APPENDIX E

Exposure Point Concentrations

APPENDIX E-1

Air Exposure Point Concentrations – Normal Operations (Project Alone Case) – 140,000 tpy

1-Hour Exposure Point Concentrations for COPC Exposure Scenarios

Normal Operations - 140,000 tpy

COPC	1-Hour Exposure Point Concentrations ($\mu g/m^3$) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Criteria Air Contaminants (CAC)																
Ammonia	2.0	0.98	1.0	1.6	3.0	1.9	0.66	0.49	0.49	0.79	1.4	0.48	0.62	0.38	1.1	1.1
Carbon Monoxide (CO)	16	8.1	8.4	14	25	16	5.5	4.1	4.1	6.6	12	4.0	5.1	3.2	8.9	9.4
Hydrogen Chloride (HCl)	3.3	1.6	1.7	2.7	5.0	3.1	1.1	0.81	0.81	1.3	2.4	0.80	1.0	0.64	1.8	1.9
Hydrogen Fluoride (HF)	0.33	0.16	0.17	0.27	0.50	0.31	0.11	0.081	0.081	0.13	0.24	0.080	0.10	0.064	0.18	0.19
Nitrogen Dioxide (NO_2)	44	22	23	37	68	42	15	11	11	18	32	11	14	8.6	24	25
Particulate Matter - PM_{10}	3.7	3.2	3.5	3.7	5.9	3.3	1.5	1.8	1.5	3.7	2.8	1.8	3.6	1.1	3.0	2.8
Particulate Matter - $PM_{2.5}$	3.7	3.2	3.5	3.7	5.9	3.3	1.5	1.8	1.5	3.7	2.8	1.8	3.6	1.1	3.0	2.8
Particulate Matter - Total	3.7	3.2	3.5	3.7	5.9	3.3	1.5	1.8	1.5	3.7	2.8	1.8	3.6	1.1	3.0	2.8
Sulfur Dioxide (SO_2)	13	6.3	6.5	11	20	12	4.3	3.2	3.2	5.1	9.2	3.1	4.0	2.5	6.9	7.3
Metals																
Antimony	9.9E-04	5.0E-04	5.1E-04	8.3E-04	0.0015	9.6E-04	3.3E-04	2.5E-04	2.5E-04	4.0E-04	7.2E-04	2.4E-04	3.1E-04	1.9E-04	5.4E-04	5.7E-04
Arsenic	1.5E-04	7.6E-05	7.9E-05	1.3E-04	2.3E-04	1.5E-04	5.1E-05	3.8E-05	3.8E-05	6.1E-05	1.1E-04	3.7E-05	4.8E-05	3.0E-05	8.3E-05	8.8E-05
Barium	7.7E-04	3.8E-04	4.0E-04	6.4E-04	0.0012	7.4E-04	2.6E-04	1.9E-04	1.9E-04	3.1E-04	5.5E-04	1.9E-04	2.4E-04	1.5E-04	4.2E-04	4.4E-04
Beryllium	1.2E-04	6.0E-05	6.2E-05	1.0E-04	1.9E-04	1.2E-04	4.1E-05	3.0E-05	3.0E-05	4.9E-05	8.7E-05	3.0E-05	3.8E-05	2.4E-05	6.6E-05	6.9E-05
Boron	0.055	0.028	0.029	0.046	0.085	0.053	0.019	0.014	0.014	0.022	0.040	0.014	0.017	0.011	0.030	0.032
Cadmium	0.0025	0.0013	0.0013	0.0021	0.0039	0.0024	8.5E-04	6.3E-04	6.3E-04	0.0010	0.0018	6.2E-04	8.0E-04	5.0E-04	0.0014	0.0015
Chromium (hexavalent)	1.2E-04	5.8E-05	6.0E-05	9.7E-05	1.8E-04	1.1E-04	3.9E-05	2.9E-05	2.9E-05	4.7E-05	8.4E-05	2.8E-05	3.6E-05	2.3E-05	6.3E-05	6.7E-05
Total Chromium (and compounds)	8.2E-04	4.1E-04	4.2E-04	6.8E-04	0.0013	7.9E-04	2.7E-04	2.0E-04	2.0E-04	3.3E-04	5.9E-04	2.0E-04	2.6E-04	1.6E-04	4.4E-04	4.7E-04
Cobalt	0.0021	0.0010	0.0011	0.0018	0.0032	0.0020	7.1E-04	5.2E-04	5.2E-04	8.5E-04	0.0015	5.1E-04	6.6E-04	4.1E-04	0.0011	0.0012
Lead	0.018	0.0090	0.0093	0.015	0.028	0.017	0.0061	0.0045	0.0045	0.0073	0.013	0.0044	0.0057	0.0035	0.0099	0.010
Mercury - Inorganic	0.0054	0.0027	0.0028	0.0046	0.0084	0.0052	0.0018	0.0014	0.0014	0.0022	0.0039	0.0013	0.0017	0.0011	0.0030	0.0031
Nickel	0.032	0.016	0.016	0.026	0.049	0.030	0.011	0.0079	0.0079	0.013	0.023	0.0077	0.0099	0.0062	0.017	0.018
Phosphorus	0.017	0.0083	0.0086	0.014	0.026	0.016	0.0056	0.0042	0.0042	0.0067	0.012	0.0041	0.0052	0.0033	0.0091	0.0096
Selenium	1.7E-04	8.7E-05	9.0E-05	1.5E-04	2.7E-04	1.7E-04	5.8E-05	4.3E-05	4.3E-05	7.0E-05	1.3E-04	4.3E-05	5.5E-05	3.4E-05	9.5E-05	1.0E-04
Silver	0.0012	6.1E-04	6.3E-04	0.0010	0.0019	0.0012	4.1E-04	3.0E-04	3.0E-04	4.9E-04	8.8E-04	3.0E-04	3.8E-04	2.4E-04	6.6E-04	7.0E-04
Thallium	0.014	0.0071	0.0073	0.012	0.022	0.014	0.0048	0.0035	0.0035	0.0057	0.010	0.0035	0.0044	0.0028	0.0077	0.0081
Tin	0.0064	0.0032	0.0033	0.0053	0.0098	0.0061	0.0021	0.0016	0.0016	0.0026	0.0046	0.0016	0.0020	0.0012	0.0035	0.0037
Vanadium	4.2E-04	2.1E-04	2.2E-04	3.5E-04	6.5E-04	4.1E-04	1.4E-04	1.1E-04	1.1E-04	1.7E-04	3.0E-04	1.0E-04	1.3E-04	8.2E-05	2.3E-04	2.4E-04
Zinc	0.072	0.036	0.037	0.061	0.11	0.070	0.024	0.018	0.018	0.029	0.052	0.018	0.023	0.014	0.039	0.042
Polycyclic Aromatic Hydrocarbons (PAH)																
Acenaphthene	6.7E-06	3.4E-06	3.5E-06	5.6E-06	1.0E-05	6.5E-06	2.3E-06	1.7E-06	1.7E-06	2.7E-06	4.9E-06	1.7E-06	2.1E-06	1.3E-06	3.7E-06	3.9E-06
Acenaphthylene	5.3E-06	2.6E-06	2.7E-06	4.4E-06	8.1E-06	5.1E-06	1.8E-06	1.3E-06	1.3E-06	2.1E-06	3.8E-06	1.3E-06	1.7E-06	1.0E-06	2.9E-06	3.0E-06
Anthracene	1.5E-06	7.4E-07	7.6E-07	1.2E-06	2.3E-06	1.4E-06	5.0E-07	3.7E-07	3.7E-07	6.0E-07	1.1E-06	3.6E-07	4.6E-07	2.9E-07	8.0E-07	8.5E-07
Benzo(a)anthracene	5.4E-07	2.7E-07	2.8E-07	4.6E-07	8.4E-07	5.2E-07	1.8E-07	1.4E-07	1.4E-07	2.2E-07	3.9E-07	1.3E-07	1.7E-07	1.1E-07	3.0E-07	3.1E-07
Benzo(b)fluoranthene	1.4E-06	6.9E-07	7.2E-07	1.2E-06	2.1E-06	1.3E-06	4.7E-07	3.5E-07	3.5E-07	5.6E-07	1.0E-06	3.4E-07	4.4E-07	2.7E-07	7.6E-07	8.0E-07
Benzo(k)fluoranthene	3.7E-07	1.8E-07	1.9E-07	3.1E-07	5.6E-07	3.5E-07	1.2E-07	9.1E-08	9.1E-08	1.5E-07	2.6E-07	9.0E-08	1.2E-07	7.2E-08	2.0E-07	2.1E-07
Benzo(a)fluorene	1.0E-05	5.0E-06	5.2E-06	8.4E-06	1.5E-05	9.7E-06	3.4E-06	2.5E-06	2.5E-06	4.0E-06	7.2E-06	2.5E-06	3.1E-06	2.0E-06	5.5E-06	5.8E-06
Benzo(b)fluorene	6.9E-06	3.4E-06	3.5E-06	5.7E-06	1.1E-05	6.6E-06	2.3E-06	1.7E-06	1.7E-06	2.8E-06	4.9E-06	1.7E-06	2.2E-06	1.3E-06	3.7E-06	3.9E-06
Benzo(ghi)perylene	1.5E-05	7.5E-06	7.7E-06	1.3E-05	2.3E-05	1.4E-05	5.0E-06	3.7E-06	3.7E-06	6.0E-06	1.1E-05	3.7E-06	4.7E-06	2.9E-06	8.2E-06	8.6E-06
Benzo(a)pyrene	1.2E-06	6.2E-07	6.4E-07	1.0E-06	1.9E-06	1.2E-06	4.2E-07	3.1E-07	3.1E-07	5.0E-07	9.0E-07	3.1E-07	3.9E-07	2.4E-07	6.8E-07	7.2E-07
Benzo(e)pyrene	3.2E-06	1.6E-06	1.6E-06	2.6E-06	4.9E-06	3.0E-06	1.1E-06	7.9E-07	7.9E-07	1.3E-06	2.3E-06	7.7E-07	9.9E-07	6.2E-07	1.7E-06	1.8E-06
Chrysene	1.4E-06	6.8E-07	7.0E-07	1.1E-06	2.1E-06	1.3E-06	4.6E-07	3.4E-07	3.4E-07	5.5E-07	9.9E-07	3.3E-07	4.3E-07	2.7E-07	7.5E-07	7.9E-07
Dibenzo(a,c)anthracene	9.7E-06	4.8E-06	5.0E-06	8.1E-06	1.5E-05	9.4E-06	3.3E-06	2.4E-06	2.4E-06	3.9E-06	7.0E-06	2.4E-06	3.1E-06	1.9E-06	5.3E-06	5.6E-06
Dibenzo(a,h)anthracene	4.4E-07	2.2E-07	2.3E-07	3.7E-07	6.8E-07	4.2E-07	1.5E-07	1.1E-07	1.1E-07	1.8E-07	3.2E-07	1.1E-07	1.4E-07	8.6E-08	2.4E-07	2.5E-07
Fluoranthene	1.5E-05	7.5E-06	7.8E-06	1.3E-05	2.3E-05	1.5E-05	5.1E-06	3.8E-06	3.8E-06	6.1E-06	1.1E-05	3.7E-06	4.7E-06	2.9E-06	8.2E-06	8.7E-06
Fluorene	1.1E-05	5.7E-06	5.9E-06	9.5E-06	1.7E-05	1.1E-05	3.8E-06	2.8E-06	2.8E-06	4.6E-06	8.2E-06	2.8E-06	3.6E-06	2.2E-06	6.2E-06	6.5E-06
Indeno(1,2,3 – cd)pyrene	2.7E-06	1.4E-06	1.4E-06	2.3E-06	4.2E-06	2.6E-06	9.2E-07	6.8E-07	6.8E-07	1.1E-06	2.0E-06	6.7E-07	8.6E-07	5.3E-07	1.5E-06	1.6E-06
1-Methylnaphthalene	3.6E-05	1.8E-05	1.8E-05	3.0E-05	5.5E-05	3.4E-05	1.2E-05	8.9E-06	8.9E-06	1.4E-05	2.6E-05	8.7E-06	1.1E-05	7.0E-06	1.9E-05	2.0E-05
2-Methylnaphthalene	2.0E-04	9.8E-05	1.0E-04	1.7E-04	3.0E-04	1.9E-04	6.6E-05	4.9E-05	4.9E-05	8.0E-05	1.4E-04	4.8E-05	6.2E-05	3.9E-05	1.1E-04	1.1E-04
Naphthalene	1.5E-04	7.7E-05	7.9E-05	1.3E-04	2.4E-04	1.5E-04	5.2E-05	3.8E-05	3.8E-05	6.2E-05	1.1E-04	3.8E-05	4.8E-05	3.0E-05	8.4E-05	8.8E-05
Perylene	5.5E-07	2.7E-07	2.8E-07	4.6E-07	8.4E-07	5.3E-07	1.8E-07	1.4E-07	1.4E-07	2.2E-07	4.0E-07	1.3E-07	1.7E-07	1.1E-07	3.0E-07	3.1E-07
Phenanthrene	3.4E-05	1.7E-05	1.8E-05	2.9E-05	5.3E-05	3.3E-05	1.2E-05	8.5E-06	8.5E-06	1.4E-05	2.5E-05	8.4E-06	1.1E-05	6.7E-06	1.9E-05	2.0E-05
Pyrene	1.8E-05	9.1E-06	9.4E-06	1.5E-05	2.8E-05	1.8E-05	6.1E-06	4.5E-06	4.5E-06	7.3E-06	1.3E-05	4.5E-06	5.7E-06	3.6E-06	9.9E-06	1.0E-05

