
Antimony	1.27E-04	6.61E-05	2.03E-05	7.99E-07	1.22E-06	5.49E-05	2.82E-07	6.21E-07	2.44E-04
Arsenic	1.26E-05	6.70E-06	2.64E-07	1.60E-07	1.87E-07	5.43E-06	2.65E-08	5.61E-07	9.37E-06
Barium	8.94E-05	4.49E-05	1.30E-06	8.12E-08	9.42E-07	3.86E-05	7.84E-07	5.29E-06	9.42E-06
Beryllium	8.00E-05	5.75E-06	5.76E-07	9.99E-08	5.71E-08	4.51E-05	4.12E-06	5.97E-06	5.71E-06
Boron	4.94E-04	4.25E-03	7.91E-05	3.84E-05	6.83E-05	2.05E-04	3.72E-06	4.69E-05	--
Cadmium	5.27E-04	2.96E-04	8.05E-04	4.30E-07	3.06E-06	2.29E-04	2.54E-05	7.46E-05	3.67E-03
Chromium (Total)	4.44E-05	3.38E-05	2.17E-06	2.16E-06	1.00E-06	1.91E-05	1.02E-07	8.20E-07	2.01E-04
Chromium VI	6.31E-06	4.81E-06	3.09E-07	3.07E-07	1.45E-07	2.71E-06	1.45E-08	--	5.28E-06
Cobalt	2.69E-04	9.15E-05	5.24E-06	2.28E-05	2.58E-06	1.16E-04	1.13E-07	2.79E-07	2.58E-04
Lead	1.23E-02	1.29E-03	9.13E-04	6.00E-06	7.96E-06	7.17E-03	8.00E-05	1.73E-04	8.34E-04
Mercury - Inorganic	9.20E-04	1.35E-05	2.49E-04	3.15E-06	5.48E-08	2.78E-03	5.11E-04	3.42E-04	3.94E-05
Methyl Mercury	3.21E-05	3.80E-06	2.73E-04	4.21E-08	7.79E-10	2.78E-06	4.95E-08	1.24E-05	1.28E-04
Nickel	5.75E-03	1.48E-03	9.75E-04	1.15E-04	3.84E-05	2.50E-03	1.96E-05	8.48E-05	5.99E-03
Selenium	2.54E-06	7.18E-06	4.00E-07	1.81E-07	2.14E-07	1.07E-06	7.07E-08	6.70E-07	3.64E-05
Silver	2.91E-05	6.15E-05	9.53E-06	2.08E-06	1.50E-06	1.24E-05	5.58E-08	--	1.32E-04
Thallium	2.79E-03	5.91E-04	4.47E-04	3.15E-04	1.71E-05	1.21E-03	3.90E-07	--	--
Tin	3.03E-03	3.53E-04	2.50E-04	4.26E-04	5.60E-06	1.40E-03	3.78E-06	--	1.68E-02
Vanadium	2.89E-04	1.89E-05	1.94E-06	8.48E-07	1.75E-07	1.75E-04	1.10E-07	2.58E-06	2.79E-05
Zinc	1.26E-02	6.12E-03	9.15E-03	6.72E-06	8.81E-05	5.47E-03	4.86E-04	2.55E-03	8.21E-02

Table M.65 - Detailed Process Upset Case Exposure Point Concentrations for the Robinson Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.64E-07	5.71E-08	1.30E-08	2.05E-10	1.07E-09	2.10E-07	3.53E-09	8.61E-10	4.26E-10
Acenaphthylene	6.17E-08	1.19E-08	3.04E-09	5.85E-11	1.41E-09	2.47E-07	4.16E-09	1.01E-09	7.06E-10
Anthracene	2.60E-07	2.61E-08	1.27E-08	1.51E-10	3.35E-10	3.15E-07	5.30E-09	1.23E-09	5.31E-10
Fluoranthene	2.57E-06	1.97E-07	1.26E-07	1.43E-09	4.22E-09	8.29E-06	1.39E-07	3.09E-08	2.11E-08
Fluorene	2.62E-07	3.93E-08	1.29E-08	2.00E-10	2.39E-09	7.38E-07	1.24E-08	2.95E-09	1.90E-09
Phenanthrene	2.65E-06	2.85E-07	1.30E-07	1.69E-09	9.20E-09	9.76E-06	1.64E-07	3.80E-08	1.46E-08
High Molecular Weight PAHs									
Benz(a)anthracene	1.43E-07	6.99E-08	3.49E-09	3.08E-10	1.13E-10	1.61E-06	2.72E-08	5.66E-09	2.83E-09
Benzo(a)pyrene	2.53E-07	3.47E-07	3.08E-08	1.35E-09	1.52E-10	5.89E-06	1.03E-07	1.01E-07	7.62E-09
Benzo(e)pyrene	6.89E-07	2.79E-05	8.40E-08	8.96E-08	6.71E-10	1.07E-05	--	1.76E-07	9.26E-08
Benzo(a)fluorene	2.83E-07	7.36E-08	6.89E-09	4.01E-10	2.36E-09	9.35E-06	--	3.37E-08	2.97E-08
Benzo(b)fluorene	1.95E-07	1.51E-07	4.76E-09	6.68E-10	1.71E-09	6.96E-06	--	2.43E-08	4.82E-08
Benzo(b)fluoranthene	3.28E-07	2.12E-08	8.01E-09	1.40E-10	1.31E-10	5.50E-06	9.26E-08	1.86E-08	8.76E-09
Benzo(g,h,i)perylene	3.57E-06	4.23E-05	4.35E-07	1.32E-07	5.59E-10	1.01E-04	1.70E-06	1.65E-06	8.86E-08
Benzo(k)fluoranthene	2.87E-07	1.40E-07	7.00E-09	5.63E-10	5.39E-11	2.14E-06	3.60E-08	7.24E-09	3.40E-09
Chrysene	5.30E-07	6.88E-08	1.29E-08	3.87E-10	2.04E-10	3.27E-06	5.50E-08	1.15E-08	5.11E-09
Dibenz(a,c)anthracene	4.50E-07	5.18E-06	5.48E-08	1.44E-08	6.78E-10	5.29E-05	8.90E-07	8.49E-07	1.70E-07
Dibenz(a,h)anthracene	1.58E-07	3.43E-06	1.92E-08	1.07E-08	3.68E-11	2.63E-06	4.43E-08	4.31E-08	5.83E-09
Indeno(1,2,3-cd)pyrene	7.60E-07	4.56E-07	9.26E-08	1.43E-09	1.43E-10	2.96E-05	2.85E-07	2.85E-07	2.85E-08
Perylene	1.49E-07	2.08E-05	1.81E-08	7.23E-08	8.07E-11	2.59E-06	4.51E-08	4.33E-08	7.20E-09
Pyrene	1.32E-05	8.36E-07	3.22E-07	6.35E-09	6.62E-09	1.80E-05	3.03E-07	6.77E-08	2.63E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	3.13E-08	5.18E-09	1.54E-08	1.77E-09	1.18E-12	1.83E-07	4.43E-09	5.64E-09	3.72E-08
PCB									
Aroclor 1254 (Total PCBs)	4.91E-05	5.26E-07	--	9.45E-07	2.16E-09	2.12E-04	--	--	4.24E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	3.76E-08	1.66E-08	4.70E-09	3.70E-08	5.44E-08	8.24E-07	2.49E-07	3.50E-08	6.54E-07
1,2,4-Trichlorobenzene	2.79E-09	5.89E-10	3.43E-10	1.70E-09	1.48E-09	9.83E-08	1.61E-09	4.00E-09	9.34E-08
1,2,4,5-Tetrachlorobenzene	1.18E-07	7.94E-09	1.45E-08	8.88E-09	2.20E-09	6.66E-07	1.19E-08	2.53E-08	6.94E-07
Pentachlorobenzene	1.84E-06	7.88E-08	4.49E-07	8.12E-08	4.56E-09	2.21E-05	3.93E-07	8.10E-07	3.38E-06
Hexachlorobenzene	5.09E-08	3.26E-09	1.24E-08	4.95E-09	1.55E-09	4.97E-06	8.87E-08	1.81E-07	1.55E-06
Pentachlorophenol	8.66E-07	2.10E-04	2.03E-06	1.41E-07	3.26E-07	7.72E-06	1.51E-07	2.85E-07	1.83E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	4.10E-11	3.94E-11	5.66E-12	3.08E-09	9.18E-09	5.58E-08	4.40E-08	2.52E-09	2.90E-08
Chloroform	6.75E-11	1.84E-10	1.51E-11	1.28E-09	1.14E-08	2.39E-08	4.20E-08	1.16E-09	5.69E-09
Dichloromethane	1.21E-08	8.32E-08	7.69E-09	1.35E-07	3.97E-06	1.59E-06	3.83E-06	8.19E-08	3.97E-07
Trichlorofluoromethane (Freon 11)	3.12E-09	4.41E-09	4.81E-10	8.03E-07	3.50E-06	1.60E-05	1.76E-05	7.42E-07	5.54E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.51E-10	2.13E-10	2.33E-11	7.08E-09	3.08E-08	1.66E-07	1.83E-07	7.71E-09	4.88E-08
Other Organics									
Bromoform	5.72E-10	9.44E-10	9.41E-11	2.62E-07	1.36E-06	6.86E-06	8.55E-06	3.22E-07	1.60E-06
O-Terphenyl	8.34E-07	1.13E-07	2.03E-07	7.29E-08	5.31E-09	3.91E-05	8.51E-07	1.39E-06	8.81E-06
Inorganics									
Antimony	1.97E-04	9.60E-05	3.15E-05	1.18E-06	2.17E-06	9.76E-05	5.00E-07	1.10E-06	4.34E-04
Arsenic	1.95E-05	9.39E-06	4.09E-07	2.31E-07	3.33E-07	9.66E-06	4.71E-08	9.98E-07	1.66E-05
Barium	1.39E-04	6.45E-05	2.02E-06	1.20E-07	1.67E-06	6.87E-05	1.39E-06	9.39E-06	1.67E-05
Beryllium	1.24E-04	8.13E-06	8.92E-07	1.47E-07	9.12E-08	7.20E-05	6.59E-06	9.53E-06	9.12E-06
Boron	7.66E-04	6.23E-03	1.23E-04	5.71E-05	1.21E-04	3.64E-04	6.60E-06	8.33E-05	--
Cadmium	8.17E-04	4.42E-04	1.25E-03	6.50E-07	5.42E-06	4.07E-04	4.50E-05	1.32E-04	6.52E-03
Chromium (Total)	6.87E-05	4.70E-05	3.36E-06	3.11E-06	1.78E-06	3.39E-05	1.81E-07	1.46E-06	3.57E-04
Chromium VI	9.77E-06	6.69E-06	4.79E-07	4.42E-07	2.54E-07	4.82E-06	2.57E-08	--	9.38E-06
Cobalt	4.16E-04	1.28E-04	8.12E-06	3.31E-05	4.58E-06	2.06E-04	2.01E-07	4.95E-07	4.58E-04
Lead	1.90E-02	1.89E-03	1.41E-03	8.95E-06	1.25E-05	1.13E-02	1.26E-04	2.72E-04	1.31E-03
Mercury - Inorganic	1.86E-03	2.11E-05	5.03E-04	6.00E-06	8.91E-08	4.52E-03	8.18E-04	5.55E-04	6.40E-05
Methyl Mercury	4.97E-05	5.96E-06	4.22E-04	6.58E-08	1.27E-09	1.23E-05	2.19E-07	5.49E-05	2.09E-04
Nickel	8.91E-03	2.09E-03	1.51E-03	1.68E-04	6.82E-05	4.43E-03	3.49E-05	1.51E-04	1.06E-02
Selenium	3.94E-06	9.99E-06	6.20E-07	2.60E-07	3.81E-07	1.90E-06	1.26E-07	1.19E-06	6.47E-05
Silver	4.51E-05	8.73E-05	1.48E-05	3.03E-06	2.66E-06	2.21E-05	9.92E-08	--	2.35E-04
Thallium	4.33E-03	8.24E-04	6.93E-04	4.57E-04	3.03E-05	2.15E-03	6.92E-07	--	--
Tin	4.69E-03	5.05E-04	3.87E-04	6.31E-04	9.68E-06	2.42E-03	6.55E-06	--	2.90E-02
Vanadium	4.48E-04	2.65E-05	3.01E-06	1.25E-06	2.72E-07	2.72E-04	1.71E-07	4.01E-06	4.35E-05
Zinc	1.95E-02	9.01E-03	1.42E-02	1.01E-05	1.57E-04	9.70E-03	8.62E-04	4.53E-03	1.46E-01

Table M.66 - Detailed Process Upset Case Exposure Point Concentrations for the Bennett Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	7.63E-08	1.66E-08	3.76E-09	6.32E-11	6.95E-10	1.36E-07	2.29E-09	5.59E-10	2.77E-10
Acenaphthylene	1.79E-08	3.53E-09	8.78E-10	2.04E-11	7.32E-10	1.29E-07	2.16E-09	5.23E-10	3.67E-10
Anthracene	7.53E-08	7.66E-09	3.68E-09	4.52E-11	1.68E-10	1.58E-07	2.65E-09	6.14E-10	2.66E-10
Fluoranthene	7.45E-07	7.09E-08	3.64E-08	4.77E-10	1.73E-09	3.39E-06	5.71E-08	1.26E-08	8.65E-09
Fluorene	7.58E-08	1.17E-08	3.72E-09	6.51E-11	1.24E-09	3.83E-07	6.44E-09	1.53E-09	9.85E-10
Phenanthrene	7.67E-07	8.90E-08	3.75E-08	5.27E-10	3.94E-09	4.18E-06	7.03E-08	1.63E-08	6.24E-09
High Molecular Weight PAHs									
Benz(a)anthracene	4.14E-08	2.81E-08	1.01E-09	1.21E-10	5.15E-11	7.38E-07	1.24E-08	2.59E-09	1.29E-09
Benzo(a)pyrene	7.33E-08	1.61E-07	8.94E-09	6.17E-10	8.60E-11	3.33E-06	5.80E-08	5.69E-08	4.31E-09
Benzo(e)pyrene	2.00E-07	1.55E-05	2.43E-08	4.98E-08	3.08E-10	4.91E-06	--	8.07E-08	4.26E-08
Benzo(a)fluorene	8.18E-08	3.58E-08	1.99E-09	1.82E-10	1.09E-09	4.33E-06	--	1.56E-08	1.38E-08
Benzo(b)fluorene	5.65E-08	8.10E-08	1.38E-09	3.46E-10	7.54E-10	3.06E-06	--	1.07E-08	2.12E-08
Benzo(b)fluoranthene	9.52E-08	9.11E-09	2.32E-09	5.22E-11	8.90E-11	3.73E-06	6.28E-08	1.26E-08	5.94E-09
Benzo(g,h,i)perylene	1.03E-06	2.35E-05	1.26E-07	7.34E-08	4.10E-10	7.40E-05	1.24E-06	1.21E-06	6.50E-08
Benzo(k)fluoranthene	8.35E-08	6.73E-08	2.04E-09	2.62E-10	2.69E-11	1.07E-06	1.79E-08	3.61E-09	1.69E-09
Chrysene	1.54E-07	2.30E-08	3.75E-09	1.25E-10	1.19E-10	1.91E-06	3.21E-08	6.70E-09	2.99E-09
Dibenz(a,c)anthracene	1.30E-07	2.55E-06	1.59E-08	7.12E-09	4.61E-10	3.60E-05	6.05E-07	5.78E-07	1.16E-07
Dibenz(a,h)anthracene	4.58E-08	1.89E-06	5.58E-09	5.90E-09	2.27E-11	1.63E-06	2.74E-08	2.66E-08	3.60E-09
Indeno(1,2,3-cd)pyrene	2.20E-07	1.56E-07	2.69E-08	4.84E-10	9.91E-11	1.22E-05	2.05E-07	1.98E-07	1.98E-08
Perylene	4.31E-08	1.16E-05	5.26E-09	4.02E-08	4.26E-11	1.37E-06	2.38E-08	2.29E-08	3.80E-09
Pyrene	3.83E-06	2.62E-07	9.36E-08	1.93E-09	2.35E-09	6.39E-06	1.08E-07	2.40E-08	9.35E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	8.51E-09	2.65E-09	4.19E-09	8.08E-10	6.13E-13	9.54E-08	2.31E-09	2.94E-09	1.94E-08
PCB									
Aroclor 1254 (Total PCBs)	1.43E-05	2.05E-07	--	2.93E-07	1.29E-09	1.26E-04	--	--	3.53E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.09E-08	4.90E-09	1.36E-09	2.77E-08	4.32E-08	6.55E-07	1.98E-07	2.79E-08	5.20E-07
1,2,4-Trichlorobenzene	8.08E-10	1.86E-10	9.94E-11	1.27E-09	1.20E-09	7.97E-08	1.31E-09	3.24E-09	7.57E-08
1,2,4,5-Tetrachlorobenzene	3.43E-08	2.36E-09	4.18E-09	4.00E-09	1.61E-09	4.87E-07	8.69E-09	1.85E-08	5.08E-07
Pentachlorobenzene	5.33E-07	2.43E-08	1.30E-07	2.77E-08	3.59E-09	1.73E-05	3.09E-07	6.37E-07	2.66E-06
Hexachlorobenzene	1.47E-08	1.37E-09	3.59E-09	2.80E-09	1.21E-09	3.86E-06	6.88E-08	1.40E-07	1.21E-06
Pentachlorophenol	2.50E-07	1.17E-04	5.86E-07	7.81E-08	9.75E-08	2.31E-06	4.53E-08	8.53E-08	5.48E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.19E-11	1.17E-11	1.64E-12	2.13E-09	6.37E-09	3.87E-08	3.05E-08	1.75E-09	2.01E-08
Chloroform	1.95E-11	5.36E-11	4.38E-12	9.97E-10	8.90E-09	1.87E-08	3.29E-08	9.06E-10	4.46E-09
Dichloromethane	3.50E-09	2.41E-08	2.22E-09	1.13E-07	3.35E-06	1.34E-06	3.22E-06	6.90E-08	3.35E-07
Trichlorofluoromethane (Freon 11)	9.02E-10	1.29E-09	1.39E-10	5.53E-07	2.41E-06	1.10E-05	1.21E-05	5.11E-07	3.82E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	4.36E-11	6.25E-11	6.73E-12	4.97E-09	2.17E-08	1.17E-07	1.29E-07	5.43E-09	3.43E-08
Other Organics									
Bromoform	1.65E-10	2.73E-10	2.72E-11	1.80E-07	9.36E-07	4.72E-06	5.88E-06	2.21E-07	1.10E-06
O-Terphenyl	2.41E-07	5.71E-08	5.89E-08	3.33E-08	2.91E-09	2.15E-05	4.77E-07	7.64E-07	4.84E-06
Inorganics									
Antimony	5.31E-05	2.87E-05	8.49E-06	3.48E-07	6.01E-07	2.71E-05	1.39E-07	3.06E-07	1.20E-04
Arsenic	5.27E-06	2.97E-06	1.10E-07	7.11E-08	9.24E-08	2.68E-06	1.31E-08	2.77E-07	4.62E-06
Barium	3.74E-05	1.96E-05	5.44E-07	3.56E-08	4.65E-07	1.90E-05	3.86E-07	2.61E-06	4.65E-06
Beryllium	3.35E-05	2.54E-06	2.41E-07	4.31E-08	2.57E-08	2.03E-05	1.86E-06	2.69E-06	2.57E-06
Boron	2.06E-04	1.84E-03	3.30E-05	1.67E-05	3.37E-05	1.01E-04	1.83E-06	2.31E-05	--
Cadmium	2.21E-04	1.27E-04	3.37E-04	1.84E-07	1.50E-06	1.13E-04	1.25E-05	3.67E-05	1.81E-03
Chromium (Total)	1.85E-05	1.50E-05	9.07E-07	9.66E-07	4.95E-07	9.40E-06	5.01E-08	4.04E-07	9.90E-05
Chromium VI	2.64E-06	2.13E-06	1.29E-07	1.37E-07	7.04E-08	7.13E-06	--	--	2.60E-06
Cobalt	1.12E-04	4.05E-05	2.19E-06	1.01E-05	1.27E-06	5.72E-05	5.58E-08	1.37E-07	1.27E-04
Lead	5.13E-03	5.62E-04	3.83E-04	2.57E-06	3.55E-06	3.19E-03	3.57E-05	7.71E-05	3.72E-04
Mercury - Inorganic	7.20E-04	8.47E-06	1.95E-04	2.35E-06	6.01E-08	3.05E-03	5.59E-04	3.75E-04	4.32E-05
Methyl Mercury	1.34E-05	2.39E-06	1.14E-04	2.38E-08	8.54E-10	2.73E-06	4.86E-08	1.22E-05	1.41E-04
Nickel	2.41E-03	6.53E-04	1.08E-04	5.07E-05	1.89E-05	1.23E-03	9.68E-06	4.18E-05	2.95E-03
Selenium	1.06E-06	3.19E-06	1.67E-07	8.12E-08	1.06E-07	5.28E-07	3.48E-08	3.30E-07	1.79E-05
Silver	1.22E-05	2.70E-05	3.98E-06	9.21E-07	7.37E-07	6.12E-06	2.75E-08	--	6.53E-05
Thallium	1.17E-03	2.62E-04	1.87E-04	1.39E-04	8.42E-06	5.98E-04	1.92E-07	--	--
Tin	1.27E-03	1.54E-04	1.05E-04	1.85E-04	2.70E-06	6.74E-04	1.82E-06	--	8.09E-03
Vanadium	1.21E-04	8.35E-06	8.14E-07	3.66E-07	7.71E-08	7.71E-05	4.86E-08	1.14E-06	1.23E-05
Zinc	5.27E-03	2.64E-03	3.83E-03	2.90E-06	4.34E-05	2.69E-03	2.39E-04	1.26E-03	4.04E-02

Table M.67 - Detailed Process Upset Case Exposure Point Concentrations for the Oshawa Creek Conservation Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	9.13E-08	1.98E-08	4.50E-09	7.77E-11	1.06E-09	2.07E-07	3.48E-09	8.50E-10	4.20E-10
Acenaphthylene	2.14E-08	4.18E-09	1.05E-09	2.71E-11	1.15E-09	2.02E-07	3.39E-09	8.20E-10	5.75E-10
Anthracene	9.00E-08	9.09E-09	4.40E-09	5.56E-11	3.24E-10	3.04E-07	5.12E-09	1.19E-09	5.13E-10
Fluoranthene	8.91E-07	7.64E-08	4.35E-08	5.86E-10	4.85E-09	9.52E-06	1.60E-07	3.55E-08	2.43E-08
Fluorene	9.07E-08	1.38E-08	4.45E-09	8.92E-11	2.50E-09	7.72E-07	1.30E-08	3.09E-09	1.99E-09
Phenanthrene	9.17E-07	1.03E-07	4.49E-08	6.98E-10	1.04E-08	1.11E-05	1.86E-07	4.31E-08	1.65E-08
High Molecular Weight PAHs									
Benz(a)anthracene	4.95E-08	2.88E-08	1.21E-09	1.28E-10	1.35E-10	1.93E-06	3.25E-08	6.78E-09	3.39E-09
Benzo(a)pyrene	8.76E-08	1.56E-07	1.07E-08	6.07E-10	1.83E-10	7.08E-06	1.23E-07	1.21E-07	9.15E-09
Benzo(e)pyrene	2.39E-07	1.41E-05	2.91E-08	4.52E-08	7.85E-10	1.25E-05	--	2.06E-07	1.08E-07
Benzo(a)fluorene	9.78E-08	3.41E-08	2.39E-09	2.11E-10	2.68E-09	1.06E-05	--	3.83E-08	3.38E-08
Benzo(b)fluorene	6.76E-08	7.44E-08	1.65E-09	3.47E-10	2.03E-09	8.26E-06	--	2.88E-08	5.73E-08
Benzo(b)fluoranthene	1.14E-07	9.09E-09	2.77E-09	5.97E-11	1.34E-10	5.59E-06	9.41E-08	1.89E-08	8.90E-09
Benzo(g,h,i)perylene	1.24E-06	2.13E-05	1.51E-07	6.67E-08	6.39E-10	1.15E-04	1.94E-06	1.89E-06	1.01E-07
Benzo(k)fluoranthene	9.94E-08	6.43E-08	2.43E-09	2.55E-10	5.48E-11	2.17E-06	3.66E-08	7.37E-09	3.46E-09
Chrysene	1.84E-07	2.56E-08	4.48E-09	1.45E-10	1.95E-10	3.13E-06	5.26E-08	1.10E-08	4.90E-09
Dibenz(a,c)anthracene	1.56E-07	2.42E-06	1.90E-08	6.78E-09	8.41E-10	6.56E-05	1.10E-06	1.05E-06	2.11E-07
Dibenz(a,h)anthracene	5.47E-08	1.72E-06	6.67E-09	5.36E-09	4.15E-11	2.97E-06	5.00E-08	4.86E-08	6.58E-09
Indeno(1,2,3-cd)pyrene	2.63E-07	1.72E-07	3.21E-08	5.48E-10	1.63E-10	2.01E-05	3.38E-07	3.25E-07	3.25E-08
Perylene	5.15E-08	1.05E-05	6.28E-09	3.64E-08	9.26E-11	2.98E-06	5.18E-08	4.97E-08	8.26E-09
Pyrene	4.57E-06	3.01E-07	1.11E-07	2.32E-09	6.38E-09	1.74E-05	2.92E-07	6.53E-08	2.54E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.06E-08	2.48E-09	5.22E-09	7.97E-10	8.74E-13	1.36E-07	3.29E-09	4.19E-09	2.76E-08
PCB									
Aroclor 1254 (Total PCBs)	1.70E-05	2.13E-07	--	3.46E-07	1.53E-09	1.50E-04	--	--	2.10E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.30E-08	5.80E-09	1.63E-09	4.71E-08	7.44E-08	1.13E-06	3.40E-07	4.80E-08	8.95E-07
1,2,4-Trichlorobenzene	9.67E-10	2.13E-10	1.19E-10	1.99E-09	1.90E-09	1.26E-07	2.08E-09	5.15E-09	1.20E-07
1,2,4,5-Tetrachlorobenzene	4.10E-08	2.79E-09	5.01E-09	4.82E-09	1.93E-09	5.86E-07	1.04E-08	2.22E-08	6.11E-07
Pentachlorobenzene	6.37E-07	2.82E-08	1.56E-07	3.64E-08	5.51E-09	2.66E-05	4.75E-07	9.79E-07	4.08E-06
Hexachlorobenzene	1.76E-08	1.38E-09	4.30E-09	4.65E-09	2.05E-09	6.55E-06	1.17E-07	2.38E-07	2.05E-06
Pentachlorophenol	3.00E-07	1.06E-04	7.02E-07	7.09E-08	1.12E-07	2.65E-06	5.20E-08	9.79E-08	6.29E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.42E-11	1.39E-11	1.96E-12	4.68E-09	1.40E-08	8.51E-08	6.71E-08	3.85E-09	4.43E-08
Chloroform	2.34E-11	6.39E-11	5.24E-12	1.83E-09	1.64E-08	3.44E-08	6.05E-08	1.67E-09	8.20E-09
Dichloromethane	4.19E-09	2.88E-08	2.66E-09	1.85E-07	5.48E-06	2.19E-06	5.28E-06	1.13E-07	5.48E-07
Trichlorofluoromethane (Freon 11)	1.08E-09	1.54E-09	1.67E-10	1.23E-06	5.36E-06	2.45E-05	2.70E-05	1.14E-06	8.50E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	5.22E-11	7.43E-11	8.05E-12	1.07E-08	4.66E-08	2.52E-07	2.77E-07	1.17E-08	7.38E-08
Other Organics									
Bromoform	1.98E-10	3.27E-10	3.26E-11	4.03E-07	2.10E-06	1.06E-05	1.32E-05	4.95E-07	2.46E-06
O-Terphenyl	2.89E-07	5.35E-08	7.05E-08	4.03E-08	5.77E-09	4.25E-05	9.22E-07	1.51E-06	9.58E-06
Inorganics									
Antimony	6.67E-05	3.43E-05	1.07E-05	4.18E-07	6.98E-07	3.14E-05	1.61E-07	3.55E-07	1.40E-04
Arsenic	6.61E-06	3.46E-06	1.39E-07	8.34E-08	1.07E-07	3.11E-06	1.52E-08	3.21E-07	5.36E-06
Barium	4.69E-05	2.33E-05	6.83E-07	4.24E-08	5.39E-07	2.21E-05	4.48E-07	3.02E-06	5.39E-06
Beryllium	4.20E-05	2.97E-06	3.02E-07	5.24E-08	4.08E-08	3.22E-05	2.95E-06	4.26E-06	4.08E-06
Boron	2.59E-04	2.21E-03	4.15E-05	2.01E-05	3.91E-05	1.17E-04	2.13E-06	2.68E-05	--
Cadmium	2.77E-04	1.54E-04	4.23E-04	2.25E-07	1.75E-06	1.32E-04	1.46E-05	4.28E-05	2.11E-03
Chromium (Total)	2.33E-05	1.74E-05	1.14E-06	1.13E-06	5.74E-07	1.09E-05	5.82E-08	4.69E-07	1.15E-04
Chromium VI	3.31E-06	2.48E-06	1.62E-07	1.60E-07	8.17E-08	1.55E-06	8.27E-09	--	3.02E-06
Cobalt	1.41E-04	4.72E-05	2.75E-06	1.19E-05	1.48E-06	6.64E-05	6.48E-08	1.59E-07	1.48E-04
Lead	6.44E-03	6.73E-04	4.80E-04	3.15E-06	5.83E-06	5.24E-03	5.86E-05	1.27E-04	6.10E-04
Mercury - Inorganic	7.47E-04	8.80E-06	2.02E-04	2.49E-06	9.36E-08	4.75E-03	8.57E-04	5.83E-04	6.73E-05
Methyl Mercury	1.68E-05	2.48E-06	1.43E-04	2.59E-08	1.33E-09	1.10E-06	1.97E-08	4.92E-06	2.19E-04
Nickel	3.02E-03	7.65E-04	5.12E-04	6.00E-05	2.20E-05	1.43E-03	1.13E-05	4.86E-05	3.43E-03
Selenium	1.33E-06	3.70E-06	2.10E-07	9.44E-08	1.23E-07	6.13E-07	4.04E-08	3.83E-07	2.08E-05
Silver	1.53E-05	3.18E-05	5.00E-06	1.09E-06	8.56E-07	7.10E-06	3.19E-08	--	7.58E-05
Thallium	1.47E-03	3.05E-04	2.35E-04	1.64E-04	9.81E-06	6.96E-04	2.24E-07	--	--
Tin	1.59E-03	1.83E-04	1.31E-04	2.23E-04	3.40E-06	8.51E-04	2.30E-06	--	1.02E-02
Vanadium	1.52E-04	9.75E-06	1.02E-06	4.45E-07	1.30E-07	1.30E-04	8.22E-08	1.92E-06	2.08E-05
Zinc	6.62E-03	3.18E-03	4.81E-03	3.52E-06	5.05E-05	3.13E-03	2.78E-04	1.46E-03	4.70E-02

Table M.68 - Detailed Process Upset Project Case Exposure Point Concentrations for the Darlington Provincial Park Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	6.45E-07	1.44E-03	7.86E-08	4.00E-04	6.28E-10	1.00E-05	--	1.64E-07	3.00E-04
Benzo(a)fluorene	2.64E-07	7.26E-08	6.45E-09	6.51E-09	2.21E-09	8.76E-06	--	3.15E-08	2.78E-08
Benzo(b)fluorene	1.83E-07	1.51E-07	4.46E-09	1.28E-08	1.60E-09	6.51E-06	--	2.27E-08	4.51E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.40E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.21E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.81E-06	3.73E-07	8.91E-07	5.92E-07	3.24E-09	2.22E-06	5.35E-08	6.82E-08	8.68E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.04E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.28E-03	2.81E-03	6.33E-02	1.03E-05	7.07E-04	1.39E-05	2.61E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.54E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.98E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	7.81E-07	1.12E-07	1.90E-07	7.56E-08	4.97E-09	3.66E-05	7.98E-07	1.30E-06	8.24E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.06E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.07E-04	5.01E-01	5.54E-02	1.63E-01	3.05E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.35E-05	1.11E-05	6.59E-07	7.12E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.06E-04	6.00E+00	5.85E-03	1.44E-02	2.86E-02
Lead	1.69E+01	4.13E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.18E-02
Mercury - Inorganic	7.20E-02	2.23E-02	1.95E-02	2.01E-03	1.00E-04	5.48E-02	9.90E-03	6.74E-03	9.36E-02
Methyl Mercury	1.47E-03	3.74E-05	1.25E-02	4.69E-04	1.50E-05	1.69E-05	3.02E-07	7.55E-05	9.37E-02
Nickel	1.23E+01	6.03E-01	2.08E+00	3.11E-01	6.09E-03	1.00E+01	7.88E-02	3.40E-01	4.95E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.04E-04	2.00E-01	9.00E-04	--	1.03E-02
Thallium	1.01E+00	2.14E-02	1.61E-01	1.07E-02	3.42E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.70E-02	1.01E-03	5.00E+00	1.35E-02	--	9.00E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.69 - Detailed Process Upset Project Case Exposure Point Concentrations for the Second Marsh Wildlife Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	3.86E-07	1.43E-03	4.71E-08	4.00E-04	1.81E-09	2.89E-05	--	4.75E-07	3.00E-04
Benzo(a)fluorene	1.58E-07	4.23E-08	3.86E-09	3.79E-09	5.66E-10	2.24E-06	--	8.08E-09	7.13E-09
Benzo(b)fluorene	1.09E-07	8.73E-08	2.67E-09	7.43E-09	4.48E-10	1.82E-06	--	6.36E-09	1.26E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.03E-02	8.46E-04	8.22E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.44E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.12E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.71E-07	8.78E-07	5.91E-07	3.24E-09	2.10E-06	5.07E-08	6.45E-08	8.43E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.02E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.19E-03	2.81E-03	6.33E-02	1.04E-05	7.10E-04	1.39E-05	2.62E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.52E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.96E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	4.67E-07	6.49E-08	1.14E-07	4.18E-08	1.45E-09	1.07E-05	2.44E-07	3.82E-07	2.41E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.06E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.64E-01	2.25E-01	1.08E-04	5.01E-01	5.54E-02	1.63E-01	3.11E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	6.06E-06	4.47E-06	2.97E-07	3.37E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.07E-04	6.00E+00	5.85E-03	1.44E-02	2.87E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.23E-02
Mercury - Inorganic	7.11E-02	2.23E-02	1.93E-02	2.00E-03	1.00E-04	6.13E-02	1.05E-02	7.53E-03	9.37E-02
Methyl Mercury	1.43E-03	3.26E-05	1.22E-02	4.69E-04	1.50E-05	6.59E-06	1.17E-07	2.94E-05	9.41E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.10E-03	1.00E+01	7.88E-02	3.40E-01	4.96E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.54E-02	1.00E-02	1.04E-04	2.00E-01	9.00E-04	--	1.03E-02
Thallium	1.00E+00	2.06E-02	1.60E-01	1.03E-02	3.45E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.64E-02	1.01E-03	5.00E+00	1.35E-02	--	9.45E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.70 - Detailed Process Upset Project Case Exposure Point Concentrations for the Darlington Waterfront Trail Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.42E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.01E-05	5.01E-02	8.43E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.01E-02	3.49E-04	3.43E-04	3.00E-04
Benzo(e)pyrene	9.63E-07	1.45E-03	1.17E-07	4.00E-04	5.09E-09	8.11E-05	--	1.33E-06	3.01E-04
Benzo(a)fluorene	3.95E-07	1.10E-07	9.63E-09	1.01E-08	1.94E-08	7.70E-05	--	2.77E-07	2.45E-07
Benzo(b)fluorene	2.73E-07	2.30E-07	6.65E-09	1.98E-08	1.33E-08	5.41E-05	--	1.89E-07	3.75E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.42E-03	6.10E-03	4.00E-04	1.00E-05	5.12E-02	8.62E-04	8.38E-04	6.51E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.08E-04	6.10E-03	4.00E-04	1.00E-05	5.06E-02	8.52E-04	8.13E-04	3.02E-04
Dibenz(a,h)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.45E-04	8.14E-04	3.00E-04
Perylene	1.00E-02	2.32E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.35E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.81E-06	3.75E-07	8.91E-07	5.92E-07	3.25E-09	3.40E-06	8.08E-08	1.05E-07	1.11E-06
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.19E-02	8.40E-04	1.64E-03	1.52E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.01E-05	1.04E-02	1.85E-04	3.82E-04	1.01E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.80E-04	3.67E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.39E-03	2.81E-03	6.33E-02	1.03E-05	7.07E-04	1.39E-05	2.61E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.94E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.90E-04	1.60E-03	1.00E-01	2.41E-01	5.16E-03	8.47E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.22E-03	1.08E-03	2.04E-02	2.24E-02	9.44E-04	9.14E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.01E-04	3.00E-03	3.31E-03	1.39E-04	7.94E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.03E-03	5.30E-04	2.02E-02	2.51E-02	9.45E-04	6.37E-04
O-Terphenyl	1.17E-06	1.70E-07	2.84E-07	1.88E-07	5.35E-08	3.94E-04	7.90E-06	1.40E-05	8.89E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.04E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.05E-04	5.00E-01	5.53E-02	1.63E-01	2.72E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.34E-05	9.22E-06	6.54E-07	5.81E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.04E-04	6.00E+00	5.85E-03	1.44E-02	2.84E-02
Lead	1.69E+01	4.13E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.22E-02
Mercury - Inorganic	7.27E-02	2.23E-02	1.97E-02	2.01E-03	1.01E-04	8.71E-02	1.27E-02	1.07E-02	9.40E-02
Methyl Mercury	1.47E-03	3.73E-05	1.25E-02	4.69E-04	1.50E-05	6.17E-06	1.10E-07	2.75E-05	9.52E-02
Nickel	1.23E+01	6.03E-01	2.08E+00	3.11E-01	6.06E-03	1.00E+01	7.87E-02	3.40E-01	4.89E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.01E+00	2.11E-02	1.61E-01	1.06E-02	3.27E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.69E-02	1.01E-03	5.00E+00	1.35E-02	--	7.99E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.71 - Detailed Process Upset Project Case Exposure Point Concentrations for the McLaughlin Bay Wildlife Reserve Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	4.45E-07	1.43E-03	5.43E-08	4.00E-04	2.62E-09	4.17E-05	--	6.85E-07	3.00E-04
Benzo(a)fluorene	1.83E-07	5.63E-08	4.45E-09	5.02E-09	4.85E-10	1.92E-06	--	6.92E-09	6.11E-09
Benzo(b)fluorene	1.26E-07	1.20E-07	3.08E-09	1.02E-08	3.91E-10	1.59E-06	--	5.55E-09	1.10E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.39E-03	6.10E-03	4.00E-04	1.00E-05	5.04E-02	8.47E-04	8.24E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.04E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.44E-04	8.06E-04	3.01E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.17E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.71E-07	8.77E-07	5.91E-07	3.24E-09	2.07E-06	5.00E-08	6.36E-08	8.37E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.03E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.24E-03	2.81E-03	6.33E-02	1.05E-05	7.13E-04	1.40E-05	2.64E-05	6.34E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.51E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.95E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	5.39E-07	8.74E-08	1.31E-07	5.32E-08	1.23E-09	9.05E-06	2.08E-07	3.23E-07	2.04E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.07E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.09E-04	5.01E-01	5.54E-02	1.63E-01	3.21E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	5.86E-06	4.15E-06	2.87E-07	3.27E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.07E-04	6.00E+00	5.85E-03	1.44E-02	2.87E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.03E-03	1.30E+01	1.45E-01	3.14E-01	7.31E-02
Mercury - Inorganic	7.14E-02	2.23E-02	1.93E-02	2.00E-03	1.00E-04	6.70E-02	1.10E-02	8.23E-03	9.37E-02
Methyl Mercury	1.43E-03	3.28E-05	1.22E-02	4.69E-04	1.50E-05	3.65E-06	6.50E-08	1.63E-05	9.44E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.11E-03	1.00E+01	7.88E-02	3.40E-01	4.97E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.54E-02	1.00E-02	1.04E-04	2.00E-01	9.00E-04	--	1.04E-02
Thallium	1.00E+00	2.05E-02	1.60E-01	1.03E-02	3.49E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.64E-02	1.02E-03	5.00E+00	1.35E-02	--	1.02E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.53E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.72 - Detailed Process Upset Project Case Exposure Point Concentrations for the Bowmanville Valley Cons. Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	3.21E-07	1.43E-03	3.91E-08	4.00E-04	6.94E-10	1.10E-05	--	1.82E-07	3.00E-04
Benzo(a)fluorene	1.32E-07	4.42E-08	3.21E-09	3.97E-09	3.26E-09	1.29E-05	--	4.65E-08	4.10E-08
Benzo(b)fluorene	9.08E-08	9.56E-08	2.22E-09	8.15E-09	2.30E-09	9.36E-06	--	3.27E-08	6.49E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.39E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.13E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.80E-06	3.72E-07	8.86E-07	5.91E-07	3.24E-09	2.26E-06	5.45E-08	6.95E-08	8.76E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.03E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.69E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.20E-03	2.81E-03	6.33E-02	1.02E-05	7.05E-04	1.38E-05	2.61E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.56E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	8.00E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	3.88E-07	6.91E-08	9.47E-08	5.43E-08	7.34E-09	5.41E-05	1.16E-06	1.93E-06	1.22E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.07E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.09E-04	5.01E-01	5.54E-02	1.63E-01	3.20E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	1.06E-05	1.01E-05	5.18E-07	6.60E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.07E-04	6.00E+00	5.85E-03	1.44E-02	2.87E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.24E-02
Mercury - Inorganic	7.12E-02	2.23E-02	1.93E-02	2.00E-03	1.00E-04	5.51E-02	9.92E-03	6.77E-03	9.36E-02
Methyl Mercury	1.45E-03	3.60E-05	1.24E-02	4.69E-04	1.50E-05	7.87E-06	1.40E-07	3.51E-05	9.37E-02
Nickel	1.23E+01	6.03E-01	2.08E+00	3.11E-01	6.11E-03	1.00E+01	7.88E-02	3.40E-01	4.97E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.04E-04	2.00E-01	9.00E-04	--	1.04E-02
Thallium	1.00E+00	2.12E-02	1.61E-01	1.07E-02	3.49E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.68E-02	1.02E-03	5.00E+00	1.35E-02	--	9.81E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.53E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.73 - Detailed Process Upset Project Case Exposure Point Concentrations for the Eco Baseline Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.38E-06	1.43E-03	1.69E-07	4.00E-04	3.41E-10	5.44E-06	--	8.94E-08	3.00E-04
Benzo(a)fluorene	5.67E-07	7.63E-08	1.38E-08	7.04E-09	1.03E-09	4.10E-06	--	1.48E-08	1.30E-08
Benzo(b)fluorene	3.92E-07	1.20E-07	9.56E-09	1.04E-08	7.18E-10	2.92E-06	--	1.02E-08	2.02E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.39E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.15E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.84E-06	3.73E-07	9.11E-07	5.92E-07	3.24E-09	2.22E-06	5.36E-08	6.84E-08	8.69E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.05E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.21E-03	2.81E-03	6.33E-02	1.01E-05	7.03E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.54E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.98E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	1.67E-06	1.06E-07	4.09E-07	8.95E-08	2.79E-09	2.06E-05	4.58E-07	7.32E-07	4.63E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.02E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.02E-01	3.78E-01	7.66E-01	2.25E-01	1.02E-04	5.00E-01	5.53E-02	1.63E-01	2.42E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	2.40E-05	1.61E-05	1.17E-06	9.55E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.02E-04	6.00E+00	5.85E-03	1.44E-02	2.82E-02
Lead	1.70E+01	4.15E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.06E-02
Mercury - Inorganic	7.28E-02	2.23E-02	1.97E-02	2.01E-03	1.00E-04	5.26E-02	9.68E-03	6.46E-03	9.35E-02
Methyl Mercury	1.52E-03	3.96E-05	1.29E-02	4.69E-04	1.50E-05	5.71E-06	1.02E-07	2.55E-05	9.36E-02
Nickel	1.23E+01	6.05E-01	2.08E+00	3.11E-01	6.03E-03	1.00E+01	7.87E-02	3.40E-01	4.84E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.01E+00	2.20E-02	1.62E-01	1.10E-02	3.12E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.26E-01	9.75E-02	1.00E-03	5.00E+00	1.35E-02	--	6.19E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.74 - Detailed Process Upset Project Case Exposure Point Concentrations for the Baseline Road & Rundle Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.16E-06	1.47E-03	1.41E-07	4.00E-04	1.40E-09	2.23E-05	--	3.66E-07	3.00E-04
Benzo(a)fluorene	4.75E-07	1.47E-07	1.16E-08	1.31E-08	4.63E-09	1.83E-05	--	6.60E-08	5.82E-08
Benzo(b)fluorene	3.28E-07	3.13E-07	8.00E-09	2.66E-08	3.41E-09	1.39E-05	--	4.84E-08	9.61E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.45E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.45E-04	8.21E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.10E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.07E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.44E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.83E-06	3.79E-07	9.06E-07	5.93E-07	3.24E-09	2.43E-06	5.85E-08	7.48E-08	9.11E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.04E-02	8.41E-04	1.64E-03	1.08E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.69E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.51E-03	2.81E-03	6.33E-02	1.05E-05	7.12E-04	1.40E-05	2.63E-05	6.34E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.57E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.20E-02	9.29E-04	8.03E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.39E-04	6.04E-04
O-Terphenyl	1.40E-06	2.28E-07	3.42E-07	1.51E-07	1.03E-08	7.57E-05	1.61E-06	2.70E-06	1.71E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.09E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.02E-01	3.78E-01	7.66E-01	2.25E-01	1.11E-04	5.01E-01	5.54E-02	1.63E-01	3.44E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	2.12E-05	1.72E-05	1.04E-06	1.09E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.09E-04	6.00E+00	5.85E-03	1.44E-02	2.89E-02
Lead	1.70E+01	4.15E-01	1.26E+00	4.40E-02	1.03E-03	1.30E+01	1.45E-01	3.14E-01	7.27E-02
Mercury - Inorganic	7.37E-02	2.24E-02	2.00E-02	2.01E-03	1.00E-04	6.10E-02	1.05E-02	7.50E-03	9.37E-02
Methyl Mercury	1.51E-03	4.32E-05	1.28E-02	4.69E-04	1.50E-05	2.03E-05	3.61E-07	9.04E-05	9.40E-02
Nickel	1.23E+01	6.05E-01	2.08E+00	3.11E-01	6.14E-03	1.00E+01	7.88E-02	3.40E-01	5.01E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.05E-04	2.00E-01	9.00E-04	--	1.05E-02
Thallium	1.01E+00	2.21E-02	1.62E-01	1.11E-02	3.60E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.26E-01	9.75E-02	1.02E-03	5.00E+00	1.35E-02	--	1.08E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.53E-02	8.10E+01	7.20E+00	3.78E+01	3.86E+01

Table M.75 - Detailed Process Upset Project Case Exposure Point Concentrations for the Baseline Road & Courtice Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.39E-06	1.45E-03	1.69E-07	4.00E-04	1.27E-09	2.02E-05	--	3.32E-07	3.00E-04
Benzo(a)fluorene	5.70E-07	1.19E-07	1.39E-08	1.08E-08	3.83E-09	1.52E-05	--	5.47E-08	4.82E-08
Benzo(b)fluorene	3.94E-07	2.29E-07	9.60E-09	1.96E-08	2.88E-09	1.17E-05	--	4.09E-08	8.12E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.42E-03	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.45E-04	8.21E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.08E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.31E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.83E-06	3.76E-07	9.06E-07	5.93E-07	3.24E-09	2.35E-06	5.67E-08	7.25E-08	8.96E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.03E-02	8.41E-04	1.64E-03	1.07E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.38E-03	2.81E-03	6.33E-02	1.06E-05	7.15E-04	1.40E-05	2.64E-05	6.35E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.53E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.97E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	1.68E-06	1.78E-07	4.10E-07	1.30E-07	8.05E-09	5.93E-05	1.27E-06	2.11E-06	1.34E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.09E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.03E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.02E-01	3.78E-01	7.66E-01	2.25E-01	1.12E-04	5.01E-01	5.54E-02	1.63E-01	3.54E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	2.15E-05	1.46E-05	1.05E-06	9.60E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.10E-04	6.00E+00	5.85E-03	1.44E-02	2.90E-02
Lead	1.70E+01	4.14E-01	1.26E+00	4.40E-02	1.03E-03	1.30E+01	1.45E-01	3.14E-01	7.28E-02
Mercury - Inorganic	7.34E-02	2.23E-02	1.99E-02	2.01E-03	1.00E-04	5.81E-02	1.02E-02	7.14E-03	9.36E-02
Methyl Mercury	1.51E-03	4.03E-05	1.28E-02	4.69E-04	1.50E-05	2.55E-05	4.54E-07	1.14E-04	9.39E-02
Nickel	1.23E+01	6.05E-01	2.08E+00	3.11E-01	6.15E-03	1.00E+01	7.88E-02	3.40E-01	5.03E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.06E-04	2.00E-01	9.00E-04	--	1.05E-02
Thallium	1.01E+00	2.18E-02	1.62E-01	1.10E-02	3.65E-04	1.00E+00	3.23E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.26E-01	9.74E-02	1.02E-03	5.01E+00	1.35E-02	--	1.12E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.53E-02	8.10E+01	7.20E+00	3.78E+01	3.86E+01

Table M.76 - Detailed Process Upset Project Case Exposure Point Concentrations for the Soper Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	2.44E-07	1.43E-03	2.97E-08	4.00E-04	4.02E-10	6.40E-06	--	1.05E-07	3.00E-04
Benzo(a)fluorene	9.99E-08	3.65E-08	2.44E-09	3.26E-09	1.75E-09	6.95E-06	--	2.50E-08	2.21E-08
Benzo(b)fluorene	6.90E-08	8.03E-08	1.68E-09	6.82E-09	1.23E-09	4.99E-06	--	1.74E-08	3.46E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.11E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.79E-06	3.71E-07	8.80E-07	5.91E-07	3.24E-09	2.14E-06	5.18E-08	6.60E-08	8.53E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.02E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.18E-03	2.81E-03	6.34E-02	1.01E-05	7.03E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.54E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.98E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	2.95E-07	5.75E-08	7.19E-08	4.12E-08	4.17E-09	3.07E-05	6.74E-07	1.09E-06	6.92E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.03E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.64E-01	2.25E-01	1.04E-04	5.00E-01	5.53E-02	1.63E-01	2.63E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	7.54E-06	7.19E-06	3.69E-07	4.48E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.11E-02
Mercury - Inorganic	7.10E-02	2.23E-02	1.92E-02	2.00E-03	1.00E-04	5.32E-02	9.73E-03	6.54E-03	9.35E-02
Methyl Mercury	1.44E-03	3.41E-05	1.22E-02	4.69E-04	1.50E-05	3.06E-06	5.45E-08	1.37E-05	9.36E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.05E-03	1.00E+01	7.87E-02	3.40E-01	4.88E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.00E+00	2.09E-02	1.61E-01	1.04E-02	3.22E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.66E-02	1.01E-03	5.00E+00	1.35E-02	--	7.21E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.77 - Detailed Process Upset Project Case Exposure Point Concentrations for the Bowmanville Marsh Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	2.79E-07	1.43E-03	3.40E-08	4.00E-04	8.02E-10	1.28E-05	--	2.10E-07	3.00E-04
Benzo(a)fluorene	1.14E-07	5.11E-08	2.79E-09	4.55E-09	2.99E-09	1.18E-05	--	4.26E-08	3.76E-08
Benzo(b)fluorene	7.89E-08	1.16E-07	1.92E-09	9.82E-09	2.13E-09	8.66E-06	--	3.02E-08	6.00E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.39E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.44E-04	8.20E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.04E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.17E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.71E-07	8.73E-07	5.91E-07	3.24E-09	2.13E-06	5.14E-08	6.54E-08	8.49E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.04E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.69E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.23E-03	2.81E-03	6.34E-02	1.01E-05	7.03E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.56E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.20E-02	9.29E-04	8.02E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.38E-04	6.04E-04
O-Terphenyl	3.37E-07	8.14E-08	8.23E-08	5.57E-08	7.20E-09	5.30E-05	1.14E-06	1.89E-06	1.20E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.02E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.02E-04	5.00E-01	5.53E-02	1.63E-01	2.38E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	3.41E-06	2.73E-06	1.67E-07	1.75E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.02E-04	6.00E+00	5.85E-03	1.44E-02	2.82E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.06E-02
Mercury - Inorganic	7.10E-02	2.23E-02	1.92E-02	2.00E-03	1.00E-04	5.69E-02	1.01E-02	6.99E-03	9.36E-02
Methyl Mercury	1.42E-03	3.20E-05	1.20E-02	4.69E-04	1.50E-05	3.55E-06	6.31E-08	1.58E-05	9.38E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.02E-03	1.00E+01	7.87E-02	3.40E-01	4.84E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.03E-02	1.60E-01	1.02E-02	3.11E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.62E-02	1.00E-03	5.00E+00	1.35E-02	--	6.07E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.78 - Detailed Process Upset Project Case Exposure Point Concentrations for the South of Site, Eco Baseline S7 Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	9.06E-07	1.42E-03	1.11E-07	4.00E-04	2.24E-10	3.56E-06	--	5.86E-08	3.00E-04
Benzo(a)fluorene	3.72E-07	4.73E-08	9.07E-09	4.39E-09	6.78E-10	2.69E-06	--	9.67E-09	8.53E-09
Benzo(b)fluorene	2.57E-07	7.18E-08	6.26E-09	6.23E-09	4.70E-10	1.91E-06	--	6.68E-09	1.33E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.09E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.81E-06	3.71E-07	8.96E-07	5.91E-07	3.24E-09	2.14E-06	5.16E-08	6.57E-08	8.51E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.03E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.15E-03	2.81E-03	6.33E-02	1.01E-05	7.02E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.52E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.96E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	1.10E-06	6.51E-08	2.68E-07	5.67E-08	1.83E-09	1.35E-05	3.05E-07	4.80E-07	3.04E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.01E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.01E-04	5.00E-01	5.53E-02	1.63E-01	2.33E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.60E-05	1.07E-05	7.82E-07	6.37E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.01E-04	6.00E+00	5.85E-03	1.44E-02	2.81E-02
Lead	1.69E+01	4.13E-01	1.26E+00	4.40E-02	1.00E-03	1.30E+01	1.45E-01	3.14E-01	7.04E-02
Mercury - Inorganic	7.18E-02	2.23E-02	1.95E-02	2.01E-03	1.00E-04	5.17E-02	9.58E-03	6.35E-03	9.35E-02
Methyl Mercury	1.48E-03	3.59E-05	1.26E-02	4.69E-04	1.50E-05	3.81E-06	6.78E-08	1.70E-05	9.36E-02
Nickel	1.23E+01	6.03E-01	2.08E+00	3.11E-01	6.02E-03	1.00E+01	7.87E-02	3.40E-01	4.83E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.01E+00	2.13E-02	1.61E-01	1.07E-02	3.08E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.70E-02	1.00E-03	5.00E+00	1.35E-02	--	5.80E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.50E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

Table M.79 - Detailed Process Upset Project Case Exposure Point Concentrations for the Sports Fields Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.42E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.01E-05	5.01E-02	8.43E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.01E-02	3.49E-04	3.43E-04	3.00E-04
Benzo(e)pyrene	9.76E-07	1.45E-03	1.19E-07	4.00E-04	5.16E-09	8.22E-05	--	1.35E-06	3.01E-04
Benzo(a)fluorene	4.00E-07	1.07E-07	9.76E-09	9.83E-09	1.97E-08	7.80E-05	--	2.81E-07	2.48E-07
Benzo(b)fluorene	2.76E-07	2.20E-07	6.74E-09	1.89E-08	1.35E-08	5.48E-05	--	1.91E-07	3.80E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.42E-03	6.10E-03	4.00E-04	1.00E-05	5.13E-02	8.62E-04	8.38E-04	6.51E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.08E-04	6.10E-03	4.00E-04	1.00E-05	5.06E-02	8.52E-04	8.14E-04	3.02E-04
Dibenz(a,h)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.45E-04	8.14E-04	3.00E-04
Perylene	1.00E-02	2.30E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.35E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.81E-06	3.75E-07	8.92E-07	5.92E-07	3.25E-09	3.45E-06	8.20E-08	1.06E-07	1.12E-06
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.19E-02	8.40E-04	1.64E-03	1.53E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.01E-05	1.04E-02	1.85E-04	3.82E-04	1.01E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.80E-04	3.67E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.37E-03	2.81E-03	6.33E-02	1.03E-05	7.08E-04	1.39E-05	2.62E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.94E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.90E-04	1.60E-03	1.00E-01	2.41E-01	5.16E-03	8.48E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.22E-03	1.08E-03	2.04E-02	2.24E-02	9.45E-04	9.16E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.01E-04	3.00E-03	3.31E-03	1.39E-04	7.94E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.03E-03	5.31E-04	2.02E-02	2.51E-02	9.45E-04	6.37E-04
O-Terphenyl	1.18E-06	1.63E-07	2.88E-07	1.87E-07	5.43E-08	4.00E-04	8.00E-06	1.42E-05	9.01E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.04E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.05E-04	5.00E-01	5.53E-02	1.63E-01	2.75E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.39E-05	9.55E-06	6.79E-07	6.02E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.04E-04	6.00E+00	5.85E-03	1.44E-02	2.84E-02
Lead	1.69E+01	4.13E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.22E-02
Mercury - Inorganic	7.27E-02	2.23E-02	1.97E-02	2.01E-03	1.01E-04	8.67E-02	1.27E-02	1.06E-02	9.40E-02
Methyl Mercury	1.47E-03	3.73E-05	1.25E-02	4.69E-04	1.50E-05	6.41E-06	1.14E-07	2.86E-05	9.52E-02
Nickel	1.23E+01	6.03E-01	2.08E+00	3.11E-01	6.06E-03	1.00E+01	7.87E-02	3.40E-01	4.90E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.01E+00	2.12E-02	1.61E-01	1.06E-02	3.28E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.69E-02	1.01E-03	5.00E+00	1.35E-02	--	8.11E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.80 - Detailed Process Upset Project Case Exposure Point Concentrations for the Water Pollution Control Plant Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.12E-06	1.43E-03	1.37E-07	4.00E-04	2.77E-10	4.40E-06	--	7.24E-08	3.00E-04
Benzo(a)fluorene	4.59E-07	7.71E-08	1.12E-08	7.03E-09	8.38E-10	3.32E-06	--	1.20E-08	1.06E-08
Benzo(b)fluorene	3.17E-07	1.36E-07	7.74E-09	1.17E-08	5.81E-10	2.36E-06	--	8.25E-09	1.64E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.40E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.18E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.82E-06	3.73E-07	9.00E-07	5.92E-07	3.24E-09	2.16E-06	5.22E-08	6.65E-08	8.56E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.04E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.25E-03	2.81E-03	6.33E-02	1.01E-05	7.02E-04	1.38E-05	2.60E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.53E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.97E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	1.36E-06	1.12E-07	3.31E-07	8.41E-08	2.26E-09	1.66E-05	3.74E-07	5.93E-07	3.75E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.01E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.02E-01	3.78E-01	7.66E-01	2.25E-01	1.02E-04	5.00E-01	5.53E-02	1.63E-01	2.35E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.84E-05	1.24E-05	9.01E-07	7.35E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.01E-04	6.00E+00	5.85E-03	1.44E-02	2.81E-02
Lead	1.69E+01	4.14E-01	1.26E+00	4.40E-02	1.00E-03	1.30E+01	1.45E-01	3.14E-01	7.04E-02
Mercury - Inorganic	7.25E-02	2.23E-02	1.96E-02	2.01E-03	1.00E-04	5.23E-02	9.64E-03	6.43E-03	9.35E-02
Methyl Mercury	1.49E-03	3.78E-05	1.27E-02	4.69E-04	1.50E-05	4.39E-06	7.81E-08	1.96E-05	9.36E-02
Nickel	1.23E+01	6.04E-01	2.08E+00	3.11E-01	6.02E-03	1.00E+01	7.87E-02	3.40E-01	4.83E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.01E+00	2.15E-02	1.61E-01	1.08E-02	3.10E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.26E-01	9.71E-02	1.00E-03	5.00E+00	1.35E-02	--	5.92E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.50E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

Table M.81 - Detailed Process Upset Project Case Exposure Point Concentrations for the Future Industrial Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.93E-06	1.43E-03	2.35E-07	4.00E-04	4.76E-10	7.58E-06	--	1.25E-07	3.00E-04
Benzo(a)fluorene	7.91E-07	9.33E-08	1.93E-08	8.69E-09	1.44E-09	5.72E-06	--	2.06E-08	1.82E-08
Benzo(b)fluorene	5.46E-07	1.34E-07	1.33E-08	1.17E-08	1.00E-09	4.07E-06	--	1.42E-08	2.82E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.39E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.44E-04	8.20E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.06E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.15E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.87E-06	3.74E-07	9.30E-07	5.93E-07	3.24E-09	2.33E-06	5.62E-08	7.18E-08	8.91E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.03E-02	8.41E-04	1.64E-03	1.06E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.22E-03	2.81E-03	6.32E-02	1.02E-05	7.04E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.55E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	8.00E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	2.34E-06	1.26E-07	5.70E-07	1.15E-07	3.89E-09	2.87E-05	6.31E-07	1.02E-06	6.46E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.03E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.03E-01	3.79E-01	7.67E-01	2.25E-01	1.03E-04	5.00E-01	5.53E-02	1.63E-01	2.53E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	3.43E-05	2.29E-05	1.68E-06	1.36E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.70E+01	4.17E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.08E-02
Mercury - Inorganic	7.38E-02	2.24E-02	2.00E-02	2.01E-03	1.00E-04	5.35E-02	9.76E-03	6.57E-03	9.35E-02
Methyl Mercury	1.57E-03	4.37E-05	1.34E-02	4.69E-04	1.50E-05	8.18E-06	1.46E-07	3.65E-05	9.37E-02
Nickel	1.23E+01	6.07E-01	2.08E+00	3.12E-01	6.04E-03	1.00E+01	7.87E-02	3.40E-01	4.86E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.03E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.02E+00	2.28E-02	1.62E-01	1.14E-02	3.18E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.82E-01	8.26E-01	9.81E-02	1.01E-03	5.00E+00	1.35E-02	--	6.71E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.82 - Detailed Process Upset Project Case Exposure Point Concentrations for the Harmony Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.86E-07	1.42E-03	2.27E-08	4.00E-04	3.32E-11	5.29E-07	--	8.69E-09	3.00E-04
Benzo(a)fluorene	7.64E-08	2.17E-08	1.86E-09	1.94E-09	7.78E-11	3.08E-07	--	1.11E-09	9.80E-10
Benzo(b)fluorene	5.28E-08	4.55E-08	1.29E-09	3.87E-09	5.66E-11	2.30E-07	--	8.03E-10	1.59E-09
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.03E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.10E-04	3.00E-04
Perylene	1.00E-02	2.06E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.69E-07	8.73E-07	5.90E-07	3.24E-09	1.99E-06	4.81E-08	6.12E-08	8.21E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.00E-02	8.41E-04	1.64E-03	1.00E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.67E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.13E-03	2.81E-03	6.34E-02	1.01E-05	7.02E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.50E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.93E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.01E-04
O-Terphenyl	2.26E-07	3.35E-08	5.50E-08	2.04E-08	1.47E-10	1.08E-06	2.68E-08	3.86E-08	2.44E-07
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.01E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.02E-04	5.00E-01	5.53E-02	1.63E-01	2.37E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	3.47E-06	2.78E-06	1.70E-07	1.78E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.02E-04	6.00E+00	5.85E-03	1.44E-02	2.82E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.00E-03	1.30E+01	1.45E-01	3.14E-01	7.04E-02
Mercury - Inorganic	7.05E-02	2.23E-02	1.91E-02	2.00E-03	1.00E-04	5.03E-02	9.45E-03	6.18E-03	9.35E-02
Methyl Mercury	1.42E-03	3.10E-05	1.20E-02	4.69E-04	1.50E-05	1.42E-06	2.54E-08	6.35E-06	9.35E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.02E-03	1.00E+01	7.87E-02	3.40E-01	4.84E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.03E-02	1.60E-01	1.02E-02	3.10E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.62E-02	1.00E-03	5.00E+00	1.35E-02	--	5.96E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

Table M.83 - Detailed Process Upset Project Case Exposure Point Concentrations for the Farewell Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	2.13E-07	1.42E-03	2.60E-08	4.00E-04	3.06E-10	4.87E-06	--	8.00E-08	3.00E-04
Benzo(a)fluorene	8.73E-08	2.30E-08	2.13E-09	2.07E-09	1.07E-09	4.24E-06	--	1.53E-08	1.35E-08
Benzo(b)fluorene	6.03E-08	4.74E-08	1.47E-09	4.04E-09	7.99E-10	3.25E-06	--	1.13E-08	2.25E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.07E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.69E-07	8.73E-07	5.90E-07	3.24E-09	2.04E-06	4.95E-08	6.29E-08	8.32E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.01E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.13E-03	2.81E-03	6.34E-02	1.01E-05	7.02E-04	1.38E-05	2.60E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.52E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.95E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	2.58E-07	3.53E-08	6.29E-08	2.62E-08	2.30E-09	1.69E-05	3.80E-07	6.04E-07	3.82E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.01E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.02E-04	5.00E-01	5.53E-02	1.63E-01	2.37E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	3.74E-06	2.86E-06	1.83E-07	1.83E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.02E-04	6.00E+00	5.85E-03	1.44E-02	2.82E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.00E-03	1.30E+01	1.45E-01	3.14E-01	7.05E-02
Mercury - Inorganic	7.05E-02	2.23E-02	1.91E-02	2.00E-03	1.00E-04	5.16E-02	9.58E-03	6.34E-03	9.35E-02
Methyl Mercury	1.42E-03	3.11E-05	1.21E-02	4.69E-04	1.50E-05	1.65E-06	2.93E-08	7.34E-06	9.36E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.02E-03	1.00E+01	7.87E-02	3.40E-01	4.84E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.04E-02	1.60E-01	1.02E-02	3.10E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.63E-02	1.00E-03	5.00E+00	1.35E-02	--	6.00E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

Table M.84 - Detailed Process Upset Project Case Exposure Point Concentrations for the Farm A Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.04E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.42E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.01E-05	5.01E-02	8.43E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.01E-02	3.49E-04	3.43E-04	3.00E-04
Benzo(e)pyrene	1.11E-06	1.45E-03	1.35E-07	4.00E-04	5.86E-09	9.34E-05	--	1.53E-06	3.01E-04
Benzo(a)fluorene	4.54E-07	1.05E-07	1.11E-08	9.79E-09	2.24E-08	8.86E-05	--	3.19E-07	2.82E-07
Benzo(b)fluorene	3.14E-07	2.09E-07	7.66E-09	1.80E-08	1.53E-08	6.23E-05	--	2.17E-07	4.32E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.42E-03	6.10E-03	4.00E-04	1.00E-05	5.14E-02	8.65E-04	8.41E-04	6.51E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.76E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.07E-04	6.10E-03	4.00E-04	1.00E-05	5.07E-02	8.53E-04	8.15E-04	3.02E-04
Dibenz(a,h)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.45E-04	8.14E-04	3.00E-04
Perylene	1.00E-02	2.28E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.35E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.89E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.82E-06	3.75E-07	8.98E-07	5.92E-07	3.25E-09	3.77E-06	8.92E-08	1.16E-07	1.18E-06
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.22E-02	8.40E-04	1.64E-03	1.60E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.01E-05	1.05E-02	1.86E-04	3.84E-04	1.01E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.80E-04	3.67E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.35E-03	2.81E-03	6.33E-02	1.04E-05	7.09E-04	1.39E-05	2.62E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.94E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.90E-04	1.61E-03	1.00E-01	2.41E-01	5.16E-03	8.62E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.23E-03	1.09E-03	2.04E-02	2.25E-02	9.47E-04	9.33E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.01E-04	3.00E-03	3.31E-03	1.39E-04	7.94E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.03E-03	5.35E-04	2.02E-02	2.51E-02	9.46E-04	6.42E-04
O-Terphenyl	1.34E-06	1.59E-07	3.27E-07	2.00E-07	6.16E-08	4.54E-04	9.05E-06	1.62E-05	1.02E-04
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.05E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.06E-04	5.00E-01	5.53E-02	1.63E-01	2.87E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.68E-05	1.15E-05	8.23E-07	7.27E-07	1.07E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.05E-04	6.00E+00	5.85E-03	1.44E-02	2.85E-02
Lead	1.69E+01	4.13E-01	1.26E+00	4.40E-02	1.03E-03	1.30E+01	1.45E-01	3.14E-01	7.27E-02
Mercury - Inorganic	7.29E-02	2.23E-02	1.97E-02	2.01E-03	1.01E-04	8.88E-02	1.29E-02	1.09E-02	9.40E-02
Methyl Mercury	1.49E-03	3.83E-05	1.26E-02	4.69E-04	1.50E-05	7.76E-06	1.38E-07	3.46E-05	9.53E-02
Nickel	1.23E+01	6.04E-01	2.08E+00	3.11E-01	6.08E-03	1.00E+01	7.87E-02	3.40E-01	4.92E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.03E-04	2.00E-01	9.00E-04	--	1.03E-02
Thallium	1.01E+00	2.14E-02	1.61E-01	1.08E-02	3.33E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.26E-01	9.71E-02	1.01E-03	5.00E+00	1.35E-02	--	8.76E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.85 - Detailed Process Upset Project Case Exposure Point Concentrations for the Farm B Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	5.28E-07	1.44E-03	6.44E-08	4.00E-04	6.38E-10	1.02E-05	--	1.67E-07	3.00E-04
Benzo(a)fluorene	2.16E-07	7.30E-08	5.28E-09	6.51E-09	2.11E-09	8.36E-06	--	3.01E-08	2.66E-08
Benzo(b)fluorene	1.49E-07	1.58E-07	3.65E-09	1.34E-08	1.55E-09	6.32E-06	--	2.21E-08	4.38E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.41E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.04E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.22E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.73E-07	8.79E-07	5.91E-07	3.24E-09	2.11E-06	5.11E-08	6.50E-08	8.47E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.03E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.29E-03	2.81E-03	6.33E-02	1.02E-05	7.05E-04	1.38E-05	2.61E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.53E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.97E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	6.39E-07	1.14E-07	1.56E-07	7.33E-08	4.69E-09	3.45E-05	7.55E-07	1.23E-06	7.78E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.03E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.64E-01	2.25E-01	1.03E-04	5.00E-01	5.53E-02	1.63E-01	2.56E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	6.75E-06	4.77E-06	3.30E-07	3.10E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.09E-02
Mercury - Inorganic	7.16E-02	2.23E-02	1.94E-02	2.01E-03	1.00E-04	5.48E-02	9.89E-03	6.73E-03	9.36E-02
Methyl Mercury	1.43E-03	3.37E-05	1.22E-02	4.69E-04	1.50E-05	6.45E-06	1.15E-07	2.88E-05	9.37E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.04E-03	1.00E+01	7.87E-02	3.40E-01	4.87E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.06E-02	1.60E-01	1.03E-02	3.19E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.64E-02	1.01E-03	5.00E+00	1.35E-02	--	6.85E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.86 - Detailed Process Upset Project Case Exposure Point Concentrations for the Farm C Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	3.52E-07	1.42E-03	4.29E-08	4.00E-04	5.05E-10	8.04E-06	--	1.32E-07	3.00E-04
Benzo(a)fluorene	1.44E-07	3.59E-08	3.52E-09	3.24E-09	1.77E-09	7.00E-06	--	2.52E-08	2.22E-08
Benzo(b)fluorene	9.96E-08	7.29E-08	2.43E-09	6.22E-09	1.32E-09	5.36E-06	--	1.87E-08	3.72E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.10E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.70E-07	8.78E-07	5.90E-07	3.24E-09	2.10E-06	5.07E-08	6.46E-08	8.44E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.02E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.17E-03	2.81E-03	6.33E-02	1.01E-05	7.03E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.53E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.97E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	4.26E-07	5.48E-08	1.04E-07	4.17E-08	3.80E-09	2.80E-05	6.17E-07	9.97E-07	6.31E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.02E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.64E-01	2.25E-01	1.03E-04	5.00E-01	5.53E-02	1.63E-01	2.52E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	6.31E-06	4.81E-06	3.09E-07	3.07E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.08E-02
Mercury - Inorganic	7.09E-02	2.23E-02	1.92E-02	2.00E-03	1.00E-04	5.28E-02	9.69E-03	6.48E-03	9.35E-02
Methyl Mercury	1.43E-03	3.26E-05	1.22E-02	4.69E-04	1.50E-05	2.78E-06	4.95E-08	1.24E-05	9.36E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.04E-03	1.00E+01	7.87E-02	3.40E-01	4.86E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.06E-02	1.60E-01	1.03E-02	3.17E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.64E-02	1.01E-03	5.00E+00	1.35E-02	--	6.68E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.87 - Detailed Process Upset Project Case Exposure Point Concentrations for the Robinson Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	6.89E-07	1.44E-03	8.40E-08	4.00E-04	6.71E-10	1.07E-05	--	1.76E-07	3.00E-04
Benzo(a)fluorene	2.83E-07	7.36E-08	6.89E-09	6.61E-09	2.36E-09	9.35E-06	--	3.37E-08	2.97E-08
Benzo(b)fluorene	1.95E-07	1.51E-07	4.76E-09	1.29E-08	1.71E-09	6.96E-06	--	2.43E-08	4.82E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.40E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.21E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.79E-06	3.73E-07	8.84E-07	5.91E-07	3.24E-09	2.15E-06	5.19E-08	6.61E-08	8.54E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.04E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.28E-03	2.81E-03	6.33E-02	1.03E-05	7.08E-04	1.39E-05	2.62E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.54E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.98E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	8.34E-07	1.13E-07	2.03E-07	7.77E-08	5.31E-09	3.91E-05	8.51E-07	1.39E-06	8.81E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.04E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.65E-01	2.25E-01	1.05E-04	5.00E-01	5.53E-02	1.63E-01	2.80E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	9.77E-06	6.69E-06	4.79E-07	4.42E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.05E-04	6.00E+00	5.85E-03	1.44E-02	2.85E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.13E-02
Mercury - Inorganic	7.19E-02	2.23E-02	1.95E-02	2.01E-03	1.00E-04	5.45E-02	9.86E-03	6.70E-03	9.36E-02
Methyl Mercury	1.45E-03	3.47E-05	1.23E-02	4.69E-04	1.50E-05	1.23E-05	2.19E-07	5.49E-05	9.37E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.07E-03	1.00E+01	7.87E-02	3.40E-01	4.91E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.03E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.00E+00	2.08E-02	1.61E-01	1.05E-02	3.30E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.66E-02	1.01E-03	5.00E+00	1.35E-02	--	7.90E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.88 - Detailed Process Upset Project Case Exposure Point Concentrations for the Bennett Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	2.00E-07	1.43E-03	2.43E-08	4.00E-04	3.08E-10	4.91E-06	--	8.07E-08	3.00E-04
Benzo(a)fluorene	8.18E-08	3.58E-08	1.99E-09	3.18E-09	1.09E-09	4.33E-06	--	1.56E-08	1.38E-08
Benzo(b)fluorene	5.65E-08	8.10E-08	1.38E-09	6.87E-09	7.54E-10	3.06E-06	--	1.07E-08	2.12E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.12E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.70E-07	8.71E-07	5.90E-07	3.24E-09	2.06E-06	4.98E-08	6.34E-08	8.36E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.04E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.18E-03	2.81E-03	6.34E-02	1.01E-05	7.02E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.53E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.96E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	2.41E-07	5.71E-08	5.89E-08	3.57E-08	2.91E-09	2.15E-05	4.77E-07	7.64E-07	4.84E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.01E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.02E-04	5.00E-01	5.53E-02	1.63E-01	2.33E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	2.64E-06	2.13E-06	1.29E-07	1.37E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.01E-04	6.00E+00	5.85E-03	1.44E-02	2.81E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.00E-03	1.30E+01	1.45E-01	3.14E-01	7.04E-02
Mercury - Inorganic	7.07E-02	2.23E-02	1.92E-02	2.00E-03	1.00E-04	5.30E-02	9.72E-03	6.52E-03	9.35E-02
Methyl Mercury	1.41E-03	3.12E-05	1.20E-02	4.69E-04	1.50E-05	2.73E-06	4.86E-08	1.22E-05	9.36E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.02E-03	1.00E+01	7.87E-02	3.40E-01	4.83E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.03E-02	1.60E-01	1.01E-02	3.08E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.62E-02	1.00E-03	5.00E+00	1.35E-02	--	5.81E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.50E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