1-Hour Exposure Point Concentrations for COPC Exposure Scenarios

Normal Operations - 140,000 tpy

COPC	1-Hour Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Chlorinated Polycyclic Aromatics																
Dioxins and Furans (as TEQ Toxic Equivalents)	2.2E-08	1.1E-08	1.1E-08	1.8E-08	3.4E-08	2.1E-08	7.3E-09	5.4E-09	5.4E-09	8.8E-09	1.6E-08	5.3E-09	6.8E-09	4.3E-09	1.2E-08	1.3E-08
Polychlorinated Biphenyls (PCBs)	2.6E-05	1.3E-05	1.4E-05	2.2E-05	4.0E-05	2.5E-05	8.8E-06	6.5E-06	6.5E-06	1.1E-05	1.9E-05	6.4E-06	8.2E-06	5.1E-06	1.4E-05	1.5E-05
Chlorinated Monocyclic Aromatics																
Dichlorobenzene, 1,2-	7.4E-04	3.7E-04	3.8E-04	6.2E-04	0.0011	7.1E-04	2.5E-04	1.8E-04	1.8E-04	3.0E-04	5.4E-04	1.8E-04	2.3E-04	1.4E-04	4.0E-04	4.3E-04
Dichlorophenol, 2,4-	3.7E-05	1.9E-05	1.9E-05	3.1E-05	5.8E-05	3.6E-05	1.3E-05	9.3E-06	9.3E-06	1.5E-05	2.7E-05	9.1E-06	1.2E-05	7.3E-06	2.0E-05	2.1E-05
Hexachlorobenzene	1.9E-05	9.3E-06	9.6E-06	1.6E-05	2.9E-05	1.8E-05	6.3E-06	4.7E-06	4.7E-06	7.5E-06	1.3E-05	4.6E-06	5.9E-06	3.6E-06	1.0E-05	1.1E-05
Pentachlorobenzene	4.9E-05	2.4E-05	2.5E-05	4.1E-05	7.6E-05	4.7E-05	1.6E-05	1.2E-05	1.2E-05	2.0E-05	3.5E-05	1.2E-05	1.5E-05	9.6E-06	2.7E-05	2.8E-05
Pentachlorophenol	7.5E-05	3.7E-05	3.9E-05	6.3E-05	1.2E-04	7.2E-05	2.5E-05	1.9E-05	1.9E-05	3.0E-05	5.4E-05	1.8E-05	2.3E-05	1.5E-05	4.1E-05	4.3E-05
Tetrachlorobenzene, 1,2,4,5-	1.9E-05	9.3E-06	9.6E-06	1.6E-05	2.9E-05	1.8E-05	6.3E-06	4.7E-06	4.7E-06	7.5E-06	1.3E-05	4.6E-06	5.9E-06	3.6E-06	1.0E-05	1.1E-05
Tetrachlorophenol, 2,3,4,6-	6.3E-05	3.1E-05	3.3E-05	5.3E-05	9.7E-05	6.1E-05	2.1E-05	1.6E-05	1.6E-05	2.5E-05	4.5E-05	1.5E-05	2.0E-05	1.2E-05	3.4E-05	3.6E-05
Trichlorobenzene, 1,2,4-	1.9E-05	9.3E-06	9.6E-06	1.6E-05	2.9E-05	1.8E-05	6.3E-06	4.7E-06	4.7E-06	7.5E-06	1.3E-05	4.6E-06	5.9E-06	3.6E-06	1.0E-05	1.1E-05
Trichlorophenol, 2,4,6-	1.9E-05	9.5E-06	9.8E-06	1.6E-05	2.9E-05	1.8E-05	6.4E-06	4.7E-06	4.7E-06	7.7E-06	1.4E-05	4.6E-06	6.0E-06	3.7E-06	1.0E-05	1.1E-05
Volatile Organic Chemicals (VOC)																
Acetaldehyde	2.6E-07	1.3E-07	1.4E-07	2.2E-07	4.0E-07	2.5E-07	8.8E-08	6.5E-08	6.5E-08	1.1E-07	1.9E-07	6.4E-08	8.3E-08	5.1E-08	1.4E-07	1.5E-07
Benzene	0.011	0.0056	0.0058	0.0094	0.017	0.011	0.0038	0.0028	0.0028	0.0045	0.0081	0.0028	0.0035	0.0022	0.0061	0.0065
Biphenyl	0.0011	5.4E-04	5.6E-04	9.1E-04	0.0017	0.0010	3.6E-04	2.7E-04	2.7E-04	4.4E-04	7.8E-04	2.6E-04	3.4E-04	2.1E-04	5.9E-04	6.2E-04
Bromodichloromethane	0.092	0.046	0.047	0.077	0.14	0.088	0.031	0.023	0.023	0.037	0.066	0.022	0.029	0.018	0.050	0.053
Bromoform	0.025	0.012	0.013	0.021	0.039	0.024	0.0084	0.0062	0.0062	0.010	0.018	0.0061	0.0079	0.0049	0.014	0.014
Bromomethane	0.013	0.0065	0.0067	0.011	0.020	0.013	0.0044	0.0033	0.0033	0.0053	0.0094	0.0032	0.0041	0.0026	0.0071	0.0075
Carbon tetrachloride	1.6E-04	7.8E-05	8.1E-05	1.3E-04	2.4E-04	1.5E-04	5.3E-05	3.9E-05	3.9E-05	6.3E-05	1.1E-04	3.8E-05	4.9E-05	3.1E-05	8.5E-05	9.0E-05
Chloroform	1.8E-04	9.2E-05	9.5E-05	1.5E-04	2.8E-04	1.8E-04	6.2E-05	4.6E-05	4.6E-05	7.5E-05	1.3E-04	4.5E-05	5.8E-05	3.6E-05	1.0E-04	1.1E-04
Dichlorodifluoromethane	0.032	0.016	0.016	0.026	0.049	0.030	0.011	0.0079	0.0079	0.013	0.023	0.0077	0.0099	0.0062	0.017	0.018
Dichloroethene, 1,1 -	2.1E-04	1.0E-04	1.1E-04	1.7E-04	3.2E-04	2.0E-04	6.9E-05	5.1E-05	5.1E-05	8.3E-05	1.5E-04	5.0E-05	6.4E-05	4.0E-05	1.1E-04	1.2E-04
Dichloromethane	0.064	0.032	0.033	0.053	0.098	0.061	0.021	0.016	0.016	0.026	0.046	0.016	0.020	0.012	0.035	0.037
Ethylbenzene	3.8E-04	1.9E-04	1.9E-04	3.1E-04	5.8E-04	3.6E-04	1.3E-04	9.4E-05	9.4E-05	1.5E-04	2.7E-04	9.2E-05	1.2E-04	7.3E-05	2.0E-04	2.2E-04
Ethylene Dibromide	1.5E-04	7.3E-05	7.6E-05	1.2E-04	2.3E-04	1.4E-04	5.0E-05	3.7E-05	3.7E-05	5.9E-05	1.1E-04	3.6E-05	4.6E-05	2.9E-05	8.0E-05	8.4E-05
Formaldehyde	0.017	0.0086	0.0089	0.014	0.027	0.017	0.0058	0.0043	0.0043	0.0070	0.012	0.0042	0.0054	0.0034	0.0094	0.0099
O-terphenyl	3.0E-05	1.5E-05	1.5E-05	2.5E-05	4.6E-05	2.9E-05	1.0E-05	7.4E-06	7.4E-06	1.2E-05	2.1E-05	7.3E-06	9.3E-06	5.8E-06	1.6E-05	1.7E-05
Tetrachloroethene	0.0021	0.0010	0.0011	0.0017	0.0032	0.0020	6.9E-04	5.1E-04	5.1E-04	8.3E-04	0.0015	5.0E-04	6.5E-04	4.0E-04	0.0011	0.0012
Tetralin	1.8E-04	9.0E-05	9.3E-05	1.5E-04	2.8E-04	1.7E-04	6.1E-05	4.5E-05	4.5E-05	7.3E-05	1.3E-04	4.4E-05	5.7E-05	3.5E-05	9.9E-05	1.0E-04
Toluene	0.018	0.0091	0.0094	0.015	0.028	0.018	0.0061	0.0045	0.0045	0.0074	0.013	0.0045	0.0057	0.0036	0.0099	0.010
Trichloroethane, 1,1,1 -	5.2E-04	2.6E-04	2.7E-04	4.3E-04	8.0E-04	5.0E-04	1.7E-04	1.3E-04	1.3E-04	2.1E-04	3.7E-04	1.3E-04	1.6E-04	1.0E-04	2.8E-04	3.0E-04
Trichloroethylene, 1,1,2 -	1.8E-04	8.9E-05	9.2E-05	1.5E-04	2.7E-04	1.7E-04	6.0E-05	4.4E-05	4.4E-05	7.2E-05	1.3E-04	4.4E-05	5.6E-05	3.5E-05	9.7E-05	1.0E-04
Trichlorofluoromethane	0.062	0.031	0.032	0.052	0.096	0.060	0.021	0.016	0.016	0.025	0.045	0.015	0.020	0.012	0.034	0.036
Vinyl chloride	0.016	0.0079	0.0082	0.013	0.024	0.015	0.0053	0.0039	0.0039	0.0064	0.011	0.0039	0.0050	0.0031	0.0086	0.0091
Xylenes, m-, p- and o-	0.22	0.11	0.11	0.18	0.34	0.21	0.074	0.055	0.055	0.088	0.16	0.054	0.069	0.043	0.12	0.13

24-Hour Exposure Point Concentrations for COPC Exposure Scenarios

Normal Operations - 140,000 tpy

COPC	24-Hour Exposure Point Concentrations ($\mu g/m^3$) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Criteria Air Contaminants (CAC)																
Ammonia	0.27	0.100	0.098	0.21	0.35	0.27	0.082	0.073	0.11	0.090	0.26	0.071	0.17	0.087	0.15	0.19
Carbon Monoxide (CO)	2.3	0.83	0.82	1.8	2.9	2.2	0.68	0.61	0.91	0.75	2.2	0.59	1.4	0.72	1.2	1.6
Hydrogen Chloride (HCl)	0.45	0.17	0.16	0.36	0.59	0.44	0.14	0.12	0.18	0.15	0.43	0.12	0.28	0.14	0.24	0.32
Hydrogen Fluoride (HF)	0.045	0.017	0.016	0.036	0.059	0.044	0.014	0.012	0.018	0.015	0.043	0.012	0.028	0.014	0.024	0.032
Nitrogen Dioxide (NO_2)	6.1	2.2	2.2	4.8	7.9	6.0	1.8	1.6	2.5	2.0	5.8	1.6	3.7	1.9	3.3	4.3
Particulate Matter - PM_{10}	0.53	0.34	0.36	0.60	0.67	0.60	0.24	0.25	0.19	0.41	0.56	0.30	0.32	0.15	0.42	0.66
Particulate Matter - $PM_{2.5}$	0.53	0.34	0.36	0.60	0.67	0.60	0.24	0.25	0.19	0.41	0.56	0.30	0.32	0.15	0.42	0.66
Particulate Matter - Total	0.53	0.34	0.36	0.60	0.67	0.60	0.24	0.25	0.19	0.41	0.56	0.30	0.32	0.15	0.42	0.66
Sulfur Dioxide (SO_2)	1.8	0.65	0.63	1.4	2.3	1.7	0.53	0.47	0.71	0.58	1.7	0.46	1.1	0.56	0.95	1.3
Metals																
Antimony	1.4E-04	5.1E-05	5.0E-05	1.1E-04	1.8E-04	1.4E-04	4.1E-05	3.7E-05	5.6E-05	4.5E-05	1.3E-04	3.6E-05	8.5E-05	4.4E-05	7.4E-05	9.8E-05
Arsenic	2.1E-05	7.8E-06	7.6E-06	1.7E-05	2.7E-05	2.1E-05	6.4E-06	5.7E-06	8.5E-06	7.0E-06	2.0E-05	5.5E-06	1.3E-05	6.8E-06	1.1E-05	1.5E-05
Barium	1.1E-04	3.9E-05	3.8E-05	8.3E-05	1.4E-04	1.0E-04	3.2E-05	2.9E-05	4.3E-05	3.5E-05	1.0E-04	2.8E-05	6.5E-05	3.4E-05	5.7E-05	7.6E-05
Beryllium	1.7E-05	6.1E-06	6.0E-06	1.3E-05	2.2E-05	1.6E-05	5.0E-06	4.5E-06	6.8E-06	5.5E-06	1.6E-05	4.4E-06	1.0E-05	5.4E-06	9.0E-06	1.2E-05
Boron	0.0077	0.0028	0.0028	0.0060	0.0100	0.0075	0.0023	0.0021	0.0031	0.0025	0.0073	0.0020	0.0047	0.0025	0.0041	0.0055
Cadmium	3.5E-04	1.3E-04	1.3E-04	2.8E-04	4.6E-04	3.5E-04	1.1E-04	9.5E-05	1.4E-04	1.2E-04	3.4E-04	9.2E-05	2.2E-04	1.1E-04	1.9E-04	2.5E-04
Chromium (hexavalent)	1.6E-05	5.9E-06	5.8E-06	1.3E-05	2.1E-05	1.6E-05	4.8E-06	4.3E-06	6.5E-06	5.3E-06	1.5E-05	4.2E-06	9.9E-06	5.1E-06	8.6E-06	1.1E-05
Total Chromium (and compounds)	1.1E-04	4.2E-05	4.1E-05	8.9E-05	1.5E-04	1.1E-04	3.4E-05	3.1E-05	4.6E-05	3.7E-05	1.1E-04	2.9E-05	7.0E-05	3.6E-05	6.1E-05	8.1E-05
Cobalt	2.9E-04	1.1E-04	1.0E-04	2.3E-04	3.8E-04	2.9E-04	8.8E-05	7.9E-05	1.2E-04	9.6E-05	2.8E-04	7.6E-05	1.8E-04	9.3E-05	1.6E-04	2.1E-04
Lead	0.0025	9.2E-04	9.1E-04	0.0020	0.0033	0.0025	7.6E-04	6.8E-04	0.0010	8.3E-04	0.0024	6.6E-04	0.0015	8.0E-04	0.0014	0.0018
Mercury - Inorganic	7.5E-04	2.8E-04	2.7E-04	5.9E-04	9.8E-04	7.4E-04	2.3E-04	2.0E-04	3.0E-04	2.5E-04	7.2E-04	2.0E-04	4.6E-04	2.4E-04	4.1E-04	5.4E-04
Nickel	0.0044	0.0016	0.0016	0.0034	0.0057	0.0043	0.0013	0.0012	0.0018	0.0014	0.0042	0.0011	0.0027	0.0014	0.0024	0.0031
Phosphorus	0.0023	8.5E-04	8.3E-04	0.0018	0.0030	0.0023	7.0E-04	6.2E-04	9.3E-04	7.6E-04	0.0022	6.0E-04	0.0014	7.4E-04	0.0012	0.0017
Selenium	2.4E-05	8.9E-06	8.7E-06	1.9E-05	3.1E-05	2.4E-05	7.3E-06	6.5E-06	9.7E-06	8.0E-06	2.3E-05	6.3E-06	1.5E-05	7.7E-06	1.3E-05	1.7E-05
Silver	1.7E-04	6.2E-05	6.1E-05	1.3E-04	2.2E-04	1.7E-04	5.1E-05	4.5E-05	6.8E-05	5.6E-05	1.6E-04	4.4E-05	1.0E-04	5.4E-05	9.1E-05	1.2E-04
Thallium	0.0020	7.2E-04	7.1E-04	0.0015	0.0025	0.0019	5.9E-04	5.3E-04	7.9E-04	6.5E-04	0.0019	5.1E-04	0.0012	6.3E-04	0.0011	0.0014
Tin	8.8E-04	3.2E-04	3.2E-04	6.9E-04	0.0011	8.7E-04	2.7E-04	2.4E-04	3.6E-04	2.9E-04	8.4E-04	2.3E-04	5.4E-04	2.8E-04	4.8E-04	6.3E-04
Vanadium	5.8E-05	2.1E-05	2.1E-05	4.6E-05	7.6E-05	5.7E-05	1.8E-05	1.6E-05	2.4E-05	1.9E-05	5.6E-05	1.5E-05	3.6E-05	1.9E-05	3.1E-05	4.2E-05
Zinc	0.0100	0.0037	0.0036	0.0079	0.013	0.0098	0.0030	0.0027	0.0040	0.0033	0.0096	0.0026	0.0062	0.0032	0.0054	0.0072
Polycyclic Aromatic Hydrocarbons (PAH)																
Acenaphthene	9.3E-07	3.4E-07	3.4E-07	7.3E-07	1.2E-06	9.2E-07	2.8E-07	2.5E-07	3.8E-07	3.1E-07	8.9E-07	2.4E-07	5.8E-07	3.0E-07	5.0E-07	6.7E-07
Acenaphthylene	7.3E-07	2.7E-07	2.6E-07	5.7E-07	9.4E-07	7.2E-07	2.2E-07	2.0E-07	2.9E-07	2.4E-07	7.0E-07	1.9E-07	4.5E-07	2.3E-07	3.9E-07	5.2E-07
Anthracene	2.0E-07	7.5E-08	7.4E-08	1.6E-07	2.7E-07	2.0E-07	6.2E-08	5.5E-08	8.3E-08	6.7E-08	2.0E-07	5.3E-08	1.3E-07	6.5E-08	1.1E-07	1.5E-07
Benzo(a)anthracene	7.5E-08	2.8E-08	2.7E-08	5.9E-08	9.8E-08	7.4E-08	2.3E-08	2.0E-08	3.0E-08	2.5E-08	7.2E-08	2.0E-08	4.6E-08	2.4E-08	4.1E-08	5.4E-08
Benzo(b)fluoranthene	1.9E-07	7.1E-08	6.9E-08	1.5E-07	2.5E-07	1.9E-07	5.8E-08	5.2E-08	7.8E-08	6.3E-08	1.8E-07	5.0E-08	1.2E-07	6.2E-08	1.0E-07	1.4E-07
Benzo(k)fluoranthene	5.1E-08	1.9E-08	1.8E-08	4.0E-08	6.6E-08	5.0E-08	1.5E-08	1.4E-08	2.0E-08	1.7E-08	4.8E-08	1.3E-08	3.1E-08	1.6E-08	2.7E-08	3.6E-08
Benzo(a)fluorene	1.4E-06	5.1E-07	5.0E-07	1.1E-06	1.8E-06	1.4E-06	4.2E-07	3.7E-07	5.6E-07	4.6E-07	1.3E-06	3.6E-07	8.6E-07	4.4E-07	7.5E-07	9.9E-07
Benzo(b)fluorene	9.5E-07	3.5E-07	3.4E-07	7.5E-07	1.2E-06	9.3E-07	2.9E-07	2.6E-07	3.8E-07	3.1E-07	9.1E-07	2.5E-07	5.9E-07	3.0E-07	5.1E-07	6.8E-07
Benzo(ghi)perylene	2.1E-06	7.6E-07	7.5E-07	1.6E-06	2.7E-06	2.0E-06	6.3E-07	5.6E-07	8.4E-07	6.8E-07	2.0E-06	5.4E-07	1.3E-06	6.6E-07	1.1E-06	1.5E-06
Benzo(a)pyrene	1.7E-07	6.3E-08	6.2E-08	1.4E-07	2.2E-07	1.7E-07	5.2E-08	4.7E-08	7.0E-08	5.7E-08	1.7E-07	4.5E-08	1.1E-07	5.5E-08	9.3E-08	1.2E-07
Benzo(e)pyrene	4.4E-07	1.6E-07	1.6E-07	3.4E-07	5.7E-07	4.3E-07	1.3E-07	1.2E-07	1.8E-07	1.4E-07	4.2E-07	1.1E-07	2.7E-07	1.4E-07	2.4E-07	3.1E-07
Chrysene	1.9E-07	7.0E-08	6.8E-08	1.5E-07	2.5E-07	1.9E-07	5.7E-08	5.1E-08	7.6E-08	6.2E-08	1.8E-07	4.9E-08	1.2E-07	6.1E-08	1.0E-07	1.4E-07
Dibenzo(a,c)anthracene	1.3E-06	4.9E-07	4.9E-07	1.1E-06	1.7E-06	1.3E-06	4.1E-07	3.6E-07	5.4E-07	4.4E-07	1.3E-06	3.5E-07	8.3E-07	4.3E-07	7.2E-07	9.6E-07
Dibenzo(a,h)anthracene	6.1E-08	2.2E-08	2.2E-08	4.8E-08	7.9E-08	6.0E-08	1.8E-08	1.6E-08	2.5E-08	2.0E-08	5.8E-08	1.6E-08	3.7E-08	1.9E-08	3.3E-08	4.3E-08
Fluoranthene	2.1E-06	7.7E-07	7.5E-07	1.6E-06	2.7E-06	2.1E-06	6.3E-07	5.6E-07	8.4E-07	6.9E-07	2.0E-06	5.5E-07	1.3E-06	6.7E-07	1.1E-06	1.5E-06
Fluorene	1.6E-06	5.8E-07	5.7E-07	1.2E-06	2.0E-06	1.5E-06	4.7E-07	4.2E-07	6.3E-07	5.2E-07	1.5E-06	4.1E-07	9.7E-07	5.0E-07	8.5E-07	1.1E-06
Indeno(1,2,3 – cd)pyrene	3.8E-07	1.4E-07	1.4E-07	3.0E-07	4.9E-07	3.7E-07	1.1E-07	1.0E-07	1.5E-07	1.2E-07	3.6E-07	9.9E-08	2.3E-07	1.2E-07	2.0E-07	2.7E-07
1-Methylnaphthalene	4.9E-06	1.8E-06	1.8E-06	3.9E-06	6.4E-06	4.8E-06	1.5E-06	1.3E-06	2.0E-06	1.6E-06	4.7E-06	1.3E-06	3.0E-06	1.6E-06	2.7E-06	3.5E-06
2-Methylnaphthalene	2.7E-05	1.0E-05	9.9E-06	2.1E-05	3.5E-05	2.7E-05	8.2E-06	7.4E-06	1.1E-05	9.0E-06	2.6E-05	7.1E-06	1.7E-05	8.7E-06	1.5E-05	2.0E-05
Naphthalene	2.1E-05	7.8E-06	7.7E-06	1.7E-05	2.8E-05	2.1E-05	6.4E-06	5.7E-06	8.6E-06	7.0E-06	2.0E-05	5.5E-06	1.3E-05	6.8E-06	1.1E-05	1.5E-05
Perylene	7.6E-08	2.8E-08	2.7E-08	6.0E-08	9.8E-08	7.5E-08	2.3E-08	2.0E-08	3.1E-08	2.5E-08	7.3E-08	2.0E-08	4.7E-08	2.4E-08	4.1E-08	5.4E-08
Phenanthrene	4.7E-06	1.7E-06	1.7E-06	3.7E-06	6.2E-06	4.7E-06	1.4E-06	1.3E-06	1.9E-06	1.6E-06	4.5E-06	1.2E-06	2.9E-06	1.5E-06	2.6E-06	3.4E-06
Pyrene	2.5E-06	9.3E-07	9.1E-07	2.0E-06	3.3E-06	2.5E-06	7.6E-07	6.8E-07	1.0E-06	8.3E-07	2.4E-06	6.6E-07	1.6E-06	8.1E-07	1.4E-06	1.8E-06