Table M.89 - Detailed Process Upset Project Case Exposure Point Concentrations for the Oshawa Creek Conservation Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	2.39E-07	1.42E-03	2.91E-08	4.00E-04	7.85E-10	1.25E-05	--	2.06E-07	3.00E-04
Benzo(a)fluorene	9.78E-08	3.41E-08	2.39E-09	3.07E-09	2.68E-09	1.06E-05	--	3.83E-08	3.38E-08
Benzo(b)fluorene	6.76E-08	7.44E-08	1.65E-09	6.34E-09	2.03E-09	8.26E-06	--	2.88E-08	5.73E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.10E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.70E-07	8.72E-07	5.90E-07	3.24E-09	2.10E-06	5.08E-08	6.47E-08	8.44E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.02E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.17E-03	2.81E-03	6.34E-02	1.01E-05	7.03E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.55E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.20E-02	9.29E-04	8.01E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.38E-04	6.04E-04
O-Terphenyl	2.89E-07	5.35E-08	7.05E-08	4.26E-08	5.77E-09	4.25E-05	9.22E-07	1.51E-06	9.58E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.01E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.00E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.02E-04	5.00E-01	5.53E-02	1.63E-01	2.36E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	3.31E-06	2.48E-06	1.62E-07	1.60E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.01E-04	6.00E+00	5.85E-03	1.44E-02	2.81E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.06E-02
Mercury - Inorganic	7.07E-02	2.23E-02	1.92E-02	2.00E-03	1.00E-04	5.47E-02	9.89E-03	6.73E-03	9.36E-02
Methyl Mercury	1.42E-03	3.13E-05	1.20E-02	4.69E-04	1.50E-05	1.10E-06	1.97E-08	4.92E-06	9.37E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.02E-03	1.00E+01	7.87E-02	3.40E-01	4.83E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.00E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.03E-02	1.60E-01	1.02E-02	3.10E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.62E-02	1.00E-03	5.00E+00	1.35E-02	--	6.02E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.83E+01

400,000 TONNES/YEAR

Table M.90 - Detailed Project Alone Exposure Point Concentrations for the Darlington Provincial Park Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.20E-07	4.76E-08	1.08E-08	1.71E-10	8.91E-10	1.75E-07	2.94E-09	7.17E-10	3.55E-10
Acenaphthylene	5.14E-08	9.94E-09	2.53E-09	4.87E-11	1.17E-09	2.06E-07	3.47E-09	8.38E-10	5.88E-10
Anthracene	2.17E-07	2.17E-08	1.06E-08	1.26E-10	2.79E-10	2.62E-07	4.41E-09	1.02E-09	4.42E-10
Fluoranthene	2.14E-06	1.62E-07	1.05E-07	1.18E-09	3.51E-09	6.90E-06	1.16E-07	2.57E-08	1.76E-08
Fluorene	2.18E-07	3.27E-08	1.07E-08	1.67E-10	1.99E-09	6.15E-07	1.03E-08	2.46E-09	1.58E-09
Phenanthrene	2.21E-06	2.37E-07	1.08E-07	1.40E-09	7.66E-09	8.13E-06	1.37E-07	3.17E-08	1.21E-08
High Molecular Weight PAHs									
Benz(a)anthracene	1.19E-07	5.71E-08	2.90E-09	2.52E-10	9.40E-11	1.35E-06	2.26E-08	4.72E-09	2.36E-09
Benzo(a)pyrene	2.11E-07	2.80E-07	2.57E-08	1.09E-09	1.27E-10	4.91E-06	8.54E-08	8.39E-08	6.35E-09
Benzo(e)pyrene	5.74E-07	2.21E-05	7.00E-08	7.10E-08	5.59E-10	8.90E-06	--	1.46E-07	7.72E-08
Benzo(a)fluorene	2.35E-07	5.91E-08	5.74E-09	3.25E-10	1.97E-09	7.79E-06	--	2.81E-08	2.47E-08
Benzo(b)fluorene	1.63E-07	1.20E-07	3.97E-09	5.34E-10	1.43E-09	5.79E-06	--	2.02E-08	4.02E-08
Benzo(b)fluoranthene	2.74E-07	1.72E-08	6.67E-09	1.15E-10	1.09E-10	4.58E-06	7.71E-08	1.55E-08	7.29E-09
Benzo(g,h,i)perylene	2.97E-06	3.35E-05	3.63E-07	1.05E-07	4.66E-10	8.40E-05	1.41E-06	1.37E-06	7.38E-08
Benzo(k)fluoranthene	2.39E-07	1.12E-07	5.83E-09	4.55E-10	4.49E-11	1.78E-06	3.00E-08	6.04E-09	2.83E-09
Chrysene	4.42E-07	5.69E-08	1.08E-08	3.21E-10	1.70E-10	2.72E-06	4.58E-08	9.55E-09	4.26E-09
Dibenz(a,c)anthracene	3.75E-07	4.16E-06	4.57E-08	1.16E-08	5.65E-10	4.40E-05	7.41E-07	7.08E-07	1.42E-07
Dibenz(a,h)anthracene	1.31E-07	2.72E-06	1.60E-08	8.48E-09	3.07E-11	2.19E-06	3.69E-08	3.59E-08	4.86E-09
Indeno(1,2,3-cd)pyrene	6.33E-07	3.77E-07	1.72E-08	1.19E-09	1.19E-10	2.47E-05	2.47E-07	2.38E-07	2.38E-08
Perylene	1.24E-07	1.65E-05	1.51E-08	5.73E-08	6.73E-11	2.16E-06	3.76E-08	3.61E-08	5.99E-09
Pyrene	1.10E-05	6.94E-07	2.68E-07	5.28E-09	5.51E-09	1.50E-05	2.52E-07	5.64E-08	2.19E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	4.20E-08	4.87E-09	2.07E-08	1.83E-09	1.58E-12	2.46E-07	5.94E-09	7.57E-09	5.00E-08
PCB									
Aroclor 1254 (Total PCBs)	4.09E-05	4.30E-07	--	7.85E-07	1.80E-09	1.77E-04	--	--	3.53E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	3.13E-08	1.38E-08	3.92E-09	3.08E-08	4.53E-08	6.87E-07	2.07E-07	2.92E-08	5.45E-07
1,2,4-Trichlorobenzene	2.33E-09	4.88E-10	2.86E-10	1.41E-09	1.23E-09	8.19E-08	1.34E-09	3.33E-09	7.78E-08
1,2,4,5-Tetrachlorobenzene	9.87E-08	6.61E-09	1.21E-08	7.40E-09	1.83E-09	5.55E-07	9.89E-09	2.10E-08	5.79E-07
Pentachlorobenzene	1.53E-06	6.54E-08	3.74E-07	6.75E-08	3.80E-09	1.84E-05	3.28E-07	6.75E-07	2.82E-06
Hexachlorobenzene	4.24E-08	2.66E-09	1.03E-08	4.10E-09	1.30E-09	4.14E-06	7.39E-08	1.51E-07	1.30E-06
Pentachlorophenol	7.21E-07	1.67E-04	1.69E-06	1.12E-07	2.72E-07	6.43E-06	1.26E-07	2.38E-07	1.53E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.51E-11	2.41E-11	3.46E-12	1.88E-09	5.62E-09	3.41E-08	2.69E-08	1.54E-09	1.78E-08
Chloroform	5.62E-11	1.53E-10	1.26E-11	1.06E-09	9.46E-09	1.99E-08	3.50E-08	9.63E-10	4.74E-09
Dichloromethane	1.01E-08	6.93E-08	6.40E-09	1.12E-07	3.31E-06	1.32E-06	3.19E-06	6.82E-08	3.31E-07
Trichlorofluoromethane (Freon 11)	2.60E-09	3.67E-09	4.01E-10	6.69E-07	2.91E-06	1.33E-05	1.47E-05	6.18E-07	4.62E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.26E-10	1.77E-10	1.94E-11	5.89E-09	2.56E-08	1.38E-07	1.52E-07	6.42E-09	4.06E-08
Other Organics									
Bromoform	3.50E-10	5.77E-10	5.76E-11	1.60E-07	8.33E-07	4.20E-06	5.23E-06	1.97E-07	9.78E-07
O-Terphenyl	6.95E-07	9.01E-08	1.70E-07	5.92E-08	4.42E-09	3.25E-05	7.13E-07	1.16E-06	7.34E-06
Inorganics									
Antimony	5.10E-04	2.82E-04	8.16E-05	3.40E-06	5.62E-06	2.53E-04	1.30E-06	2.86E-06	1.12E-03
Arsenic	5.06E-05	2.95E-05	1.06E-06	7.00E-07	8.63E-07	2.50E-05	1.22E-07	2.59E-06	4.32E-05
Barium	3.59E-04	1.93E-04	5.23E-06	3.48E-07	4.34E-06	1.78E-04	3.61E-06	2.43E-05	4.34E-05
Beryllium	3.21E-04	2.51E-05	2.31E-06	4.21E-07	2.36E-07	1.87E-04	1.71E-05	2.47E-05	2.36E-05
Boron	1.99E-03	1.80E-02	3.18E-04	1.63E-04	3.14E-04	9.43E-04	1.71E-05	2.16E-04	--
Cadmium	2.12E-03	1.23E-03	3.23E-03	1.79E-06	1.41E-05	1.05E-03	1.17E-04	3.43E-04	1.69E-02
Chromium (Total)	1.78E-04	1.49E-04	8.72E-06	9.54E-06	4.62E-06	8.79E-05	4.68E-07	3.78E-06	9.25E-04
Chromium VI	2.53E-05	2.13E-05	1.24E-06	6.58E-06	1.25E-06	6.66E-07	6.66E-08	--	2.43E-05
Cobalt	1.08E-03	4.03E-04	2.10E-05	9.96E-05	1.19E-05	5.35E-04	5.21E-07	1.28E-06	1.19E-03
Lead	4.92E-02	5.51E-03	3.67E-03	2.50E-05	3.25E-05	2.92E-02	3.26E-04	7.05E-04	3.40E-03
Mercury - Inorganic	3.35E-03	5.54E-05	9.08E-04	1.17E-05	1.61E-07	8.16E-03	1.43E-03	1.00E-03	1.16E-04
Methyl Mercury	1.29E-04	1.56E-05	1.09E-03	1.72E-07	2.29E-09	3.19E-05	5.68E-07	1.42E-04	3.77E-04
Nickel	2.31E-02	6.48E-03	3.91E-03	4.98E-04	1.77E-04	1.15E-02	9.04E-05	3.90E-04	2.76E-02
Selenium	1.02E-05	3.18E-05	1.61E-06	8.03E-07	9.87E-07	4.93E-06	3.26E-07	3.09E-06	1.68E-04
Silver	1.17E-04	2.67E-04	3.83E-05	9.06E-06	6.89E-06	5.72E-05	2.57E-07	--	6.10E-04
Thallium	1.12E-02	2.61E-03	1.80E-03	1.37E-03	7.87E-05	5.58E-03	1.79E-06	--	--
Tin	1.22E-02	1.52E-03	1.00E-03	1.80E-03	2.51E-05	6.27E-03	1.70E-05	--	7.53E-02
Vanadium	1.16E-03	8.30E-05	7.80E-06	3.58E-06	7.04E-07	7.04E-04	4.44E-07	1.04E-05	1.13E-04
Zinc	5.06E-02	2.58E-02	3.67E-02	2.83E-05	4.06E-04	2.52E-02	2.23E-03	1.17E-02	3.78E-01

Table M.91 - Detailed Project Alone Exposure Point Concentrations for the Second Marsh Wildlife Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.40E-07	3.02E-08	6.89E-09	1.07E-10	3.80E-10	7.45E-08	1.25E-09	3.06E-10	1.51E-10
Acenaphthylene	3.27E-08	6.33E-09	1.61E-09	2.58E-11	2.24E-10	3.93E-08	6.61E-10	1.60E-10	1.12E-10
Anthracene	1.38E-07	1.38E-08	6.74E-09	7.98E-11	1.39E-10	1.31E-07	2.21E-09	5.11E-10	2.21E-10
Fluoranthene	1.36E-06	1.04E-07	6.66E-08	7.80E-10	3.71E-09	7.29E-06	1.23E-07	2.72E-08	1.86E-08
Fluorene	1.39E-07	2.08E-08	6.81E-09	1.04E-10	1.06E-09	3.27E-07	5.50E-09	1.31E-07	8.42E-10
Phenanthrene	1.40E-06	1.51E-07	6.87E-08	9.16E-10	6.57E-09	6.97E-06	1.17E-07	2.72E-08	1.04E-08
High Molecular Weight PAHs									
Benz(a)anthracene	7.58E-08	3.72E-08	1.85E-09	1.64E-10	6.30E-11	9.03E-07	1.52E-08	3.17E-09	1.58E-09
Benzo(a)pyrene	1.34E-07	1.84E-07	1.64E-08	7.17E-10	2.35E-10	9.09E-06	1.58E-07	1.55E-07	1.18E-08
Benzo(e)pyrene	3.65E-07	1.47E-05	4.46E-08	4.73E-08	1.71E-09	2.72E-05	--	4.47E-07	2.36E-07
Benzo(a)fluorene	1.50E-07	3.89E-08	3.65E-09	2.01E-10	5.35E-10	2.12E-06	--	7.63E-09	6.73E-09
Benzo(b)fluorene	1.03E-07	7.97E-08	2.52E-09	3.45E-10	4.23E-10	1.72E-06	--	6.00E-09	1.19E-08
Benzo(b)fluoranthene	1.74E-07	1.12E-08	4.25E-09	7.44E-11	8.32E-11	3.49E-06	5.87E-08	1.18E-08	5.55E-09
Benzo(g,h,i)perylene	1.89E-06	2.23E-05	2.31E-07	6.99E-08	1.47E-09	2.66E-04	4.47E-06	4.34E-06	2.33E-07
Benzo(k)fluoranthene	1.53E-07	7.40E-08	3.72E-09	3.00E-10	1.24E-10	4.92E-06	8.27E-08	1.67E-08	7.82E-09
Chrysene	2.81E-07	3.67E-08	6.87E-09	2.06E-10	9.68E-11	1.55E-06	2.61E-08	5.45E-09	2.43E-09
Dibenz(a,c)anthracene	2.38E-07	2.75E-06	2.91E-08	7.66E-09	1.57E-09	1.23E-04	2.06E-06	1.97E-06	3.95E-07
Dibenz(a,h)anthracene	8.38E-08	1.81E-06	1.02E-08	5.65E-09	9.71E-11	6.95E-06	1.17E-07	1.14E-07	1.54E-08
Indeno(1,2,3-cd)pyrene	4.03E-07	2.44E-07	4.91E-08	7.68E-10	3.63E-10	7.52E-05	7.25E-07	7.25E-07	7.25E-08
Perylene	7.89E-08	1.10E-05	9.62E-09	3.82E-08	2.56E-10	8.21E-06	1.43E-07	1.37E-07	2.28E-08
Pyrene	7.00E-06	4.44E-07	1.71E-07	3.42E-09	6.09E-09	1.66E-05	2.79E-07	6.23E-08	2.43E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.84E-08	2.82E-09	9.07E-09	9.82E-10	7.95E-13	1.24E-07	2.99E-09	3.81E-09	2.51E-08
PCB									
Aroclor 1254 (Total PCBs)	2.62E-05	2.79E-07	--	5.03E-07	1.11E-09	1.09E-04	--	--	1.53E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.99E-08	8.78E-09	2.49E-09	1.73E-08	2.51E-08	3.81E-07	1.15E-07	1.62E-08	3.02E-07
1,2,4-Trichlorobenzene	1.48E-09	3.12E-10	1.82E-10	7.42E-10	6.28E-10	4.17E-08	6.84E-10	1.70E-09	3.96E-08
1,2,4,5-Tetrachlorobenzene	6.28E-08	4.21E-09	7.66E-09	4.06E-09	7.18E-10	2.18E-07	3.88E-09	8.26E-09	2.27E-07
Pentachlorobenzene	9.76E-07	4.17E-08	2.38E-07	4.22E-08	1.94E-09	9.39E-06	1.67E-07	3.45E-07	1.44E-06
Hexachlorobenzene	2.70E-08	1.73E-09	6.58E-09	2.51E-09	7.64E-10	2.45E-06	4.36E-08	8.88E-08	7.64E-07
Pentachlorophenol	4.59E-07	1.11E-04	1.07E-06	7.49E-08	4.04E-07	9.56E-06	1.88E-07	3.53E-07	2.27E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.59E-11	1.53E-11	2.20E-12	1.20E-09	3.58E-09	2.18E-08	1.72E-08	9.85E-10	1.13E-08
Chloroform	3.57E-11	9.74E-11	8.02E-12	6.00E-10	5.33E-09	1.12E-08	1.97E-08	5.43E-10	2.67E-09
Dichloromethane	6.41E-09	4.41E-08	4.07E-09	5.66E-08	1.66E-06	6.66E-07	1.60E-06	3.43E-08	1.66E-07
Trichlorofluoromethane (Freon 11)	1.65E-09	2.33E-09	2.55E-10	4.21E-07	1.83E-06	8.37E-06	9.21E-06	3.88E-07	2.90E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	7.98E-11	1.13E-10	1.23E-11	3.72E-09	1.62E-08	8.74E-08	9.62E-08	4.06E-09	2.57E-08
Other Organics									
Bromoform	2.22E-10	3.67E-10	3.66E-11	9.98E-08	5.18E-07	2.61E-06	3.25E-06	1.23E-07	6.09E-07
O-Terphenyl	4.42E-07	5.95E-08	1.08E-07	3.62E-08	1.38E-09	1.01E-05	2.32E-07	3.61E-07	2.28E-06
Inorganics									
Antimony	2.23E-04	1.13E-04	3.56E-05	1.51E-06	5.81E-06	2.61E-04	1.34E-06	2.95E-06	1.16E-03
Arsenic	2.21E-05	1.13E-05	4.63E-07	3.15E-07	8.93E-07	2.59E-05	1.26E-07	2.67E-06	4.46E-05
Barium	1.57E-04	7.64E-05	2.28E-06	1.55E-07	4.49E-06	1.84E-04	3.73E-06	2.52E-05	4.49E-05
Beryllium	1.40E-04	9.74E-06	1.01E-06	1.79E-07	2.89E-07	2.28E-04	2.08E-05	3.01E-05	2.89E-05
Boron	8.65E-04	7.29E-03	1.38E-04	7.23E-05	3.26E-04	9.77E-04	1.77E-05	2.24E-04	--
Cadmium	9.24E-04	5.12E-04	1.41E-03	7.88E-07	1.46E-05	1.09E-03	1.21E-04	3.55E-04	1.75E-02
Chromium (Total)	7.77E-05	5.69E-05	3.80E-06	4.30E-06	4.78E-06	9.09E-05	4.84E-07	3.91E-06	9.57E-04
Chromium VI	1.10E-05	8.09E-06	5.41E-07	6.11E-07	6.80E-07	1.29E-05	6.89E-08	--	2.51E-05
Cobalt	4.70E-04	1.54E-04	9.18E-06	4.47E-05	1.23E-05	5.53E-04	5.39E-07	1.33E-06	1.23E-03
Lead	2.15E-02	2.22E-03	1.60E-03	1.07E-05	4.05E-05	3.64E-02	4.07E-04	8.79E-04	4.24E-03
Mercury - Inorganic	1.99E-03	2.42E-05	5.38E-04	6.56E-06	3.97E-07	2.05E-02	3.30E-03	2.52E-03	2.86E-04
Methyl Mercury	5.63E-05	6.83E-06	4.78E-04	7.51E-08	1.31E-08	1.20E-05	2.14E-07	5.36E-05	1.11E-03
Nickel	1.01E-02	2.50E-03	1.71E-03	2.23E-04	1.83E-04	1.19E-02	9.35E-05	4.04E-04	2.85E-02
Selenium	4.45E-06	1.21E-05	7.01E-07	3.63E-07	1.02E-06	5.11E-06	3.37E-07	3.20E-06	1.74E-04
Silver	5.10E-05	1.04E-04	1.67E-05	4.06E-06	7.13E-06	5.92E-05	2.66E-07	--	6.31E-04
Thallium	4.90E-03	9.96E-04	7.84E-04	6.15E-04	8.14E-05	5.78E-03	1.86E-06	--	--
Tin	5.31E-03	6.00E-04	4.38E-04	7.86E-04	2.70E-05	6.76E-03	1.83E-05	--	8.11E-02
Vanadium	5.07E-04	3.19E-05	3.41E-06	1.51E-06	8.92E-07	8.92E-04	5.63E-07	1.32E-05	1.43E-04
Zinc	2.21E-02	1.05E-02	1.60E-02	1.25E-05	4.20E-04	2.60E-02	2.31E-03	1.21E-02	3.91E-01

Table M.92 - Detailed Project Alone Exposure Point Concentrations for the Darlington Waterfront Trail Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	3.52E-07	7.62E-08	1.73E-08	3.82E-10	1.29E-08	2.53E-06	4.26E-08	1.04E-08	5.14E-09
Acenaphthylene	8.24E-08	1.59E-08	4.05E-09	1.65E-10	1.06E-08	1.85E-06	3.12E-08	7.55E-09	5.29E-09
Anthracene	3.47E-07	3.47E-08	1.70E-08	2.34E-10	2.87E-09	2.70E-06	4.55E-08	1.05E-08	4.56E-09
Fluoranthene	3.44E-06	2.47E-07	1.68E-07	2.21E-09	2.92E-08	5.73E-05	9.64E-07	2.14E-07	1.46E-07
Fluorene	3.50E-07	5.21E-08	1.72E-08	4.81E-10	2.22E-08	6.85E-06	1.15E-07	2.74E-08	1.77E-08
Phenanthrene	3.54E-06	3.74E-07	1.73E-07	2.95E-09	6.72E-08	7.13E-05	1.20E-06	2.78E-07	1.07E-07
High Molecular Weight PAHs									
Benz(a)anthracene	1.91E-07	8.45E-08	4.66E-09	3.88E-10	8.54E-10	1.22E-05	2.06E-07	4.29E-08	2.15E-08
Benzo(a)pyrene	3.38E-07	3.96E-07	4.12E-08	1.57E-09	1.42E-09	5.50E-05	9.56E-07	9.39E-07	7.11E-08
Benzo(e)pyrene	9.20E-07	2.90E-05	1.12E-07	9.30E-08	4.87E-09	7.75E-05	--	1.27E-06	6.72E-07
Benzo(a)fluorene	3.77E-07	8.20E-08	9.20E-09	7.14E-10	1.86E-08	7.36E-05	--	2.65E-07	2.34E-07
Benzo(b)fluorene	2.61E-07	1.60E-07	6.36E-09	8.87E-10	1.27E-08	5.17E-05	--	1.81E-07	3.58E-07
Benzo(b)fluoranthene	4.39E-07	2.49E-08	1.07E-08	1.96E-10	1.50E-09	6.29E-05	1.06E-06	2.13E-07	1.00E-07
Benzo(g,h,i)perylene	4.77E-06	4.39E-05	5.81E-07	1.38E-07	6.57E-09	1.18E-03	1.99E-05	1.94E-05	1.04E-06
Benzo(k)fluoranthene	3.84E-07	1.57E-07	9.36E-09	6.48E-10	4.18E-10	1.66E-05	2.79E-07	5.62E-08	2.64E-08
Chrysene	7.08E-07	8.84E-08	1.73E-08	5.32E-10	2.05E-09	3.29E-05	5.54E-07	1.16E-07	5.16E-08
Dibenz(a,c)anthracene	6.00E-07	5.74E-06	7.32E-08	1.61E-08	7.63E-09	5.95E-04	1.00E-05	9.56E-06	1.92E-06
Dibenz(a,h)anthracene	2.11E-07	3.57E-06	2.57E-08	1.12E-08	3.66E-10	2.62E-05	4.41E-07	4.28E-07	5.79E-08
Indeno(1,2,3-cd)pyrene	1.01E-06	5.83E-07	1.24E-07	1.86E-09	1.60E-09	1.97E-04	3.31E-06	3.19E-06	3.19E-07
Perylene	1.99E-07	2.16E-05	2.42E-08	7.50E-08	6.77E-10	2.17E-05	3.78E-07	3.63E-07	6.03E-08
Pyrene	1.76E-05	1.10E-06	4.30E-07	8.81E-09	3.55E-08	9.65E-05	1.62E-06	3.63E-07	1.41E-07
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	4.58E-08	5.77E-09	2.26E-08	2.13E-09	9.84E-12	1.53E-06	3.64E-08	4.71E-08	3.11E-07
PCB									
Aroclor 1254 (Total PCBs)	6.57E-05	6.46E-07	--	1.27E-06	1.82E-08	1.79E-03	--	--	5.01E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	5.01E-08	2.20E-08	6.28E-09	7.00E-07	1.13E-06	1.71E-05	5.15E-06	7.26E-07	1.36E-05
1,2,4-Trichlorobenzene	3.73E-09	7.68E-10	4.58E-10	2.98E-08	2.95E-08	1.96E-06	3.21E-08	7.97E-08	1.86E-06
1,2,4,5-Tetrachlorobenzene	1.58E-07	1.05E-08	1.93E-08	4.87E-08	2.84E-08	8.62E-06	1.54E-07	3.27E-07	9.00E-06
Pentachlorobenzene	2.46E-06	1.04E-07	6.00E-07	2.21E-07	7.81E-08	3.78E-04	6.73E-06	1.39E-05	5.79E-05
Hexachlorobenzene	6.79E-08	3.89E-09	1.66E-08	4.86E-08	2.87E-08	9.18E-05	1.64E-06	3.34E-06	2.87E-05
Pentachlorophenol	1.16E-06	2.18E-04	2.71E-06	1.46E-07	3.00E-07	7.11E-06	1.39E-07	2.63E-07	1.69E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	4.02E-11	3.84E-11	5.55E-12	4.69E-08	1.40E-07	8.52E-07	6.72E-07	3.85E-08	4.43E-07
Chloroform	9.01E-11	2.45E-10	2.02E-11	2.84E-08	2.54E-07	5.34E-07	9.40E-07	2.59E-08	1.27E-07
Dichloromethane	1.61E-08	1.11E-07	1.03E-08	3.13E-06	9.27E-05	3.71E-05	8.92E-05	1.91E-06	9.27E-06
Trichlorofluoromethane (Freon 11)	4.16E-09	5.86E-09	6.42E-10	1.69E-05	7.35E-05	3.36E-04	3.70E-04	1.56E-05	1.17E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.01E-10	2.83E-10	3.11E-11	1.48E-07	6.44E-07	3.48E-06	3.83E-06	1.61E-07	1.02E-06
Other Organics									
Bromoform	5.61E-10	9.25E-10	9.23E-11	4.08E-06	2.12E-05	1.07E-04	1.33E-04	5.01E-06	2.49E-05
O-Terphenyl	1.11E-06	1.23E-07	2.72E-07	1.57E-07	5.12E-08	3.77E-04	7.56E-06	1.34E-05	8.49E-05
Inorganics									
Antimony	5.55E-04	2.71E-04	8.88E-05	3.25E-06	3.89E-06	1.75E-04	8.99E-07	1.98E-06	7.79E-04
Arsenic	5.50E-05	2.65E-05	1.15E-06	6.26E-07	5.98E-07	1.73E-05	8.45E-08	1.79E-06	2.99E-05
Barium	3.91E-04	1.82E-04	5.69E-06	3.27E-07	3.01E-06	1.23E-04	2.50E-06	1.69E-05	3.01E-05
Beryllium	3.50E-04	2.29E-05	2.52E-06	4.16E-07	2.91E-07	2.30E-04	2.10E-05	3.04E-05	2.91E-05
Boron	2.16E-03	1.76E-02	3.45E-04	1.57E-04	2.18E-04	6.53E-04	1.19E-05	1.50E-04	--
Cadmium	2.30E-03	1.25E-03	3.52E-03	1.81E-06	9.83E-06	7.37E-04	8.15E-05	2.40E-04	1.18E-02
Chromium (Total)	1.94E-04	1.33E-04	9.49E-06	8.37E-06	3.20E-06	6.08E-05	3.24E-07	2.62E-06	6.40E-04
Chromium VI	2.76E-05	1.89E-05	1.35E-06	1.19E-06	4.55E-07	8.65E-06	4.61E-08	--	1.68E-05
Cobalt	1.17E-03	3.61E-04	2.29E-05	8.96E-05	8.23E-06	3.71E-04	3.61E-07	8.89E-07	8.23E-04
Lead	5.36E-02	5.32E-03	3.99E-03	2.53E-05	4.24E-05	3.82E-02	4.26E-04	9.21E-04	4.44E-03
Mercury - Inorganic	4.46E-03	5.37E-05	1.21E-03	1.48E-05	1.19E-06	6.03E-02	7.91E-03	7.41E-03	8.55E-04
Methyl Mercury	1.40E-04	1.52E-05	1.19E-03	1.72E-07	1.69E-08	1.27E-05	2.27E-07	5.68E-05	2.78E-03
Nickel	2.51E-02	5.88E-03	4.26E-03	4.57E-04	1.23E-04	8.00E-03	6.29E-05	2.72E-04	1.92E-02
Selenium	1.11E-05	2.81E-05	1.75E-06	6.97E-07	6.83E-07	3.42E-06	2.25E-07	2.14E-06	1.16E-04
Silver	1.27E-04	2.46E-04	4.16E-05	8.23E-06	4.77E-06	3.96E-05	1.78E-07	--	4.22E-04
Thallium	1.22E-02	2.32E-03	1.95E-03	1.24E-03	5.49E-05	3.90E-03	1.25E-06	--	--
Tin	1.32E-02	1.42E-03	1.09E-03	1.76E-03	2.06E-05	5.14E-03	1.39E-05	--	6.17E-02
Vanadium	1.26E-03	7.47E-05	8.50E-06	3.53E-06	9.65E-07	9.65E-04	6.09E-07	1.42E-05	1.54E-04
Zinc	5.51E-02	2.54E-02	4.00E-02	2.78E-05	2.82E-04	1.75E-02	1.55E-03	8.16E-03	2.63E-01

Table M.93 - Detailed Project Alone Exposure Point Concentrations for the McLaughlin Bay Wildlife Reserve Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.50E-07	3.25E-08	7.40E-09	1.14E-10	2.94E-10	5.77E-08	9.71E-10	2.37E-10	1.17E-10
Acenaphthylene	3.52E-08	6.83E-09	1.73E-09	2.70E-11	1.64E-10	2.89E-08	4.86E-10	1.17E-10	8.24E-11
Anthracene	1.48E-07	1.49E-08	7.24E-09	8.54E-11	1.10E-10	1.04E-07	1.75E-09	4.05E-10	1.75E-10
Fluoranthene	1.47E-06	1.16E-07	7.16E-08	8.43E-10	3.29E-09	6.45E-06	1.09E-07	2.41E-08	1.65E-08
Fluorene	1.49E-07	2.25E-08	7.32E-09	1.08E-10	8.46E-10	2.61E-07	4.39E-09	1.04E-09	6.72E-10
Phenanthrene	1.51E-06	1.64E-07	7.38E-08	9.71E-10	5.58E-09	5.92E-06	9.96E-08	2.31E-08	8.84E-09
High Molecular Weight PAHs									
Benz(a)anthracene	8.14E-08	4.22E-08	1.98E-09	1.85E-10	5.41E-11	7.75E-07	1.30E-08	2.72E-09	1.36E-09
Benzo(a)pyrene	1.44E-07	2.15E-07	1.76E-08	8.34E-10	2.35E-10	9.12E-06	1.59E-07	1.56E-07	1.18E-08
Benzo(e)pyrene	3.92E-07	1.79E-05	4.79E-08	5.75E-08	2.25E-09	3.58E-05	--	5.89E-07	3.11E-07
Benzo(a)fluorene	1.61E-07	4.59E-08	3.93E-09	2.30E-10	4.25E-10	1.68E-06	--	6.06E-09	5.35E-09
Benzo(b)fluorene	1.11E-07	9.61E-08	2.71E-09	4.11E-10	3.41E-10	1.39E-06	--	4.84E-09	9.61E-09
Benzo(b)fluoranthene	1.87E-07	1.29E-08	4.56E-09	8.27E-11	6.78E-11	2.84E-06	4.78E-08	9.60E-09	4.52E-09
Benzo(g,h,i)perylene	2.03E-06	2.71E-05	2.48E-07	8.48E-08	1.78E-09	3.21E-04	5.40E-06	5.24E-06	2.82E-07
Benzo(k)fluoranthene	1.63E-07	8.71E-08	3.98E-09	3.50E-10	1.60E-10	6.35E-06	1.07E-07	2.15E-08	1.01E-08
Chrysene	3.02E-07	4.04E-08	7.36E-09	2.24E-10	7.74E-11	1.24E-06	2.09E-08	4.36E-09	1.94E-09
Dibenz(a,c)anthracene	2.56E-07	3.25E-06	3.12E-08	9.06E-09	1.76E-09	1.37E-04	2.31E-06	2.21E-06	4.42E-07
Dibenz(a,h)anthracene	8.99E-08	2.20E-06	1.10E-08	6.85E-09	1.24E-10	8.90E-06	1.50E-07	1.45E-07	1.97E-08
Indeno(1,2,3-cd)pyrene	4.33E-07	2.69E-07	5.28E-08	8.47E-10	4.36E-10	5.37E-05	9.03E-07	8.70E-07	8.70E-08
Perylene	8.47E-08	1.33E-05	1.03E-08	4.64E-08	3.77E-10	1.21E-05	2.10E-07	2.02E-07	3.36E-08
Pyrene	7.49E-06	4.81E-07	1.83E-07	3.66E-09	5.59E-09	1.52E-05	2.56E-07	5.72E-08	2.23E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.75E-08	3.26E-09	8.62E-09	1.09E-09	6.06E-13	9.43E-08	2.28E-09	2.90E-09	1.92E-08
PCB									
Aroclor 1254 (Total PCBs)	2.79E-05	3.13E-07	--	5.41E-07	8.92E-10	8.76E-05	--	--	2.31E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	2.14E-08	9.47E-09	2.68E-09	1.38E-08	1.92E-08	2.92E-07	8.79E-08	1.24E-08	2.31E-07
1,2,4-Trichlorobenzene	1.59E-09	3.40E-10	1.96E-10	6.01E-10	4.77E-10	3.17E-08	5.20E-10	1.29E-09	3.01E-08
1,2,4,5-Tetrachlorobenzene	6.75E-08	4.54E-09	8.24E-09	3.97E-09	4.91E-10	1.49E-07	2.65E-09	5.65E-09	1.55E-07
Pentachlorobenzene	1.05E-06	4.53E-08	2.56E-07	4.46E-08	1.49E-09	7.21E-06	1.29E-07	2.65E-07	1.11E-06
Hexachlorobenzene	2.90E-08	1.97E-09	7.07E-09	2.38E-09	5.87E-10	1.88E-06	3.35E-08	6.82E-08	5.87E-07
Pentachlorophenol	4.93E-07	1.35E-04	1.15E-06	9.10E-08	4.77E-07	1.13E-05	2.21E-07	4.17E-07	2.68E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.71E-11	1.66E-11	2.37E-12	9.20E-10	2.74E-09	1.67E-08	1.32E-08	7.54E-10	8.68E-09
Chloroform	3.84E-11	1.05E-10	8.63E-12	4.60E-10	4.08E-09	8.57E-09	1.51E-08	4.15E-10	2.04E-09
Dichloromethane	6.89E-09	4.74E-08	4.38E-09	4.34E-08	1.27E-06	5.09E-07	1.22E-06	2.62E-08	1.27E-07
Trichlorofluoromethane (Freon 11)	1.78E-09	2.52E-09	2.74E-10	3.22E-07	1.40E-06	6.41E-06	7.05E-06	2.97E-07	2.22E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.59E-11	1.22E-10	1.33E-11	2.85E-09	1.24E-08	6.70E-08	7.37E-08	3.11E-09	1.97E-08
Other Organics									
Bromoform	2.39E-10	3.95E-10	3.94E-11	7.63E-08	3.96E-07	2.00E-06	2.49E-06	9.37E-08	4.66E-07
O-Terphenyl	4.75E-07	7.08E-08	1.16E-07	4.10E-08	1.08E-09	7.95E-06	1.83E-07	2.83E-07	1.79E-06
Inorganics									
Antimony	2.13E-04	1.06E-04	3.41E-05	1.46E-06	6.38E-06	2.87E-04	1.47E-06	3.24E-06	1.28E-03
Arsenic	2.12E-05	1.05E-05	4.44E-07	3.05E-07	9.80E-07	2.84E-05	1.39E-07	2.94E-06	4.90E-05
Barium	1.50E-04	7.17E-05	2.19E-06	1.50E-07	4.92E-06	2.02E-04	4.09E-06	2.76E-05	4.92E-05
Beryllium	1.34E-04	9.09E-06	9.67E-07	1.73E-07	3.74E-07	2.95E-04	2.70E-05	3.91E-05	3.74E-05
Boron	8.31E-04	6.88E-03	1.33E-04	6.99E-05	3.58E-04	1.07E-03	1.95E-05	2.46E-04	--
Cadmium	8.85E-04	4.85E-04	1.35E-03	7.59E-07	1.60E-05	1.20E-03	1.33E-04	3.90E-04	1.92E-02
Chromium (Total)	7.45E-05	5.29E-05	3.65E-06	4.17E-06	5.25E-06	9.98E-05	5.32E-07	4.29E-06	1.05E-03
Chromium VI	1.06E-05	7.52E-06	5.19E-07	5.93E-07	7.47E-07	1.42E-05	7.57E-08	--	2.76E-05
Cobalt	4.51E-04	1.44E-04	8.80E-06	4.34E-05	1.35E-05	6.07E-04	5.91E-07	1.46E-06	1.35E-03
Lead	2.06E-02	2.09E-03	1.53E-03	1.03E-05	5.33E-05	4.79E-02	5.35E-04	1.16E-03	5.58E-03
Mercury - Inorganic	2.22E-03	2.46E-05	6.02E-04	7.24E-06	5.40E-07	2.79E-02	4.29E-03	3.43E-03	3.88E-04
Methyl Mercury	5.38E-05	6.94E-06	4.57E-04	7.50E-08	1.79E-08	6.60E-06	1.18E-07	2.94E-05	1.51E-03
Nickel	9.66E-03	2.33E-03	1.64E-03	2.16E-04	2.01E-04	1.30E-02	1.03E-04	4.44E-04	3.13E-02
Selenium	4.27E-06	1.12E-05	6.73E-07	3.52E-07	1.12E-06	5.61E-06	3.70E-07	3.51E-06	1.91E-04
Silver	4.89E-05	9.75E-05	1.60E-05	3.94E-06	7.83E-06	6.50E-05	2.92E-07	--	6.93E-04
Thallium	4.69E-03	9.25E-04	7.51E-04	5.96E-04	8.94E-05	6.35E-03	2.04E-06	--	--
Tin	5.08E-03	5.62E-04	4.19E-04	7.59E-04	3.12E-05	7.79E-03	2.11E-05	--	9.35E-02
Vanadium	4.85E-04	2.97E-05	3.26E-06	1.46E-06	1.19E-06	1.19E-03	7.49E-07	1.75E-05	1.90E-04
Zinc	2.12E-02	9.93E-03	1.54E-02	1.21E-05	4.61E-04	2.86E-02	2.54E-03	1.33E-02	4.29E-01

Table M.94 - Detailed Project Alone Exposure Point Concentrations for the Bowmanville Valley Cons. Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.17E-07	2.53E-08	5.76E-09	1.03E-10	1.72E-09	3.37E-07	5.67E-09	1.38E-09	6.85E-10
Acenaphthylene	2.73E-08	5.34E-09	1.35E-09	3.89E-11	1.90E-09	3.33E-07	5.61E-09	1.36E-09	9.51E-10
Anthracene	1.15E-07	1.16E-08	5.63E-09	7.20E-11	4.87E-10	4.58E-07	7.70E-09	1.78E-09	7.72E-10
Fluoranthene	1.14E-06	9.55E-08	5.57E-08	7.28E-10	5.57E-09	1.09E-05	1.84E-07	4.08E-08	2.79E-08
Fluorene	1.16E-07	1.76E-08	5.69E-09	1.20E-10	3.73E-09	1.15E-06	1.93E-08	4.60E-09	2.96E-09
Phenanthrene	1.17E-06	1.30E-07	5.74E-08	8.81E-10	1.29E-08	1.36E-05	2.30E-07	5.32E-08	2.04E-08
High Molecular Weight PAHs									
Benz(a)anthracene	6.33E-08	3.57E-08	1.54E-09	1.57E-10	1.17E-10	1.67E-06	2.81E-08	5.87E-09	2.93E-09
Benzo(a)pyrene	1.12E-07	1.89E-07	1.37E-08	7.36E-10	1.40E-10	5.41E-06	9.41E-08	9.24E-08	6.99E-09
Benzo(e)pyrene	3.05E-07	1.68E-05	3.72E-08	5.38E-08	6.61E-10	1.05E-05	--	1.73E-07	9.12E-08
Benzo(a)fluorene	1.25E-07	4.12E-08	3.05E-09	2.52E-10	3.10E-09	1.23E-05	--	4.43E-08	3.91E-08
Benzo(b)fluorene	8.65E-08	8.90E-08	2.11E-09	4.11E-10	2.19E-09	8.91E-06	--	3.11E-08	6.18E-08
Benzo(b)fluoranthene	1.45E-07	1.12E-08	3.55E-09	7.23E-11	1.32E-10	5.55E-06	9.34E-08	1.88E-08	8.83E-09
Benzo(g,h,i)perylene	1.58E-06	2.54E-05	1.93E-07	7.95E-08	4.50E-10	8.12E-05	1.37E-06	1.33E-06	7.14E-08
Benzo(k)fluoranthene	1.27E-07	7.79E-08	3.10E-09	3.09E-10	4.44E-11	1.76E-06	2.97E-08	5.97E-09	2.80E-09
Chrysene	2.35E-07	3.24E-08	5.73E-09	1.83E-10	2.35E-10	3.77E-06	6.34E-08	1.32E-08	5.90E-09
Dibenz(a,c)anthracene	1.99E-07	2.92E-06	2.43E-08	8.16E-09	6.00E-10	4.68E-05	7.87E-07	7.52E-07	1.51E-07
Dibenz(a,h)anthracene	6.99E-08	2.05E-06	8.52E-09	6.40E-09	3.08E-11	2.20E-06	3.71E-08	3.60E-08	4.88E-09
Indeno(1,2,3-cd)pyrene	3.36E-07	2.17E-07	4.10E-08	1.47E-08	1.17E-10	2.43E-05	2.34E-07	2.34E-07	2.34E-08
Perylene	6.58E-08	1.25E-05	8.03E-09	4.34E-08	7.28E-11	2.34E-06	4.07E-08	3.91E-08	6.49E-09
Pyrene	5.83E-06	3.81E-07	1.42E-07	2.94E-09	7.43E-09	2.02E-05	3.40E-07	7.60E-08	2.96E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	3.21E-08	3.84E-09	1.58E-08	1.44E-09	1.79E-12	2.79E-07	6.73E-09	8.58E-09	5.66E-08
PCB									
Aroclor 1254 (Total PCBs)	2.17E-05	2.64E-07	--	4.35E-07	1.60E-09	1.57E-04	--	--	3.14E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.66E-08	7.41E-09	2.08E-09	4.87E-08	7.64E-08	1.16E-06	3.49E-07	4.92E-08	9.19E-07
1,2,4-Trichlorobenzene	1.24E-09	2.70E-10	1.52E-10	2.20E-09	2.10E-09	1.39E-07	2.29E-09	5.67E-09	1.32E-07
1,2,4,5-Tetrachlorobenzene	5.25E-08	3.56E-09	6.41E-09	5.86E-09	2.27E-09	6.87E-07	1.23E-08	2.61E-08	7.17E-07
Pentachlorobenzene	8.16E-07	3.58E-08	1.99E-07	4.49E-08	6.44E-09	3.11E-05	5.55E-07	1.14E-06	4.78E-06
Hexachlorobenzene	2.25E-08	1.70E-09	5.50E-09	4.96E-09	2.14E-09	6.86E-06	1.22E-07	2.49E-07	2.14E-06
Pentachlorophenol	3.84E-07	1.26E-04	8.98E-07	8.47E-08	2.18E-07	5.16E-06	1.01E-07	1.91E-07	1.23E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.33E-11	1.30E-11	1.84E-12	2.85E-09	8.51E-09	5.17E-08	4.08E-08	2.34E-09	2.69E-08
Chloroform	2.99E-11	8.17E-11	6.71E-12	1.73E-09	1.54E-08	3.24E-08	5.70E-08	1.57E-09	7.72E-09
Dichloromethane	5.36E-09	3.69E-08	3.41E-09	1.92E-07	5.67E-06	2.27E-06	5.46E-06	1.17E-07	5.67E-07
Trichlorofluoromethane (Freon 11)	1.38E-09	1.96E-09	2.13E-10	1.00E-06	4.38E-06	2.00E-05	2.20E-05	9.28E-07	6.94E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	6.68E-11	9.49E-11	1.03E-11	8.99E-09	3.92E-08	2.11E-07	2.33E-07	9.81E-09	6.21E-08
Other Organics									
Bromoform	1.86E-10	3.07E-10	3.06E-11	2.40E-07	1.25E-06	6.28E-06	7.82E-06	2.94E-07	1.46E-06
O-Terphenyl	3.70E-07	6.44E-08	9.02E-08	4.84E-08	6.99E-09	5.15E-05	1.11E-06	1.83E-06	1.16E-05
Inorganics									
Antimony	3.90E-04	2.34E-04	6.24E-05	2.86E-06	6.39E-06	2.88E-04	1.47E-06	3.25E-06	1.28E-03
Arsenic	3.87E-05	2.53E-05	8.11E-07	6.15E-07	9.82E-07	2.85E-05	1.39E-07	2.94E-06	4.91E-05
Barium	2.74E-04	1.62E-04	3.99E-06	2.96E-07	4.94E-06	2.02E-04	4.10E-06	2.77E-05	4.94E-05
Beryllium	2.45E-04	2.14E-05	1.77E-06	3.48E-07	3.00E-07	2.37E-04	2.17E-05	3.13E-05	3.00E-05
Boron	1.52E-03	1.48E-02	2.43E-04	1.36E-04	3.58E-04	1.07E-03	1.95E-05	2.46E-04	--
Cadmium	1.62E-03	9.88E-04	2.47E-03	1.44E-06	1.60E-05	1.20E-03	1.33E-04	3.90E-04	1.92E-02
Chromium (Total)	1.36E-04	1.29E-04	6.66E-06	8.46E-06	5.26E-06	9.99E-05	5.33E-07	4.30E-06	1.05E-03
Chromium VI	1.94E-05	1.84E-05	9.48E-07	1.20E-06	7.48E-07	1.42E-05	7.58E-08	--	2.76E-05
Cobalt	8.24E-04	3.47E-04	1.61E-05	8.71E-05	1.35E-05	6.08E-04	5.93E-07	1.46E-06	1.35E-03
Lead	3.76E-02	4.54E-03	2.80E-03	2.03E-05	4.18E-05	3.76E-02	4.20E-04	9.07E-04	4.38E-03
Mercury - Inorganic	2.27E-03	4.68E-05	6.15E-04	8.49E-06	1.85E-07	9.37E-03	1.63E-03	1.15E-03	1.33E-04
Methyl Mercury	9.84E-05	1.32E-05	8.36E-04	1.41E-07	2.62E-09	1.44E-05	2.56E-07	6.42E-05	4.33E-04
Nickel	1.77E-02	5.53E-03	2.99E-03	4.30E-04	2.01E-04	1.31E-02	1.03E-04	4.44E-04	3.14E-02
Selenium	7.80E-06	2.75E-05	1.23E-06	7.17E-07	1.12E-06	5.61E-06	3.70E-07	3.51E-06	1.91E-04
Silver	8.94E-05	2.27E-04	2.93E-05	7.88E-06	7.84E-06	6.50E-05	2.93E-07	--	6.94E-04
Thallium	8.58E-03	2.26E-03	1.37E-03	1.20E-03	8.95E-05	6.35E-03	2.04E-06	--	--
Tin	9.29E-03	1.28E-03	7.66E-04	1.50E-03	2.93E-05	7.33E-03	1.98E-05	--	8.79E-02
Vanadium	8.87E-04	7.12E-05	5.96E-06	2.96E-06	9.16E-07	9.16E-04	5.78E-07	1.35E-05	1.47E-04
Zinc	3.87E-02	2.10E-02	2.81E-02	2.33E-05	4.61E-04	2.86E-02	2.54E-03	1.33E-02	4.30E-01

Table M.95 - Detailed Project Alone Exposure Point Concentrations for the Eco Baseline Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.89E-07	1.27E-07	2.90E-08	4.42E-10	6.96E-10	1.36E-07	2.30E-09	5.60E-10	2.77E-10
Acenaphthylene	1.38E-07	2.62E-08	6.78E-09	1.06E-10	7.68E-10	1.35E-07	2.27E-09	5.49E-10	3.85E-10
Anthracene	5.80E-07	5.74E-08	2.84E-08	3.28E-10	1.78E-10	1.67E-07	2.82E-09	6.52E-10	2.82E-10
Fluoranthene	5.75E-06	3.45E-07	2.81E-07	2.71E-09	1.87E-09	3.67E-06	6.18E-08	1.37E-08	9.37E-09
Fluorene	5.85E-07	8.54E-08	2.87E-08	3.94E-10	1.24E-09	3.84E-07	6.46E-09	1.53E-09	9.88E-10
Phenanthrene	5.92E-06	5.94E-07	2.89E-07	3.41E-09	4.11E-09	4.36E-06	7.34E-08	1.70E-08	6.51E-09
High Molecular Weight PAHs									
Benz(a)anthracene	3.19E-07	1.03E-07	7.78E-09	4.72E-10	6.29E-11	9.01E-07	1.52E-08	3.16E-09	1.58E-09
Benzo(a)pyrene	5.65E-07	3.67E-07	6.89E-08	1.47E-09	1.16E-10	4.51E-06	7.84E-08	7.70E-08	5.83E-09
Benzo(e)pyrene	1.54E-06	1.22E-05	1.88E-07	3.93E-08	3.80E-10	6.05E-06	--	9.94E-08	5.24E-08
Benzo(a)fluorene	6.31E-07	6.61E-08	1.54E-08	4.28E-10	1.15E-09	4.56E-06	--	1.64E-08	1.45E-08
Benzo(b)fluorene	4.36E-07	8.53E-08	1.06E-08	4.42E-10	7.98E-10	3.24E-06	--	1.13E-08	2.25E-08
Benzo(b)fluoranthene	7.33E-07	2.71E-08	1.79E-08	2.37E-10	1.19E-10	4.97E-06	8.36E-08	1.68E-08	7.91E-09
Benzo(g,h,i)perylene	7.97E-06	1.85E-05	9.72E-07	5.88E-08	7.10E-10	1.28E-04	2.16E-06	2.09E-06	1.13E-07
Benzo(k)fluoranthene	6.40E-07	1.30E-07	1.56E-08	5.92E-10	4.23E-11	1.68E-06	2.82E-08	5.68E-09	2.67E-09
Chrysene	1.18E-06	1.32E-07	2.89E-08	7.75E-10	1.47E-10	2.36E-06	3.97E-08	8.27E-09	3.69E-09
Dibenz(a,c)anthracene	1.00E-06	4.46E-06	1.22E-07	1.24E-08	6.63E-10	5.17E-05	8.71E-07	8.31E-07	1.67E-07
Dibenz(a,h)anthracene	3.52E-07	1.59E-06	4.30E-08	5.01E-09	3.53E-11	2.53E-06	4.26E-08	4.14E-08	5.60E-09
Indeno(1,2,3-cd)pyrene	1.70E-06	8.57E-07	2.07E-07	2.73E-09	1.64E-10	2.02E-05	3.40E-07	3.27E-07	3.27E-08
Perylene	3.32E-07	9.05E-06	4.05E-08	3.15E-08	5.75E-11	1.85E-06	3.22E-08	3.09E-08	5.13E-09
Pyrene	2.94E-05	1.74E-06	7.17E-07	1.35E-08	2.96E-09	8.05E-06	1.35E-07	3.03E-08	1.18E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	8.90E-08	4.49E-09	4.41E-08	2.35E-09	1.92E-12	2.99E-07	7.22E-09	9.21E-09	6.08E-08
PCB									
Aroclor 1254 (Total PCBs)	1.09E-04	8.26E-07	--	1.99E-06	2.64E-09	2.59E-04	--	--	5.18E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	8.39E-08	3.63E-08	1.05E-08	3.95E-08	5.19E-08	7.86E-07	2.37E-07	3.34E-08	6.23E-07
1,2,4-Trichlorobenzene	6.24E-09	1.21E-09	7.67E-10	1.84E-09	1.39E-09	9.23E-08	1.51E-09	3.76E-09	8.77E-08
1,2,4,5-Tetrachlorobenzene	2.65E-07	1.73E-08	3.23E-08	1.58E-08	2.20E-09	6.65E-07	1.19E-08	2.53E-08	6.94E-07
Pentachlorobenzene	4.11E-06	1.66E-07	1.00E-06	1.67E-07	3.99E-09	1.93E-05	3.44E-07	7.08E-07	2.96E-06
Hexachlorobenzene	1.14E-07	4.44E-09	2.77E-08	6.62E-09	1.41E-09	4.51E-06	8.05E-08	1.64E-07	1.41E-06
Pentachlorophenol	1.93E-06	9.16E-05	4.53E-06	6.14E-08	1.21E-07	2.86E-06	5.62E-08	1.06E-07	6.80E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	6.72E-11	6.31E-11	9.29E-12	2.33E-09	6.94E-09	4.22E-08	3.33E-08	1.91E-09	2.19E-08
Chloroform	1.51E-10	4.08E-10	3.38E-11	1.31E-09	1.16E-08	2.43E-08	4.28E-08	1.18E-09	5.80E-09
Dichloromethane	2.70E-08	1.85E-07	1.72E-08	1.38E-07	4.04E-06	1.62E-06	3.89E-06	8.34E-08	4.04E-07
Trichlorofluoromethane (Freon 11)	6.96E-09	9.71E-09	1.07E-09	8.42E-07	3.67E-06	1.68E-05	1.84E-05	7.77E-07	5.81E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	3.37E-10	4.69E-10	5.20E-11	7.28E-09	3.16E-08	1.70E-07	1.88E-07	7.91E-09	5.00E-08
Other Organics									
Bromoform	9.38E-10	1.55E-09	1.54E-10	2.04E-07	1.06E-06	5.34E-06	6.65E-06	2.51E-07	1.25E-06
O-Terphenyl	1.86E-06	8.65E-08	4.54E-07	8.14E-08	3.10E-09	2.29E-05	5.07E-07	8.14E-07	5.15E-06
Inorganics									
Antimony	1.08E-03	5.21E-04	1.73E-04	6.07E-06	1.98E-06	8.93E-05	4.58E-07	1.01E-06	3.97E-04
Arsenic	1.08E-04	5.06E-05	2.25E-06	1.13E-06	3.05E-07	8.83E-06	4.31E-08	9.13E-07	1.52E-05
Barium	7.63E-04	3.50E-04	1.11E-05	6.06E-07	1.53E-06	6.28E-05	1.27E-06	8.60E-06	1.53E-05
Beryllium	6.82E-04	4.39E-05	4.91E-06	7.85E-07	8.63E-08	6.82E-05	6.23E-06	9.02E-06	8.63E-06
Boron	4.22E-03	3.39E-02	6.75E-04	2.94E-04	1.11E-04	3.33E-04	6.03E-06	7.61E-05	--
Cadmium	4.50E-03	2.42E-03	6.86E-03	3.44E-06	4.97E-06	3.73E-04	4.12E-05	1.21E-04	5.97E-03
Chromium (Total)	3.79E-04	2.53E-04	1.85E-05	1.50E-05	1.63E-06	3.10E-05	1.65E-07	1.33E-06	3.26E-04
Chromium VI	5.38E-05	3.60E-05	2.64E-06	2.14E-06	2.32E-07	4.41E-06	2.35E-08	--	8.57E-06
Cobalt	2.29E-03	6.90E-04	4.47E-05	1.63E-04	4.20E-06	1.89E-04	1.84E-07	4.53E-07	4.20E-04
Lead	1.04E-01	1.03E-02	7.78E-03	4.82E-05	1.19E-05	1.07E-02	1.20E-04	2.59E-04	1.25E-03
Mercury - Inorganic	5.58E-03	8.10E-05	1.51E-03	1.89E-05	1.02E-07	5.18E-03	9.32E-04	6.36E-04	7.34E-05
Methyl Mercury	2.73E-04	2.28E-05	2.32E-03	2.84E-07	1.45E-09	1.28E-05	2.29E-07	5.72E-05	2.39E-04
Nickel	4.91E-02	1.13E-02	8.32E-03	8.38E-04	6.24E-05	4.06E-03	3.19E-05	1.38E-04	9.74E-03
Selenium	2.17E-05	5.37E-05	3.42E-06	1.25E-06	3.48E-07	1.74E-06	1.15E-07	1.09E-06	5.91E-05
Silver	2.49E-04	4.72E-04	8.14E-05	1.50E-05	2.43E-06	2.02E-05	9.07E-08	--	2.15E-04
Thallium	2.38E-02	4.43E-03	3.81E-03	2.26E-03	2.78E-05	1.97E-03	6.34E-07	--	--
Tin	2.58E-02	2.73E-03	2.13E-03	3.30E-03	8.95E-06	2.24E-03	6.05E-06	--	2.68E-02
Vanadium	2.47E-03	1.43E-04	1.66E-05	6.67E-06	2.60E-07	2.60E-04	1.64E-07	3.83E-06	4.15E-05
Zinc	1.08E-01	4.91E-02	7.80E-02	5.25E-05	1.43E-04	8.89E-03	7.90E-04	4.14E-03	1.34E-01

Table M.96 - Detailed Project Alone Exposure Point Concentrations for the Baseline Road & Rundle Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	4.26E-07	9.23E-08	2.10E-08	3.33E-10	1.82E-09	3.57E-07	6.00E-09	1.46E-09	7.24E-10
Acenaphthylene	9.98E-08	1.93E-08	4.91E-09	9.50E-11	2.32E-09	4.07E-07	6.85E-09	1.66E-09	1.16E-09
Anthracene	4.21E-07	4.21E-08	2.06E-08	2.46E-10	5.83E-10	5.48E-07	9.22E-09	2.13E-09	9.24E-10
Fluoranthene	4.16E-06	3.17E-07	2.03E-07	2.32E-09	7.87E-09	1.55E-05	2.60E-07	5.77E-08	3.95E-08
Fluorene	4.24E-07	6.35E-08	2.08E-08	3.28E-10	4.27E-09	1.32E-06	2.22E-08	5.27E-09	3.39E-09
Phenanthrene	4.28E-06	4.61E-07	2.10E-07	2.75E-09	1.70E-08	1.81E-05	3.04E-07	7.04E-08	2.70E-08
High Molecular Weight PAHs									
Benz(a)anthracene	2.31E-07	1.12E-07	5.64E-09	4.96E-10	2.26E-10	3.23E-06	5.44E-08	1.13E-08	5.67E-09
Benzo(a)pyrene	4.09E-07	5.53E-07	4.99E-08	2.15E-09	3.22E-10	1.25E-05	2.17E-07	2.13E-07	1.61E-08
Benzo(e)pyrene	1.11E-06	4.42E-05	1.36E-07	1.42E-07	1.34E-09	2.14E-05	--	3.52E-07	1.86E-07
Benzo(a)fluorene	4.57E-07	1.17E-07	1.12E-08	6.52E-10	4.45E-09	1.76E-05	--	6.35E-08	5.60E-08
Benzo(b)fluorene	3.16E-07	2.39E-07	7.70E-09	1.07E-09	3.28E-09	1.33E-05	--	4.65E-08	9.24E-08
Benzo(b)fluoranthene	5.31E-07	3.39E-08	1.30E-08	2.27E-10	2.53E-10	1.06E-05	1.79E-07	3.59E-08	1.69E-08
Benzo(g,h,i)perylene	5.77E-06	6.70E-05	7.04E-07	2.09E-07	1.23E-09	2.22E-04	3.74E-06	3.63E-06	1.95E-07
Benzo(k)fluoranthene	4.64E-07	2.23E-07	1.13E-08	8.99E-10	1.07E-10	4.26E-06	7.17E-08	1.44E-08	6.77E-09
Chrysene	8.58E-07	1.11E-07	2.09E-08	6.26E-10	3.68E-10	5.90E-06	9.93E-08	2.07E-08	9.24E-09
Dibenz(a,c)anthracene	7.27E-07	8.25E-06	8.87E-08	2.30E-08	1.50E-09	1.17E-04	1.97E-06	1.88E-06	3.77E-07
Dibenz(a,h)anthracene	2.55E-07	5.43E-06	3.11E-08	1.69E-08	7.82E-11	5.60E-06	9.42E-08	9.16E-08	1.24E-08
Indeno(1,2,3-cd)pyrene	1.23E-06	7.36E-07	1.50E-07	2.31E-09	3.11E-10	3.83E-05	6.45E-07	6.21E-07	6.21E-08
Perylene	2.40E-07	3.29E-05	2.93E-08	1.14E-07	1.67E-10	5.36E-06	9.31E-08	8.95E-08	1.49E-08
Pyrene	2.13E-05	1.35E-06	5.21E-07	1.03E-08	1.17E-08	3.17E-05	5.34E-07	1.19E-07	4.65E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	6.92E-08	9.07E-09	3.42E-08	3.29E-09	3.05E-12	4.75E-07	1.14E-08	1.46E-08	9.65E-08
PCB									
Aroclor 1254 (Total PCBs)	7.95E-05	8.45E-07	--	1.53E-06	3.73E-09	3.66E-04	--	--	7.33E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.07E-08	2.68E-08	7.60E-09	6.34E-08	9.38E-08	1.42E-06	4.29E-07	6.05E-08	1.13E-06
1,2,4-Trichlorobenzene	4.52E-09	9.50E-10	5.55E-10	2.87E-09	2.52E-09	2.75E-07	2.75E-09	6.81E-09	1.59E-07
1,2,4,5-Tetrachlorobenzene	1.92E-07	1.28E-08	2.34E-08	1.41E-08	3.35E-09	1.01E-06	1.81E-08	3.85E-08	1.06E-06
Pentachlorobenzene	2.98E-06	1.27E-07	7.27E-07	1.32E-07	7.87E-09	3.80E-05	6.78E-07	1.40E-06	5.83E-06
Hexachlorobenzene	8.23E-08	5.22E-09	2.01E-08	8.32E-09	2.70E-09	8.64E-06	1.54E-07	3.14E-07	2.70E-06
Pentachlorophenol	1.40E-06	3.33E-04	3.28E-06	2.23E-07	4.84E-07	1.15E-05	2.25E-07	4.24E-07	2.72E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	4.87E-11	4.68E-11	6.72E-12	3.96E-09	1.18E-08	7.18E-08	5.66E-08	3.25E-09	3.74E-08
Chloroform	1.09E-10	2.97E-10	2.45E-11	2.21E-09	1.97E-08	4.14E-08	7.29E-08	2.01E-09	9.88E-09
Dichloromethane	1.96E-08	1.34E-07	1.24E-08	2.32E-07	6.85E-06	2.74E-06	6.59E-06	1.41E-07	6.85E-07
Trichlorofluoromethane (Freon 11)	5.04E-09	7.12E-09	7.78E-10	1.41E-06	6.13E-06	2.80E-05	3.08E-05	1.30E-06	9.71E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.44E-10	3.44E-10	3.76E-11	1.24E-08	5.38E-08	2.91E-07	3.20E-07	1.35E-08	8.53E-08
Other Organics									
Bromoform	6.79E-10	1.12E-09	1.12E-10	3.37E-07	1.75E-06	8.83E-06	1.10E-05	4.14E-07	2.06E-06
O-Terphenyl	1.35E-06	1.79E-07	3.29E-07	1.19E-07	9.89E-09	7.28E-05	1.55E-06	2.59E-06	1.64E-05
Inorganics									
Antimony	8.39E-04	4.48E-04	1.34E-04	5.40E-06	8.45E-06	3.80E-04	1.95E-06	4.30E-06	1.69E-03
Arsenic	8.32E-05	4.60E-05	1.75E-06	1.09E-06	1.30E-06	3.76E-05	1.84E-07	3.89E-06	6.49E-05
Barium	5.91E-04	3.05E-04	8.60E-06	5.51E-07	6.53E-06	2.68E-04	5.43E-06	3.66E-05	6.53E-05
Beryllium	5.29E-04	3.94E-05	3.81E-06	6.73E-07	3.69E-07	2.92E-04	2.67E-05	3.86E-05	3.69E-05
Boron	3.27E-03	2.87E-02	5.22E-04	2.59E-04	4.73E-04	1.42E-03	2.57E-05	3.25E-04	--
Cadmium	3.48E-03	1.98E-03	5.31E-03	2.88E-06	2.11E-05	1.59E-03	1.75E-04	5.16E-04	2.54E-02
Chromium (Total)	2.93E-04	2.33E-04	1.43E-05	1.48E-05	6.95E-06	1.32E-04	7.04E-07	5.68E-06	1.39E-03
Chromium VI	4.17E-05	3.31E-05	2.04E-06	2.11E-06	9.89E-07	1.88E-05	1.00E-07	--	3.65E-05
Cobalt	1.77E-03	6.29E-04	3.46E-05	1.56E-04	1.79E-05	8.04E-04	7.84E-07	1.93E-06	1.79E-03
Lead	8.10E-02	8.76E-03	6.03E-03	4.02E-05	5.10E-05	4.59E-02	5.12E-04	1.11E-03	5.34E-03
Mercury - Inorganic	6.29E-03	9.10E-05	1.70E-03	2.13E-05	3.65E-07	1.85E-02	3.02E-03	2.28E-03	2.63E-04
Methyl Mercury	2.12E-04	2.57E-05	1.80E-03	2.82E-07	5.19E-09	3.98E-05	7.09E-07	1.78E-04	8.55E-04
Nickel	3.80E-02	1.01E-02	6.44E-03	7.83E-04	2.66E-04	1.73E-02	1.36E-04	5.87E-04	4.15E-02
Selenium	1.68E-05	4.94E-05	2.64E-06	1.25E-06	1.48E-06	7.42E-06	4.90E-07	4.64E-06	2.52E-04
Silver	1.92E-04	4.20E-04	6.30E-05	1.42E-05	1.04E-05	8.60E-05	3.87E-07	--	9.17E-04
Thallium	1.85E-02	4.07E-03	2.95E-03	2.15E-03	1.18E-04	8.40E-03	2.70E-06	--	--
Tin	2.00E-02	2.40E-03	1.65E-03	2.88E-03	3.81E-05	9.52E-03	2.58E-05	--	1.14E-01
Vanadium	1.91E-03	1.30E-04	1.28E-05	5.72E-06	1.11E-06	1.11E-03	7.00E-07	1.64E-05	1.78E-04
Zinc	8.33E-02	4.12E-02	6.04E-02	4.52E-05	6.10E-04	3.78E-02	3.36E-03	1.76E-02	5.68E-01

Table M.97 - Detailed Project Alone Exposure Point Concentrations for the Baseline Road & Courtice Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.88E-07	1.27E-07	2.90E-08	4.49E-10	1.48E-09	2.90E-07	4.88E-09	1.19E-09	5.89E-10
Acenaphthylene	1.38E-07	2.63E-08	6.78E-09	1.20E-10	2.20E-09	3.87E-07	6.52E-09	1.58E-09	1.11E-09
Anthracene	5.80E-07	5.77E-08	2.84E-08	3.34E-10	5.31E-10	4.99E-07	8.40E-09	1.94E-09	8.42E-10
Fluoranthene	5.74E-06	3.78E-07	2.80E-07	2.93E-09	7.72E-09	1.52E-05	2.55E-07	5.65E-08	3.87E-08
Fluorene	5.85E-07	8.62E-08	2.87E-08	4.24E-10	3.77E-09	1.16E-06	1.96E-08	4.65E-09	2.99E-09
Phenanthrene	5.91E-06	6.09E-07	2.89E-07	3.61E-09	1.63E-08	1.73E-05	2.91E-07	6.74E-08	2.58E-08
High Molecular Weight PAHs									
Benz(a)anthracene	3.19E-07	1.21E-07	7.78E-09	5.50E-10	2.30E-10	3.29E-06	5.54E-08	1.15E-08	5.77E-09
Benzo(a)pyrene	5.65E-07	5.10E-07	6.89E-08	2.01E-09	3.26E-10	1.26E-05	2.20E-07	2.16E-07	1.63E-08
Benzo(e)pyrene	1.54E-06	2.97E-05	1.88E-07	9.55E-08	1.40E-09	2.23E-05	--	3.67E-07	1.94E-07
Benzo(a)fluorene	6.31E-07	1.00E-07	1.54E-08	6.17E-10	4.23E-09	1.68E-05	--	6.04E-08	5.33E-08
Benzo(b)fluorene	4.35E-07	1.73E-07	1.06E-08	8.30E-10	3.18E-09	1.29E-05	--	4.52E-08	8.98E-08
Benzo(b)fluoranthene	7.33E-07	3.42E-08	1.79E-08	2.64E-10	2.35E-10	9.84E-06	1.66E-07	3.33E-08	1.57E-08
Benzo(g,h,i)perylene	7.97E-06	4.51E-05	9.72E-07	1.42E-07	1.25E-09	2.26E-04	3.80E-06	3.69E-06	1.99E-07
Benzo(k)fluoranthene	6.41E-07	1.94E-07	1.56E-08	8.26E-10	1.15E-10	4.58E-06	7.70E-08	1.55E-08	7.28E-09
Chrysene	1.18E-06	1.40E-07	2.89E-08	8.07E-10	3.37E-10	5.41E-06	9.10E-08	1.90E-08	8.46E-09
Dibenz(a,c)anthracene	1.00E-06	6.95E-06	1.22E-07	1.93E-08	1.49E-09	1.16E-04	1.96E-06	1.87E-06	3.75E-07
Dibenz(a,h)anthracene	3.52E-07	3.71E-06	4.30E-08	1.16E-08	8.06E-11	5.77E-06	9.71E-08	9.44E-08	1.28E-08
Indeno(1,2,3-cd)pyrene	1.70E-06	9.14E-07	2.07E-07	2.89E-09	3.17E-10	3.91E-05	6.57E-07	6.33E-07	6.33E-08
Perylene	3.32E-07	2.21E-05	4.05E-08	7.69E-08	1.73E-10	5.56E-06	9.66E-08	9.29E-08	1.54E-08
Pyrene	2.94E-05	1.78E-06	7.18E-07	1.38E-08	1.25E-08	3.40E-05	5.71E-07	1.28E-07	4.97E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	8.25E-08	6.96E-09	4.09E-08	2.91E-09	3.01E-12	4.68E-07	1.13E-08	1.44E-08	9.51E-08
PCB									
Aroclor 1254 (Total PCBs)	1.10E-04	9.50E-07	--	2.04E-06	3.78E-09	3.71E-04	--	--	7.43E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	8.38E-08	3.65E-08	1.05E-08	4.02E-08	5.29E-08	8.01E-07	2.42E-07	3.41E-08	6.36E-07
1,2,4-Trichlorobenzene	6.23E-09	1.24E-09	7.66E-10	1.95E-09	1.49E-09	9.90E-08	1.63E-09	4.03E-09	9.41E-08
1,2,4,5-Tetrachlorobenzene	2.64E-07	1.75E-08	3.23E-08	1.58E-08	2.19E-09	6.62E-07	1.18E-08	2.51E-08	6.91E-07
Pentachlorobenzene	4.11E-06	1.69E-07	1.00E-06	1.71E-07	5.15E-09	2.49E-05	4.44E-07	9.15E-07	3.82E-06
Hexachlorobenzene	1.14E-07	5.43E-09	2.77E-08	7.34E-09	1.61E-09	5.16E-06	9.19E-08	1.87E-07	1.61E-06
Pentachlorophenol	1.93E-06	2.24E-04	4.52E-06	1.51E-07	7.07E-07	1.67E-05	3.28E-07	6.18E-07	3.97E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	6.71E-11	6.36E-11	9.28E-12	1.96E-09	5.84E-09	3.55E-08	2.80E-08	1.61E-09	1.85E-08
Chloroform	1.51E-10	4.08E-10	3.38E-11	1.18E-09	1.04E-08	2.19E-08	3.85E-08	1.06E-09	5.23E-09
Dichloromethane	2.70E-08	1.85E-07	1.72E-08	1.30E-07	3.79E-06	1.52E-06	3.65E-06	7.81E-08	3.79E-07
Trichlorofluoromethane (Freon 11)	6.96E-09	9.75E-09	1.07E-09	6.88E-07	2.99E-06	1.37E-05	1.51E-05	6.35E-07	4.75E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	3.36E-10	4.71E-10	5.19E-11	6.19E-09	2.68E-08	1.45E-07	1.60E-07	6.73E-09	4.25E-08
Other Organics									
Bromoform	9.37E-10	1.55E-09	1.54E-10	1.64E-07	8.51E-07	4.29E-06	5.34E-06	2.01E-07	1.00E-06
O-Terphenyl	1.86E-06	1.44E-07	4.54E-07	1.14E-07	8.89E-09	6.55E-05	1.40E-06	2.33E-06	1.48E-05
Inorganics									
Antimony	1.00E-03	4.84E-04	1.60E-04	5.97E-06	1.07E-05	4.82E-04	2.47E-06	5.45E-06	2.14E-03
Arsenic	9.93E-05	4.71E-05	2.08E-06	1.16E-06	1.65E-06	4.77E-05	2.33E-07	4.93E-06	8.23E-05
Barium	7.05E-04	3.25E-04	1.03E-05	6.02E-07	8.28E-06	3.39E-04	6.88E-06	4.64E-05	8.28E-05
Beryllium	6.31E-04	4.08E-05	4.54E-06	7.42E-07	4.45E-07	3.51E-04	3.21E-05	4.65E-05	4.45E-05
Boron	3.89E-03	3.14E-02	6.23E-04	2.88E-04	6.00E-04	1.80E-03	3.27E-05	4.12E-04	--
Cadmium	4.16E-03	2.24E-03	6.34E-03	3.29E-06	2.68E-05	2.01E-03	2.22E-04	6.53E-04	3.22E-02
Chromium (Total)	3.49E-04	2.36E-04	1.71E-05	1.56E-05	8.82E-06	1.68E-04	8.93E-07	7.21E-06	1.76E-03
Chromium VI	4.97E-05	3.35E-05	2.43E-06	2.21E-06	1.25E-06	2.38E-05	1.27E-07	--	4.63E-05
Cobalt	2.12E-03	6.43E-04	4.13E-05	1.66E-04	2.27E-05	1.02E-03	9.94E-07	2.45E-06	2.27E-03
Lead	9.66E-02	9.53E-03	7.19E-03	4.53E-05	6.11E-05	5.49E-02	6.13E-04	1.32E-03	6.39E-03
Mercury - Inorganic	6.50E-03	8.46E-05	1.76E-03	2.15E-05	3.04E-07	1.54E-02	2.56E-03	1.89E-03	2.18E-04
Methyl Mercury	2.53E-04	2.39E-05	2.15E-03	2.84E-07	4.31E-09	5.90E-05	1.05E-06	2.63E-04	7.11E-04
Nickel	4.53E-02	1.05E-02	7.68E-03	8.44E-04	3.37E-04	1.72E-02	1.72E-04	7.45E-04	5.26E-02
Selenium	2.00E-05	5.01E-05	3.15E-06	1.30E-06	1.88E-06	9.41E-06	6.21E-07	5.89E-06	3.20E-04
Silver	2.30E-04	4.39E-04	7.51E-05	1.52E-05	1.31E-05	1.09E-04	4.90E-07	--	1.16E-03
Thallium	2.20E-02	4.13E-03	3.52E-03	2.30E-03	1.50E-04	1.06E-02	3.42E-06	--	--
Tin	2.39E-02	2.54E-03	1.97E-03	3.18E-03	4.77E-05	1.19E-02	3.23E-05	--	1.43E-01
Vanadium	2.28E-03	1.33E-04	1.53E-05	6.29E-06	3.32E-06	1.32E-03	8.33E-07	1.95E-05	2.11E-04
Zinc	9.93E-02	4.55E-02	7.21E-02	5.09E-05	7.74E-04	4.80E-02	4.26E-03	2.24E-02	7.21E-01