24-Hour Exposure Point Concentrations for COPC Exposure Scenarios

Normal Operations - 140,000 tpy

COPC	24-Hour Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Chlorinated Polycyclic Aromatics																
Dioxins and Furans (as TEQ Toxic Equivalents)	3.0E-09	1.1E-09	1.1E-09	2.4E-09	3.9E-09	3.0E-09	9.1E-10	8.1E-10	1.2E-09	9.9E-10	2.9E-09	7.9E-10	1.9E-09	9.6E-10	1.6E-09	2.2E-09
Polychlorinated Biphenyls (PCBs)	3.6E-06	1.3E-06	1.3E-06	2.9E-06	4.7E-06	3.6E-06	1.1E-06	9.8E-07	1.5E-06	1.2E-06	3.5E-06	9.5E-07	2.2E-06	1.2E-06	2.0E-06	2.6E-06
Chlorinated Monocyclic Aromatics																
Dichlorobenzene, 1,2-	1.0E-04	3.8E-05	3.7E-05	8.1E-05	1.3E-04	1.0E-04	3.1E-05	2.8E-05	4.1E-05	3.4E-05	9.8E-05	2.7E-05	6.3E-05	3.3E-05	5.5E-05	7.3E-05
Dichlorophenol, 2,4-	5.2E-06	1.9E-06	1.9E-06	4.1E-06	6.7E-06	5.1E-06	1.6E-06	1.4E-06	2.1E-06	1.7E-06	4.9E-06	1.4E-06	3.2E-06	1.7E-06	2.8E-06	3.7E-06
Hexachlorobenzene	2.6E-06	9.5E-07	9.3E-07	2.0E-06	3.4E-06	2.5E-06	7.8E-07	7.0E-07	1.0E-06	8.5E-07	2.5E-06	6.8E-07	1.6E-06	8.3E-07	1.4E-06	1.8E-06
Pentachlorobenzene	6.8E-06	2.5E-06	2.5E-06	5.3E-06	8.8E-06	6.7E-06	2.0E-06	1.8E-06	2.7E-06	2.2E-06	6.5E-06	1.8E-06	4.2E-06	2.2E-06	3.7E-06	4.9E-06
Pentachlorophenol	1.0E-05	3.8E-06	3.7E-06	8.1E-06	1.3E-05	1.0E-05	3.1E-06	2.8E-06	4.2E-06	3.4E-06	9.9E-06	2.7E-06	6.4E-06	3.3E-06	5.6E-06	7.4E-06
Tetrachlorobenzene, 1,2,4,5-	2.6E-06	9.5E-07	9.3E-07	2.0E-06	3.4E-06	2.5E-06	7.8E-07	7.0E-07	1.0E-06	8.5E-07	2.5E-06	6.8E-07	1.6E-06	8.3E-07	1.4E-06	1.8E-06
Tetrachlorophenol, 2,3,4,6-	8.7E-06	3.2E-06	3.1E-06	6.9E-06	1.1E-05	8.6E-06	2.6E-06	2.4E-06	3.5E-06	2.9E-06	8.3E-06	2.3E-06	5.4E-06	2.8E-06	4.7E-06	6.2E-06
Trichlorobenzene, 1,2,4-	2.6E-06	9.5E-07	9.3E-07	2.0E-06	3.4E-06	2.5E-06	7.8E-07	7.0E-07	1.0E-06	8.5E-07	2.5E-06	6.8E-07	1.6E-06	8.3E-07	1.4E-06	1.8E-06
Trichlorophenol, 2,4,6-	2.6E-06	9.7E-07	9.5E-07	2.1E-06	3.4E-06	2.6E-06	7.9E-07	7.1E-07	1.1E-06	8.7E-07	2.5E-06	6.9E-07	1.6E-06	8.4E-07	1.4E-06	1.9E-06
Volatile Organic Chemicals (VOC)																
Acetaldehyde	3.6E-08	1.3E-08	1.3E-08	2.9E-08	4.7E-08	3.6E-08	1.1E-08	9.8E-09	1.5E-08	1.2E-08	3.5E-08	9.5E-09	2.2E-08	1.2E-08	2.0E-08	2.6E-08
Benzene	0.0016	5.7E-04	5.6E-04	0.0012	0.0020	0.0015	4.7E-04	4.2E-04	6.3E-04	5.1E-04	0.0015	4.1E-04	9.6E-04	5.0E-04	8.4E-04	0.0011
Biphenyl	1.5E-04	5.5E-05	5.4E-05	1.2E-04	1.9E-04	1.5E-04	4.5E-05	4.0E-05	6.0E-05	4.9E-05	1.4E-04	3.9E-05	9.2E-05	4.8E-05	8.1E-05	1.1E-04
Bromodichloromethane	0.013	0.0047	0.0046	0.0100	0.016	0.012	0.0038	0.0034	0.0051	0.0042	0.012	0.0033	0.0078	0.0041	0.0068	0.0091
Bromoform	0.0035	0.0013	0.0013	0.0027	0.0045	0.0034	0.0010	9.4E-04	0.0014	0.0011	0.0033	9.1E-04	0.0021	0.0011	0.0019	0.0025
Bromomethane	0.0018	6.6E-04	6.5E-04	0.0014	0.0023	0.0018	5.4E-04	4.9E-04	7.3E-04	6.0E-04	0.0017	4.7E-04	0.0011	5.8E-04	9.7E-04	0.0013
Carbon tetrachloride	2.2E-05	7.9E-06	7.8E-06	1.7E-05	2.8E-05	2.1E-05	6.5E-06	5.8E-06	8.7E-06	7.1E-06	2.1E-05	5.7E-06	1.3E-05	6.9E-06	1.2E-05	1.5E-05
Chloroform	2.6E-05	9.4E-06	9.2E-06	2.0E-05	3.3E-05	2.5E-05	7.7E-06	6.9E-06	1.0E-05	8.5E-06	2.4E-05	6.7E-06	1.6E-05	8.2E-06	1.4E-05	1.8E-05
Dichlorodifluoromethane	0.0044	0.0016	0.0016	0.0034	0.0057	0.0043	0.0013	0.0012	0.0018	0.0014	0.0042	0.0011	0.0027	0.0014	0.0024	0.0031
Dichloroethene, 1,1 -	2.8E-05	1.0E-05	1.0E-05	2.2E-05	3.7E-05	2.8E-05	8.6E-06	7.7E-06	1.1E-05	9.4E-06	2.7E-05	7.4E-06	1.8E-05	9.1E-06	1.5E-05	2.0E-05
Dichloromethane	0.0088	0.0032	0.0032	0.0069	0.011	0.0087	0.0027	0.0024	0.0036	0.0029	0.0085	0.0023	0.0054	0.0028	0.0048	0.0063
Ethylbenzene	5.2E-05	1.9E-05	1.9E-05	4.1E-05	6.7E-05	5.1E-05	1.6E-05	1.4E-05	2.1E-05	1.7E-05	5.0E-05	1.4E-05	3.2E-05	1.7E-05	2.8E-05	3.7E-05
Ethylene Dibromide	2.0E-05	7.5E-06	7.3E-06	1.6E-05	2.6E-05	2.0E-05	6.1E-06	5.5E-06	8.2E-06	6.7E-06	1.9E-05	5.3E-06	1.3E-05	6.5E-06	1.1E-05	1.5E-05
Formaldehyde	0.0024	8.8E-04	8.6E-04	0.0019	0.0031	0.0023	7.2E-04	6.4E-04	9.6E-04	7.9E-04	0.0023	6.2E-04	0.0015	7.6E-04	0.0013	0.0017
O-terphenyl	4.1E-06	1.5E-06	1.5E-06	3.2E-06	5.3E-06	4.0E-06	1.2E-06	1.1E-06	1.7E-06	1.4E-06	3.9E-06	1.1E-06	2.5E-06	1.3E-06	2.2E-06	2.9E-06
Tetrachloroethene	2.8E-04	1.0E-04	1.0E-04	2.2E-04	3.7E-04	2.8E-04	8.6E-05	7.7E-05	1.1E-04	9.4E-05	2.7E-04	7.4E-05	1.8E-04	9.1E-05	1.5E-04	2.0E-04
Tetralin	2.5E-05	9.2E-06	9.0E-06	2.0E-05	3.2E-05	2.5E-05	7.5E-06	6.8E-06	1.0E-05	8.3E-06	2.4E-05	6.5E-06	1.5E-05	8.0E-06	1.3E-05	1.8E-05
Toluene	0.0025	9.3E-04	9.1E-04	0.0020	0.0033	0.0025	7.6E-04	6.8E-04	0.0010	8.3E-04	0.0024	6.6E-04	0.0016	8.1E-04	0.0014	0.0018
Trichloroethane, 1,1,1 -	7.1E-05	2.6E-05	2.6E-05	5.6E-05	9.3E-05	7.0E-05	2.2E-05	1.9E-05	2.9E-05	2.4E-05	6.9E-05	1.9E-05	4.4E-05	2.3E-05	3.9E-05	5.1E-05
Trichloroethylene, 1,1,2 -	2.5E-05	9.1E-06	8.9E-06	1.9E-05	3.2E-05	2.4E-05	7.4E-06	6.7E-06	1.0E-05	8.2E-06	2.4E-05	6.4E-06	1.5E-05	7.9E-06	1.3E-05	1.8E-05
Trichlorofluoromethane	0.0086	0.0032	0.0031	0.0068	0.011	0.0085	0.0026	0.0023	0.0035	0.0029	0.0083	0.0023	0.0053	0.0028	0.0047	0.0062
Vinyl chloride	0.0022	8.0E-04	7.9E-04	0.0017	0.0028	0.0022	6.6E-04	5.9E-04	8.8E-04	7.2E-04	0.0021	5.7E-04	0.0014	7.0E-04	0.0012	0.0016
Xylenes, m-, p- and o-	0.030	0.011	0.011	0.024	0.039	0.030	0.0091	0.0082	0.012	0.010	0.029	0.0079	0.019	0.0097	0.016	0.022

Annual Exposure Point Concentrations for COPC Exposure Scenarios

Normal Operations - 140,000 tpy

COPC	Annual Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Criteria Air Contaminants (CAC)																
Ammonia	0.0078	0.0034	0.0034	0.0079	0.0067	0.0079	0.0029	0.0032	0.0040	0.0026	0.0076	0.0034	0.0053	0.0037	0.0064	0.0070
Carbon Monoxide (CO)	0.065	0.028	0.028	0.066	0.056	0.066	0.024	0.026	0.034	0.022	0.063	0.029	0.044	0.031	0.053	0.058
Hydrogen Chloride (HCl)	0.013	0.0057	0.0056	0.013	0.011	0.013	0.0048	0.0053	0.0067	0.0043	0.013	0.0057	0.0088	0.0061	0.011	0.012
Hydrogen Fluoride (HF)	0.0013	5.7E-04	5.6E-04	0.0013	0.0011	0.0013	4.8E-04	5.3E-04	6.7E-04	4.3E-04	0.0013	5.7E-04	8.8E-04	6.1E-04	0.0011	0.0012
Nitrogen Dioxide (NO_2)	0.18	0.076	0.076	0.18	0.15	0.18	0.065	0.071	0.090	0.058	0.17	0.077	0.12	0.082	0.14	0.16
Particulate Matter - PM_{10}	0.015	0.0085	0.0083	0.015	0.013	0.016	0.0074	0.0081	0.0093	0.0074	0.014	0.0090	0.011	0.0082	0.013	0.013
Particulate Matter - $PM_{2.5}$	0.015	0.0085	0.0083	0.015	0.013	0.016	0.0074	0.0081	0.0093	0.0074	0.014	0.0090	0.011	0.0082	0.013	0.013
Particulate Matter - Total	0.015	0.0085	0.0083	0.015	0.013	0.016	0.0074	0.0081	0.0093	0.0074	0.014	0.0090	0.011	0.0082	0.013	0.013
Sulfur Dioxide (SO_2)	0.051	0.022	0.022	0.051	0.044	0.051	0.019	0.020	0.026	0.017	0.049	0.022	0.034	0.024	0.041	0.045
Metals																
Antimony	4.0E-06	1.7E-06	1.7E-06	4.0E-06	3.4E-06	4.0E-06	1.5E-06	1.6E-06	2.0E-06	1.3E-06	3.8E-06	1.7E-06	2.7E-06	1.9E-06	3.2E-06	3.6E-06
Arsenic	6.1E-07	2.6E-07	2.6E-07	6.1E-07	5.2E-07	6.1E-07	2.2E-07	2.5E-07	3.1E-07	2.0E-07	5.9E-07	2.7E-07	4.1E-07	2.9E-07	4.9E-07	5.4E-07
Barium	3.1E-06	1.3E-06	1.3E-06	3.1E-06	2.6E-06	3.1E-06	1.1E-06	1.2E-06	1.6E-06	1.0E-06	3.0E-06	1.3E-06	2.1E-06	1.4E-06	2.5E-06	2.7E-06
Beryllium	4.8E-07	2.1E-07	2.1E-07	4.9E-07	4.1E-07	4.9E-07	1.8E-07	1.9E-07	2.5E-07	1.6E-07	4.7E-07	2.1E-07	3.2E-07	2.3E-07	3.9E-07	4.3E-07
Boron	2.2E-04	9.6E-05	9.6E-05	2.2E-04	1.9E-04	2.2E-04	8.2E-05	8.9E-05	1.1E-04	7.4E-05	2.1E-04	9.8E-05	1.5E-04	1.0E-04	1.8E-04	2.0E-04
Cadmium	1.0E-05	4.4E-06	4.4E-06	1.0E-05	8.7E-06	1.0E-05	3.7E-06	4.1E-06	5.2E-06	3.4E-06	9.8E-06	4.5E-06	6.8E-06	4.8E-06	8.2E-06	9.1E-06
Chromium (hexavalent)	4.7E-07	2.0E-07	2.0E-07	4.7E-07	4.0E-07	4.7E-07	1.7E-07	1.9E-07	2.4E-07	1.5E-07	4.5E-07	2.0E-07	3.1E-07	2.2E-07	3.8E-07	4.1E-07
Total Chromium (and compounds)	3.3E-06	1.4E-06	1.4E-06	3.3E-06	2.8E-06	3.3E-06	1.2E-06	1.3E-06	1.7E-06	1.1E-06	3.1E-06	1.4E-06	2.2E-06	1.5E-06	2.7E-06	2.9E-06
Cobalt	8.4E-06	3.6E-06	3.6E-06	8.5E-06	7.2E-06	8.5E-06	3.1E-06	3.4E-06	4.3E-06	2.8E-06	8.1E-06	3.7E-06	5.6E-06	3.9E-06	6.8E-06	7.5E-06
Lead	7.3E-05	3.1E-05	3.1E-05	7.3E-05	6.2E-05	7.3E-05	2.7E-05	2.9E-05	3.7E-05	2.4E-05	7.0E-05	3.2E-05	4.9E-05	3.4E-05	5.9E-05	6.5E-05
Mercury - Inorganic	2.2E-05	9.4E-06	9.4E-06	2.2E-05	1.9E-05	2.2E-05	8.0E-06	8.8E-06	1.1E-05	7.2E-06	2.1E-05	9.6E-06	1.5E-05	1.0E-05	1.8E-05	1.9E-05
Nickel	1.3E-04	5.5E-05	5.5E-05	1.3E-04	1.1E-04	1.3E-04	4.7E-05	5.1E-05	6.5E-05	4.2E-05	1.2E-04	5.6E-05	8.5E-05	5.9E-05	1.0E-04	1.1E-04
Phosphorus	6.7E-05	2.9E-05	2.9E-05	6.7E-05	5.7E-05	6.7E-05	2.5E-05	2.7E-05	3.4E-05	2.2E-05	6.4E-05	2.9E-05	4.5E-05	3.1E-05	5.4E-05	6.0E-05
Selenium	7.0E-07	3.0E-07	3.0E-07	7.0E-07	6.0E-07	7.0E-07	2.6E-07	2.8E-07	3.6E-07	2.3E-07	6.7E-07	3.1E-07	4.7E-07	3.3E-07	5.7E-07	6.2E-07
Silver	4.9E-06	2.1E-06	2.1E-06	4.9E-06	4.2E-06	4.9E-06	1.8E-06	2.0E-06	2.5E-06	1.6E-06	4.7E-06	2.1E-06	3.3E-06	2.3E-06	3.9E-06	4.3E-06
Thallium	5.7E-05	2.4E-05	2.4E-05	5.7E-05	4.8E-05	5.7E-05	2.1E-05	2.3E-05	2.9E-05	1.9E-05	5.5E-05	2.5E-05	3.8E-05	2.7E-05	4.6E-05	5.1E-05
Tin	2.6E-05	1.1E-05	1.1E-05	2.6E-05	2.2E-05	2.6E-05	9.4E-06	1.0E-05	1.3E-05	8.5E-06	2.5E-05	1.1E-05	1.7E-05	1.2E-05	2.1E-05	2.3E-05
Vanadium	1.7E-06	7.3E-07	7.3E-07	1.7E-06	1.4E-06	1.7E-06	6.2E-07	6.8E-07	8.7E-07	5.6E-07	1.6E-06	7.4E-07	1.1E-06	7.9E-07	1.4E-06	1.5E-06
Zinc	2.9E-04	1.3E-04	1.2E-04	2.9E-04	2.5E-04	2.9E-04	1.1E-04	1.2E-04	1.5E-04	9.6E-05	2.8E-04	1.3E-04	1.9E-04	1.4E-04	2.4E-04	2.6E-04
Polycyclic Aromatic Hydrocarbons (PAH)																
Acenaphthene	2.7E-08	1.2E-08	1.2E-08	2.7E-08	2.3E-08	2.7E-08	9.9E-09	1.1E-08	1.4E-08	9.0E-09	2.6E-08	1.2E-08	1.8E-08	1.3E-08	2.2E-08	2.4E-08
Acenaphthylene	2.1E-08	9.1E-09	9.1E-09	2.1E-08	1.8E-08	2.1E-08	7.7E-09	8.5E-09	1.1E-08	7.0E-09	2.0E-08	9.2E-09	1.4E-08	9.9E-09	1.7E-08	1.9E-08
Anthracene	5.9E-09	2.6E-09	2.5E-09	5.9E-09	5.1E-09	6.0E-09	2.2E-09	2.4E-09	3.0E-09	2.0E-09	5.7E-09	2.6E-09	4.0E-09	2.8E-09	4.8E-09	5.3E-09
Benzo(a)anthracene	2.2E-09	9.4E-10	9.4E-10	2.2E-09	1.9E-09	2.2E-09	8.0E-10	8.8E-10	1.1E-09	7.2E-10	2.1E-09	9.6E-10	1.5E-09	1.0E-09	1.8E-09	1.9E-09
Benzo(b)fluoranthene	5.6E-09	2.4E-09	2.4E-09	5.6E-09	4.8E-09	5.6E-09	2.0E-09	2.2E-09	2.9E-09	1.8E-09	5.4E-09	2.4E-09	3.7E-09	2.6E-09	4.5E-09	5.0E-09
Benzo(k)fluoranthene	1.5E-09	6.3E-10	6.3E-10	1.5E-09	1.3E-09	1.5E-09	5.4E-10	5.9E-10	7.5E-10	4.9E-10	1.4E-09	6.4E-10	9.8E-10	6.9E-10	1.2E-09	1.3E-09
Benzo(a)fluorene	4.0E-08	1.7E-08	1.7E-08	4.0E-08	3.4E-08	4.0E-08	1.5E-08	1.6E-08	2.1E-08	1.3E-08	3.9E-08	1.8E-08	2.7E-08	1.9E-08	3.3E-08	3.6E-08
Benzo(b)fluorene	2.7E-08	1.2E-08	1.2E-08	2.8E-08	2.4E-08	2.8E-08	1.0E-08	1.1E-08	1.4E-08	9.1E-09	2.6E-08	1.2E-08	1.8E-08	1.3E-08	2.2E-08	2.5E-08
Benzo(ghi)perylene	6.0E-08	2.6E-08	2.6E-08	6.0E-08	5.1E-08	6.0E-08	2.2E-08	2.4E-08	3.1E-08	2.0E-08	5.8E-08	2.6E-08	4.0E-08	2.8E-08	4.9E-08	5.4E-08
Benzo(a)pyrene	5.0E-09	2.2E-09	2.2E-09	5.0E-09	4.3E-09	5.0E-09	1.8E-09	2.0E-09	2.6E-09	1.7E-09	4.8E-09	2.2E-09	3.3E-09	2.3E-09	4.1E-09	4.5E-09
Benzo(e)pyrene	1.3E-08	5.5E-09	5.5E-09	1.3E-08	1.1E-08	1.3E-08	4.7E-09	5.1E-09	6.5E-09	4.2E-09	1.2E-08	5.6E-09	8.5E-09	5.9E-09	1.0E-08	1.1E-08
Chrysene	5.5E-09	2.4E-09	2.4E-09	5.5E-09	4.7E-09	5.5E-09	2.0E-09	2.2E-09	2.8E-09	1.8E-09	5.3E-09	2.4E-09	3.7E-09	2.6E-09	4.4E-09	4.9E-09
Dibenzo(a,c)anthracene	3.9E-08	1.7E-08	1.7E-08	3.9E-08	3.3E-08	3.9E-08	1.4E-08	1.6E-08	2.0E-08	1.3E-08	3.8E-08	1.7E-08	2.6E-08	1.8E-08	3.2E-08	3.5E-08
Dibenzo(a,h)anthracene	1.8E-09	7.6E-10	7.6E-10	1.8E-09	1.5E-09	1.8E-09	6.5E-10	7.1E-10	9.0E-10	5.8E-10	1.7E-09	7.7E-10	1.2E-09	8.2E-10	1.4E-09	1.6E-09
Fluoranthene	6.0E-08	2.6E-08	2.6E-08	6.1E-08	5.2E-08	6.1E-08	2.2E-08	2.4E-08	3.1E-08	2.0E-08	5.8E-08	2.7E-08	4.0E-08	2.8E-08	4.9E-08	5.4E-08
Fluorene	4.5E-08	2.0E-08	2.0E-08	4.6E-08	3.9E-08	4.6E-08	1.7E-08	1.8E-08	2.3E-08	1.5E-08	4.4E-08	2.0E-08	3.0E-08	2.1E-08	3.7E-08	4.1E-08
Indeno(1,2,3 – cd)pyrene	1.1E-08	4.7E-09	4.7E-09	1.1E-08	9.4E-09	1.1E-08	4.0E-09	4.4E-09	5.6E-09	3.6E-09	1.1E-08	4.8E-09	7.3E-09	5.1E-09	8.9E-09	9.8E-09
1-Methylnaphthalene	1.4E-07	6.2E-08	6.1E-08	1.4E-07	1.2E-07	1.4E-07	5.2E-08	5.7E-08	7.3E-08	4.7E-08	1.4E-07	6.3E-08	9.6E-08	6.7E-08	1.2E-07	1.3E-07
2-Methylnaphthalene	7.9E-07	3.4E-07	3.4E-07	7.9E-07	6.8E-07	8.0E-07	2.9E-07	3.2E-07	4.1E-07	2.6E-07	7.6E-07	3.5E-07	5.3E-07	3.7E-07	6.4E-07	7.0E-07
Naphthalene	6.1E-07	2.7E-07	2.6E-07	6.2E-07	5.3E-07	6.2E-07	2.3E-07	2.5E-07	3.2E-07	2.0E-07	5.9E-07	2.7E-07	4.1E-07	2.9E-07	5.0E-07	5.5E-07
Perylene	2.2E-09	9.5E-10	9.5E-10	2.2E-09	1.9E-09	2.2E-09	8.1E-10	8.8E-10	1.1E-09	7.3E-10	2.1E-09	9.6E-10	1.5E-09	1.0E-09	1.8E-09	2.0E-09
Phenanthrene	1.4E-07	5.9E-08	5.9E-08	1.4E-07	1.2E-07	1.4E-07	5.1E-08	5.5E-08	7.0E-08	4.6E-08	1.3E-07	6.0E-08	9.2E-08	6.4E-08	1.1E-07	1.2E-07
Pyrene	7.3E-08	3.2E-08	3.1E-08	7.3E-08	6.2E-08	7.3E-08	2.7E-08	2.9E-08	3.7E-08	2.4E-08	7.0E-08	3.2E-08	4.9E-08	3.4E-08	5.9E-08	6.5E-08