Table M.98 - Detailed Project Alone Exposure Point Concentrations for the Soper Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	8.97E-08	1.94E-08	4.42E-09	7.59E-11	9.92E-10	1.94E-07	3.27E-09	7.98E-10	3.95E-10
Acenaphthylene	2.10E-08	4.11E-09	1.03E-09	2.57E-11	1.04E-09	1.82E-07	3.06E-09	7.41E-10	5.20E-10
Anthracene	8.84E-08	8.94E-09	4.33E-09	5.39E-11	2.63E-10	2.48E-07	4.17E-09	9.65E-10	4.17E-10
Fluoranthene	8.75E-07	7.58E-08	4.27E-08	5.47E-10	2.91E-09	5.71E-06	9.61E-08	2.13E-08	1.46E-08
Fluorene	8.92E-08	1.36E-08	4.37E-09	8.25E-11	2.00E-09	6.18E-07	1.04E-08	2.47E-09	1.59E-09
Phenanthrene	9.01E-07	1.01E-07	4.41E-08	6.38E-10	6.68E-09	7.09E-06	1.19E-07	2.76E-08	1.06E-08
High Molecular Weight PAHs									
Benz(a)anthracene	4.86E-08	2.88E-08	1.19E-09	1.26E-10	6.78E-11	9.70E-07	1.63E-08	3.40E-09	1.70E-09
Benzo(a)pyrene	8.61E-08	1.56E-07	1.05E-08	6.05E-10	8.75E-11	3.39E-06	5.90E-08	5.79E-08	4.39E-09
Benzo(e)pyrene	2.34E-07	1.42E-05	2.86E-08	4.56E-08	3.87E-10	6.16E-06	--	1.01E-07	5.34E-08
Benzo(a)fluorene	9.61E-08	3.42E-08	2.35E-09	1.93E-10	1.69E-09	6.68E-06	--	2.41E-08	2.12E-08
Benzo(b)fluorene	6.64E-08	7.49E-08	1.62E-09	3.34E-10	1.18E-09	4.80E-06	--	1.68E-08	3.33E-08
Benzo(b)fluoranthene	1.12E-07	9.09E-09	2.73E-09	5.73E-11	8.47E-11	3.55E-06	5.97E-08	1.20E-08	5.65E-09
Benzo(g,h,i)perylene	1.21E-06	2.15E-05	1.48E-07	6.72E-08	3.02E-10	5.45E-05	9.16E-07	8.90E-07	4.79E-08
Benzo(k)fluoranthene	9.76E-08	6.46E-08	2.38E-09	2.55E-10	2.77E-11	1.10E-06	1.85E-08	3.72E-09	1.74E-09
Chrysene	1.80E-07	2.54E-08	4.40E-09	1.42E-10	1.42E-10	2.28E-06	3.83E-08	7.98E-09	3.56E-09
Dibenz(a,c)anthracene	1.53E-07	2.43E-06	1.87E-08	6.79E-09	3.92E-10	3.06E-05	5.15E-07	4.92E-07	9.86E-08
Dibenz(a,h)anthracene	5.37E-08	1.74E-06	6.55E-09	5.41E-09	1.99E-11	1.43E-06	2.40E-08	2.33E-08	3.16E-09
Indeno(1,2,3-cd)pyrene	2.58E-07	1.70E-07	3.15E-08	5.37E-10	7.77E-11	9.56E-06	1.61E-07	1.55E-07	1.55E-08
Perylene	5.06E-08	1.06E-05	6.17E-09	3.68E-08	4.50E-11	1.45E-06	2.51E-08	2.42E-08	4.01E-09
Pyrene	4.48E-06	2.96E-07	1.09E-07	2.24E-09	3.87E-09	1.05E-05	1.77E-07	3.96E-08	1.54E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	2.34E-08	3.10E-09	1.15E-08	1.13E-09	1.11E-12	1.73E-07	4.19E-09	5.34E-09	3.52E-08
PCB									
Aroclor 1254 (Total PCBs)	1.67E-05	2.12E-07	--	3.38E-07	1.05E-09	1.03E-04	--	--	2.06E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.28E-08	5.70E-09	1.60E-09	3.59E-08	5.62E-08	8.52E-07	2.57E-07	3.62E-08	6.76E-07
1,2,4-Trichlorobenzene	9.50E-10	2.10E-10	1.17E-10	1.59E-09	1.51E-09	1.00E-07	1.64E-09	4.08E-09	9.52E-08
1,2,4,5-Tetrachlorobenzene	4.03E-08	2.74E-09	4.92E-09	4.46E-09	1.71E-09	5.19E-07	9.25E-09	1.97E-08	5.41E-07
Pentachlorobenzene	6.26E-07	2.77E-08	1.53E-07	3.38E-08	4.34E-09	2.10E-05	3.74E-07	7.71E-07	3.22E-06
Hexachlorobenzene	1.73E-08	1.38E-09	4.22E-09	3.69E-09	1.52E-09	4.86E-06	8.67E-08	1.77E-07	1.52E-06
Pentachlorophenol	2.94E-07	1.07E-04	6.89E-07	7.15E-08	1.08E-07	2.55E-06	5.00E-08	9.41E-08	6.05E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.02E-11	1.00E-11	1.41E-12	2.30E-09	6.88E-09	4.18E-08	3.30E-08	1.89E-09	2.18E-08
Chloroform	2.30E-11	6.28E-11	5.15E-12	1.33E-09	1.19E-08	2.50E-08	4.39E-08	1.21E-09	5.96E-09
Dichloromethane	4.11E-09	2.83E-08	2.61E-09	1.43E-07	4.24E-06	1.70E-06	4.09E-06	8.75E-08	4.24E-07
Trichlorofluoromethane (Freon 11)	1.06E-09	1.51E-09	1.64E-10	8.21E-07	3.58E-06	1.63E-05	1.80E-05	7.59E-07	5.67E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	5.13E-11	7.30E-11	7.91E-12	7.23E-09	3.15E-08	1.70E-07	1.87E-07	7.88E-09	4.99E-08
Other Organics									
Bromoform	1.43E-10	2.36E-10	2.35E-11	1.97E-07	1.02E-06	5.16E-06	6.43E-06	2.42E-07	1.20E-06
O-Terphenyl	2.84E-07	5.38E-08	6.92E-08	3.66E-08	4.01E-09	2.95E-05	6.50E-07	1.05E-06	6.66E-06
Inorganics									
Antimony	2.84E-04	1.71E-04	4.55E-05	2.02E-06	2.99E-06	1.35E-04	6.91E-07	1.52E-06	5.99E-04
Arsenic	2.82E-05	1.85E-05	5.91E-07	4.29E-07	4.60E-07	1.33E-05	6.50E-08	1.38E-06	2.30E-05
Barium	2.00E-04	1.18E-04	2.91E-06	2.09E-07	2.31E-06	9.48E-05	1.92E-06	1.30E-05	2.31E-05
Beryllium	1.79E-04	1.57E-05	1.29E-06	2.51E-07	1.43E-07	1.13E-04	1.03E-05	1.49E-05	1.43E-05
Boron	1.11E-03	1.08E-02	1.77E-04	9.63E-05	1.67E-04	5.02E-04	9.12E-06	1.15E-04	--
Cadmium	1.18E-03	7.21E-04	1.80E-03	1.03E-06	7.50E-06	5.62E-04	6.22E-05	1.83E-04	9.02E-03
Chromium (Total)	9.92E-05	9.44E-05	4.86E-06	5.89E-06	2.46E-06	4.68E-05	2.49E-07	2.01E-06	4.93E-04
Chromium VI	1.41E-05	1.34E-05	6.91E-07	8.38E-07	3.50E-07	6.66E-06	3.55E-08	--	1.29E-05
Cobalt	6.01E-04	2.53E-04	1.17E-05	6.09E-05	6.33E-06	2.85E-04	2.78E-07	6.84E-07	6.33E-04
Lead	2.74E-02	3.32E-03	2.04E-03	1.47E-05	1.99E-05	1.79E-02	2.00E-04	4.33E-04	2.09E-03
Mercury - Inorganic	1.77E-03	3.51E-05	4.81E-04	6.56E-06	1.17E-07	5.92E-03	1.06E-03	7.27E-04	8.39E-05
Methyl Mercury	7.18E-05	9.91E-06	6.10E-04	1.05E-07	1.66E-09	5.73E-06	1.02E-07	2.56E-05	2.73E-04
Nickel	1.29E-02	4.04E-03	2.18E-03	3.02E-04	9.42E-05	6.12E-03	4.82E-05	2.08E-04	1.47E-02
Selenium	5.68E-06	2.01E-05	8.96E-07	4.98E-07	5.25E-07	2.63E-06	1.73E-07	1.64E-06	8.93E-05
Silver	6.52E-05	1.66E-04	2.13E-05	5.52E-06	3.67E-06	3.05E-05	1.37E-07	--	3.25E-04
Thallium	6.25E-03	1.65E-03	1.00E-03	8.37E-04	4.20E-05	2.98E-03	9.56E-07	--	--
Tin	6.78E-03	9.36E-04	5.59E-04	1.07E-03	1.38E-05	3.45E-03	9.32E-06	--	4.14E-02
Vanadium	6.47E-04	5.20E-05	4.35E-06	2.14E-06	4.38E-07	4.38E-04	2.76E-07	6.46E-06	7.01E-05
Zinc	2.82E-02	1.54E-02	2.05E-02	1.66E-05	2.16E-04	1.34E-02	1.19E-03	6.25E-03	2.01E-01

Table M.99 - Detailed Project Alone Exposure Point Concentrations for the Bowmanville Marsh Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	9.79E-08	2.12E-08	4.83E-09	8.55E-11	1.37E-09	2.69E-07	4.53E-09	1.11E-09	5.47E-10
Acenaphthylene	2.29E-08	4.52E-09	1.13E-09	3.11E-11	1.43E-09	2.51E-07	4.23E-09	1.02E-09	7.18E-10
Anthracene	9.66E-08	9.81E-09	4.72E-09	6.01E-11	3.85E-10	3.62E-07	6.08E-09	1.41E-09	6.10E-10
Fluoranthene	9.56E-07	8.89E-08	4.67E-08	6.40E-10	4.61E-09	9.06E-06	1.52E-07	3.38E-08	2.31E-08
Fluorene	9.73E-08	1.50E-08	4.77E-09	9.86E-11	2.94E-09	9.06E-07	1.52E-08	3.62E-09	2.33E-09
Phenanthrene	9.84E-07	1.13E-07	4.81E-08	7.42E-10	1.04E-08	1.10E-05	1.85E-07	4.28E-08	1.64E-08
High Molecular Weight PAHs									
Benz(a)anthracene	5.31E-08	3.49E-08	1.30E-09	1.51E-10	1.28E-10	1.83E-06	3.08E-08	6.41E-09	3.21E-09
Benzo(a)pyrene	9.40E-08	1.97E-07	1.15E-08	7.59E-10	1.87E-10	7.27E-06	1.26E-07	1.24E-07	9.39E-09
Benzo(e)pyrene	2.56E-07	1.88E-05	3.12E-08	6.02E-08	7.37E-10	1.17E-05	--	1.93E-07	1.02E-07
Benzo(a)fluorene	1.05E-07	4.38E-08	2.56E-09	2.46E-10	2.74E-09	1.09E-05	--	3.92E-08	3.45E-08
Benzo(b)fluorene	7.25E-08	9.82E-08	1.77E-09	4.37E-10	1.96E-09	7.95E-06	--	2.78E-08	5.51E-08
Benzo(b)fluoranthene	1.22E-07	1.12E-08	2.98E-09	6.62E-11	1.66E-10	6.95E-06	1.17E-07	2.35E-08	1.11E-08
Benzo(g,h,i)perylene	1.33E-06	2.85E-05	1.62E-07	8.88E-08	7.33E-10	2.22E-04	2.22E-06	2.16E-06	1.16E-07
Benzo(k)fluoranthene	1.07E-07	8.23E-08	2.60E-09	3.21E-10	5.74E-11	2.28E-06	3.83E-08	7.71E-09	3.62E-09
Chrysene	1.97E-07	2.91E-08	4.81E-09	1.60E-10	2.42E-10	3.89E-06	6.54E-08	1.36E-08	6.08E-09
Dibenz(a,c)anthracene	1.67E-07	3.12E-06	2.04E-08	8.70E-09	9.12E-10	7.11E-05	1.20E-06	1.14E-06	2.29E-07
Dibenz(a,h)anthracene	5.87E-08	2.29E-06	7.15E-09	7.14E-09	4.51E-11	3.23E-06	5.44E-08	5.28E-08	7.15E-09
Indeno(1,2,3-cd)pyrene	2.82E-07	1.97E-07	3.44E-08	6.13E-10	1.84E-10	2.27E-05	3.81E-07	3.67E-07	3.67E-08
Perylene	5.52E-08	1.40E-05	6.74E-09	4.86E-08	9.34E-11	3.00E-06	5.22E-08	5.02E-08	8.33E-09
Pyrene	4.90E-06	3.32E-07	1.20E-07	2.50E-09	6.01E-09	1.64E-05	2.75E-07	6.15E-08	2.39E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.07E-08	3.21E-09	5.28E-09	9.85E-10	1.02E-12	1.58E-07	3.82E-09	4.86E-09	3.21E-08
PCB									
Aroclor 1254 (Total PCBs)	1.83E-05	2.54E-07	--	3.72E-07	2.00E-09	1.97E-04	--	--	3.93E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.39E-08	6.27E-09	1.75E-09	5.04E-08	7.96E-08	1.21E-06	3.64E-07	5.13E-08	9.57E-07
1,2,4-Trichlorobenzene	1.04E-09	2.37E-10	1.28E-10	2.19E-09	2.10E-09	1.40E-07	2.29E-09	5.68E-09	1.33E-07
1,2,4,5-Tetrachlorobenzene	4.40E-08	3.02E-09	5.37E-09	5.37E-09	2.23E-09	6.75E-07	1.20E-08	2.56E-08	7.04E-07
Pentachlorobenzene	6.84E-07	3.09E-08	1.67E-07	3.81E-08	6.31E-09	3.05E-05	5.44E-07	1.12E-06	4.68E-06
Hexachlorobenzene	1.89E-08	1.69E-09	4.61E-09	4.62E-09	2.21E-09	7.08E-06	1.26E-07	2.57E-07	2.21E-06
Pentachlorophenol	3.21E-07	1.41E-04	7.52E-07	9.45E-08	1.24E-07	2.94E-06	5.78E-08	1.09E-07	6.99E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.12E-11	1.10E-11	1.54E-12	3.40E-09	1.01E-08	6.17E-08	4.86E-08	2.79E-09	3.21E-08
Chloroform	2.51E-11	6.88E-11	5.62E-12	1.91E-09	1.71E-08	3.58E-08	6.30E-08	1.74E-09	8.55E-09
Dichloromethane	4.49E-09	3.09E-08	2.85E-09	2.02E-07	5.97E-06	2.39E-06	5.75E-06	1.23E-07	5.97E-07
Trichlorofluoromethane (Freon 11)	1.16E-09	1.66E-09	1.79E-10	1.21E-06	5.28E-06	2.42E-05	2.66E-05	1.12E-06	8.38E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	5.60E-11	8.01E-11	8.64E-12	1.06E-08	4.63E-08	2.50E-07	2.75E-07	1.16E-08	7.33E-08
Other Organics									
Bromoform	1.56E-10	2.57E-10	2.57E-11	2.92E-07	1.51E-06	7.63E-06	9.50E-06	3.58E-07	1.78E-06
O-Terphenyl	3.10E-07	6.95E-08	7.56E-08	4.58E-08	6.61E-09	4.87E-05	1.05E-06	1.73E-06	1.10E-05
Inorganics									
Antimony	1.30E-04	6.93E-05	2.08E-05	8.41E-07	1.43E-06	6.45E-05	3.31E-07	7.29E-07	2.87E-04
Arsenic	1.29E-05	7.11E-06	2.70E-07	1.71E-07	2.20E-07	6.38E-06	3.11E-08	6.59E-07	1.10E-05
Barium	9.15E-05	4.72E-05	1.33E-06	8.58E-08	1.11E-06	4.54E-05	9.20E-07	6.21E-06	1.11E-05
Beryllium	8.19E-05	6.09E-06	5.90E-07	1.05E-07	7.40E-08	5.84E-05	5.34E-06	7.73E-06	7.40E-06
Boron	5.06E-04	4.44E-03	8.09E-05	4.03E-05	8.02E-05	2.41E-04	4.37E-06	5.51E-05	--
Cadmium	5.40E-04	3.07E-04	8.24E-04	4.47E-07	3.59E-06	2.70E-04	2.98E-05	8.77E-05	4.32E-03
Chromium (Total)	4.54E-05	3.59E-05	2.22E-06	2.31E-06	1.18E-06	2.24E-05	1.19E-07	9.64E-07	2.36E-04
Chromium VI	6.45E-06	5.11E-06	3.16E-07	3.29E-07	1.68E-07	3.19E-06	1.70E-08	--	6.20E-06
Cobalt	2.75E-04	9.72E-05	5.36E-06	2.43E-05	3.03E-06	1.36E-04	1.33E-07	3.27E-07	3.03E-04
Lead	1.25E-02	1.36E-03	9.35E-04	6.26E-06	1.04E-05	9.38E-03	1.05E-04	2.26E-04	1.09E-03
Mercury - Inorganic	1.78E-03	2.00E-05	4.81E-04	5.77E-06	2.32E-07	1.18E-02	2.01E-03	1.45E-03	1.67E-04
Methyl Mercury	3.28E-05	5.65E-06	2.79E-04	5.68E-08	3.30E-09	6.71E-06	1.19E-07	2.99E-05	5.44E-04
Nickel	5.89E-03	1.57E-03	9.98E-04	1.22E-04	4.51E-05	2.93E-03	2.31E-05	9.97E-05	7.04E-03
Selenium	2.60E-06	7.64E-06	4.10E-07	1.95E-07	2.52E-07	1.26E-06	8.30E-08	7.87E-07	4.28E-05
Silver	2.98E-05	6.50E-05	9.75E-06	2.21E-06	1.76E-06	1.46E-05	6.56E-08	--	1.56E-04
Thallium	2.86E-03	6.29E-04	4.58E-04	3.35E-04	2.01E-05	1.43E-03	4.58E-07	--	--
Tin	3.10E-03	3.71E-04	2.56E-04	4.48E-04	6.74E-06	1.69E-03	4.56E-06	--	2.02E-02
Vanadium	2.96E-04	2.00E-05	1.99E-06	8.90E-07	2.31E-07	2.31E-04	1.45E-07	3.41E-06	3.69E-05
Zinc	1.29E-02	6.38E-03	9.37E-03	7.03E-06	1.04E-04	6.42E-03	5.71E-04	3.00E-03	9.65E-02

Table M.100 - Detailed Project Alone Exposure Point Concentrations for the South of Site, Eco Baseline S7 Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	3.71E-07	8.02E-08	1.83E-08	2.79E-10	4.39E-10	8.60E-08	1.45E-09	3.53E-10	1.75E-10
Acenaphthylene	8.69E-08	1.65E-08	4.28E-09	6.66E-11	4.84E-10	8.50E-08	1.43E-09	3.46E-10	2.43E-10
Anthracene	3.66E-07	3.62E-08	1.79E-08	2.07E-10	1.12E-10	1.06E-07	1.78E-09	4.11E-10	1.78E-10
Fluoranthene	3.62E-06	2.18E-07	1.77E-07	1.71E-09	1.18E-09	2.32E-06	3.90E-08	8.64E-09	5.91E-09
Fluorene	3.69E-07	5.39E-08	1.81E-08	2.48E-10	7.85E-10	2.42E-07	4.07E-09	9.68E-10	6.23E-10
Phenanthrene	3.73E-06	3.75E-07	1.82E-07	2.15E-09	2.59E-09	2.75E-06	4.63E-08	1.07E-08	4.11E-09
High Molecular Weight PAHs									
Benz(a)anthracene	2.01E-07	6.49E-08	4.91E-09	2.98E-10	3.97E-11	5.68E-07	9.57E-09	1.99E-09	9.97E-10
Benzo(a)pyrene	3.56E-07	2.33E-07	4.34E-08	9.33E-10	7.33E-11	2.84E-06	4.94E-08	4.86E-08	3.68E-09
Benzo(e)pyrene	9.70E-07	7.80E-06	1.18E-07	2.52E-08	2.39E-10	3.81E-06	--	6.27E-08	3.30E-08
Benzo(a)fluorene	3.98E-07	4.19E-08	9.71E-09	2.71E-10	7.25E-10	2.88E-06	--	1.04E-08	9.13E-09
Benzo(b)fluorene	2.75E-07	5.43E-08	6.70E-09	2.81E-10	5.03E-10	2.05E-06	--	7.14E-09	1.42E-08
Benzo(b)fluoranthene	4.62E-07	1.71E-08	1.13E-08	1.50E-10	7.48E-11	3.13E-06	5.27E-08	1.06E-08	4.99E-09
Benzo(g,h,i)perylene	5.03E-06	1.18E-05	6.13E-07	3.76E-08	4.48E-10	8.08E-05	1.36E-06	1.32E-06	7.10E-08
Benzo(k)fluoranthene	4.03E-07	8.26E-08	9.84E-09	3.75E-10	2.67E-11	1.06E-06	1.78E-08	3.58E-09	1.68E-09
Chrysene	7.46E-07	8.35E-08	1.82E-08	4.89E-10	9.27E-11	1.49E-06	2.50E-08	5.22E-09	2.33E-09
Dibenz(a,c)anthracene	6.33E-07	2.83E-06	7.72E-08	7.86E-09	4.18E-10	3.26E-05	5.49E-07	5.24E-07	1.05E-07
Dibenz(a,h)anthracene	2.22E-07	1.02E-06	2.71E-08	3.20E-09	2.23E-11	1.60E-06	2.68E-08	2.61E-08	3.53E-09
Indeno(1,2,3-cd)pyrene	1.07E-06	5.41E-07	1.30E-07	1.72E-09	1.03E-10	1.27E-05	2.14E-07	2.06E-07	2.06E-08
Perylene	2.09E-07	5.79E-06	2.55E-08	2.02E-08	3.63E-11	1.17E-06	2.03E-08	1.95E-08	3.23E-09
Pyrene	1.85E-05	1.10E-06	4.52E-07	8.52E-09	1.87E-09	5.07E-06	8.54E-08	1.91E-08	7.43E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	5.62E-08	2.85E-09	2.78E-08	1.49E-09	1.21E-12	1.89E-07	4.56E-09	5.81E-09	3.84E-08
PCB									
Aroclor 1254 (Total PCBs)	6.90E-05	5.21E-07	--	1.26E-06	1.66E-09	1.63E-04	--	--	3.27E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	5.29E-08	2.29E-08	6.62E-09	2.49E-08	3.27E-08	4.96E-07	1.49E-07	2.11E-08	3.93E-07
1,2,4-Trichlorobenzene	3.93E-09	7.60E-10	4.84E-10	1.16E-09	8.76E-10	5.82E-08	9.55E-10	2.37E-09	5.53E-08
1,2,4,5-Tetrachlorobenzene	1.67E-07	1.09E-08	2.04E-08	9.94E-09	1.38E-09	4.20E-07	7.48E-09	1.59E-08	4.38E-07
Pentachlorobenzene	2.59E-06	1.05E-07	6.33E-07	1.06E-07	2.52E-09	1.22E-05	2.17E-07	4.47E-07	1.86E-06
Hexachlorobenzene	7.17E-08	2.81E-09	1.75E-08	4.18E-09	8.90E-10	2.85E-06	5.08E-08	1.03E-07	8.90E-07
Pentachlorophenol	1.22E-06	5.86E-05	2.85E-06	3.93E-08	7.63E-08	1.81E-06	3.54E-08	6.67E-08	4.29E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	4.24E-11	3.98E-11	5.86E-12	1.47E-09	4.38E-09	2.66E-08	2.10E-08	1.20E-09	1.38E-08
Chloroform	9.50E-11	2.57E-10	2.13E-11	8.25E-10	7.30E-09	1.53E-08	2.70E-08	7.43E-10	3.66E-09
Dichloromethane	1.70E-08	1.17E-07	1.08E-08	8.73E-08	2.55E-06	1.02E-06	2.46E-06	5.26E-08	2.55E-07
Trichlorofluoromethane (Freon 11)	4.39E-09	6.12E-09	6.78E-10	5.31E-07	2.31E-06	1.06E-05	1.16E-05	4.90E-07	3.66E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.12E-10	2.96E-10	3.28E-11	4.59E-09	1.99E-08	1.07E-07	1.18E-07	4.99E-09	3.15E-08
Other Organics									
Bromoform	5.92E-10	9.76E-10	9.74E-11	1.29E-07	6.69E-07	3.37E-06	4.20E-06	1.58E-07	7.86E-07
O-Terphenyl	1.17E-06	5.49E-08	2.87E-07	5.15E-08	1.96E-09	1.44E-05	3.25E-07	5.13E-07	3.25E-06
Inorganics									
Antimony	6.84E-04	3.29E-04	1.09E-04	3.83E-06	1.25E-06	5.63E-05	2.89E-07	6.37E-07	2.50E-04
Arsenic	6.78E-05	3.20E-05	1.42E-06	7.16E-07	1.92E-07	5.57E-06	2.72E-08	5.76E-07	9.61E-06
Barium	4.81E-04	2.21E-04	7.01E-06	3.83E-07	9.67E-07	3.96E-05	8.04E-07	5.42E-06	9.67E-06
Beryllium	4.30E-04	2.77E-05	3.10E-06	4.95E-07	5.45E-08	4.30E-05	3.93E-06	5.69E-06	5.45E-06
Boron	2.66E-03	2.14E-02	4.26E-04	1.86E-04	6.99E-05	2.10E-04	3.81E-06	4.80E-05	--
Cadmium	2.84E-03	1.52E-03	4.33E-03	2.17E-06	3.13E-06	2.35E-04	2.60E-05	7.65E-05	3.77E-03
Chromium (Total)	2.39E-04	1.60E-04	1.17E-05	9.51E-06	1.03E-06	1.96E-05	1.04E-07	8.41E-07	2.06E-04
Chromium VI	3.40E-05	2.27E-05	1.66E-06	1.35E-06	1.46E-07	1.48E-06	--	--	5.41E-06
Cobalt	1.45E-03	4.36E-04	2.82E-05	1.03E-04	2.65E-06	1.19E-04	1.16E-07	2.86E-07	2.65E-04
Lead	6.59E-02	6.48E-03	4.91E-03	3.04E-05	7.52E-06	6.77E-03	7.56E-05	1.63E-04	7.88E-04
Mercury - Inorganic	3.52E-03	5.12E-05	9.54E-04	1.19E-05	6.45E-08	3.27E-03	5.98E-04	4.02E-04	4.63E-05
Methyl Mercury	1.72E-04	1.45E-05	1.47E-03	1.79E-07	9.15E-10	8.10E-06	1.44E-07	3.61E-05	1.51E-04
Nickel	3.10E-02	7.11E-03	5.25E-03	5.29E-04	3.94E-05	3.96E-03	2.02E-05	8.70E-05	6.15E-03
Selenium	1.37E-05	3.39E-05	2.16E-06	7.89E-07	2.19E-07	1.10E-06	7.24E-08	6.87E-07	3.73E-05
Silver	1.57E-04	2.98E-04	5.13E-05	9.48E-06	1.53E-06	1.27E-05	5.72E-08	--	1.36E-04
Thallium	1.50E-02	2.80E-03	2.41E-03	1.43E-03	1.75E-05	1.25E-03	4.00E-07	--	--
Tin	1.63E-02	1.73E-03	1.34E-03	2.08E-03	5.64E-06	1.41E-03	3.82E-06	--	1.69E-02
Vanadium	1.56E-03	9.03E-05	1.05E-05	4.21E-06	1.64E-07	1.41E-04	1.03E-07	2.42E-06	2.62E-05
Zinc	6.78E-02	3.10E-02	4.92E-02	3.31E-05	9.04E-05	5.61E-03	4.98E-04	2.61E-03	8.42E-02

Table M.101 - Detailed Project Alone Exposure Point Concentrations for the Sports Fields Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	3.35E-07	7.26E-08	1.65E-08	3.64E-10	1.23E-08	2.41E-06	4.06E-08	9.90E-09	4.90E-09
Acenaphthylene	7.85E-08	1.51E-08	3.86E-09	1.57E-10	1.01E-08	1.77E-06	2.97E-08	7.19E-09	5.04E-09
Anthracene	3.31E-07	3.30E-08	1.62E-08	2.23E-10	2.74E-09	2.57E-06	4.33E-08	1.00E-08	4.34E-09
Fluoranthene	3.27E-06	2.34E-07	1.60E-07	2.10E-09	2.78E-08	5.46E-05	9.18E-07	2.04E-07	1.39E-07
Fluorene	3.33E-07	4.96E-08	1.63E-08	4.58E-10	2.12E-08	6.53E-06	1.10E-07	2.61E-08	1.68E-08
Phenanthrene	3.37E-06	3.56E-07	1.65E-07	2.81E-09	6.40E-08	6.80E-05	1.14E-06	2.65E-07	1.02E-07
High Molecular Weight PAHs									
Benz(a)anthracene	1.82E-07	7.97E-08	4.44E-09	3.66E-10	8.14E-10	1.17E-05	1.96E-07	4.09E-08	2.04E-08
Benzo(a)pyrene	3.22E-07	3.71E-07	3.93E-08	1.47E-09	1.35E-09	5.24E-05	9.11E-07	8.95E-07	6.77E-08
Benzo(e)pyrene	8.77E-07	2.68E-05	1.07E-07	8.61E-08	4.64E-09	7.38E-05	--	1.21E-06	6.40E-07
Benzo(a)fluorene	3.59E-07	7.65E-08	8.77E-09	6.74E-10	1.77E-08	7.01E-05	--	2.52E-07	2.23E-07
Benzo(b)fluorene	2.48E-07	1.48E-07	6.06E-09	8.30E-10	1.21E-08	4.93E-05	--	1.72E-07	3.41E-07
Benzo(b)fluoranthene	4.18E-07	2.34E-08	1.02E-08	1.86E-10	1.43E-09	5.99E-05	1.01E-06	2.03E-07	9.54E-08
Benzo(g,h,i)perylene	4.54E-06	4.06E-05	5.54E-07	1.27E-07	6.26E-09	1.13E-03	1.90E-05	1.85E-05	9.92E-07
Benzo(k)fluoranthene	3.65E-07	1.46E-07	8.91E-09	6.07E-10	3.99E-10	1.58E-05	2.66E-07	5.36E-08	2.52E-08
Chrysene	6.75E-07	8.39E-08	1.65E-08	5.06E-10	1.96E-09	3.14E-05	5.28E-07	1.10E-07	4.91E-08
Dibenz(a,c)anthracene	5.72E-07	5.36E-06	6.98E-08	1.50E-08	7.27E-09	5.67E-04	9.54E-06	9.11E-06	1.83E-06
Dibenz(a,h)anthracene	2.01E-07	3.31E-06	2.45E-08	1.03E-08	3.48E-10	2.49E-05	4.20E-07	4.08E-07	5.52E-08
Indeno(1,2,3-cd)pyrene	9.67E-07	5.53E-07	1.18E-07	1.76E-09	1.52E-09	1.87E-04	3.15E-06	3.04E-06	3.04E-07
Perylene	1.89E-07	1.99E-05	2.31E-08	6.94E-08	6.45E-10	2.07E-05	3.60E-07	3.46E-07	5.75E-08
Pyrene	1.68E-05	1.04E-06	4.10E-07	8.39E-09	3.38E-08	9.20E-05	1.55E-06	3.46E-07	1.35E-07
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	4.39E-08	5.38E-09	2.17E-08	2.00E-09	9.43E-12	1.47E-06	3.49E-08	4.52E-08	2.98E-07
PCB									
Aroclor 1254 (Total PCBs)	6.26E-05	6.10E-07	--	1.21E-06	1.74E-08	1.71E-03	--	--	4.78E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	4.78E-08	2.10E-08	5.98E-09	6.67E-07	1.07E-06	1.63E-05	4.91E-06	6.92E-07	1.29E-05
1,2,4-Trichlorobenzene	3.55E-09	7.30E-10	4.37E-10	2.84E-08	2.81E-08	3.06E-06	3.06E-08	7.59E-08	1.77E-06
1,2,4,5-Tetrachlorobenzene	1.51E-07	1.00E-08	1.84E-08	4.64E-08	2.71E-08	8.21E-06	1.46E-07	3.12E-07	8.57E-06
Pentachlorobenzene	2.34E-06	9.85E-08	5.72E-07	2.11E-07	7.44E-08	3.60E-04	6.41E-06	1.32E-05	5.52E-05
Hexachlorobenzene	6.47E-08	3.66E-09	1.58E-08	4.63E-08	2.73E-08	8.75E-05	1.56E-06	3.18E-06	2.73E-05
Pentachlorophenol	1.10E-06	2.02E-04	2.58E-06	1.35E-07	2.86E-07	6.77E-06	1.33E-07	2.50E-07	1.61E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	3.83E-11	3.66E-11	5.29E-12	4.47E-08	1.34E-07	8.12E-07	6.40E-07	3.67E-08	4.22E-07
Chloroform	8.58E-11	2.33E-10	1.93E-11	2.71E-08	2.42E-07	5.09E-07	8.95E-07	2.47E-08	1.21E-07
Dichloromethane	1.54E-08	1.06E-07	9.78E-09	2.98E-06	8.83E-05	3.53E-05	8.50E-05	1.82E-06	8.83E-06
Trichlorofluoromethane (Freon 11)	3.96E-09	5.58E-09	6.12E-10	1.61E-05	7.01E-05	3.20E-04	3.52E-04	1.49E-05	1.11E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.92E-10	2.70E-10	2.96E-11	1.41E-07	6.14E-07	3.32E-06	3.65E-06	1.54E-07	9.73E-07
Other Organics									
Bromoform	5.34E-10	8.81E-10	8.79E-11	3.89E-06	2.02E-05	1.02E-04	1.27E-04	4.77E-06	2.37E-05
O-Terphenyl	1.06E-06	1.15E-07	2.59E-07	1.49E-07	4.87E-08	3.59E-04	7.21E-06	1.28E-05	8.09E-05
Inorganics									
Antimony	5.32E-04	2.59E-04	8.51E-05	3.12E-06	3.73E-06	1.68E-04	8.61E-07	1.90E-06	7.47E-04
Arsenic	5.28E-05	2.53E-05	1.11E-06	5.99E-07	5.73E-07	1.66E-05	8.10E-08	1.72E-06	2.86E-05
Barium	3.74E-04	1.74E-04	5.45E-06	3.14E-07	2.88E-06	1.18E-04	2.40E-06	1.62E-05	2.88E-05
Beryllium	3.35E-04	2.19E-05	2.41E-06	3.98E-07	2.79E-07	2.20E-04	2.01E-05	2.91E-05	2.79E-05
Boron	2.07E-03	1.68E-02	3.31E-04	1.50E-04	2.09E-04	6.26E-04	1.14E-05	1.43E-04	--
Cadmium	2.21E-03	1.19E-03	3.37E-03	1.73E-06	9.42E-06	7.07E-04	7.81E-05	2.30E-04	1.13E-02
Chromium (Total)	1.86E-04	1.27E-04	9.09E-06	8.01E-06	3.07E-06	5.83E-05	3.11E-07	2.51E-06	6.14E-04
Chromium VI	2.64E-05	1.80E-05	1.29E-06	1.14E-06	4.42E-07	8.29E-06	4.42E-08	--	1.61E-05
Cobalt	1.12E-03	3.45E-04	2.19E-05	8.58E-05	7.89E-06	3.55E-04	3.46E-07	8.52E-07	7.89E-04
Lead	5.13E-02	5.10E-03	3.82E-03	2.43E-05	4.07E-05	3.66E-02	4.09E-04	8.83E-04	4.26E-03
Mercury - Inorganic	4.21E-03	5.09E-05	1.14E-03	1.40E-05	1.12E-06	5.69E-02	7.57E-03	6.98E-03	8.06E-04
Methyl Mercury	1.34E-04	1.44E-05	1.14E-03	1.64E-07	1.59E-08	1.22E-05	2.17E-07	5.44E-05	2.62E-03
Nickel	2.41E-02	5.63E-03	4.08E-03	4.38E-04	1.18E-04	7.66E-03	6.03E-05	2.61E-04	1.84E-02
Selenium	1.06E-05	2.69E-05	1.68E-06	6.67E-07	6.55E-07	3.27E-06	2.16E-07	2.05E-06	1.11E-04
Silver	1.22E-04	2.36E-04	3.99E-05	7.87E-06	4.57E-06	3.79E-05	1.71E-07	--	4.05E-04
Thallium	1.17E-02	2.22E-03	1.87E-03	1.19E-03	5.26E-05	3.74E-03	1.20E-06	--	--
Tin	1.27E-02	1.36E-03	1.05E-03	1.68E-03	1.97E-05	4.93E-03	1.33E-05	--	5.91E-02
Vanadium	1.21E-03	7.15E-05	8.14E-06	3.38E-06	9.25E-07	9.25E-04	5.83E-07	1.37E-05	1.48E-04
Zinc	5.28E-02	2.43E-02	3.83E-02	2.67E-05	2.71E-04	1.68E-02	1.49E-03	7.82E-03	2.52E-01

Table M.102 - Detailed Project Alone Exposure Point Concentrations for the Water Pollution Control Plant Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	4.80E-07	1.04E-07	2.36E-08	3.60E-10	5.67E-10	1.11E-07	1.87E-09	4.57E-10	2.26E-10
Acenaphthylene	1.12E-07	2.14E-08	5.53E-09	8.62E-11	6.26E-10	1.10E-07	1.85E-09	4.47E-10	3.14E-10
Anthracene	4.73E-07	4.69E-08	2.31E-08	2.68E-10	1.45E-10	1.36E-07	2.30E-09	5.31E-10	2.30E-10
Fluoranthene	4.68E-06	2.96E-07	2.29E-07	2.26E-09	1.52E-09	2.99E-06	5.04E-08	1.12E-08	7.64E-09
Fluorene	4.77E-07	7.00E-08	2.34E-08	3.22E-10	1.01E-09	3.13E-07	5.26E-09	1.25E-09	8.06E-10
Phenanthrene	4.82E-06	4.91E-07	2.36E-07	2.80E-09	3.35E-09	3.55E-06	5.98E-08	1.38E-08	5.31E-09
High Molecular Weight PAHs									
Benz(a)anthracene	2.60E-07	9.17E-08	6.34E-09	4.17E-10	5.13E-11	7.35E-07	1.24E-08	2.58E-09	1.29E-09
Benzo(a)pyrene	4.60E-07	3.61E-07	5.61E-08	1.43E-09	9.48E-11	3.67E-06	6.39E-08	6.27E-08	4.75E-09
Benzo(e)pyrene	1.25E-06	1.75E-05	1.53E-07	5.63E-08	3.09E-10	4.93E-06	--	8.10E-08	4.27E-08
Benzo(a)fluorene	5.14E-07	6.86E-08	1.25E-08	4.09E-10	9.38E-10	3.72E-06	--	1.34E-08	1.18E-08
Benzo(b)fluorene	3.55E-07	1.07E-07	8.66E-09	5.11E-10	6.51E-10	2.64E-06	--	9.23E-09	1.83E-08
Benzo(b)fluoranthene	5.97E-07	2.51E-08	1.46E-08	2.04E-10	9.66E-11	4.05E-06	6.81E-08	1.37E-08	6.44E-09
Benzo(g,h,i)perylene	6.49E-06	2.65E-05	7.92E-07	8.36E-08	5.79E-10	1.04E-04	1.76E-06	1.71E-06	9.18E-08
Benzo(k)fluoranthene	5.21E-07	1.34E-07	1.27E-08	5.83E-10	3.44E-11	1.37E-06	2.30E-08	4.63E-09	2.17E-09
Chrysene	9.64E-07	1.11E-07	2.35E-08	6.44E-10	1.20E-10	1.92E-06	3.23E-08	6.74E-09	3.01E-09
Dibenz(a,c)anthracene	8.18E-07	4.70E-06	9.98E-08	1.31E-08	5.41E-10	4.22E-05	7.09E-07	6.77E-07	1.36E-07
Dibenz(a,h)anthracene	2.87E-07	2.21E-06	3.50E-08	6.93E-09	2.88E-11	2.06E-06	3.47E-08	3.37E-08	4.56E-09
Indeno(1,2,3-cd)pyrene	1.38E-06	7.23E-07	1.68E-07	2.29E-09	1.34E-10	2.77E-07	2.67E-07	2.67E-07	2.67E-08
Perylene	2.70E-07	1.30E-05	3.30E-08	4.53E-08	4.69E-11	1.51E-06	2.62E-08	2.52E-08	4.18E-09
Pyrene	2.39E-05	1.44E-06	5.84E-07	1.11E-08	2.41E-09	6.56E-06	1.10E-07	2.47E-08	9.60E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	6.92E-08	4.71E-09	3.43E-08	2.15E-09	1.50E-12	2.33E-07	5.62E-09	7.16E-09	4.73E-08
PCB									
Aroclor 1254 (Total PCBs)	8.91E-05	7.25E-07	--	1.64E-06	2.15E-09	2.11E-04	--	--	4.22E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.84E-08	2.97E-08	8.56E-09	3.22E-08	4.23E-08	6.41E-07	1.93E-07	2.72E-08	5.08E-07
1,2,4-Trichlorobenzene	5.08E-09	9.98E-10	6.25E-10	1.50E-09	1.13E-09	7.52E-08	1.23E-09	3.06E-09	7.15E-08
1,2,4,5-Tetrachlorobenzene	2.16E-07	1.42E-08	2.63E-08	1.29E-08	1.79E-09	5.42E-07	9.67E-09	2.06E-08	5.66E-07
Pentachlorobenzene	3.35E-06	1.37E-07	8.18E-07	1.37E-07	3.25E-09	1.57E-05	2.80E-07	5.77E-07	2.41E-06
Hexachlorobenzene	9.26E-08	4.05E-09	2.26E-08	5.57E-09	1.15E-09	3.68E-06	6.56E-08	1.34E-07	1.15E-06
Pentachlorophenol	1.58E-06	1.32E-04	3.69E-06	8.79E-08	9.85E-08	2.33E-06	4.58E-08	8.62E-08	5.54E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	5.47E-11	5.16E-11	7.56E-12	1.90E-09	5.65E-09	3.43E-08	2.71E-08	1.55E-09	1.79E-08
Chloroform	1.23E-10	3.33E-10	2.76E-11	1.07E-09	9.43E-09	1.98E-08	3.49E-08	9.60E-10	4.73E-09
Dichloromethane	2.20E-08	1.51E-07	1.40E-08	1.13E-07	3.29E-06	1.32E-06	3.17E-06	6.79E-08	3.29E-07
Trichlorofluoromethane (Freon 11)	5.67E-09	7.93E-09	8.76E-10	6.86E-07	2.99E-06	1.36E-05	1.50E-05	6.33E-07	4.73E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.74E-10	3.83E-10	4.23E-11	5.93E-09	2.57E-08	1.39E-07	1.53E-07	6.44E-09	4.07E-08
Other Organics									
Bromoform	7.63E-10	1.26E-09	1.26E-10	1.66E-07	8.63E-07	4.35E-06	5.41E-06	2.04E-07	1.01E-06
O-Terphenyl	1.52E-06	9.53E-08	3.70E-07	7.64E-08	2.53E-09	1.86E-05	4.17E-07	6.64E-07	4.20E-06
Inorganics									
Antimony	8.43E-04	4.06E-04	1.35E-04	4.72E-06	1.54E-06	6.95E-05	3.56E-07	7.85E-07	3.09E-04
Arsenic	8.36E-05	3.94E-05	1.75E-06	8.83E-07	2.37E-07	6.87E-06	3.35E-08	7.10E-07	1.18E-05
Barium	5.93E-04	2.72E-04	8.64E-06	4.72E-07	1.19E-06	4.89E-05	9.91E-07	6.68E-06	1.19E-05
Beryllium	5.30E-04	3.42E-05	3.82E-06	6.11E-07	6.71E-08	5.30E-05	4.85E-06	7.01E-06	6.71E-06
Boron	3.28E-03	2.64E-02	5.25E-04	2.29E-04	8.62E-05	2.59E-04	4.69E-06	5.92E-05	--
Cadmium	3.50E-03	1.88E-03	5.34E-03	2.68E-06	3.86E-06	2.90E-04	3.21E-05	9.43E-05	4.65E-03
Chromium (Total)	2.94E-04	1.97E-04	1.44E-05	1.17E-05	1.27E-06	2.41E-05	1.28E-07	1.04E-06	2.54E-04
Chromium VI	4.19E-05	2.80E-05	2.05E-06	1.67E-06	1.80E-07	3.43E-06	1.83E-08	--	6.67E-06
Cobalt	1.78E-03	5.38E-04	3.48E-05	1.27E-04	3.26E-06	1.47E-04	1.43E-07	3.52E-07	3.26E-04
Lead	8.13E-02	7.99E-03	6.05E-03	3.75E-05	9.28E-06	8.35E-03	9.33E-05	2.01E-04	9.71E-04
Mercury - Inorganic	4.92E-03	6.71E-05	1.33E-03	1.64E-05	9.01E-08	4.57E-03	8.26E-04	5.61E-04	6.48E-05
Methyl Mercury	2.13E-04	1.89E-05	1.81E-03	2.30E-07	1.28E-09	9.98E-06	1.78E-07	4.45E-05	2.11E-04
Nickel	3.82E-02	8.77E-03	6.47E-03	6.53E-04	4.86E-05	1.68E-03	2.48E-05	1.07E-04	7.58E-03
Selenium	1.69E-05	4.19E-05	2.66E-06	9.73E-07	2.70E-07	1.35E-06	8.93E-08	8.47E-07	4.60E-05
Silver	1.93E-04	3.68E-04	6.33E-05	1.17E-05	1.89E-06	1.57E-05	7.05E-08	--	1.67E-04
Thallium	1.85E-02	3.45E-03	2.97E-03	1.76E-03	2.16E-05	1.54E-03	4.93E-07	--	--
Tin	2.01E-02	2.13E-03	1.66E-03	2.57E-03	6.96E-06	1.74E-03	4.70E-06	--	2.09E-02
Vanadium	1.92E-03	1.11E-04	1.29E-05	5.19E-06	2.02E-07	2.02E-04	1.27E-07	2.98E-06	3.23E-05
Zinc	8.36E-02	3.82E-02	6.07E-02	4.08E-05	1.12E-04	6.91E-03	6.14E-04	3.22E-03	1.04E-01

Table M.103 - Detailed Project Alone Exposure Point Concentrations for the Future Industrial Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	8.34E-07	1.80E-07	4.11E-08	6.26E-10	9.86E-10	1.93E-07	3.25E-09	7.93E-10	3.92E-10
Acenaphthylene	1.95E-07	3.70E-08	9.60E-09	1.49E-10	1.09E-09	1.91E-07	3.21E-09	7.77E-10	5.45E-10
Anthracene	8.22E-07	8.13E-08	4.02E-08	4.65E-10	2.52E-10	2.37E-07	3.99E-09	9.23E-10	4.00E-10
Fluoranthene	8.14E-06	4.87E-07	3.97E-07	3.83E-09	2.65E-09	5.20E-06	8.75E-08	1.94E-08	1.33E-08
Fluorene	8.29E-07	1.21E-07	4.06E-08	5.57E-10	1.76E-09	5.43E-07	9.14E-09	2.17E-09	1.40E-09
Phenanthrene	8.38E-06	8.41E-07	4.10E-07	4.82E-09	5.82E-09	6.17E-06	1.04E-07	2.40E-08	9.22E-09
High Molecular Weight PAHs									
Benz(a)anthracene	4.52E-07	1.45E-07	1.10E-08	6.65E-10	8.91E-11	1.28E-06	2.15E-08	4.48E-09	2.24E-09
Benzo(a)pyrene	8.00E-07	5.14E-07	9.75E-08	2.06E-09	1.65E-10	6.38E-06	1.11E-07	1.09E-07	8.25E-09
Benzo(e)pyrene	2.18E-06	1.65E-05	2.66E-07	5.31E-08	5.38E-10	8.56E-06	--	1.41E-07	7.42E-08
Benzo(a)fluorene	8.94E-07	9.20E-08	2.18E-08	5.99E-10	1.63E-09	6.46E-06	--	2.32E-08	2.05E-08
Benzo(b)fluorene	6.17E-07	1.17E-07	1.51E-08	6.10E-10	1.13E-09	4.59E-06	--	1.60E-08	3.18E-08
Benzo(b)fluoranthene	1.04E-06	3.81E-08	2.53E-08	3.34E-10	1.68E-10	7.03E-06	1.18E-07	2.38E-08	1.12E-08
Benzo(g,h,i)perylene	1.13E-05	2.50E-05	1.38E-06	7.95E-08	1.01E-09	1.81E-04	3.05E-06	2.97E-06	1.59E-07
Benzo(k)fluoranthene	9.06E-07	1.82E-07	2.21E-08	8.28E-10	5.99E-11	2.38E-06	4.00E-08	8.04E-09	3.78E-09
Chrysene	1.68E-06	1.87E-07	4.09E-08	1.10E-09	2.08E-10	3.34E-06	5.62E-08	1.17E-08	5.23E-09
Dibenz(a,c)anthracene	1.42E-06	6.20E-06	1.73E-07	1.72E-08	9.39E-10	7.33E-05	1.23E-06	1.18E-06	2.36E-07
Dibenz(a,h)anthracene	4.99E-07	2.16E-06	6.08E-08	6.80E-09	5.00E-11	3.58E-06	6.03E-08	5.86E-08	7.93E-09
Indeno(1,2,3-cd)pyrene	2.40E-06	1.21E-06	2.93E-07	3.85E-09	2.32E-10	2.86E-05	4.81E-07	4.63E-07	4.64E-08
Perylene	4.70E-07	1.22E-05	5.73E-08	4.26E-08	8.15E-11	2.62E-06	4.55E-08	4.37E-08	7.26E-09
Pyrene	4.16E-05	2.46E-06	1.02E-06	1.91E-08	4.19E-09	1.14E-05	1.92E-07	4.29E-08	1.67E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.27E-07	6.25E-09	6.30E-08	3.31E-09	2.74E-12	4.26E-07	1.02E-08	1.31E-08	8.65E-08
PCB									
Aroclor 1254 (Total PCBs)	1.55E-04	1.16E-06	--	2.82E-06	3.74E-09	3.67E-04	--	--	7.33E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.19E-07	5.14E-08	1.49E-08	5.59E-08	7.34E-08	1.11E-06	3.36E-07	4.73E-08	8.83E-07
1,2,4-Trichlorobenzene	8.83E-09	1.71E-09	1.09E-09	2.61E-09	1.97E-09	1.31E-07	2.14E-09	5.32E-09	1.24E-07
1,2,4,5-Tetrachlorobenzene	3.75E-07	2.45E-08	4.57E-08	2.23E-08	3.11E-09	9.42E-07	1.68E-08	3.58E-08	9.83E-07
Pentachlorobenzene	5.82E-06	2.35E-07	1.42E-06	2.37E-07	5.65E-09	2.73E-05	4.87E-07	1.00E-06	4.19E-06
Hexachlorobenzene	1.61E-07	6.24E-09	3.93E-08	9.35E-09	2.00E-09	6.39E-06	1.14E-07	2.32E-07	2.00E-06
Pentachlorophenol	2.74E-06	1.24E-04	6.41E-06	8.29E-08	1.71E-07	4.05E-06	7.95E-08	1.50E-07	9.63E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	9.52E-11	8.92E-11	1.32E-11	3.30E-09	9.82E-09	5.97E-08	4.71E-08	2.70E-09	3.11E-08
Chloroform	2.13E-10	5.77E-10	4.79E-11	1.85E-09	1.64E-08	3.44E-08	6.06E-08	1.67E-09	8.21E-09
Dichloromethane	3.83E-08	2.63E-07	2.43E-08	1.96E-07	5.73E-06	2.29E-06	5.51E-06	1.18E-07	5.73E-07
Trichlorofluoromethane (Freon 11)	9.86E-09	1.37E-08	1.52E-09	1.19E-06	5.19E-06	2.37E-05	2.61E-05	1.10E-06	8.23E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	4.77E-10	6.65E-10	7.36E-11	1.03E-08	4.47E-08	2.41E-07	2.66E-07	1.12E-08	7.08E-08
Other Organics									
Bromoform	1.33E-09	2.19E-09	2.19E-10	2.89E-07	1.50E-06	7.56E-06	9.41E-06	3.55E-07	1.76E-06
O-Terphenyl	2.64E-06	1.20E-07	6.44E-07	1.14E-07	4.39E-09	3.24E-05	7.09E-07	1.15E-06	7.29E-06
Inorganics									
Antimony	1.54E-03	7.42E-04	2.47E-04	8.63E-06	2.82E-06	1.27E-04	6.51E-07	1.44E-06	5.65E-04
Arsenic	1.53E-04	7.20E-05	3.21E-06	1.61E-06	4.33E-07	1.26E-05	6.13E-08	1.30E-06	2.17E-05
Barium	1.09E-03	4.97E-04	1.58E-05	8.63E-07	2.18E-06	8.94E-05	1.81E-06	1.22E-05	2.18E-05
Beryllium	9.70E-04	6.24E-05	6.99E-06	1.12E-06	1.23E-07	9.70E-05	8.87E-06	1.28E-05	1.23E-05
Boron	6.00E-03	4.82E-02	9.60E-04	4.19E-04	1.58E-04	4.73E-04	8.59E-06	1.08E-04	--
Cadmium	6.40E-03	3.44E-03	9.75E-03	4.90E-06	7.07E-06	5.30E-04	5.86E-05	1.73E-04	8.50E-03
Chromium (Total)	5.39E-04	3.60E-04	2.64E-05	2.14E-05	2.32E-06	4.41E-05	2.35E-07	1.90E-06	4.64E-04
Chromium VI	7.66E-05	5.12E-05	3.75E-06	3.05E-06	3.30E-07	6.27E-06	3.34E-08	--	1.22E-05
Cobalt	3.26E-03	9.82E-04	6.36E-05	2.32E-04	5.97E-06	2.69E-04	2.62E-07	6.45E-07	5.97E-04
Lead	1.49E-01	1.46E-02	1.11E-02	6.86E-05	1.70E-05	1.53E-02	1.71E-04	3.68E-04	1.78E-03
Mercury - Inorganic	7.87E-03	1.15E-04	2.13E-03	2.66E-05	1.44E-07	7.31E-03	1.29E-03	8.98E-04	1.04E-04
Methyl Mercury	3.89E-04	3.24E-05	3.31E-03	4.03E-07	2.05E-09	1.83E-05	3.25E-07	8.14E-05	3.37E-04
Nickel	6.98E-02	1.60E-02	1.18E-02	1.19E-03	8.89E-05	5.78E-03	4.55E-05	1.96E-04	1.39E-02
Selenium	3.08E-05	7.65E-05	4.86E-06	1.78E-06	4.95E-07	2.47E-06	1.63E-07	1.55E-06	8.41E-05
Silver	3.54E-04	6.72E-04	1.16E-04	2.14E-05	3.46E-06	2.87E-05	1.29E-07	--	3.06E-04
Thallium	3.39E-02	6.31E-03	5.43E-03	3.22E-03	3.96E-05	2.81E-03	9.02E-07	--	--
Tin	3.67E-02	3.89E-03	3.03E-03	4.70E-03	1.27E-05	3.18E-03	8.61E-06	--	3.82E-02
Vanadium	3.51E-03	2.03E-04	2.36E-05	9.49E-06	3.69E-07	3.69E-04	2.33E-07	5.45E-06	5.91E-05
Zinc	1.53E-01	6.98E-02	1.11E-01	7.47E-05	2.04E-04	1.26E-02	1.12E-03	5.90E-03	1.90E-01

Table M.104 - Detailed Project Alone Exposure Point Concentrations for the Harmony Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	7.00E-08	1.52E-08	3.45E-09	5.22E-11	3.77E-11	7.39E-09	1.24E-10	3.03E-11	1.50E-11
Acenaphthylene	1.64E-08	3.18E-09	8.06E-10	1.30E-11	1.21E-10	2.13E-08	3.58E-10	8.67E-11	6.08E-11
Anthracene	6.90E-08	6.93E-09	3.38E-09	3.93E-11	1.56E-11	1.47E-08	2.47E-10	5.72E-11	2.48E-11
Fluoranthene	6.83E-07	5.34E-08	3.34E-08	3.70E-10	1.72E-10	3.37E-07	5.68E-09	1.26E-09	8.61E-10
Fluorene	6.96E-08	1.05E-08	3.41E-09	4.68E-11	6.47E-11	2.00E-08	3.36E-10	7.98E-11	5.14E-11
Phenanthrene	7.03E-07	7.63E-08	3.44E-08	4.22E-10	3.24E-10	3.44E-07	5.79E-09	1.34E-09	5.14E-10
High Molecular Weight PAHs									
Benz(a)anthracene	3.79E-08	1.91E-08	9.25E-10	8.38E-11	4.45E-12	6.37E-08	1.07E-09	2.23E-10	1.12E-10
Benzo(a)pyrene	6.72E-08	9.68E-08	8.19E-09	3.75E-10	4.80E-12	1.86E-07	3.24E-09	3.18E-09	2.41E-10
Benzo(e)pyrene	1.83E-07	8.04E-06	2.23E-08	2.58E-08	3.26E-11	5.19E-07	--	8.53E-09	4.50E-09
Benzo(a)fluorene	7.50E-08	2.07E-08	1.83E-09	1.03E-10	7.63E-11	3.03E-07	--	1.09E-09	9.61E-10
Benzo(b)fluorene	5.18E-08	4.32E-08	1.26E-09	1.84E-10	5.55E-11	2.26E-07	--	7.88E-10	1.56E-09
Benzo(b)fluoranthene	8.72E-08	5.86E-09	2.13E-09	3.78E-11	5.18E-12	2.17E-07	3.65E-09	7.33E-10	3.45E-10
Benzo(g,h,i)perylene	9.48E-07	1.22E-05	1.16E-07	3.81E-08	1.82E-11	3.27E-06	5.51E-08	5.35E-08	2.88E-09
Benzo(k)fluoranthene	7.62E-08	3.93E-08	1.86E-09	1.58E-10	3.34E-12	1.33E-07	2.23E-09	4.49E-10	2.11E-10
Chrysene	1.41E-07	1.84E-08	3.43E-09	1.03E-10	9.65E-12	1.55E-07	2.61E-09	5.43E-10	2.42E-10
Dibenz(a,c)anthracene	1.19E-07	1.46E-06	1.46E-08	4.07E-09	1.36E-11	1.06E-06	1.79E-08	1.71E-08	3.43E-09
Dibenz(a,h)anthracene	4.19E-08	9.86E-07	5.11E-09	3.07E-09	1.43E-12	1.03E-07	1.73E-09	1.68E-09	2.27E-10
Indeno(1,2,3-cd)pyrene	2.02E-07	1.22E-07	2.46E-08	3.84E-10	4.77E-12	5.88E-07	9.89E-09	9.52E-09	9.53E-10
Perylene	3.95E-08	5.98E-06	4.81E-09	2.08E-08	3.56E-12	1.14E-07	1.99E-09	1.91E-09	3.18E-10
Pyrene	3.50E-06	2.24E-07	8.54E-08	1.68E-09	5.69E-10	1.55E-06	2.61E-08	5.82E-09	2.27E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.11E-08	1.60E-09	5.44E-09	5.67E-10	1.43E-13	2.23E-08	5.39E-10	6.85E-10	4.52E-09
PCB									
Aroclor 1254 (Total PCBs)	1.30E-05	1.44E-07	--	2.53E-07	2.18E-10	2.14E-05	--	--	3.00E-05
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	9.97E-09	4.41E-09	1.25E-09	1.79E-09	1.43E-09	2.16E-08	6.53E-09	9.20E-10	1.72E-08
1,2,4-Trichlorobenzene	7.41E-10	1.58E-10	9.12E-11	1.09E-10	5.18E-11	3.44E-09	5.64E-11	1.40E-10	3.27E-09
1,2,4,5-Tetrachlorobenzene	3.15E-08	2.11E-09	3.84E-09	1.95E-09	2.91E-10	8.82E-08	1.57E-09	3.35E-09	9.21E-08
Pentachlorobenzene	4.89E-07	2.10E-08	1.19E-07	2.00E-08	1.55E-10	7.49E-07	1.34E-08	2.75E-08	1.15E-07
Hexachlorobenzene	1.35E-08	9.02E-10	3.30E-09	7.60E-10	4.65E-11	1.49E-07	2.65E-09	5.40E-09	4.65E-08
Pentachlorophenol	2.30E-07	6.05E-05	5.38E-07	4.05E-08	8.14E-08	1.93E-06	3.78E-08	7.12E-08	4.58E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	7.99E-12	7.71E-12	1.10E-12	5.13E-11	1.51E-10	9.18E-10	7.24E-10	4.15E-11	4.78E-10
Chloroform	1.79E-11	4.89E-11	4.02E-12	3.03E-11	2.56E-10	5.37E-10	9.46E-10	2.60E-11	1.28E-10
Dichloromethane	3.21E-09	2.21E-08	2.04E-09	3.19E-09	8.79E-08	3.51E-08	8.46E-08	1.81E-09	8.79E-09
Trichlorofluoromethane (Freon 11)	8.28E-10	1.17E-09	1.28E-10	1.80E-08	7.79E-08	3.56E-07	3.92E-07	1.65E-08	1.23E-07
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	4.00E-11	5.66E-11	6.18E-12	1.63E-10	6.91E-10	3.73E-09	4.11E-09	1.73E-10	1.10E-09
Other Organics									
Bromoform	1.11E-10	1.84E-10	1.84E-11	4.29E-09	2.22E-08	1.12E-07	1.40E-07	5.26E-09	2.61E-08
O-Terphenyl	2.21E-07	3.20E-08	5.40E-08	1.82E-08	1.44E-10	1.06E-06	2.63E-08	3.79E-08	2.40E-07
Inorganics									
Antimony	1.34E-04	7.22E-05	2.15E-05	8.72E-07	1.41E-06	6.34E-05	3.25E-07	7.16E-07	2.82E-04
Arsenic	1.33E-05	7.43E-06	2.80E-07	1.77E-07	2.16E-07	6.28E-06	3.06E-08	6.48E-07	1.08E-05
Barium	9.46E-05	4.92E-05	1.38E-06	8.90E-08	1.09E-06	4.46E-05	9.05E-07	6.10E-06	1.09E-05
Beryllium	8.47E-05	6.36E-06	6.10E-07	1.08E-07	5.30E-08	4.19E-05	3.83E-06	5.54E-06	5.30E-06
Boron	5.23E-04	4.63E-03	8.37E-05	4.18E-05	7.88E-05	2.37E-04	4.29E-06	5.42E-05	--
Cadmium	5.58E-04	3.19E-04	8.52E-04	4.63E-07	3.52E-06	2.64E-04	2.92E-05	8.59E-05	4.23E-03
Chromium (Total)	4.69E-05	3.76E-05	2.30E-06	2.40E-06	1.16E-06	2.20E-05	1.17E-07	9.48E-07	2.32E-04
Chromium VI	6.68E-06	5.35E-06	3.27E-07	3.42E-07	1.65E-07	3.13E-06	1.67E-08	--	6.09E-06
Cobalt	2.84E-04	1.02E-04	5.55E-06	2.52E-05	2.98E-06	1.34E-04	1.31E-07	3.22E-07	2.98E-04
Lead	1.30E-02	1.41E-03	9.66E-04	6.46E-06	7.18E-06	6.46E-03	7.22E-05	1.56E-04	7.52E-04
Mercury - Inorganic	9.97E-04	1.52E-05	2.70E-04	3.42E-06	1.27E-08	6.46E-04	1.21E-04	7.94E-05	9.16E-06
Methyl Mercury	3.39E-05	4.28E-06	2.88E-04	4.65E-08	1.81E-10	2.74E-06	4.88E-08	1.22E-05	2.98E-05
Nickel	6.09E-03	1.64E-03	1.03E-03	1.27E-04	4.43E-05	2.88E-03	2.27E-05	9.78E-05	6.91E-03
Selenium	2.69E-06	7.99E-06	4.24E-07	2.02E-07	2.47E-07	1.24E-06	8.16E-08	7.74E-07	4.20E-05
Silver	3.08E-05	6.78E-05	1.01E-05	2.30E-06	1.73E-06	1.43E-05	6.45E-08	--	1.53E-04
Thallium	2.96E-03	6.58E-04	4.73E-04	3.48E-04	1.97E-05	1.40E-03	4.49E-07	--	--
Tin	3.21E-03	3.87E-04	2.64E-04	4.63E-04	6.14E-06	1.53E-03	4.15E-06	--	1.84E-02
Vanadium	3.06E-04	2.09E-05	1.53E-06	9.18E-07	1.53E-07	1.53E-04	9.67E-08	2.26E-06	2.45E-05
Zinc	1.33E-02	6.64E-03	9.69E-03	7.29E-06	1.02E-04	6.30E-03	5.60E-04	2.94E-03	9.47E-02

Table M.105 - Detailed Project Alone Exposure Point Concentrations for the Farewell Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	7.87E-08	1.70E-08	3.88E-09	6.21E-11	4.07E-10	7.98E-08	1.34E-09	3.27E-10	1.62E-10
Acenaphthylene	1.84E-08	3.56E-09	9.06E-10	1.82E-11	4.93E-10	8.66E-08	1.46E-09	3.53E-10	2.47E-10
Anthracene	7.76E-08	7.77E-09	3.79E-09	4.56E-11	1.31E-10	1.23E-07	2.08E-09	4.81E-10	2.08E-10
Fluoranthene	7.68E-07	5.77E-08	3.75E-08	4.34E-10	1.87E-09	3.67E-06	6.18E-08	1.37E-08	9.37E-09
Fluorene	7.82E-08	1.17E-08	3.84E-09	6.28E-11	9.86E-10	3.04E-07	5.12E-09	1.22E-09	7.83E-10
Phenanthrene	7.90E-07	8.47E-08	3.87E-08	5.21E-10	4.05E-09	4.29E-06	7.22E-08	1.67E-08	6.41E-09
High Molecular Weight PAHs									
Benz(a)anthracene	4.26E-08	2.02E-08	1.04E-09	8.99E-11	5.04E-11	7.22E-07	1.21E-08	2.53E-09	1.27E-09
Benzo(a)pyrene	7.55E-08	9.88E-08	9.21E-09	3.86E-10	6.74E-11	2.61E-06	4.54E-08	4.46E-08	3.38E-09
Benzo(e)pyrene	2.06E-07	7.81E-06	2.51E-08	2.51E-08	2.95E-10	4.70E-06	--	7.72E-08	4.07E-08
Benzo(a)fluorene	8.43E-08	2.09E-08	2.06E-09	1.23E-10	1.03E-09	4.09E-06	--	1.47E-08	1.30E-08
Benzo(b)fluorene	5.82E-08	4.24E-08	1.42E-09	1.94E-10	7.71E-10	3.13E-06	--	1.09E-08	2.17E-08
Benzo(b)fluoranthene	9.80E-08	6.09E-09	2.39E-09	4.22E-11	5.19E-11	2.18E-06	3.66E-08	7.35E-09	3.46E-09
Benzo(g,h,i)perylene	1.07E-06	1.18E-05	1.30E-07	3.70E-08	2.38E-10	4.30E-05	7.23E-07	7.03E-07	3.78E-08
Benzo(k)fluoranthene	8.56E-08	3.97E-08	2.09E-09	1.61E-10	2.16E-11	8.57E-07	1.44E-08	2.90E-09	1.36E-09
Chrysene	1.58E-07	2.01E-08	3.86E-09	1.15E-10	7.80E-11	1.25E-06	2.11E-08	4.39E-09	1.96E-09
Dibenz(a,c)anthracene	1.34E-07	1.47E-06	1.64E-08	4.10E-09	3.05E-10	2.38E-05	4.01E-07	3.82E-07	7.67E-08
Dibenz(a,h)anthracene	4.71E-08	9.60E-07	5.74E-09	3.00E-09	1.56E-11	1.12E-06	1.88E-08	1.83E-08	2.48E-09
Indeno(1,2,3-cd)pyrene	2.27E-07	1.33E-07	2.76E-08	4.22E-10	6.10E-11	7.50E-06	1.26E-07	1.22E-07	1.22E-08
Perylene	4.44E-08	5.81E-06	5.41E-09	2.02E-08	3.49E-11	1.12E-06	1.95E-08	1.87E-08	3.11E-09
Pyrene	3.93E-06	2.48E-07	9.60E-08	1.91E-09	2.64E-09	7.18E-06	1.21E-07	2.70E-08	1.05E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.20E-08	1.58E-09	5.90E-09	5.76E-10	5.10E-13	7.94E-08	1.92E-09	2.44E-09	1.61E-08
PCB									
Aroclor 1254 (Total PCBs)	1.47E-05	1.53E-07	--	2.84E-07	6.81E-10	6.68E-05	--	--	1.34E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.12E-08	4.94E-09	1.40E-09	1.49E-08	2.26E-08	3.42E-07	1.03E-07	1.45E-08	2.71E-07
1,2,4-Trichlorobenzene	8.33E-10	1.74E-10	1.02E-10	6.61E-10	5.95E-10	3.95E-08	6.48E-10	1.61E-09	3.75E-08
1,2,4,5-Tetrachlorobenzene	3.53E-08	2.37E-09	4.32E-09	2.73E-09	7.04E-10	2.13E-07	3.80E-09	8.09E-09	2.22E-07
Pentachlorobenzene	5.49E-07	2.34E-08	1.34E-07	2.53E-08	1.81E-09	8.77E-06	1.56E-07	3.22E-07	1.34E-06
Hexachlorobenzene	1.52E-08	9.45E-10	3.70E-09	1.85E-09	6.39E-10	2.05E-06	3.65E-08	7.43E-08	6.39E-07
Pentachlorophenol	2.58E-07	5.88E-05	6.05E-07	3.94E-08	8.58E-08	2.03E-06	3.99E-08	7.51E-08	4.83E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	8.98E-12	8.62E-12	1.24E-12	9.80E-10	2.93E-09	1.78E-08	1.40E-08	8.05E-10	9.26E-09
Chloroform	2.01E-11	5.48E-11	4.52E-12	5.39E-10	4.80E-09	1.01E-08	1.78E-08	4.89E-10	2.41E-09
Dichloromethane	3.61E-09	2.48E-08	2.29E-09	5.59E-08	1.65E-06	6.59E-07	1.59E-06	3.40E-08	1.65E-07
Trichlorofluoromethane (Freon 11)	9.30E-10	1.31E-09	1.44E-10	3.49E-07	1.52E-06	6.95E-06	7.65E-06	3.22E-07	2.41E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	4.50E-11	6.35E-11	6.94E-12	3.06E-09	1.33E-08	7.19E-08	7.91E-08	3.34E-09	2.11E-08
Other Organics									
Bromoform	1.25E-10	2.07E-10	2.06E-11	8.37E-08	4.35E-07	2.19E-06	2.73E-06	1.03E-07	5.11E-07
O-Terphenyl	2.49E-07	3.19E-08	6.07E-08	2.29E-08	2.22E-09	1.64E-05	3.68E-07	5.83E-07	3.69E-06
Inorganics									
Antimony	1.46E-04	7.63E-05	2.33E-05	9.20E-07	1.40E-06	6.30E-05	3.23E-07	7.11E-07	2.80E-04
Arsenic	1.44E-05	7.75E-06	3.03E-07	1.85E-07	2.15E-07	6.23E-06	3.04E-08	6.44E-07	1.07E-05
Barium	1.03E-04	5.18E-05	1.49E-06	9.36E-08	1.08E-06	4.43E-05	8.98E-07	6.06E-06	1.08E-05
Beryllium	9.17E-05	6.65E-06	6.60E-07	1.15E-07	6.55E-08	5.17E-05	4.73E-06	6.84E-06	6.55E-06
Boron	5.67E-04	4.90E-03	9.07E-05	4.42E-05	7.83E-05	2.35E-04	4.26E-06	5.38E-05	--
Cadmium	6.05E-04	3.41E-04	9.23E-04	4.95E-07	3.50E-06	2.63E-04	2.91E-05	8.55E-05	4.21E-03
Chromium (Total)	5.09E-05	3.91E-05	2.49E-06	2.50E-06	1.15E-06	2.19E-05	1.17E-07	9.41E-07	2.30E-04
Chromium VI	7.23E-06	5.56E-06	3.54E-07	3.55E-07	1.64E-07	3.11E-06	1.66E-08	--	6.05E-06
Cobalt	3.08E-04	1.06E-04	6.01E-06	2.63E-05	2.96E-06	1.33E-04	1.30E-07	3.19E-07	2.96E-04
Lead	1.40E-02	1.49E-03	1.05E-03	6.91E-06	9.13E-06	8.22E-03	9.18E-05	1.98E-04	9.56E-04
Mercury - Inorganic	9.99E-04	1.55E-05	2.71E-04	3.47E-06	5.96E-08	3.02E-03	5.54E-04	3.71E-04	4.28E-05
Methyl Mercury	3.68E-05	4.37E-06	3.13E-04	4.83E-08	8.46E-10	3.18E-06	5.67E-08	1.42E-05	1.39E-04
Nickel	6.60E-03	1.71E-03	1.12E-03	1.33E-04	4.40E-05	2.86E-03	2.25E-05	9.73E-05	6.87E-03
Selenium	2.91E-06	8.31E-06	4.59E-07	2.09E-07	2.46E-07	1.23E-06	8.10E-08	7.68E-07	4.17E-05
Silver	3.34E-05	7.11E-05	1.09E-05	2.40E-06	1.71E-06	1.42E-05	6.40E-08	--	1.52E-04
Thallium	3.20E-03	6.84E-04	5.13E-04	3.63E-04	1.96E-05	1.39E-03	4.47E-07	--	--
Tin	3.47E-03	4.07E-04	2.86E-04	4.91E-04	6.42E-06	1.60E-03	4.34E-06	--	1.92E-02
Vanadium	3.32E-04	2.18E-05	2.23E-06	9.77E-07	2.00E-07	2.00E-04	1.26E-07	2.95E-06	3.20E-05
Zinc	1.45E-02	7.05E-03	1.05E-02	7.74E-06	1.01E-04	6.27E-03	5.57E-04	2.92E-03	9.41E-02

Table M.106 - Detailed Project Alone Exposure Point Concentrations for the Farm A Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	4.26E-07	9.21E-08	2.10E-08	4.62E-10	1.56E-08	3.06E-06	5.15E-08	1.26E-08	6.22E-09
Acenaphthylene	9.97E-08	1.91E-08	4.90E-09	1.99E-10	1.28E-08	2.24E-06	3.78E-08	9.13E-09	6.40E-09
Anthracene	4.20E-07	4.18E-08	2.05E-08	2.82E-10	3.48E-09	3.27E-06	5.50E-08	1.27E-08	5.51E-09
Fluoranthene	4.16E-06	2.81E-07	2.03E-07	2.60E-09	3.53E-08	6.93E-05	1.17E-06	2.58E-07	1.77E-07
Fluorene	4.23E-07	6.26E-08	2.08E-08	5.80E-10	2.69E-08	8.29E-06	1.40E-07	3.32E-08	2.14E-08
Phenanthrene	4.28E-06	4.44E-07	2.09E-07	3.54E-09	8.13E-08	8.63E-05	1.45E-06	3.36E-07	1.29E-07
High Molecular Weight PAHs									
Benz(a)anthracene	2.31E-07	9.17E-08	5.63E-09	4.27E-10	1.03E-09	1.48E-05	2.49E-07	5.19E-08	2.60E-08
Benzo(a)pyrene	4.09E-07	3.99E-07	4.98E-08	1.59E-09	1.72E-09	6.65E-05	1.16E-06	1.14E-06	8.60E-08
Benzo(e)pyrene	1.11E-06	2.52E-05	1.36E-07	8.11E-08	5.89E-09	9.37E-05	--	1.54E-06	8.12E-07
Benzo(a)fluorene	4.56E-07	7.99E-08	1.11E-08	7.85E-10	2.25E-08	8.90E-05	--	3.20E-07	2.83E-07
Benzo(b)fluorene	3.15E-07	1.44E-07	7.69E-09	8.77E-10	1.54E-08	6.25E-05	--	2.18E-07	4.33E-07
Benzo(b)fluoranthene	5.31E-07	2.62E-08	1.29E-08	2.23E-10	1.82E-09	7.61E-05	1.28E-06	2.57E-07	1.21E-07
Benzo(g,h,i)perylene	5.77E-06	3.82E-05	7.03E-07	1.20E-07	7.95E-09	2.41E-03	2.41E-05	2.34E-05	1.26E-06
Benzo(k)fluoranthene	4.64E-07	1.54E-07	1.13E-08	6.54E-10	5.06E-10	2.01E-05	3.38E-07	6.80E-08	3.19E-08
Chrysene	8.57E-07	1.03E-07	2.09E-08	6.27E-10	2.48E-09	3.98E-05	6.70E-07	1.40E-07	6.24E-08
Dibenz(a,c)anthracene	7.26E-07	5.55E-06	8.86E-08	1.56E-08	9.23E-09	7.20E-04	1.21E-05	1.16E-05	2.32E-06
Dibenz(a,h)anthracene	2.55E-07	3.14E-06	3.11E-08	9.81E-09	4.42E-10	3.17E-05	5.33E-07	5.18E-07	7.01E-08
Indeno(1,2,3-cd)pyrene	1.23E-06	6.73E-07	1.50E-07	2.16E-09	1.93E-09	2.38E-04	4.00E-06	3.85E-06	3.85E-07
Perylene	2.40E-07	1.88E-05	2.93E-08	6.53E-08	8.18E-10	2.63E-05	4.57E-07	4.39E-07	7.29E-08
Pyrene	2.13E-05	1.30E-06	5.20E-07	1.06E-08	4.29E-08	1.17E-04	1.96E-06	4.39E-07	1.71E-07
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	5.92E-08	5.60E-09	2.93E-08	2.27E-09	1.27E-11	1.98E-06	4.68E-08	6.10E-08	4.02E-07
PCB									
Aroclor 1254 (Total PCBs)	7.95E-05	7.13E-07	--	1.52E-06	2.21E-08	2.17E-03	--	--	6.06E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.07E-08	2.65E-08	7.59E-09	8.46E-07	1.36E-06	2.07E-05	6.23E-06	8.79E-07	1.64E-05
1,2,4-Trichlorobenzene	4.51E-09	9.07E-10	5.55E-10	3.61E-08	3.57E-08	2.37E-06	3.89E-08	9.64E-08	2.25E-06
1,2,4,5-Tetrachlorobenzene	1.91E-07	1.27E-08	2.34E-08	5.89E-08	3.44E-08	1.04E-05	1.86E-07	3.96E-07	1.09E-05
Pentachlorobenzene	2.97E-06	1.23E-07	7.26E-07	2.67E-07	9.45E-08	4.57E-04	8.14E-06	1.68E-05	7.00E-05
Hexachlorobenzene	8.22E-08	4.14E-09	2.00E-08	5.85E-08	3.47E-08	1.11E-04	1.98E-06	4.03E-06	3.47E-05
Pentachlorophenol	1.40E-06	1.90E-04	3.27E-06	1.27E-07	3.63E-07	8.60E-06	1.69E-07	3.18E-07	2.04E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	4.86E-11	4.61E-11	6.72E-12	5.67E-08	1.70E-07	1.03E-06	8.12E-07	4.66E-08	5.36E-07
Chloroform	1.09E-10	2.96E-10	2.44E-11	3.44E-08	3.07E-07	6.46E-07	1.14E-06	3.13E-08	1.54E-07
Dichloromethane	1.95E-08	1.34E-07	1.24E-08	3.78E-06	1.12E-04	4.48E-05	1.08E-04	2.31E-06	1.12E-05
Trichlorofluoromethane (Freon 11)	5.03E-09	7.06E-09	7.77E-10	2.04E-05	8.90E-05	4.07E-04	4.47E-04	1.89E-05	1.41E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.43E-10	3.41E-10	3.76E-11	1.79E-07	7.79E-07	4.21E-06	4.63E-06	1.95E-07	1.24E-06
Other Organics									
Bromoform	6.78E-10	1.12E-09	1.12E-10	4.93E-06	2.56E-05	1.29E-04	1.61E-04	6.06E-06	3.01E-05
O-Terphenyl	1.35E-06	1.17E-07	3.29E-07	1.77E-07	6.19E-08	4.56E-04	9.08E-06	1.62E-05	1.03E-04
Inorganics									
Antimony	7.18E-04	3.49E-04	1.15E-04	4.20E-06	5.04E-06	2.27E-04	1.16E-06	2.56E-06	1.01E-03
Arsenic	7.12E-05	3.40E-05	1.49E-06	8.06E-07	7.73E-07	2.24E-05	1.09E-07	2.32E-06	3.87E-05
Barium	5.05E-04	2.34E-04	7.36E-06	4.22E-07	3.89E-06	1.59E-04	3.23E-06	2.18E-05	3.89E-05
Beryllium	4.52E-04	2.95E-05	3.26E-06	5.37E-07	3.77E-07	2.98E-04	2.72E-05	3.93E-05	3.77E-05
Boron	2.79E-03	2.26E-02	4.47E-04	2.03E-04	2.82E-04	8.45E-04	1.53E-05	1.93E-04	--
Cadmium	2.98E-03	1.61E-03	4.55E-03	2.34E-06	1.27E-05	9.54E-04	1.05E-04	3.10E-04	1.53E-02
Chromium (Total)	2.51E-04	1.70E-04	1.23E-05	1.08E-05	4.14E-06	7.87E-05	4.19E-07	3.39E-06	8.28E-04
Chromium VI	3.56E-05	2.42E-05	1.75E-06	1.53E-06	5.89E-07	1.12E-05	5.97E-08	--	2.18E-05
Cobalt	1.52E-03	4.64E-04	2.96E-05	1.15E-04	1.07E-05	4.79E-04	4.67E-07	1.15E-06	1.07E-03
Lead	6.93E-02	6.86E-03	5.16E-03	3.27E-05	5.49E-05	4.94E-02	5.51E-04	1.19E-03	5.75E-03
Mercury - Inorganic	4.90E-03	6.31E-05	1.33E-03	1.65E-05	1.31E-06	6.62E-02	8.48E-03	8.13E-03	9.38E-04
Methyl Mercury	1.81E-04	1.78E-05	1.54E-03	2.09E-07	1.85E-08	1.65E-05	2.93E-07	7.34E-05	3.06E-03
Nickel	3.25E-02	7.57E-03	5.51E-03	5.89E-04	1.59E-04	1.03E-02	8.14E-05	3.52E-04	2.48E-02
Selenium	1.44E-05	3.62E-05	2.26E-06	8.97E-07	8.84E-07	4.42E-06	2.92E-07	2.77E-06	1.50E-04
Silver	1.65E-04	3.17E-04	5.39E-05	1.06E-05	6.17E-06	5.12E-05	2.30E-07	--	5.46E-04
Thallium	1.58E-02	2.99E-03	2.53E-03	1.60E-03	7.10E-05	5.04E-03	1.62E-06	--	--
Tin	1.71E-02	1.83E-03	1.41E-03	2.27E-03	2.66E-05	6.65E-03	1.80E-05	--	7.98E-02
Vanadium	1.64E-03	9.61E-05	1.10E-05	4.56E-06	1.25E-06	1.25E-03	7.87E-07	1.84E-05	2.00E-04
Zinc	7.12E-02	3.28E-02	5.17E-02	3.59E-05	3.65E-04	2.26E-02	2.01E-03	1.06E-02	3.40E-01

Table M.107 - Detailed Project Alone Exposure Point Concentrations for the Farm B Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.00E-07	4.34E-08	9.88E-09	1.57E-10	8.56E-10	1.68E-07	2.82E-09	6.89E-10	3.41E-10
Acenaphthylene	4.69E-08	9.14E-09	2.31E-09	4.49E-11	1.09E-09	1.91E-07	3.22E-09	7.79E-10	5.46E-10
Anthracene	1.98E-07	1.99E-08	9.67E-09	1.16E-10	2.74E-10	2.58E-07	4.34E-09	1.00E-09	4.35E-10
Fluoranthene	1.96E-06	1.59E-07	9.56E-08	1.13E-09	3.71E-09	7.28E-06	1.22E-07	2.71E-08	1.86E-08
Fluorene	1.99E-07	3.02E-08	9.77E-09	1.55E-10	2.01E-09	6.20E-07	1.04E-08	2.48E-09	1.60E-09
Phenanthrene	2.01E-06	2.22E-07	9.85E-08	1.31E-09	8.02E-09	8.51E-06	1.43E-07	3.31E-08	1.27E-08
High Molecular Weight PAHs									
Benz(a)anthracene	1.09E-07	5.86E-08	2.65E-09	2.57E-10	1.06E-10	1.52E-06	2.56E-08	5.34E-09	2.67E-09
Benzo(a)pyrene	1.92E-07	3.06E-07	2.35E-08	1.18E-09	1.51E-10	5.86E-06	1.02E-07	1.00E-07	7.58E-09
Benzo(e)pyrene	5.24E-07	2.64E-05	6.39E-08	8.48E-08	6.33E-10	1.01E-05	--	1.66E-07	8.74E-08
Benzo(a)fluorene	2.15E-07	6.61E-08	5.24E-09	3.52E-10	2.09E-09	8.30E-06	--	2.99E-08	2.64E-08
Benzo(b)fluorene	1.48E-07	1.41E-07	3.62E-09	6.16E-10	1.54E-09	6.27E-06	--	2.19E-08	4.35E-08
Benzo(b)fluoranthene	2.50E-07	1.82E-08	6.09E-09	1.15E-10	1.19E-10	5.00E-06	8.41E-08	1.69E-08	7.95E-09
Benzo(g,h,i)perylene	2.72E-06	4.00E-05	3.31E-07	1.25E-07	5.80E-10	1.05E-04	1.76E-06	1.71E-06	9.19E-08
Benzo(k)fluoranthene	2.18E-07	1.25E-07	5.33E-09	4.97E-10	5.05E-11	2.00E-06	3.37E-08	6.79E-09	3.19E-09
Chrysene	4.03E-07	5.45E-08	9.84E-09	3.03E-10	1.73E-10	2.78E-06	4.67E-08	9.74E-09	4.35E-09
Dibenz(a,c)anthracene	3.42E-07	4.68E-06	4.17E-08	1.30E-08	7.06E-10	5.50E-05	9.26E-07	8.85E-07	1.77E-07
Dibenz(a,h)anthracene	1.20E-07	3.24E-06	1.46E-08	1.01E-08	3.68E-11	2.63E-06	4.43E-08	4.31E-08	5.83E-09
Indeno(1,2,3-cd)pyrene	5.78E-07	3.64E-07	7.05E-08	1.14E-09	1.46E-10	1.80E-05	3.03E-07	2.92E-07	2.92E-08
Perylene	1.13E-07	1.97E-05	1.38E-08	6.84E-08	7.85E-11	2.52E-06	4.38E-08	4.21E-08	6.99E-09
Pyrene	1.00E-05	6.49E-07	2.45E-07	4.90E-09	5.49E-09	1.49E-05	2.51E-07	5.62E-08	2.19E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	2.27E-08	4.70E-09	1.12E-08	1.53E-09	1.00E-12	1.56E-07	3.78E-09	4.81E-09	3.17E-08
PCB									
Aroclor 1254 (Total PCBs)	3.74E-05	4.36E-07	--	7.32E-07	1.76E-09	1.72E-04	--	--	3.45E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	2.86E-08	1.27E-08	3.58E-09	2.98E-08	4.41E-08	6.69E-07	2.02E-07	2.84E-08	5.30E-07
1,2,4-Trichlorobenzene	2.12E-09	4.59E-10	2.61E-10	1.35E-09	1.19E-09	7.87E-08	1.29E-09	3.20E-09	7.48E-08
1,2,4,5-Tetrachlorobenzene	9.01E-08	6.08E-09	1.10E-08	6.64E-09	1.57E-09	4.77E-07	8.51E-09	1.81E-08	4.98E-07
Pentachlorobenzene	1.40E-06	6.10E-08	3.42E-07	6.26E-08	3.70E-09	1.79E-05	3.19E-07	6.57E-07	2.74E-06
Hexachlorobenzene	3.87E-08	2.78E-09	9.44E-09	4.05E-09	1.27E-09	4.06E-06	7.25E-08	1.48E-07	1.27E-06
Pentachlorophenol	6.58E-07	1.99E-04	1.54E-06	1.33E-07	2.28E-07	5.39E-06	1.06E-07	1.99E-07	1.28E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.29E-11	2.22E-11	3.16E-12	1.86E-09	5.56E-09	3.38E-08	2.66E-08	1.53E-09	1.76E-08
Chloroform	5.13E-11	1.40E-10	1.15E-11	1.04E-09	9.27E-09	1.95E-08	3.43E-08	9.44E-10	4.65E-09
Dichloromethane	9.20E-09	6.33E-08	5.85E-09	1.09E-07	3.22E-06	1.29E-06	3.10E-06	6.64E-08	3.22E-07
Trichlorofluoromethane (Freon 11)	2.37E-09	3.37E-09	3.66E-10	6.62E-07	2.88E-06	1.32E-05	1.45E-05	6.11E-07	4.57E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.15E-10	1.63E-10	1.77E-11	5.82E-09	2.53E-08	1.37E-07	1.50E-07	6.34E-09	4.01E-08
Other Organics									
Bromoform	3.19E-10	5.27E-10	5.26E-11	1.59E-07	8.24E-07	4.15E-06	5.17E-06	1.95E-07	9.68E-07
O-Terphenyl	6.34E-07	1.03E-07	1.55E-07	6.36E-08	4.65E-09	3.43E-05	7.49E-07	1.22E-06	7.72E-06
Inorganics									
Antimony	2.75E-04	1.36E-04	4.41E-05	1.67E-06	2.77E-06	1.25E-04	6.40E-07	1.41E-06	5.55E-04
Arsenic	2.73E-05	1.35E-05	5.73E-07	3.27E-07	4.26E-07	1.24E-05	6.03E-08	1.28E-06	2.13E-05
Barium	1.94E-04	9.18E-05	2.82E-06	1.69E-07	2.14E-06	8.79E-05	1.78E-06	1.20E-05	2.14E-05
Beryllium	1.74E-04	1.16E-05	1.25E-06	2.08E-07	1.21E-07	9.57E-05	8.75E-06	1.27E-05	1.21E-05
Boron	1.07E-03	8.83E-03	1.71E-04	8.04E-05	1.55E-04	4.66E-04	8.45E-06	1.07E-04	--
Cadmium	1.14E-03	6.24E-04	1.75E-03	9.13E-07	6.94E-06	5.21E-04	5.76E-05	1.69E-04	8.35E-03
Chromium (Total)	9.62E-05	6.75E-05	4.71E-06	4.39E-06	2.28E-06	4.34E-05	2.31E-07	1.87E-06	4.57E-04
Chromium VI	1.37E-05	9.60E-06	6.70E-07	6.25E-07	3.29E-07	6.17E-06	3.29E-08	--	1.20E-05
Cobalt	5.82E-04	1.84E-04	1.14E-05	4.67E-05	5.87E-06	2.64E-04	2.57E-07	6.34E-07	5.87E-04
Lead	2.66E-02	2.68E-03	1.98E-03	1.26E-05	1.67E-05	1.51E-02	1.68E-04	3.64E-04	1.75E-03
Mercury - Inorganic	2.98E-03	3.32E-05	8.06E-04	9.60E-06	1.73E-07	8.77E-03	1.53E-03	1.08E-03	1.24E-04
Methyl Mercury	6.96E-05	9.36E-06	5.91E-04	1.00E-07	2.46E-09	1.31E-05	2.33E-07	5.83E-05	4.05E-04
Nickel	1.25E-02	2.99E-03	2.11E-03	2.37E-04	8.73E-05	5.67E-03	4.46E-05	1.93E-04	1.36E-02
Selenium	5.51E-06	1.43E-05	8.68E-07	3.67E-07	4.87E-07	2.43E-06	1.61E-07	1.52E-06	8.28E-05
Silver	6.32E-05	1.25E-04	2.07E-05	4.28E-06	3.40E-06	2.82E-05	1.27E-07	--	3.01E-04
Thallium	6.06E-03	1.18E-03	9.70E-04	6.46E-04	3.88E-05	2.76E-03	8.86E-07	--	--
Tin	6.57E-03	7.19E-04	5.42E-04	8.90E-04	1.25E-05	3.13E-03	8.45E-06	--	3.75E-02
Vanadium	6.27E-04	3.80E-05	4.22E-06	1.76E-06	3.65E-07	3.65E-04	2.30E-07	5.38E-06	5.83E-05
Zinc	2.73E-02	1.28E-02	1.99E-02	1.42E-05	2.00E-04	1.24E-02	1.10E-03	5.79E-03	1.87E-01

Table M.108 - Detailed Project Alone Exposure Point Concentrations for the Farm C Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.29E-07	2.79E-08	6.36E-09	1.02E-10	6.67E-10	1.31E-07	2.20E-09	5.37E-10	2.65E-10
Acenaphthylene	3.02E-08	5.82E-09	1.49E-09	2.98E-11	8.09E-10	1.42E-07	2.39E-09	5.78E-10	4.05E-10
Anthracene	1.27E-07	1.27E-08	6.22E-09	7.47E-11	2.15E-10	2.02E-07	3.40E-09	7.88E-10	3.41E-10
Fluoranthene	1.26E-06	9.19E-08	6.15E-08	7.01E-10	3.06E-09	6.02E-06	1.01E-07	2.24E-08	1.54E-08
Fluorene	1.28E-07	1.91E-08	6.29E-09	1.03E-10	1.62E-09	4.98E-07	8.38E-09	1.99E-09	1.28E-09
Phenanthrene	1.30E-06	1.38E-07	6.34E-08	8.49E-10	6.63E-09	7.04E-06	1.18E-07	2.74E-08	1.05E-08
High Molecular Weight PAHs									
Benz(a)anthracene	6.99E-08	3.16E-08	1.71E-09	1.42E-10	8.26E-11	1.18E-06	1.99E-08	4.15E-09	2.08E-09
Benzo(a)pyrene	1.24E-07	1.51E-07	1.51E-08	5.90E-10	1.10E-10	4.28E-06	7.45E-08	7.31E-08	5.54E-09
Benzo(e)pyrene	3.37E-07	1.13E-05	4.11E-08	3.64E-08	4.84E-10	7.70E-06	--	1.27E-07	6.67E-08
Benzo(a)fluorene	1.38E-07	3.14E-08	3.37E-09	1.90E-10	1.69E-09	6.71E-06	--	2.42E-08	2.13E-08
Benzo(b)fluorene	9.55E-08	6.22E-08	2.33E-09	2.90E-10	1.26E-09	5.14E-06	--	1.79E-08	3.56E-08
Benzo(b)fluoranthene	1.61E-07	9.41E-09	3.92E-09	6.71E-11	8.51E-11	3.57E-06	6.00E-08	1.21E-08	5.68E-09
Benzo(g,h,i)perylene	1.75E-06	1.72E-05	2.13E-07	5.39E-08	3.91E-10	7.04E-05	1.19E-06	1.15E-06	6.19E-08
Benzo(k)fluoranthene	1.40E-07	5.99E-08	3.42E-09	2.45E-10	3.54E-11	1.41E-06	2.36E-08	4.76E-09	2.23E-09
Chrysene	2.59E-07	3.25E-08	6.33E-09	1.86E-10	1.28E-10	2.05E-06	3.45E-08	7.19E-09	3.21E-09
Dibenz(a,c)anthracene	2.20E-07	2.20E-06	2.68E-08	6.16E-09	5.00E-10	3.90E-05	6.57E-07	6.27E-07	1.26E-07
Dibenz(a,h)anthracene	7.72E-08	1.40E-06	9.42E-09	4.36E-09	2.56E-11	1.83E-06	3.08E-08	3.00E-08	4.06E-09
Indeno(1,2,3-cd)pyrene	3.72E-07	2.15E-07	4.53E-08	6.82E-10	9.99E-11	1.23E-05	2.07E-07	1.99E-07	1.99E-08
Perylene	7.27E-08	8.44E-06	8.87E-09	2.94E-08	5.71E-11	1.83E-06	3.19E-08	3.07E-08	5.09E-09
Pyrene	6.45E-06	4.03E-07	1.57E-07	3.11E-09	4.32E-09	1.18E-05	1.98E-07	4.42E-08	1.72E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	2.00E-08	2.38E-09	9.86E-09	8.93E-10	8.52E-13	1.33E-07	3.21E-09	4.08E-09	2.69E-08
PCB									
Aroclor 1254 (Total PCBs)	2.40E-05	2.41E-07	--	4.62E-07	1.12E-09	1.10E-04	--	--	2.19E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.84E-08	8.08E-09	2.30E-09	2.45E-08	3.70E-08	5.61E-07	1.69E-07	2.38E-08	4.45E-07
1,2,4-Trichlorobenzene	1.37E-09	2.83E-10	1.68E-10	1.08E-09	9.75E-10	6.47E-08	1.06E-09	2.64E-09	6.15E-08
1,2,4,5-Tetrachlorobenzene	5.79E-08	3.87E-09	7.08E-09	4.47E-09	1.15E-09	3.50E-07	6.23E-09	1.33E-08	3.65E-07
Pentachlorobenzene	9.01E-07	3.81E-08	2.20E-07	4.14E-08	2.97E-09	1.44E-05	2.56E-07	5.28E-07	2.20E-06
Hexachlorobenzene	2.49E-08	1.47E-09	6.07E-09	3.00E-09	1.05E-09	3.35E-06	5.98E-08	1.22E-07	1.05E-06
Pentachlorophenol	4.23E-07	8.54E-05	9.91E-07	5.72E-08	1.41E-07	3.33E-06	6.54E-08	1.23E-07	7.91E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.47E-11	1.41E-11	2.03E-12	1.61E-09	4.80E-09	2.92E-08	2.30E-08	1.32E-09	1.52E-08
Chloroform	3.30E-11	8.98E-11	7.41E-12	8.84E-10	7.88E-09	1.65E-08	2.91E-08	8.02E-10	3.95E-09
Dichloromethane	5.92E-09	4.07E-08	3.76E-09	9.16E-08	2.70E-06	1.08E-06	2.60E-06	5.57E-08	2.70E-07
Trichlorofluoromethane (Freon 11)	1.52E-09	2.15E-09	2.35E-10	5.72E-07	2.49E-06	1.14E-05	1.25E-05	5.29E-07	3.95E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	7.37E-11	1.04E-10	1.14E-11	5.02E-09	2.18E-08	1.18E-07	1.30E-07	5.47E-09	3.46E-08
Other Organics									
Bromoform	2.05E-10	3.39E-10	3.38E-11	1.37E-07	7.13E-07	3.59E-06	4.47E-06	1.69E-07	8.38E-07
O-Terphenyl	4.08E-07	4.75E-08	9.95E-08	3.56E-08	3.64E-09	2.68E-05	5.92E-07	9.55E-07	6.04E-06
Inorganics									
Antimony	2.43E-04	1.26E-04	3.89E-05	1.53E-06	2.34E-06	1.05E-04	5.39E-07	1.19E-06	4.67E-04
Arsenic	2.41E-05	1.28E-05	5.06E-07	3.05E-07	3.59E-07	1.04E-05	5.07E-08	1.07E-06	1.79E-05
Barium	1.71E-04	8.57E-05	2.49E-06	1.55E-07	1.80E-06	7.40E-05	1.50E-06	1.01E-05	1.80E-05
Beryllium	1.53E-04	1.10E-05	1.10E-06	1.91E-07	1.09E-07	8.64E-05	7.90E-06	1.14E-05	1.09E-05
Boron	9.46E-04	8.13E-03	1.51E-04	7.34E-05	1.31E-04	3.92E-04	7.12E-06	8.98E-05	--
Cadmium	1.01E-03	5.66E-04	1.54E-03	8.23E-07	5.85E-06	4.39E-04	4.85E-05	1.43E-04	7.03E-03
Chromium (Total)	8.49E-05	6.46E-05	4.16E-06	4.13E-06	1.92E-06	3.65E-05	1.95E-07	1.57E-06	3.84E-04
Chromium VI	1.21E-05	9.18E-06	5.91E-07	5.87E-07	2.73E-07	5.19E-06	2.77E-08	--	1.01E-05
Cobalt	5.14E-04	1.75E-04	1.00E-05	4.36E-05	4.94E-06	2.22E-04	2.17E-07	5.34E-07	4.94E-04
Lead	2.35E-02	2.48E-03	1.75E-03	1.15E-05	1.52E-05	1.37E-02	1.53E-04	3.31E-04	1.60E-03
Mercury - Inorganic	1.65E-03	2.48E-05	4.48E-04	5.69E-06	9.86E-08	5.00E-03	9.01E-04	6.14E-04	7.09E-05
Methyl Mercury	6.14E-05	7.00E-06	5.22E-04	7.83E-08	1.40E-09	5.32E-06	9.47E-08	2.37E-05	2.31E-04
Nickel	1.10E-02	2.83E-03	1.87E-03	2.20E-04	7.35E-05	4.78E-03	3.76E-05	1.62E-04	1.15E-02
Selenium	4.86E-06	1.37E-05	7.67E-07	3.46E-07	4.10E-07	2.05E-06	1.35E-07	1.28E-06	6.97E-05
Silver	5.58E-05	1.18E-04	1.83E-05	3.98E-06	2.86E-06	2.38E-05	1.07E-07	--	2.54E-04
Thallium	5.35E-03	1.13E-03	8.56E-04	6.01E-04	3.27E-05	2.32E-03	7.46E-07	--	--
Tin	5.80E-03	6.74E-04	4.78E-04	8.16E-04	1.07E-05	2.68E-03	7.24E-06	--	3.21E-02
Vanadium	5.54E-04	3.61E-05	3.72E-06	1.62E-06	3.34E-07	3.34E-04	2.11E-07	4.93E-06	5.35E-05
Zinc	2.41E-02	1.17E-02	1.75E-02	1.29E-05	1.69E-04	1.05E-02	9.30E-04	4.88E-03	1.57E-01

Table M.109 - Detailed Project Alone Exposure Point Concentrations for the Robinson Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.74E-07	5.93E-08	1.35E-08	2.13E-10	1.11E-09	2.18E-07	3.66E-09	8.94E-10	4.42E-10
Acenaphthylene	6.41E-08	1.24E-08	3.15E-09	6.06E-11	1.46E-09	2.57E-07	4.32E-09	1.04E-09	7.33E-10
Anthracene	2.70E-07	2.70E-08	1.32E-08	1.57E-10	3.48E-10	3.27E-07	5.50E-09	1.27E-09	5.51E-10
Fluoranthene	2.67E-06	1.95E-07	1.30E-07	1.45E-09	4.38E-09	8.60E-06	1.45E-07	3.21E-08	2.19E-08
Fluorene	2.72E-07	4.06E-08	1.33E-08	2.07E-10	2.48E-09	7.66E-07	1.29E-08	3.06E-09	1.97E-09
Phenanthrene	2.75E-06	2.92E-07	1.35E-07	1.74E-09	9.54E-09	1.01E-05	1.70E-07	3.95E-08	1.51E-08
High Molecular Weight PAHs									
Benz(a)anthracene	1.48E-07	6.73E-08	3.62E-09	2.99E-10	1.17E-10	1.68E-06	2.82E-08	5.88E-09	2.94E-09
Benzo(a)pyrene	2.63E-07	3.20E-07	3.20E-08	1.25E-09	1.58E-10	6.12E-06	1.06E-07	1.05E-07	7.91E-09
Benzo(e)pyrene	7.15E-07	2.40E-05	8.72E-08	7.71E-08	6.97E-10	1.11E-05	--	1.82E-07	9.61E-08
Benzo(a)fluorene	2.93E-07	6.66E-08	7.16E-09	3.76E-10	2.45E-09	9.71E-06	--	3.50E-08	3.08E-08
Benzo(b)fluorene	2.03E-07	1.32E-07	4.94E-09	5.94E-10	1.78E-09	7.22E-06	--	2.52E-08	5.01E-08
Benzo(b)fluoranthene	3.41E-07	2.00E-08	8.32E-09	1.38E-10	1.36E-10	5.71E-06	9.61E-08	1.93E-08	9.09E-09
Benzo(g,h,i)perylene	3.71E-06	3.64E-05	4.52E-07	1.14E-07	5.81E-10	1.05E-04	1.76E-06	1.71E-06	9.20E-08
Benzo(k)fluoranthene	2.98E-07	1.27E-07	7.27E-09	5.19E-10	5.60E-11	2.22E-06	3.74E-08	7.52E-09	3.53E-09
Chrysene	5.51E-07	6.93E-08	1.34E-08	3.93E-10	2.11E-10	3.39E-06	5.71E-08	1.19E-08	5.31E-09
Dibenz(a,c)anthracene	4.67E-07	4.67E-06	5.69E-08	1.30E-08	7.04E-10	5.49E-05	9.24E-07	8.82E-07	1.77E-07
Dibenz(a,h)anthracene	1.64E-07	2.96E-06	2.00E-08	9.23E-09	3.82E-11	2.74E-06	4.60E-08	4.47E-08	6.06E-09
Indeno(1,2,3-cd)pyrene	7.89E-07	4.58E-07	9.62E-08	1.44E-09	1.49E-10	1.83E-05	3.08E-07	2.96E-07	2.96E-08
Perylene	1.54E-07	1.79E-05	1.88E-08	6.22E-08	8.38E-11	2.69E-06	4.68E-08	4.50E-08	7.47E-09
Pyrene	1.37E-05	8.55E-07	3.34E-07	6.55E-09	6.87E-09	1.87E-05	3.14E-07	7.03E-08	2.73E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	3.44E-08	4.67E-09	1.70E-08	1.68E-09	1.29E-12	2.02E-07	4.87E-09	6.20E-09	4.09E-08
PCB									
Aroclor 1254 (Total PCBs)	5.10E-05	5.12E-07	--	9.70E-07	2.24E-09	2.20E-04	--	--	4.40E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	3.90E-08	1.71E-08	4.88E-09	3.84E-08	5.65E-08	8.56E-07	2.58E-07	3.64E-08	6.79E-07
1,2,4-Trichlorobenzene	2.90E-09	6.00E-10	3.57E-10	1.76E-09	1.54E-09	1.02E-07	1.68E-09	4.15E-09	9.70E-08
1,2,4,5-Tetrachlorobenzene	1.23E-07	8.21E-09	1.50E-08	9.21E-09	2.28E-09	6.91E-07	1.23E-08	2.62E-08	7.21E-07
Pentachlorobenzene	1.91E-06	8.09E-08	4.67E-07	8.39E-08	4.73E-09	2.29E-05	4.08E-07	8.41E-07	3.51E-06
Hexachlorobenzene	5.28E-08	3.11E-09	1.29E-08	5.02E-09	1.61E-09	5.17E-06	9.21E-08	1.88E-07	1.61E-06
Pentachlorophenol	8.99E-07	1.81E-04	2.10E-06	1.21E-07	3.39E-07	8.02E-06	1.57E-07	2.96E-07	1.90E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	3.13E-11	2.99E-11	4.32E-12	2.35E-09	7.01E-09	4.26E-08	3.36E-08	1.93E-09	2.22E-08
Chloroform	7.01E-11	1.91E-10	1.57E-11	1.33E-09	1.18E-08	2.48E-08	4.36E-08	1.20E-09	5.91E-09
Dichloromethane	1.26E-08	8.63E-08	7.98E-09	1.40E-07	4.12E-06	1.65E-06	3.97E-06	8.50E-08	4.12E-07
Trichlorofluoromethane (Freon 11)	3.24E-09	4.56E-09	5.00E-10	8.34E-07	3.63E-06	1.66E-05	1.83E-05	7.70E-07	5.76E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.57E-10	2.21E-10	2.42E-11	7.35E-09	3.19E-08	1.73E-07	1.90E-07	8.01E-09	5.06E-08
Other Organics									
Bromoform	4.36E-10	7.20E-10	7.18E-11	2.00E-07	1.04E-06	5.24E-06	6.52E-06	2.46E-07	1.22E-06
O-Terphenyl	8.66E-07	1.01E-07	2.11E-07	6.90E-08	5.51E-09	4.06E-05	8.82E-07	1.44E-06	9.14E-06
Inorganics									
Antimony	4.18E-04	2.03E-04	6.68E-05	2.51E-06	4.60E-06	2.07E-04	1.06E-06	2.34E-06	9.21E-04
Arsenic	4.15E-05	1.99E-05	8.69E-07	4.90E-07	7.07E-07	2.05E-05	1.00E-07	2.12E-06	3.54E-05
Barium	2.94E-04	1.37E-04	4.28E-06	2.54E-07	3.56E-06	1.46E-04	2.96E-06	1.99E-05	3.56E-05
Beryllium	2.63E-04	1.72E-05	1.89E-06	3.12E-07	1.94E-07	1.53E-04	1.40E-05	2.02E-05	1.94E-05
Boron	1.63E-03	1.32E-02	2.60E-04	1.21E-04	2.58E-04	7.73E-04	1.40E-05	1.77E-04	--
Cadmium	1.73E-03	9.37E-04	2.65E-03	1.38E-06	1.15E-05	8.64E-04	9.55E-05	2.81E-04	1.38E-02
Chromium (Total)	1.46E-04	9.95E-05	7.14E-06	6.57E-06	3.79E-06	7.20E-05	3.84E-07	3.10E-06	7.58E-04
Chromium VI	2.08E-05	1.41E-05	1.02E-06	9.35E-07	5.39E-07	1.02E-05	5.46E-08	--	1.99E-05
Cobalt	8.83E-04	2.71E-04	1.72E-05	7.00E-05	9.73E-06	4.38E-04	4.27E-07	1.05E-06	9.73E-04
Lead	4.03E-02	4.00E-03	3.00E-03	1.90E-05	2.66E-05	2.40E-02	2.68E-04	5.78E-04	2.79E-03
Mercury - Inorganic	3.50E-03	4.14E-05	9.47E-04	1.14E-05	1.68E-07	8.52E-03	1.49E-03	1.05E-03	1.21E-04
Methyl Mercury	1.05E-04	1.17E-05	8.96E-04	1.32E-07	2.38E-09	2.61E-05	4.65E-07	1.16E-04	3.93E-04
Nickel	1.89E-02	4.41E-03	3.21E-03	3.55E-04	1.45E-04	9.41E-03	7.40E-05	3.20E-04	2.26E-02
Selenium	8.36E-06	2.11E-05	1.32E-06	5.49E-07	8.08E-07	4.04E-06	2.67E-07	2.53E-06	1.37E-04
Silver	9.59E-05	1.85E-04	3.14E-05	6.42E-06	5.64E-06	4.68E-05	2.11E-07	--	5.00E-04
Thallium	9.19E-03	1.74E-03	1.47E-03	9.68E-04	6.44E-05	4.57E-03	1.47E-06	--	--
Tin	9.96E-03	1.07E-03	8.22E-04	1.34E-03	2.06E-05	5.14E-03	1.39E-05	--	6.17E-02
Vanadium	9.51E-04	5.61E-05	6.39E-06	2.64E-06	5.77E-07	5.77E-04	3.64E-07	8.51E-06	9.23E-05
Zinc	4.15E-02	1.91E-02	3.01E-02	2.13E-05	3.32E-04	2.06E-02	1.83E-03	9.61E-03	3.10E-01

Table M.110 - Detailed Project Alone Exposure Point Concentrations for the Bennett Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	7.21E-08	1.56E-08	3.55E-09	5.97E-11	6.57E-10	1.29E-07	2.17E-09	5.29E-10	2.62E-10
Acenaphthylene	1.69E-08	3.33E-09	8.30E-10	1.92E-11	6.92E-10	1.21E-07	2.04E-09	4.94E-10	3.47E-10
Anthracene	7.12E-08	7.23E-09	3.48E-09	4.27E-11	1.58E-10	1.49E-07	2.51E-09	5.80E-10	2.51E-10
Fluoranthene	7.05E-07	6.51E-08	3.44E-08	4.43E-10	1.63E-09	3.20E-06	5.39E-08	1.19E-08	8.18E-09
Fluorene	7.17E-08	1.10E-08	3.51E-09	1.17E-11	1.17E-09	3.62E-07	6.09E-09	1.45E-09	9.31E-10
Phenanthrene	7.25E-07	8.32E-08	3.54E-08	4.95E-10	3.72E-09	3.95E-06	6.65E-08	1.54E-08	5.90E-09
High Molecular Weight PAHs									
Benz(a)anthracene	3.91E-08	2.54E-08	9.55E-10	1.10E-10	4.87E-11	6.97E-07	1.17E-08	2.45E-09	1.22E-09
Benzo(a)pyrene	6.93E-08	1.43E-07	8.45E-09	5.52E-10	8.13E-11	3.15E-06	5.48E-08	5.38E-08	4.07E-09
Benzo(e)pyrene	1.89E-07	1.36E-05	2.30E-08	4.37E-08	2.91E-10	4.64E-06	--	7.63E-08	4.02E-08
Benzo(a)fluorene	7.73E-08	3.18E-08	1.89E-09	1.64E-10	1.03E-09	4.09E-06	--	1.47E-08	1.30E-08
Benzo(b)fluorene	5.34E-08	7.13E-08	1.30E-09	3.06E-10	7.13E-10	2.90E-06	--	1.01E-08	2.01E-08
Benzo(b)fluoranthene	9.00E-08	8.19E-09	2.19E-09	4.79E-11	8.41E-11	3.53E-06	5.93E-08	1.19E-08	5.61E-09
Benzo(g,h,i)perylene	9.78E-07	2.07E-05	1.19E-07	6.45E-08	3.88E-10	6.99E-05	1.18E-06	1.14E-06	6.14E-08
Benzo(k)fluoranthene	7.89E-08	5.99E-08	1.92E-09	2.34E-10	2.54E-11	1.01E-06	1.70E-08	3.41E-09	1.60E-09
Chrysene	1.45E-07	2.13E-08	3.55E-09	1.17E-10	1.12E-10	1.80E-06	3.04E-08	6.33E-09	2.82E-09
Dibenz(a,c)anthracene	1.23E-07	2.27E-06	1.50E-08	6.32E-09	4.36E-10	3.40E-05	5.72E-07	5.46E-07	1.09E-07
Dibenz(a,h)anthracene	4.33E-08	1.66E-06	5.28E-09	5.18E-09	2.15E-11	1.54E-06	2.59E-08	2.51E-08	3.40E-09
Indeno(1,2,3-cd)pyrene	2.08E-07	1.44E-07	2.54E-08	4.48E-10	9.36E-11	1.15E-05	1.94E-07	1.87E-07	1.87E-08
Perylene	4.07E-08	1.01E-05	4.97E-09	3.53E-08	4.03E-11	1.29E-06	2.25E-08	2.16E-08	3.59E-09
Pyrene	3.62E-06	2.45E-07	8.84E-08	1.81E-09	2.22E-09	6.04E-06	1.02E-07	2.27E-08	8.84E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	8.34E-09	2.35E-09	4.10E-09	7.27E-10	6.01E-13	9.35E-08	2.26E-09	2.88E-09	1.90E-08
PCB									
Aroclor 1254 (Total PCBs)	1.36E-05	1.86E-07	--	2.75E-07	1.22E-09	1.19E-04	--	--	3.34E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.03E-08	4.62E-09	1.29E-09	2.62E-08	4.09E-08	6.19E-07	1.87E-07	2.63E-08	4.91E-07
1,2,4-Trichlorobenzene	7.64E-10	1.74E-10	9.39E-11	1.20E-09	1.13E-09	7.53E-08	1.24E-09	3.07E-09	7.16E-08
1,2,4,5-Tetrachlorobenzene	3.24E-08	2.22E-09	3.96E-09	3.78E-09	1.52E-09	4.60E-07	8.21E-09	1.75E-08	4.80E-07
Pentachlorobenzene	5.04E-07	2.27E-08	1.23E-07	2.61E-08	3.39E-09	1.64E-05	2.92E-07	6.02E-07	2.51E-06
Hexachlorobenzene	1.39E-08	1.23E-09	3.39E-09	2.62E-09	1.14E-09	3.65E-06	6.50E-08	1.32E-07	1.14E-06
Pentachlorophenol	2.37E-07	1.03E-04	5.54E-07	6.86E-08	9.21E-08	2.18E-06	4.28E-08	8.06E-08	5.18E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	8.23E-12	8.12E-12	1.14E-12	1.48E-09	4.42E-09	2.69E-08	2.12E-08	1.22E-09	1.40E-08
Chloroform	1.84E-11	5.06E-11	4.14E-12	9.43E-10	8.41E-09	1.77E-08	3.11E-08	8.57E-10	4.22E-09
Dichloromethane	3.31E-09	2.28E-08	2.10E-09	1.07E-07	3.16E-06	1.27E-06	3.05E-06	6.53E-08	3.16E-07
Trichlorofluoromethane (Freon 11)	8.52E-10	1.22E-09	1.32E-10	5.23E-07	2.28E-06	1.04E-05	1.15E-05	4.83E-07	3.61E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	4.12E-11	5.90E-11	6.36E-12	4.70E-09	2.05E-08	1.11E-07	1.22E-07	5.13E-09	3.24E-08
Other Organics									
Bromoform	1.15E-10	1.90E-10	1.89E-11	1.25E-07	6.50E-07	3.27E-06	4.08E-06	1.54E-07	7.63E-07
O-Terphenyl	2.28E-07	5.05E-08	5.57E-08	3.01E-08	2.75E-09	2.03E-05	4.52E-07	7.22E-07	4.57E-06
Inorganics									
Antimony	1.00E-04	5.39E-05	1.61E-05	6.53E-07	1.14E-06	5.12E-05	2.62E-07	5.79E-07	2.28E-04
Arsenic	9.96E-06	5.54E-06	2.09E-07	1.33E-07	1.75E-07	5.07E-06	2.47E-08	5.24E-07	8.74E-06
Barium	7.07E-05	3.67E-05	1.03E-06	6.67E-08	8.79E-07	3.60E-05	7.31E-07	4.93E-06	8.79E-06
Beryllium	6.34E-05	4.74E-06	4.57E-07	8.10E-08	4.87E-08	3.85E-05	3.52E-06	5.09E-06	4.87E-06
Boron	3.90E-04	3.45E-03	6.25E-05	3.13E-05	6.37E-05	1.91E-04	3.47E-06	4.37E-05	--
Cadmium	4.17E-04	2.38E-04	6.37E-04	3.47E-07	2.85E-06	2.13E-04	2.36E-05	6.94E-05	3.42E-03
Chromium (Total)	3.51E-05	2.80E-05	1.72E-06	1.81E-06	9.36E-07	1.78E-05	9.48E-08	7.65E-07	1.87E-04
Chromium VI	4.98E-06	3.98E-06	2.44E-07	2.57E-07	1.33E-07	2.53E-06	1.35E-08	--	4.92E-06
Cobalt	2.12E-04	7.57E-05	4.14E-06	1.89E-05	2.41E-06	1.08E-04	1.06E-07	2.60E-07	2.41E-04
Lead	9.71E-03	1.05E-03	7.24E-04	4.84E-06	6.71E-06	6.04E-03	6.75E-05	1.46E-04	7.03E-04
Mercury - Inorganic	1.28E-03	1.51E-05	3.46E-04	4.17E-06	1.07E-07	5.41E-03	9.72E-04	6.65E-04	7.67E-05
Methyl Mercury	2.54E-05	4.26E-06	2.16E-04	4.31E-08	1.52E-09	5.16E-06	9.19E-08	2.30E-05	2.50E-04
Nickel	4.55E-03	1.22E-03	7.71E-04	9.50E-05	3.58E-05	2.33E-03	1.83E-05	7.90E-05	5.58E-03
Selenium	2.01E-06	5.95E-06	3.16E-07	1.52E-07	2.00E-07	9.99E-07	6.59E-08	6.25E-07	3.40E-05
Silver	2.30E-05	5.05E-05	7.53E-06	1.73E-06	1.39E-06	1.16E-05	5.21E-08	--	1.23E-04
Thallium	2.21E-03	4.90E-04	3.54E-04	2.61E-04	1.59E-05	1.13E-03	3.63E-07	--	--
Tin	2.40E-03	2.89E-04	1.98E-04	3.47E-04	5.10E-06	1.27E-03	3.45E-06	--	1.53E-02
Vanadium	2.29E-04	1.56E-05	1.54E-06	6.88E-07	1.46E-07	1.46E-04	9.19E-08	2.15E-06	2.33E-05
Zinc	9.97E-03	4.95E-03	7.24E-03	5.46E-06	8.21E-05	5.09E-03	4.53E-04	2.37E-03	7.65E-02

Table M.111 - Detailed Project Alone Exposure Point Concentrations for the Oshawa Creek Conservation Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	8.12E-08	1.76E-08	4.00E-09	6.91E-11	9.39E-10	1.84E-07	3.10E-09	7.56E-10	3.74E-10
Acenaphthylene	1.90E-08	3.71E-09	9.35E-10	2.41E-11	1.02E-09	1.79E-07	3.02E-09	7.30E-10	5.12E-10
Anthracene	8.01E-08	8.08E-09	3.92E-09	4.94E-11	2.88E-10	2.71E-07	4.56E-09	1.05E-09	4.56E-10
Fluoranthene	7.93E-07	6.66E-08	3.87E-08	5.16E-10	4.31E-09	8.47E-06	1.43E-07	3.16E-08	2.16E-08
Fluorene	8.07E-08	1.23E-08	3.96E-09	7.92E-11	2.23E-09	6.87E-07	1.16E-08	2.75E-09	1.77E-09
Phenanthrene	8.16E-07	9.07E-08	3.99E-08	6.19E-10	9.27E-09	9.84E-06	1.66E-07	3.83E-08	1.47E-08
High Molecular Weight PAHs									
Benz(a)anthracene	4.40E-08	2.49E-08	1.07E-09	1.11E-10	1.20E-10	1.72E-06	2.89E-08	6.03E-09	3.02E-09
Benzo(a)pyrene	7.79E-08	1.33E-07	9.50E-09	5.19E-10	1.62E-10	6.29E-06	1.09E-07	1.08E-07	8.14E-09
Benzo(e)pyrene	2.12E-07	1.18E-05	2.59E-08	3.79E-08	6.98E-10	1.11E-05	--	1.83E-07	9.64E-08
Benzo(a)fluorene	8.70E-08	2.90E-08	2.12E-09	1.82E-10	2.39E-09	9.45E-06	--	3.40E-08	3.00E-08
Benzo(b)fluorene	6.01E-08	6.26E-08	1.47E-09	2.95E-10	1.81E-09	7.34E-06	--	2.56E-08	5.09E-08
Benzo(b)fluoranthene	1.01E-07	7.81E-09	2.47E-09	5.21E-11	1.19E-10	4.98E-06	8.37E-08	1.68E-08	7.92E-09
Benzo(g,h,i)perylene	1.10E-06	1.79E-05	1.34E-07	5.60E-08	5.69E-10	1.03E-04	1.73E-06	1.68E-06	9.01E-08
Benzo(k)fluoranthene	8.84E-08	5.47E-08	2.18E-09	2.18E-10	4.87E-11	1.93E-06	3.26E-08	6.55E-09	3.08E-09
Chrysene	1.63E-07	2.25E-08	3.99E-09	1.28E-10	1.73E-10	2.78E-06	4.68E-08	9.76E-09	4.35E-09
Dibenz(a,c)anthracene	1.38E-07	2.05E-06	1.69E-08	5.75E-09	7.48E-10	5.83E-05	9.81E-07	9.37E-07	1.88E-07
Dibenz(a,h)anthracene	4.86E-08	1.45E-06	5.93E-09	4.51E-09	3.69E-11	2.64E-06	4.45E-08	4.32E-08	5.85E-09
Indeno(1,2,3-cd)pyrene	2.34E-07	1.51E-07	2.85E-08	4.81E-10	1.45E-10	3.00E-05	2.89E-07	2.89E-07	2.89E-08
Perylene	4.58E-08	8.80E-06	5.58E-09	3.06E-08	8.24E-11	2.65E-06	4.60E-08	4.42E-08	7.34E-09
Pyrene	4.06E-06	2.66E-07	9.92E-08	2.05E-09	5.68E-09	1.54E-05	2.60E-07	5.81E-08	2.26E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.01E-08	2.13E-09	4.97E-09	6.97E-10	8.32E-13	1.29E-07	3.13E-09	3.98E-09	2.63E-08
PCB									
Aroclor 1254 (Total PCBs)	1.51E-05	1.85E-07	--	3.07E-07	1.36E-09	1.33E-04	--	--	1.86E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.16E-08	5.15E-09	1.45E-09	4.19E-08	6.62E-08	1.00E-06	3.03E-07	4.27E-08	7.96E-07
1,2,4-Trichlorobenzene	8.60E-10	1.88E-10	1.06E-10	1.77E-09	1.69E-09	1.85E-09	1.12E-07	4.58E-09	1.07E-07
1,2,4,5-Tetrachlorobenzene	3.65E-08	2.47E-09	4.45E-09	4.29E-09	1.72E-09	5.21E-07	9.29E-09	1.98E-08	5.44E-07
Pentachlorobenzene	5.67E-07	2.49E-08	1.38E-07	3.23E-08	4.90E-09	2.37E-05	4.22E-07	8.70E-07	3.63E-06
Hexachlorobenzene	1.57E-08	1.19E-09	3.82E-09	4.12E-09	1.82E-09	5.83E-06	1.04E-07	2.12E-07	1.82E-06
Pentachlorophenol	2.67E-07	8.90E-05	6.24E-07	5.95E-08	9.95E-08	2.36E-06	4.62E-08	8.71E-08	5.59E-05
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	9.26E-12	9.02E-12	1.28E-12	3.06E-09	9.14E-09	5.56E-08	4.38E-08	2.51E-09	2.89E-08
Chloroform	2.08E-11	5.68E-11	4.66E-12	1.63E-09	1.46E-08	3.06E-08	5.38E-08	1.48E-09	7.29E-09
Dichloromethane	3.73E-09	2.56E-08	2.37E-09	1.65E-07	4.88E-06	1.95E-06	4.70E-06	1.01E-07	4.88E-07
Trichlorofluoromethane (Freon 11)	9.60E-10	1.37E-09	1.48E-10	1.10E-06	4.77E-06	2.18E-05	2.40E-05	1.01E-06	7.56E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	4.64E-11	6.60E-11	7.16E-12	9.52E-09	4.14E-08	2.24E-07	2.46E-07	1.04E-08	6.57E-08
Other Organics									
Bromoform	1.29E-10	2.13E-10	2.13E-11	2.63E-07	1.37E-06	6.90E-06	8.59E-06	3.23E-07	1.61E-06
O-Terphenyl	2.57E-07	4.53E-08	6.27E-08	3.49E-08	5.13E-09	3.78E-05	8.24E-07	1.35E-06	8.52E-06
Inorganics									
Antimony	1.22E-04	6.37E-05	1.96E-05	7.73E-07	1.28E-06	5.77E-05	2.96E-07	6.52E-07	2.57E-04
Arsenic	1.22E-05	6.44E-06	2.55E-07	1.55E-07	1.97E-07	5.71E-06	2.79E-08	5.90E-07	9.85E-06
Barium	8.62E-05	4.32E-05	1.26E-06	7.87E-08	9.91E-07	4.06E-05	8.24E-07	5.56E-06	9.91E-06
Beryllium	7.72E-05	5.54E-06	5.56E-07	9.70E-08	7.50E-08	5.92E-05	5.42E-06	7.83E-06	7.50E-06
Boron	4.77E-04	4.09E-03	7.63E-05	3.71E-05	7.18E-05	2.15E-04	3.91E-06	4.93E-05	--
Cadmium	5.09E-04	2.85E-04	7.77E-04	4.16E-07	3.22E-06	2.42E-04	2.67E-05	7.86E-05	3.87E-03
Chromium (Total)	4.28E-05	3.25E-05	2.09E-06	2.10E-06	1.06E-06	2.01E-05	1.07E-07	8.62E-07	2.11E-04
Chromium VI	6.08E-06	4.62E-06	2.98E-07	2.98E-07	1.50E-07	2.85E-06	1.52E-08	--	5.55E-06
Cobalt	2.59E-04	8.80E-05	5.06E-06	2.21E-05	2.71E-06	1.22E-04	1.19E-07	2.93E-07	2.71E-04
Lead	1.18E-02	1.25E-03	8.81E-04	5.82E-06	1.07E-05	9.64E-03	1.08E-04	2.32E-04	1.12E-03
Mercury - Inorganic	1.27E-03	1.55E-05	3.44E-04	4.26E-06	1.59E-07	8.06E-03	1.42E-03	9.90E-04	1.14E-04
Methyl Mercury	3.09E-05	4.38E-06	2.63E-04	4.62E-08	2.26E-09	2.03E-06	3.61E-08	9.05E-06	3.72E-04
Nickel	5.55E-03	1.42E-03	9.40E-04	1.11E-04	4.04E-05	2.63E-03	2.07E-05	8.93E-05	6.31E-03
Selenium	2.45E-06	6.90E-06	3.86E-07	1.76E-07	2.25E-07	1.13E-06	7.43E-08	7.05E-07	3.83E-05
Silver	2.81E-05	5.92E-05	9.19E-06	2.02E-06	1.57E-06	1.30E-05	5.87E-08	--	1.39E-04
Thallium	2.70E-03	5.69E-04	4.31E-04	3.05E-04	1.80E-05	1.28E-03	4.11E-07	--	--
Tin	2.92E-03	3.39E-04	2.41E-04	4.13E-04	6.26E-06	1.56E-03	4.23E-06	--	1.88E-02
Vanadium	2.79E-04	1.82E-05	8.24E-06	8.24E-07	2.39E-07	2.39E-04	1.51E-07	3.53E-06	3.83E-05
Zinc	1.22E-02	5.89E-03	8.83E-03	6.50E-06	9.28E-05	5.75E-03	5.11E-04	2.68E-03	8.64E-02

Table M.112 - Detailed Project Case Exposure Point Concentrations for the Darlington Provincial Park Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	5.74E-07	1.43E-03	7.00E-08	4.00E-04	5.59E-10	8.90E-06	--	1.46E-07	3.00E-04
Benzo(a)fluorene	2.35E-07	5.91E-08	5.74E-09	5.32E-09	1.97E-09	7.79E-06	--	2.81E-08	2.47E-08
Benzo(b)fluorene	1.63E-07	1.20E-07	3.97E-09	1.02E-08	1.43E-09	5.79E-06	--	2.02E-08	4.02E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.39E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.04E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.16E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.81E-06	3.72E-07	8.91E-07	5.91E-07	3.24E-09	2.21E-06	5.34E-08	6.80E-08	8.66E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.04E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.23E-03	2.81E-03	6.33E-02	1.03E-05	7.06E-04	1.39E-05	2.61E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.53E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.97E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	6.95E-07	9.01E-08	1.70E-07	6.31E-08	4.42E-09	3.25E-05	7.13E-07	1.16E-06	7.34E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.11E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.03E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.02E-01	3.78E-01	7.66E-01	2.25E-01	1.14E-04	5.01E-01	5.54E-02	1.63E-01	3.84E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	2.53E-05	2.13E-05	1.24E-06	1.36E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.12E-04	6.00E+00	5.85E-03	1.44E-02	2.92E-02
Lead	1.70E+01	4.16E-01	1.26E+00	4.40E-02	1.03E-03	1.30E+01	1.45E-01	3.14E-01	7.34E-02
Mercury - Inorganic	7.34E-02	2.24E-02	1.99E-02	2.01E-03	1.00E-04	5.82E-02	1.02E-02	7.15E-03	9.36E-02
Methyl Mercury	1.53E-03	4.44E-05	1.30E-02	4.69E-04	1.50E-05	3.19E-05	5.68E-07	1.42E-04	9.39E-02
Nickel	1.23E+01	6.06E-01	2.08E+00	3.11E-01	6.18E-03	1.00E+01	7.88E-02	3.40E-01	5.08E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.03E-02	6.55E-02	1.00E-02	1.07E-04	2.00E-01	9.00E-04	--	1.06E-02
Thallium	1.01E+00	2.26E-02	1.62E-01	1.14E-02	3.79E-04	1.01E+00	3.23E-04	--	1.00E-02
Tin	1.00E+01	1.82E-01	8.26E-01	9.78E-02	1.03E-03	5.01E+00	1.35E-02	--	1.25E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.54E-02	8.10E+01	7.20E+00	3.78E+01	3.87E+01

Table M.113 - Detailed Project Case Exposure Point Concentrations for the Second Marsh Wildlife Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	3.65E-07	1.42E-03	4.46E-08	4.00E-04	1.71E-09	2.72E-05	--	4.47E-07	3.00E-04
Benzo(a)fluorene	1.50E-07	3.89E-08	3.65E-09	3.49E-09	5.35E-10	2.12E-06	--	7.63E-09	6.73E-09
Benzo(b)fluorene	1.03E-07	7.97E-08	2.52E-09	6.79E-09	4.23E-10	1.72E-06	--	6.00E-09	1.19E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.03E-02	8.46E-04	8.22E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.11E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.70E-07	8.77E-07	5.90E-07	3.24E-09	2.09E-06	5.05E-08	6.43E-08	8.41E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.02E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.18E-03	2.81E-03	6.33E-02	1.04E-05	7.10E-04	1.39E-05	2.62E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.52E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.95E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	4.42E-07	5.95E-08	1.08E-07	3.87E-08	1.38E-09	1.01E-05	2.32E-07	3.61E-07	2.28E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.12E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.03E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.15E-04	5.01E-01	5.54E-02	1.63E-01	3.90E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	1.10E-05	8.09E-06	5.41E-07	6.11E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.12E-04	6.00E+00	5.85E-03	1.44E-02	2.92E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.04E-03	1.30E+01	1.45E-01	3.14E-01	7.42E-02
Mercury - Inorganic	7.20E-02	2.23E-02	1.95E-02	2.01E-03	1.00E-04	7.05E-02	1.13E-02	8.66E-03	9.38E-02
Methyl Mercury	1.46E-03	3.56E-05	1.24E-02	4.69E-04	1.50E-05	1.20E-05	2.14E-07	5.36E-05	9.46E-02
Nickel	1.23E+01	6.03E-01	2.08E+00	3.11E-01	6.18E-03	1.00E+01	7.88E-02	3.40E-01	5.09E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.07E-04	2.00E-01	9.00E-04	--	1.06E-02
Thallium	1.00E+00	2.10E-02	1.61E-01	1.06E-02	3.81E-04	1.01E+00	3.23E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.68E-02	1.03E-03	5.01E+00	1.35E-02	--	1.31E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.54E-02	8.10E+01	7.20E+00	3.78E+01	3.87E+01

Table M.114 - Detailed Project Case Exposure Point Concentrations for the Darlington Waterfront Trail Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.42E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.01E-05	5.01E-02	8.43E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.01E-02	3.49E-04	3.43E-04	3.00E-04
Benzo(e)pyrene	9.20E-07	1.44E-03	1.12E-07	4.00E-04	4.87E-09	7.75E-05	--	1.27E-06	3.01E-04
Benzo(a)fluorene	3.77E-07	8.20E-08	9.20E-09	7.67E-09	1.86E-08	7.36E-05	--	2.65E-07	2.34E-07
Benzo(b)fluorene	2.61E-07	1.60E-07	6.36E-09	1.38E-08	1.27E-08	5.17E-05	--	1.81E-07	3.58E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.40E-03	6.10E-03	4.00E-04	1.00E-05	5.12E-02	8.61E-04	8.37E-04	6.51E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.06E-04	6.10E-03	4.00E-04	1.00E-05	5.06E-02	8.51E-04	8.13E-04	3.02E-04
Dibenz(a,h)anthracene	5.00E-02	2.04E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.45E-04	8.14E-04	3.00E-04
Perylene	1.00E-02	2.22E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.35E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.81E-06	3.73E-07	8.93E-07	5.92E-07	3.25E-09	3.49E-06	8.30E-08	1.08E-07	1.13E-06
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.18E-02	8.40E-04	1.64E-03	1.50E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.01E-05	1.04E-02	1.85E-04	3.81E-04	1.01E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.80E-04	3.67E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.29E-03	2.81E-03	6.33E-02	1.03E-05	7.07E-04	1.39E-05	2.61E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.94E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.89E-04	1.59E-03	1.00E-01	2.41E-01	5.16E-03	8.43E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.22E-03	1.07E-03	2.03E-02	2.24E-02	9.44E-04	9.09E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.01E-04	3.00E-03	3.31E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.03E-03	5.21E-04	2.01E-02	2.50E-02	9.43E-04	6.26E-04
O-Terphenyl	1.11E-06	1.23E-07	2.72E-07	1.62E-07	5.12E-08	3.77E-04	7.56E-06	1.34E-05	8.49E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.08E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.02E-01	3.78E-01	7.66E-01	2.25E-01	1.10E-04	5.01E-01	5.54E-02	1.63E-01	3.33E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	2.76E-05	1.89E-05	1.35E-06	1.19E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.08E-04	6.00E+00	5.85E-03	1.44E-02	2.88E-02
Lead	1.70E+01	4.15E-01	1.26E+00	4.40E-02	1.04E-03	1.30E+01	1.45E-01	3.14E-01	7.44E-02
Mercury - Inorganic	7.45E-02	2.24E-02	2.02E-02	2.01E-03	1.01E-04	1.10E-01	1.45E-02	1.36E-02	9.44E-02
Methyl Mercury	1.54E-03	4.39E-05	1.31E-02	4.69E-04	1.50E-05	1.27E-05	2.27E-07	5.68E-05	9.63E-02
Nickel	1.23E+01	6.06E-01	2.08E+00	3.11E-01	6.12E-03	1.00E+01	7.88E-02	3.40E-01	4.99E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.05E-04	2.00E-01	9.00E-04	--	1.04E-02
Thallium	1.01E+00	2.23E-02	1.62E-01	1.12E-02	3.55E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.26E-01	9.78E-02	1.02E-03	5.01E+00	1.35E-02	--	1.12E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.53E-02	8.10E+01	7.20E+00	3.78E+01	3.86E+01

Table M.115 - Detailed Project Case Exposure Point Concentrations for the McLaughlin Bay Wildlife Reserve Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	3.92E-07	1.43E-03	4.79E-08	4.00E-04	2.25E-09	3.58E-05	--	5.89E-07	3.00E-04
Benzo(a)fluorene	1.61E-07	4.59E-08	3.93E-09	4.10E-09	4.25E-10	1.68E-06	--	6.06E-09	5.35E-09
Benzo(b)fluorene	1.11E-07	9.61E-08	2.71E-09	8.17E-09	3.41E-10	1.39E-06	--	4.84E-09	9.61E-09
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.39E-03	6.10E-03	4.00E-04	1.00E-05	5.03E-02	8.47E-04	8.23E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.44E-04	8.06E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.13E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.71E-07	8.76E-07	5.91E-07	3.24E-09	2.06E-06	4.98E-08	6.34E-08	8.36E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.02E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.20E-03	2.81E-03	6.33E-02	1.05E-05	7.11E-04	1.39E-05	2.63E-05	6.34E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.51E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.95E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	4.75E-07	7.08E-08	1.16E-07	4.41E-08	1.08E-09	7.95E-06	1.83E-07	2.83E-07	1.79E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.13E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.04E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.65E-01	2.25E-01	1.16E-04	5.01E-01	5.54E-02	1.63E-01	4.07E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.01E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	1.06E-05	7.52E-06	5.19E-07	5.93E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.13E-04	6.00E+00	5.85E-03	1.44E-02	2.93E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.05E-03	1.30E+01	1.46E-01	3.15E-01	7.56E-02
Mercury - Inorganic	7.22E-02	2.23E-02	1.96E-02	2.01E-03	1.01E-04	7.79E-02	1.20E-02	9.57E-03	9.39E-02
Methyl Mercury	1.45E-03	3.57E-05	1.24E-02	4.69E-04	1.50E-05	6.60E-06	1.18E-07	2.94E-05	9.50E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.20E-03	1.00E+01	7.88E-02	3.40E-01	5.11E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.08E-04	2.00E-01	9.00E-04	--	1.07E-02
Thallium	1.00E+00	2.09E-02	1.61E-01	1.06E-02	3.89E-04	1.01E+00	3.23E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.68E-02	1.03E-03	5.01E+00	1.35E-02	--	1.43E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.55E-02	8.10E+01	7.20E+00	3.78E+01	3.87E+01

Table M.116 - Detailed Project Case Exposure Point Concentrations for the Bowmanville Valley Cons. Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	3.05E-07	1.43E-03	3.72E-08	4.00E-04	6.61E-10	1.05E-05	--	1.73E-07	3.00E-04
Benzo(a)fluorene	1.25E-07	4.12E-08	3.05E-09	3.72E-09	3.10E-09	1.23E-05	--	4.43E-08	3.91E-08
Benzo(b)fluorene	8.65E-08	8.90E-08	2.11E-09	7.59E-09	2.19E-09	8.91E-06	--	3.11E-08	6.18E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.39E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.12E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.80E-06	3.71E-07	8.85E-07	5.91E-07	3.24E-09	2.24E-06	5.41E-08	6.90E-08	8.73E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.03E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.69E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.19E-03	2.81E-03	6.34E-02	1.02E-05	7.05E-04	1.38E-05	2.61E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.56E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.99E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	3.70E-07	6.44E-08	9.02E-08	5.11E-08	6.99E-09	5.15E-05	1.11E-06	1.83E-06	1.16E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.13E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.04E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.02E-01	3.78E-01	7.66E-01	2.25E-01	1.16E-04	5.01E-01	5.54E-02	1.63E-01	4.07E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.01E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	1.94E-05	1.84E-05	9.48E-07	1.20E-06	1.07E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.14E-04	6.00E+00	5.85E-03	1.44E-02	2.94E-02
Lead	1.69E+01	4.15E-01	1.26E+00	4.40E-02	1.04E-03	1.30E+01	1.45E-01	3.14E-01	7.44E-02
Mercury - Inorganic	7.23E-02	2.23E-02	1.96E-02	2.01E-03	1.00E-04	5.94E-02	1.03E-02	7.29E-03	9.36E-02
Methyl Mercury	1.50E-03	4.20E-05	1.27E-02	4.69E-04	1.50E-05	1.44E-05	2.56E-07	6.42E-05	9.39E-02
Nickel	1.23E+01	6.06E-01	2.08E+00	3.11E-01	6.20E-03	1.00E+01	7.88E-02	3.40E-01	5.11E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.08E-04	2.00E-01	9.00E-04	--	1.07E-02
Thallium	1.01E+00	2.23E-02	1.61E-01	1.12E-02	3.89E-04	1.01E+00	3.23E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.26E-01	9.75E-02	1.03E-03	5.01E+00	1.35E-02	--	1.38E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.55E-02	8.10E+01	7.20E+00	3.78E+01	3.87E+01

Table M.117 - Detailed Project Case Exposure Point Concentrations for the Eco Baseline Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.54E-06	1.42E-03	1.88E-07	4.00E-04	3.80E-10	6.05E-06	--	9.94E-08	3.00E-04
Benzo(a)fluorene	6.31E-07	6.61E-08	1.54E-08	6.21E-09	1.15E-09	4.56E-06	--	1.64E-08	1.45E-08
Benzo(b)fluorene	4.36E-07	8.53E-08	1.06E-08	7.50E-09	7.98E-10	3.24E-06	--	1.13E-08	2.25E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.20E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.04E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.09E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.85E-06	3.72E-07	9.18E-07	5.92E-07	3.24E-09	2.26E-06	5.46E-08	6.97E-08	8.77E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.03E-02	8.41E-04	1.64E-03	1.05E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.16E-03	2.81E-03	6.33E-02	1.01E-05	7.03E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.54E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.98E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	1.86E-06	8.65E-08	4.54E-07	8.54E-08	3.10E-09	2.29E-05	5.07E-07	8.14E-07	5.15E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.04E-02
Arsenic	8.00E+00	3.21E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.01E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.04E-01	3.79E-01	7.69E-01	2.25E-01	1.05E-04	5.00E-01	5.53E-02	1.63E-01	2.75E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	5.38E-05	3.60E-05	2.64E-06	2.14E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.02E-02	5.04E-04	6.00E+00	5.85E-03	1.44E-02	2.84E-02
Lead	1.70E+01	4.20E-01	1.27E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.12E-02
Mercury - Inorganic	7.56E-02	2.24E-02	2.05E-02	2.02E-03	1.00E-04	5.52E-02	9.93E-03	6.78E-03	9.36E-02
Methyl Mercury	1.67E-03	5.16E-05	1.42E-02	4.69E-04	1.50E-05	1.28E-05	2.29E-07	5.72E-05	9.37E-02
Nickel	1.23E+01	6.11E-01	2.08E+00	3.12E-01	6.06E-03	1.00E+01	7.87E-02	3.40E-01	4.90E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.05E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.02E+00	2.44E-02	1.64E-01	1.23E-02	3.28E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.83E-01	8.27E-01	9.93E-02	1.01E-03	5.00E+00	1.35E-02	--	7.68E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.118 - Detailed Project Case Exposure Point Concentrations for the Baseline Road & Rundle Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.11E-06	1.45E-03	1.36E-07	4.00E-04	1.34E-09	2.14E-05	--	3.52E-07	3.00E-04
Benzo(a)fluorene	4.57E-07	1.17E-07	1.12E-08	1.05E-08	4.45E-09	1.76E-05	--	6.35E-08	5.60E-08
Benzo(b)fluorene	3.16E-07	2.39E-07	7.70E-09	2.04E-08	3.28E-09	1.33E-05	--	4.65E-08	9.24E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.43E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.45E-04	8.21E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.08E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.33E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.83E-06	3.76E-07	9.07E-07	5.93E-07	3.24E-09	2.44E-06	5.87E-08	7.51E-08	9.13E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.04E-02	8.41E-04	1.64E-03	1.07E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.69E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.40E-03	2.81E-03	6.33E-02	1.05E-05	7.11E-04	1.40E-05	2.63E-05	6.34E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.57E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.20E-02	9.29E-04	8.02E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	1.35E-06	1.79E-07	3.29E-07	1.27E-07	9.89E-09	7.28E-05	1.55E-06	2.59E-06	1.64E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.17E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.01E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.05E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.03E-01	3.79E-01	7.68E-01	2.25E-01	1.21E-04	5.02E-01	5.54E-02	1.63E-01	4.69E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.01E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	4.17E-05	3.31E-05	2.04E-06	2.11E-06	1.00E-02	2.00E+00	1.07E-02	--	3.70E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.02E-02	5.18E-04	6.00E+00	5.85E-03	1.44E-02	2.98E-02
Lead	1.70E+01	4.19E-01	1.27E+00	4.40E-02	1.05E-03	1.30E+01	1.46E-01	3.15E-01	7.53E-02
Mercury - Inorganic	7.63E-02	2.24E-02	2.07E-02	2.02E-03	1.00E-04	6.85E-02	1.12E-02	8.42E-03	9.38E-02
Methyl Mercury	1.61E-03	5.44E-05	1.37E-02	4.69E-04	1.50E-05	3.98E-05	7.09E-07	1.78E-04	9.44E-02
Nickel	1.23E+01	6.10E-01	2.08E+00	3.12E-01	6.27E-03	1.00E+01	7.88E-02	3.41E-01	5.21E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.04E-02	6.55E-02	1.00E-02	1.10E-04	2.00E-01	9.00E-04	--	1.09E-02
Thallium	1.02E+00	2.41E-02	1.63E-01	1.21E-02	4.18E-04	1.01E+00	3.24E-04	--	1.00E-02
Tin	1.00E+01	1.82E-01	8.26E-01	9.89E-02	1.04E-03	5.01E+00	1.35E-02	--	1.64E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.56E-02	8.10E+01	7.20E+00	3.78E+01	3.89E+01

Table M.119 - Detailed Project Case Exposure Point Concentrations for the Baseline Road & Courtice Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.54E-06	1.44E-03	1.88E-07	4.00E-04	1.40E-09	2.23E-05	--	3.67E-07	3.00E-04
Benzo(a)fluorene	6.31E-07	1.00E-07	1.54E-08	9.23E-09	4.23E-09	1.68E-05	--	6.04E-08	5.33E-08
Benzo(b)fluorene	4.35E-07	1.73E-07	1.06E-08	1.49E-08	3.18E-09	1.29E-05	--	4.52E-08	8.98E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.41E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.45E-04	8.21E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.07E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.04E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.22E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.85E-06	3.74E-07	9.14E-07	5.92E-07	3.24E-09	2.43E-06	5.85E-08	7.49E-08	9.11E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.04E-02	8.41E-04	1.64E-03	1.07E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.29E-03	2.81E-03	6.33E-02	1.07E-05	7.17E-04	1.41E-05	2.65E-05	6.35E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.54E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.97E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	1.86E-06	1.44E-07	4.54E-07	1.21E-07	8.89E-09	6.55E-05	1.40E-06	2.33E-06	1.48E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.21E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.01E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.06E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.04E-01	3.79E-01	7.69E-01	2.25E-01	1.27E-04	5.02E-01	5.54E-02	1.63E-01	5.37E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.01E-03	3.20E+01	1.71E-01	1.38E+00	3.32E-01
Chromium VI	4.97E-05	3.35E-05	2.43E-06	2.21E-06	1.00E-02	2.00E+00	1.07E-02	--	3.70E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.02E-02	5.23E-04	6.00E+00	5.85E-03	1.44E-02	3.03E-02
Lead	1.70E+01	4.20E-01	1.27E+00	4.40E-02	1.06E-03	1.31E+01	1.46E-01	3.15E-01	7.64E-02
Mercury - Inorganic	7.65E-02	2.24E-02	2.07E-02	2.02E-03	1.00E-04	6.54E-02	1.09E-02	8.03E-03	9.37E-02
Methyl Mercury	1.65E-03	5.26E-05	1.40E-02	4.69E-04	1.50E-05	5.90E-05	1.05E-06	2.63E-04	9.42E-02
Nickel	1.23E+01	6.10E-01	2.08E+00	3.12E-01	6.34E-03	1.00E+01	7.88E-02	3.41E-01	5.33E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.04E-02	6.55E-02	1.00E-02	1.13E-04	2.00E-01	9.00E-04	--	1.12E-02
Thallium	1.02E+00	2.41E-02	1.64E-01	1.23E-02	4.50E-04	1.01E+00	3.25E-04	--	1.00E-02
Tin	1.00E+01	1.83E-01	8.27E-01	9.92E-02	1.05E-03	5.01E+00	1.36E-02	--	1.93E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.58E-02	8.10E+01	7.20E+00	3.78E+01	3.90E+01