Annual Exposure Point Concentrations for COPC Exposure Scenarios

Normal Operations - 140,000 tpy

COPC	Annual Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Chlorinated Polycyclic Aromatics																
Dioxins and Furans (as TEQ Toxic Equivalents)	8.7E-11	3.8E-11	3.8E-11	8.8E-11	7.5E-11	8.8E-11	3.2E-11	3.5E-11	4.5E-11	2.9E-11	8.4E-11	3.8E-11	5.8E-11	4.1E-11	7.1E-11	7.8E-11
Polychlorinated Biphenyls (PCBs)	1.0E-07	4.5E-08	4.5E-08	1.1E-07	9.0E-08	1.1E-07	3.9E-08	4.2E-08	5.4E-08	3.5E-08	1.0E-07	4.6E-08	7.0E-08	4.9E-08	8.5E-08	9.4E-08
Chlorinated Monocyclic Aromatics																
Dichlorobenzene, 1,2-	3.0E-06	1.3E-06	1.3E-06	3.0E-06	2.5E-06	3.0E-06	1.1E-06	1.2E-06	1.5E-06	9.9E-07	2.9E-06	1.3E-06	2.0E-06	1.4E-06	2.4E-06	2.7E-06
Dichlorophenol, 2,4-	1.5E-07	6.5E-08	6.5E-08	1.5E-07	1.3E-07	1.5E-07	5.5E-08	6.0E-08	7.7E-08	5.0E-08	1.4E-07	6.6E-08	1.0E-07	7.0E-08	1.2E-07	1.3E-07
Hexachlorobenzene	7.5E-08	3.2E-08	3.2E-08	7.5E-08	6.4E-08	7.5E-08	2.8E-08	3.0E-08	3.8E-08	2.5E-08	7.2E-08	3.3E-08	5.0E-08	3.5E-08	6.1E-08	6.7E-08
Pentachlorobenzene	2.0E-07	8.5E-08	8.5E-08	2.0E-07	1.7E-07	2.0E-07	7.2E-08	7.9E-08	1.0E-07	6.5E-08	1.9E-07	8.6E-08	1.3E-07	9.2E-08	1.6E-07	1.8E-07
Pentachlorophenol	3.0E-07	1.3E-07	1.3E-07	3.0E-07	2.6E-07	3.0E-07	1.1E-07	1.2E-07	1.5E-07	9.9E-08	2.9E-07	1.3E-07	2.0E-07	1.4E-07	2.4E-07	2.7E-07
Tetrachlorobenzene, 1,2,4,5-	7.5E-08	3.2E-08	3.2E-08	7.5E-08	6.4E-08	7.5E-08	2.8E-08	3.0E-08	3.8E-08	2.5E-08	7.2E-08	3.3E-08	5.0E-08	3.5E-08	6.1E-08	6.7E-08
Tetrachlorophenol, 2,3,4,6-	2.5E-07	1.1E-07	1.1E-07	2.5E-07	2.2E-07	2.5E-07	9.3E-08	1.0E-07	1.3E-07	8.4E-08	2.4E-07	1.1E-07	1.7E-07	1.2E-07	2.0E-07	2.3E-07
Trichlorobenzene, 1,2,4-	7.5E-08	3.2E-08	3.2E-08	7.5E-08	6.4E-08	7.5E-08	2.8E-08	3.0E-08	3.8E-08	2.5E-08	7.2E-08	3.3E-08	5.0E-08	3.5E-08	6.1E-08	6.7E-08
Trichlorophenol, 2,4,6-	7.6E-08	3.3E-08	3.3E-08	7.6E-08	6.5E-08	7.7E-08	2.8E-08	3.1E-08	3.9E-08	2.5E-08	7.3E-08	3.3E-08	5.1E-08	3.6E-08	6.2E-08	6.8E-08
Volatile Organic Chemicals (VOC)																
Acetaldehyde	1.1E-09	4.5E-10	4.5E-10	1.1E-09	9.0E-10	1.1E-09	3.9E-10	4.2E-10	5.4E-10	3.5E-10	1.0E-09	4.6E-10	7.0E-10	4.9E-10	8.5E-10	9.4E-10
Benzene	4.5E-05	1.9E-05	1.9E-05	4.5E-05	3.9E-05	4.5E-05	1.7E-05	1.8E-05	2.3E-05	1.5E-05	4.3E-05	2.0E-05	3.0E-05	2.1E-05	3.7E-05	4.0E-05
Biphenyl	4.3E-06	1.9E-06	1.9E-06	4.4E-06	3.7E-06	4.4E-06	1.6E-06	1.7E-06	2.2E-06	1.4E-06	4.2E-06	1.9E-06	2.9E-06	2.0E-06	3.5E-06	3.9E-06
Bromodichloromethane	3.7E-04	1.6E-04	1.6E-04	3.7E-04	3.1E-04	3.7E-04	1.3E-04	1.5E-04	1.9E-04	1.2E-04	3.5E-04	1.6E-04	2.5E-04	1.7E-04	3.0E-04	3.3E-04
Bromoform	1.0E-04	4.3E-05	4.3E-05	1.0E-04	8.6E-05	1.0E-04	3.7E-05	4.0E-05	5.1E-05	3.3E-05	9.7E-05	4.4E-05	6.7E-05	4.7E-05	8.1E-05	8.9E-05
Bromomethane	5.2E-05	2.3E-05	2.3E-05	5.3E-05	4.5E-05	5.3E-05	1.9E-05	2.1E-05	2.7E-05	1.7E-05	5.0E-05	2.3E-05	3.5E-05	2.4E-05	4.2E-05	4.7E-05
Carbon tetrachloride	6.3E-07	2.7E-07	2.7E-07	6.3E-07	5.4E-07	6.3E-07	2.3E-07	2.5E-07	3.2E-07	2.1E-07	6.0E-07	2.7E-07	4.2E-07	2.9E-07	5.1E-07	5.6E-07
Chloroform	7.4E-07	3.2E-07	3.2E-07	7.4E-07	6.3E-07	7.5E-07	2.7E-07	3.0E-07	3.8E-07	2.5E-07	7.1E-07	3.3E-07	5.0E-07	3.5E-07	6.0E-07	6.6E-07
Dichlorodifluoromethane	1.3E-04	5.5E-05	5.5E-05	1.3E-04	1.1E-04	1.3E-04	4.7E-05	5.1E-05	6.5E-05	4.2E-05	1.2E-04	5.5E-05	8.5E-05	5.9E-05	1.0E-04	1.1E-04
Dichloroethene, 1,1 -	8.2E-07	3.5E-07	3.5E-07	8.3E-07	7.0E-07	8.3E-07	3.0E-07	3.3E-07	4.2E-07	2.7E-07	7.9E-07	3.6E-07	5.5E-07	3.8E-07	6.7E-07	7.3E-07
Dichloromethane	2.6E-04	1.1E-04	1.1E-04	2.6E-04	2.2E-04	2.6E-04	9.4E-05	1.0E-04	1.3E-04	8.5E-05	2.5E-04	1.1E-04	1.7E-04	1.2E-04	2.1E-04	2.3E-04
Ethylbenzene	1.5E-06	6.5E-07	6.5E-07	1.5E-06	1.3E-06	1.5E-06	5.5E-07	6.0E-07	7.7E-07	5.0E-07	1.5E-06	6.6E-07	1.0E-06	7.0E-07	1.2E-06	1.3E-06
Ethylene Dibromide	5.9E-07	2.5E-07	2.5E-07	5.9E-07	5.0E-07	5.9E-07	2.2E-07	2.4E-07	3.0E-07	2.0E-07	5.7E-07	2.6E-07	3.9E-07	2.8E-07	4.8E-07	5.3E-07
Formaldehyde	6.9E-05	3.0E-05	3.0E-05	6.9E-05	5.9E-05	7.0E-05	2.5E-05	2.8E-05	3.5E-05	2.3E-05	6.6E-05	3.0E-05	4.6E-05	3.2E-05	5.6E-05	6.2E-05
O-terphenyl	1.2E-07	5.1E-08	5.1E-08	1.2E-07	1.0E-07	1.2E-07	4.4E-08	4.8E-08	6.1E-08	3.9E-08	1.1E-07	5.2E-08	8.0E-08	5.6E-08	9.6E-08	1.1E-07
Tetrachloroethene	8.2E-06	3.6E-06	3.6E-06	8.3E-06	7.0E-06	8.3E-06	3.0E-06	3.3E-06	4.2E-06	2.7E-06	7.9E-06	3.6E-06	5.5E-06	3.9E-06	6.7E-06	7.3E-06
Tetralin	7.2E-07	3.1E-07	3.1E-07	7.3E-07	6.2E-07	7.3E-07	2.7E-07	2.9E-07	3.7E-07	2.4E-07	7.0E-07	3.2E-07	4.9E-07	3.4E-07	5.9E-07	6.5E-07
Toluene	7.3E-05	3.2E-05	3.1E-05	7.3E-05	6.3E-05	7.4E-05	2.7E-05	2.9E-05	3.7E-05	2.4E-05	7.0E-05	3.2E-05	4.9E-05	3.4E-05	5.9E-05	6.5E-05
Trichloroethane, 1,1,1 -	2.1E-06	9.0E-07	8.9E-07	2.1E-06	1.8E-06	2.1E-06	7.6E-07	8.3E-07	1.1E-06	6.9E-07	2.0E-06	9.1E-07	1.4E-06	9.7E-07	1.7E-06	1.8E-06
Trichloroethylene, 1,1,2 -	7.1E-07	3.1E-07	3.1E-07	7.2E-07	6.1E-07	7.2E-07	2.6E-07	2.9E-07	3.7E-07	2.4E-07	6.9E-07	3.1E-07	4.8E-07	3.3E-07	5.8E-07	6.4E-07
Trichlorofluoromethane	2.5E-04	1.1E-04	1.1E-04	2.5E-04	2.1E-04	2.5E-04	9.2E-05	1.0E-04	1.3E-04	8.3E-05	2.4E-04	1.1E-04	1.7E-04	1.2E-04	2.0E-04	2.2E-04
Vinyl chloride	6.3E-05	2.7E-05	2.7E-05	6.4E-05	5.4E-05	6.4E-05	2.3E-05	2.5E-05	3.2E-05	2.1E-05	6.1E-05	2.8E-05	4.2E-05	3.0E-05	5.1E-05	5.7E-05
Xylenes, m-, p- and o-	8.8E-04	3.8E-04	3.8E-04	8.8E-04	7.5E-04	8.8E-04	3.2E-04	3.5E-04	4.5E-04	2.9E-04	8.5E-04	3.8E-04	5.9E-04	4.1E-04	7.1E-04	7.8E-04