Table M.120 - Detailed Project Case Exposure Point Concentrations for the Soper Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	2.34E-07	1.42E-03	2.86E-08	4.00E-04	3.87E-10	6.16E-06	--	1.01E-07	3.00E-04
Benzo(a)fluorene	9.61E-08	3.42E-08	2.35E-09	3.06E-09	1.69E-09	6.68E-06	--	2.41E-08	2.12E-08
Benzo(b)fluorene	6.64E-08	7.49E-08	1.62E-09	6.37E-09	1.18E-09	4.80E-06	--	1.68E-08	3.33E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.11E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.79E-06	3.71E-07	8.80E-07	5.91E-07	3.24E-09	2.14E-06	5.17E-08	6.58E-08	8.52E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.02E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.17E-03	2.81E-03	6.34E-02	1.01E-05	7.03E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.54E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.98E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	2.84E-07	5.38E-08	6.92E-08	3.89E-08	4.01E-09	2.95E-05	6.50E-07	1.05E-06	6.66E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.06E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.07E-04	5.01E-01	5.54E-02	1.63E-01	3.05E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.41E-05	1.34E-05	6.91E-07	8.38E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.06E-04	6.00E+00	5.85E-03	1.44E-02	2.86E-02
Lead	1.69E+01	4.13E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.21E-02
Mercury - Inorganic	7.18E-02	2.23E-02	1.94E-02	2.01E-03	1.00E-04	5.59E-02	1.00E-02	6.87E-03	9.36E-02
Methyl Mercury	1.47E-03	3.87E-05	1.25E-02	4.69E-04	1.50E-05	5.73E-06	1.02E-07	2.56E-05	9.38E-02
Nickel	1.23E+01	6.04E-01	2.08E+00	3.11E-01	6.09E-03	1.00E+01	7.88E-02	3.40E-01	4.95E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.04E-04	2.00E-01	9.00E-04	--	1.03E-02
Thallium	1.01E+00	2.16E-02	1.61E-01	1.08E-02	3.42E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.71E-02	1.01E-03	5.00E+00	1.35E-02	--	9.14E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.121 - Detailed Project Case Exposure Point Concentrations for the Bowmanville Marsh Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	2.56E-07	1.43E-03	3.12E-08	4.00E-04	7.37E-10	1.17E-05	--	1.93E-07	3.00E-04
Benzo(a)fluorene	1.05E-07	4.38E-08	2.56E-09	3.91E-09	2.74E-09	1.09E-05	--	3.92E-08	3.45E-08
Benzo(b)fluorene	7.25E-08	9.82E-08	1.77E-09	8.34E-09	1.96E-09	7.95E-06	--	2.78E-08	5.51E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.39E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.44E-04	8.20E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.14E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.71E-07	8.72E-07	5.91E-07	3.24E-09	2.12E-06	5.13E-08	6.53E-08	8.48E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.04E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.69E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.21E-03	2.81E-03	6.34E-02	1.01E-05	7.03E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.56E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.20E-02	9.29E-04	8.01E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	3.10E-07	6.95E-08	7.56E-08	4.88E-08	6.61E-09	4.87E-05	1.05E-06	1.73E-06	1.10E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.03E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.64E-01	2.25E-01	1.04E-04	5.00E-01	5.53E-02	1.63E-01	2.58E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	6.45E-06	5.11E-06	3.16E-07	3.29E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.11E-02
Mercury - Inorganic	7.18E-02	2.23E-02	1.94E-02	2.01E-03	1.00E-04	6.18E-02	1.06E-02	7.59E-03	9.37E-02
Methyl Mercury	1.43E-03	3.44E-05	1.22E-02	4.69E-04	1.50E-05	6.71E-06	1.19E-07	2.99E-05	9.40E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.05E-03	1.00E+01	7.87E-02	3.40E-01	4.87E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.54E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.00E+00	2.06E-02	1.60E-01	1.03E-02	3.20E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.64E-02	1.01E-03	5.00E+00	1.35E-02	--	7.02E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.122 - Detailed Project Case Exposure Point Concentrations for the South of Site, Eco Baseline S7 Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	9.70E-07	1.42E-03	1.18E-07	4.00E-04	2.39E-10	3.81E-06	--	6.27E-08	3.00E-04
Benzo(a)fluorene	3.98E-07	4.19E-08	9.71E-09	3.94E-09	7.25E-10	2.88E-06	--	1.04E-08	9.13E-09
Benzo(b)fluorene	2.75E-07	5.43E-08	6.70E-09	4.78E-09	5.03E-10	2.05E-06	--	7.14E-09	1.42E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.06E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.82E-06	3.70E-07	8.99E-07	5.91E-07	3.24E-09	2.15E-06	5.20E-08	6.63E-08	8.55E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.03E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.13E-03	2.81E-03	6.33E-02	1.01E-05	7.02E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.53E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.96E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	1.17E-06	5.49E-08	2.87E-07	5.40E-08	1.96E-09	1.44E-05	3.25E-07	5.13E-07	3.25E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.03E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.03E-01	3.79E-01	7.67E-01	2.25E-01	1.03E-04	5.00E-01	5.53E-02	1.63E-01	2.53E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	3.40E-05	2.27E-05	1.66E-06	1.35E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.70E+01	4.16E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.08E-02
Mercury - Inorganic	7.35E-02	2.24E-02	1.99E-02	2.01E-03	1.00E-04	5.33E-02	9.74E-03	6.54E-03	9.35E-02
Methyl Mercury	1.57E-03	4.32E-05	1.34E-02	4.69E-04	1.50E-05	8.10E-06	1.44E-07	3.61E-05	9.37E-02
Nickel	1.23E+01	6.07E-01	2.08E+00	3.12E-01	6.04E-03	1.00E+01	7.87E-02	3.40E-01	4.86E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.03E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.02E+00	2.28E-02	1.62E-01	1.14E-02	3.18E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.82E-01	8.26E-01	9.81E-02	1.01E-03	5.00E+00	1.35E-02	--	6.69E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.123 - Detailed Project Case Exposure Point Concentrations for the Sports Fields Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.42E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.01E-05	5.01E-02	8.43E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.01E-02	3.49E-04	3.43E-04	3.00E-04
Benzo(e)pyrene	8.77E-07	1.44E-03	1.07E-07	4.00E-04	4.64E-09	7.38E-05	--	1.21E-06	3.01E-04
Benzo(a)fluorene	3.59E-07	7.65E-08	8.77E-09	7.17E-09	1.77E-08	7.01E-05	--	2.52E-07	2.23E-07
Benzo(b)fluorene	2.48E-07	1.48E-07	6.06E-09	1.28E-08	1.21E-08	4.93E-05	--	1.72E-07	3.41E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.40E-03	6.10E-03	4.00E-04	1.00E-05	5.11E-02	8.60E-04	8.36E-04	6.51E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.06E-02	8.51E-04	8.12E-04	3.02E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.44E-04	8.13E-04	3.00E-04
Perylene	1.00E-02	2.20E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.35E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.81E-06	3.73E-07	8.92E-07	5.92E-07	3.25E-09	3.43E-06	8.15E-08	1.06E-07	1.11E-06
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.17E-02	8.40E-04	1.64E-03	1.48E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.01E-05	1.04E-02	1.85E-04	3.81E-04	1.01E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.80E-04	3.66E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.27E-03	2.81E-03	6.33E-02	1.03E-05	7.07E-04	1.39E-05	2.61E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.94E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.89E-04	1.59E-03	1.00E-01	2.41E-01	5.16E-03	8.38E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.22E-03	1.07E-03	2.03E-02	2.24E-02	9.43E-04	9.04E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.01E-04	3.00E-03	3.31E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.03E-03	5.20E-04	2.01E-02	2.50E-02	9.43E-04	6.25E-04
O-Terphenyl	1.06E-06	1.15E-07	2.59E-07	1.54E-07	4.87E-08	3.59E-04	7.21E-06	1.28E-05	8.09E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.07E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.02E-01	3.78E-01	7.66E-01	2.25E-01	1.09E-04	5.01E-01	5.54E-02	1.63E-01	3.28E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	2.64E-05	1.80E-05	1.29E-06	1.14E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.08E-04	6.00E+00	5.85E-03	1.44E-02	2.88E-02
Lead	1.70E+01	4.15E-01	1.26E+00	4.40E-02	1.04E-03	1.30E+01	1.45E-01	3.14E-01	7.43E-02
Mercury - Inorganic	7.42E-02	2.24E-02	2.01E-02	2.01E-03	1.01E-04	1.07E-01	1.42E-02	1.31E-02	9.43E-02
Methyl Mercury	1.53E-03	4.31E-05	1.30E-02	4.69E-04	1.50E-05	1.22E-05	2.17E-07	5.44E-05	9.61E-02
Nickel	1.23E+01	6.06E-01	2.08E+00	3.11E-01	6.12E-03	1.00E+01	7.88E-02	3.40E-01	4.98E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.05E-04	2.00E-01	9.00E-04	--	1.04E-02
Thallium	1.01E+00	2.22E-02	1.62E-01	1.12E-02	3.53E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.26E-01	9.77E-02	1.02E-03	5.00E+00	1.35E-02	--	1.09E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.53E-02	8.10E+01	7.20E+00	3.78E+01	3.86E+01

Table M.124 - Detailed Project Case Exposure Point Concentrations for the Water Pollution Control Plant Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.25E-06	1.43E-03	1.53E-07	4.00E-04	3.09E-10	4.93E-06	--	8.10E-08	3.00E-04
Benzo(a)fluorene	5.14E-07	6.86E-08	1.25E-08	6.34E-09	9.38E-10	3.72E-06	--	1.34E-08	1.18E-08
Benzo(b)fluorene	3.55E-07	1.07E-07	8.66E-09	9.30E-09	6.51E-10	2.64E-06	--	9.23E-09	1.83E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.39E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.13E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.83E-06	3.72E-07	9.07E-07	5.92E-07	3.24E-09	2.20E-06	5.30E-08	6.76E-08	8.64E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.04E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.20E-03	2.81E-03	6.33E-02	1.01E-05	7.02E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.53E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.97E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	1.52E-06	9.53E-08	3.70E-07	8.08E-08	2.53E-09	1.86E-05	4.17E-07	6.64E-07	4.20E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.03E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.01E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.03E-01	3.79E-01	7.68E-01	2.25E-01	1.04E-04	5.00E-01	5.53E-02	1.63E-01	2.61E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	4.19E-05	2.80E-05	2.05E-06	1.67E-06	1.07E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.01E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.70E+01	4.18E-01	1.27E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.10E-02
Mercury - Inorganic	7.49E-02	2.24E-02	2.03E-02	2.02E-03	1.00E-04	5.46E-02	9.87E-03	6.70E-03	9.36E-02
Methyl Mercury	1.61E-03	4.77E-05	1.37E-02	4.69E-04	1.50E-05	9.98E-06	1.78E-07	4.45E-05	9.37E-02
Nickel	1.23E+01	6.09E-01	2.08E+00	3.12E-01	6.05E-03	1.00E+01	7.87E-02	3.40E-01	4.88E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.04E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.02E+00	2.35E-02	1.63E-01	1.18E-02	3.22E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.82E-01	8.26E-01	9.86E-02	1.01E-03	5.00E+00	1.35E-02	--	7.09E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.125 - Detailed Project Case Exposure Point Concentrations for the Future Industrial Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.90E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	2.18E-06	1.43E-03	2.66E-07	4.00E-04	5.38E-10	8.56E-06	--	1.41E-07	3.00E-04
Benzo(a)fluorene	8.94E-07	9.20E-08	2.18E-08	8.66E-09	1.63E-09	6.46E-06	--	2.32E-08	2.05E-08
Benzo(b)fluorene	6.17E-07	1.17E-07	1.51E-08	1.03E-08	1.13E-09	4.59E-06	--	1.60E-08	3.18E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.44E-04	8.21E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.06E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.12E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.89E-06	3.74E-07	9.40E-07	5.93E-07	3.24E-09	2.39E-06	5.75E-08	7.36E-08	9.03E-07
PCB									
Aroclor 1254 (Total PCBs)	5.02E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.04E-02	8.41E-04	1.64E-03	1.07E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.19E-03	2.82E-03	6.32E-02	1.02E-05	7.04E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.56E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.20E-02	9.29E-04	8.01E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	2.64E-06	1.20E-07	6.44E-07	1.20E-07	4.39E-09	3.24E-05	7.09E-07	1.15E-06	7.29E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.06E-02
Arsenic	8.00E+00	3.21E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.01E-01	2.00E-01	5.05E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.06E-01	3.80E-01	7.71E-01	2.25E-01	1.07E-04	5.01E-01	5.53E-02	1.63E-01	3.00E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	7.66E-05	5.12E-05	3.75E-06	3.05E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.02E-02	5.06E-04	6.00E+00	5.85E-03	1.44E-02	2.86E-02
Lead	1.71E+01	4.25E-01	1.27E+00	4.41E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.18E-02
Mercury - Inorganic	7.79E-02	2.24E-02	2.11E-02	2.03E-03	1.00E-04	5.73E-02	1.01E-02	7.04E-03	9.36E-02
Methyl Mercury	1.79E-03	6.12E-05	1.52E-02	4.69E-04	1.50E-05	1.83E-05	3.25E-07	8.14E-05	9.38E-02
Nickel	1.23E+01	6.16E-01	2.09E+00	3.12E-01	6.09E-03	1.00E+01	7.88E-02	3.40E-01	4.94E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.07E-02	6.56E-02	1.00E-02	1.03E-04	2.00E-01	9.00E-04	--	1.03E-02
Thallium	1.03E+00	2.63E-02	1.65E-01	1.32E-02	3.40E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.84E-01	8.27E-01	1.01E-01	1.01E-03	5.00E+00	1.35E-02	--	8.82E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.92E+01	6.73E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.126 - Detailed Project Case Exposure Point Concentrations for the Harmony Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.83E-07	1.42E-03	2.23E-08	4.00E-04	3.26E-11	5.19E-07	--	8.53E-09	3.00E-04
Benzo(a)fluorene	7.50E-08	2.07E-08	1.83E-09	1.85E-09	7.63E-11	3.03E-07	--	1.09E-09	9.61E-10
Benzo(b)fluorene	5.18E-08	4.32E-08	1.26E-09	3.67E-09	5.55E-11	2.26E-07	--	7.88E-10	1.56E-09
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.03E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.10E-04	3.00E-04
Perylene	1.00E-02	2.06E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.69E-07	8.73E-07	5.90E-07	3.24E-09	1.99E-06	4.81E-08	6.11E-08	8.21E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.00E-02	8.41E-04	1.64E-03	1.00E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.67E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.13E-03	2.81E-03	6.34E-02	1.01E-05	7.02E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.50E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.93E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.01E-04
O-Terphenyl	2.21E-07	3.20E-08	5.40E-08	1.96E-08	1.44E-10	1.06E-06	2.63E-08	3.79E-08	2.40E-07
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.03E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.64E-01	2.25E-01	1.04E-04	5.00E-01	5.53E-02	1.63E-01	2.57E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	6.68E-06	5.35E-06	3.27E-07	3.42E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.08E-02
Mercury - Inorganic	7.10E-02	2.23E-02	1.92E-02	2.00E-03	1.00E-04	5.06E-02	9.48E-03	6.22E-03	9.35E-02
Methyl Mercury	1.43E-03	3.30E-05	1.22E-02	4.69E-04	1.50E-05	2.74E-06	4.88E-08	1.22E-05	9.35E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.04E-03	1.00E+01	7.87E-02	3.40E-01	4.87E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.00E+00	2.07E-02	1.60E-01	1.03E-02	3.20E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.65E-02	1.01E-03	5.00E+00	1.35E-02	--	6.84E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.127 - Detailed Project Case Exposure Point Concentrations for the Farewell Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	2.06E-07	1.42E-03	2.51E-08	4.00E-04	2.95E-10	4.70E-06	--	7.72E-08	3.00E-04
Benzo(a)fluorene	8.43E-08	2.09E-08	2.06E-09	1.89E-09	1.03E-09	4.09E-06	--	1.47E-08	1.30E-08
Benzo(b)fluorene	5.82E-08	4.24E-08	1.42E-09	3.62E-09	7.71E-10	3.13E-06	--	1.09E-08	2.17E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.37E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.06E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.69E-07	8.73E-07	5.90E-07	3.24E-09	2.04E-06	4.95E-08	6.29E-08	8.32E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.01E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.13E-03	2.81E-03	6.34E-02	1.01E-05	7.02E-04	1.38E-05	2.59E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.52E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.95E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	2.49E-07	3.19E-08	6.07E-08	2.43E-08	2.22E-09	1.64E-05	3.68E-07	5.83E-07	3.69E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.03E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.64E-01	2.25E-01	1.04E-04	5.00E-01	5.53E-02	1.63E-01	2.57E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	7.23E-06	5.56E-06	3.54E-07	3.55E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.10E-02
Mercury - Inorganic	7.10E-02	2.23E-02	1.92E-02	2.00E-03	1.00E-04	5.30E-02	9.72E-03	6.51E-03	9.35E-02
Methyl Mercury	1.44E-03	3.31E-05	1.22E-02	4.69E-04	1.50E-05	3.18E-06	5.67E-08	1.42E-05	9.36E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.04E-03	1.00E+01	7.87E-02	3.40E-01	4.87E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.00E+00	2.07E-02	1.61E-01	1.04E-02	3.20E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.65E-02	1.01E-03	5.00E+00	1.35E-02	--	6.92E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.128 - Detailed Project Case Exposure Point Concentrations for the Farm A Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.04E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.42E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.01E-05	5.01E-02	8.43E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.01E-02	3.49E-04	3.43E-04	3.00E-04
Benzo(e)pyrene	1.11E-06	1.44E-03	1.36E-07	4.00E-04	5.89E-09	9.37E-05	--	1.54E-06	3.01E-04
Benzo(a)fluorene	4.56E-07	7.99E-08	1.11E-08	7.61E-09	2.25E-08	8.90E-05	--	3.20E-07	2.83E-07
Benzo(b)fluorene	3.15E-07	1.44E-07	7.69E-09	1.26E-08	1.54E-08	6.25E-05	--	2.18E-07	4.33E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.40E-03	6.10E-03	4.00E-04	1.00E-05	5.14E-02	8.65E-04	8.41E-04	6.51E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.76E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.06E-04	6.10E-03	4.00E-04	1.00E-05	5.07E-02	8.53E-04	8.15E-04	3.02E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.45E-04	8.14E-04	3.00E-04
Perylene	1.00E-02	2.19E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.35E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.89E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.82E-06	3.73E-07	9.01E-07	5.92E-07	3.25E-09	3.94E-06	9.33E-08	1.21E-07	1.22E-06
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.22E-02	8.40E-04	1.64E-03	1.61E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.01E-05	1.05E-02	1.86E-04	3.84E-04	1.01E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.80E-04	3.67E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.26E-03	2.81E-03	6.33E-02	1.04E-05	7.09E-04	1.39E-05	2.62E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.94E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.90E-04	1.61E-03	1.00E-01	2.41E-01	5.16E-03	8.62E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.23E-03	1.09E-03	2.04E-02	2.25E-02	9.47E-04	9.33E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.01E-04	3.00E-03	3.31E-03	1.39E-04	7.94E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.03E-03	5.26E-04	2.01E-02	2.51E-02	9.44E-04	6.31E-04
O-Terphenyl	1.35E-06	1.17E-07	3.29E-07	1.82E-07	6.19E-08	4.56E-04	9.08E-06	1.62E-05	1.03E-04
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.10E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.03E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.03E-01	3.79E-01	7.67E-01	2.25E-01	1.13E-04	5.01E-01	5.54E-02	1.63E-01	3.68E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	3.56E-05	2.42E-05	1.75E-06	1.53E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.11E-04	6.00E+00	5.85E-03	1.44E-02	2.91E-02
Lead	1.70E+01	4.17E-01	1.26E+00	4.40E-02	1.05E-03	1.30E+01	1.46E-01	3.15E-01	7.57E-02
Mercury - Inorganic	7.49E-02	2.24E-02	2.03E-02	2.02E-03	1.01E-04	1.16E-01	1.49E-02	1.43E-02	9.44E-02
Methyl Mercury	1.58E-03	4.66E-05	1.34E-02	4.69E-04	1.50E-05	1.65E-05	2.93E-07	7.34E-05	9.66E-02
Nickel	1.23E+01	6.08E-01	2.08E+00	3.12E-01	6.16E-03	1.00E+01	7.88E-02	3.40E-01	5.05E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.03E-02	6.55E-02	1.00E-02	1.06E-04	2.00E-01	9.00E-04	--	1.05E-02
Thallium	1.02E+00	2.30E-02	1.63E-01	1.16E-02	3.71E-04	1.01E+00	3.23E-04	--	1.00E-02
Tin	1.00E+01	1.82E-01	8.26E-01	9.83E-02	1.03E-03	5.01E+00	1.35E-02	--	1.30E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.54E-02	8.10E+01	7.20E+00	3.78E+01	3.86E+01

Table M.129 - Detailed Project Case Exposure Point Concentrations for the Farm B Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	5.24E-07	1.44E-03	6.39E-08	4.00E-04	6.33E-10	1.01E-05	--	1.66E-07	3.00E-04
Benzo(a)fluorene	2.15E-07	6.61E-08	5.24E-09	5.91E-09	2.09E-09	8.30E-06	--	2.99E-08	2.64E-08
Benzo(b)fluorene	1.48E-07	1.41E-07	3.62E-09	1.20E-08	1.54E-09	6.27E-06	--	2.19E-08	4.35E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.40E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.20E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.79E-06	3.72E-07	8.79E-07	5.91E-07	3.24E-09	2.12E-06	5.13E-08	6.53E-08	8.48E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.03E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.27E-03	2.81E-03	6.33E-02	1.02E-05	7.05E-04	1.38E-05	2.61E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.53E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.97E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	6.34E-07	1.03E-07	1.55E-07	6.80E-08	4.65E-09	3.43E-05	7.49E-07	1.22E-06	7.72E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.06E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.07E-04	5.01E-01	5.53E-02	1.63E-01	2.98E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.37E-05	9.60E-06	6.70E-07	6.25E-07	1.07E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.06E-04	6.00E+00	5.85E-03	1.44E-02	2.86E-02
Lead	1.69E+01	4.13E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.18E-02
Mercury - Inorganic	7.30E-02	2.23E-02	1.98E-02	2.01E-03	1.00E-04	5.88E-02	1.03E-02	7.22E-03	9.36E-02
Methyl Mercury	1.47E-03	3.81E-05	1.25E-02	4.69E-04	1.50E-05	1.31E-05	2.33E-07	5.83E-05	9.39E-02
Nickel	1.23E+01	6.03E-01	2.08E+00	3.11E-01	6.09E-03	1.00E+01	7.88E-02	3.40E-01	4.94E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.03E-04	2.00E-01	9.00E-04	--	1.03E-02
Thallium	1.01E+00	2.12E-02	1.61E-01	1.06E-02	3.39E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.69E-02	1.01E-03	5.00E+00	1.35E-02	--	8.75E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.130 - Detailed Project Case Exposure Point Concentrations for the Farm C Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	3.37E-07	1.42E-03	4.11E-08	4.00E-04	4.84E-10	7.70E-06	--	1.27E-07	3.00E-04
Benzo(a)fluorene	1.38E-07	3.14E-08	3.37E-09	2.85E-09	1.69E-09	6.71E-06	--	2.42E-08	2.13E-08
Benzo(b)fluorene	9.55E-08	6.22E-08	2.33E-09	5.32E-09	1.26E-09	5.14E-06	--	1.79E-08	3.56E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.08E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.70E-07	8.78E-07	5.90E-07	3.24E-09	2.10E-06	5.07E-08	6.45E-08	8.43E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.02E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.15E-03	2.81E-03	6.33E-02	1.01E-05	7.03E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.53E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.96E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	4.08E-07	4.75E-08	9.95E-08	3.77E-08	3.64E-09	2.68E-05	5.92E-07	9.55E-07	6.04E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.05E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.06E-04	5.00E-01	5.53E-02	1.63E-01	2.85E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.21E-05	9.18E-06	5.91E-07	5.87E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.05E-04	6.00E+00	5.85E-03	1.44E-02	2.85E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.16E-02
Mercury - Inorganic	7.17E-02	2.23E-02	1.94E-02	2.01E-03	1.00E-04	5.50E-02	9.91E-03	6.76E-03	9.36E-02
Methyl Mercury	1.46E-03	3.58E-05	1.24E-02	4.69E-04	1.50E-05	5.32E-06	9.47E-08	2.37E-05	9.37E-02
Nickel	1.23E+01	6.03E-01	2.08E+00	3.11E-01	6.07E-03	1.00E+01	7.87E-02	3.40E-01	4.91E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.03E-04	2.00E-01	9.00E-04	--	1.03E-02
Thallium	1.01E+00	2.11E-02	1.61E-01	1.06E-02	3.33E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.68E-02	1.01E-03	5.00E+00	1.35E-02	--	8.21E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.131 - Detailed Project Case Exposure Point Concentrations for the Robinson Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	7.15E-07	1.43E-03	8.72E-08	4.00E-04	6.97E-10	1.11E-05	--	1.82E-07	3.00E-04
Benzo(a)fluorene	2.93E-07	6.66E-08	7.16E-09	6.02E-09	2.45E-09	9.71E-06	--	3.50E-08	3.08E-08
Benzo(b)fluorene	2.03E-07	1.32E-07	4.94E-09	1.13E-08	1.78E-09	7.22E-06	--	2.52E-08	5.01E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.40E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.18E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.80E-06	3.72E-07	8.86E-07	5.91E-07	3.24E-09	2.17E-06	5.23E-08	6.67E-08	8.57E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.04E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.25E-03	2.81E-03	6.33E-02	1.03E-05	7.08E-04	1.39E-05	2.62E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.54E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.98E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	8.66E-07	1.01E-07	2.11E-07	7.34E-08	5.51E-09	4.06E-05	8.82E-07	1.44E-06	9.14E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.09E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.03E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.02E-01	3.78E-01	7.66E-01	2.25E-01	1.12E-04	5.01E-01	5.54E-02	1.63E-01	3.53E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	2.08E-05	1.41E-05	1.02E-06	9.35E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.10E-04	6.00E+00	5.85E-03	1.44E-02	2.90E-02
Lead	1.70E+01	4.14E-01	1.26E+00	4.40E-02	1.03E-03	1.30E+01	1.45E-01	3.14E-01	7.28E-02
Mercury - Inorganic	7.35E-02	2.23E-02	1.99E-02	2.01E-03	1.00E-04	5.85E-02	1.03E-02	7.19E-03	9.36E-02
Methyl Mercury	1.51E-03	4.05E-05	1.28E-02	4.69E-04	1.50E-05	2.61E-05	4.65E-07	1.16E-04	9.39E-02
Nickel	1.23E+01	6.04E-01	2.08E+00	3.11E-01	6.14E-03	1.00E+01	7.88E-02	3.40E-01	5.03E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.06E-04	2.00E-01	9.00E-04	--	1.05E-02
Thallium	1.01E+00	2.17E-02	1.61E-01	1.10E-02	3.64E-04	1.00E+00	3.23E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.26E-01	9.73E-02	1.02E-03	5.01E+00	1.35E-02	--	1.12E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.53E-02	8.10E+01	7.20E+00	3.78E+01	3.86E+01

Table M.132 - Detailed Project Case Exposure Point Concentrations for the Bennett Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.89E-07	1.42E-03	2.30E-08	4.00E-04	2.91E-10	4.64E-06	--	7.63E-08	3.00E-04
Benzo(a)fluorene	7.73E-08	3.18E-08	1.89E-09	2.83E-09	1.03E-09	4.09E-06	--	1.47E-08	1.30E-08
Benzo(b)fluorene	5.34E-08	7.13E-08	1.30E-09	6.05E-09	7.13E-10	2.90E-06	--	1.01E-08	2.01E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.10E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.70E-07	8.71E-07	5.90E-07	3.24E-09	2.06E-06	4.98E-08	6.33E-08	8.35E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.03E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.17E-03	2.81E-03	6.34E-02	1.01E-05	7.02E-04	1.38E-05	2.60E-05	6.31E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.53E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.96E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	2.28E-07	5.05E-08	5.57E-08	3.22E-08	2.75E-09	2.03E-05	4.52E-07	7.22E-07	4.57E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.02E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.00E-01	3.77E-01	7.64E-01	2.25E-01	1.03E-04	5.00E-01	5.53E-02	1.63E-01	2.49E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	4.98E-06	3.98E-06	2.44E-07	2.57E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.02E-04	6.00E+00	5.85E-03	1.44E-02	2.82E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.07E-02
Mercury - Inorganic	7.13E-02	2.23E-02	1.93E-02	2.00E-03	1.00E-04	5.54E-02	9.95E-03	6.81E-03	9.36E-02
Methyl Mercury	1.43E-03	3.30E-05	1.21E-02	4.69E-04	1.50E-05	5.16E-06	9.19E-08	2.30E-05	9.37E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.04E-03	1.00E+01	7.87E-02	3.40E-01	4.86E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.54E-02	1.00E-02	1.01E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.05E-02	1.60E-01	1.03E-02	3.16E-04	1.00E+00	3.21E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.63E-02	1.01E-03	5.00E+00	1.35E-02	--	6.53E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.133 - Detailed Project Case Exposure Point Concentrations for the Oshawa Creek Conservation Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	2.12E-07	1.42E-03	2.59E-08	4.00E-04	6.98E-10	1.11E-05	--	1.83E-07	3.00E-04
Benzo(a)fluorene	8.70E-08	2.90E-08	2.12E-09	2.61E-09	2.39E-09	9.45E-06	--	3.40E-08	3.00E-08
Benzo(b)fluorene	6.01E-08	6.26E-08	1.47E-09	5.34E-09	1.81E-09	7.34E-06	--	2.56E-08	5.09E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.38E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.02E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.01E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.09E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.77E-06	3.70E-07	8.72E-07	5.90E-07	3.24E-09	2.09E-06	5.06E-08	6.44E-08	8.43E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.02E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.16E-03	2.81E-03	6.34E-02	1.01E-05	7.02E-04	1.38E-05	2.60E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.55E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	8.00E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	2.57E-07	4.53E-08	6.27E-08	3.69E-08	5.13E-09	3.78E-05	8.24E-07	1.35E-06	8.52E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.03E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.64E-01	2.25E-01	1.03E-04	5.00E-01	5.53E-02	1.63E-01	2.54E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	6.08E-06	4.62E-06	2.98E-07	2.98E-07	1.07E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.69E+01	4.11E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.11E-02
Mercury - Inorganic	7.13E-02	2.23E-02	1.93E-02	2.00E-03	1.00E-04	5.81E-02	1.02E-02	7.13E-03	9.36E-02
Methyl Mercury	1.43E-03	3.32E-05	1.22E-02	4.69E-04	1.50E-05	2.03E-06	3.61E-08	9.05E-06	9.39E-02
Nickel	1.23E+01	6.01E-01	2.08E+00	3.11E-01	6.04E-03	1.00E+01	7.87E-02	3.40E-01	4.86E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.54E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.01E-02
Thallium	1.00E+00	2.06E-02	1.60E-01	1.03E-02	3.18E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.64E-02	1.01E-03	5.00E+00	1.35E-02	--	6.88E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.134 - Detailed Process Upset Case Exposure Point Concentrations for the Darlington Provincial Park Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	6.15E-07	1.33E-07	3.03E-08	4.79E-10	2.50E-09	4.89E-07	8.23E-09	2.01E-09	9.93E-10
Acenaphthylene	1.44E-07	2.78E-08	7.08E-09	1.36E-10	3.28E-09	5.77E-07	9.70E-09	2.35E-09	1.65E-09
Anthracene	6.06E-07	6.07E-08	2.97E-08	3.53E-10	7.81E-10	7.35E-07	1.24E-08	2.86E-09	1.24E-09
Fluoranthene	6.00E-06	4.50E-07	2.93E-07	3.30E-09	9.84E-09	1.93E-05	3.25E-07	7.21E-08	4.93E-08
Fluorene	6.11E-07	9.15E-08	3.00E-08	4.66E-10	5.58E-09	1.72E-06	2.90E-08	6.88E-09	4.43E-09
Phenanthrene	6.18E-06	6.62E-07	3.02E-07	3.92E-09	2.14E-08	2.28E-05	3.83E-07	8.87E-08	3.40E-08
High Molecular Weight PAHs									
Benz(a)anthracene	3.33E-07	1.58E-07	8.13E-09	7.01E-10	2.63E-10	3.77E-06	6.34E-08	1.32E-08	6.61E-09
Benzo(a)pyrene	5.90E-07	7.71E-07	7.20E-08	3.00E-09	3.55E-10	1.37E-05	2.39E-07	2.35E-07	1.78E-08
Benzo(e)pyrene	1.61E-06	6.01E-05	1.96E-07	1.93E-07	1.57E-09	2.49E-05	--	4.10E-07	2.16E-07
Benzo(a)fluorene	6.59E-07	1.62E-07	1.61E-08	8.96E-10	5.50E-09	2.18E-05	--	7.85E-08	6.93E-08
Benzo(b)fluorene	4.55E-07	3.27E-07	1.11E-08	1.46E-09	3.99E-09	1.62E-05	--	5.66E-08	1.12E-07
Benzo(b)fluoranthene	7.66E-07	4.75E-08	1.87E-08	3.20E-10	3.06E-10	1.28E-05	2.16E-07	4.34E-08	2.04E-08
Benzo(g,h,i)perylene	8.33E-06	9.12E-05	1.02E-06	2.85E-07	1.30E-09	2.35E-04	3.96E-06	3.85E-06	2.07E-07
Benzo(k)fluoranthene	6.69E-07	3.09E-07	1.63E-08	1.25E-09	1.26E-10	4.99E-06	8.40E-08	1.69E-08	7.93E-09
Chrysene	1.24E-06	1.59E-07	3.02E-08	8.97E-10	4.75E-10	7.62E-06	1.28E-07	2.67E-08	1.19E-08
Dibenz(a,c)anthracene	1.05E-06	1.14E-05	1.28E-07	3.18E-08	1.58E-09	1.23E-04	2.07E-06	1.98E-06	3.97E-07
Dibenz(a,h)anthracene	3.68E-07	7.40E-06	4.49E-08	2.31E-08	8.58E-11	6.15E-06	1.03E-07	1.00E-07	1.36E-08
Indeno(1,2,3-cd)pyrene	1.77E-06	1.06E-06	3.32E-07	3.32E-09	4.11E-10	6.91E-05	6.91E-07	6.66E-07	6.66E-08
Perylene	3.47E-07	4.48E-05	4.23E-08	1.56E-07	1.88E-10	6.05E-06	1.05E-07	1.01E-07	1.68E-08
Pyrene	3.07E-05	1.94E-06	7.50E-07	1.48E-08	1.54E-08	4.20E-05	7.06E-07	1.58E-07	6.14E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	6.09E-08	1.13E-08	3.01E-08	3.77E-09	2.29E-12	3.57E-07	8.60E-09	1.10E-08	7.25E-08
PCB									
Aroclor 1254 (Total PCBs)	1.14E-04	1.19E-06	--	2.19E-06	5.04E-09	4.94E-04	--	--	9.89E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	8.76E-08	3.86E-08	1.10E-08	8.62E-08	1.27E-07	1.92E-06	5.80E-07	8.18E-08	1.53E-06
1,2,4-Trichlorobenzene	6.52E-09	1.36E-09	8.01E-10	3.95E-09	3.45E-09	2.29E-07	3.76E-09	9.33E-09	2.18E-07
1,2,4,5-Tetrachlorobenzene	2.76E-07	1.85E-08	3.37E-08	2.07E-08	5.12E-09	1.55E-06	2.77E-08	5.89E-08	1.62E-06
Pentachlorobenzene	4.30E-06	1.83E-07	1.05E-06	1.89E-07	1.06E-08	5.14E-05	9.17E-07	1.89E-06	7.89E-06
Hexachlorobenzene	1.19E-07	7.33E-09	2.90E-08	1.14E-08	3.63E-09	1.16E-05	2.07E-07	4.22E-07	3.63E-06
Pentachlorophenol	2.02E-06	4.53E-04	4.73E-06	3.03E-07	7.61E-07	1.80E-05	3.53E-07	6.66E-07	4.28E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	7.02E-11	6.61E-11	9.70E-12	5.27E-09	1.57E-08	9.56E-08	7.54E-08	4.32E-09	4.97E-08
Chloroform	1.57E-10	4.29E-10	3.53E-11	2.98E-09	2.65E-08	5.56E-08	9.80E-08	2.70E-09	1.33E-08
Dichloromethane	2.82E-08	1.94E-07	1.79E-08	3.15E-07	9.27E-06	3.71E-06	8.92E-06	1.91E-07	9.27E-07
Trichlorofluoromethane (Freon 11)	7.27E-09	1.03E-08	1.12E-09	1.87E-06	8.16E-06	3.73E-05	4.10E-05	1.73E-06	1.29E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	3.52E-10	4.96E-10	5.43E-11	1.65E-08	7.18E-08	3.88E-07	4.26E-07	1.80E-08	1.14E-07
Other Organics									
Bromoform	9.79E-10	1.62E-09	1.61E-10	4.49E-07	2.33E-06	1.18E-05	1.46E-05	5.51E-07	2.74E-06
O-Terphenyl	1.95E-06	2.46E-07	4.75E-07	1.63E-07	1.24E-08	9.11E-05	1.92E-06	3.25E-06	2.05E-05
Inorganics									
Antimony	7.39E-04	4.10E-04	1.18E-04	4.93E-06	8.15E-06	3.67E-04	1.88E-06	4.14E-06	1.63E-03
Arsenic	7.34E-05	4.27E-05	1.54E-06	1.02E-06	1.25E-06	3.63E-05	1.77E-07	3.75E-06	6.26E-05
Barium	5.21E-04	2.80E-04	7.58E-06	5.05E-07	6.29E-06	2.58E-04	5.23E-06	3.53E-05	6.29E-05
Beryllium	4.66E-04	3.65E-05	3.35E-06	6.11E-07	3.43E-07	2.71E-04	2.47E-05	3.58E-05	3.43E-05
Boron	2.88E-03	2.61E-02	4.61E-04	2.36E-04	4.56E-04	1.37E-03	2.48E-05	3.13E-04	--
Cadmium	3.07E-03	1.79E-03	4.68E-03	2.59E-06	2.04E-05	1.53E-03	1.69E-04	4.97E-04	2.45E-02
Chromium (Total)	2.58E-04	2.17E-04	1.26E-05	1.38E-05	6.71E-06	1.27E-04	6.79E-07	5.48E-06	1.34E-03
Chromium VI	3.67E-05	3.08E-05	1.80E-06	1.97E-06	9.54E-07	1.81E-05	9.66E-08	--	3.52E-05
Cobalt	1.56E-03	5.84E-04	3.05E-05	1.44E-04	1.72E-05	7.75E-04	7.56E-07	1.86E-06	1.72E-03
Lead	7.13E-02	7.98E-03	5.31E-03	3.62E-05	4.71E-05	4.24E-02	4.73E-04	1.02E-03	4.93E-03
Mercury - Inorganic	4.86E-03	7.99E-05	1.32E-03	1.70E-05	2.33E-07	1.18E-02	2.02E-03	1.45E-03	1.68E-04
Methyl Mercury	1.87E-04	2.25E-05	1.59E-03	2.48E-07	3.31E-09	4.62E-05	8.24E-07	2.06E-04	5.46E-04
Nickel	3.35E-02	9.39E-03	5.68E-03	7.22E-04	2.56E-04	1.67E-02	1.31E-04	5.66E-04	4.00E-02
Selenium	1.48E-05	4.61E-05	2.33E-06	1.16E-06	1.43E-06	7.15E-06	4.72E-07	4.48E-06	2.43E-04
Silver	1.70E-04	3.88E-04	5.55E-05	1.31E-05	9.99E-06	8.29E-05	3.73E-07	--	8.85E-04
Thallium	1.63E-02	3.79E-03	2.60E-03	1.99E-03	1.14E-04	8.10E-03	2.60E-06	--	--
Tin	1.76E-02	2.21E-03	1.45E-03	2.62E-03	3.64E-05	9.10E-03	2.46E-05	--	1.09E-01
Vanadium	1.68E-03	1.20E-04	1.13E-05	5.19E-06	1.02E-06	1.02E-03	6.44E-07	1.51E-05	1.63E-04
Zinc	7.34E-02	3.74E-02	5.33E-02	4.10E-05	5.88E-04	3.65E-02	3.24E-03	1.70E-02	5.48E-01

Table M.135 - Detailed Process Upset Case Exposure Point Concentrations for the Second Marsh Wildlife Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	3.91E-07	8.47E-08	1.93E-08	3.00E-10	1.06E-09	2.09E-07	3.51E-09	8.57E-10	4.24E-10
Acenaphthylene	9.16E-08	1.77E-08	4.50E-09	7.21E-11	6.26E-10	1.10E-07	1.85E-09	4.47E-10	3.14E-10
Anthracene	3.86E-07	3.87E-08	1.89E-08	2.23E-10	3.90E-10	3.67E-07	6.17E-09	1.43E-09	6.19E-10
Fluoranthene	3.82E-06	2.90E-07	1.87E-07	2.18E-09	1.04E-08	2.04E-05	3.44E-07	7.61E-08	5.21E-08
Fluorene	3.89E-07	5.83E-08	1.91E-08	2.90E-10	2.97E-09	9.15E-07	1.54E-08	3.66E-09	2.36E-09
Phenanthrene	3.93E-06	4.23E-07	1.92E-07	2.56E-09	1.84E-08	1.95E-05	3.28E-07	7.60E-08	2.91E-08
High Molecular Weight PAHs									
Benz(a)anthracene	2.12E-07	1.03E-07	5.18E-09	4.55E-10	1.76E-10	2.52E-06	4.24E-08	8.85E-09	4.42E-09
Benzo(a)pyrene	3.76E-07	5.06E-07	4.58E-08	1.97E-09	6.56E-10	2.54E-05	4.42E-07	4.34E-07	3.29E-08
Benzo(e)pyrene	1.02E-06	4.01E-05	1.25E-07	1.29E-07	4.76E-09	7.57E-05	--	1.24E-06	6.56E-07
Benzo(a)fluorene	4.19E-07	1.07E-07	1.02E-08	5.52E-10	1.50E-09	5.93E-06	--	2.13E-08	1.88E-08
Benzo(b)fluorene	2.90E-07	2.17E-07	7.06E-09	9.43E-10	1.18E-09	4.80E-06	--	1.68E-08	3.33E-08
Benzo(b)fluoranthene	4.88E-07	3.10E-08	1.19E-08	2.07E-10	2.33E-10	9.76E-06	1.64E-07	3.30E-08	1.55E-08
Benzo(g,h,i)perylene	5.30E-06	6.07E-05	6.47E-07	1.90E-07	4.11E-09	7.41E-04	1.25E-05	1.21E-05	6.51E-07
Benzo(k)fluoranthene	4.27E-07	2.03E-07	1.04E-08	8.25E-10	3.47E-10	1.38E-05	2.32E-07	4.66E-08	2.19E-08
Chrysene	7.88E-07	1.03E-07	1.92E-08	5.76E-10	2.71E-10	4.35E-06	7.31E-08	1.52E-08	6.80E-09
Dibenz(a,c)anthracene	6.67E-07	7.53E-06	8.14E-08	2.10E-08	4.40E-09	3.43E-04	5.77E-06	5.51E-06	1.10E-06
Dibenz(a,h)anthracene	2.35E-07	4.93E-06	2.86E-08	1.54E-08	2.72E-10	1.95E-05	3.28E-07	3.18E-07	4.31E-08
Indeno(1,2,3-cd)pyrene	1.13E-06	6.82E-07	1.38E-07	1.25E-09	2.11E-09	2.03E-04	2.11E-06	2.03E-06	2.03E-07
Perylene	2.21E-07	2.98E-05	2.69E-08	1.04E-07	7.12E-10	2.29E-05	3.98E-07	3.83E-07	6.35E-08
Pyrene	1.96E-05	1.24E-06	4.79E-07	9.55E-09	1.71E-08	4.64E-05	7.81E-07	1.74E-07	6.79E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	2.67E-08	6.92E-09	1.32E-08	2.17E-09	1.18E-12	1.84E-07	4.44E-09	5.65E-09	3.73E-08
PCB									
Aroclor 1254 (Total PCBs)	7.33E-05	7.74E-07	--	1.41E-06	3.11E-09	3.06E-04	--	--	4.28E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	5.57E-08	2.46E-08	6.97E-09	4.85E-08	7.04E-08	1.07E-06	3.22E-07	4.54E-08	8.46E-07
1,2,4-Trichlorobenzene	4.14E-09	8.70E-10	5.09E-10	2.08E-09	1.76E-09	1.17E-07	1.92E-09	4.75E-09	1.11E-07
1,2,4,5-Tetrachlorobenzene	1.76E-07	1.18E-08	2.15E-08	1.14E-08	2.01E-09	6.10E-07	1.09E-08	2.31E-08	6.36E-07
Pentachlorobenzene	2.73E-06	1.17E-07	6.67E-07	1.18E-07	5.44E-09	2.63E-05	4.69E-07	9.66E-07	4.03E-06
Hexachlorobenzene	7.55E-08	4.77E-09	1.84E-08	7.01E-09	2.14E-09	6.85E-06	1.22E-07	2.49E-07	2.14E-06
Pentachlorophenol	1.28E-06	3.02E-04	3.01E-06	2.04E-07	1.13E-06	2.67E-05	5.24E-07	9.88E-07	6.35E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	4.46E-11	4.21E-11	6.17E-12	3.36E-09	1.00E-08	6.10E-08	4.81E-08	2.76E-09	3.17E-08
Chloroform	1.00E-10	2.73E-10	2.25E-11	1.68E-09	1.49E-08	3.14E-08	5.52E-08	1.52E-09	7.49E-09
Dichloromethane	1.79E-08	1.23E-07	1.14E-08	1.59E-07	4.66E-06	1.86E-06	4.49E-06	9.61E-08	4.66E-07
Trichlorofluoromethane (Freon 11)	4.62E-09	6.53E-09	7.14E-10	1.18E-06	5.13E-06	2.34E-05	2.58E-05	1.09E-06	8.13E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.24E-10	3.16E-10	3.45E-11	1.04E-08	4.53E-08	2.45E-07	2.69E-07	1.14E-08	7.18E-08
Other Organics									
Bromoform	6.23E-10	1.03E-09	1.03E-10	2.79E-07	1.45E-06	7.32E-06	9.11E-06	3.43E-07	1.71E-06
O-Terphenyl	1.24E-06	1.63E-07	3.02E-07	9.97E-08	3.85E-09	2.83E-05	6.24E-07	1.01E-06	6.39E-06
Inorganics									
Antimony	3.23E-04	1.64E-04	5.16E-05	2.19E-06	8.43E-06	3.79E-04	1.94E-06	4.28E-06	1.69E-03
Arsenic	3.20E-05	1.64E-05	6.71E-07	4.57E-07	1.29E-06	3.75E-05	1.83E-07	3.88E-06	6.47E-05
Barium	2.27E-04	1.11E-04	3.31E-06	2.25E-07	6.51E-06	2.67E-04	5.41E-06	3.65E-05	6.51E-05
Beryllium	2.04E-04	1.41E-05	1.47E-06	2.59E-07	4.18E-07	3.31E-04	3.02E-05	4.37E-05	4.18E-05
Boron	1.25E-03	1.06E-02	2.01E-04	1.05E-04	4.72E-04	1.42E-03	2.57E-05	3.24E-04	--
Cadmium	1.34E-03	7.42E-04	2.05E-03	1.14E-06	2.11E-05	1.58E-03	1.75E-04	5.14E-04	2.54E-02
Chromium (Total)	1.13E-04	8.25E-05	5.51E-06	6.23E-06	6.94E-06	1.32E-04	7.03E-07	5.67E-06	1.39E-03
Chromium VI	1.60E-05	1.17E-05	7.84E-07	8.86E-07	9.87E-07	1.87E-05	9.99E-08	--	3.65E-05
Cobalt	6.82E-04	2.24E-04	1.33E-05	6.49E-05	1.78E-05	8.02E-04	7.82E-07	1.92E-06	1.78E-03
Lead	3.12E-02	3.22E-03	2.32E-03	1.55E-05	5.87E-05	5.28E-02	5.89E-04	1.27E-03	6.15E-03
Mercury - Inorganic	2.88E-03	3.48E-05	7.80E-04	9.49E-06	5.76E-07	2.98E-02	4.53E-03	3.66E-03	4.14E-04
Methyl Mercury	8.16E-05	9.82E-06	6.94E-04	1.08E-07	1.90E-08	1.74E-05	3.10E-07	7.77E-05	1.61E-03
Nickel	1.46E-02	3.63E-03	2.48E-03	3.23E-04	2.65E-04	1.72E-02	1.36E-04	5.86E-04	4.14E-02
Selenium	6.45E-06	1.75E-05	1.02E-06	5.26E-07	1.48E-06	7.40E-06	4.89E-07	4.63E-06	2.52E-04
Silver	7.40E-05	1.51E-04	2.42E-05	5.89E-06	1.03E-05	8.58E-05	3.86E-07	--	9.15E-04
Thallium	7.10E-03	1.44E-03	1.14E-03	8.91E-04	1.18E-04	8.38E-03	2.69E-06	--	--
Tin	7.70E-03	8.70E-04	6.35E-04	1.14E-03	3.92E-05	9.80E-03	2.65E-05	--	1.18E-01
Vanadium	7.36E-04	4.62E-05	4.94E-06	2.19E-06	1.29E-06	1.29E-03	8.16E-07	1.91E-05	2.07E-04
Zinc	3.20E-02	1.52E-02	2.33E-02	1.82E-05	6.08E-04	3.77E-02	3.35E-03	1.76E-02	5.67E-01

Table M.136 - Detailed Process Upset Case Exposure Point Concentrations for the Darlington Waterfront Trail Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	9.85E-07	2.13E-07	4.86E-08	1.07E-09	3.61E-08	7.08E-06	1.19E-07	2.91E-08	1.44E-08
Acenaphthylene	2.31E-07	4.44E-08	1.13E-08	4.62E-10	2.96E-08	5.19E-06	8.74E-08	2.11E-08	1.48E-08
Anthracene	9.72E-07	9.71E-08	4.75E-08	6.54E-10	8.05E-09	7.57E-06	1.27E-07	2.95E-08	1.28E-08
Fluoranthene	9.62E-06	6.88E-07	4.70E-07	6.16E-09	8.17E-08	1.60E-04	2.70E-06	5.98E-07	4.09E-07
Fluorene	9.80E-07	1.46E-07	4.80E-08	1.35E-09	6.22E-08	1.92E-05	3.23E-07	7.67E-08	4.94E-08
Phenanthrene	9.90E-06	1.05E-06	4.84E-07	8.24E-09	1.88E-07	2.00E-04	3.36E-06	7.78E-07	2.98E-07
High Molecular Weight PAHs									
Benz(a)anthracene	5.34E-07	2.35E-07	1.30E-08	1.08E-09	2.39E-09	3.43E-05	5.76E-07	1.20E-07	6.01E-08
Benzo(a)pyrene	9.46E-07	1.09E-06	1.15E-07	4.32E-09	3.97E-09	1.54E-04	2.68E-06	2.63E-06	1.99E-07
Benzo(e)pyrene	2.58E-06	7.87E-05	3.14E-07	2.53E-07	1.36E-08	2.17E-04	--	3.57E-06	1.88E-06
Benzo(a)fluorene	1.06E-06	2.25E-07	2.58E-08	1.98E-09	5.20E-08	2.06E-04	--	7.42E-07	6.54E-07
Benzo(b)fluorene	7.29E-07	4.36E-07	1.78E-08	2.44E-09	3.56E-08	1.45E-04	--	5.05E-07	1.00E-06
Benzo(b)fluoranthene	1.23E-06	6.90E-08	3.00E-08	5.47E-10	4.20E-09	1.76E-04	2.96E-06	5.95E-07	2.80E-07
Benzo(g,h,i)perylene	1.33E-05	1.19E-04	1.63E-06	3.74E-07	1.84E-08	3.32E-03	5.57E-05	5.43E-05	2.92E-06
Benzo(k)fluoranthene	1.07E-06	4.30E-07	2.62E-08	1.79E-09	1.17E-09	4.65E-05	7.82E-07	1.57E-07	7.39E-08
Chrysene	1.98E-06	2.47E-07	4.84E-08	1.49E-09	5.75E-09	9.22E-05	1.55E-06	3.23E-07	1.44E-07
Dibenz(a,c)anthracene	1.68E-06	1.58E-05	2.05E-07	4.42E-08	2.14E-08	1.67E-03	2.80E-05	2.68E-05	5.37E-06
Dibenz(a,h)anthracene	5.90E-07	9.72E-06	7.20E-08	3.04E-08	1.02E-09	7.33E-05	1.23E-06	1.20E-06	1.62E-07
Indeno(1,2,3-cd)pyrene	2.84E-06	1.63E-06	3.46E-07	5.20E-09	4.47E-09	5.50E-04	9.26E-06	8.92E-06	8.92E-07
Perylene	5.56E-07	5.86E-05	6.78E-08	2.04E-07	1.89E-09	6.09E-05	1.06E-06	1.02E-06	1.69E-07
Pyrene	4.93E-05	3.06E-06	1.20E-06	2.47E-08	9.94E-08	2.70E-04	4.55E-06	1.02E-06	3.96E-07
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	6.64E-08	1.39E-08	3.28E-08	4.55E-09	1.43E-11	2.22E-06	5.24E-08	6.83E-08	4.51E-07
PCB									
Aroclor 1254 (Total PCBs)	1.84E-04	1.79E-06	--	3.56E-06	5.11E-08	5.01E-03	--	--	1.40E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.40E-07	6.16E-08	1.76E-08	1.96E-06	3.16E-06	4.78E-05	1.44E-05	2.03E-06	3.79E-05
1,2,4-Trichlorobenzene	1.04E-08	2.14E-09	1.28E-09	8.35E-08	8.26E-08	5.48E-06	9.00E-08	2.23E-07	5.21E-06
1,2,4,5-Tetrachlorobenzene	4.43E-07	2.95E-08	5.41E-08	1.36E-07	7.96E-08	2.41E-05	4.30E-07	9.16E-07	2.52E-05
Pentachlorobenzene	6.88E-06	2.90E-07	1.68E-06	6.20E-07	2.19E-07	1.06E-03	1.88E-05	3.89E-05	1.62E-04
Hexachlorobenzene	1.90E-07	1.07E-08	4.64E-08	1.36E-07	8.03E-08	2.57E-04	4.58E-06	9.34E-06	8.03E-05
Pentachlorophenol	3.24E-06	5.93E-04	7.57E-06	3.97E-07	8.40E-07	1.99E-05	3.90E-07	7.36E-07	4.73E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.12E-10	1.06E-10	1.55E-11	1.31E-07	3.92E-07	2.39E-06	1.88E-06	1.08E-07	1.24E-06
Chloroform	2.52E-10	6.86E-10	5.66E-11	7.96E-08	7.12E-07	1.49E-06	2.63E-06	7.25E-08	3.57E-07
Dichloromethane	4.52E-08	3.11E-07	2.87E-08	8.76E-06	2.59E-04	1.04E-04	2.50E-04	5.35E-06	2.59E-05
Trichlorofluoromethane (Freon 11)	1.17E-08	1.64E-08	1.80E-09	4.73E-05	2.06E-04	9.41E-04	1.04E-03	4.37E-05	3.26E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	5.63E-10	7.93E-10	8.69E-11	4.14E-07	1.80E-06	9.74E-06	1.07E-05	4.52E-07	2.86E-06
Other Organics									
Bromoform	1.57E-09	2.59E-09	2.58E-10	1.14E-05	5.93E-05	2.99E-04	3.72E-04	1.40E-05	6.97E-05
O-Terphenyl	3.12E-06	3.37E-07	7.61E-07	4.36E-07	1.43E-07	1.05E-03	2.04E-05	3.76E-05	2.38E-04
Inorganics									
Antimony	8.04E-04	3.92E-04	1.29E-04	4.72E-06	5.65E-06	2.54E-04	1.30E-06	2.87E-06	1.13E-03
Arsenic	7.98E-05	3.84E-05	1.67E-06	9.07E-07	8.67E-07	2.51E-05	1.23E-07	2.60E-06	4.33E-05
Barium	5.66E-04	2.64E-04	8.25E-06	4.75E-07	4.36E-06	1.79E-04	3.63E-06	2.45E-05	4.36E-05
Beryllium	5.07E-04	3.32E-05	3.65E-06	6.03E-07	4.22E-07	3.33E-04	3.05E-05	4.41E-05	4.22E-05
Boron	3.13E-03	2.54E-02	5.01E-04	2.28E-04	3.16E-04	9.47E-04	1.72E-05	2.17E-04	--
Cadmium	3.34E-03	1.81E-03	5.10E-03	2.62E-06	1.43E-05	1.07E-03	1.18E-04	3.48E-04	1.71E-02
Chromium (Total)	2.81E-04	1.92E-04	1.38E-05	1.21E-05	4.64E-06	8.82E-05	4.70E-07	3.79E-06	9.29E-04
Chromium VI	4.00E-05	2.73E-05	1.96E-06	1.73E-06	6.60E-07	1.25E-05	6.69E-08	--	2.44E-05
Cobalt	1.70E-03	5.23E-04	3.32E-05	1.30E-04	1.19E-05	5.37E-04	5.24E-07	1.29E-06	1.19E-03
Lead	7.77E-02	7.72E-03	5.78E-03	3.67E-05	6.15E-05	5.54E-02	6.18E-04	1.34E-03	6.44E-03
Mercury - Inorganic	6.47E-03	7.73E-05	1.75E-03	2.14E-05	1.72E-06	8.75E-02	1.04E-02	1.07E-02	1.24E-03
Methyl Mercury	2.03E-04	2.18E-05	1.73E-03	2.49E-07	2.45E-08	1.85E-05	3.29E-07	8.23E-05	4.04E-03
Nickel	3.64E-02	8.53E-03	6.18E-03	6.63E-04	1.78E-04	1.16E-02	9.13E-05	3.94E-04	2.78E-02
Selenium	1.61E-05	4.08E-05	2.54E-06	1.01E-06	9.90E-07	4.95E-06	3.27E-07	3.10E-06	1.68E-04
Silver	1.85E-04	3.57E-04	6.04E-05	1.19E-05	6.92E-06	5.74E-05	2.58E-07	--	6.12E-04
Thallium	1.77E-02	3.37E-03	2.83E-03	1.80E-03	7.96E-05	5.65E-03	1.81E-06	--	--
Tin	1.92E-02	2.06E-03	1.58E-03	2.55E-03	2.98E-05	7.45E-03	2.02E-05	--	8.94E-02
Vanadium	1.83E-03	1.08E-04	1.23E-05	5.12E-06	1.40E-06	8.82E-07	8.82E-07	2.07E-05	2.24E-04
Zinc	7.99E-02	3.68E-02	5.80E-02	4.04E-05	4.09E-04	2.54E-02	2.25E-03	1.18E-02	3.81E-01

Table M.137 - Detailed Process Upset Case Exposure Point Concentrations for the McLaughlin Bay Wildlife Reserve Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	4.21E-07	9.11E-08	2.07E-08	3.20E-10	8.24E-10	1.61E-07	2.72E-09	6.63E-10	3.28E-10
Acenaphthylene	9.85E-08	1.91E-08	4.84E-09	7.56E-11	4.60E-10	8.08E-08	1.36E-09	3.29E-10	2.30E-10
Anthracene	4.15E-07	4.16E-08	2.03E-08	2.39E-10	3.09E-10	2.91E-07	4.89E-09	1.13E-09	4.90E-10
Fluoranthene	4.10E-06	3.22E-07	2.00E-07	2.35E-09	9.20E-09	1.81E-05	3.04E-07	6.73E-08	4.61E-08
Fluorene	4.18E-07	6.29E-08	2.05E-08	3.04E-10	2.37E-09	7.30E-07	1.23E-08	2.92E-09	1.88E-09
Phenanthrene	4.23E-06	4.59E-07	2.07E-07	2.72E-09	1.56E-08	1.66E-05	2.79E-07	6.45E-08	2.47E-08
High Molecular Weight PAHs									
Benz(a)anthracene	2.28E-07	1.17E-07	5.56E-09	5.13E-10	1.51E-10	2.16E-06	3.64E-08	7.59E-09	3.79E-09
Benzo(a)pyrene	4.03E-07	5.90E-07	4.92E-08	2.30E-09	6.57E-10	2.55E-05	4.43E-07	4.35E-07	3.29E-08
Benzo(e)pyrene	1.10E-06	4.87E-05	1.34E-07	1.56E-07	6.26E-09	9.97E-05	--	1.64E-06	8.64E-07
Benzo(a)fluorene	4.51E-07	1.26E-07	1.10E-08	6.33E-10	1.19E-09	4.70E-06	--	1.69E-08	1.49E-08
Benzo(b)fluorene	3.11E-07	2.62E-07	7.59E-09	1.12E-09	9.52E-10	3.87E-06	--	1.35E-08	2.68E-08
Benzo(b)fluoranthene	5.24E-07	3.56E-08	1.28E-08	2.30E-10	1.90E-10	7.95E-06	1.34E-07	2.69E-08	1.27E-08
Benzo(g,h,i)perylene	5.69E-06	7.38E-05	6.94E-07	2.31E-07	4.95E-09	8.92E-04	1.50E-05	1.46E-05	7.84E-07
Benzo(k)fluoranthene	4.57E-07	2.39E-07	1.11E-08	9.63E-10	4.48E-10	1.78E-05	2.99E-07	6.02E-08	2.82E-08
Chrysene	8.45E-07	1.13E-07	2.06E-08	6.27E-10	2.17E-10	3.48E-06	5.85E-08	1.22E-08	5.44E-09
Dibenz(a,c)anthracene	7.17E-07	8.89E-06	8.75E-08	2.48E-08	4.93E-09	3.84E-04	6.46E-06	6.17E-06	1.24E-06
Dibenz(a,h)anthracene	2.52E-07	5.97E-06	3.07E-08	1.86E-08	3.48E-10	2.49E-05	4.19E-07	4.07E-07	5.51E-08
Indeno(1,2,3-cd)pyrene	1.21E-06	7.53E-07	1.48E-07	1.23E-09	1.22E-09	2.53E-04	2.44E-06	2.44E-06	2.44E-07
Perylene	2.37E-07	3.62E-05	2.89E-08	1.26E-07	1.05E-09	3.36E-05	5.85E-07	5.62E-07	9.34E-08
Pyrene	2.10E-05	1.34E-06	5.12E-07	1.02E-08	1.56E-08	4.25E-05	7.16E-07	1.60E-07	6.23E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	2.54E-08	8.17E-09	1.25E-08	2.48E-09	9.16E-13	1.42E-07	3.45E-09	4.39E-09	2.90E-08
PCB									
Aroclor 1254 (Total PCBs)	7.81E-05	8.67E-07	--	1.51E-06	2.50E-09	2.45E-04	--	--	6.48E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	5.99E-08	2.65E-08	7.50E-09	3.87E-08	5.39E-08	8.17E-07	2.46E-07	3.47E-08	6.48E-07
1,2,4-Trichlorobenzene	4.46E-09	9.48E-10	5.48E-10	1.68E-09	1.34E-09	8.87E-08	1.46E-09	3.61E-09	8.43E-08
1,2,4,5-Tetrachlorobenzene	1.89E-07	1.27E-08	2.31E-08	1.11E-08	1.38E-09	4.17E-07	7.43E-09	1.58E-08	4.35E-07
Pentachlorobenzene	2.94E-06	1.27E-07	7.17E-07	1.25E-07	4.17E-09	2.02E-05	3.60E-07	7.42E-07	3.09E-06
Hexachlorobenzene	8.12E-08	5.44E-09	1.98E-08	6.63E-09	1.64E-09	5.26E-06	9.38E-08	1.91E-07	1.64E-06
Pentachlorophenol	1.38E-06	3.67E-04	3.23E-06	2.47E-07	1.33E-06	3.15E-05	6.17E-07	1.16E-06	7.48E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	4.80E-11	4.53E-11	6.63E-12	2.57E-09	7.68E-09	4.67E-08	3.68E-08	2.11E-09	2.43E-08
Chloroform	1.08E-10	2.94E-10	2.42E-11	1.29E-09	1.14E-08	2.40E-08	4.22E-08	1.16E-09	5.73E-09
Dichloromethane	1.93E-08	1.33E-07	1.23E-08	1.22E-07	3.56E-06	1.42E-06	3.43E-06	7.34E-08	3.56E-07
Trichlorofluoromethane (Freon 11)	4.97E-09	7.04E-09	7.68E-10	9.01E-07	3.92E-06	1.79E-05	1.97E-05	8.32E-07	6.22E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.40E-10	3.40E-10	3.71E-11	7.99E-09	3.47E-08	1.87E-07	2.06E-07	8.70E-09	5.50E-08
Other Organics									
Bromoform	6.70E-10	1.10E-09	1.10E-10	2.14E-07	1.11E-06	5.59E-06	6.96E-06	2.62E-07	1.30E-06
O-Terphenyl	1.33E-06	1.93E-07	3.25E-07	1.13E-07	3.02E-09	2.22E-05	4.94E-07	7.92E-07	5.01E-06
Inorganics									
Antimony	3.09E-04	1.54E-04	4.95E-05	2.12E-06	9.24E-06	4.16E-04	2.13E-06	4.70E-06	1.85E-03
Arsenic	3.07E-05	1.53E-05	6.43E-07	4.43E-07	1.42E-06	4.12E-05	2.01E-07	4.26E-06	7.10E-05
Barium	2.18E-04	1.04E-04	3.17E-06	2.18E-07	7.14E-06	2.93E-04	5.94E-06	4.00E-05	7.14E-05
Beryllium	1.95E-04	1.32E-05	1.40E-06	2.50E-07	5.42E-07	4.28E-04	3.91E-05	5.66E-05	5.42E-05
Boron	1.20E-03	9.97E-03	1.93E-04	1.01E-04	5.19E-04	1.56E-03	2.82E-05	3.56E-04	--
Cadmium	1.28E-03	7.03E-04	1.96E-03	1.10E-06	2.32E-05	1.74E-03	1.92E-04	5.66E-04	2.79E-02
Chromium (Total)	1.08E-04	7.67E-05	5.29E-06	6.05E-06	7.62E-06	1.45E-04	7.71E-07	6.23E-06	1.52E-03
Chromium VI	1.54E-05	1.09E-05	7.52E-07	8.60E-07	1.08E-06	2.06E-05	1.10E-07	--	4.00E-05
Cobalt	6.54E-04	2.08E-04	1.28E-05	6.29E-05	1.95E-05	8.80E-04	8.58E-07	2.11E-06	1.95E-03
Lead	2.98E-02	3.03E-03	2.22E-03	1.49E-05	7.72E-05	6.95E-02	7.75E-04	1.68E-03	8.09E-03
Mercury - Inorganic	3.22E-03	3.53E-05	8.73E-04	1.05E-05	7.83E-07	4.04E-02	5.81E-03	4.97E-03	5.63E-04
Methyl Mercury	7.80E-05	9.96E-06	6.63E-04	1.08E-07	2.59E-08	9.57E-06	1.70E-07	4.27E-05	2.19E-03
Nickel	1.40E-02	3.38E-03	2.37E-03	3.13E-04	2.91E-04	1.89E-02	1.49E-04	6.43E-04	4.54E-02
Selenium	6.19E-06	1.63E-05	9.75E-07	5.11E-07	1.63E-06	8.13E-06	5.37E-07	5.09E-06	2.77E-04
Silver	7.10E-05	1.41E-04	2.32E-05	5.71E-06	1.14E-05	9.42E-05	4.24E-07	--	1.01E-03
Thallium	6.81E-03	1.34E-03	1.09E-03	8.64E-04	1.30E-04	9.21E-03	2.96E-06	--	--
Tin	7.37E-03	8.14E-04	6.08E-04	1.10E-03	4.52E-05	1.13E-02	3.05E-05	--	1.36E-01
Vanadium	7.04E-04	4.31E-05	1.73E-06	2.12E-06	1.09E-06	1.72E-03	1.09E-06	2.54E-05	2.76E-04
Zinc	3.07E-02	1.44E-02	2.23E-02	1.75E-05	6.68E-04	4.14E-02	3.68E-03	1.93E-02	6.22E-01

Table M.138 - Detailed Process Upset Case Exposure Point Concentrations for the Bowmanville Valley Cons. Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	3.27E-07	7.09E-08	1.61E-08	2.88E-10	4.82E-09	9.44E-07	1.59E-08	3.88E-09	1.92E-09
Acenaphthylene	7.66E-08	1.49E-08	3.77E-09	1.09E-10	5.32E-09	9.33E-07	1.57E-08	3.80E-09	2.66E-09
Anthracene	3.22E-07	3.25E-08	1.58E-08	2.01E-10	1.36E-09	1.28E-06	2.16E-08	4.99E-09	2.16E-09
Fluoranthene	3.19E-06	2.65E-07	1.56E-07	2.03E-09	1.56E-08	3.06E-05	5.16E-07	1.14E-07	7.82E-08
Fluorene	3.25E-07	4.93E-08	1.59E-08	3.35E-10	1.04E-08	3.22E-06	5.41E-08	1.29E-08	8.29E-09
Phenanthrene	3.29E-06	3.64E-07	1.61E-07	2.46E-09	3.60E-08	3.82E-05	6.43E-07	1.49E-07	5.71E-08
High Molecular Weight PAHs									
Benz(a)anthracene	1.77E-07	9.88E-08	4.32E-09	4.36E-10	3.27E-10	4.68E-06	7.88E-08	1.64E-08	8.21E-09
Benzo(a)pyrene	3.14E-07	5.20E-07	3.83E-08	2.02E-09	3.91E-10	1.51E-05	2.63E-07	2.59E-07	1.96E-08
Benzo(e)pyrene	8.54E-07	4.56E-05	1.04E-07	1.46E-07	1.85E-09	2.95E-05	--	4.84E-07	2.55E-07
Benzo(a)fluorene	3.51E-07	1.13E-07	8.55E-09	6.96E-10	8.69E-09	3.44E-05	--	1.24E-07	1.09E-07
Benzo(b)fluorene	2.42E-07	2.42E-07	5.90E-09	1.12E-09	6.14E-09	2.50E-05	--	8.71E-08	1.73E-07
Benzo(b)fluoranthene	4.07E-07	3.07E-08	9.94E-09	2.01E-10	3.71E-10	1.55E-05	2.62E-07	5.25E-08	2.47E-08
Benzo(g,h,i)perylene	4.43E-06	6.92E-05	5.40E-07	2.16E-07	1.26E-09	2.27E-04	3.83E-06	3.72E-06	2.00E-07
Benzo(k)fluoranthene	3.56E-07	2.13E-07	8.68E-09	8.49E-10	1.24E-10	4.94E-06	8.31E-08	1.67E-08	7.85E-09
Chrysene	6.58E-07	9.05E-08	1.60E-08	5.12E-10	6.57E-10	1.06E-05	1.78E-07	3.70E-08	1.65E-08
Dibenz(a,c)anthracene	5.58E-07	8.00E-06	6.80E-08	2.23E-08	1.68E-09	1.31E-04	2.20E-06	2.11E-06	4.22E-07
Dibenz(a,h)anthracene	1.96E-07	5.58E-06	2.39E-08	1.74E-08	8.62E-11	6.17E-06	1.04E-07	1.01E-07	1.37E-08
Indeno(1,2,3-cd)pyrene	9.42E-07	6.05E-07	1.15E-07	1.91E-09	3.28E-10	4.04E-05	6.80E-07	6.55E-07	6.55E-08
Perylene	1.84E-07	3.40E-05	2.25E-08	1.18E-07	2.04E-10	6.54E-06	1.14E-07	1.09E-07	1.82E-08
Pyrene	1.63E-05	1.06E-06	3.99E-07	8.21E-09	2.08E-08	5.66E-05	9.52E-07	2.13E-07	8.28E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	4.65E-08	8.79E-09	2.30E-08	2.93E-09	2.60E-12	4.04E-07	9.73E-09	1.24E-08	8.21E-08
PCB									
Aroclor 1254 (Total PCBs)	6.08E-05	7.28E-07	--	1.22E-06	4.48E-09	4.40E-04	--	--	8.80E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	4.66E-08	2.07E-08	5.83E-09	1.36E-07	2.14E-07	3.24E-06	9.78E-07	1.38E-07	2.57E-06
1,2,4-Trichlorobenzene	3.46E-09	7.54E-10	4.26E-10	6.17E-09	5.88E-09	3.90E-07	6.41E-09	1.59E-08	3.71E-07
1,2,4,5-Tetrachlorobenzene	1.47E-07	9.95E-09	1.79E-08	1.64E-08	6.35E-09	1.92E-06	3.43E-08	7.30E-08	2.01E-06
Pentachlorobenzene	2.28E-06	9.99E-08	5.57E-07	1.26E-07	1.80E-08	8.72E-05	1.55E-06	3.20E-06	1.34E-05
Hexachlorobenzene	6.31E-08	4.67E-09	1.54E-08	1.39E-08	6.00E-09	1.92E-05	3.43E-07	6.98E-07	6.00E-06
Pentachlorophenol	1.07E-06	3.44E-04	2.51E-06	2.30E-07	6.10E-07	1.45E-05	2.83E-07	5.34E-07	3.43E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	3.73E-11	3.53E-11	5.16E-12	7.98E-09	2.38E-08	1.45E-07	1.14E-07	6.55E-09	7.54E-08
Chloroform	8.37E-11	2.29E-10	1.88E-11	4.83E-09	4.31E-08	9.06E-08	1.60E-07	4.39E-09	2.16E-08
Dichloromethane	1.50E-08	1.03E-07	9.53E-09	5.36E-07	1.59E-05	6.35E-06	1.53E-05	3.27E-07	1.59E-06
Trichlorofluoromethane (Freon 11)	3.87E-09	5.50E-09	5.97E-10	2.81E-06	1.23E-05	5.60E-05	6.16E-05	2.60E-06	1.94E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.87E-10	2.66E-10	2.89E-11	2.52E-08	1.10E-07	5.92E-07	6.51E-07	2.75E-08	1.74E-07
Other Organics									
Bromoform	5.21E-10	8.59E-10	8.58E-11	6.72E-07	3.49E-06	1.76E-05	2.19E-05	8.24E-07	4.10E-06
O-Terphenyl	1.03E-06	1.76E-07	2.52E-07	1.34E-07	1.96E-08	1.44E-04	2.99E-06	5.13E-06	3.25E-05
Inorganics									
Antimony	5.65E-04	3.39E-04	9.04E-05	4.14E-06	9.27E-06	4.17E-04	2.14E-06	4.71E-06	1.85E-03
Arsenic	5.61E-05	3.67E-05	1.18E-06	8.92E-07	1.42E-06	4.13E-05	2.01E-07	4.26E-06	7.12E-05
Barium	3.98E-04	2.34E-04	5.79E-06	4.30E-07	7.16E-06	2.93E-04	5.95E-06	4.01E-05	7.16E-05
Beryllium	3.56E-04	3.11E-05	2.56E-06	5.05E-07	4.35E-07	3.44E-04	3.14E-05	4.54E-05	4.35E-05
Boron	2.20E-03	2.14E-02	3.52E-04	1.97E-04	5.19E-04	1.56E-03	2.82E-05	3.56E-04	--
Cadmium	2.35E-03	1.43E-03	3.58E-03	2.09E-06	2.32E-05	1.74E-03	1.92E-04	5.65E-04	2.79E-02
Chromium (Total)	1.97E-04	1.87E-04	9.66E-06	1.23E-05	7.63E-06	1.45E-04	7.72E-07	6.23E-06	1.53E-03
Chromium VI	2.81E-05	2.67E-05	1.37E-06	1.75E-06	1.08E-06	2.06E-05	1.10E-07	--	4.01E-05
Cobalt	1.19E-03	5.03E-04	2.33E-05	1.26E-04	1.96E-05	8.82E-04	8.59E-07	2.12E-06	1.96E-03
Lead	5.45E-02	6.58E-03	4.06E-03	2.94E-05	6.06E-05	5.46E-02	6.08E-04	1.32E-03	6.35E-03
Mercury - Inorganic	3.29E-03	6.75E-05	8.91E-04	1.23E-05	2.68E-07	1.36E-02	2.29E-03	1.67E-03	1.93E-04
Methyl Mercury	1.43E-04	1.90E-05	1.21E-03	2.03E-07	3.80E-09	2.09E-05	3.72E-07	9.31E-05	6.27E-04
Nickel	2.56E-02	8.02E-03	4.34E-03	6.23E-04	2.91E-04	1.89E-02	1.49E-04	6.44E-04	4.55E-02
Selenium	1.13E-05	3.98E-05	1.78E-06	1.04E-06	1.63E-06	8.14E-06	5.37E-07	5.09E-06	2.77E-04
Silver	1.30E-04	3.29E-04	4.24E-05	1.14E-05	1.14E-05	9.43E-05	4.24E-07	--	1.01E-03
Thallium	1.24E-02	3.27E-03	1.99E-03	1.73E-03	1.30E-04	9.21E-03	2.96E-06	--	--
Tin	1.35E-02	1.86E-03	1.11E-03	2.18E-03	4.25E-05	1.06E-02	2.87E-05	--	1.28E-01
Vanadium	1.29E-03	1.03E-04	8.65E-06	4.30E-06	1.33E-06	1.33E-03	8.38E-07	1.96E-05	2.13E-04
Zinc	5.61E-02	3.05E-02	4.07E-02	3.38E-05	6.69E-04	4.15E-02	3.69E-03	1.93E-02	6.23E-01