APPENDIX E-2

Air Exposure Point Concentrations – Upset Operations (Process Upset Case) – 140,000 tpy

1-Hour Exposure Point Concentrations for Process Upset COPC Exposure Scenarios

Process Upset - 140,000 tpy

COPC	1-Hour Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Criteria Air Contaminants (CAC)																
Ammonia	20	9.8	10	16	30	19	6.4	4.9	4.9	7.9	14	4.8	6.1	3.8	11	11
Carbon Monoxide (CO)	163	81	84	137	251	157	54	41	41	66	118	40	51	32	89	94
Hydrogen Chloride (HCl)	33	16	17	27	50	31	11	8.1	8.1	13	24	8.0	10	6.4	18	19
Hydrogen Fluoride (HF)	3.3	1.6	1.7	2.7	5.0	3.1	1.1	0.81	0.81	1.3	2.4	0.80	1.0	0.64	1.8	1.9
Nitrogen Dioxide (NO_2)	72	36	37	60	110	69	23	18	18	29	52	18	22	14	39	41
Particulate Matter - PM_{10}	37	32	35	37	59	33	15	18	15	37	28	18	36	11	30	28
Particulate Matter - $PM_{2.5}$	37	32	35	37	59	33	15	18	15	37	28	18	36	11	30	28
Particulate Matter - Total	37	32	35	37	59	33	15	18	15	37	28	18	36	11	30	28
Sulfur Dioxide (SO_2)	203	101	105	170	313	196	67	51	51	82	147	50	64	40	111	117
Metals																
Antimony	0.0099	0.0050	0.0051	0.0083	0.015	0.0096	0.0033	0.0025	0.0025	0.0040	0.0072	0.0024	0.0031	0.0019	0.0054	0.0057
Arsenic	0.0015	7.6E-04	7.9E-04	0.0013	0.0023	0.0015	5.0E-04	3.8E-04	3.8E-04	6.1E-04	0.0011	3.7E-04	4.8E-04	3.0E-04	8.3E-04	8.8E-04
Barium	0.0077	0.0038	0.0040	0.0064	0.012	0.0074	0.0025	0.0019	0.0019	0.0031	0.0055	0.0019	0.0024	0.0015	0.0042	0.0044
Beryllium	0.0012	6.0E-04	6.2E-04	0.0010	0.0019	0.0012	4.0E-04	3.0E-04	3.0E-04	4.9E-04	8.7E-04	3.0E-04	3.8E-04	2.4E-04	6.6E-04	6.9E-04
Boron	0.55	0.28	0.29	0.46	0.85	0.53	0.18	0.14	0.14	0.22	0.40	0.14	0.17	0.11	0.30	0.32
Cadmium	0.025	0.013	0.013	0.021	0.039	0.024	0.0083	0.0063	0.0063	0.010	0.018	0.0062	0.0080	0.0050	0.014	0.015
Chromium (hexavalent)	0.0012	5.8E-04	6.0E-04	9.7E-04	0.0018	0.0011	3.8E-04	2.9E-04	2.9E-04	4.7E-04	8.4E-04	2.8E-04	3.6E-04	2.3E-04	6.3E-04	6.7E-04
Total Chromium (and compounds)	0.0082	0.0041	0.0042	0.0068	0.013	0.0079	0.0027	0.0020	0.0020	0.0033	0.0059	0.0020	0.0026	0.0016	0.0044	0.0047
Cobalt	0.021	0.010	0.011	0.018	0.032	0.020	0.0069	0.0052	0.0052	0.0085	0.015	0.0051	0.0066	0.0041	0.011	0.012
Lead	0.18	0.090	0.093	0.15	0.28	0.17	0.059	0.045	0.045	0.073	0.13	0.044	0.057	0.035	0.099	0.10
Mercury - Inorganic	0.054	0.027	0.028	0.046	0.084	0.052	0.018	0.014	0.014	0.022	0.039	0.013	0.017	0.011	0.030	0.031
Nickel	0.32	0.16	0.16	0.26	0.49	0.30	0.10	0.079	0.079	0.13	0.23	0.077	0.099	0.062	0.17	0.18
Phosphorus	0.17	0.083	0.086	0.14	0.26	0.16	0.055	0.042	0.042	0.067	0.12	0.041	0.052	0.033	0.091	0.096
Selenium	0.0017	8.7E-04	9.0E-04	0.0015	0.0027	0.0017	5.7E-04	4.3E-04	4.3E-04	7.0E-04	0.0013	4.3E-04	5.5E-04	3.4E-04	9.5E-04	0.0010
Silver	0.012	0.0061	0.0063	0.010	0.019	0.012	0.0040	0.0030	0.0030	0.0049	0.0088	0.0030	0.0038	0.0024	0.0066	0.0070
Thallium	0.14	0.071	0.073	0.12	0.22	0.14	0.046	0.035	0.035	0.057	0.10	0.035	0.044	0.028	0.077	0.081
Tin	0.064	0.032	0.033	0.053	0.098	0.061	0.021	0.016	0.016	0.026	0.046	0.016	0.020	0.012	0.035	0.037
Vanadium	0.0042	0.0021	0.0022	0.0035	0.0065	0.0041	0.0014	0.0011	0.0011	0.0017	0.0030	0.0010	0.0013	8.2E-04	0.0023	0.0024
Zinc	0.72	0.36	0.37	0.61	1.1	0.70	0.24	0.18	0.18	0.29	0.52	0.18	0.23	0.14	0.39	0.42
Polycyclic Aromatic Hydrocarbons (PAH)																
Acenaphthene	6.7E-05	3.4E-05	3.5E-05	5.6E-05	1.0E-04	6.5E-05	2.2E-05	1.7E-05	1.7E-05	2.7E-05	4.9E-05	1.7E-05	2.1E-05	1.3E-05	3.7E-05	3.9E-05
Acenaphthylene	5.3E-05	2.6E-05	2.7E-05	4.4E-05	8.1E-05	5.1E-05	1.7E-05	1.3E-05	1.3E-05	2.1E-05	3.8E-05	1.3E-05	1.6E-05	1.0E-05	2.9E-05	3.0E-05
Anthracene	1.5E-05	7.4E-06	7.6E-06	1.2E-05	2.3E-05	1.4E-05	4.8E-06	3.7E-06	3.7E-06	6.0E-06	1.1E-05	3.6E-06	4.6E-06	2.9E-06	8.0E-06	8.5E-06
Benzo(a)anthracene	5.4E-06	2.7E-06	2.8E-06	4.6E-06	8.4E-06	5.2E-06	1.8E-06	1.4E-06	1.4E-06	2.2E-06	3.9E-06	1.3E-06	1.7E-06	1.1E-06	3.0E-06	3.1E-06
Benzo(b)fluoranthene	1.4E-05	6.9E-06	7.2E-06	1.2E-05	2.1E-05	1.3E-05	4.6E-06	3.5E-06	3.5E-06	5.6E-06	1.0E-05	3.4E-06	4.4E-06	2.7E-06	7.6E-06	8.0E-06
Benzo(k)fluoranthene	3.7E-06	1.8E-06	1.9E-06	3.1E-06	5.6E-06	3.5E-06	1.2E-06	9.1E-07	9.1E-07	1.5E-06	2.6E-06	9.0E-07	1.1E-06	7.2E-07	2.0E-06	2.1E-06
Benzo(a)fluorene	1.0E-04	5.0E-05	5.2E-05	8.4E-05	1.5E-04	9.7E-05	3.3E-05	2.5E-05	2.5E-05	4.0E-05	7.2E-05	2.5E-05	3.1E-05	2.0E-05	5.5E-05	5.8E-05
Benzo(b)fluorene	6.9E-05	3.4E-05	3.5E-05	5.7E-05	1.1E-04	6.6E-05	2.3E-05	1.7E-05	1.7E-05	2.8E-05	4.9E-05	1.7E-05	2.1E-05	1.3E-05	3.7E-05	3.9E-05
Benzo(ghi)perylene	1.5E-04	7.5E-05	7.7E-05	1.3E-04	2.3E-04	1.4E-04	4.9E-05	3.7E-05	3.7E-05	6.0E-05	1.1E-04	3.7E-05	4.7E-05	2.9E-05	8.2E-05	8.6E-05
Benzo(a)pyrene	1.2E-05	6.2E-06	6.4E-06	1.0E-05	1.9E-05	1.2E-05	4.1E-06	3.1E-06	3.1E-06	5.0E-06	9.0E-06	3.1E-06	3.9E-06	2.4E-06	6.8E-06	7.2E-06
Benzo(e)pyrene	3.2E-05	1.6E-05	1.6E-05	2.6E-05	4.9E-05	3.0E-05	1.0E-05	7.9E-06	7.9E-06	1.3E-05	2.3E-05	7.7E-06	9.9E-06	6.2E-06	1.7E-05	1.8E-05
Chrysene	1.4E-05	6.8E-06	7.0E-06	1.1E-05	2.1E-05	1.3E-05	4.5E-06	3.4E-06	3.4E-06	5.5E-06	9.9E-06	3.3E-06	4.3E-06	2.7E-06	7.5E-06	7.9E-06
Dibenzo(a,c)anthracene	9.7E-05	4.8E-05	5.0E-05	8.1E-05	1.5E-04	9.4E-05	3.2E-05	2.4E-05	2.4E-05	3.9E-05	7.0E-05	2.4E-05	3.0E-05	1.9E-05	5.3E-05	5.6E-05
Dibenzo(a,h)anthracene	4.4E-06	2.2E-06	2.3E-06	3.7E-06	6.8E-06	4.2E-06	1.4E-06	1.1E-06	1.1E-06	1.8E-06	3.2E-06	1.1E-06	1.4E-06	8.6E-07	2.4E-06	2.5E-06
Fluoranthene	1.5E-04	7.5E-05	7.8E-05	1.3E-04	2.3E-04	1.5E-04	4.9E-05	3.8E-05	3.8E-05	6.1E-05	1.1E-04	3.7E-05	4.7E-05	2.9E-05	8.2E-05	8.7E-05
Fluorene	1.1E-04	5.7E-05	5.9E-05	9.5E-05	1.7E-04	1.1E-04	3.7E-05	2.8E-05	2.8E-05	4.6E-05	8.2E-05	2.8E-05	3.6E-05	2.2E-05	6.2E-05	6.5E-05
Indeno(1,2,3 – cd)pyrene	2.7E-05	1.4E-05	1.4E-05	2.3E-05	4.2E-05	2.6E-05	9.0E-06	6.8E-06	6.8E-06	1.1E-05	2.0E-05	6.7E-06	8.6E-06	5.3E-06	1.5E-05	1.6E-05
1-Methylnaphthalene	3.6E-04	1.8E-04	1.8E-04	3.0E-04	5.5E-04	3.4E-04	1.2E-04	8.9E-05	8.9E-05	1.4E-04	2.6E-04	8.7E-05	1.1E-04	7.0E-05	1.9E-04	2.0E-04
2-Methylnaphthalene	0.0020	9.8E-04	0.0010	0.0017	0.0030	0.0019	6.5E-04	4.9E-04	4.9E-04	8.0E-04	0.0014	4.8E-04	6.2E-04	3.9E-04	0.0011	0.0011
Naphthalene	0.0015	7.7E-04	7.9E-04	0.0013	0.0024	0.0015	5.0E-04	3.8E-04	3.8E-04	6.2E-04	0.0011	3.8E-04	4.8E-04	3.0E-04	8.4E-04	8.8E-04
Perylene	5.5E-06	2.7E-06	2.8E-06	4.6E-06	8.4E-06	5.3E-06	1.8E-06	1.4E-06	1.4E-06	2.2E-06	4.0E-06	1.3E-06	1.7E-06	1.1E-06	3.0E-06	3.1E-06
Phenanthrene	3.4E-04	1.7E-04	1.8E-04	2.9E-04	5.3E-04	3.3E-04	1.1E-04	8.5E-05	8.5E-05	1.4E-04	2.5E-04	8.4E-05	1.1E-04	6.7E-05	1.9E-04	2.0E-04
Pyrene	1.8E-04	9.1E-05	9.4E-05	1.5E-04	2.8E-04	1.8E-04	6.0E-05	4.5E-05	4.5E-05	7.3E-05	1.3E-04	4.5E-05	5.7E-05	3.6E-05	9.9E-05	1.0E-04

1-Hour Exposure Point Concentrations for Process Upset COPC Exposure Scenarios

Process Upset - 140,000 tpy

COPC	1-Hour Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Chlorinated Polycyclic Aromatics																
Dioxins and Furans (as TEQ Toxic Equivalents)	2.2E-07	1.1E-07	1.1E-07	1.8E-07	3.4E-07	2.1E-07	7.1E-08	5.4E-08	5.4E-08	8.8E-08	1.6E-07	5.3E-08	6.8E-08	4.3E-08	1.2E-07	1.3E-07
Polychlorinated Biphenyls (PCBs)	2.6E-04	1.3E-04	1.4E-04	2.2E-04	4.0E-04	2.5E-04	8.6E-05	6.5E-05	6.5E-05	1.1E-04	1.9E-04	6.4E-05	8.2E-05	5.1E-05	1.4E-04	1.5E-04
Chlorinated Monocyclic Aromatics																
Dichlorobenzene, 1,2-	0.0074	0.0037	0.0038	0.0062	0.011	0.0071	0.0024	0.0018	0.0018	0.0030	0.0054	0.0018	0.0023	0.0014	0.0040	0.0043
Dichlorophenol, 2,4-	3.7E-04	1.9E-04	1.9E-04	3.1E-04	5.8E-04	3.6E-04	1.2E-04	9.3E-05	9.3E-05	1.5E-04	2.7E-04	9.1E-05	1.2E-04	7.3E-05	2.0E-04	2.1E-04
Hexachlorobenzene	1.9E-04	9.3E-05	9.6E-05	1.6E-04	2.9E-04	1.8E-04	6.1E-05	4.7E-05	4.7E-05	7.5E-05	1.3E-04	4.6E-05	5.9E-05	3.6E-05	1.0E-04	1.1E-04
Pentachlorobenzene	4.9E-04	2.4E-04	2.5E-04	4.1E-04	7.6E-04	4.7E-04	1.6E-04	1.2E-04	1.2E-04	2.0E-04	3.5E-04	1.2E-04	1.5E-04	9.6E-05	2.7E-04	2.8E-04
Pentachlorophenol	7.5E-04	3.7E-04	3.9E-04	6.3E-04	0.0012	7.2E-04	2.5E-04	1.9E-04	1.9E-04	3.0E-04	5.4E-04	1.8E-04	2.3E-04	1.5E-04	4.1E-04	4.3E-04
Tetrachlorobenzene, 1,2,4,5-	1.9E-04	9.3E-05	9.6E-05	1.6E-04	2.9E-04	1.8E-04	6.1E-05	4.7E-05	4.7E-05	7.5E-05	1.3E-04	4.6E-05	5.9E-05	3.6E-05	1.0E-04	1.1E-04
Tetrachlorophenol, 2,3,4,6-	6.3E-04	3.1E-04	3.3E-04	5.3E-04	9.7E-04	6.1E-04	2.1E-04	1.6E-04	1.6E-04	2.5E-04	4.5E-04	1.5E-04	2.0E-04	1.2E-04	3.4E-04	3.6E-04
Trichlorobenzene, 1,2,4-	1.9E-04	9.3E-05	9.6E-05	1.6E-04	2.9E-04	1.8E-04	6.1E-05	4.7E-05	4.7E-05	7.5E-05	1.3E-04	4.6E-05	5.9E-05	3.6E-05	1.0E-04	1.1E-04
Trichlorophenol, 2,4,6-	1.9E-04	9.5E-05	9.8E-05	1.6E-04	2.9E-04	1.8E-04	6.2E-05	4.7E-05	4.7E-05	7.7E-05	1.4E-04	4.6E-05	5.9E-05	3.7E-05	1.0E-04	1.1E-04
Volatile Organic Chemicals (VOC)																
Acetaldehyde	2.6E-06	1.3E-06	1.4E-06	2.2E-06	4.0E-06	2.5E-06	8.6E-07	6.5E-07	6.5E-07	1.1E-06	1.9E-06	6.4E-07	8.2E-07	5.1E-07	1.4E-06	1.5E-06
Benzene	0.11	0.056	0.058	0.094	0.17	0.11	0.037	0.028	0.028	0.045	0.081	0.028	0.035	0.022	0.061	0.065
Biphenyl	0.011	0.0054	0.0056	0.0091	0.017	0.010	0.0035	0.0027	0.0027	0.0044	0.0078	0.0026	0.0034	0.0021	0.0059	0.0062
Bromodichloromethane	0.92	0.46	0.47	0.77	1.4	0.88	0.30	0.23	0.23	0.37	0.66	0.22	0.29	0.18	0.50	0.53
Bromoform	0.25	0.12	0.13	0.21	0.39	0.24	0.082	0.062	0.062	0.10	0.18	0.061	0.078	0.049	0.14	0.14
Bromomethane	0.13	0.065	0.067	0.11	0.20	0.13	0.043	0.033	0.033	0.053	0.094	0.032	0.041	0.026	0.071	0.075
Carbon tetrachloride	0.0016	7.8E-04	8.1E-04	0.0013	0.0024	0.0015	5.1E-04	3.9E-04	3.9E-04	6.3E-04	0.0011	3.8E-04	4.9E-04	3.1E-04	8.5E-04	9.0E-04
Chloroform	0.0018	9.2E-04	9.5E-04	0.0015	0.0028	0.0018	6.1E-04	4.6E-04	4.6E-04	7.5E-04	0.0013	4.5E-04	5.8E-04	3.6E-04	0.0010	0.0011
Dichlorodifluoromethane	0.32	0.16	0.16	0.26	0.49	0.30	0.10	0.079	0.079	0.13	0.23	0.077	0.099	0.062	0.17	0.18
Dichloroethene, 1,1 -	0.0021	0.0010	0.0011	0.0017	0.0032	0.0020	6.7E-04	5.1E-04	5.1E-04	8.3E-04	0.0015	5.0E-04	6.4E-04	4.0E-04	0.0011	0.0012
Dichloromethane	0.64	0.32	0.33	0.53	0.98	0.61	0.21	0.16	0.16	0.26	0.46	0.16	0.20	0.12	0.35	0.37
Ethylbenzene	0.0038	0.0019	0.0019	0.0031	0.0058	0.0036	0.0012	9.4E-04	9.4E-04	0.0015	0.0027	9.2E-04	0.0012	7.3E-04	0.0020	0.0022
Ethylene Dibromide	0.0015	7.3E-04	7.6E-04	0.0012	0.0023	0.0014	4.8E-04	3.7E-04	3.7E-04	5.9E-04	0.0011	3.6E-04	4.6E-04	2.9E-04	8.0E-04	8.4E-04
Formaldehyde	0.17	0.086	0.089	0.14	0.27	0.17	0.057	0.043	0.043	0.070	0.12	0.042	0.054	0.034	0.094	0.099
O-terphenyl	3.0E-04	1.5E-04	1.5E-04	2.5E-04	4.6E-04	2.9E-04	9.7E-05	7.4E-05	7.4E-05	1.2E-04	2.1E-04	7.3E-05	9.3E-05	5.8E-05	1.6E-04	1.7E-04
Tetrachloroethene	0.021	0.010	0.011	0.017	0.032	0.020	0.0067	0.0051	0.0051	0.0083	0.015	0.0050	0.0064	0.0040	0.011	0.012
Tetralin	0.0018	9.0E-04	9.3E-04	0.0015	0.0028	0.0017	5.9E-04	4.5E-04	4.5E-04	7.3E-04	0.0013	4.4E-04	5.7E-04	3.5E-04	9.9E-04	0.0010
Toluene	0.18	0.091	0.094	0.15	0.28	0.18	0.060	0.045	0.045	0.074	0.13	0.045	0.057	0.036	0.099	0.10
Trichloroethane, 1,1,1 -	0.0052	0.0026	0.0027	0.0043	0.0080	0.0050	0.0017	0.0013	0.0013	0.0021	0.0037	0.0013	0.0016	0.0010	0.0028	0.0030
Trichloroethylene, 1,1,2 -	0.0018	8.9E-04	9.2E-04	0.0015	0.0027	0.0017	5.9E-04	4.4E-04	4.4E-04	7.2E-04	0.0013	4.4E-04	5.6E-04	3.5E-04	9.7E-04	0.0010
Trichlorofluoromethane	0.62	0.31	0.32	0.52	0.96	0.60	0.20	0.16	0.16	0.25	0.45	0.15	0.20	0.12	0.34	0.36
Vinyl chloride	0.16	0.079	0.082	0.13	0.24	0.15	0.052	0.039	0.039	0.064	0.11	0.039	0.050	0.031	0.086	0.091
Xylenes, m-, p- and o-	2.2	1.1	1.1	1.8	3.4	2.1	0.72	0.55	0.55	0.88	1.6	0.54	0.69	0.43	1.2	1.3