Table M.139 - Detailed Process Upset Case Exposure Point Concentrations for the Eco Baseline Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.65E-06	3.56E-07	8.13E-08	1.24E-09	1.95E-09	3.82E-07	6.43E-09	1.57E-09	7.76E-10
Acenaphthylene	3.86E-07	7.32E-08	1.90E-08	2.96E-10	2.15E-09	3.78E-07	6.35E-09	1.54E-09	1.08E-09
Anthracene	1.63E-06	1.61E-07	7.95E-08	9.19E-10	4.99E-10	4.69E-07	7.89E-09	1.83E-09	7.90E-10
Fluoranthene	1.61E-05	9.65E-07	7.85E-07	7.57E-09	5.24E-09	1.03E-05	1.73E-07	3.83E-08	2.62E-08
Fluorene	1.64E-06	2.39E-07	8.04E-08	1.10E-09	3.48E-09	1.07E-06	1.81E-08	4.30E-09	2.77E-09
Phenanthrene	1.66E-05	1.66E-06	8.10E-07	9.53E-09	1.15E-08	1.22E-05	2.05E-07	4.76E-08	1.82E-08
High Molecular Weight PAHs									
Benz(a)anthracene	8.93E-07	2.87E-07	2.18E-08	1.32E-09	1.76E-10	2.52E-06	4.25E-08	8.85E-09	4.43E-09
Benzo(a)pyrene	1.58E-06	1.02E-06	1.93E-07	4.10E-09	3.26E-10	1.26E-05	2.19E-07	2.16E-07	1.63E-08
Benzo(e)pyrene	4.31E-06	3.31E-05	5.25E-07	1.07E-07	1.06E-09	1.69E-05	--	2.78E-07	1.47E-07
Benzo(a)fluorene	1.77E-06	1.83E-07	4.31E-08	1.19E-09	3.22E-09	1.28E-05	--	4.60E-08	4.05E-08
Benzo(b)fluorene	1.22E-06	2.34E-07	2.98E-08	1.22E-09	2.23E-09	9.08E-06	--	3.17E-08	6.30E-08
Benzo(b)fluoranthene	2.05E-06	7.56E-08	5.01E-08	6.62E-10	3.32E-10	1.39E-05	2.34E-07	4.70E-08	2.21E-08
Benzo(g,h,i)perylene	2.23E-05	5.02E-05	2.72E-06	1.60E-07	1.99E-09	3.59E-04	6.03E-06	5.86E-06	3.15E-07
Benzo(k)fluoranthene	1.79E-06	3.62E-07	4.37E-08	1.65E-09	1.18E-10	4.70E-06	7.90E-08	1.59E-08	7.47E-09
Chrysene	3.31E-06	3.70E-07	8.08E-08	2.17E-09	4.11E-10	6.60E-06	1.11E-07	2.32E-08	1.03E-08
Dibenz(a,c)anthracene	2.81E-06	1.23E-05	3.43E-07	3.43E-08	1.86E-09	1.45E-04	2.44E-06	2.33E-06	4.67E-07
Dibenz(a,h)anthracene	9.86E-07	4.34E-06	1.20E-07	1.37E-08	9.89E-11	7.08E-06	1.19E-07	1.16E-07	1.57E-08
Indeno(1,2,3-cd)pyrene	4.75E-06	2.40E-06	5.79E-07	4.59E-09	7.63E-09	5.65E-05	9.51E-07	9.16E-07	9.17E-08
Perylene	9.29E-07	2.46E-05	1.13E-07	8.57E-08	1.61E-10	5.18E-06	9.00E-08	8.65E-08	1.44E-08
Pyrene	8.23E-05	4.86E-06	2.01E-06	3.78E-08	8.28E-09	2.25E-05	3.79E-07	8.47E-08	3.30E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.29E-07	8.84E-09	6.42E-08	4.02E-09	2.79E-12	4.34E-07	1.04E-08	1.34E-08	8.82E-08
PCB									
Aroclor 1254 (Total PCBs)	3.06E-04	2.30E-06	--	5.58E-06	7.39E-09	7.25E-04	--	--	1.45E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	2.35E-07	1.02E-07	2.94E-08	1.11E-07	1.45E-07	2.20E-06	6.64E-07	9.36E-08	1.75E-06
1,2,4-Trichlorobenzene	1.75E-08	3.37E-09	2.15E-09	5.15E-09	3.89E-09	2.58E-07	4.24E-09	1.05E-08	2.46E-07
1,2,4,5-Tetrachlorobenzene	7.41E-07	4.85E-08	9.05E-08	4.41E-08	6.15E-09	1.86E-06	3.32E-08	7.07E-08	1.94E-06
Pentachlorobenzene	1.15E-05	4.65E-07	2.81E-06	4.69E-07	1.12E-08	5.40E-05	9.63E-07	1.98E-06	8.28E-06
Hexachlorobenzene	3.18E-07	1.24E-08	7.76E-08	1.85E-08	3.95E-09	1.26E-05	2.25E-07	4.59E-07	3.95E-06
Pentachlorophenol	5.41E-06	2.49E-04	1.27E-05	1.67E-07	3.39E-07	8.02E-06	1.57E-07	2.96E-07	1.90E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.88E-10	1.76E-10	2.60E-11	6.52E-09	1.94E-08	1.18E-07	9.31E-08	5.34E-09	6.15E-08
Chloroform	4.22E-10	1.14E-09	9.47E-11	3.66E-09	3.24E-08	6.80E-08	1.20E-07	3.30E-09	1.62E-08
Dichloromethane	7.57E-08	5.19E-07	4.81E-08	3.87E-07	1.13E-05	4.53E-06	1.09E-05	2.33E-07	1.13E-06
Trichlorofluoromethane (Freon 11)	1.95E-08	2.72E-08	3.01E-09	2.36E-06	1.03E-05	4.69E-05	5.16E-05	2.18E-06	1.63E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	9.42E-10	1.31E-09	1.45E-10	2.04E-08	8.83E-08	4.77E-07	5.25E-07	2.21E-08	1.40E-07
Other Organics									
Bromoform	2.63E-09	4.33E-09	4.32E-10	5.72E-07	2.97E-06	1.50E-05	1.86E-05	7.01E-07	3.49E-06
O-Terphenyl	5.22E-06	2.39E-07	1.27E-06	2.26E-07	8.69E-09	6.40E-05	1.37E-06	2.28E-06	1.44E-05
Inorganics									
Antimony	1.57E-03	7.56E-04	2.51E-04	8.80E-06	2.88E-06	1.29E-04	6.64E-07	1.46E-06	5.76E-04
Arsenic	1.56E-04	7.33E-05	3.27E-06	1.64E-06	4.42E-07	1.28E-05	6.25E-08	1.32E-06	2.21E-05
Barium	1.11E-03	5.07E-04	1.61E-05	8.79E-07	2.22E-06	9.11E-05	1.85E-06	1.25E-05	2.22E-05
Beryllium	9.89E-04	6.36E-05	7.12E-06	1.14E-06	1.25E-07	9.89E-05	9.04E-06	1.31E-05	1.25E-05
Boron	6.12E-03	4.91E-02	9.79E-04	4.27E-04	1.61E-04	4.82E-04	8.75E-06	1.10E-04	--
Cadmium	6.52E-03	3.50E-03	9.93E-03	4.99E-06	7.21E-06	5.40E-04	5.98E-05	1.76E-04	8.66E-03
Chromium (Total)	5.49E-04	3.67E-04	2.69E-05	2.18E-05	2.37E-06	4.49E-05	2.40E-07	1.93E-06	4.73E-04
Chromium VI	7.81E-05	5.22E-05	3.82E-06	3.10E-06	3.36E-07	6.39E-06	3.41E-08	--	1.24E-05
Cobalt	3.32E-03	1.00E-03	6.48E-05	2.36E-04	6.08E-06	2.74E-04	2.67E-07	6.57E-07	6.08E-04
Lead	1.51E-01	1.49E-02	1.13E-02	6.99E-05	1.73E-05	1.56E-02	1.74E-04	3.75E-04	1.81E-03
Mercury - Inorganic	8.09E-03	1.17E-04	2.19E-03	2.73E-05	1.48E-07	7.51E-03	1.33E-03	9.23E-04	1.06E-04
Methyl Mercury	3.96E-04	3.31E-05	3.37E-03	4.11E-07	2.10E-09	1.86E-05	3.31E-07	8.30E-05	3.47E-04
Nickel	7.12E-02	1.63E-02	1.21E-02	4.22E-03	9.05E-05	5.89E-03	4.63E-05	2.00E-04	1.41E-02
Selenium	3.14E-05	7.79E-05	4.95E-06	1.81E-06	5.04E-07	2.52E-06	1.66E-07	1.58E-06	8.57E-05
Silver	3.61E-04	6.85E-04	1.18E-04	2.18E-05	3.52E-06	2.92E-05	1.31E-07	--	3.12E-04
Thallium	3.46E-02	6.43E-03	5.53E-03	3.28E-03	4.03E-05	2.86E-03	9.19E-07	--	--
Tin	3.74E-02	3.96E-03	3.09E-03	4.79E-03	1.30E-05	3.24E-03	8.77E-06	--	3.89E-02
Vanadium	3.58E-03	2.07E-04	2.40E-05	9.67E-06	3.76E-07	3.76E-04	2.37E-07	5.55E-06	6.02E-05
Zinc	1.56E-01	7.12E-02	1.13E-01	7.61E-05	2.08E-04	1.29E-02	1.15E-03	6.01E-03	1.94E-01

Table M.140 - Detailed Process Upset Case Exposure Point Concentrations for the Baseline Road & Rundle Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.19E-06	2.58E-07	5.88E-08	9.33E-10	5.09E-09	9.99E-07	1.68E-08	4.10E-09	2.03E-09
Acenaphthylene	2.80E-07	5.40E-08	1.37E-08	2.66E-10	6.49E-09	1.14E-06	1.92E-08	4.64E-09	3.25E-09
Anthracene	1.18E-06	1.18E-07	5.76E-08	6.87E-10	1.63E-09	1.53E-06	2.58E-08	5.97E-09	2.59E-09
Fluoranthene	1.17E-05	8.80E-07	5.69E-07	6.48E-09	2.20E-08	4.33E-05	7.29E-07	1.61E-07	1.10E-07
Fluorene	1.19E-06	1.78E-07	5.82E-08	9.18E-10	1.20E-08	3.69E-06	6.20E-08	1.47E-08	9.50E-09
Phenanthrene	1.20E-05	1.29E-06	5.87E-07	7.70E-09	4.77E-08	5.06E-05	8.52E-07	1.97E-07	7.56E-08
High Molecular Weight PAHs									
Benz(a)anthracene	6.47E-07	3.11E-07	1.58E-08	1.38E-09	6.32E-10	9.05E-06	1.52E-07	3.18E-08	1.59E-08
Benzo(a)pyrene	1.15E-06	1.52E-06	1.40E-07	5.93E-09	9.01E-10	3.49E-05	6.07E-07	5.96E-07	4.51E-08
Benzo(e)pyrene	3.12E-06	1.20E-04	3.81E-07	3.85E-07	3.77E-09	6.00E-05	--	9.86E-07	5.20E-07
Benzo(a)fluorene	1.28E-06	3.21E-07	3.12E-08	1.80E-09	1.25E-08	4.94E-05	--	1.78E-07	1.57E-07
Benzo(b)fluorene	8.84E-07	6.52E-07	2.16E-08	2.92E-09	9.18E-09	3.73E-05	--	1.30E-07	2.59E-07
Benzo(b)fluoranthene	1.49E-06	9.35E-08	3.63E-08	6.30E-10	7.09E-10	2.97E-05	5.00E-07	1.00E-07	4.73E-08
Benzo(g,h,i)perylene	1.62E-05	1.82E-04	1.97E-06	5.69E-07	3.45E-09	6.22E-04	1.05E-05	1.02E-05	5.46E-07
Benzo(k)fluoranthene	1.30E-06	6.11E-07	3.17E-08	2.47E-09	3.01E-10	1.19E-05	2.01E-07	4.04E-08	1.90E-08
Chrysene	2.40E-06	3.10E-07	5.86E-08	1.75E-09	1.03E-09	1.65E-05	2.78E-07	5.79E-08	2.59E-08
Dibenz(a,c)anthracene	2.04E-06	2.26E-05	2.48E-07	6.30E-08	4.20E-09	3.28E-04	5.51E-06	5.27E-06	1.06E-06
Dibenz(a,h)anthracene	7.15E-07	1.48E-05	8.72E-08	4.61E-08	2.19E-10	1.57E-05	2.64E-07	2.56E-07	3.47E-08
Indeno(1,2,3-cd)pyrene	3.44E-06	2.06E-06	4.20E-07	6.47E-09	8.71E-10	1.07E-04	1.80E-06	1.74E-06	1.74E-07
Perylene	6.73E-07	8.94E-05	8.21E-08	3.11E-07	4.67E-10	1.50E-05	2.61E-07	2.51E-07	4.16E-08
Pyrene	5.97E-05	3.77E-06	1.46E-06	2.88E-08	3.27E-08	8.89E-05	1.50E-06	3.34E-07	1.30E-07
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.00E-07	2.16E-08	4.98E-08	7.00E-09	4.43E-12	6.90E-07	1.65E-08	2.12E-08	1.40E-07
PCB									
Aroclor 1254 (Total PCBs)	2.23E-04	2.34E-06	--	4.28E-06	1.05E-08	1.03E-03	--	--	2.05E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.70E-07	7.50E-08	2.13E-08	1.77E-07	2.63E-07	3.98E-06	1.20E-06	1.69E-07	3.16E-06
1,2,4-Trichlorobenzene	1.26E-08	2.65E-09	1.56E-09	8.03E-09	7.05E-09	4.68E-07	7.69E-09	1.91E-08	4.45E-07
1,2,4,5-Tetrachlorobenzene	5.36E-07	3.59E-08	6.55E-08	3.94E-08	9.37E-09	2.84E-06	5.07E-08	1.08E-07	2.96E-06
Pentachlorobenzene	8.34E-06	3.56E-07	2.03E-06	3.70E-07	2.20E-08	1.06E-04	1.90E-06	3.91E-06	1.63E-05
Hexachlorobenzene	2.30E-07	1.44E-08	5.62E-08	2.32E-08	7.56E-09	2.42E-05	4.31E-07	8.79E-07	7.56E-06
Pentachlorophenol	3.92E-06	9.04E-04	9.18E-06	6.06E-07	1.36E-06	3.21E-05	6.29E-07	1.19E-06	7.62E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.36E-10	1.28E-10	1.88E-11	1.11E-08	3.31E-08	2.01E-07	1.59E-07	9.09E-09	1.05E-07
Chloroform	3.06E-10	8.32E-10	6.86E-11	6.20E-09	5.52E-08	1.16E-07	2.04E-07	5.62E-09	2.77E-08
Dichloromethane	5.48E-08	3.77E-07	3.48E-08	6.51E-07	1.92E-05	7.67E-06	1.85E-05	3.95E-07	1.92E-06
Trichlorofluoromethane (Freon 11)	1.41E-08	1.99E-08	2.18E-09	3.94E-06	1.72E-05	7.84E-05	8.63E-05	3.64E-06	2.72E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	6.82E-10	9.64E-10	1.05E-10	3.47E-08	1.51E-07	8.14E-07	8.96E-07	3.78E-08	2.39E-07
Other Organics									
Bromoform	1.90E-09	3.14E-09	3.13E-10	9.44E-07	4.90E-06	2.47E-05	3.08E-05	1.16E-06	5.76E-06
O-Terphenyl	3.78E-06	4.89E-07	9.22E-07	3.29E-07	2.77E-08	2.04E-04	4.18E-06	7.26E-06	4.59E-05
Inorganics									
Antimony	1.22E-03	6.50E-04	1.95E-04	7.83E-06	1.23E-05	5.52E-04	2.83E-06	6.23E-06	2.45E-03
Arsenic	1.21E-04	6.67E-05	2.53E-06	1.59E-06	1.88E-06	5.46E-05	2.66E-07	5.64E-06	9.41E-05
Barium	8.57E-04	4.42E-04	1.25E-05	7.99E-07	9.47E-06	3.88E-04	7.87E-06	5.31E-05	9.47E-05
Beryllium	7.67E-04	5.71E-05	5.52E-06	9.76E-07	5.35E-07	4.23E-04	3.87E-05	5.59E-05	5.35E-05
Boron	4.73E-03	4.16E-02	7.58E-04	3.76E-04	6.86E-04	2.06E-03	3.73E-05	4.71E-04	--
Cadmium	5.05E-03	2.88E-03	7.70E-03	4.18E-06	3.07E-05	2.30E-03	2.54E-04	7.47E-04	3.69E-02
Chromium (Total)	4.25E-04	3.37E-04	2.08E-05	2.15E-05	1.01E-05	1.92E-04	1.02E-06	8.24E-06	2.02E-03
Chromium VI	6.04E-05	4.80E-05	2.96E-06	1.45E-06	1.43E-06	2.72E-05	1.45E-07	--	5.30E-05
Cobalt	2.57E-03	9.11E-04	5.02E-05	2.26E-04	2.59E-05	1.17E-03	1.14E-06	2.80E-06	2.59E-03
Lead	1.17E-01	1.27E-02	8.74E-03	5.83E-05	7.40E-05	6.66E-02	7.42E-04	1.60E-03	7.75E-03
Mercury - Inorganic	9.12E-03	1.31E-04	2.47E-03	3.09E-05	5.30E-07	2.69E-02	4.16E-03	3.30E-03	3.81E-04
Methyl Mercury	3.07E-04	3.70E-05	2.61E-03	4.07E-07	7.52E-09	5.78E-05	1.03E-06	2.58E-04	1.24E-03
Nickel	5.51E-02	1.47E-02	9.34E-03	1.14E-03	3.85E-04	2.51E-02	1.97E-04	8.52E-04	6.01E-02
Selenium	2.43E-05	7.16E-05	3.83E-06	1.81E-06	2.15E-06	1.08E-05	7.10E-07	6.73E-06	3.66E-04
Silver	2.79E-04	6.09E-04	9.13E-05	2.06E-05	1.50E-05	1.25E-04	5.61E-07	--	1.33E-03
Thallium	2.68E-02	5.90E-03	4.28E-03	3.12E-03	1.72E-04	1.22E-02	3.91E-06	--	--
Tin	2.90E-02	3.48E-03	2.39E-03	4.17E-03	5.52E-05	1.38E-02	3.73E-05	--	1.66E-01
Vanadium	2.77E-03	1.88E-04	1.86E-05	8.29E-06	1.61E-06	1.61E-03	1.02E-06	2.38E-05	2.58E-04
Zinc	1.21E-01	5.98E-02	8.76E-02	6.56E-05	8.85E-04	5.49E-02	4.87E-03	2.56E-02	8.24E-01

Table M.141 - Detailed Process Upset Case Exposure Point Concentrations for the Baseline Road & Courtice Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.65E-06	3.56E-07	8.12E-08	1.26E-09	4.14E-09	8.12E-07	1.37E-08	3.33E-09	1.65E-09
Acenaphthylene	3.86E-07	7.37E-08	1.90E-08	3.37E-10	6.17E-09	1.08E-06	1.82E-08	4.41E-09	3.09E-09
Anthracene	1.62E-06	1.61E-07	7.95E-08	9.34E-10	1.49E-09	1.40E-06	2.35E-08	5.44E-09	2.36E-09
Fluoranthene	1.61E-05	1.05E-06	7.85E-07	8.17E-09	2.16E-08	4.25E-05	7.14E-07	1.58E-07	1.08E-07
Fluorene	1.64E-06	2.41E-07	8.03E-08	1.19E-09	1.05E-08	3.25E-06	5.47E-08	1.30E-08	8.38E-09
Phenanthrene	1.66E-05	1.70E-06	8.10E-07	1.01E-08	4.56E-08	4.84E-05	8.15E-07	1.89E-07	7.23E-08
High Molecular Weight PAHs									
Benz(a)anthracene	8.93E-07	3.38E-07	2.18E-08	1.53E-09	6.44E-10	9.22E-06	1.55E-07	3.23E-08	1.62E-08
Benzo(a)pyrene	1.58E-06	1.41E-06	1.93E-07	5.57E-09	9.12E-10	3.54E-05	6.15E-07	6.04E-07	4.57E-08
Benzo(e)pyrene	4.31E-06	8.08E-05	5.25E-07	2.60E-07	3.93E-09	6.25E-05	--	1.03E-06	5.42E-07
Benzo(a)fluorene	1.77E-06	2.77E-07	4.31E-08	1.71E-09	1.19E-08	4.70E-05	--	1.69E-07	1.49E-07
Benzo(b)fluorene	1.22E-06	4.73E-07	2.97E-08	2.27E-09	8.92E-09	3.62E-05	--	1.27E-07	2.51E-07
Benzo(b)fluoranthene	2.05E-06	9.48E-08	5.01E-08	7.37E-10	6.58E-10	2.76E-05	4.64E-07	9.31E-08	4.39E-08
Benzo(g,h,i)perylene	2.23E-05	1.22E-04	2.72E-06	3.85E-07	3.51E-09	6.32E-04	1.06E-05	1.03E-05	5.56E-07
Benzo(k)fluoranthene	1.79E-06	5.35E-07	4.38E-08	2.28E-09	3.23E-10	1.28E-05	2.16E-07	4.34E-08	2.04E-08
Chrysene	3.31E-06	3.91E-07	8.09E-08	2.26E-09	9.43E-10	1.51E-05	2.55E-07	5.31E-08	2.37E-08
Dibenz(a,c)anthracene	2.81E-06	1.91E-05	3.43E-07	5.32E-08	4.18E-09	3.26E-04	5.48E-06	5.23E-06	1.05E-06
Dibenz(a,h)anthracene	9.87E-07	1.01E-05	1.20E-07	3.16E-08	2.26E-10	1.62E-05	2.72E-07	2.64E-07	3.58E-08
Indeno(1,2,3-cd)pyrene	4.75E-06	2.56E-06	5.79E-07	8.10E-09	8.89E-10	1.09E-04	1.84E-06	1.77E-06	1.77E-07
Perylene	9.29E-07	6.01E-05	1.13E-07	2.09E-07	4.84E-10	1.56E-05	2.71E-07	2.60E-07	4.32E-08
Pyrene	8.24E-05	4.99E-06	2.01E-06	3.87E-08	3.49E-08	9.51E-05	1.60E-06	3.58E-07	1.39E-07
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.20E-07	1.58E-08	5.95E-08	5.72E-09	4.37E-12	6.79E-07	1.63E-08	2.09E-08	1.38E-07
PCB									
Aroclor 1254 (Total PCBs)	3.07E-04	2.64E-06	--	5.71E-06	1.06E-08	1.04E-03	--	--	2.08E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	2.35E-07	1.02E-07	2.94E-08	1.12E-07	1.48E-07	2.24E-06	6.77E-07	9.54E-08	1.78E-06
1,2,4-Trichlorobenzene	1.74E-08	3.47E-09	2.15E-09	5.46E-09	4.17E-09	2.77E-07	4.55E-09	1.13E-08	2.63E-07
1,2,4,5-Tetrachlorobenzene	7.40E-07	4.89E-08	9.04E-08	4.42E-08	6.12E-09	1.85E-06	3.31E-08	7.04E-08	1.93E-06
Pentachlorobenzene	1.15E-05	4.74E-07	2.81E-06	4.77E-07	1.44E-08	6.98E-05	1.24E-06	2.56E-06	1.07E-05
Hexachlorobenzene	3.18E-07	1.51E-08	7.76E-08	2.05E-08	4.51E-09	1.44E-05	2.57E-07	5.24E-07	4.51E-06
Pentachlorophenol	5.41E-06	6.08E-04	1.27E-05	4.10E-07	1.98E-06	4.68E-05	9.17E-07	1.73E-06	1.11E-03
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.88E-10	1.76E-10	2.60E-11	5.49E-09	1.64E-08	9.94E-08	7.84E-08	4.50E-09	5.17E-08
Chloroform	4.22E-10	1.14E-09	9.46E-11	3.30E-09	2.92E-08	6.13E-08	1.08E-07	2.97E-09	1.46E-08
Dichloromethane	7.56E-08	5.19E-07	4.80E-08	3.64E-07	1.06E-05	4.24E-06	1.02E-05	2.19E-07	1.06E-06
Trichlorofluoromethane (Freon 11)	1.95E-08	2.73E-08	3.01E-09	1.93E-06	8.39E-06	3.83E-05	4.22E-05	1.78E-06	1.33E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	9.42E-10	1.32E-09	1.45E-10	1.73E-08	7.52E-08	4.06E-07	4.47E-07	1.88E-08	1.19E-07
Other Organics									
Bromoform	2.62E-09	4.33E-09	4.32E-10	4.59E-07	2.38E-06	1.20E-05	1.50E-05	5.63E-07	2.80E-06
O-Terphenyl	5.21E-06	3.96E-07	1.27E-06	3.16E-07	2.49E-08	1.83E-04	3.78E-06	6.53E-06	4.13E-05
Inorganics									
Antimony	1.45E-03	7.02E-04	2.32E-04	8.66E-06	1.55E-05	6.99E-04	3.59E-06	7.90E-06	3.11E-03
Arsenic	1.44E-04	6.83E-05	3.02E-06	1.68E-06	2.39E-06	6.92E-05	3.38E-07	7.15E-06	1.19E-04
Barium	1.02E-03	4.71E-04	1.49E-05	8.74E-07	1.20E-05	4.92E-04	9.98E-06	6.73E-05	1.20E-04
Beryllium	9.14E-04	5.92E-05	6.58E-06	1.08E-06	6.45E-07	5.10E-04	4.66E-05	6.74E-05	6.45E-05
Boron	5.65E-03	4.56E-02	9.03E-04	4.18E-04	8.70E-04	2.61E-03	4.73E-05	5.97E-04	--
Cadmium	6.03E-03	3.24E-03	9.18E-03	4.77E-06	3.89E-05	2.91E-03	3.22E-04	9.47E-04	4.67E-02
Chromium (Total)	5.07E-04	3.42E-04	2.48E-05	2.26E-05	1.28E-05	2.43E-04	1.30E-06	1.05E-05	2.56E-03
Chromium VI	7.21E-05	4.86E-05	3.53E-06	3.21E-06	1.82E-06	3.46E-05	1.84E-07	--	6.72E-05
Cobalt	3.07E-03	9.32E-04	5.99E-05	2.41E-04	3.29E-05	1.48E-03	1.44E-06	3.55E-06	3.29E-03
Lead	1.40E-01	1.38E-02	1.04E-02	6.57E-05	8.85E-05	7.97E-02	8.88E-04	1.92E-03	9.27E-03
Mercury - Inorganic	9.43E-03	1.22E-04	2.55E-03	3.12E-05	4.40E-07	2.23E-02	3.55E-03	2.74E-03	3.17E-04
Methyl Mercury	3.67E-04	3.44E-05	3.12E-03	4.11E-07	6.25E-09	8.55E-05	1.52E-06	3.81E-04	1.03E-03
Nickel	6.57E-02	1.52E-02	1.11E-02	1.22E-03	4.89E-04	3.18E-02	2.50E-04	1.08E-03	7.62E-02
Selenium	2.90E-05	7.26E-05	4.57E-06	1.88E-06	2.73E-06	1.36E-05	9.00E-07	8.54E-06	4.64E-04
Silver	3.33E-04	6.37E-04	1.09E-04	2.21E-05	1.90E-05	1.58E-04	7.11E-07	--	1.69E-03
Thallium	3.19E-02	5.99E-03	5.11E-03	3.33E-03	2.17E-04	1.54E-02	4.96E-06	--	--
Tin	3.46E-02	3.68E-03	2.85E-03	4.62E-03	6.92E-05	1.73E-02	4.68E-05	--	2.08E-01
Vanadium	3.31E-03	1.93E-04	1.22E-05	9.12E-06	1.92E-06	1.92E-03	1.21E-06	2.83E-05	3.06E-04
Zinc	1.44E-01	6.60E-02	1.04E-01	7.38E-05	1.12E-03	6.96E-02	6.18E-03	3.24E-02	1.04E+00

Table M.142 - Detailed Process Upset Case Exposure Point Concentrations for the Soper Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.51E-07	5.44E-08	1.24E-08	2.13E-10	2.78E-09	5.44E-07	9.16E-09	2.24E-09	1.11E-09
Acenaphthylene	5.88E-08	1.15E-08	2.89E-09	7.19E-11	2.90E-09	5.10E-07	8.58E-09	2.08E-09	1.46E-09
Anthracene	2.48E-07	2.50E-08	1.21E-08	1.51E-10	7.37E-10	6.93E-07	1.17E-08	2.70E-09	1.17E-09
Fluoranthene	2.45E-06	2.10E-07	1.20E-07	1.52E-09	8.14E-09	1.60E-05	2.69E-07	5.96E-08	4.08E-08
Fluorene	2.50E-07	3.80E-08	1.22E-08	2.31E-10	5.61E-09	1.73E-06	2.91E-08	6.92E-09	4.46E-09
Phenanthrene	2.52E-06	2.82E-07	1.23E-07	1.78E-09	1.87E-08	1.99E-05	3.34E-07	7.74E-08	2.97E-08
High Molecular Weight PAHs									
Benz(a)anthracene	1.36E-07	7.96E-08	3.32E-09	3.49E-10	1.90E-10	2.72E-06	4.57E-08	9.53E-09	4.77E-09
Benzo(a)pyrene	2.41E-07	4.29E-07	2.94E-08	1.66E-09	2.45E-10	9.50E-06	1.65E-07	1.62E-07	1.23E-08
Benzo(e)pyrene	6.56E-07	3.86E-05	8.00E-08	1.24E-07	1.08E-09	1.72E-05	--	2.83E-07	1.49E-07
Benzo(a)fluorene	2.69E-07	9.37E-08	6.57E-09	5.30E-10	4.72E-09	1.87E-05	--	6.74E-08	5.94E-08
Benzo(b)fluorene	1.86E-07	2.04E-07	4.53E-09	9.11E-10	3.31E-09	1.34E-05	--	4.70E-08	9.32E-08
Benzo(b)fluoranthene	3.13E-07	2.50E-08	7.63E-09	1.59E-10	2.37E-10	9.94E-06	1.67E-07	3.36E-08	1.58E-08
Benzo(g,h,i)perylene	3.40E-06	5.85E-05	4.15E-07	1.83E-07	8.46E-10	1.52E-04	2.57E-06	2.49E-06	1.34E-07
Benzo(k)fluoranthene	2.73E-07	1.77E-07	6.67E-09	6.99E-10	7.74E-11	3.07E-06	5.17E-08	1.04E-08	4.88E-09
Chrysene	5.05E-07	7.10E-08	1.23E-08	3.97E-10	3.97E-10	6.37E-06	1.07E-07	2.23E-08	9.97E-09
Dibenz(a,c)anthracene	4.28E-07	6.65E-06	5.22E-08	1.86E-08	1.10E-09	8.57E-05	1.44E-06	1.38E-06	2.76E-07
Dibenz(a,h)anthracene	1.50E-07	4.72E-06	1.83E-08	1.47E-08	5.58E-11	4.00E-06	6.73E-08	6.54E-08	8.85E-09
Indeno(1,2,3-cd)pyrene	7.24E-07	4.76E-07	8.83E-08	1.50E-09	1.50E-10	2.68E-05	4.51E-07	4.34E-07	4.34E-08
Perylene	1.42E-07	2.87E-05	1.73E-08	9.99E-08	1.26E-10	4.05E-06	7.04E-08	6.76E-08	1.12E-08
Pyrene	1.26E-05	8.27E-07	3.07E-07	6.26E-09	1.08E-08	2.95E-05	4.96E-07	1.11E-07	4.31E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	3.40E-08	7.22E-09	1.67E-08	2.35E-09	1.62E-12	2.51E-07	6.07E-09	7.74E-09	5.11E-08
PCB									
Aroclor 1254 (Total PCBs)	4.68E-05	5.85E-07	--	9.43E-07	2.93E-09	2.88E-04	--	--	5.76E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	3.58E-08	1.60E-08	4.48E-09	1.00E-07	1.57E-07	2.39E-06	7.20E-07	1.01E-07	1.89E-06
1,2,4-Trichlorobenzene	2.66E-09	5.87E-10	3.27E-10	4.45E-09	4.22E-09	2.80E-07	4.60E-09	1.14E-08	2.66E-07
1,2,4,5-Tetrachlorobenzene	1.13E-07	7.67E-09	1.38E-08	1.25E-08	4.79E-09	1.45E-06	2.59E-08	5.51E-08	1.52E-06
Pentachlorobenzene	1.75E-06	7.74E-08	4.28E-07	9.45E-08	1.22E-08	5.88E-05	1.05E-06	2.16E-06	9.01E-06
Hexachlorobenzene	4.85E-08	3.79E-09	1.18E-08	1.03E-08	4.26E-09	1.36E-05	2.43E-07	4.95E-07	4.26E-06
Pentachlorophenol	8.25E-07	2.91E-04	1.93E-06	1.94E-07	3.01E-07	7.13E-06	1.40E-07	2.64E-07	1.69E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.87E-11	2.72E-11	3.96E-12	6.45E-09	1.93E-08	1.17E-07	9.24E-08	5.30E-09	6.09E-08
Chloroform	6.43E-11	1.76E-10	1.44E-11	3.73E-09	3.33E-08	6.99E-08	1.23E-07	3.39E-09	1.67E-08
Dichloromethane	1.15E-08	7.93E-08	7.32E-09	4.02E-07	1.19E-05	4.75E-06	1.14E-05	2.45E-07	1.19E-06
Trichlorofluoromethane (Freon 11)	2.97E-09	4.23E-09	4.58E-10	2.30E-06	1.00E-05	4.58E-05	5.04E-05	2.12E-06	1.59E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.44E-10	2.04E-10	2.22E-11	2.02E-08	8.81E-08	4.76E-07	5.24E-07	2.21E-08	1.40E-07
Other Organics									
Bromoform	4.00E-10	6.60E-10	6.58E-11	5.52E-07	2.87E-06	1.45E-05	1.80E-05	6.78E-07	3.37E-06
O-Terphenyl	7.94E-07	1.47E-07	1.94E-07	1.01E-07	1.12E-08	8.27E-05	1.75E-06	2.95E-06	1.86E-05
Inorganics									
Antimony	4.12E-04	2.48E-04	6.59E-05	2.93E-06	4.34E-06	1.95E-04	1.00E-06	2.21E-06	8.68E-04
Arsenic	4.09E-05	2.68E-05	8.57E-07	6.22E-07	6.67E-07	1.93E-05	9.43E-08	2.00E-06	3.33E-05
Barium	2.90E-04	1.71E-04	4.22E-06	3.03E-07	3.35E-06	1.37E-04	2.79E-06	1.88E-05	3.35E-05
Beryllium	2.60E-04	2.27E-05	1.87E-06	3.64E-07	2.07E-07	1.63E-04	1.49E-05	2.16E-05	2.07E-05
Boron	1.60E-03	1.56E-02	2.57E-04	1.40E-04	2.43E-04	7.29E-04	1.32E-05	1.67E-04	--
Cadmium	1.71E-03	1.05E-03	2.61E-03	1.50E-06	1.09E-05	8.16E-04	9.02E-05	2.65E-04	1.31E-02
Chromium (Total)	1.44E-04	1.37E-04	7.05E-06	8.54E-06	3.57E-06	6.79E-05	3.62E-07	2.92E-06	7.14E-04
Chromium VI	2.05E-05	1.95E-05	1.00E-06	1.21E-06	5.08E-07	9.65E-06	5.14E-08	--	1.88E-05
Cobalt	8.71E-04	3.67E-04	1.70E-05	8.83E-05	9.18E-06	4.13E-04	4.03E-07	9.91E-07	9.18E-04
Lead	3.98E-02	4.81E-03	2.96E-03	2.13E-05	2.89E-05	2.60E-02	2.90E-04	6.28E-04	3.03E-03
Mercury - Inorganic	2.57E-03	5.07E-05	6.97E-04	9.50E-06	1.69E-07	8.58E-03	1.50E-03	1.05E-03	1.22E-04
Methyl Mercury	1.04E-04	1.43E-05	8.84E-04	1.51E-07	2.40E-09	8.31E-06	1.48E-07	3.71E-05	3.96E-04
Nickel	1.87E-02	5.86E-03	3.16E-03	4.38E-04	1.37E-04	8.88E-03	6.99E-05	3.02E-04	2.13E-02
Selenium	8.24E-06	2.91E-05	1.30E-06	7.22E-07	7.62E-07	3.81E-06	2.51E-07	2.38E-06	1.30E-04
Silver	9.45E-05	2.40E-04	3.09E-05	8.00E-06	5.32E-06	4.42E-05	1.99E-07	--	4.71E-04
Thallium	9.07E-03	2.39E-03	1.45E-03	1.21E-03	6.08E-05	4.32E-03	1.39E-06	--	--
Tin	9.83E-03	1.36E-03	8.11E-04	1.56E-03	2.00E-05	5.00E-03	1.35E-05	--	6.00E-02
Vanadium	9.38E-04	7.54E-05	6.31E-06	3.10E-06	6.35E-07	6.35E-04	4.00E-07	9.37E-06	1.02E-04
Zinc	4.09E-02	2.23E-02	2.97E-02	2.40E-05	3.14E-04	1.94E-02	1.73E-03	9.07E-03	2.92E-01

Table M.143 - Detailed Process Upset Case Exposure Point Concentrations for the Bowmanville Marsh Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.74E-07	5.95E-08	1.35E-08	2.40E-10	3.84E-09	7.54E-07	1.27E-08	3.09E-09	1.53E-09
Acenaphthylene	6.42E-08	1.26E-08	3.16E-09	8.69E-11	4.01E-09	7.04E-07	1.18E-08	2.87E-09	2.01E-09
Anthracene	2.70E-07	2.74E-08	1.32E-08	1.68E-10	1.08E-09	1.01E-06	1.70E-08	3.94E-09	1.71E-09
Fluoranthene	2.68E-06	2.46E-07	1.31E-07	1.78E-09	1.29E-08	2.54E-05	4.27E-07	9.46E-08	6.47E-08
Fluorene	2.73E-07	4.19E-08	1.34E-08	2.76E-10	8.23E-09	2.54E-06	4.27E-08	1.01E-08	6.53E-09
Phenanthrene	2.75E-06	3.16E-07	1.35E-07	2.07E-09	2.90E-08	3.08E-05	5.18E-07	1.20E-07	4.60E-08
High Molecular Weight PAHs									
Benz(a)anthracene	1.49E-07	9.64E-08	3.63E-09	4.19E-10	3.57E-10	5.12E-06	8.61E-08	1.79E-08	8.98E-09
Benzo(a)pyrene	2.63E-07	5.40E-07	3.21E-08	2.08E-09	5.25E-10	2.03E-05	3.54E-07	3.47E-07	2.63E-08
Benzo(e)pyrene	7.17E-07	5.10E-05	8.74E-08	1.64E-07	2.06E-09	3.28E-05	--	5.40E-07	2.85E-07
Benzo(a)fluorene	2.94E-07	1.20E-07	7.17E-09	6.77E-10	7.68E-09	3.05E-05	--	1.10E-07	9.67E-08
Benzo(b)fluorene	2.03E-07	2.67E-07	4.95E-09	1.19E-09	5.48E-09	2.23E-05	--	7.77E-08	1.54E-07
Benzo(b)fluoranthene	3.42E-07	3.09E-08	8.33E-09	1.83E-10	4.64E-10	1.95E-05	3.27E-07	6.57E-08	3.10E-08
Benzo(g,h,i)perylene	3.71E-06	7.74E-05	4.53E-07	2.41E-07	2.05E-09	3.70E-04	6.23E-06	6.05E-06	3.25E-07
Benzo(k)fluoranthene	2.99E-07	2.25E-07	7.29E-09	8.81E-10	1.61E-10	6.37E-06	1.07E-07	2.16E-08	1.01E-08
Chrysene	5.52E-07	8.13E-08	1.35E-08	4.48E-10	6.78E-10	1.09E-05	1.83E-07	3.82E-08	1.70E-08
Dibenz(a,c)anthracene	4.68E-07	8.52E-06	5.70E-08	2.38E-08	2.55E-09	1.99E-04	3.35E-06	3.20E-06	6.42E-07
Dibenz(a,h)anthracene	1.64E-07	6.23E-06	2.00E-08	1.94E-08	1.26E-10	9.05E-06	1.52E-07	1.48E-07	2.00E-08
Indeno(1,2,3-cd)pyrene	7.90E-07	5.49E-07	9.64E-08	1.71E-09	5.16E-10	6.34E-05	1.07E-06	1.03E-06	1.03E-07
Perylene	1.55E-07	3.80E-05	1.89E-08	1.32E-07	2.62E-10	8.40E-06	1.46E-07	1.40E-07	2.33E-08
Pyrene	1.37E-05	9.26E-07	3.35E-07	6.98E-09	1.68E-08	4.58E-05	7.70E-07	1.72E-07	6.70E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.56E-08	8.27E-09	7.66E-09	2.38E-09	1.47E-12	2.29E-07	5.54E-09	7.06E-09	4.66E-08
PCB									
Aroclor 1254 (Total PCBs)	5.12E-05	7.01E-07	--	1.04E-06	5.61E-09	5.50E-04	--	--	1.10E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	3.91E-08	1.75E-08	4.89E-09	1.41E-07	2.23E-07	3.38E-06	1.02E-06	1.44E-07	2.68E-06
1,2,4-Trichlorobenzene	2.90E-09	6.60E-10	3.57E-10	6.13E-09	5.89E-09	3.91E-07	6.42E-09	1.59E-08	3.71E-07
1,2,4,5-Tetrachlorobenzene	1.23E-07	8.44E-09	1.50E-08	1.50E-08	6.24E-09	1.89E-06	3.37E-08	7.17E-08	1.97E-06
Pentachlorobenzene	1.91E-06	8.63E-08	4.67E-07	1.07E-07	1.77E-08	8.55E-05	1.52E-06	3.14E-06	1.31E-05
Hexachlorobenzene	5.29E-08	4.65E-09	1.29E-08	1.29E-08	6.20E-09	1.98E-05	3.53E-07	7.20E-07	6.20E-06
Pentachlorophenol	9.00E-07	3.85E-04	2.11E-06	2.57E-07	3.48E-07	8.24E-06	1.62E-07	3.05E-07	1.96E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	3.13E-11	2.98E-11	4.32E-12	9.51E-09	2.84E-08	1.73E-07	1.36E-07	7.81E-09	8.98E-08
Chloroform	7.02E-11	1.92E-10	1.57E-11	5.35E-09	4.77E-08	1.00E-07	1.77E-07	4.86E-09	2.39E-08
Dichloromethane	1.26E-08	8.66E-08	7.99E-09	5.65E-07	1.67E-05	6.69E-06	1.61E-05	3.45E-07	1.67E-06
Trichlorofluoromethane (Freon 11)	3.24E-09	4.64E-09	5.00E-10	3.40E-06	1.48E-05	6.76E-05	7.44E-05	3.14E-06	2.35E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.57E-10	2.24E-10	2.42E-11	2.97E-08	1.30E-07	6.99E-07	7.70E-07	3.25E-08	2.05E-07
Other Organics									
Bromoform	4.36E-10	7.20E-10	7.19E-11	8.16E-07	4.24E-06	2.14E-05	2.66E-05	1.00E-06	4.98E-06
O-Terphenyl	8.67E-07	1.90E-07	2.12E-07	1.26E-07	1.85E-08	1.36E-04	2.84E-06	4.86E-06	3.07E-05
Inorganics									
Antimony	1.88E-04	1.01E-04	3.01E-05	1.22E-06	2.08E-06	9.35E-05	4.80E-07	1.06E-06	4.16E-04
Arsenic	1.87E-05	1.03E-05	3.92E-07	2.47E-07	3.19E-07	9.26E-06	4.51E-08	9.56E-07	1.60E-05
Barium	1.33E-04	6.84E-05	1.93E-06	1.24E-07	1.61E-06	6.58E-05	1.33E-06	9.00E-06	1.61E-05
Beryllium	1.19E-04	8.83E-06	8.55E-07	1.52E-07	1.07E-07	8.47E-05	7.74E-06	1.12E-05	1.07E-05
Boron	7.33E-04	6.44E-03	1.17E-04	5.85E-05	1.16E-04	3.49E-04	6.33E-06	7.99E-05	--
Cadmium	7.82E-04	4.45E-04	1.19E-03	6.49E-07	5.21E-06	3.91E-04	4.32E-05	1.27E-04	6.27E-03
Chromium (Total)	6.58E-05	5.21E-05	3.22E-06	3.36E-06	1.71E-06	3.25E-05	1.73E-07	1.40E-06	3.42E-04
Chromium VI	9.36E-06	7.41E-06	4.58E-07	4.77E-07	2.43E-07	4.62E-06	2.46E-08	--	8.99E-06
Cobalt	3.98E-04	1.41E-04	7.78E-06	3.52E-05	4.39E-06	1.98E-04	1.93E-07	4.75E-07	4.39E-04
Lead	1.82E-02	1.97E-03	1.36E-03	9.07E-06	1.51E-05	1.36E-02	1.52E-04	3.28E-04	1.58E-03
Mercury - Inorganic	2.58E-03	2.87E-05	6.98E-04	8.35E-06	3.37E-07	1.71E-02	2.81E-03	2.10E-03	2.42E-04
Methyl Mercury	4.76E-05	8.08E-06	4.05E-04	8.15E-08	4.78E-09	9.72E-06	1.73E-07	4.34E-05	7.88E-04
Nickel	8.54E-03	2.27E-03	1.45E-03	1.77E-04	6.54E-05	4.25E-03	3.35E-05	1.45E-04	1.02E-02
Selenium	3.77E-06	1.11E-05	5.94E-07	2.82E-07	3.65E-07	1.82E-06	1.20E-07	1.14E-06	6.20E-05
Silver	4.32E-05	9.42E-05	1.41E-05	3.21E-06	2.55E-06	2.11E-05	9.51E-08	--	2.26E-04
Thallium	4.15E-03	9.11E-04	6.64E-04	4.86E-04	2.91E-05	2.07E-03	6.65E-07	--	--
Tin	4.50E-03	5.39E-04	3.71E-04	6.49E-04	9.78E-06	2.44E-03	6.61E-06	--	2.93E-02
Vanadium	4.29E-04	2.90E-05	2.89E-06	1.29E-06	3.35E-07	3.35E-04	2.11E-07	4.94E-06	5.35E-05
Zinc	1.87E-02	9.26E-03	1.36E-02	1.02E-05	1.50E-04	9.31E-03	8.27E-04	4.34E-03	1.40E-01

Table M.144 - Detailed Process Upset Case Exposure Point Concentrations for the South of Site, Eco Baseline S7 Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.04E-06	2.25E-07	5.12E-08	7.81E-10	1.23E-09	2.41E-07	4.05E-09	9.89E-10	4.89E-10
Acenaphthylene	2.43E-07	4.62E-08	1.20E-08	1.86E-10	1.36E-09	2.38E-07	4.01E-09	9.69E-10	6.80E-10
Anthracene	1.02E-06	1.01E-07	5.01E-08	5.80E-10	3.14E-10	2.96E-07	4.97E-09	1.15E-09	4.98E-10
Fluoranthene	1.01E-05	6.09E-07	4.95E-07	4.78E-09	3.30E-09	6.48E-06	1.09E-07	2.42E-08	1.65E-08
Fluorene	1.03E-06	1.51E-07	5.07E-08	6.95E-10	2.20E-09	6.77E-07	1.14E-08	2.71E-07	1.74E-09
Phenanthrene	1.04E-05	1.05E-06	5.11E-07	6.01E-09	7.25E-09	7.70E-06	1.30E-07	3.00E-08	1.15E-08
High Molecular Weight PAHs									
Benz(a)anthracene	5.63E-07	1.81E-07	1.37E-08	8.33E-10	1.11E-10	1.59E-06	2.68E-08	5.58E-09	2.79E-09
Benzo(a)pyrene	9.97E-07	6.47E-07	1.22E-07	2.59E-09	2.05E-10	7.96E-06	1.38E-07	1.36E-07	1.03E-08
Benzo(e)pyrene	2.72E-06	2.12E-05	3.31E-07	6.84E-08	6.70E-10	1.07E-05	--	1.75E-07	9.25E-08
Benzo(a)fluorene	1.11E-06	1.16E-07	2.72E-08	7.53E-10	2.03E-09	8.05E-06	--	2.90E-08	2.56E-08
Benzo(b)fluorene	7.70E-07	1.49E-07	1.88E-08	7.74E-10	1.41E-09	5.73E-06	--	2.00E-08	3.97E-08
Benzo(b)fluoranthene	1.29E-06	4.78E-08	3.16E-08	4.18E-10	2.09E-10	8.77E-06	1.48E-07	2.96E-08	1.40E-08
Benzo(g,h,i)perylene	1.41E-05	3.21E-05	1.72E-06	1.02E-07	1.25E-09	2.26E-04	3.81E-06	3.70E-06	1.99E-07
Benzo(k)fluoranthene	1.13E-06	2.29E-07	2.76E-08	1.04E-09	7.46E-11	2.96E-06	4.98E-08	1.00E-08	4.71E-09
Chrysene	2.09E-06	2.34E-07	5.10E-08	1.37E-09	2.59E-10	4.16E-06	7.01E-08	1.46E-08	6.52E-09
Dibenz(a,c)anthracene	1.77E-06	7.83E-06	2.16E-07	2.18E-08	1.17E-09	9.14E-05	1.54E-06	1.47E-06	2.94E-07
Dibenz(a,h)anthracene	6.22E-07	2.78E-06	7.58E-08	8.73E-09	6.24E-11	4.47E-06	7.52E-08	7.30E-08	9.89E-09
Indeno(1,2,3-cd)pyrene	2.99E-06	1.51E-06	3.65E-07	4.82E-09	2.90E-10	3.57E-05	6.00E-07	5.78E-07	5.78E-08
Perylene	5.86E-07	1.57E-05	7.15E-08	5.48E-08	1.02E-10	3.26E-06	5.68E-08	5.46E-08	9.06E-09
Pyrene	5.19E-05	3.07E-06	1.27E-06	2.39E-08	5.22E-09	1.42E-05	2.39E-07	5.34E-08	2.08E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	8.14E-08	5.63E-09	4.03E-08	2.55E-09	1.76E-12	2.74E-07	6.61E-09	8.43E-09	5.56E-08
PCB									
Aroclor 1254 (Total PCBs)	1.93E-04	1.46E-06	--	3.52E-06	4.66E-09	4.57E-04	--	--	9.14E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.48E-07	6.41E-08	1.85E-08	6.97E-08	9.16E-08	1.39E-06	4.19E-07	5.90E-08	1.10E-06
1,2,4-Trichlorobenzene	1.10E-08	2.13E-09	1.35E-09	3.25E-09	2.45E-09	1.63E-07	2.67E-09	6.63E-09	1.55E-07
1,2,4,5-Tetrachlorobenzene	4.67E-07	3.06E-08	5.70E-08	2.78E-08	3.88E-09	1.18E-06	2.10E-08	4.46E-08	1.23E-06
Pentachlorobenzene	7.26E-06	2.93E-07	1.77E-06	2.96E-07	7.04E-09	3.41E-05	6.07E-07	1.25E-06	5.22E-06
Hexachlorobenzene	2.01E-07	7.82E-09	4.90E-08	1.17E-08	2.49E-09	7.97E-06	1.42E-07	2.90E-07	2.49E-06
Pentachlorophenol	3.41E-06	1.59E-04	7.99E-06	1.07E-07	2.14E-07	5.06E-06	9.92E-08	1.87E-07	1.20E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.19E-10	1.11E-10	1.64E-11	4.11E-09	1.23E-08	7.45E-08	5.87E-08	3.37E-09	3.88E-08
Chloroform	2.66E-10	7.20E-10	5.97E-11	2.31E-09	2.04E-08	4.29E-08	7.55E-08	2.08E-09	1.02E-08
Dichloromethane	4.77E-08	3.27E-07	3.03E-08	2.44E-07	7.14E-06	2.86E-06	6.87E-06	1.47E-07	7.14E-07
Trichlorofluoromethane (Freon 11)	1.23E-08	1.71E-08	1.90E-09	1.49E-06	6.47E-06	2.96E-05	3.26E-05	1.37E-06	1.03E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	5.94E-10	8.29E-10	9.17E-11	1.28E-08	5.57E-08	3.01E-07	3.31E-07	1.40E-08	8.83E-08
Other Organics									
Bromoform	1.66E-09	2.73E-09	2.73E-10	3.60E-07	1.87E-06	9.44E-06	1.17E-05	4.42E-07	2.20E-06
O-Terphenyl	3.29E-06	1.52E-07	8.02E-07	1.43E-07	5.48E-09	4.04E-05	8.77E-07	1.44E-06	9.09E-06
Inorganics									
Antimony	9.91E-04	4.77E-04	1.59E-04	5.55E-06	1.82E-06	8.17E-05	4.19E-07	9.23E-07	3.63E-04
Arsenic	9.84E-05	4.63E-05	2.06E-06	1.04E-06	2.79E-07	8.08E-06	3.94E-08	8.35E-07	1.39E-05
Barium	6.98E-04	3.20E-04	1.02E-05	5.55E-07	1.40E-06	5.75E-05	1.17E-06	7.86E-06	1.40E-05
Beryllium	6.24E-04	4.02E-05	4.49E-06	7.18E-07	7.90E-08	6.24E-05	5.70E-06	8.25E-06	7.90E-06
Boron	3.86E-03	3.10E-02	6.17E-04	2.69E-04	1.01E-04	3.04E-04	5.52E-06	6.97E-05	--
Cadmium	4.11E-03	2.21E-03	6.27E-03	3.15E-06	4.55E-06	3.41E-04	3.77E-05	1.11E-04	5.46E-03
Chromium (Total)	3.46E-04	2.32E-04	1.70E-05	1.38E-05	1.49E-06	2.84E-05	1.51E-07	1.22E-06	2.98E-04
Chromium VI	4.92E-05	3.30E-05	2.41E-06	1.96E-06	2.12E-07	4.03E-06	2.15E-08	--	7.84E-06
Cobalt	2.10E-03	6.32E-04	4.09E-05	1.49E-04	3.84E-06	1.73E-04	1.68E-07	4.15E-07	3.84E-04
Lead	9.56E-02	9.39E-03	7.12E-03	4.41E-05	1.09E-05	9.82E-03	1.10E-04	2.37E-04	1.14E-03
Mercury - Inorganic	5.11E-03	7.41E-05	1.38E-03	1.73E-05	9.35E-08	4.74E-03	8.56E-04	5.82E-04	6.72E-05
Methyl Mercury	2.50E-04	2.09E-05	2.13E-03	2.59E-07	1.33E-09	1.17E-05	2.09E-07	5.24E-05	2.19E-04
Nickel	4.49E-02	1.03E-02	7.61E-03	7.68E-04	5.71E-05	3.71E-03	2.92E-05	1.26E-04	8.91E-03
Selenium	1.98E-05	4.92E-05	3.13E-06	1.14E-06	3.18E-07	1.59E-06	1.05E-07	9.96E-07	5.41E-05
Silver	2.27E-04	4.32E-04	7.44E-05	1.38E-05	2.22E-06	1.84E-05	8.29E-08	--	1.97E-04
Thallium	2.18E-02	4.06E-03	3.49E-03	2.07E-03	2.54E-05	1.81E-03	5.80E-07	--	--
Tin	2.36E-02	2.50E-03	1.95E-03	3.02E-03	8.18E-06	2.05E-03	5.53E-06	--	2.46E-02
Vanadium	2.26E-03	1.31E-04	1.52E-05	6.10E-06	2.37E-07	2.37E-04	1.50E-07	3.50E-06	3.80E-05
Zinc	9.84E-02	4.49E-02	7.14E-02	4.80E-05	1.31E-04	8.13E-03	7.22E-04	3.79E-03	1.22E-01

Table M.145 - Detailed Process Upset Case Exposure Point Concentrations for the Sports Fields Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	9.39E-07	2.03E-07	4.63E-08	1.02E-09	3.44E-08	6.75E-06	1.14E-07	2.77E-08	1.37E-08
Acenaphthylene	2.20E-07	4.23E-08	1.08E-08	4.40E-10	2.82E-08	4.95E-06	8.33E-08	2.01E-08	1.41E-08
Anthracene	9.26E-07	9.24E-08	4.53E-08	6.23E-10	7.67E-09	7.21E-06	1.21E-07	2.81E-08	1.22E-08
Fluoranthene	9.17E-06	6.52E-07	4.48E-07	5.86E-09	7.78E-08	1.53E-04	2.57E-06	5.70E-07	3.90E-07
Fluorene	9.33E-07	1.39E-07	4.58E-08	1.28E-09	5.93E-08	1.83E-05	3.08E-07	7.31E-08	4.71E-08
Phenanthrene	9.44E-06	9.94E-07	4.61E-07	7.85E-09	1.79E-07	1.90E-04	3.20E-06	7.41E-07	2.84E-07
High Molecular Weight PAHs									
Benz(a)anthracene	5.09E-07	2.21E-07	1.24E-08	1.02E-09	2.28E-09	3.26E-05	5.49E-07	1.14E-07	5.72E-08
Benzo(a)pyrene	9.01E-07	1.02E-06	1.10E-07	4.05E-09	3.78E-09	1.47E-04	2.55E-06	2.50E-06	1.90E-07
Benzo(e)pyrene	2.45E-06	7.29E-05	2.99E-07	2.34E-07	1.30E-08	2.07E-04	--	3.40E-06	1.79E-06
Benzo(a)fluorene	1.01E-06	2.10E-07	2.46E-08	1.87E-09	4.95E-08	1.96E-04	--	7.07E-07	6.23E-07
Benzo(b)fluorene	6.95E-07	4.04E-07	1.70E-08	2.28E-09	3.39E-08	1.38E-04	--	4.82E-07	9.56E-07
Benzo(b)fluoranthene	1.17E-06	6.48E-08	2.85E-08	5.18E-10	4.00E-09	1.68E-04	2.82E-06	5.67E-07	2.67E-07
Benzo(g,h,i)perylene	1.27E-05	1.10E-04	1.55E-06	3.46E-07	1.75E-08	3.16E-03	5.31E-05	5.17E-05	2.78E-06
Benzo(k)fluoranthene	1.02E-06	4.02E-07	2.50E-08	1.67E-09	1.12E-09	4.43E-05	7.45E-07	1.50E-07	7.04E-08
Chrysene	1.89E-06	2.35E-07	4.61E-08	1.41E-09	5.48E-09	8.79E-05	1.48E-06	3.08E-07	1.38E-07
Dibenz(a,c)anthracene	1.60E-06	1.47E-05	1.95E-07	4.12E-08	2.04E-08	1.59E-03	2.67E-05	2.55E-05	5.11E-06
Dibenz(a,h)anthracene	5.62E-07	9.00E-06	6.86E-08	2.81E-08	9.75E-10	6.98E-05	1.18E-06	1.14E-06	1.55E-07
Indeno(1,2,3-cd)pyrene	2.71E-06	1.55E-06	3.30E-07	4.94E-09	4.26E-09	5.24E-04	8.82E-06	8.50E-06	8.50E-07
Perylene	5.30E-07	5.42E-05	6.46E-08	1.89E-07	1.81E-09	5.80E-05	1.01E-06	9.69E-07	1.61E-07
Pyrene	4.70E-05	2.91E-06	1.15E-06	2.35E-08	9.47E-08	2.58E-04	4.33E-06	9.69E-07	3.77E-07
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	6.36E-08	1.30E-08	3.15E-08	4.26E-09	1.37E-11	2.13E-06	5.02E-08	6.55E-08	4.32E-07
PCB									
Aroclor 1254 (Total PCBs)	1.75E-04	1.69E-06	--	3.38E-06	4.87E-08	4.78E-03	--	--	1.34E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.34E-07	5.87E-08	1.67E-08	1.87E-06	3.01E-06	4.56E-05	1.37E-05	1.94E-06	3.62E-05
1,2,4-Trichlorobenzene	9.95E-09	2.04E-09	1.22E-09	7.95E-08	7.87E-08	5.22E-06	8.57E-08	2.13E-07	4.96E-06
1,2,4,5-Tetrachlorobenzene	4.22E-07	2.81E-08	5.15E-08	1.30E-07	7.59E-08	2.30E-05	4.10E-07	8.73E-07	2.40E-05
Pentachlorobenzene	6.56E-06	2.75E-07	1.60E-06	5.90E-07	2.08E-07	1.01E-03	1.79E-05	3.70E-05	1.55E-04
Hexachlorobenzene	1.81E-07	1.01E-08	4.42E-08	1.30E-07	7.66E-08	2.45E-04	4.36E-06	8.90E-06	7.66E-05
Pentachlorophenol	3.08E-06	5.49E-04	7.22E-06	3.67E-07	8.01E-07	1.90E-05	3.72E-07	7.01E-07	4.50E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.07E-10	1.01E-10	1.48E-11	1.25E-07	3.74E-07	2.27E-06	1.79E-06	1.03E-07	1.18E-06
Chloroform	2.40E-10	6.53E-10	5.39E-11	7.58E-08	6.78E-07	1.42E-06	2.51E-06	6.90E-08	3.40E-07
Dichloromethane	4.31E-08	2.96E-07	2.74E-08	8.35E-06	2.47E-04	9.89E-05	2.38E-04	5.10E-06	2.47E-05
Trichlorofluoromethane (Freon 11)	1.11E-08	1.56E-08	1.71E-09	4.50E-05	1.96E-04	8.97E-04	9.87E-04	4.16E-05	3.11E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	5.37E-10	7.55E-10	8.28E-11	3.95E-07	1.72E-06	9.28E-06	1.02E-05	4.31E-07	2.72E-06
Other Organics									
Bromoform	1.50E-09	2.47E-09	2.46E-10	1.09E-05	5.65E-05	2.85E-04	3.55E-04	1.34E-05	6.64E-05
O-Terphenyl	2.97E-06	3.14E-07	7.25E-07	4.13E-07	1.36E-07	1.00E-03	1.95E-05	3.58E-05	2.27E-04
Inorganics									
Antimony	7.71E-04	3.76E-04	1.23E-04	4.52E-06	5.41E-06	2.44E-04	1.25E-06	2.75E-06	1.08E-03
Arsenic	7.65E-05	3.67E-05	1.60E-06	8.68E-07	8.31E-07	2.41E-05	1.17E-07	2.49E-06	4.15E-05
Barium	5.43E-04	2.52E-04	7.90E-06	4.55E-07	4.18E-06	1.71E-04	3.47E-06	2.34E-05	4.18E-05
Beryllium	4.86E-04	3.18E-05	3.50E-06	5.78E-07	4.05E-07	3.20E-04	2.92E-05	4.23E-05	4.05E-05
Boron	3.00E-03	2.44E-02	4.80E-04	2.18E-04	3.03E-04	9.08E-04	1.65E-05	2.08E-04	--
Cadmium	3.20E-03	1.73E-03	4.88E-03	2.51E-06	1.37E-05	1.02E-03	1.13E-04	3.33E-04	1.64E-02
Chromium (Total)	2.69E-04	1.84E-04	1.32E-05	1.16E-05	4.45E-06	8.45E-05	4.51E-07	3.64E-06	8.90E-04
Chromium VI	3.83E-05	2.62E-05	1.87E-06	1.65E-06	6.33E-07	1.20E-05	6.41E-08	--	2.34E-05
Cobalt	1.63E-03	5.01E-04	3.18E-05	1.24E-04	1.14E-05	5.15E-04	5.02E-07	1.24E-06	1.14E-03
Lead	7.44E-02	7.39E-03	5.54E-03	3.52E-05	5.90E-05	5.31E-02	5.92E-04	1.28E-03	6.18E-03
Mercury - Inorganic	6.10E-03	7.33E-05	1.65E-03	2.02E-05	1.63E-06	8.24E-02	9.95E-03	1.01E-02	1.17E-03
Methyl Mercury	1.95E-04	2.07E-05	1.66E-03	2.37E-07	2.31E-08	1.77E-05	3.15E-07	7.89E-05	3.80E-03
Nickel	3.49E-02	8.16E-03	5.92E-03	6.35E-04	1.71E-04	1.11E-02	8.75E-05	3.78E-04	2.67E-02
Selenium	1.54E-05	3.90E-05	2.43E-06	9.68E-07	9.49E-07	4.75E-06	3.13E-07	2.97E-06	1.61E-04
Silver	1.77E-04	3.42E-04	5.79E-05	1.14E-05	6.63E-06	5.50E-05	2.47E-07	--	5.87E-04
Thallium	1.70E-02	3.22E-03	2.72E-03	1.72E-03	7.63E-05	5.42E-03	1.74E-06	--	--
Tin	1.84E-02	1.97E-03	1.52E-03	2.44E-03	2.86E-05	7.14E-03	1.93E-05	--	8.57E-02
Vanadium	1.76E-03	1.04E-04	1.18E-05	4.91E-06	1.34E-06	1.34E-03	8.46E-07	1.98E-05	2.15E-04
Zinc	7.65E-02	3.53E-02	5.56E-02	3.87E-05	3.92E-04	2.43E-02	2.16E-03	1.13E-02	3.65E-01

Table M.146 - Detailed Process Upset Case Exposure Point Concentrations for the Water Pollution Control Plant Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.34E-06	2.90E-07	6.62E-08	1.01E-09	1.59E-09	3.11E-07	5.24E-09	1.28E-09	6.32E-10
Acenaphthylene	3.15E-07	5.99E-08	1.55E-08	2.41E-10	1.75E-09	3.08E-07	5.18E-09	1.25E-09	8.78E-10
Anthracene	1.32E-06	1.31E-07	6.48E-08	7.50E-10	4.06E-10	3.82E-07	6.43E-09	1.49E-09	6.44E-10
Fluoranthene	1.31E-05	8.25E-07	6.40E-07	6.32E-09	4.27E-09	8.38E-06	1.41E-07	3.13E-08	2.14E-08
Fluorene	1.34E-06	1.96E-07	6.55E-08	9.01E-10	2.84E-09	8.76E-07	1.47E-08	3.50E-09	2.26E-09
Phenanthrene	1.35E-05	1.37E-06	6.60E-07	7.83E-09	9.38E-09	9.95E-06	1.67E-07	3.88E-08	1.49E-08
High Molecular Weight PAHs									
Benz(a)anthracene	7.28E-07	2.56E-07	1.77E-08	1.16E-09	1.44E-10	2.06E-06	3.46E-08	7.21E-09	3.61E-09
Benzo(a)pyrene	1.29E-06	1.00E-06	1.57E-07	3.97E-09	2.65E-10	1.03E-05	1.79E-07	1.76E-07	1.33E-08
Benzo(e)pyrene	3.51E-06	4.75E-05	4.28E-07	1.53E-07	8.66E-10	1.38E-05	--	2.27E-07	1.20E-07
Benzo(a)fluorene	1.44E-06	1.90E-07	3.51E-08	1.13E-09	2.63E-09	1.04E-05	--	3.75E-08	3.31E-08
Benzo(b)fluorene	9.94E-07	2.94E-07	2.43E-08	1.40E-09	1.82E-09	7.40E-06	--	2.59E-08	5.13E-08
Benzo(b)fluoranthene	1.67E-06	6.99E-08	4.08E-08	5.70E-10	2.71E-10	1.13E-05	1.91E-07	3.83E-08	1.80E-08
Benzo(g,h,i)perylene	1.82E-05	7.21E-05	2.22E-06	2.27E-07	1.62E-09	2.92E-04	4.92E-06	4.78E-06	2.57E-07
Benzo(k)fluoranthene	1.46E-06	3.69E-07	3.56E-08	1.61E-09	9.64E-11	3.83E-06	6.44E-08	1.30E-08	6.09E-09
Chrysene	2.70E-06	3.11E-07	6.59E-08	1.80E-09	3.35E-10	5.38E-06	9.06E-08	1.89E-08	8.42E-09
Dibenz(a,c)anthracene	2.29E-06	1.30E-05	2.79E-07	3.61E-08	1.51E-09	1.18E-04	1.99E-06	1.90E-06	3.80E-07
Dibenz(a,h)anthracene	8.04E-07	6.02E-06	9.80E-08	1.89E-08	8.06E-11	5.77E-06	9.71E-08	9.44E-08	1.28E-08
Indeno(1,2,3-cd)pyrene	3.87E-06	2.02E-06	4.72E-07	6.42E-09	3.74E-10	7.75E-05	7.47E-07	7.47E-07	7.47E-08
Perylene	7.57E-07	3.53E-05	9.23E-08	1.23E-07	1.31E-10	4.22E-06	7.34E-08	7.05E-08	1.17E-08
Pyrene	6.70E-05	4.01E-06	1.64E-06	3.10E-08	6.75E-09	1.84E-05	3.09E-07	6.91E-08	2.69E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.00E-07	1.02E-08	4.98E-08	3.99E-09	2.17E-12	3.38E-07	8.14E-09	1.04E-08	6.86E-08
PCB									
Aroclor 1254 (Total PCBs)	2.49E-04	2.02E-06	--	4.59E-06	6.02E-09	5.91E-04	--	--	1.18E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.91E-07	8.32E-08	2.40E-08	9.02E-08	1.18E-07	1.79E-06	5.41E-07	7.62E-08	1.42E-06
1,2,4-Trichlorobenzene	1.42E-08	2.79E-09	1.75E-09	4.21E-09	3.17E-09	2.11E-07	3.46E-09	8.57E-09	2.00E-07
1,2,4,5-Tetrachlorobenzene	6.04E-07	3.97E-08	7.37E-08	3.60E-08	5.01E-09	1.52E-06	2.71E-08	5.76E-08	1.58E-06
Pentachlorobenzene	9.38E-06	3.83E-07	2.29E-06	3.84E-07	9.10E-09	4.40E-05	7.85E-07	1.62E-06	6.75E-06
Hexachlorobenzene	2.59E-07	1.13E-08	6.33E-08	1.56E-08	3.22E-09	1.03E-05	1.84E-07	3.74E-07	3.22E-06
Pentachlorophenol	4.41E-06	3.58E-04	1.03E-05	2.39E-07	2.76E-07	6.53E-06	1.28E-07	2.41E-07	1.55E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.53E-10	1.43E-10	2.12E-11	5.31E-09	1.58E-08	9.62E-08	7.58E-08	4.35E-09	5.00E-08
Chloroform	3.44E-10	9.31E-10	7.71E-11	2.98E-09	2.64E-08	5.54E-08	9.76E-08	2.69E-09	1.32E-08
Dichloromethane	6.16E-08	4.23E-07	3.92E-08	3.16E-07	9.22E-06	3.69E-06	8.88E-06	1.90E-07	9.22E-07
Trichlorofluoromethane (Freon 11)	1.59E-08	2.22E-08	2.45E-09	1.92E-06	8.36E-06	3.82E-05	4.21E-05	1.77E-06	1.33E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	7.68E-10	1.07E-09	1.19E-10	1.66E-08	7.20E-08	3.89E-07	4.28E-07	1.80E-08	1.14E-07
Other Organics									
Bromoform	2.14E-09	3.53E-09	3.52E-10	4.65E-07	2.42E-06	1.22E-05	1.52E-05	5.71E-07	2.84E-06
O-Terphenyl	4.25E-06	2.62E-07	1.04E-06	2.12E-07	7.08E-09	5.22E-05	1.12E-06	1.86E-06	1.18E-05
Inorganics									
Antimony	1.22E-03	5.89E-04	1.96E-04	6.85E-06	2.24E-06	1.01E-04	5.16E-07	1.14E-06	4.48E-04
Arsenic	1.21E-04	5.71E-05	2.54E-06	1.28E-06	3.43E-07	9.96E-06	4.86E-08	1.03E-06	1.72E-05
Barium	8.60E-04	3.95E-04	1.25E-05	6.84E-07	1.73E-06	7.09E-05	1.44E-06	9.69E-06	1.73E-05
Beryllium	7.69E-04	4.95E-05	5.54E-06	8.86E-07	9.74E-08	7.69E-05	7.03E-06	1.02E-05	9.74E-06
Boron	4.76E-03	3.83E-02	7.61E-04	3.32E-04	1.25E-04	3.75E-04	6.81E-06	8.59E-05	--
Cadmium	5.07E-03	2.73E-03	7.73E-03	3.89E-06	5.60E-06	4.20E-04	4.65E-05	1.37E-04	6.74E-03
Chromium (Total)	4.27E-04	2.86E-04	2.09E-05	1.70E-05	1.84E-06	3.50E-05	1.86E-07	1.50E-06	3.68E-04
Chromium VI	6.07E-05	4.07E-05	2.97E-06	2.42E-06	2.62E-07	4.97E-06	2.65E-08	--	9.67E-06
Cobalt	2.58E-03	7.80E-04	5.04E-05	1.84E-04	4.73E-06	2.13E-04	2.08E-07	5.11E-07	4.73E-04
Lead	1.18E-01	1.16E-02	8.77E-03	5.44E-05	1.35E-05	1.21E-02	1.35E-04	2.92E-04	1.41E-03
Mercury - Inorganic	7.14E-03	9.69E-05	1.93E-03	2.38E-05	1.31E-07	6.62E-03	1.18E-03	8.14E-04	9.39E-05
Methyl Mercury	3.08E-04	2.73E-05	2.62E-03	3.32E-07	1.85E-09	1.45E-05	2.58E-07	6.46E-05	3.06E-04
Nickel	5.53E-02	1.27E-02	9.38E-03	9.47E-04	7.04E-05	4.58E-03	3.60E-05	1.56E-04	1.10E-02
Selenium	2.44E-05	6.07E-05	3.85E-06	1.41E-06	3.92E-07	1.96E-06	1.29E-07	1.23E-06	6.67E-05
Silver	2.80E-04	5.33E-04	9.17E-05	1.70E-05	2.74E-06	2.27E-05	1.02E-07	--	2.43E-04
Thallium	2.69E-02	5.01E-03	4.30E-03	2.55E-03	3.14E-05	2.23E-03	7.15E-07	--	--
Tin	2.91E-02	3.08E-03	2.40E-03	3.73E-03	1.01E-05	2.52E-03	6.82E-06	--	3.03E-02
Vanadium	2.78E-03	1.61E-04	1.87E-05	7.52E-06	2.93E-07	2.93E-04	1.85E-07	4.32E-06	4.68E-05
Zinc	1.21E-01	5.54E-02	8.80E-02	5.92E-05	1.62E-04	1.00E-02	8.91E-04	4.67E-03	1.51E-01

Table M.147 - Detailed Process Upset Case Exposure Point Concentrations for the Future Industrial Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.33E-06	5.04E-07	1.15E-07	1.75E-09	2.76E-09	5.41E-07	9.10E-09	2.22E-09	1.10E-09
Acenaphthylene	5.47E-07	1.04E-07	2.69E-08	4.18E-10	3.04E-09	5.35E-07	9.00E-09	2.18E-09	1.53E-09
Anthracene	2.30E-06	2.28E-07	1.13E-07	1.30E-09	7.06E-10	6.64E-07	1.12E-08	2.58E-09	1.12E-09
Fluoranthene	2.28E-05	1.36E-06	1.11E-06	1.07E-08	7.41E-09	1.46E-05	2.45E-07	5.43E-08	3.72E-08
Fluorene	2.32E-06	3.39E-07	1.14E-07	1.56E-09	4.93E-09	1.52E-06	2.56E-08	6.08E-09	3.92E-09
Phenanthrene	2.35E-05	2.35E-06	1.15E-06	1.35E-08	1.63E-08	1.73E-05	2.91E-07	6.73E-08	2.58E-08
High Molecular Weight PAHs									
Benz(a)anthracene	1.26E-06	4.04E-07	3.08E-08	1.86E-09	2.50E-10	3.57E-06	6.01E-08	1.25E-08	6.27E-09
Benzo(a)pyrene	2.24E-06	1.43E-06	2.73E-07	5.74E-09	4.61E-10	1.79E-05	3.11E-07	3.05E-07	2.31E-08
Benzo(e)pyrene	6.10E-06	4.48E-05	7.44E-07	1.45E-07	1.51E-09	2.40E-05	--	3.94E-07	2.08E-07
Benzo(a)fluorene	2.50E-06	2.55E-07	6.10E-08	1.67E-09	4.56E-09	1.81E-05	--	6.51E-08	5.74E-08
Benzo(b)fluorene	1.73E-06	3.20E-07	4.22E-08	1.68E-09	3.16E-09	1.29E-05	--	4.49E-08	8.92E-08
Benzo(b)fluoranthene	2.91E-06	1.06E-07	7.09E-08	9.35E-10	4.70E-10	1.97E-05	3.31E-07	6.66E-08	3.13E-08
Benzo(g,h,i)perylene	3.16E-05	6.79E-05	3.85E-06	2.16E-07	2.82E-09	5.08E-04	8.54E-06	8.30E-06	4.46E-07
Benzo(k)fluoranthene	2.54E-06	5.04E-07	6.19E-08	2.30E-09	1.68E-10	6.65E-06	1.12E-07	2.25E-08	1.06E-08
Chrysene	4.69E-06	5.24E-07	1.14E-07	3.07E-09	5.83E-10	9.35E-06	1.57E-07	3.28E-08	1.46E-08
Dibenz(a,c)anthracene	3.98E-06	1.72E-05	4.86E-07	4.77E-08	2.63E-09	2.05E-04	3.45E-06	3.30E-06	6.61E-07
Dibenz(a,h)anthracene	1.40E-06	5.89E-06	1.70E-07	1.85E-08	1.40E-10	1.00E-05	1.69E-07	1.64E-07	2.22E-08
Indeno(1,2,3-cd)pyrene	6.72E-06	3.39E-06	8.20E-07	1.08E-08	6.51E-10	8.01E-05	1.35E-06	1.30E-06	1.30E-07
Perylene	1.32E-06	3.32E-05	1.60E-07	1.16E-07	2.28E-10	7.33E-06	1.27E-07	1.22E-07	2.03E-08
Pyrene	1.16E-04	6.88E-06	2.84E-06	5.35E-08	1.17E-08	3.19E-05	5.37E-07	1.20E-07	4.67E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.84E-07	1.22E-08	9.19E-08	5.62E-09	3.97E-12	6.17E-07	1.48E-08	1.90E-08	1.25E-07
PCB									
Aroclor 1254 (Total PCBs)	4.34E-04	3.25E-06	--	7.90E-06	1.05E-08	1.03E-03	--	--	2.05E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	3.33E-07	1.44E-07	4.16E-08	1.57E-07	2.06E-07	3.12E-06	9.40E-07	1.32E-07	2.47E-06
1,2,4-Trichlorobenzene	2.47E-08	4.77E-09	3.04E-09	7.29E-09	5.51E-09	3.66E-07	6.01E-09	1.49E-08	3.48E-07
1,2,4,5-Tetrachlorobenzene	1.05E-06	6.87E-08	1.28E-07	6.25E-08	8.70E-09	2.64E-06	4.70E-08	1.00E-07	2.75E-06
Pentachlorobenzene	1.63E-05	6.58E-07	3.98E-06	6.64E-07	1.58E-08	7.65E-05	1.36E-06	2.81E-06	1.17E-05
Hexachlorobenzene	4.51E-07	1.74E-08	1.10E-07	2.62E-08	5.59E-09	1.79E-05	3.19E-07	6.50E-07	5.59E-06
Pentachlorophenol	7.67E-06	3.37E-04	1.79E-05	2.25E-07	4.79E-07	1.14E-05	2.23E-07	4.20E-07	2.70E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.66E-10	2.49E-10	3.68E-11	9.23E-09	2.75E-08	1.67E-07	1.32E-07	7.56E-09	8.70E-08
Chloroform	5.97E-10	1.62E-09	1.34E-10	5.19E-09	4.59E-08	9.63E-08	1.70E-07	4.67E-09	2.30E-08
Dichloromethane	1.07E-07	7.35E-07	6.81E-08	5.49E-07	1.60E-05	6.41E-06	1.54E-05	3.31E-07	1.60E-06
Trichlorofluoromethane (Freon 11)	2.76E-08	3.85E-08	4.26E-09	3.34E-06	1.45E-05	6.64E-05	7.31E-05	3.08E-06	2.30E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.33E-09	1.86E-09	2.06E-10	2.88E-08	1.25E-07	6.76E-07	7.43E-07	3.13E-08	1.98E-07
Other Organics									
Bromoform	3.72E-09	6.13E-09	6.12E-10	8.09E-07	4.20E-06	2.12E-05	2.64E-05	9.93E-07	4.94E-06
O-Terphenyl	7.39E-06	3.31E-07	1.80E-06	3.18E-07	1.23E-08	9.06E-05	1.91E-06	3.23E-06	2.04E-05
Inorganics									
Antimony	2.24E-03	1.08E-03	3.58E-04	1.25E-05	4.09E-06	1.84E-04	9.45E-07	2.08E-06	8.19E-04
Arsenic	2.22E-04	1.04E-04	4.65E-06	2.34E-06	6.28E-07	1.82E-05	8.89E-08	1.88E-06	3.14E-05
Barium	1.57E-03	7.21E-04	2.29E-05	1.25E-06	3.16E-06	1.30E-04	2.63E-06	1.77E-05	3.16E-05
Beryllium	1.41E-03	9.05E-05	1.01E-05	1.62E-06	1.78E-07	1.41E-04	1.29E-05	1.86E-05	1.78E-05
Boron	8.70E-03	6.99E-02	1.39E-03	6.07E-04	2.29E-04	6.86E-04	1.25E-05	1.57E-04	--
Cadmium	9.28E-03	4.98E-03	1.41E-02	7.11E-06	1.03E-05	7.69E-04	8.50E-05	2.50E-04	1.23E-02
Chromium (Total)	7.81E-04	5.22E-04	3.82E-05	3.11E-05	3.37E-06	6.39E-05	3.41E-07	2.75E-06	6.73E-04
Chromium VI	1.11E-04	7.43E-05	5.44E-06	4.42E-06	4.79E-07	9.09E-06	4.85E-08	--	1.77E-05
Cobalt	4.73E-03	1.42E-03	9.23E-05	3.36E-04	8.66E-06	3.90E-04	3.80E-07	9.35E-07	8.66E-04
Lead	2.16E-01	2.12E-02	1.60E-02	9.95E-05	2.46E-05	2.21E-02	2.47E-04	5.34E-04	2.58E-03
Mercury - Inorganic	1.14E-02	1.66E-04	3.09E-03	3.86E-05	2.09E-07	1.06E-02	1.83E-03	1.30E-03	1.50E-04
Methyl Mercury	5.64E-04	4.69E-05	4.79E-03	5.83E-07	2.97E-09	2.65E-05	4.72E-07	1.18E-04	4.89E-04
Nickel	1.01E-01	2.32E-02	1.72E-02	1.73E-03	1.29E-04	8.37E-03	6.59E-05	2.85E-04	2.01E-02
Selenium	4.47E-05	1.11E-04	7.05E-06	2.58E-06	7.18E-07	3.59E-06	2.37E-07	2.25E-06	1.22E-04
Silver	5.13E-04	9.74E-04	1.68E-04	3.10E-05	5.01E-06	4.16E-05	1.87E-07	--	4.44E-04
Thallium	4.92E-02	9.15E-03	7.87E-03	4.67E-03	5.74E-05	4.07E-03	1.31E-06	--	--
Tin	5.33E-02	5.64E-03	4.39E-03	6.81E-03	1.85E-05	4.61E-03	1.25E-05	--	5.54E-02
Vanadium	5.09E-03	2.95E-04	3.42E-05	1.38E-05	5.35E-07	5.35E-04	3.38E-07	7.90E-06	8.57E-05
Zinc	2.22E-01	1.01E-01	1.61E-01	1.08E-04	2.96E-04	1.83E-02	1.63E-03	8.55E-03	2.75E-01

Table M.148 - Detailed Process Upset Case Exposure Point Concentrations for the Harmony Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.96E-07	4.24E-08	9.66E-09	1.46E-10	1.05E-10	2.07E-08	3.48E-10	8.48E-11	4.20E-11
Acenaphthylene	4.59E-08	8.89E-09	2.26E-09	3.65E-11	3.40E-10	5.96E-08	1.00E-09	2.43E-10	1.70E-10
Anthracene	1.93E-07	1.94E-08	9.45E-09	1.10E-10	4.37E-11	4.11E-08	6.92E-10	1.60E-10	6.93E-11
Fluoranthene	1.91E-06	1.48E-07	9.34E-08	1.03E-09	4.81E-10	9.44E-07	1.59E-08	3.52E-09	2.41E-09
Fluorene	1.95E-07	2.93E-08	9.55E-09	1.31E-10	1.81E-10	5.58E-08	9.40E-10	2.23E-10	1.44E-10
Phenanthrene	1.97E-06	2.13E-07	9.63E-08	1.18E-09	9.06E-10	9.62E-07	1.62E-08	3.75E-09	1.44E-09
High Molecular Weight PAHs									
Benz(a)anthracene	1.06E-07	5.30E-08	2.59E-09	2.32E-10	1.25E-11	1.78E-07	3.00E-09	6.25E-10	3.13E-10
Benzo(a)pyrene	1.88E-07	2.66E-07	2.29E-08	1.03E-09	1.34E-11	5.21E-07	9.06E-09	8.90E-09	6.74E-10
Benzo(e)pyrene	5.12E-07	2.18E-05	6.25E-08	7.01E-08	9.12E-11	1.45E-06	--	2.39E-08	1.26E-08
Benzo(a)fluorene	2.10E-07	5.68E-08	5.13E-09	2.83E-10	2.14E-10	8.46E-07	--	3.05E-09	2.69E-09
Benzo(b)fluorene	1.45E-07	1.18E-07	3.54E-09	5.02E-10	1.55E-10	6.31E-07	--	2.20E-09	4.38E-09
Benzo(b)fluoranthene	2.44E-07	1.62E-08	5.96E-09	1.05E-10	1.45E-11	6.07E-07	1.02E-08	2.05E-09	9.66E-10
Benzo(g,h,i)perylene	2.65E-06	3.31E-05	3.24E-07	1.04E-07	5.08E-11	9.16E-06	1.54E-07	1.50E-07	8.05E-09
Benzo(k)fluoranthene	2.13E-07	1.08E-07	5.20E-09	4.33E-10	9.36E-12	3.71E-07	6.25E-09	1.26E-09	5.90E-10
Chrysene	3.94E-07	5.15E-08	9.62E-09	2.87E-10	2.70E-11	4.34E-07	7.30E-09	1.52E-09	6.79E-10
Dibenz(a,c)anthracene	3.34E-07	4.01E-06	4.08E-08	1.12E-08	3.82E-11	2.98E-06	5.02E-08	4.79E-08	9.60E-09
Dibenz(a,h)anthracene	1.17E-07	2.68E-06	1.43E-08	8.36E-09	4.01E-12	2.87E-07	4.83E-09	4.69E-09	6.35E-10
Indeno(1,2,3-cd)pyrene	5.65E-07	3.42E-07	6.89E-08	1.07E-09	1.34E-11	1.65E-06	2.77E-08	2.67E-08	2.67E-09
Perylene	1.11E-07	1.63E-05	1.35E-08	5.66E-08	9.97E-12	3.20E-07	5.57E-09	5.35E-09	8.89E-10
Pyrene	9.80E-06	6.24E-07	2.39E-07	4.69E-09	1.59E-09	4.33E-06	7.29E-08	1.63E-08	6.34E-09
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.61E-08	3.87E-09	7.90E-09	1.23E-09	2.08E-13	3.24E-08	7.84E-10	9.96E-10	6.58E-09
PCB									
Aroclor 1254 (Total PCBs)	3.65E-05	3.99E-07	--	7.07E-07	6.10E-10	5.99E-05	--	--	8.39E-05
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	2.79E-08	1.23E-08	3.50E-09	5.01E-09	4.00E-09	6.06E-08	1.83E-08	2.58E-09	4.81E-08
1,2,4-Trichlorobenzene	2.08E-09	4.40E-10	2.55E-10	3.05E-10	1.45E-10	9.62E-09	1.58E-10	3.92E-10	9.15E-09
1,2,4,5-Tetrachlorobenzene	8.81E-08	5.91E-09	1.08E-08	5.45E-09	8.15E-10	2.47E-07	4.41E-09	9.38E-09	2.58E-07
Pentachlorobenzene	1.37E-06	5.88E-08	3.34E-07	5.59E-08	4.34E-10	2.10E-06	3.74E-08	7.71E-08	3.22E-07
Hexachlorobenzene	3.78E-08	2.49E-09	9.23E-09	2.11E-09	1.30E-10	4.16E-07	7.42E-09	1.51E-08	1.30E-07
Pentachlorophenol	6.44E-07	1.65E-04	1.51E-06	1.10E-07	2.28E-07	5.40E-06	1.06E-07	1.99E-07	1.28E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.24E-11	2.11E-11	3.09E-12	1.44E-10	4.23E-10	2.57E-09	2.03E-09	1.16E-10	1.34E-09
Chloroform	5.02E-11	1.37E-10	1.13E-11	8.48E-11	7.16E-10	1.50E-09	2.65E-09	7.29E-11	3.59E-10
Dichloromethane	8.99E-09	6.18E-08	5.71E-09	8.94E-09	2.46E-07	9.84E-08	2.37E-07	5.07E-09	2.46E-08
Trichlorofluoromethane (Freon 11)	2.32E-09	3.28E-09	3.58E-10	5.03E-08	2.18E-07	9.97E-07	1.10E-06	4.63E-08	3.46E-07
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.12E-10	1.58E-10	1.73E-11	4.56E-10	1.93E-09	1.04E-08	1.15E-08	4.85E-10	3.07E-09
Other Organics									
Bromoform	3.12E-10	5.15E-10	5.14E-11	1.20E-08	6.23E-08	3.14E-07	3.91E-07	1.47E-08	7.32E-08
O-Terphenyl	6.20E-07	8.73E-08	1.51E-07	5.02E-08	4.04E-10	2.97E-06	7.10E-08	1.06E-07	6.70E-07
Inorganics									
Antimony	1.95E-04	1.05E-04	3.12E-05	1.26E-06	2.04E-06	9.19E-05	4.71E-07	1.04E-06	4.09E-04
Arsenic	1.93E-05	1.08E-05	4.05E-07	2.57E-07	3.14E-07	9.10E-06	4.44E-08	9.40E-07	1.57E-05
Barium	1.37E-04	7.13E-05	2.00E-06	1.29E-07	1.58E-06	6.47E-05	1.31E-06	8.85E-06	1.58E-05
Beryllium	1.23E-04	9.22E-06	8.84E-07	1.57E-07	7.69E-08	6.08E-05	5.55E-06	8.03E-06	7.69E-06
Boron	7.58E-04	6.71E-03	1.21E-04	6.06E-05	1.14E-04	3.43E-04	6.22E-06	7.85E-05	--
Cadmium	8.09E-04	4.63E-04	1.24E-03	6.72E-07	5.10E-06	3.83E-04	4.23E-05	1.25E-04	6.14E-03
Chromium (Total)	6.81E-05	5.45E-05	3.33E-06	3.49E-06	1.68E-06	3.19E-05	1.70E-07	1.37E-06	3.36E-04
Chromium VI	9.68E-06	7.75E-06	4.74E-07	4.96E-07	2.39E-07	4.54E-06	2.42E-08	--	8.83E-06
Cobalt	4.12E-04	1.47E-04	8.04E-06	3.66E-05	4.32E-06	1.94E-04	1.90E-07	4.67E-07	4.32E-04
Lead	1.88E-02	2.05E-03	1.40E-03	9.36E-06	1.04E-05	9.37E-03	1.05E-04	2.26E-04	1.09E-03
Mercury - Inorganic	1.44E-03	2.18E-05	3.91E-04	4.94E-06	1.85E-08	9.37E-04	1.75E-04	1.15E-04	1.33E-05
Methyl Mercury	4.92E-05	6.16E-06	4.18E-04	6.70E-08	2.62E-10	3.97E-06	7.08E-08	1.77E-05	4.32E-05
Nickel	8.83E-03	2.37E-03	1.50E-03	1.84E-04	6.42E-05	4.17E-03	3.28E-05	1.42E-04	1.00E-02
Selenium	3.90E-06	1.16E-05	6.14E-07	2.93E-07	3.59E-07	1.79E-06	1.18E-07	1.12E-06	6.10E-05
Silver	4.47E-05	9.83E-05	1.46E-05	3.33E-06	2.50E-06	2.08E-05	9.35E-08	--	2.22E-04
Thallium	4.29E-03	9.53E-04	6.86E-04	5.05E-04	2.86E-05	2.03E-03	6.51E-07	--	--
Tin	4.65E-03	5.62E-04	3.83E-04	6.72E-04	8.90E-06	2.22E-03	6.02E-06	--	2.67E-02
Vanadium	4.44E-04	3.04E-05	2.98E-06	1.33E-06	2.22E-07	2.22E-04	1.40E-07	3.28E-06	3.56E-05
Zinc	1.93E-02	9.63E-03	1.40E-02	1.06E-05	1.47E-04	9.14E-03	8.12E-04	4.26E-03	1.37E-01

Table M.149 - Detailed Process Upset Case Exposure Point Concentrations for the Farewell Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.20E-07	4.77E-08	1.09E-08	1.74E-10	1.14E-09	2.23E-07	3.76E-09	9.17E-10	4.54E-10
Acenaphthylene	5.16E-08	9.96E-09	2.54E-09	5.10E-11	1.38E-09	2.43E-07	4.08E-09	9.87E-10	6.92E-10
Anthracene	2.17E-07	2.17E-08	1.06E-08	1.28E-10	3.67E-10	3.45E-07	5.81E-09	1.35E-09	5.82E-10
Fluoranthene	2.15E-06	1.60E-07	1.05E-07	1.21E-09	5.23E-09	1.03E-05	1.73E-07	3.83E-08	2.62E-08
Fluorene	2.19E-07	3.28E-08	1.07E-08	1.76E-10	2.76E-09	8.51E-07	1.43E-08	3.40E-09	2.19E-09
Phenanthrene	2.21E-06	2.37E-07	1.08E-07	1.46E-09	1.13E-08	1.20E-05	2.02E-07	4.68E-08	1.79E-08
High Molecular Weight PAHs									
Benz(a)anthracene	1.19E-07	5.59E-08	2.91E-09	2.50E-10	1.41E-10	2.02E-06	3.40E-08	7.09E-09	3.55E-09
Benzo(a)pyrene	2.11E-07	2.72E-07	2.58E-08	1.06E-09	1.89E-10	7.31E-06	1.27E-07	1.25E-07	9.46E-09
Benzo(e)pyrene	5.76E-07	2.12E-05	7.02E-08	6.82E-08	8.26E-10	1.32E-05	--	2.16E-07	1.14E-07
Benzo(a)fluorene	2.36E-07	5.73E-08	5.76E-09	3.39E-10	2.89E-09	1.15E-05	--	4.13E-08	3.64E-08
Benzo(b)fluorene	1.63E-07	1.16E-07	3.98E-09	5.32E-10	2.16E-09	8.77E-06	--	3.06E-08	6.08E-08
Benzo(b)fluoranthene	2.74E-07	1.68E-08	6.69E-09	1.17E-10	1.45E-10	6.09E-06	1.03E-07	2.06E-08	9.70E-09
Benzo(g,h,i)perylene	2.98E-06	3.22E-05	3.64E-07	1.01E-07	6.67E-10	1.20E-04	2.03E-06	1.97E-06	1.06E-07
Benzo(k)fluoranthene	2.40E-07	1.09E-07	5.85E-09	4.44E-10	6.05E-11	2.40E-06	4.04E-08	8.13E-09	3.82E-09
Chrysene	4.43E-07	5.63E-08	1.08E-08	3.21E-10	2.18E-10	3.50E-06	5.90E-08	1.23E-08	5.48E-09
Dibenz(a,c)anthracene	3.76E-07	4.03E-06	4.58E-08	1.12E-08	8.54E-10	6.66E-05	1.12E-06	1.07E-06	2.15E-07
Dibenz(a,h)anthracene	1.32E-07	2.61E-06	1.61E-08	8.15E-09	4.37E-11	3.13E-06	5.27E-08	5.12E-08	6.93E-09
Indeno(1,2,3-cd)pyrene	6.35E-07	3.72E-07	7.74E-08	1.18E-09	1.71E-10	3.54E-05	3.41E-07	3.41E-07	3.41E-08
Perylene	1.24E-07	1.58E-05	1.51E-08	5.50E-08	9.76E-11	3.13E-06	5.45E-08	5.24E-08	8.70E-09
Pyrene	1.10E-05	6.93E-07	2.69E-07	5.33E-09	7.39E-09	2.01E-05	3.38E-07	7.56E-08	2.94E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.74E-08	3.80E-09	8.56E-09	1.23E-09	7.40E-13	1.15E-07	2.79E-09	3.55E-09	2.34E-08
PCB									
Aroclor 1254 (Total PCBs)	4.10E-05	4.25E-07	--	7.93E-07	1.91E-09	1.87E-04	--	--	3.74E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	3.14E-08	1.38E-08	3.93E-09	4.18E-08	6.32E-08	9.57E-07	2.89E-07	4.07E-08	7.59E-07
1,2,4-Trichlorobenzene	2.33E-09	4.87E-10	2.87E-10	1.85E-09	1.67E-09	1.82E-07	1.82E-09	4.50E-09	1.05E-07
1,2,4,5-Tetrachlorobenzene	9.90E-08	6.62E-09	1.21E-08	7.64E-09	1.97E-09	5.97E-07	1.06E-08	2.27E-08	6.23E-07
Pentachlorobenzene	1.54E-06	6.54E-08	3.75E-07	7.09E-08	5.08E-09	2.46E-05	4.38E-07	9.02E-07	3.76E-06
Hexachlorobenzene	4.25E-08	2.61E-09	1.04E-08	5.17E-09	1.79E-09	5.73E-06	1.02E-07	2.08E-07	1.79E-06
Pentachlorophenol	7.23E-07	1.60E-04	1.69E-06	1.07E-07	2.40E-07	5.69E-06	1.12E-07	2.10E-07	1.35E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.51E-11	2.37E-11	3.47E-12	2.74E-09	8.20E-09	4.98E-08	3.93E-08	2.25E-09	2.59E-08
Chloroform	5.64E-11	1.53E-10	1.26E-11	1.51E-09	1.35E-08	2.82E-08	4.97E-08	1.37E-09	6.74E-09
Dichloromethane	1.01E-08	6.95E-08	6.42E-09	1.56E-07	4.61E-06	1.85E-06	4.44E-06	9.51E-08	4.61E-07
Trichlorofluoromethane (Freon 11)	2.60E-09	3.68E-09	4.02E-10	9.78E-07	4.26E-06	1.95E-05	2.14E-05	9.03E-07	6.75E-06
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.26E-10	1.78E-10	1.94E-11	8.57E-09	3.73E-08	2.01E-07	2.22E-07	9.34E-09	5.91E-08
Other Organics									
Bromoform	3.51E-10	5.79E-10	5.78E-11	2.34E-07	1.22E-06	6.14E-06	7.64E-06	2.88E-07	1.43E-06
O-Terphenyl	6.97E-07	8.72E-08	1.70E-07	6.34E-08	6.22E-09	4.58E-05	9.92E-07	1.63E-06	1.03E-05
Inorganics									
Antimony	2.11E-04	1.11E-04	3.38E-05	1.33E-06	2.03E-06	9.13E-05	4.68E-07	1.03E-06	4.06E-04
Arsenic	2.09E-05	1.12E-05	4.39E-07	2.68E-07	3.12E-07	9.03E-06	4.41E-08	9.33E-07	1.56E-05
Barium	1.49E-04	7.51E-05	2.16E-06	1.36E-07	1.57E-06	6.42E-05	1.30E-06	8.79E-06	1.57E-05
Beryllium	1.33E-04	9.65E-06	9.58E-07	1.67E-07	9.50E-08	7.50E-05	6.86E-06	9.92E-06	9.50E-06
Boron	8.22E-04	7.11E-03	1.31E-04	6.41E-05	1.13E-04	3.40E-04	6.18E-06	7.79E-05	--
Cadmium	8.77E-04	4.94E-04	1.34E-03	7.17E-07	5.08E-06	3.81E-04	4.21E-05	1.24E-04	6.11E-03
Chromium (Total)	7.37E-05	5.67E-05	3.61E-06	3.62E-06	1.67E-06	3.17E-05	1.69E-07	1.36E-06	3.34E-04
Chromium VI	1.05E-05	8.07E-06	5.13E-07	4.51E-07	2.37E-07	4.51E-06	2.40E-08	--	8.77E-06
Cobalt	4.46E-04	1.54E-04	8.71E-06	3.82E-05	4.29E-06	1.93E-04	1.88E-07	4.63E-07	4.29E-04
Lead	2.04E-02	2.17E-03	1.52E-03	1.00E-05	1.32E-05	1.19E-02	1.33E-04	2.87E-04	1.39E-03
Mercury - Inorganic	1.45E-03	2.23E-05	3.92E-04	5.02E-06	8.64E-08	4.38E-03	7.94E-04	5.38E-04	6.21E-05
Methyl Mercury	5.33E-05	6.29E-06	4.53E-04	6.97E-08	1.23E-09	4.62E-06	8.22E-08	2.06E-05	2.02E-04
Nickel	9.56E-03	2.48E-03	1.62E-03	4.15E-04	6.38E-05	4.15E-03	3.27E-05	1.41E-04	9.96E-03
Selenium	4.22E-06	1.21E-05	6.66E-07	3.04E-07	3.56E-07	1.78E-06	1.17E-07	1.11E-06	6.05E-05
Silver	4.84E-05	1.03E-04	1.58E-05	3.48E-06	2.49E-06	2.06E-05	9.28E-08	--	2.20E-04
Thallium	4.65E-03	9.92E-04	7.43E-04	5.27E-04	2.84E-05	2.02E-03	6.48E-07	--	--
Tin	5.04E-03	5.90E-04	4.15E-04	7.12E-04	9.30E-06	2.33E-03	6.29E-06	--	2.79E-02
Vanadium	4.81E-04	3.17E-05	3.23E-06	1.42E-06	2.90E-07	2.90E-04	1.83E-07	4.28E-06	4.64E-05
Zinc	2.10E-02	1.02E-02	1.52E-02	1.12E-05	1.47E-04	9.09E-03	8.07E-04	4.24E-03	1.36E-01

Table M.150 - Detailed Process Upset Case Exposure Point Concentrations for the Farm A Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	1.19E-06	2.58E-07	5.88E-08	1.29E-09	4.37E-08	8.57E-06	1.44E-07	3.52E-08	1.74E-08
Acenaphthylene	2.79E-07	5.34E-08	1.37E-08	5.58E-10	3.58E-08	6.28E-06	1.06E-07	2.56E-08	1.79E-08
Anthracene	1.18E-06	1.17E-07	5.75E-08	7.90E-10	9.73E-09	9.15E-06	1.54E-07	3.56E-08	1.54E-08
Fluoranthene	1.16E-05	7.82E-07	5.68E-07	7.26E-09	9.88E-08	1.94E-04	3.26E-06	7.23E-07	4.95E-07
Fluorene	1.18E-06	1.75E-07	5.81E-08	1.62E-09	7.53E-08	2.32E-05	3.91E-07	9.28E-08	5.98E-08
Phenanthrene	1.20E-05	1.24E-06	5.86E-07	9.89E-09	2.28E-07	2.42E-04	4.07E-06	9.41E-07	3.61E-07
High Molecular Weight PAHs									
Benz(a)anthracene	6.46E-07	2.55E-07	1.58E-08	1.19E-09	2.89E-09	4.14E-05	6.97E-07	1.45E-07	7.27E-08
Benzo(a)pyrene	1.14E-06	1.10E-06	1.40E-07	4.41E-09	4.80E-09	1.86E-04	3.24E-06	3.18E-06	2.41E-07
Benzo(e)pyrene	3.12E-06	6.86E-05	3.80E-07	2.21E-07	1.65E-08	2.62E-04	--	4.31E-06	2.27E-06
Benzo(a)fluorene	1.28E-06	2.20E-07	3.12E-08	2.18E-09	6.29E-08	2.49E-04	--	8.97E-07	7.91E-07
Benzo(b)fluorene	8.82E-07	3.93E-07	2.15E-08	2.42E-09	4.31E-08	1.75E-04	--	6.11E-07	1.21E-06
Benzo(b)fluoranthene	1.49E-06	7.27E-08	3.62E-08	6.23E-10	5.08E-09	2.13E-04	3.58E-06	7.20E-07	3.39E-07
Benzo(g,h,i)perylene	1.61E-05	1.04E-04	1.97E-06	3.27E-07	2.23E-08	4.01E-03	6.73E-05	6.56E-05	3.53E-06
Benzo(k)fluoranthene	1.30E-06	4.24E-07	3.17E-08	1.81E-09	1.42E-09	5.62E-05	9.46E-07	1.90E-07	8.94E-08
Chrysene	2.40E-06	2.87E-07	5.85E-08	1.75E-09	6.95E-09	1.12E-04	1.88E-06	3.91E-07	1.75E-07
Dibenz(a,c)anthracene	2.03E-06	1.53E-05	2.48E-07	4.28E-08	2.58E-08	2.02E-03	3.39E-05	3.24E-05	6.49E-06
Dibenz(a,h)anthracene	7.14E-07	8.54E-06	8.71E-08	2.67E-08	1.24E-09	8.87E-05	1.49E-06	1.45E-06	1.96E-07
Indeno(1,2,3-cd)pyrene	3.44E-06	1.88E-06	4.19E-07	6.03E-09	5.41E-09	6.66E-04	1.12E-05	1.08E-05	1.08E-06
Perylene	6.72E-07	5.10E-05	8.20E-08	1.78E-07	2.29E-09	7.36E-05	1.28E-06	1.23E-06	2.04E-07
Pyrene	5.96E-05	3.64E-06	1.46E-06	2.96E-08	1.20E-07	3.27E-04	5.50E-06	1.23E-06	4.79E-07
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	8.59E-08	1.30E-08	4.26E-08	4.56E-09	1.85E-11	2.87E-06	6.74E-08	8.84E-08	5.84E-07
PCB									
Aroclor 1254 (Total PCBs)	2.23E-04	1.98E-06	--	4.24E-06	6.18E-08	6.06E-03	--	--	1.70E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.70E-07	7.41E-08	2.13E-08	2.37E-06	3.82E-06	5.79E-05	1.75E-05	2.46E-06	4.59E-05
1,2,4-Trichlorobenzene	1.26E-08	2.54E-09	1.55E-09	1.01E-07	9.99E-08	6.63E-06	1.09E-07	2.70E-07	6.30E-06
1,2,4,5-Tetrachlorobenzene	5.36E-07	3.54E-08	6.54E-08	1.65E-07	9.63E-08	2.92E-05	5.21E-07	1.11E-06	3.05E-05
Pentachlorobenzene	8.32E-06	3.45E-07	2.03E-06	7.47E-07	2.65E-07	1.28E-03	2.27E-05	4.70E-05	1.96E-04
Hexachlorobenzene	2.30E-07	1.15E-08	5.61E-08	1.64E-07	9.72E-08	3.11E-04	5.54E-06	1.13E-05	9.72E-05
Pentachlorophenol	3.91E-06	5.16E-04	9.16E-06	3.46E-07	1.02E-06	2.41E-05	4.72E-07	8.90E-07	5.72E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.36E-10	1.28E-10	1.88E-11	1.59E-07	4.75E-07	2.89E-06	2.27E-06	1.30E-07	1.50E-06
Chloroform	3.05E-10	8.28E-10	6.84E-11	9.63E-08	8.61E-07	1.81E-06	3.18E-06	8.76E-08	4.31E-07
Dichloromethane	5.47E-08	3.76E-07	3.48E-08	1.06E-05	3.14E-04	1.26E-04	3.02E-04	6.47E-06	3.14E-05
Trichlorofluoromethane (Freon 11)	1.41E-08	1.98E-08	2.18E-09	5.72E-05	2.49E-04	1.14E-03	1.25E-03	5.28E-05	3.95E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	6.81E-10	9.56E-10	1.05E-10	5.01E-07	2.18E-06	1.18E-05	1.30E-05	5.47E-07	3.46E-06
Other Organics									
Bromoform	1.90E-09	3.13E-09	3.13E-10	1.38E-05	7.18E-05	3.62E-04	4.50E-04	1.70E-05	8.43E-05
O-Terphenyl	3.77E-06	3.20E-07	9.20E-07	4.92E-07	1.73E-07	1.28E-03	2.45E-05	4.55E-05	2.88E-04
Inorganics									
Antimony	1.04E-03	5.06E-04	1.67E-04	6.08E-06	7.31E-06	3.29E-04	1.69E-06	3.72E-06	1.46E-03
Arsenic	1.03E-04	4.93E-05	2.16E-06	1.17E-06	1.12E-06	3.25E-05	1.59E-07	3.36E-06	5.61E-05
Barium	7.33E-04	3.40E-04	1.07E-05	6.12E-07	5.64E-06	2.31E-04	4.69E-06	3.16E-05	5.64E-05
Beryllium	6.56E-04	4.27E-05	4.72E-06	7.78E-07	5.46E-07	4.31E-04	3.94E-05	5.70E-05	5.46E-05
Boron	4.05E-03	3.28E-02	6.48E-04	2.94E-04	4.08E-04	1.23E-03	2.22E-05	2.81E-04	--
Cadmium	4.32E-03	2.33E-03	6.59E-03	3.39E-06	1.84E-05	1.38E-03	1.53E-04	4.50E-04	2.22E-02
Chromium (Total)	3.63E-04	2.47E-04	1.78E-05	1.56E-05	6.01E-06	1.14E-04	6.08E-07	4.91E-06	1.20E-03
Chromium VI	5.17E-05	3.52E-05	2.53E-06	2.22E-06	8.54E-07	1.62E-05	8.65E-08	--	3.16E-05
Cobalt	2.20E-03	6.73E-04	4.30E-05	1.67E-04	1.54E-05	6.95E-04	6.78E-07	1.67E-06	1.54E-03
Lead	1.00E-01	9.95E-03	7.48E-03	4.74E-05	7.96E-05	7.17E-02	7.99E-04	1.73E-03	8.34E-03
Mercury - Inorganic	7.10E-03	9.09E-05	1.92E-03	2.38E-05	1.89E-06	9.60E-02	1.11E-02	1.18E-02	1.36E-03
Methyl Mercury	2.63E-04	2.56E-05	2.24E-03	3.02E-07	2.69E-08	2.39E-05	4.25E-07	1.06E-04	4.43E-03
Nickel	4.71E-02	1.10E-02	7.99E-03	8.54E-04	2.31E-04	1.50E-02	1.18E-04	5.10E-04	3.60E-02
Selenium	2.08E-05	5.25E-05	3.28E-06	1.30E-06	1.28E-06	6.41E-06	4.23E-07	4.01E-06	2.18E-04
Silver	2.39E-04	4.60E-04	7.81E-05	1.54E-05	8.95E-06	7.43E-05	3.34E-07	--	7.92E-04
Thallium	2.29E-02	4.33E-03	3.67E-03	2.32E-03	1.03E-04	7.31E-03	2.35E-06	--	--
Tin	2.48E-02	2.66E-03	2.05E-03	3.29E-03	3.86E-05	9.64E-03	2.61E-05	--	1.16E-01
Vanadium	2.37E-03	1.39E-04	1.59E-05	6.61E-06	1.14E-06	1.81E-03	1.14E-06	2.67E-05	2.90E-04
Zinc	1.03E-01	4.75E-02	7.50E-02	5.21E-05	5.29E-04	3.28E-02	2.92E-03	1.53E-02	4.93E-01

Table M.151 - Detailed Process Upset Case Exposure Point Concentrations for the Farm B Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.61E-07	1.22E-07	2.77E-08	4.39E-10	2.40E-09	4.70E-07	7.91E-09	1.93E-09	9.55E-10
Acenaphthylene	1.31E-07	2.56E-08	6.47E-09	1.26E-10	3.05E-09	5.36E-07	9.02E-09	2.18E-09	1.53E-09
Anthracene	5.54E-07	5.57E-08	2.71E-08	3.24E-10	7.68E-10	7.22E-07	1.21E-08	2.81E-09	1.22E-09
Fluoranthene	5.48E-06	4.43E-07	2.68E-07	3.16E-09	1.04E-08	2.04E-05	3.43E-07	7.60E-08	5.20E-08
Fluorene	5.58E-07	8.43E-08	2.74E-08	4.34E-10	5.63E-09	1.74E-06	2.92E-08	6.94E-09	4.47E-09
Phenanthrene	5.64E-06	6.19E-07	2.76E-07	3.67E-09	2.24E-08	2.38E-05	4.01E-07	9.28E-08	3.56E-08
High Molecular Weight PAHs									
Benz(a)anthracene	3.04E-07	1.62E-07	7.42E-09	7.12E-10	2.97E-10	4.26E-06	7.17E-08	1.49E-08	7.47E-09
Benzo(a)pyrene	5.39E-07	8.40E-07	6.57E-08	3.26E-09	4.24E-10	1.64E-05	2.86E-07	2.80E-07	2.12E-08
Benzo(e)pyrene	1.47E-06	7.18E-05	1.79E-07	2.30E-07	1.77E-09	2.82E-05	--	4.64E-07	2.45E-07
Benzo(a)fluorene	6.02E-07	1.81E-07	1.47E-08	9.68E-10	5.86E-09	2.32E-05	--	8.37E-08	7.38E-08
Benzo(b)fluorene	4.16E-07	3.84E-07	1.01E-08	1.68E-09	4.32E-09	1.76E-05	--	6.13E-08	1.22E-07
Benzo(b)fluoranthene	7.00E-07	5.01E-08	1.71E-08	3.18E-10	3.34E-10	1.40E-05	2.35E-07	4.73E-08	2.23E-08
Benzo(g,h,i)perylene	7.60E-06	1.09E-04	9.27E-07	3.40E-07	1.62E-09	2.93E-04	4.92E-06	4.78E-06	2.57E-07
Benzo(k)fluoranthene	6.11E-07	3.43E-07	1.49E-08	1.37E-09	1.41E-10	5.61E-06	9.44E-08	1.90E-08	8.92E-09
Chrysene	1.13E-06	1.52E-07	2.76E-08	8.48E-10	4.84E-10	7.77E-06	1.31E-07	2.73E-08	1.22E-08
Dibenz(a,c)anthracene	9.58E-07	1.28E-05	1.17E-07	3.57E-08	1.98E-09	1.54E-04	2.59E-06	2.48E-06	4.96E-07
Dibenz(a,h)anthracene	3.36E-07	8.80E-06	4.10E-08	2.74E-08	1.03E-10	7.37E-06	1.24E-07	1.21E-07	1.63E-08
Indeno(1,2,3-cd)pyrene	1.62E-06	1.02E-06	1.97E-07	5.04E-09	4.10E-10	5.04E-05	8.49E-07	8.17E-07	8.18E-08
Perylene	3.17E-07	5.35E-05	3.86E-08	1.86E-07	2.20E-10	7.06E-06	1.23E-07	1.18E-07	1.96E-08
Pyrene	2.81E-05	1.81E-06	6.85E-07	1.37E-08	1.54E-08	4.18E-05	7.04E-07	1.57E-07	6.12E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	3.29E-08	1.19E-08	1.62E-08	3.56E-09	1.46E-12	2.27E-07	5.48E-09	6.98E-09	4.61E-08
PCB									
Aroclor 1254 (Total PCBs)	1.05E-04	1.21E-06	--	2.04E-06	4.92E-09	4.82E-04	--	--	9.65E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	8.00E-08	3.55E-08	1.00E-08	8.35E-08	1.24E-07	1.87E-06	5.65E-07	7.96E-08	1.49E-06
1,2,4-Trichlorobenzene	5.95E-09	1.28E-09	7.31E-10	3.79E-09	3.32E-09	2.20E-07	3.62E-09	8.97E-09	2.09E-07
1,2,4,5-Tetrachlorobenzene	2.52E-07	1.70E-08	3.08E-08	1.86E-08	4.41E-09	1.34E-06	2.38E-08	5.07E-08	1.39E-06
Pentachlorobenzene	3.92E-06	1.70E-07	9.57E-07	1.75E-07	1.04E-08	5.01E-05	8.93E-07	1.84E-06	7.68E-06
Hexachlorobenzene	1.08E-07	7.66E-09	2.64E-08	1.13E-08	3.56E-09	1.14E-05	2.03E-07	4.13E-07	3.56E-06
Pentachlorophenol	1.84E-06	5.41E-04	4.32E-06	3.62E-07	6.38E-07	1.51E-05	2.96E-07	5.58E-07	3.59E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	6.41E-11	6.06E-11	8.86E-12	5.21E-09	1.56E-08	9.46E-08	7.46E-08	4.28E-09	4.92E-08
Chloroform	1.44E-10	3.92E-10	3.22E-11	2.92E-09	2.60E-08	5.45E-08	9.60E-08	2.64E-09	1.30E-08
Dichloromethane	2.58E-08	1.77E-07	1.64E-08	3.06E-07	9.01E-06	3.61E-06	8.68E-06	1.86E-07	9.01E-07
Trichlorofluoromethane (Freon 11)	6.64E-09	9.42E-09	1.02E-09	1.85E-06	8.07E-06	3.69E-05	4.06E-05	1.71E-06	1.28E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	3.21E-10	4.55E-10	4.95E-11	1.63E-08	7.09E-08	3.83E-07	4.21E-07	1.78E-08	1.12E-07
Other Organics									
Bromoform	8.94E-10	1.48E-09	1.47E-10	4.44E-07	2.31E-06	1.16E-05	1.45E-05	5.45E-07	2.71E-06
O-Terphenyl	1.78E-06	2.81E-07	4.33E-07	1.75E-07	1.30E-08	9.59E-05	2.02E-06	3.42E-06	2.16E-05
Inorganics									
Antimony	3.99E-04	1.98E-04	6.39E-05	2.42E-06	4.02E-06	1.81E-04	9.28E-07	2.05E-06	8.05E-04
Arsenic	3.96E-05	1.95E-05	8.31E-07	4.74E-07	6.18E-07	1.79E-05	8.74E-08	1.85E-06	3.09E-05
Barium	2.81E-04	1.33E-04	4.09E-06	2.45E-07	3.11E-06	1.27E-04	2.58E-06	1.74E-05	3.11E-05
Beryllium	2.52E-04	1.69E-05	1.81E-06	3.02E-07	1.76E-07	1.39E-04	1.27E-05	1.84E-05	1.76E-05
Boron	1.55E-03	1.28E-02	2.49E-04	1.17E-04	2.25E-04	6.75E-04	1.23E-05	1.55E-04	--
Cadmium	1.66E-03	9.05E-04	2.53E-03	1.32E-06	1.01E-05	7.55E-04	8.35E-05	2.46E-04	1.21E-02
Chromium (Total)	1.39E-04	9.79E-05	6.83E-06	6.37E-06	3.31E-06	6.29E-05	3.35E-07	2.71E-06	6.62E-04
Chromium VI	1.98E-05	1.39E-05	9.71E-07	9.06E-07	4.77E-07	8.94E-06	4.77E-08	--	1.74E-05
Cobalt	8.44E-04	2.66E-04	1.65E-05	6.77E-05	8.51E-06	3.83E-04	3.73E-07	9.19E-07	8.51E-04
Lead	3.85E-02	3.89E-03	2.87E-03	1.83E-05	2.43E-05	2.19E-02	2.44E-04	5.27E-04	2.54E-03
Mercury - Inorganic	4.32E-03	4.76E-05	1.17E-03	1.39E-05	2.51E-07	1.27E-02	2.16E-03	1.56E-03	1.80E-04
Methyl Mercury	1.01E-04	1.34E-05	8.57E-04	1.44E-07	3.56E-09	1.90E-05	3.38E-07	8.45E-05	5.87E-04
Nickel	1.81E-02	4.33E-03	3.07E-03	3.43E-04	1.27E-04	8.22E-03	6.47E-05	2.80E-04	1.97E-02
Selenium	7.99E-06	2.08E-05	1.26E-06	5.32E-07	7.06E-07	3.53E-06	2.33E-07	2.21E-06	1.20E-04
Silver	9.16E-05	1.81E-04	3.00E-05	6.20E-06	4.93E-06	4.09E-05	1.84E-07	--	4.37E-04
Thallium	8.79E-03	1.71E-03	1.41E-03	9.36E-04	5.63E-05	4.00E-03	1.28E-06	--	--
Tin	9.53E-03	1.04E-03	7.86E-04	1.29E-03	1.81E-05	4.53E-03	1.23E-05	--	5.44E-02
Vanadium	9.10E-04	5.51E-05	6.11E-06	2.56E-06	5.29E-07	5.29E-04	3.33E-07	7.80E-06	8.46E-05
Zinc	3.96E-02	1.85E-02	2.88E-02	2.05E-05	2.91E-04	1.80E-02	1.60E-03	8.40E-03	2.71E-01

Table M.152 - Detailed Process Upset Case Exposure Point Concentrations for the Farm C Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	3.61E-07	7.81E-08	1.78E-08	2.85E-10	1.87E-09	3.66E-07	6.16E-09	1.50E-09	7.43E-10
Acenaphthylene	8.45E-08	1.63E-08	4.16E-09	8.35E-11	2.26E-09	3.98E-07	6.69E-09	1.62E-09	1.13E-09
Anthracene	3.56E-07	3.56E-08	1.74E-08	2.09E-10	6.02E-10	5.66E-07	9.53E-09	2.20E-09	9.54E-10
Fluoranthene	3.52E-06	2.56E-07	1.72E-07	1.96E-09	8.58E-09	1.68E-05	2.83E-07	6.28E-08	4.30E-08
Fluorene	3.59E-07	5.35E-08	1.76E-08	2.88E-10	4.52E-09	1.39E-06	2.35E-08	5.58E-09	3.59E-09
Phenanthrene	3.63E-06	3.85E-07	1.77E-07	2.38E-09	1.86E-08	1.97E-05	3.31E-07	7.67E-08	2.94E-08
High Molecular Weight PAHs									
Benz(a)anthracene	1.96E-07	8.78E-08	4.77E-09	3.93E-10	2.31E-10	3.31E-06	5.57E-08	1.16E-08	5.81E-09
Benzo(a)pyrene	3.46E-07	4.15E-07	4.23E-08	1.63E-09	3.09E-10	1.20E-05	2.09E-07	2.05E-07	1.55E-08
Benzo(e)pyrene	9.44E-07	3.08E-05	1.15E-07	9.90E-08	1.35E-09	2.16E-05	--	3.54E-07	1.87E-07
Benzo(a)fluorene	3.87E-07	8.63E-08	9.44E-09	5.24E-10	4.74E-09	1.88E-05	--	6.76E-08	5.97E-08
Benzo(b)fluorene	2.67E-07	1.70E-07	6.52E-09	7.93E-10	3.54E-09	1.44E-05	--	5.02E-08	9.97E-08
Benzo(b)fluoranthene	4.50E-07	2.60E-08	1.10E-08	1.87E-10	2.38E-10	9.99E-06	1.68E-07	3.37E-08	1.59E-08
Benzo(g,h,i)perylene	4.89E-06	4.68E-05	5.96E-07	1.46E-07	1.09E-09	1.97E-04	3.32E-06	3.23E-06	1.73E-07
Benzo(k)fluoranthene	3.93E-07	1.65E-07	9.59E-09	6.76E-10	9.91E-11	3.93E-06	6.62E-08	1.33E-08	6.26E-09
Chrysene	7.26E-07	9.10E-08	1.77E-08	5.21E-10	3.58E-10	5.74E-06	9.66E-08	2.01E-08	8.99E-09
Dibenz(a,c)anthracene	6.16E-07	6.05E-06	7.51E-08	1.69E-08	1.40E-09	1.09E-04	1.84E-06	1.76E-06	3.52E-07
Dibenz(a,h)anthracene	2.16E-07	3.80E-06	2.64E-08	1.19E-08	7.17E-11	5.13E-06	8.64E-08	8.39E-08	1.14E-08
Indeno(1,2,3-cd)pyrene	1.04E-06	6.01E-07	1.27E-07	1.91E-09	2.80E-10	3.44E-05	5.80E-07	5.58E-07	5.58E-08
Perylene	2.04E-07	2.30E-05	2.48E-08	7.98E-08	1.60E-10	5.14E-06	8.93E-08	8.59E-08	1.43E-08
Pyrene	1.80E-05	1.13E-06	4.41E-07	8.70E-09	1.21E-08	3.29E-05	5.54E-07	1.24E-07	4.82E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	2.90E-08	5.63E-09	1.43E-08	1.87E-09	1.24E-12	1.92E-07	4.65E-09	5.92E-09	3.91E-08
PCB									
Aroclor 1254 (Total PCBs)	6.73E-05	6.70E-07	--	1.29E-06	3.13E-09	3.07E-04	--	--	6.13E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	5.14E-08	2.26E-08	6.44E-09	6.85E-08	1.04E-07	1.57E-06	4.73E-07	6.67E-08	1.24E-06
1,2,4-Trichlorobenzene	3.83E-09	7.90E-10	4.70E-10	3.03E-09	2.73E-09	1.81E-07	2.98E-09	7.38E-09	1.72E-07
1,2,4,5-Tetrachlorobenzene	1.62E-07	1.08E-08	1.98E-08	1.25E-08	3.23E-09	9.79E-07	1.75E-08	3.71E-08	1.02E-06
Pentachlorobenzene	2.52E-06	1.06E-07	6.15E-07	1.16E-07	8.32E-09	4.02E-05	7.17E-07	1.48E-06	6.17E-06
Hexachlorobenzene	6.97E-08	4.05E-09	1.70E-08	8.38E-09	2.93E-09	9.39E-06	1.67E-07	3.41E-07	2.93E-06
Pentachlorophenol	1.19E-06	2.32E-04	2.78E-06	1.56E-07	3.94E-07	9.33E-06	1.83E-07	3.45E-07	2.22E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	4.12E-11	3.88E-11	5.69E-12	4.50E-09	1.34E-08	8.17E-08	6.44E-08	3.69E-09	4.25E-08
Chloroform	9.24E-11	2.51E-10	2.07E-11	2.47E-09	2.20E-08	4.63E-08	8.15E-08	2.24E-09	1.11E-08
Dichloromethane	1.66E-08	1.14E-07	1.05E-08	2.56E-07	7.56E-06	3.02E-06	7.28E-06	1.56E-07	7.56E-07
Trichlorofluoromethane (Freon 11)	4.27E-09	6.02E-09	6.59E-10	1.60E-06	6.98E-06	3.19E-05	3.51E-05	1.48E-06	1.11E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	2.06E-10	2.91E-10	3.19E-11	1.41E-08	6.11E-08	3.30E-07	3.63E-07	1.53E-08	9.69E-08
Other Organics									
Bromoform	5.75E-10	9.49E-10	9.47E-11	3.84E-07	2.00E-06	1.01E-05	1.25E-05	4.72E-07	2.35E-06
O-Terphenyl	1.14E-06	1.30E-07	2.79E-07	9.86E-08	1.02E-08	7.51E-05	1.60E-06	2.67E-06	1.69E-05
Inorganics									
Antimony	3.53E-04	1.83E-04	5.64E-05	2.21E-06	3.39E-06	1.52E-04	7.82E-07	1.72E-06	6.78E-04
Arsenic	3.50E-05	1.86E-05	7.33E-07	4.43E-07	5.20E-07	1.51E-05	7.36E-08	1.56E-06	2.60E-05
Barium	2.48E-04	1.24E-04	3.61E-06	2.25E-07	2.62E-06	1.07E-04	2.18E-06	1.47E-05	2.62E-05
Beryllium	2.22E-04	1.59E-05	1.60E-06	2.77E-07	1.59E-07	1.25E-04	1.15E-05	1.66E-05	1.59E-05
Boron	1.37E-03	1.18E-02	2.20E-04	1.06E-04	1.90E-04	5.69E-04	1.03E-05	1.30E-04	--
Cadmium	1.46E-03	8.21E-04	2.23E-03	1.19E-06	8.48E-06	6.36E-04	7.04E-05	2.07E-04	1.02E-02
Chromium (Total)	1.23E-04	9.36E-05	6.03E-06	5.98E-06	2.79E-06	5.30E-05	2.82E-07	2.28E-06	5.57E-04
Chromium VI	1.75E-05	1.33E-05	8.57E-07	8.51E-07	3.96E-07	4.01E-06	4.01E-08	--	1.46E-05
Cobalt	7.45E-04	2.54E-04	1.46E-05	6.32E-05	7.16E-06	3.22E-04	3.14E-07	7.74E-07	7.16E-04
Lead	3.40E-02	3.59E-03	2.54E-03	1.67E-05	2.21E-05	1.99E-02	2.22E-04	4.80E-04	2.31E-03
Mercury - Inorganic	2.40E-03	3.57E-05	6.49E-04	8.24E-06	1.43E-07	7.25E-03	1.28E-03	8.91E-04	1.03E-04
Methyl Mercury	8.90E-05	1.01E-05	7.57E-04	1.13E-07	2.03E-09	7.71E-06	1.37E-07	3.44E-05	3.35E-04
Nickel	1.60E-02	4.10E-03	2.71E-03	3.18E-04	1.07E-04	6.93E-03	5.45E-05	2.36E-04	1.66E-02
Selenium	7.05E-06	1.99E-05	1.11E-06	5.02E-07	5.95E-07	2.97E-06	1.96E-07	1.86E-06	1.01E-04
Silver	8.09E-05	1.70E-04	2.65E-05	5.77E-06	4.15E-06	3.45E-05	1.55E-07	--	3.68E-04
Thallium	7.76E-03	1.64E-03	1.24E-03	8.72E-04	4.75E-05	3.37E-03	1.08E-06	--	--
Tin	8.41E-03	9.77E-04	6.94E-04	1.18E-03	1.55E-05	3.88E-03	1.05E-05	--	4.66E-02
Vanadium	8.03E-04	5.23E-05	5.40E-06	2.35E-06	4.85E-07	4.85E-04	3.06E-07	7.15E-06	7.75E-05
Zinc	3.50E-02	1.70E-02	2.54E-02	1.87E-05	2.45E-04	1.52E-02	1.35E-03	7.07E-03	2.28E-01

Table M.153 - Detailed Process Upset Case Exposure Point Concentrations for the Robinson Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	7.66E-07	1.66E-07	3.78E-08	5.97E-10	3.11E-09	6.09E-07	1.03E-08	2.50E-09	1.24E-09
Acenaphthylene	1.79E-07	3.46E-08	8.83E-09	1.70E-10	4.09E-09	7.19E-07	1.21E-08	2.92E-09	2.05E-09
Anthracene	7.56E-07	7.55E-08	3.70E-08	4.40E-10	9.74E-10	9.15E-07	1.54E-08	3.57E-09	1.54E-09
Fluoranthene	7.48E-06	5.43E-07	3.65E-07	4.04E-09	1.23E-08	2.41E-05	4.05E-07	8.98E-08	6.15E-08
Fluorene	7.62E-07	1.14E-07	3.74E-08	5.80E-10	6.95E-09	2.14E-06	3.61E-08	8.58E-09	5.52E-09
Phenanthrene	7.70E-06	8.17E-07	3.77E-07	4.86E-09	2.67E-08	2.84E-05	4.77E-07	1.10E-07	4.24E-08
High Molecular Weight PAHs									
Benz(a)anthracene	4.15E-07	1.87E-07	1.01E-08	8.30E-10	3.28E-10	4.69E-06	7.90E-08	1.65E-08	8.23E-09
Benzo(a)pyrene	7.36E-07	8.81E-07	8.97E-08	3.44E-09	4.42E-10	1.71E-05	2.98E-07	2.93E-07	2.22E-08
Benzo(e)pyrene	2.00E-06	6.53E-05	2.44E-07	2.10E-07	1.95E-09	3.11E-05	--	5.10E-07	2.69E-07
Benzo(a)fluorene	8.22E-07	1.83E-07	2.00E-08	1.04E-09	6.86E-09	2.72E-05	--	9.79E-08	8.63E-08
Benzo(b)fluorene	5.67E-07	3.59E-07	1.38E-08	1.62E-09	4.97E-09	2.02E-05	--	7.06E-08	1.40E-07
Benzo(b)fluoranthene	9.55E-07	5.52E-08	2.33E-08	3.85E-10	3.82E-10	1.60E-05	2.69E-07	5.40E-08	2.54E-08
Benzo(g,h,i)perylene	1.04E-05	9.89E-05	1.27E-06	3.10E-07	1.63E-09	2.93E-04	4.93E-06	4.79E-06	2.58E-07
Benzo(k)fluoranthene	8.34E-07	3.49E-07	2.03E-08	1.43E-09	1.57E-10	6.22E-06	1.05E-07	2.11E-08	9.89E-09
Chrysene	1.54E-06	1.94E-07	3.76E-08	1.10E-09	5.92E-10	9.50E-06	1.60E-07	3.33E-08	1.49E-08
Dibenz(a,c)anthracene	1.31E-06	1.28E-05	1.59E-07	3.57E-08	1.97E-09	1.54E-04	2.59E-06	2.47E-06	4.95E-07
Dibenz(a,h)anthracene	4.59E-07	8.05E-06	5.60E-08	2.51E-08	1.07E-10	7.66E-06	1.29E-07	1.25E-07	1.70E-08
Indeno(1,2,3-cd)pyrene	2.21E-06	1.28E-06	2.69E-07	4.03E-09	4.16E-10	5.12E-05	8.61E-07	8.30E-07	8.30E-08
Perylene	4.32E-07	4.86E-05	5.27E-08	1.69E-07	2.35E-10	7.54E-06	1.31E-07	1.26E-07	2.09E-08
Pyrene	3.83E-05	2.39E-06	9.35E-07	1.83E-08	1.92E-08	5.23E-05	8.80E-07	1.97E-07	7.66E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	4.99E-08	1.14E-08	2.46E-08	3.65E-09	1.88E-12	2.92E-07	7.06E-09	9.00E-09	5.94E-08
PCB									
Aroclor 1254 (Total PCBs)	1.43E-04	1.42E-06	--	2.71E-06	6.28E-09	6.16E-04	--	--	1.23E-03
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	1.09E-07	4.80E-08	1.37E-08	1.07E-07	1.58E-07	2.40E-06	7.23E-07	1.02E-07	1.90E-06
1,2,4-Trichlorobenzene	8.12E-09	1.68E-09	9.99E-10	4.92E-09	4.30E-09	2.86E-07	4.69E-09	1.16E-08	2.72E-07
1,2,4,5-Tetrachlorobenzene	3.44E-07	2.30E-08	4.21E-08	2.58E-08	6.38E-09	1.94E-06	3.45E-08	7.34E-08	2.02E-06
Pentachlorobenzene	5.35E-06	2.26E-07	1.31E-06	2.35E-07	1.33E-08	6.41E-05	1.14E-06	2.36E-06	9.83E-06
Hexachlorobenzene	1.48E-07	8.59E-09	3.61E-08	1.40E-08	4.52E-09	1.45E-05	2.58E-07	5.25E-07	4.52E-06
Pentachlorophenol	2.52E-06	4.92E-04	5.89E-06	3.30E-07	9.48E-07	2.25E-05	4.40E-07	8.30E-07	5.33E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	8.75E-11	8.24E-11	1.21E-11	6.57E-09	1.96E-08	1.19E-07	9.40E-08	5.39E-09	6.20E-08
Chloroform	1.96E-10	5.34E-10	4.40E-11	3.71E-09	3.30E-08	6.94E-08	1.22E-07	3.36E-09	1.66E-08
Dichloromethane	3.52E-08	2.42E-07	2.24E-08	3.92E-07	1.15E-05	4.62E-06	1.11E-05	2.38E-07	1.15E-06
Trichlorofluoromethane (Freon 11)	9.06E-09	1.28E-08	1.40E-09	2.33E-06	1.02E-05	4.65E-05	5.11E-05	2.16E-06	1.61E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	4.38E-10	6.17E-10	6.76E-11	2.06E-08	8.94E-08	4.83E-07	5.32E-07	2.24E-08	1.42E-07
Other Organics									
Bromoform	1.22E-09	2.02E-09	2.01E-10	5.60E-07	2.91E-06	1.47E-05	1.83E-05	6.87E-07	3.42E-06
O-Terphenyl	2.43E-06	2.75E-07	5.92E-07	1.91E-07	1.54E-08	1.14E-04	2.38E-06	4.05E-06	2.56E-05
Inorganics									
Antimony	6.06E-04	2.95E-04	9.69E-05	3.64E-06	6.68E-06	3.00E-04	1.54E-06	3.39E-06	1.34E-03
Arsenic	6.01E-05	2.88E-05	1.26E-06	7.10E-07	1.03E-06	2.97E-05	1.45E-07	3.07E-06	5.13E-05
Barium	4.26E-04	1.98E-04	6.21E-06	3.68E-07	5.16E-06	2.11E-04	4.29E-06	2.89E-05	5.16E-05
Beryllium	3.82E-04	2.49E-05	2.75E-06	4.52E-07	2.81E-07	2.22E-04	2.03E-05	2.93E-05	2.81E-05
Boron	2.36E-03	1.91E-02	3.77E-04	1.76E-04	3.74E-04	1.12E-03	2.03E-05	2.57E-04	--
Cadmium	2.51E-03	1.36E-03	3.84E-03	2.00E-06	1.67E-05	1.25E-03	1.38E-04	4.07E-04	2.01E-02
Chromium (Total)	2.12E-04	1.44E-04	1.04E-05	9.53E-06	5.49E-06	1.04E-04	5.56E-07	4.49E-06	1.10E-03
Chromium VI	3.01E-05	2.05E-05	1.47E-06	1.36E-06	7.81E-07	1.48E-05	7.91E-08	--	2.89E-05
Cobalt	1.28E-03	3.93E-04	2.50E-05	1.02E-04	1.41E-05	6.35E-04	6.19E-07	1.52E-06	1.41E-03
Lead	5.84E-02	5.80E-03	4.35E-03	2.75E-05	3.86E-05	3.47E-02	3.88E-04	8.38E-04	4.04E-03
Mercury - Inorganic	5.07E-03	5.96E-05	1.37E-03	1.65E-05	2.44E-07	1.24E-02	2.10E-03	1.52E-03	1.75E-04
Methyl Mercury	1.53E-04	1.68E-05	1.30E-03	1.91E-07	3.46E-09	3.79E-05	6.75E-07	1.69E-04	5.70E-04
Nickel	2.74E-02	6.40E-03	4.65E-03	5.15E-04	2.10E-04	1.36E-02	1.07E-04	4.64E-04	3.27E-02
Selenium	1.21E-05	3.06E-05	1.91E-06	7.96E-07	1.17E-06	5.86E-06	3.87E-07	3.67E-06	1.99E-04
Silver	1.39E-04	2.68E-04	4.55E-05	9.30E-06	8.18E-06	6.79E-05	3.05E-07	--	7.25E-04
Thallium	1.33E-02	2.53E-03	2.13E-03	1.40E-03	9.34E-05	6.63E-03	2.13E-06	--	--
Tin	1.44E-02	1.55E-03	1.19E-03	1.94E-03	2.98E-05	7.45E-03	2.02E-05	--	8.94E-02
Vanadium	1.38E-03	8.13E-05	9.27E-06	3.83E-06	8.36E-07	8.36E-04	5.27E-07	1.23E-05	1.34E-04
Zinc	6.01E-02	2.77E-02	4.36E-02	3.10E-05	4.82E-04	2.99E-02	2.65E-03	1.39E-02	4.49E-01

Table M.154 - Detailed Process Upset Case Exposure Point Concentrations for the Bennett Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.02E-07	4.38E-08	9.95E-09	1.67E-10	1.84E-09	3.61E-07	6.07E-09	1.48E-09	7.32E-10
Acenaphthylene	4.73E-08	9.31E-09	2.32E-09	5.38E-11	1.94E-09	3.40E-07	5.72E-09	1.38E-09	9.71E-10
Anthracene	1.99E-07	2.02E-08	9.75E-09	1.19E-10	4.44E-10	4.17E-07	7.02E-09	1.62E-09	7.03E-10
Fluoranthene	1.97E-06	1.80E-07	9.63E-08	1.23E-09	4.57E-09	8.97E-06	1.51E-07	3.35E-08	2.29E-08
Fluorene	2.01E-07	3.09E-08	9.84E-09	1.72E-10	3.28E-09	1.01E-06	1.70E-08	4.05E-09	2.61E-09
Phenanthrene	2.03E-06	2.32E-07	9.92E-08	1.38E-09	1.04E-08	1.11E-05	1.86E-07	4.31E-08	1.65E-08
High Molecular Weight PAHs									
Benz(a)anthracene	1.10E-07	7.03E-08	2.67E-09	3.04E-10	1.36E-10	1.95E-06	3.29E-08	6.85E-09	3.42E-09
Benzo(a)pyrene	1.94E-07	3.93E-07	2.37E-08	1.51E-09	2.28E-10	8.82E-06	1.53E-07	1.51E-07	1.14E-08
Benzo(e)pyrene	5.28E-07	3.70E-05	6.44E-08	1.19E-07	8.16E-10	1.30E-05	--	2.14E-07	1.13E-07
Benzo(a)fluorene	2.16E-07	8.70E-08	5.28E-09	4.50E-10	2.89E-09	1.15E-05	--	4.12E-08	3.64E-08
Benzo(b)fluorene	1.49E-07	1.94E-07	3.65E-09	8.35E-10	2.00E-09	8.11E-06	--	2.83E-08	5.62E-08
Benzo(b)fluoranthene	2.52E-07	2.25E-08	6.15E-09	1.33E-10	2.36E-10	9.87E-06	1.66E-07	3.34E-08	1.57E-08
Benzo(g,h,i)perylene	2.74E-06	5.62E-05	3.34E-07	1.75E-07	1.09E-09	1.96E-04	3.29E-06	3.20E-06	1.72E-07
Benzo(k)fluoranthene	2.21E-07	1.64E-07	5.39E-09	6.40E-10	7.11E-11	2.82E-06	4.75E-08	9.55E-09	4.49E-09
Chrysene	4.07E-07	5.95E-08	9.93E-09	3.26E-10	3.15E-10	5.05E-06	8.50E-08	1.77E-08	7.91E-09
Dibenz(a,c)anthracene	3.44E-07	6.20E-06	4.20E-08	1.73E-08	1.22E-09	9.52E-05	1.60E-06	1.53E-06	3.06E-07
Dibenz(a,h)anthracene	1.21E-07	4.52E-06	1.48E-08	1.41E-08	6.01E-11	4.30E-06	7.24E-08	7.03E-08	9.52E-09
Indeno(1,2,3-cd)pyrene	5.83E-07	4.02E-07	7.11E-08	1.25E-09	2.62E-10	3.23E-05	5.43E-07	5.23E-07	5.23E-08
Perylene	1.14E-07	2.76E-05	1.39E-08	9.59E-08	1.13E-10	3.62E-06	6.30E-08	6.05E-08	1.00E-08
Pyrene	1.01E-05	6.83E-07	2.48E-07	5.06E-09	6.22E-09	1.69E-05	2.84E-07	6.36E-08	2.47E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.21E-08	6.03E-09	5.95E-09	1.74E-09	8.71E-13	1.36E-07	3.28E-09	4.17E-09	2.76E-08
PCB									
Aroclor 1254 (Total PCBs)	3.80E-05	5.14E-07	--	7.67E-07	3.40E-09	3.34E-04	--	--	9.35E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	2.88E-08	1.29E-08	3.60E-09	7.32E-08	1.14E-07	1.73E-06	5.23E-07	7.37E-08	1.38E-06
1,2,4-Trichlorobenzene	2.14E-09	4.85E-10	2.63E-10	3.35E-09	3.18E-09	2.11E-07	3.46E-09	8.59E-09	2.00E-07
1,2,4,5-Tetrachlorobenzene	9.07E-08	6.21E-09	1.11E-08	1.06E-08	4.25E-09	1.29E-06	2.30E-08	4.89E-08	1.35E-06
Pentachlorobenzene	1.41E-06	6.35E-08	3.44E-07	7.29E-08	9.49E-09	4.59E-05	8.18E-07	1.69E-06	7.03E-06
Hexachlorobenzene	3.90E-08	3.39E-09	9.50E-09	7.32E-09	3.19E-09	1.02E-05	1.82E-07	3.71E-07	3.19E-06
Pentachlorophenol	6.63E-07	2.79E-04	1.55E-06	1.86E-07	2.58E-07	6.11E-06	1.20E-07	2.26E-07	1.45E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.30E-11	2.19E-11	3.18E-12	4.14E-09	1.24E-08	7.53E-08	5.93E-08	3.40E-09	3.91E-08
Chloroform	5.17E-11	1.42E-10	1.16E-11	2.64E-09	2.36E-08	4.95E-08	8.71E-08	2.40E-09	1.18E-08
Dichloromethane	9.26E-09	6.38E-08	5.88E-09	3.00E-07	8.86E-06	3.54E-06	8.53E-06	1.83E-07	8.86E-07
Trichlorofluoromethane (Freon 11)	2.39E-09	3.42E-09	3.68E-10	1.46E-06	6.38E-06	2.92E-05	3.21E-05	1.35E-06	1.01E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.15E-10	1.65E-10	1.78E-11	1.32E-08	5.73E-08	3.09E-07	3.41E-07	1.44E-08	9.08E-08
Other Organics									
Bromoform	3.21E-10	5.30E-10	5.29E-11	3.50E-07	1.82E-06	9.17E-06	1.14E-05	4.30E-07	2.14E-06
O-Terphenyl	6.39E-07	1.38E-07	1.56E-07	8.27E-08	7.71E-09	5.68E-05	1.22E-06	2.02E-06	1.28E-05
Inorganics									
Antimony	1.46E-04	7.81E-05	2.33E-05	9.47E-07	1.65E-06	7.42E-05	3.81E-07	8.39E-07	3.30E-04
Arsenic	1.44E-05	8.03E-06	3.03E-07	1.93E-07	2.53E-07	7.35E-06	3.58E-08	7.59E-07	1.27E-05
Barium	1.03E-04	5.32E-05	1.49E-06	9.68E-08	1.27E-06	5.22E-05	1.06E-06	7.15E-06	1.27E-05
Beryllium	9.19E-05	6.87E-06	6.62E-07	1.17E-07	7.06E-08	5.58E-05	5.10E-06	7.37E-06	7.06E-06
Boron	5.66E-04	5.00E-03	9.06E-05	4.54E-05	9.23E-05	2.77E-04	5.03E-06	6.34E-05	--
Cadmium	6.05E-04	3.45E-04	9.24E-04	5.03E-07	4.13E-06	3.09E-04	3.42E-05	1.01E-04	4.96E-03
Chromium (Total)	5.08E-05	4.06E-05	2.49E-06	2.62E-06	1.36E-06	2.58E-05	1.37E-07	1.11E-06	2.71E-04
Chromium VI	7.23E-06	5.77E-06	3.54E-07	3.72E-07	1.93E-07	3.67E-06	1.96E-08	--	7.13E-06
Cobalt	3.08E-04	1.10E-04	6.01E-06	2.75E-05	3.49E-06	1.57E-04	1.53E-07	3.77E-07	3.49E-04
Lead	1.41E-02	1.53E-03	1.05E-03	7.02E-06	9.73E-06	8.76E-03	9.79E-05	2.11E-04	1.02E-03
Mercury - Inorganic	1.85E-03	2.16E-05	5.02E-04	6.03E-06	1.55E-07	7.85E-03	1.38E-03	9.64E-04	1.11E-04
Methyl Mercury	3.69E-05	6.10E-06	3.13E-04	6.18E-08	2.20E-09	7.49E-06	1.33E-07	3.34E-05	3.62E-04
Nickel	6.60E-03	1.77E-03	1.12E-03	1.38E-04	5.19E-05	3.37E-03	2.65E-05	1.15E-04	8.09E-03
Selenium	2.91E-06	8.63E-06	4.59E-07	2.20E-07	2.90E-07	1.45E-06	9.56E-08	9.06E-07	4.92E-05
Silver	3.34E-05	7.32E-05	1.09E-05	2.50E-06	2.02E-06	1.68E-05	7.55E-08	--	1.79E-04
Thallium	3.21E-03	7.10E-04	5.13E-04	3.79E-04	2.31E-05	1.64E-03	5.26E-07	--	--
Tin	3.48E-03	4.19E-04	2.87E-04	5.04E-04	7.39E-06	1.85E-03	5.00E-06	--	2.22E-02
Vanadium	3.32E-04	2.26E-05	2.23E-06	9.98E-07	2.11E-07	2.11E-04	1.33E-07	3.12E-06	3.38E-05
Zinc	1.45E-02	7.18E-03	1.05E-02	7.92E-06	1.19E-04	7.38E-03	6.56E-04	3.44E-03	1.11E-01

Table M.155 - Detailed Process Upset Case Exposure Point Concentrations for the Oshawa Creek Conservation Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	2.27E-07	4.93E-08	1.12E-08	1.93E-10	2.63E-09	5.15E-07	8.67E-09	2.12E-09	1.05E-09
Acenaphthylene	5.32E-08	1.04E-08	2.62E-09	6.74E-11	2.86E-09	5.02E-07	8.45E-09	2.04E-09	1.43E-09
Anthracene	2.24E-07	2.26E-08	1.10E-08	1.38E-10	8.06E-10	7.58E-07	1.28E-08	2.95E-09	1.28E-09
Fluoranthene	2.22E-06	1.85E-07	1.08E-07	1.44E-09	1.21E-08	2.37E-05	3.99E-07	8.84E-08	6.05E-08
Fluorene	2.26E-07	3.43E-08	1.11E-08	2.22E-10	6.23E-09	1.92E-06	3.23E-08	7.69E-09	4.95E-09
Phenanthrene	2.28E-06	2.53E-07	1.12E-07	1.73E-09	2.60E-08	2.76E-05	4.64E-07	1.07E-07	4.11E-08
High Molecular Weight PAHs									
Benz(a)anthracene	1.23E-07	6.90E-08	3.01E-09	3.08E-10	3.36E-10	4.82E-06	8.10E-08	1.69E-08	8.45E-09
Benzo(a)pyrene	2.18E-07	3.65E-07	2.66E-08	1.43E-09	4.55E-10	1.76E-05	3.06E-07	3.01E-07	2.28E-08
Benzo(e)pyrene	5.94E-07	3.21E-05	7.25E-08	1.03E-07	1.95E-09	3.11E-05	--	5.12E-07	2.70E-07
Benzo(a)fluorene	2.44E-07	7.93E-08	5.94E-09	5.02E-10	6.68E-09	2.65E-05	--	9.53E-08	8.41E-08
Benzo(b)fluorene	1.68E-07	1.71E-07	4.10E-09	8.06E-10	5.06E-09	2.06E-05	--	7.18E-08	1.43E-07
Benzo(b)fluoranthene	2.83E-07	2.15E-08	6.91E-09	1.45E-10	3.32E-10	1.39E-05	2.34E-07	4.71E-08	2.22E-08
Benzo(g,h,i)perylene	3.08E-06	4.87E-05	3.76E-07	1.52E-07	1.59E-09	2.87E-04	4.83E-06	4.69E-06	2.52E-07
Benzo(k)fluoranthene	2.48E-07	1.50E-07	6.04E-09	5.98E-10	1.36E-10	5.42E-06	9.11E-08	1.83E-08	8.61E-09
Chrysene	4.57E-07	6.29E-08	1.12E-08	3.58E-10	4.85E-10	7.79E-06	1.31E-07	2.73E-08	1.22E-08
Dibenz(a,c)anthracene	3.88E-07	5.62E-06	4.73E-08	1.57E-08	2.09E-09	1.63E-04	2.75E-06	2.62E-06	5.26E-07
Dibenz(a,h)anthracene	1.36E-07	3.93E-06	1.66E-08	1.23E-08	1.03E-10	7.40E-06	1.25E-07	1.21E-07	1.64E-08
Indeno(1,2,3-cd)pyrene	6.55E-07	4.21E-07	7.99E-08	1.34E-09	4.06E-10	5.00E-05	8.41E-07	8.10E-07	8.11E-08
Perylene	1.28E-07	2.39E-05	1.56E-08	8.32E-08	2.31E-10	7.41E-06	1.29E-07	1.24E-07	2.06E-08
Pyrene	1.14E-05	7.42E-07	2.78E-07	5.74E-09	1.59E-08	4.32E-05	7.27E-07	1.63E-07	6.33E-08
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.47E-08	5.35E-09	7.21E-09	1.61E-09	1.21E-12	1.88E-07	4.54E-09	5.79E-09	3.82E-08
PCB									
Aroclor 1254 (Total PCBs)	4.24E-05	5.10E-07	--	8.56E-07	3.80E-09	3.73E-04	--	--	5.22E-04
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	3.24E-08	1.44E-08	4.05E-09	1.17E-07	1.85E-07	2.81E-06	8.47E-07	1.19E-07	2.23E-06
1,2,4-Trichlorobenzene	2.41E-09	5.25E-10	2.96E-10	4.95E-09	4.74E-09	3.15E-07	5.17E-09	1.28E-08	2.99E-07
1,2,4,5-Tetrachlorobenzene	1.02E-07	6.92E-09	1.25E-08	1.20E-08	4.81E-09	1.46E-06	2.60E-08	5.54E-08	1.52E-06
Pentachlorobenzene	1.59E-06	6.95E-08	3.87E-07	9.05E-08	1.37E-08	6.63E-05	1.18E-06	2.44E-06	1.02E-05
Hexachlorobenzene	4.39E-08	3.27E-09	1.07E-08	1.15E-08	5.10E-09	1.63E-05	2.91E-07	5.93E-07	5.10E-06
Pentachlorophenol	7.46E-07	2.42E-04	1.75E-06	1.62E-07	2.79E-07	6.60E-06	1.29E-07	2.44E-07	1.57E-04
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	2.59E-11	2.46E-11	3.58E-12	8.56E-09	2.56E-08	1.56E-07	1.23E-07	7.03E-09	8.09E-08
Chloroform	5.82E-11	1.59E-10	1.31E-11	4.56E-09	4.08E-08	8.56E-08	1.51E-07	4.15E-09	2.04E-08
Dichloromethane	1.04E-08	7.18E-08	6.63E-09	4.62E-07	1.37E-05	5.46E-06	1.31E-05	2.81E-07	1.37E-06
Trichlorofluoromethane (Freon 11)	2.69E-09	3.82E-09	4.15E-10	3.07E-06	1.34E-05	6.11E-05	6.72E-05	2.83E-06	2.12E-05
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	1.30E-10	1.85E-10	2.01E-11	2.66E-08	1.16E-07	6.26E-07	6.89E-07	2.91E-08	1.84E-07
Other Organics									
Bromoform	3.62E-10	5.97E-10	5.96E-11	7.38E-07	3.83E-06	1.93E-05	2.40E-05	9.05E-07	4.50E-06
O-Terphenyl	7.19E-07	1.24E-07	1.75E-07	9.65E-08	1.44E-08	1.06E-04	2.22E-06	3.77E-06	2.38E-05
Inorganics									
Antimony	1.78E-04	9.23E-05	2.84E-05	1.12E-06	1.86E-06	8.37E-05	4.29E-07	9.46E-07	3.72E-04
Arsenic	1.76E-05	9.34E-06	3.69E-07	2.25E-07	2.86E-07	8.28E-06	4.04E-08	8.56E-07	1.43E-05
Barium	1.25E-04	6.26E-05	1.82E-06	1.14E-07	1.44E-06	5.89E-05	1.19E-06	8.06E-06	1.44E-05
Beryllium	1.12E-04	8.03E-06	8.06E-07	1.41E-07	1.09E-07	8.59E-05	7.85E-06	1.14E-05	1.09E-05
Boron	6.91E-04	5.94E-03	1.11E-04	5.39E-05	1.04E-04	3.12E-04	5.66E-06	7.15E-05	--
Cadmium	7.37E-04	4.14E-04	1.13E-03	6.03E-07	4.67E-06	3.50E-04	3.88E-05	1.14E-04	5.62E-03
Chromium (Total)	6.20E-05	4.71E-05	3.04E-06	3.04E-06	1.53E-06	2.91E-05	1.55E-07	1.25E-06	3.06E-04
Chromium VI	8.82E-06	6.70E-06	4.32E-07	4.32E-07	2.18E-07	4.13E-06	2.20E-08	--	8.04E-06
Cobalt	3.76E-04	1.28E-04	7.33E-06	3.21E-05	3.93E-06	1.77E-04	1.73E-07	4.25E-07	3.93E-04
Lead	1.71E-02	1.81E-03	1.28E-03	8.44E-06	1.55E-05	1.40E-02	1.56E-04	3.37E-04	1.63E-03
Mercury - Inorganic	1.84E-03	2.23E-05	4.99E-04	6.16E-06	2.30E-07	1.17E-02	2.00E-03	1.44E-03	1.66E-04
Methyl Mercury	4.49E-05	6.28E-06	3.81E-04	6.64E-08	3.27E-09	2.94E-06	5.24E-08	1.31E-05	5.40E-04
Nickel	8.05E-03	2.06E-03	1.36E-03	1.61E-04	5.86E-05	3.81E-03	3.00E-05	1.30E-04	9.15E-03
Selenium	3.55E-06	1.00E-05	5.60E-07	2.55E-07	3.26E-07	1.63E-06	1.08E-07	1.02E-06	5.55E-05
Silver	4.07E-05	8.58E-05	1.33E-05	2.93E-06	2.28E-06	1.89E-05	8.51E-08	--	2.02E-04
Thallium	3.91E-03	8.24E-04	6.25E-04	4.43E-04	2.61E-05	1.85E-03	5.96E-07	--	--
Tin	4.24E-03	4.92E-04	3.50E-04	6.00E-04	9.07E-06	2.27E-03	6.13E-06	--	2.72E-02
Vanadium	4.05E-04	2.63E-05	2.72E-06	1.20E-06	3.47E-07	3.47E-04	2.19E-07	5.12E-06	5.55E-05
Zinc	1.76E-02	8.55E-03	1.28E-02	9.43E-06	1.35E-04	8.34E-03	7.41E-04	3.89E-03	1.25E-01

Table M.156 - Detailed Process Upset Project Case Exposure Point Concentrations for the Darlington Provincial Park Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.61E-06	1.47E-03	1.96E-07	4.00E-04	1.57E-09	2.49E-05	--	4.10E-07	3.00E-04
Benzo(a)fluorene	6.59E-07	1.62E-07	1.61E-08	1.46E-08	5.50E-09	2.18E-05	--	7.85E-08	6.93E-08
Benzo(b)fluorene	4.55E-07	3.27E-07	1.11E-08	2.79E-08	3.99E-09	1.62E-05	--	5.66E-08	1.12E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.45E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.45E-04	8.21E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.11E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.07E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.45E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.82E-06	3.79E-07	9.02E-07	5.93E-07	3.24E-09	2.32E-06	5.59E-08	7.15E-08	8.89E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.05E-02	8.41E-04	1.64E-03	1.10E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.79E-04	3.69E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.52E-03	2.81E-03	6.33E-02	1.08E-05	7.18E-04	1.41E-05	2.65E-05	6.35E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.59E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.21E-02	9.30E-04	8.05E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.38E-04	6.04E-04
O-Terphenyl	1.95E-06	2.46E-07	4.75E-07	1.74E-07	1.24E-08	9.11E-05	1.92E-06	3.25E-06	2.05E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.16E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.05E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.03E-01	3.79E-01	7.67E-01	2.25E-01	1.20E-04	5.02E-01	5.54E-02	1.63E-01	4.60E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.01E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	3.67E-05	3.08E-05	1.80E-06	1.97E-06	1.07E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.01E-02	5.17E-04	6.00E+00	5.85E-03	1.44E-02	2.97E-02
Lead	1.70E+01	4.18E-01	1.26E+00	4.40E-02	1.05E-03	1.30E+01	1.46E-01	3.14E-01	7.49E-02
Mercury - Inorganic	7.49E-02	2.24E-02	2.03E-02	2.02E-03	1.00E-04	6.18E-02	1.06E-02	7.60E-03	9.37E-02
Methyl Mercury	1.59E-03	5.13E-05	1.35E-02	4.69E-04	1.50E-05	4.62E-05	8.24E-07	2.06E-04	9.40E-02
Nickel	1.23E+01	6.09E-01	2.08E+00	3.12E-01	6.26E-03	1.00E+01	7.88E-02	3.40E-01	5.20E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.04E-02	6.55E-02	1.00E-02	1.10E-04	2.00E-01	9.00E-04	--	1.09E-02
Thallium	1.02E+00	2.38E-02	1.63E-01	1.20E-02	4.14E-04	1.01E+00	3.24E-04	--	1.00E-02
Tin	1.00E+01	1.82E-01	8.26E-01	9.86E-02	1.04E-03	5.01E+00	1.35E-02	--	1.59E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.56E-02	8.10E+01	7.20E+00	3.78E+01	3.88E+01

Table M.157 - Detailed Process Upset Project Case Exposure Point Concentrations for the Second Marsh Wildlife Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.02E-06	1.45E-03	1.25E-07	4.00E-04	4.76E-09	7.57E-05	--	1.24E-06	3.01E-04
Benzo(a)fluorene	4.19E-07	1.07E-07	1.02E-08	9.57E-09	1.50E-09	5.93E-06	--	2.13E-08	1.88E-08
Benzo(b)fluorene	2.90E-07	2.17E-07	7.06E-09	1.85E-08	1.18E-09	4.80E-06	--	1.68E-08	3.33E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.42E-03	6.10E-03	4.00E-04	1.00E-05	5.07E-02	8.53E-04	8.30E-04	6.51E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.08E-04	6.10E-03	4.00E-04	1.00E-05	5.03E-02	8.47E-04	8.09E-04	3.01E-04
Dibenz(a,h)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.12E-04	3.00E-04
Perylene	1.00E-02	2.30E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.35E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.79E-06	3.74E-07	8.82E-07	5.92E-07	3.24E-09	2.15E-06	5.19E-08	6.61E-08	8.54E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.03E-02	8.41E-04	1.64E-03	1.04E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.37E-03	2.81E-03	6.33E-02	1.11E-05	7.27E-04	1.42E-05	2.69E-05	6.37E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.55E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.20E-02	9.29E-04	8.01E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	1.24E-06	1.63E-07	3.02E-07	1.07E-07	3.85E-09	2.83E-05	6.24E-07	1.01E-06	6.39E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.17E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.05E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.21E-04	5.02E-01	5.54E-02	1.63E-01	4.69E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.01E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	1.60E-05	1.17E-05	7.84E-07	8.86E-07	1.00E-02	2.00E+00	1.07E-02	--	3.70E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.18E-04	6.00E+00	5.85E-03	1.44E-02	2.98E-02
Lead	1.69E+01	4.13E-01	1.26E+00	4.40E-02	1.06E-03	1.31E+01	1.46E-01	3.15E-01	7.61E-02
Mercury - Inorganic	7.29E-02	2.23E-02	1.97E-02	2.01E-03	1.01E-04	7.98E-02	1.21E-02	9.80E-03	9.39E-02
Methyl Mercury	1.48E-03	3.86E-05	1.26E-02	4.69E-04	1.50E-05	1.74E-05	3.10E-07	7.77E-05	9.51E-02
Nickel	1.23E+01	6.04E-01	2.08E+00	3.11E-01	6.27E-03	1.00E+01	7.88E-02	3.41E-01	5.21E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.10E-04	2.00E-01	9.00E-04	--	1.09E-02
Thallium	1.01E+00	2.14E-02	1.61E-01	1.09E-02	4.18E-04	1.01E+00	3.24E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.71E-02	1.04E-03	5.01E+00	1.35E-02	--	1.68E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.56E-02	8.10E+01	7.20E+00	3.78E+01	3.89E+01

Table M.158 - Detailed Process Upset Project Case Exposure Point Concentrations for the Darlington Waterfront Trail Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.04E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.01E-05	5.02E-02	8.44E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.01E-05	5.00E-02	8.42E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.90E-04	4.00E-04	1.02E-05	5.02E-02	8.45E-04	1.96E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.02E-02	3.50E-04	3.44E-04	3.00E-04
Benzo(e)pyrene	2.58E-06	1.49E-03	3.14E-07	4.00E-04	1.36E-08	2.17E-04	--	3.57E-06	3.02E-04
Benzo(a)fluorene	1.06E-06	2.25E-07	2.58E-08	2.11E-08	5.20E-08	2.06E-04	--	7.42E-07	6.54E-07
Benzo(b)fluorene	7.29E-07	4.36E-07	1.78E-08	3.77E-08	3.56E-08	1.45E-04	--	5.05E-07	1.00E-06
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.02E-02	8.44E-04	1.70E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.48E-03	6.10E-03	4.00E-04	1.00E-05	5.33E-02	8.95E-04	8.72E-04	6.53E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.76E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.16E-04	6.10E-03	4.00E-04	1.00E-05	5.17E-02	8.68E-04	8.30E-04	3.05E-04
Dibenz(a,h)anthracene	5.00E-02	2.10E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.12E-04	6.10E-03	4.00E-04	1.00E-05	5.06E-02	8.50E-04	8.19E-04	3.01E-04
Perylene	1.00E-02	2.59E-04	1.22E-03	4.00E-04	1.00E-05	2.01E-02	3.49E-04	3.35E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.01E-05	5.03E-02	8.46E-04	1.89E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.83E-06	3.81E-07	9.05E-07	5.94E-07	3.26E-09	4.18E-06	9.87E-08	1.29E-07	1.27E-06
PCB									
Aroclor 1254 (Total PCBs)	5.02E-02	1.00E-02	1.11E-02	1.00E-02	2.01E-05	5.50E-02	8.39E-04	1.64E-03	2.40E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.40E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.01E-05	1.00E-02	1.79E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.02E-05	1.11E-02	1.96E-04	4.06E-04	1.02E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.01E-05	1.03E-02	1.83E-04	3.73E-04	1.01E-02
Pentachlorophenol	1.20E-03	1.66E-03	2.82E-03	6.32E-02	1.08E-05	7.20E-04	1.41E-05	2.66E-05	6.36E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.94E-04	5.01E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.95E-04	1.76E-03	1.00E-01	2.41E-01	5.16E-03	1.01E-04
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.25E-03	1.21E-03	2.09E-02	2.30E-02	9.72E-04	1.12E-03
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.02E-04	3.01E-03	3.31E-03	1.40E-04	7.95E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.04E-03	5.59E-04	2.03E-02	2.53E-02	9.52E-04	6.71E-04
O-Terphenyl	3.12E-06	3.37E-07	7.61E-07	4.51E-07	1.43E-07	1.05E-03	2.04E-05	3.76E-05	2.38E-04
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.11E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.01E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.03E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.03E-01	3.79E-01	7.68E-01	2.25E-01	1.14E-04	5.01E-01	5.54E-02	1.63E-01	3.86E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	4.00E-05	2.73E-05	1.96E-06	1.73E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.01E-02	5.12E-04	6.00E+00	5.85E-03	1.44E-02	2.92E-02
Lead	1.70E+01	4.18E-01	1.27E+00	4.40E-02	1.06E-03	1.31E+01	1.46E-01	3.15E-01	7.64E-02
Mercury - Inorganic	7.65E-02	2.24E-02	2.07E-02	2.02E-03	1.02E-04	1.37E-01	1.63E-02	1.69E-02	9.47E-02
Methyl Mercury	1.60E-03	5.06E-05	1.36E-02	4.69E-04	1.50E-05	1.85E-05	3.29E-07	8.23E-05	9.75E-02
Nickel	1.23E+01	6.09E-01	2.08E+00	3.12E-01	6.18E-03	1.00E+01	7.88E-02	3.40E-01	5.08E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.04E-02	6.55E-02	1.00E-02	1.07E-04	2.00E-01	9.00E-04	--	1.06E-02
Thallium	1.02E+00	2.34E-02	1.63E-01	1.18E-02	3.80E-04	1.01E+00	3.23E-04	--	1.00E-02
Tin	1.00E+01	1.82E-01	8.26E-01	9.85E-02	1.03E-03	5.01E+00	1.35E-02	--	1.39E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.54E-02	8.10E+01	7.20E+00	3.78E+01	3.87E+01

Table M.159 - Detailed Process Upset Project Case Exposure Point Concentrations for the McLaughlin Bay Wildlife Reserve Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.10E-06	1.46E-03	1.34E-07	4.00E-04	6.26E-09	9.97E-05	--	1.64E-06	3.01E-04
Benzo(a)fluorene	4.51E-07	1.26E-07	1.10E-08	1.12E-08	1.19E-09	4.70E-06	--	1.69E-08	1.49E-08
Benzo(b)fluorene	3.11E-07	2.62E-07	7.59E-09	2.23E-08	9.52E-10	3.87E-06	--	1.35E-08	2.68E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.43E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.56E-04	8.32E-04	6.51E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.09E-04	6.10E-03	4.00E-04	1.00E-05	5.04E-02	8.48E-04	8.10E-04	3.01E-04
Dibenz(a,h)anthracene	5.00E-02	2.06E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.44E-04	8.13E-04	3.00E-04
Perylene	1.00E-02	2.36E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.35E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.79E-06	3.76E-07	8.81E-07	5.92E-07	3.24E-09	2.11E-06	5.09E-08	6.49E-08	8.45E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.06E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.43E-03	2.81E-03	6.33E-02	1.13E-05	7.32E-04	1.43E-05	2.70E-05	6.38E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.54E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.99E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.02E-04
O-Terphenyl	1.33E-06	1.93E-07	3.25E-07	1.21E-07	3.02E-09	2.22E-05	4.94E-07	7.92E-07	5.01E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.18E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.05E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.23E-04	5.02E-01	5.54E-02	1.63E-01	4.94E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.01E-03	3.20E+01	1.71E-01	1.38E+00	3.32E-01
Chromium VI	1.54E-05	1.09E-05	7.52E-07	8.60E-07	1.07E-02	2.00E+00	1.07E-02	--	3.70E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.20E-04	6.00E+00	5.85E-03	1.44E-02	3.00E-02
Lead	1.69E+01	4.13E-01	1.26E+00	4.40E-02	1.08E-03	1.31E+01	1.46E-01	3.15E-01	7.81E-02
Mercury - Inorganic	7.32E-02	2.23E-02	1.98E-02	2.01E-03	1.01E-04	9.04E-02	1.30E-02	1.11E-02	9.41E-02
Methyl Mercury	1.48E-03	3.87E-05	1.26E-02	4.69E-04	1.50E-05	9.57E-06	1.70E-07	4.27E-05	9.57E-02
Nickel	1.23E+01	6.03E-01	2.08E+00	3.11E-01	6.29E-03	1.00E+01	7.88E-02	3.41E-01	5.25E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.11E-04	2.00E-01	9.00E-04	--	1.10E-02
Thallium	1.01E+00	2.13E-02	1.61E-01	1.09E-02	4.30E-04	1.01E+00	3.24E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.71E-02	1.05E-03	5.01E+00	1.36E-02	--	1.86E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.57E-02	8.10E+01	7.20E+00	3.78E+01	3.89E+01

Table M.160 - Detailed Process Upset Project Case Exposure Point Concentrations for the Bowmanville Valley Cons. Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	8.54E-07	1.46E-03	1.04E-07	4.00E-04	1.85E-09	2.95E-05	--	4.84E-07	3.00E-04
Benzo(a)fluorene	3.51E-07	1.13E-07	8.55E-09	1.02E-08	8.69E-09	3.44E-05	--	1.24E-07	1.09E-07
Benzo(b)fluorene	2.42E-07	2.42E-07	5.90E-09	2.07E-08	6.14E-09	2.50E-05	--	8.71E-08	1.73E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.43E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.45E-04	8.21E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.08E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.44E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.06E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.34E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.81E-06	3.76E-07	8.93E-07	5.92E-07	3.24E-09	2.37E-06	5.70E-08	7.29E-08	8.98E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.04E-02	8.41E-04	1.64E-03	1.09E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.80E-04	3.71E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.41E-03	2.81E-03	6.33E-02	1.06E-05	7.14E-04	1.40E-05	2.64E-05	6.34E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.52E-03	1.00E-01	2.41E-01	5.15E-03	7.66E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.01E-02	2.21E-02	9.31E-04	8.12E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.03E-03	5.03E-04	2.00E-02	2.49E-02	9.39E-04	6.05E-04
O-Terphenyl	1.03E-06	1.76E-07	2.52E-07	1.41E-07	1.96E-08	1.44E-04	2.99E-06	5.13E-06	3.25E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.19E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.05E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.02E-01	3.78E-01	7.67E-01	2.25E-01	1.23E-04	5.02E-01	5.54E-02	1.63E-01	4.94E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.01E-03	3.20E+01	1.71E-01	1.38E+00	3.32E-01
Chromium VI	2.81E-05	2.67E-05	1.37E-06	1.75E-06	1.00E-02	2.00E+00	1.07E-02	--	3.70E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.01E-02	5.20E-04	6.00E+00	5.85E-03	1.44E-02	3.00E-02
Lead	1.70E+01	4.17E-01	1.26E+00	4.40E-02	1.06E-03	1.31E+01	1.46E-01	3.15E-01	7.63E-02
Mercury - Inorganic	7.33E-02	2.24E-02	1.99E-02	2.01E-03	1.00E-04	6.36E-02	1.07E-02	7.81E-03	9.37E-02
Methyl Mercury	1.54E-03	4.78E-05	1.31E-02	4.69E-04	1.50E-05	2.09E-05	3.72E-07	9.31E-05	9.41E-02
Nickel	1.23E+01	6.08E-01	2.08E+00	3.12E-01	6.29E-03	1.00E+01	7.88E-02	3.41E-01	5.25E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.03E-02	6.55E-02	1.00E-02	1.11E-04	2.00E-01	9.00E-04	--	1.10E-02
Thallium	1.01E+00	2.33E-02	1.62E-01	1.17E-02	4.30E-04	1.01E+00	3.24E-04	--	1.00E-02
Tin	1.00E+01	1.82E-01	8.26E-01	9.82E-02	1.04E-03	5.01E+00	1.35E-02	--	1.78E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.57E-02	8.10E+01	7.20E+00	3.78E+01	3.89E+01

Table M.161 - Detailed Process Upset Project Case Exposure Point Concentrations for the Eco Baseline Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.90E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	4.31E-06	1.44E-03	5.25E-07	4.00E-04	1.06E-09	1.69E-05	--	2.78E-07	3.00E-04
Benzo(a)fluorene	1.77E-06	1.83E-07	4.31E-08	1.72E-08	3.22E-09	1.28E-05	--	4.60E-08	4.05E-08
Benzo(b)fluorene	1.22E-06	2.34E-07	2.98E-08	2.06E-08	2.23E-09	9.08E-06	--	3.17E-08	6.30E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.41E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.47E-04	8.23E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.12E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.44E-04	8.06E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.04E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.12E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.25E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.01E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.89E-06	3.76E-07	9.42E-07	5.94E-07	3.24E-09	2.40E-06	5.77E-08	7.38E-08	9.05E-07
PCB									
Aroclor 1254 (Total PCBs)	5.03E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.07E-02	8.41E-04	1.64E-03	1.15E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.79E-04	3.69E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.21E-03	1.32E-03	2.82E-03	6.31E-02	1.03E-05	7.08E-04	1.39E-05	2.62E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.61E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.21E-02	9.30E-04	8.09E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.03E-04	2.00E-02	2.49E-02	9.39E-04	6.05E-04
O-Terphenyl	5.22E-06	2.39E-07	1.27E-06	2.38E-07	8.69E-09	6.40E-05	1.37E-06	2.28E-06	1.44E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.06E-02
Arsenic	8.00E+00	3.21E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.01E-01	2.00E-01	5.05E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.07E-01	3.81E-01	7.72E-01	2.25E-01	1.07E-04	5.01E-01	5.53E-02	1.63E-01	3.02E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	7.81E-05	5.22E-05	3.82E-06	3.10E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.02E-02	5.06E-04	6.00E+00	5.85E-03	1.44E-02	2.86E-02
Lead	1.71E+01	4.25E-01	1.27E+00	4.41E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.18E-02
Mercury - Inorganic	7.81E-02	2.24E-02	2.12E-02	2.03E-03	1.00E-04	5.75E-02	1.02E-02	7.07E-03	9.36E-02
Methyl Mercury	1.80E-03	6.18E-05	1.53E-02	4.69E-04	1.50E-05	1.86E-05	3.31E-07	8.30E-05	9.38E-02
Nickel	1.23E+01	6.16E-01	2.09E+00	3.12E-01	6.09E-03	1.00E+01	7.88E-02	3.40E-01	4.94E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.07E-02	6.56E-02	1.00E-02	1.04E-04	2.00E-01	9.00E-04	--	1.03E-02
Thallium	1.03E+00	2.64E-02	1.66E-01	1.33E-02	3.40E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.84E-01	8.27E-01	1.01E-01	1.01E-03	5.00E+00	1.35E-02	--	8.89E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.92E+01	6.73E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.162 - Detailed Process Upset Project Case Exposure Point Concentrations for the Baseline Road & Rundle Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.90E-04	4.00E-04	1.00E-05	5.01E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	3.12E-06	1.53E-03	3.81E-07	4.00E-04	3.77E-09	6.00E-05	--	9.86E-07	3.01E-04
Benzo(a)fluorene	1.28E-06	3.21E-07	3.12E-08	2.89E-08	1.25E-08	4.94E-05	--	1.78E-07	1.57E-07
Benzo(b)fluorene	8.84E-07	6.52E-07	2.16E-08	5.56E-08	9.18E-09	3.73E-05	--	1.30E-07	2.59E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.54E-03	6.10E-03	4.01E-04	1.00E-05	5.06E-02	8.51E-04	8.28E-04	6.51E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.23E-04	6.10E-03	4.00E-04	1.00E-05	5.03E-02	8.47E-04	8.09E-04	3.01E-04
Dibenz(a,h)anthracene	5.00E-02	2.15E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.12E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.12E-04	3.00E-04
Perylene	1.00E-02	2.89E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.35E-04	3.00E-04
Pyrene	5.01E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.86E-06	3.89E-07	9.25E-07	5.97E-07	3.25E-09	2.65E-06	6.36E-08	8.17E-08	9.57E-07
PCB									
Aroclor 1254 (Total PCBs)	5.02E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.10E-02	8.41E-04	1.64E-03	1.21E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.80E-04	3.71E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.97E-03	2.82E-03	6.32E-02	1.14E-05	7.32E-04	1.43E-05	2.71E-05	6.39E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.52E-03	1.00E-01	2.41E-01	5.15E-03	7.69E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.02E-03	2.01E-02	2.21E-02	9.32E-04	8.20E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.03E-03	5.05E-04	2.00E-02	2.49E-02	9.39E-04	6.07E-04
O-Terphenyl	3.78E-06	4.89E-07	9.22E-07	3.50E-07	2.77E-08	2.04E-04	4.18E-06	7.26E-06	4.59E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.25E-02
Arsenic	8.00E+00	3.21E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.01E-01	2.00E-01	5.05E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.07E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.05E-01	3.80E-01	7.70E-01	2.25E-01	1.31E-04	5.02E-01	5.55E-02	1.63E-01	5.84E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.01E-03	3.20E+01	1.71E-01	1.38E+00	3.32E-01
Chromium VI	6.04E-05	4.80E-05	2.96E-06	3.06E-06	1.07E-02	2.00E+00	1.07E-02	--	3.70E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.02E-02	5.26E-04	6.00E+00	5.85E-03	1.44E-02	3.06E-02
Lead	1.70E+01	4.23E-01	1.27E+00	4.41E-02	1.07E-03	1.31E+01	1.46E-01	3.15E-01	7.77E-02
Mercury - Inorganic	7.91E-02	2.24E-02	2.14E-02	2.03E-03	1.01E-04	7.69E-02	1.19E-02	9.44E-03	9.39E-02
Methyl Mercury	1.71E-03	6.57E-05	1.45E-02	4.69E-04	1.50E-05	5.78E-05	1.03E-06	2.58E-04	9.47E-02
Nickel	1.23E+01	6.15E-01	2.08E+00	3.12E-01	6.39E-03	1.00E+01	7.89E-02	3.41E-01	5.40E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.06E-02	6.55E-02	1.00E-02	1.15E-04	2.00E-01	9.00E-04	--	1.13E-02
Thallium	1.03E+00	2.59E-02	1.64E-01	1.31E-02	4.72E-04	1.01E+00	3.25E-04	--	1.00E-02
Tin	1.00E+01	1.83E-01	8.27E-01	1.00E-01	1.06E-03	5.01E+00	1.36E-02	--	2.16E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.73E+01	5.74E+01	2.98E+01	4.59E-02	8.11E+01	7.20E+00	3.78E+01	3.91E+01

Table M.163 - Detailed Process Upset Project Case Exposure Point Concentrations for the Baseline Road & Courtice Road Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.90E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	4.31E-06	1.49E-03	5.25E-07	4.00E-04	3.93E-09	6.25E-05	--	1.03E-06	3.01E-04
Benzo(a)fluorene	1.77E-06	2.77E-07	4.31E-08	2.54E-08	1.19E-08	4.70E-05	--	1.69E-07	1.49E-07
Benzo(b)fluorene	1.22E-06	4.73E-07	2.97E-08	4.08E-08	8.92E-09	3.62E-05	--	1.27E-07	2.51E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.48E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.52E-04	8.28E-04	6.51E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.19E-04	6.10E-03	4.00E-04	1.00E-05	5.03E-02	8.47E-04	8.09E-04	3.01E-04
Dibenz(a,h)anthracene	5.00E-02	2.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.13E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.12E-04	3.00E-04
Perylene	1.00E-02	2.60E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.35E-04	3.00E-04
Pyrene	5.01E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.88E-06	3.83E-07	9.36E-07	5.95E-07	3.25E-09	2.64E-06	6.34E-08	8.14E-08	9.54E-07
PCB									
Aroclor 1254 (Total PCBs)	5.03E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.10E-02	8.41E-04	1.64E-03	1.21E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.80E-04	3.70E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.21E-03	1.68E-03	2.82E-03	6.31E-02	1.20E-05	7.47E-04	1.46E-05	2.76E-05	6.42E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.61E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.21E-02	9.30E-04	8.06E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.38E-04	6.04E-04
O-Terphenyl	5.21E-06	3.96E-07	1.27E-06	3.34E-07	2.49E-08	1.83E-04	3.78E-06	6.53E-06	4.13E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.02E-03	1.00E+00	5.13E-03	1.13E-02	1.31E-02
Arsenic	8.00E+00	3.21E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.01E-01	2.00E-01	5.05E-03	1.00E-01	1.00E-03	5.01E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.09E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.06E-01	3.80E-01	7.71E-01	2.25E-01	1.39E-04	5.03E-01	5.55E-02	1.63E-01	6.82E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.01E-03	3.20E+01	1.71E-01	1.38E+00	3.33E-01
Chromium VI	7.21E-05	4.86E-05	3.53E-06	3.21E-06	1.00E-02	2.00E+00	1.07E-02	--	3.70E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.02E-02	5.33E-04	6.00E+00	5.85E-03	1.44E-02	3.13E-02
Lead	1.71E+01	4.24E-01	1.27E+00	4.41E-02	1.09E-03	1.31E+01	1.46E-01	3.15E-01	7.93E-02
Mercury - Inorganic	7.94E-02	2.24E-02	2.15E-02	2.03E-03	1.00E-04	7.23E-02	1.15E-02	8.89E-03	9.38E-02
Methyl Mercury	1.77E-03	6.32E-05	1.50E-02	4.69E-04	1.50E-05	8.55E-05	1.52E-06	3.81E-04	9.45E-02
Nickel	1.23E+01	6.15E-01	2.09E+00	3.12E-01	6.49E-03	1.00E+01	7.89E-02	3.41E-01	5.56E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.06E-02	6.55E-02	1.00E-02	1.19E-04	2.00E-01	9.00E-04	--	1.17E-02
Thallium	1.03E+00	2.60E-02	1.65E-01	1.33E-02	5.17E-04	1.02E+00	3.26E-04	--	1.00E-02
Tin	1.00E+01	1.84E-01	8.27E-01	1.01E-01	1.07E-03	5.02E+00	1.36E-02	--	2.58E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.73E+01	5.74E+01	2.98E+01	4.61E-02	8.11E+01	7.20E+00	3.78E+01	3.93E+01

Table M.164 - Detailed Process Upset Project Case Exposure Point Concentrations for the Soper Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	6.56E-07	1.45E-03	8.00E-08	4.00E-04	1.08E-09	1.72E-05	--	2.83E-07	3.00E-04
Benzo(a)fluorene	2.69E-07	9.37E-08	6.57E-09	8.39E-09	4.72E-09	1.87E-05	--	6.74E-08	5.94E-08
Benzo(b)fluorene	1.86E-07	2.04E-07	4.53E-09	1.74E-08	3.31E-09	1.34E-05	--	4.70E-08	9.32E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.42E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.44E-04	8.20E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.07E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.29E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.80E-06	3.75E-07	8.86E-07	5.92E-07	3.24E-09	2.22E-06	5.35E-08	6.82E-08	8.67E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.03E-02	8.41E-04	1.64E-03	1.06E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.79E-04	3.70E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.36E-03	2.81E-03	6.33E-02	1.03E-05	7.07E-04	1.39E-05	2.61E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.62E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.21E-02	9.30E-04	8.08E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.03E-04	2.00E-02	2.49E-02	9.39E-04	6.05E-04
O-Terphenyl	7.94E-07	1.47E-07	1.94E-07	1.07E-07	1.12E-08	8.27E-05	1.75E-06	2.95E-06	1.86E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.09E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.02E-01	3.78E-01	7.66E-01	2.25E-01	1.11E-04	5.01E-01	5.54E-02	1.63E-01	3.46E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	2.05E-05	1.95E-05	1.00E-06	1.21E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.09E-04	6.00E+00	5.85E-03	1.44E-02	2.89E-02
Lead	1.69E+01	4.15E-01	1.26E+00	4.40E-02	1.03E-03	1.30E+01	1.45E-01	3.14E-01	7.30E-02
Mercury - Inorganic	7.26E-02	2.24E-02	1.97E-02	2.01E-03	1.00E-04	5.86E-02	1.03E-02	7.20E-03	9.36E-02
Methyl Mercury	1.50E-03	4.31E-05	1.28E-02	4.69E-04	1.50E-05	8.31E-06	1.48E-07	3.71E-05	9.39E-02
Nickel	1.23E+01	6.06E-01	2.08E+00	3.11E-01	6.14E-03	1.00E+01	7.88E-02	3.40E-01	5.01E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.05E-04	2.00E-01	9.00E-04	--	1.05E-02
Thallium	1.01E+00	2.24E-02	1.61E-01	1.12E-02	3.61E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.26E-01	9.76E-02	1.02E-03	5.00E+00	1.35E-02	--	1.10E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.53E-02	8.10E+01	7.20E+00	3.78E+01	3.86E+01

Table M.165 - Detailed Process Upset Project Case Exposure Point Concentrations for the Bowmanville Marsh Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	7.17E-07	1.46E-03	8.74E-08	4.00E-04	2.06E-09	3.28E-05	--	5.40E-07	3.00E-04
Benzo(a)fluorene	2.94E-07	1.20E-07	7.17E-09	1.07E-08	7.68E-09	3.05E-05	--	1.10E-07	9.67E-08
Benzo(b)fluorene	2.03E-07	2.67E-07	4.95E-09	2.27E-08	5.48E-09	2.23E-05	--	7.77E-08	1.54E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.44E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.47E-04	8.24E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.09E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.45E-04	8.07E-04	3.01E-04
Dibenz(a,h)anthracene	5.00E-02	2.06E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.38E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.76E-07	8.75E-07	5.92E-07	3.24E-09	2.19E-06	5.30E-08	6.75E-08	8.63E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.06E-02	8.41E-04	1.64E-03	1.11E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.80E-04	3.71E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.45E-03	2.81E-03	6.33E-02	1.03E-05	7.08E-04	1.39E-05	2.62E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.52E-03	1.00E-01	2.41E-01	5.15E-03	7.67E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.01E-02	2.21E-02	9.31E-04	8.16E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.03E-03	5.04E-04	2.00E-02	2.49E-02	9.39E-04	6.06E-04
O-Terphenyl	8.67E-07	1.90E-07	2.12E-07	1.34E-07	1.85E-08	1.36E-04	2.84E-06	4.86E-06	3.07E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.04E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.65E-01	2.25E-01	1.05E-04	5.00E-01	5.53E-02	1.63E-01	2.78E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	9.36E-06	7.41E-06	4.58E-07	4.77E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.04E-04	6.00E+00	5.85E-03	1.44E-02	2.84E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.16E-02
Mercury - Inorganic	7.26E-02	2.23E-02	1.97E-02	2.01E-03	1.00E-04	6.71E-02	1.10E-02	8.24E-03	9.37E-02
Methyl Mercury	1.45E-03	3.69E-05	1.23E-02	4.69E-04	1.50E-05	9.72E-06	1.73E-07	4.34E-05	9.43E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.07E-03	1.00E+01	7.87E-02	3.40E-01	4.90E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.03E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.00E+00	2.09E-02	1.61E-01	1.05E-02	3.29E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.66E-02	1.01E-03	5.00E+00	1.35E-02	--	7.93E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.166 - Detailed Process Upset Project Case Exposure Point Concentrations for the South of Site, Eco Baseline S7 Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.90E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	2.72E-06	1.43E-03	3.31E-07	4.00E-04	6.70E-10	1.07E-05	--	1.75E-07	3.00E-04
Benzo(a)fluorene	1.11E-06	1.16E-07	2.72E-08	1.09E-08	2.03E-09	8.05E-06	--	2.90E-08	2.56E-08
Benzo(b)fluorene	7.70E-07	1.49E-07	1.88E-08	1.31E-08	1.41E-09	5.73E-06	--	2.00E-08	3.97E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.39E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.45E-04	8.21E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.08E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.12E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.16E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.01E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.84E-06	3.73E-07	9.14E-07	5.92E-07	3.24E-09	2.24E-06	5.40E-08	6.89E-08	8.72E-07
PCB									
Aroclor 1254 (Total PCBs)	5.02E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.05E-02	8.41E-04	1.64E-03	1.09E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.69E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.23E-03	2.82E-03	6.32E-02	1.02E-05	7.05E-04	1.38E-05	2.61E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.57E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.20E-02	9.29E-04	8.03E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	3.29E-06	1.52E-07	8.02E-07	1.50E-07	5.48E-09	4.04E-05	8.77E-07	1.44E-06	9.09E-06
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.04E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.01E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.04E-01	3.79E-01	7.69E-01	2.25E-01	1.05E-04	5.00E-01	5.53E-02	1.63E-01	2.70E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	4.92E-05	3.30E-05	2.41E-06	1.96E-06	1.07E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.01E-02	5.04E-04	6.00E+00	5.85E-03	1.44E-02	2.84E-02
Lead	1.70E+01	4.19E-01	1.27E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.11E-02
Mercury - Inorganic	7.51E-02	2.24E-02	2.03E-02	2.02E-03	1.00E-04	5.47E-02	9.89E-03	6.73E-03	9.36E-02
Methyl Mercury	1.65E-03	4.97E-05	1.40E-02	4.69E-04	1.50E-05	1.17E-05	2.09E-07	5.24E-05	9.37E-02
Nickel	1.23E+01	6.10E-01	2.08E+00	3.12E-01	6.06E-03	1.00E+01	7.87E-02	3.40E-01	4.89E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.04E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.02E+00	2.41E-02	1.63E-01	1.21E-02	3.25E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.83E-01	8.27E-01	9.90E-02	1.01E-03	5.00E+00	1.35E-02	--	7.46E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.167 - Detailed Process Upset Project Case Exposure Point Concentrations for the Sports Fields Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.04E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.01E-05	5.02E-02	8.44E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.01E-05	5.00E-02	8.42E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.90E-04	4.00E-04	1.02E-05	5.02E-02	8.44E-04	1.96E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.01E-02	3.50E-04	3.44E-04	3.00E-04
Benzo(e)pyrene	2.45E-06	1.48E-03	2.99E-07	4.00E-04	1.30E-08	2.07E-04	--	3.40E-06	3.02E-04
Benzo(a)fluorene	1.01E-06	2.10E-07	2.46E-08	1.97E-08	4.95E-08	1.96E-04	--	7.07E-07	6.23E-07
Benzo(b)fluorene	6.95E-07	4.04E-07	1.70E-08	3.50E-08	3.39E-08	1.38E-04	--	4.82E-07	9.56E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.02E-02	8.44E-04	1.70E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.47E-03	6.10E-03	4.00E-04	1.00E-05	5.32E-02	8.93E-04	8.69E-04	6.53E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.76E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.15E-04	6.10E-03	4.00E-04	1.00E-05	5.16E-02	8.67E-04	8.29E-04	3.05E-04
Dibenz(a,h)anthracene	5.00E-02	2.09E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.12E-04	6.10E-03	4.00E-04	1.00E-05	5.05E-02	8.50E-04	8.19E-04	3.01E-04
Perylene	1.00E-02	2.54E-04	1.22E-03	4.00E-04	1.00E-05	2.01E-02	3.49E-04	3.35E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.01E-05	5.03E-02	8.46E-04	1.89E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.83E-06	3.80E-07	9.03E-07	5.94E-07	3.25E-09	4.09E-06	9.66E-08	1.26E-07	1.25E-06
PCB									
Aroclor 1254 (Total PCBs)	5.02E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.48E-02	8.39E-04	1.64E-03	2.34E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.01E-05	1.00E-02	1.79E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.02E-05	1.10E-02	1.96E-04	4.04E-04	1.02E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.01E-05	1.02E-02	1.83E-04	3.72E-04	1.01E-02
Pentachlorophenol	1.20E-03	1.62E-03	2.82E-03	6.32E-02	1.08E-05	7.19E-04	1.41E-05	2.66E-05	6.35E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.94E-04	5.01E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.95E-04	1.75E-03	1.00E-01	2.41E-01	5.16E-03	9.97E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.25E-03	1.20E-03	2.09E-02	2.30E-02	9.70E-04	1.10E-03
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.02E-04	3.01E-03	3.31E-03	1.40E-04	7.95E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.04E-03	5.57E-04	2.03E-02	2.53E-02	9.51E-04	6.68E-04
O-Terphenyl	2.97E-06	3.14E-07	7.25E-07	4.27E-07	1.36E-07	1.00E-03	1.95E-05	3.58E-05	2.27E-04
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.11E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.03E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.03E-01	3.79E-01	7.68E-01	2.25E-01	1.14E-04	5.01E-01	5.54E-02	1.63E-01	3.79E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	3.83E-05	2.62E-05	1.87E-06	1.65E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.01E-02	5.11E-04	6.00E+00	5.85E-03	1.44E-02	2.91E-02
Lead	1.70E+01	4.17E-01	1.27E+00	4.40E-02	1.06E-03	1.31E+01	1.46E-01	3.15E-01	7.62E-02
Mercury - Inorganic	7.61E-02	2.24E-02	2.06E-02	2.02E-03	1.02E-04	1.32E-01	1.60E-02	1.63E-02	9.47E-02
Methyl Mercury	1.59E-03	4.94E-05	1.36E-02	4.69E-04	1.50E-05	1.77E-05	3.15E-07	7.89E-05	9.73E-02
Nickel	1.23E+01	6.08E-01	2.08E+00	3.12E-01	6.17E-03	1.00E+01	7.88E-02	3.40E-01	5.07E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.03E-02	6.55E-02	1.00E-02	1.07E-04	2.00E-01	9.00E-04	--	1.06E-02
Thallium	1.02E+00	2.32E-02	1.63E-01	1.17E-02	3.76E-04	1.01E+00	3.23E-04	--	1.00E-02
Tin	1.00E+01	1.82E-01	8.26E-01	9.84E-02	1.03E-03	5.01E+00	1.35E-02	--	1.36E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.54E-02	8.10E+01	7.20E+00	3.78E+01	3.87E+01

Table M.168 - Detailed Process Upset Project Case Exposure Point Concentrations for the Water Pollution Control Plant Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.90E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	3.51E-06	1.46E-03	4.28E-07	4.00E-04	8.66E-10	1.38E-05	--	2.27E-07	3.00E-04
Benzo(a)fluorene	1.44E-06	1.90E-07	3.51E-08	1.75E-08	2.63E-09	1.04E-05	--	3.75E-08	3.31E-08
Benzo(b)fluorene	9.94E-07	2.94E-07	2.43E-08	2.55E-08	1.82E-09	7.40E-06	--	2.59E-08	5.13E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.43E-03	6.10E-03	4.00E-04	1.00E-05	5.03E-02	8.46E-04	8.22E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.13E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.06E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.12E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.35E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.01E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.86E-06	3.78E-07	9.25E-07	5.94E-07	3.24E-09	2.30E-06	5.55E-08	7.09E-08	8.85E-07
PCB									
Aroclor 1254 (Total PCBs)	5.02E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.06E-02	8.41E-04	1.64E-03	1.12E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.69E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.43E-03	2.82E-03	6.31E-02	1.03E-05	7.07E-04	1.39E-05	2.61E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.59E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.21E-02	9.30E-04	8.06E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.38E-04	6.04E-04
O-Terphenyl	4.25E-06	2.62E-07	1.04E-06	2.24E-07	7.08E-09	5.22E-05	1.12E-06	1.86E-06	1.18E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.04E-02
Arsenic	8.00E+00	3.21E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.01E-01	2.00E-01	5.05E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.05E-01	3.80E-01	7.70E-01	2.25E-01	1.06E-04	5.00E-01	5.53E-02	1.63E-01	2.82E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	6.07E-05	4.07E-05	2.97E-06	2.42E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.02E-02	5.05E-04	6.00E+00	5.85E-03	1.44E-02	2.85E-02
Lead	1.70E+01	4.22E-01	1.27E+00	4.41E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.14E-02
Mercury - Inorganic	7.71E-02	2.24E-02	2.09E-02	2.02E-03	1.00E-04	5.66E-02	1.01E-02	6.96E-03	9.36E-02
Methyl Mercury	1.71E-03	5.61E-05	1.45E-02	4.69E-04	1.50E-05	1.45E-05	2.58E-07	6.46E-05	9.38E-02
Nickel	1.23E+01	6.13E-01	2.09E+00	3.12E-01	6.07E-03	1.00E+01	7.87E-02	3.40E-01	4.91E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.05E-02	6.55E-02	1.00E-02	1.03E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.03E+00	2.50E-02	1.64E-01	1.26E-02	3.31E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.83E-01	8.27E-01	9.97E-02	1.01E-03	5.00E+00	1.35E-02	--	8.03E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.73E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.169 - Detailed Process Upset Project Case Exposure Point Concentrations for the Future Industrial Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.90E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	6.10E-06	1.45E-03	7.44E-07	4.00E-04	1.51E-09	2.40E-05	--	3.94E-07	3.00E-04
Benzo(a)fluorene	2.50E-06	2.55E-07	6.10E-08	2.40E-08	4.56E-09	1.81E-05	--	6.51E-08	5.74E-08
Benzo(b)fluorene	1.73E-06	3.20E-07	4.22E-08	2.83E-08	3.16E-09	1.29E-05	--	4.49E-08	8.92E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.43E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.50E-04	8.26E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.17E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.45E-04	8.07E-04	3.01E-04
Dibenz(a,h)anthracene	5.00E-02	2.06E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.13E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.12E-04	3.00E-04
Perylene	1.00E-02	2.33E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.01E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.95E-06	3.80E-07	9.74E-07	5.95E-07	3.24E-09	2.58E-06	6.20E-08	7.95E-08	9.42E-07
PCB									
Aroclor 1254 (Total PCBs)	5.04E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.10E-02	8.41E-04	1.64E-03	1.21E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.80E-04	3.70E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.21E-03	1.40E-03	2.83E-03	6.30E-02	1.05E-05	7.11E-04	1.40E-05	2.63E-05	6.34E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.52E-03	1.00E-01	2.41E-01	5.15E-03	7.66E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.01E-02	2.21E-02	9.31E-04	8.15E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.03E-03	5.04E-04	2.00E-02	2.49E-02	9.39E-04	6.06E-04
O-Terphenyl	7.39E-06	3.31E-07	1.80E-06	3.33E-07	1.23E-08	9.06E-05	1.91E-06	3.23E-06	2.04E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.08E-02
Arsenic	8.00E+00	3.21E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.01E-01	2.00E-01	5.05E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.80E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.09E-01	3.82E-01	7.75E-01	2.25E-01	1.10E-04	5.01E-01	5.54E-02	1.63E-01	3.38E-02
Chromium (Total)	2.22E+01	9.11E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	1.11E-04	7.43E-05	5.44E-06	4.42E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.03E-02	5.09E-04	6.00E+00	5.85E-03	1.44E-02	2.89E-02
Lead	1.71E+01	4.31E-01	1.27E+00	4.41E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.26E-02
Mercury - Inorganic	8.14E-02	2.25E-02	2.21E-02	2.04E-03	1.00E-04	6.06E-02	1.04E-02	7.44E-03	9.37E-02
Methyl Mercury	1.96E-03	7.56E-05	1.67E-02	4.69E-04	1.50E-05	2.65E-05	4.72E-07	1.18E-04	9.40E-02
Nickel	1.24E+01	6.23E-01	2.09E+00	3.13E-01	6.13E-03	1.00E+01	7.88E-02	3.40E-01	5.00E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.01E-01	2.10E-02	6.56E-02	1.00E-02	1.05E-04	2.00E-01	9.00E-04	--	1.04E-02
Thallium	1.05E+00	2.91E-02	1.68E-01	1.47E-02	3.57E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.01E+01	1.86E-01	8.29E-01	1.03E-01	1.02E-03	5.00E+00	1.35E-02	--	1.05E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.92E+01	6.73E+01	5.74E+01	2.98E+01	4.53E-02	8.10E+01	7.20E+00	3.78E+01	3.86E+01

Table M.170 - Detailed Process Upset Project Case Exposure Point Concentrations for the Harmony Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	5.12E-07	1.43E-03	6.25E-08	4.00E-04	9.12E-11	1.45E-06	--	2.39E-08	3.00E-04
Benzo(a)fluorene	2.10E-07	5.68E-08	5.13E-09	5.07E-09	2.14E-10	8.46E-07	--	3.05E-09	2.69E-09
Benzo(b)fluorene	1.45E-07	1.18E-07	3.54E-09	1.00E-08	1.55E-10	6.31E-07	--	2.20E-09	4.38E-09
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.39E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.04E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.03E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.10E-04	3.00E-04
Perylene	1.00E-02	2.16E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.71E-07	8.76E-07	5.91E-07	3.24E-09	2.00E-06	4.84E-08	6.15E-08	8.23E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.01E-02	8.41E-04	1.64E-03	1.01E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.67E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.23E-03	2.81E-03	6.33E-02	1.02E-05	7.05E-04	1.38E-05	2.61E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.50E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.20E-03	1.00E-03	2.00E-02	2.20E-02	9.28E-04	7.93E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.92E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.00E-04	2.00E-02	2.49E-02	9.38E-04	6.01E-04
O-Terphenyl	6.20E-07	8.73E-08	1.51E-07	5.40E-08	4.04E-10	2.97E-06	7.10E-08	1.06E-07	6.70E-07
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.04E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.65E-01	2.25E-01	1.05E-04	5.00E-01	5.53E-02	1.63E-01	2.76E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	9.68E-06	7.75E-06	4.74E-07	4.96E-07	1.07E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.04E-04	6.00E+00	5.85E-03	1.44E-02	2.84E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.11E-02
Mercury - Inorganic	7.14E-02	2.23E-02	1.94E-02	2.00E-03	1.00E-04	5.09E-02	9.51E-03	6.26E-03	9.35E-02
Methyl Mercury	1.45E-03	3.49E-05	1.23E-02	4.69E-04	1.50E-05	3.97E-06	7.08E-08	1.77E-05	9.35E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.06E-03	1.00E+01	7.87E-02	3.40E-01	4.90E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.03E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.00E+00	2.10E-02	1.61E-01	1.05E-02	3.29E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.67E-02	1.01E-03	5.00E+00	1.35E-02	--	7.67E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.171 - Detailed Process Upset Project Case Exposure Point Concentrations for the Farewell Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	5.76E-07	1.43E-03	7.02E-08	4.00E-04	8.26E-10	1.32E-05	--	2.16E-07	3.00E-04
Benzo(a)fluorene	2.36E-07	5.73E-08	5.76E-09	5.19E-09	2.89E-09	1.15E-05	--	4.13E-08	3.64E-08
Benzo(b)fluorene	1.63E-07	1.16E-07	3.98E-09	9.87E-09	2.16E-09	8.77E-06	--	3.06E-08	6.08E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.39E-03	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.20E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.04E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.04E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.03E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.16E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.71E-07	8.76E-07	5.91E-07	3.24E-09	2.08E-06	5.03E-08	6.40E-08	8.40E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.02E-02	8.41E-04	1.64E-03	1.04E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.79E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.68E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.63E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.23E-03	2.81E-03	6.33E-02	1.02E-05	7.06E-04	1.38E-05	2.61E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.86E-04	1.50E-03	1.00E-01	2.41E-01	5.15E-03	7.55E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.00E-03	2.00E-02	2.20E-02	9.29E-04	7.99E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.01E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	6.97E-07	8.72E-08	1.70E-07	6.71E-08	6.22E-09	4.58E-05	9.92E-07	1.63E-06	1.03E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.04E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.65E-01	2.25E-01	1.05E-04	5.00E-01	5.53E-02	1.63E-01	2.76E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	1.05E-05	8.07E-06	5.13E-07	5.15E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.04E-04	6.00E+00	5.85E-03	1.44E-02	2.84E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.14E-02
Mercury - Inorganic	7.14E-02	2.23E-02	1.94E-02	2.01E-03	1.00E-04	5.44E-02	9.85E-03	6.68E-03	9.36E-02
Methyl Mercury	1.45E-03	3.51E-05	1.24E-02	4.69E-04	1.50E-05	4.62E-06	8.22E-08	2.06E-05	9.37E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.06E-03	1.00E+01	7.87E-02	3.40E-01	4.90E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.00E+00	2.10E-02	1.61E-01	1.05E-02	3.28E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.25E-01	9.67E-02	1.01E-03	5.00E+00	1.35E-02	--	7.79E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.172 - Detailed Process Upset Project Case Exposure Point Concentrations for the Farm A Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	2.04E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.01E-05	5.02E-02	8.45E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.01E-05	5.00E-02	8.42E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.90E-04	4.00E-04	1.02E-05	5.02E-02	8.45E-04	1.96E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.76E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.02E-02	3.51E-04	3.45E-04	3.00E-04
Benzo(e)pyrene	3.12E-06	1.48E-03	3.80E-07	4.00E-04	1.65E-08	2.62E-04	--	4.31E-06	3.02E-04
Benzo(a)fluorene	1.28E-06	2.20E-07	3.12E-08	2.10E-08	6.29E-08	2.49E-04	--	8.97E-07	7.91E-07
Benzo(b)fluorene	8.82E-07	3.93E-07	2.15E-08	3.44E-08	4.31E-08	1.75E-04	--	6.11E-07	1.21E-06
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.02E-02	8.45E-04	1.70E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.46E-03	6.10E-03	4.00E-04	1.00E-05	5.40E-02	9.06E-04	8.83E-04	6.54E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	1.70E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	1.76E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.15E-04	6.10E-03	4.00E-04	1.00E-05	5.20E-02	8.74E-04	8.36E-04	3.06E-04
Dibenz(a,h)anthracene	5.00E-02	2.09E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.19E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.12E-04	6.10E-03	4.00E-04	1.00E-05	5.07E-02	8.52E-04	8.21E-04	3.01E-04
Perylene	1.00E-02	2.51E-04	1.22E-03	4.00E-04	1.00E-05	2.01E-02	3.49E-04	3.35E-04	3.00E-04
Pyrene	5.01E-02	1.19E-02	1.22E-03	4.00E-04	1.01E-05	5.03E-02	8.47E-04	1.89E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.85E-06	3.80E-07	9.16E-07	5.94E-07	3.26E-09	4.84E-06	1.14E-07	1.49E-07	1.40E-06
PCB									
Aroclor 1254 (Total PCBs)	5.02E-02	1.00E-02	1.11E-02	1.00E-02	2.01E-05	5.61E-02	8.38E-04	1.64E-03	2.70E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.01E-02	1.81E-02	2.55E-03	2.40E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.01E-05	1.00E-02	1.79E-04	3.81E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.03E-05	1.13E-02	2.00E-04	4.14E-04	1.02E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.01E-05	1.03E-02	1.84E-04	3.75E-04	1.01E-02
Pentachlorophenol	1.20E-03	1.58E-03	2.82E-03	6.32E-02	1.10E-05	7.24E-04	1.42E-05	2.68E-05	6.37E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.94E-04	5.01E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.97E-04	1.81E-03	1.00E-01	2.41E-01	5.16E-03	1.06E-04
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.26E-03	1.25E-03	2.11E-02	2.33E-02	9.81E-04	1.19E-03
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.02E-04	3.01E-03	3.31E-03	1.40E-04	7.96E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.04E-03	5.72E-04	2.04E-02	2.54E-02	9.55E-04	6.85E-04
O-Terphenyl	3.77E-06	3.20E-07	9.20E-07	5.06E-07	1.73E-07	1.28E-03	2.45E-05	4.55E-05	2.88E-04
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.15E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.01E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.62E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.04E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.04E-01	3.79E-01	7.69E-01	2.25E-01	1.18E-04	5.01E-01	5.54E-02	1.63E-01	4.37E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.01E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	5.17E-05	3.52E-05	2.53E-06	2.22E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.47E-01	1.37E-01	5.02E-02	5.15E-04	6.00E+00	5.85E-03	1.44E-02	2.95E-02
Lead	1.70E+01	4.20E-01	1.27E+00	4.40E-02	1.08E-03	1.31E+01	1.46E-01	3.15E-01	7.83E-02
Mercury - Inorganic	7.71E-02	2.24E-02	2.09E-02	2.02E-03	1.02E-04	1.46E-01	1.69E-02	1.79E-02	9.49E-02
Methyl Mercury	1.66E-03	5.44E-05	1.41E-02	4.69E-04	1.50E-05	2.39E-05	4.25E-07	1.06E-04	9.79E-02
Nickel	1.23E+01	6.11E-01	2.08E+00	3.12E-01	6.23E-03	1.00E+01	7.88E-02	3.40E-01	5.16E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.05E-02	6.55E-02	1.00E-02	1.09E-04	2.00E-01	9.00E-04	--	1.08E-02
Thallium	1.02E+00	2.43E-02	1.64E-01	1.23E-02	4.03E-04	1.01E+00	3.23E-04	--	1.00E-02
Tin	1.00E+01	1.83E-01	8.27E-01	9.93E-02	1.04E-03	5.01E+00	1.35E-02	--	1.66E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.55E-02	8.10E+01	7.20E+00	3.78E+01	3.88E+01

Table M.173 - Detailed Process Upset Project Case Exposure Point Concentrations for the Farm B Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	1.47E-06	1.48E-03	1.79E-07	4.00E-04	1.77E-09	2.82E-05	--	4.64E-07	3.00E-04
Benzo(a)fluorene	6.02E-07	1.81E-07	1.47E-08	1.62E-08	5.86E-09	2.32E-05	--	8.37E-08	7.38E-08
Benzo(b)fluorene	4.16E-07	3.84E-07	1.01E-08	3.26E-08	4.32E-09	1.76E-05	--	6.13E-08	1.22E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.47E-03	6.10E-03	4.00E-04	1.00E-05	5.03E-02	8.46E-04	8.22E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.13E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.44E-04	8.06E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.09E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.53E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.80E-06	3.79E-07	8.85E-07	5.93E-07	3.24E-09	2.19E-06	5.29E-08	6.74E-08	8.62E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.05E-02	8.41E-04	1.64E-03	1.10E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.79E-04	3.69E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.61E-03	2.81E-03	6.33E-02	1.06E-05	7.15E-04	1.40E-05	2.64E-05	6.35E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.59E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.21E-02	9.30E-04	8.05E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.38E-04	6.04E-04
O-Terphenyl	1.78E-06	2.81E-07	4.33E-07	1.87E-07	1.30E-08	9.59E-05	2.02E-06	3.42E-06	2.16E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.08E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.02E-01	3.78E-01	7.66E-01	2.25E-01	1.10E-04	5.01E-01	5.54E-02	1.63E-01	3.36E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	1.98E-05	1.39E-05	9.71E-07	9.06E-07	1.07E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.09E-04	6.00E+00	5.85E-03	1.44E-02	2.89E-02
Lead	1.69E+01	4.14E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.25E-02
Mercury - Inorganic	7.43E-02	2.23E-02	2.01E-02	2.01E-03	1.00E-04	6.27E-02	1.06E-02	7.70E-03	9.37E-02
Methyl Mercury	1.50E-03	4.22E-05	1.28E-02	4.69E-04	1.50E-05	1.90E-05	3.38E-07	8.45E-05	9.41E-02
Nickel	1.23E+01	6.04E-01	2.08E+00	3.11E-01	6.13E-03	1.00E+01	7.88E-02	3.40E-01	5.00E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.05E-04	2.00E-01	9.00E-04	--	1.04E-02
Thallium	1.01E+00	2.17E-02	1.61E-01	1.09E-02	3.56E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.26E-01	9.73E-02	1.02E-03	5.00E+00	1.35E-02	--	1.04E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.53E-02	8.10E+01	7.20E+00	3.78E+01	3.86E+01

Table M.174 - Detailed Process Upset Project Case Exposure Point Concentrations for the Farm C Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	9.44E-07	1.44E-03	1.15E-07	4.00E-04	1.35E-09	2.16E-05	--	3.54E-07	3.00E-04
Benzo(a)fluorene	3.87E-07	8.63E-08	9.44E-09	7.84E-09	4.74E-09	1.88E-05	--	6.76E-08	5.97E-08
Benzo(b)fluorene	2.67E-07	1.70E-07	6.52E-09	1.45E-08	3.54E-09	1.44E-05	--	5.02E-08	9.97E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.41E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.45E-04	8.21E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.06E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.04E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.23E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.79E-06	3.73E-07	8.83E-07	5.91E-07	3.24E-09	2.16E-06	5.21E-08	6.64E-08	8.55E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.03E-02	8.41E-04	1.64E-03	1.06E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.69E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.30E-03	2.81E-03	6.33E-02	1.04E-05	7.09E-04	1.39E-05	2.62E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.58E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.20E-02	9.30E-04	8.04E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	1.14E-06	1.30E-07	2.79E-07	1.04E-07	1.02E-08	7.51E-05	1.60E-06	2.67E-06	1.69E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.07E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.02E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.78E-01	7.65E-01	2.25E-01	1.08E-04	5.01E-01	5.54E-02	1.63E-01	3.17E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	1.75E-05	1.33E-05	8.57E-07	8.51E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.07E-04	6.00E+00	5.85E-03	1.44E-02	2.87E-02
Lead	1.69E+01	4.14E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.23E-02
Mercury - Inorganic	7.24E-02	2.23E-02	1.96E-02	2.01E-03	1.00E-04	5.72E-02	1.01E-02	7.03E-03	9.36E-02
Methyl Mercury	1.49E-03	3.88E-05	1.27E-02	4.69E-04	1.50E-05	7.71E-06	1.37E-07	3.44E-05	9.38E-02
Nickel	1.23E+01	6.04E-01	2.08E+00	3.11E-01	6.11E-03	1.00E+01	7.88E-02	3.40E-01	4.97E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.02E-02	6.55E-02	1.00E-02	1.04E-04	2.00E-01	9.00E-04	--	1.04E-02
Thallium	1.01E+00	2.16E-02	1.61E-01	1.09E-02	3.47E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.81E-01	8.26E-01	9.72E-02	1.02E-03	5.00E+00	1.35E-02	--	9.66E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.52E-02	8.10E+01	7.20E+00	3.78E+01	3.85E+01

Table M.175 - Detailed Process Upset Project Case Exposure Point Concentrations for the Robinson Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	2.00E-06	1.48E-03	2.44E-07	4.00E-04	1.95E-09	3.11E-05	--	5.10E-07	3.00E-04
Benzo(a)fluorene	8.22E-07	1.83E-07	2.00E-08	1.65E-08	6.86E-09	2.72E-05	--	9.79E-08	8.63E-08
Benzo(b)fluorene	5.67E-07	3.59E-07	1.38E-08	3.07E-08	4.97E-09	2.02E-05	--	7.06E-08	1.40E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.46E-03	6.10E-03	4.00E-04	1.00E-05	5.03E-02	8.46E-04	8.22E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.13E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.44E-04	8.06E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.08E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.11E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.49E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.01E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.81E-06	3.79E-07	8.95E-07	5.93E-07	3.24E-09	2.26E-06	5.44E-08	6.95E-08	8.76E-07
PCB									
Aroclor 1254 (Total PCBs)	5.01E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.06E-02	8.41E-04	1.64E-03	1.12E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.79E-04	3.70E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.56E-03	2.81E-03	6.32E-02	1.09E-05	7.22E-04	1.42E-05	2.67E-05	6.36E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.62E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.21E-02	9.30E-04	8.09E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.03E-04	2.00E-02	2.49E-02	9.39E-04	6.05E-04
O-Terphenyl	2.43E-06	2.75E-07	5.92E-07	2.03E-07	1.54E-08	1.14E-04	2.38E-06	4.05E-06	2.56E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.01E-03	1.00E+00	5.13E-03	1.13E-02	1.13E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.04E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.03E-01	3.78E-01	7.67E-01	2.25E-01	1.17E-04	5.01E-01	5.54E-02	1.63E-01	4.16E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.01E-03	3.20E+01	1.71E-01	1.38E+00	3.31E-01
Chromium VI	3.01E-05	2.05E-05	1.47E-06	1.36E-06	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.01E-02	5.14E-04	6.00E+00	5.85E-03	1.44E-02	2.94E-02
Lead	1.70E+01	4.16E-01	1.26E+00	4.40E-02	1.04E-03	1.30E+01	1.45E-01	3.14E-01	7.40E-02
Mercury - Inorganic	7.51E-02	2.24E-02	2.03E-02	2.02E-03	1.00E-04	6.24E-02	1.06E-02	7.66E-03	9.37E-02
Methyl Mercury	1.55E-03	4.56E-05	1.32E-02	4.69E-04	1.50E-05	3.79E-05	6.75E-07	1.69E-04	9.41E-02
Nickel	1.23E+01	6.06E-01	2.08E+00	3.12E-01	6.21E-03	1.00E+01	7.88E-02	3.40E-01	5.13E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.03E-02	6.55E-02	1.00E-02	1.08E-04	2.00E-01	9.00E-04	--	1.07E-02
Thallium	1.01E+00	2.25E-02	1.62E-01	1.14E-02	3.93E-04	1.01E+00	3.23E-04	--	1.00E-02
Tin	1.00E+01	1.82E-01	8.26E-01	9.79E-02	1.03E-03	5.01E+00	1.35E-02	--	1.39E-01
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.91E+01	6.72E+01	5.74E+01	2.98E+01	4.55E-02	8.10E+01	7.20E+00	3.78E+01	3.87E+01

Table M.176 - Detailed Process Upset Project Case Exposure Point Concentrations for the Bennett Creek Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.86E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	5.28E-07	1.45E-03	6.44E-08	4.00E-04	8.16E-10	1.30E-05	--	2.14E-07	3.00E-04
Benzo(a)fluorene	2.16E-07	8.70E-08	5.28E-09	7.73E-09	2.89E-09	1.15E-05	--	4.12E-08	3.64E-08
Benzo(b)fluorene	1.49E-07	1.94E-07	3.65E-09	1.65E-08	2.00E-09	8.11E-06	--	2.83E-08	5.62E-08
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.42E-03	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.45E-04	8.21E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.06E-04	6.10E-03	4.00E-04	1.00E-05	5.01E-02	8.43E-04	8.05E-04	3.00E-04
Dibenz(a,h)anthracene	5.00E-02	2.05E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.28E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.73E-07	8.73E-07	5.91E-07	3.24E-09	2.10E-06	5.08E-08	6.46E-08	8.44E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.03E-02	8.41E-04	1.64E-03	1.09E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.69E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.35E-03	2.81E-03	6.33E-02	1.03E-05	7.06E-04	1.39E-05	2.61E-05	6.32E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.59E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.00E-02	2.20E-02	9.29E-04	8.03E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.02E-03	5.02E-04	2.00E-02	2.49E-02	9.38E-04	6.03E-04
O-Terphenyl	6.39E-07	1.38E-07	1.56E-07	8.85E-08	7.71E-09	5.68E-05	1.22E-06	2.02E-06	1.28E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.03E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.64E-01	2.25E-01	1.04E-04	5.00E-01	5.53E-02	1.63E-01	2.65E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	7.23E-06	5.77E-06	3.54E-07	3.72E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.03E-04	6.00E+00	5.85E-03	1.44E-02	2.83E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.01E-03	1.30E+01	1.45E-01	3.14E-01	7.10E-02
Mercury - Inorganic	7.19E-02	2.23E-02	1.95E-02	2.01E-03	1.00E-04	5.78E-02	1.02E-02	7.11E-03	9.36E-02
Methyl Mercury	1.44E-03	3.49E-05	1.22E-02	4.69E-04	1.50E-05	7.49E-06	1.33E-07	3.34E-05	9.39E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.05E-03	1.00E+01	7.87E-02	3.40E-01	4.88E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.00E+00	2.07E-02	1.61E-01	1.04E-02	3.23E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.65E-02	1.01E-03	5.00E+00	1.35E-02	--	7.22E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01

Table M.177 - Detailed Process Upset Project Case Exposure Point Concentrations for the Oshawa Creek Conservation Area Receptor Location

Constituent	Soil Conc. (mg/kg dw)	Terrestrial Plant Conc. (mg/kg ww)	Terrestrial Invertebrate Conc. (mg/kg ww)	Terrestrial Mammal Conc. (mg/kg ww)	Surface Water Conc. (mg/L)	Freshwater Sediment Conc. (mg/kg dw)	Freshwater Aquatic Plant Conc. (mg/kg ww)	Freshwater Benthic Invertebrate Conc. (mg/kg ww)	Freshwater Fish Tissue Conc. (mg/kg ww)
Polycyclic Aromatic Hydrocarbons									
Low Molecular Weight PAHs									
Acenaphthene	5.00E-02	5.87E-03	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.05E-04	1.11E-03
Acenaphthylene	5.00E-02	2.40E-04	2.46E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	2.03E-04	3.00E-04
Anthracene	5.00E-02	2.74E-03	2.45E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.95E-04	3.00E-04
Fluoranthene	5.00E-02	2.51E-02	2.44E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.87E-04	7.90E-04
Fluorene	5.00E-02	1.67E-02	2.45E-03	4.00E-04	2.00E-05	5.00E-02	8.41E-04	2.00E-04	1.29E-03
Phenanthrene	1.00E-02	5.81E-02	4.89E-04	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.95E-04	2.72E-03
High Molecular Weight PAHs									
Benz(a)anthracene	5.00E-02	7.80E-04	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.41E-04	1.75E-04	3.00E-04
Benzo(a)pyrene	2.00E-02	1.97E-02	2.44E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.42E-04	3.00E-04
Benzo(e)pyrene	5.94E-07	1.44E-03	7.25E-08	4.00E-04	1.95E-09	3.11E-05	--	5.12E-07	3.00E-04
Benzo(a)fluorene	2.44E-07	7.93E-08	5.94E-09	7.16E-09	6.68E-09	2.65E-05	--	9.53E-08	8.41E-08
Benzo(b)fluorene	1.68E-07	1.71E-07	4.10E-09	1.46E-08	5.06E-09	2.06E-05	--	7.18E-08	1.43E-07
Benzo(b)fluoranthene	5.00E-02	1.53E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Benzo(g,h,i)perylene	5.00E-02	1.41E-03	6.10E-03	4.00E-04	1.00E-05	5.03E-02	8.46E-04	8.22E-04	6.50E-04
Benzo(k)fluoranthene	5.00E-02	1.04E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.69E-04	3.00E-04
Chrysene	5.00E-02	3.51E-03	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.75E-04	5.30E-04
Dibenz(a,c)anthracene	5.00E-02	2.06E-04	6.10E-03	4.00E-04	1.00E-05	5.02E-02	8.44E-04	8.06E-04	3.01E-04
Dibenz(a,h)anthracene	5.00E-02	2.04E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.18E-04	3.00E-04
Indeno(1,2,3-cd)pyrene	5.00E-02	8.10E-04	6.10E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	8.11E-04	3.00E-04
Perylene	1.00E-02	2.24E-04	1.22E-03	4.00E-04	1.00E-05	2.00E-02	3.48E-04	3.34E-04	3.00E-04
Pyrene	5.00E-02	1.19E-02	1.22E-03	4.00E-04	1.00E-05	5.00E-02	8.42E-04	1.88E-04	4.40E-04
Dioxins and Furans									
2,3,7,8-TCDD Equivalent	1.78E-06	3.73E-07	8.75E-07	5.91E-07	3.24E-09	2.15E-06	5.20E-08	6.63E-08	8.55E-07
PCB									
Aroclor 1254 (Total PCBs)	5.00E-02	1.00E-02	1.11E-02	1.00E-02	2.00E-05	5.04E-02	8.41E-04	1.64E-03	1.05E-02
Chlorinated Monocyclic Aromatics									
1,2-Dichlorobenzene	6.00E-02	6.00E-01	7.51E-03	1.08E-02	1.50E-03	6.00E-02	1.81E-02	2.55E-03	2.39E-02
1,2,4-Trichlorobenzene	1.00E-01	1.00E+00	1.23E-02	2.63E-02	5.00E-04	1.00E-01	1.64E-03	4.07E-03	1.25E-02
1,2,4,5-Tetrachlorobenzene	1.00E-02	1.00E-02	1.22E-03	1.00E-02	5.00E-05	1.00E-02	1.78E-04	3.80E-04	1.00E-02
Pentachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.01E-02	1.79E-04	3.70E-04	1.00E-02
Hexachlorobenzene	1.00E-02	1.00E-02	2.44E-03	1.00E-02	5.00E-05	1.00E-02	1.79E-04	3.64E-04	1.00E-02
Pentachlorophenol	1.20E-03	1.31E-03	2.81E-03	6.33E-02	1.03E-05	7.07E-04	1.39E-05	2.61E-05	6.33E-02
Chlorinated Solvents and Derivatives									
Carbon Tetrachloride	1.00E-02	1.00E-01	1.38E-03	8.78E-04	5.00E-04	1.00E-02	7.88E-03	4.52E-04	1.58E-03
Chloroform	1.00E-02	1.00E-01	2.24E-03	2.93E-04	5.00E-04	1.00E-02	1.76E-02	4.85E-04	2.51E-04
Dichloromethane	2.00E-01	1.00E+00	1.27E-01	8.87E-04	1.51E-03	1.00E-01	2.41E-01	5.15E-03	7.64E-05
Trichlorofluoromethane (Freon 11)	2.00E-02	2.00E-01	3.09E-03	1.21E-03	1.01E-03	2.01E-02	2.21E-02	9.31E-04	8.14E-04
Chlorinated Alkanes/Alkenes									
1,1,1-Trichloroethane	8.00E-03	3.00E-02	1.23E-03	1.81E-04	5.00E-04	3.00E-03	3.30E-03	1.39E-04	7.93E-04
Other Organics									
Bromoform	2.00E-02	2.00E-01	3.29E-03	1.03E-03	5.04E-04	2.00E-02	2.49E-02	9.39E-04	6.06E-04
O-Terphenyl	7.19E-07	1.24E-07	1.75E-07	1.02E-07	1.44E-08	1.06E-04	2.22E-06	3.77E-06	2.38E-05
Inorganics									
Antimony	1.00E+00	1.00E+00	1.60E-01	1.00E-02	5.00E-03	1.00E+00	5.13E-03	1.13E-02	1.04E-02
Arsenic	8.00E+00	3.20E-02	1.68E-01	7.20E-02	2.00E-03	2.00E+00	9.76E-03	2.07E-01	1.66E-01
Barium	8.91E+01	3.91E+01	1.30E+00	5.20E+00	9.00E-02	9.40E+01	1.91E+00	1.29E+01	2.43E+00
Beryllium	7.00E-01	2.00E-01	5.04E-03	1.00E-01	1.00E-03	5.00E-01	4.57E-02	6.61E-02	1.00E-01
Boron	1.32E+01	2.79E+01	2.12E+00	6.00E+00	6.01E-02	1.40E+01	2.54E-01	3.21E+00	6.00E+00
Cadmium	5.01E-01	3.77E-01	7.65E-01	2.25E-01	1.05E-04	5.00E-01	5.53E-02	1.63E-01	2.71E-02
Chromium (Total)	2.22E+01	9.10E-01	1.09E+00	1.72E-01	6.00E-03	3.20E+01	1.71E-01	1.38E+00	3.30E-01
Chromium VI	8.82E-06	6.70E-06	4.32E-07	4.32E-07	1.00E-02	2.00E+00	1.07E-02	--	3.69E-01
Cobalt	7.00E+00	1.46E-01	1.37E-01	5.00E-02	5.04E-04	6.00E+00	5.85E-03	1.44E-02	2.84E-02
Lead	1.69E+01	4.12E-01	1.26E+00	4.40E-02	1.02E-03	1.30E+01	1.45E-01	3.14E-01	7.16E-02
Mercury - Inorganic	7.18E-02	2.23E-02	1.95E-02	2.01E-03	1.00E-04	6.17E-02	1.06E-02	7.58E-03	9.37E-02
Methyl Mercury	1.44E-03	3.51E-05	1.23E-02	4.69E-04	1.50E-05	2.94E-06	5.24E-08	1.31E-05	9.40E-02
Nickel	1.23E+01	6.02E-01	2.08E+00	3.11E-01	6.06E-03	1.00E+01	7.87E-02	3.40E-01	4.89E-01
Selenium	1.00E+00	1.30E-01	1.58E-01	3.40E-01	5.00E-03	1.00E+00	6.60E-02	6.26E-01	1.28E+00
Silver	2.00E-01	2.01E-02	6.55E-02	1.00E-02	1.02E-04	2.00E-01	9.00E-04	--	1.02E-02
Thallium	1.00E+00	2.08E-02	1.61E-01	1.04E-02	3.26E-04	1.00E+00	3.22E-04	--	1.00E-02
Tin	1.00E+01	1.80E-01	8.25E-01	9.66E-02	1.01E-03	5.00E+00	1.35E-02	--	7.72E-02
Vanadium	2.79E+01	2.90E-01	1.87E-01	1.10E-01	8.00E-03	2.90E+01	1.83E-02	4.28E-01	2.10E-01
Zinc	7.90E+01	6.72E+01	5.74E+01	2.98E+01	4.51E-02	8.10E+01	7.20E+00	3.78E+01	3.84E+01