24-Hour Exposure Point Concentrations for Process Upset COPC Exposure Scenarios

Process Upset - 140,000 tpy

COPC	24-Hour Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Criteria Air Contaminants (CAC)																
Ammonia	2.7	1.00	0.98	2.1	3.5	2.7	0.82	0.73	1.1	0.90	2.6	0.67	1.7	0.87	1.5	1.9
Carbon Monoxide (CO)	23	8.3	8.2	18	29	22	6.8	6.1	9.1	7.5	22	5.6	14	7.2	12	16
Hydrogen Chloride (HCl)	4.5	1.7	1.6	3.6	5.9	4.4	1.4	1.2	1.8	1.5	4.3	1.1	2.8	1.4	2.4	3.2
Hydrogen Fluoride (HF)	0.45	0.17	0.16	0.36	0.59	0.44	0.14	0.12	0.18	0.15	0.43	0.11	0.28	0.14	0.24	0.32
Nitrogen Dioxide (NO_2)	9.9	3.6	3.6	7.8	13	9.7	3.0	2.7	4.0	3.3	9.5	2.5	6.1	3.2	5.3	7.1
Particulate Matter - PM_{10}	5.3	3.4	3.6	6.0	6.7	6.0	2.4	2.5	1.9	4.1	5.6	3.0	3.2	1.5	4.2	6.6
Particulate Matter - $PM_{2.5}$	5.3	3.4	3.6	6.0	6.7	6.0	2.4	2.5	1.9	4.1	5.6	3.0	3.2	1.5	4.2	6.6
Particulate Matter - Total	5.3	3.4	3.6	6.0	6.7	6.0	2.4	2.5	1.9	4.1	5.6	3.0	3.2	1.5	4.2	6.6
Sulfur Dioxide (SO_2)	28	10	10	22	36	28	8.5	7.6	11	9.3	27	7.0	17	9.0	15	20
Metals																
Antimony	0.0014	5.1E-04	5.0E-04	0.0011	0.0018	0.0014	4.1E-04	3.7E-04	5.6E-04	4.5E-04	0.0013	3.4E-04	8.5E-04	4.4E-04	7.4E-04	9.8E-04
Arsenic	2.1E-04	7.8E-05	7.6E-05	1.7E-04	2.7E-04	2.1E-04	6.4E-05	5.7E-05	8.5E-05	7.0E-05	2.0E-04	5.2E-05	1.3E-04	6.8E-05	1.1E-04	1.5E-04
Barium	0.0011	3.9E-04	3.8E-04	8.3E-04	0.0014	0.0010	3.2E-04	2.9E-04	4.3E-04	3.5E-04	0.0010	2.6E-04	6.5E-04	3.4E-04	5.7E-04	7.6E-04
Beryllium	1.7E-04	6.1E-05	6.0E-05	1.3E-04	2.2E-04	1.6E-04	5.0E-05	4.5E-05	6.8E-05	5.5E-05	1.6E-04	4.2E-05	1.0E-04	5.4E-05	9.0E-05	1.2E-04
Boron	0.077	0.028	0.028	0.060	0.100	0.075	0.023	0.021	0.031	0.025	0.073	0.019	0.047	0.025	0.041	0.055
Cadmium	0.0035	0.0013	0.0013	0.0028	0.0046	0.0035	0.0011	9.5E-04	0.0014	0.0012	0.0034	8.7E-04	0.0022	0.0011	0.0019	0.0025
Chromium (hexavalent)	1.6E-04	5.9E-05	5.8E-05	1.3E-04	2.1E-04	1.6E-04	4.8E-05	4.3E-05	6.5E-05	5.3E-05	1.5E-04	4.0E-05	9.9E-05	5.1E-05	8.6E-05	1.1E-04
Total Chromium (and compounds)	0.0011	4.2E-04	4.1E-04	8.9E-04	0.0015	0.0011	3.4E-04	3.1E-04	4.6E-04	3.7E-04	0.0011	2.8E-04	7.0E-04	3.6E-04	6.1E-04	8.1E-04
Cobalt	0.0029	0.0011	0.0010	0.0023	0.0038	0.0029	8.8E-04	7.9E-04	0.0012	9.6E-04	0.0028	7.2E-04	0.0018	9.3E-04	0.0016	0.0021
Lead	0.025	0.0092	0.0091	0.020	0.033	0.025	0.0076	0.0068	0.010	0.0083	0.024	0.0062	0.015	0.0080	0.014	0.018
Mercury - Inorganic	0.0075	0.0028	0.0027	0.0059	0.0098	0.0074	0.0023	0.0020	0.0030	0.0025	0.0072	0.0019	0.0046	0.0024	0.0041	0.0054
Nickel	0.044	0.016	0.016	0.034	0.057	0.043	0.013	0.012	0.018	0.014	0.042	0.011	0.027	0.014	0.024	0.031
Phosphorus	0.023	0.0085	0.0083	0.018	0.030	0.023	0.0070	0.0062	0.0093	0.0076	0.022	0.0057	0.014	0.0074	0.012	0.017
Selenium	2.4E-04	8.9E-05	8.7E-05	1.9E-04	3.1E-04	2.4E-04	7.3E-05	6.5E-05	9.7E-05	8.0E-05	2.3E-04	6.0E-05	1.5E-04	7.7E-05	1.3E-04	1.7E-04
Silver	0.0017	6.2E-04	6.1E-04	0.0013	0.0022	0.0017	5.1E-04	4.5E-04	6.8E-04	5.6E-04	0.0016	4.2E-04	0.0010	5.4E-04	9.1E-04	0.0012
Thallium	0.020	0.0072	0.0071	0.015	0.025	0.019	0.0059	0.0053	0.0079	0.0065	0.019	0.0049	0.012	0.0063	0.011	0.014
Tin	0.0088	0.0032	0.0032	0.0069	0.011	0.0087	0.0027	0.0024	0.0036	0.0029	0.0084	0.0022	0.0054	0.0028	0.0048	0.0063
Vanadium	5.8E-04	2.1E-04	2.1E-04	4.6E-04	7.6E-04	5.7E-04	1.8E-04	1.6E-04	2.4E-04	1.9E-04	5.6E-04	1.4E-04	3.6E-04	1.9E-04	3.1E-04	4.2E-04
Zinc	0.100	0.037	0.036	0.079	0.13	0.098	0.030	0.027	0.040	0.033	0.096	0.025	0.062	0.032	0.054	0.072
Polycyclic Aromatic Hydrocarbons (PAH)																
Acenaphthene	9.3E-06	3.4E-06	3.4E-06	7.3E-06	1.2E-05	9.2E-06	2.8E-06	2.5E-06	3.8E-06	3.1E-06	8.9E-06	2.3E-06	5.8E-06	3.0E-06	5.0E-06	6.7E-06
Acenaphthylene	7.3E-06	2.7E-06	2.6E-06	5.7E-06	9.4E-06	7.2E-06	2.2E-06	2.0E-06	2.9E-06	2.4E-06	7.0E-06	1.8E-06	4.5E-06	2.3E-06	3.9E-06	5.2E-06
Anthracene	2.0E-06	7.5E-07	7.4E-07	1.6E-06	2.7E-06	2.0E-06	6.2E-07	5.5E-07	8.3E-07	6.7E-07	2.0E-06	5.1E-07	1.3E-06	6.5E-07	1.1E-06	1.5E-06
Benzo(a)anthracene	7.5E-07	2.8E-07	2.7E-07	5.9E-07	9.8E-07	7.4E-07	2.3E-07	2.0E-07	3.0E-07	2.5E-07	7.2E-07	1.9E-07	4.6E-07	2.4E-07	4.1E-07	5.4E-07
Benzo(b)fluoranthene	1.9E-06	7.1E-07	6.9E-07	1.5E-06	2.5E-06	1.9E-06	5.8E-07	5.2E-07	7.8E-07	6.3E-07	1.8E-06	4.8E-07	1.2E-06	6.2E-07	1.0E-06	1.4E-06
Benzo(k)fluoranthene	5.1E-07	1.9E-07	1.8E-07	4.0E-07	6.6E-07	5.0E-07	1.5E-07	1.4E-07	2.0E-07	1.7E-07	4.8E-07	1.3E-07	3.1E-07	1.6E-07	2.7E-07	3.6E-07
Benzo(a)fluorene	1.4E-05	5.1E-06	5.0E-06	1.1E-05	1.8E-05	1.4E-05	4.2E-06	3.7E-06	5.6E-06	4.6E-06	1.3E-05	3.4E-06	8.6E-06	4.4E-06	7.5E-06	9.9E-06
Benzo(b)fluorene	9.5E-06	3.5E-06	3.4E-06	7.5E-06	1.2E-05	9.3E-06	2.9E-06	2.6E-06	3.8E-06	3.1E-06	9.1E-06	2.4E-06	5.9E-06	3.0E-06	5.1E-06	6.8E-06
Benzo(ghi)perylene	2.1E-05	7.6E-06	7.5E-06	1.6E-05	2.7E-05	2.0E-05	6.3E-06	5.6E-06	8.4E-06	6.8E-06	2.0E-05	5.1E-06	1.3E-05	6.6E-06	1.1E-05	1.5E-05
Benzo(a)pyrene	1.7E-06	6.3E-07	6.2E-07	1.4E-06	2.2E-06	1.7E-06	5.2E-07	4.7E-07	7.0E-07	5.7E-07	1.7E-06	4.3E-07	1.1E-06	5.5E-07	9.3E-07	1.2E-06
Benzo(e)pyrene	4.4E-06	1.6E-06	1.6E-06	3.4E-06	5.7E-06	4.3E-06	1.3E-06	1.2E-06	1.8E-06	1.4E-06	4.2E-06	1.1E-06	2.7E-06	1.4E-06	2.4E-06	3.1E-06
Chrysene	1.9E-06	7.0E-07	6.8E-07	1.5E-06	2.5E-06	1.9E-06	5.7E-07	5.1E-07	7.6E-07	6.2E-07	1.8E-06	4.7E-07	1.2E-06	6.1E-07	1.0E-06	1.4E-06
Dibenzo(a,c)anthracene	1.3E-05	4.9E-06	4.9E-06	1.1E-05	1.7E-05	1.3E-05	4.1E-06	3.6E-06	5.4E-06	4.4E-06	1.3E-05	3.3E-06	8.3E-06	4.3E-06	7.2E-06	9.6E-06
Dibenzo(a,h)anthracene	6.1E-07	2.2E-07	2.2E-07	4.8E-07	7.9E-07	6.0E-07	1.8E-07	1.6E-07	2.5E-07	2.0E-07	5.8E-07	1.5E-07	3.7E-07	1.9E-07	3.3E-07	4.3E-07
Fluoranthene	2.1E-05	7.7E-06	7.5E-06	1.6E-05	2.7E-05	2.1E-05	6.3E-06	5.6E-06	8.4E-06	6.9E-06	2.0E-05	5.2E-06	1.3E-05	6.7E-06	1.1E-05	1.5E-05
Fluorene	1.6E-05	5.8E-06	5.7E-06	1.2E-05	2.0E-05	1.5E-05	4.7E-06	4.2E-06	6.3E-06	5.2E-06	1.5E-05	3.9E-06	9.7E-06	5.0E-06	8.5E-06	1.1E-05
Indeno(1,2,3 – cd)pyrene	3.8E-06	1.4E-06	1.4E-06	3.0E-06	4.9E-06	3.7E-06	1.1E-06	1.0E-06	1.5E-06	1.2E-06	3.6E-06	9.4E-07	2.3E-06	1.2E-06	2.0E-06	2.7E-06
1-Methylnaphthalene	4.9E-05	1.8E-05	1.8E-05	3.9E-05	6.4E-05	4.8E-05	1.5E-05	1.3E-05	2.0E-05	1.6E-05	4.7E-05	1.2E-05	3.0E-05	1.6E-05	2.7E-05	3.5E-05
2-Methylnaphthalene	2.7E-04	1.0E-04	9.9E-05	2.1E-04	3.5E-04	2.7E-04	8.2E-05	7.4E-05	1.1E-04	9.0E-05	2.6E-04	6.8E-05	1.7E-04	8.7E-05	1.5E-04	2.0E-04
Naphthalene	2.1E-04	7.8E-05	7.7E-05	1.7E-04	2.8E-04	2.1E-04	6.4E-05	5.7E-05	8.6E-05	7.0E-05	2.0E-04	5.3E-05	1.3E-04	6.8E-05	1.1E-04	1.5E-04
Perylene	7.6E-07	2.8E-07	2.7E-07	6.0E-07	9.8E-07	7.5E-07	2.3E-07	2.0E-07	3.1E-07	2.5E-07	7.3E-07	1.9E-07	4.7E-07	2.4E-07	4.1E-07	5.4E-07
Phenanthrene	4.7E-05	1.7E-05	1.7E-05	3.7E-05	6.2E-05	4.7E-05	1.4E-05	1.3E-05	1.9E-05	1.6E-05	4.5E-05	1.2E-05	2.9E-05	1.5E-05	2.6E-05	3.4E-05
Pyrene	2.5E-05	9.3E-06	9.1E-06	2.0E-05	3.3E-05	2.5E-05	7.6E-06	6.8E-06	1.0E-05	8.3E-06	2.4E-05	6.3E-06	1.6E-05	8.1E-06	1.4E-05	1.8E-05

24-Hour Exposure Point Concentrations for Process Upset COPC Exposure Scenarios

Process Upset - 140,000 tpy

COPC	24-Hour Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Chlorinated Polycyclic Aromatics																
Dioxins and Furans (as TEQ Toxic Equivalents)	3.0E-08	1.1E-08	1.1E-08	2.4E-08	3.9E-08	3.0E-08	9.1E-09	8.1E-09	1.2E-08	9.9E-09	2.9E-08	7.5E-09	1.9E-08	9.6E-09	1.6E-08	2.2E-08
Polychlorinated Biphenyls (PCBs)	3.6E-05	1.3E-05	1.3E-05	2.9E-05	4.7E-05	3.6E-05	1.1E-05	9.8E-06	1.5E-05	1.2E-05	3.5E-05	9.0E-06	2.2E-05	1.2E-05	2.0E-05	2.6E-05
Chlorinated Monocyclic Aromatics																
Dichlorobenzene, 1,2-	0.0010	3.8E-04	3.7E-04	8.1E-04	0.0013	0.0010	3.1E-04	2.8E-04	4.1E-04	3.4E-04	9.8E-04	2.5E-04	6.3E-04	3.3E-04	5.5E-04	7.3E-04
Dichlorophenol, 2,4-	5.2E-05	1.9E-05	1.9E-05	4.1E-05	6.7E-05	5.1E-05	1.6E-05	1.4E-05	2.1E-05	1.7E-05	4.9E-05	1.3E-05	3.2E-05	1.7E-05	2.8E-05	3.7E-05
Hexachlorobenzene	2.6E-05	9.5E-06	9.3E-06	2.0E-05	3.4E-05	2.5E-05	7.8E-06	7.0E-06	1.0E-05	8.5E-06	2.5E-05	6.4E-06	1.6E-05	8.3E-06	1.4E-05	1.8E-05
Pentachlorobenzene	6.8E-05	2.5E-05	2.5E-05	5.3E-05	8.8E-05	6.7E-05	2.0E-05	1.8E-05	2.7E-05	2.2E-05	6.5E-05	1.7E-05	4.2E-05	2.2E-05	3.7E-05	4.9E-05
Pentachlorophenol	1.0E-04	3.8E-05	3.7E-05	8.1E-05	1.3E-04	1.0E-04	3.1E-05	2.8E-05	4.2E-05	3.4E-05	9.9E-05	2.6E-05	6.4E-05	3.3E-05	5.6E-05	7.4E-05
Tetrachlorobenzene, 1,2,4,5-	2.6E-05	9.5E-06	9.3E-06	2.0E-05	3.4E-05	2.5E-05	7.8E-06	7.0E-06	1.0E-05	8.5E-06	2.5E-05	6.4E-06	1.6E-05	8.3E-06	1.4E-05	1.8E-05
Tetrachlorophenol, 2,3,4,6-	8.7E-05	3.2E-05	3.1E-05	6.9E-05	1.1E-04	8.6E-05	2.6E-05	2.4E-05	3.5E-05	2.9E-05	8.3E-05	2.2E-05	5.4E-05	2.8E-05	4.7E-05	6.2E-05
Trichlorobenzene, 1,2,4-	2.6E-05	9.5E-06	9.3E-06	2.0E-05	3.4E-05	2.5E-05	7.8E-06	7.0E-06	1.0E-05	8.5E-06	2.5E-05	6.4E-06	1.6E-05	8.3E-06	1.4E-05	1.8E-05
Trichlorophenol, 2,4,6-	2.6E-05	9.7E-06	9.5E-06	2.1E-05	3.4E-05	2.6E-05	7.9E-06	7.1E-06	1.1E-05	8.7E-06	2.5E-05	6.5E-06	1.6E-05	8.4E-06	1.4E-05	1.9E-05
Volatile Organic Chemicals (VOC)																
Acetaldehyde	3.6E-07	1.3E-07	1.3E-07	2.9E-07	4.7E-07	3.6E-07	1.1E-07	9.8E-08	1.5E-07	1.2E-07	3.5E-07	9.0E-08	2.2E-07	1.2E-07	2.0E-07	2.6E-07
Benzene	0.016	0.0057	0.0056	0.012	0.020	0.015	0.0047	0.0042	0.0063	0.0051	0.015	0.0039	0.0096	0.0050	0.0084	0.011
Biphenyl	0.0015	5.5E-04	5.4E-04	0.0012	0.0019	0.0015	4.5E-04	4.0E-04	6.0E-04	4.9E-04	0.0014	3.7E-04	9.2E-04	4.8E-04	8.1E-04	0.0011
Bromodichloromethane	0.13	0.047	0.046	0.100	0.16	0.12	0.038	0.034	0.051	0.042	0.12	0.031	0.078	0.041	0.068	0.091
Bromoform	0.035	0.013	0.013	0.027	0.045	0.034	0.010	0.0094	0.014	0.011	0.033	0.0086	0.021	0.011	0.019	0.025
Bromomethane	0.018	0.0066	0.0065	0.014	0.023	0.018	0.0054	0.0049	0.0073	0.0060	0.017	0.0045	0.011	0.0058	0.0097	0.013
Carbon tetrachloride	2.2E-04	7.9E-05	7.8E-05	1.7E-04	2.8E-04	2.1E-04	6.5E-05	5.8E-05	8.7E-05	7.1E-05	2.1E-04	5.4E-05	1.3E-04	6.9E-05	1.2E-04	1.5E-04
Chloroform	2.6E-04	9.4E-05	9.2E-05	2.0E-04	3.3E-04	2.5E-04	7.7E-05	6.9E-05	1.0E-04	8.5E-05	2.4E-04	6.4E-05	1.6E-04	8.2E-05	1.4E-04	1.8E-04
Dichlorodifluoromethane	0.044	0.016	0.016	0.034	0.057	0.043	0.013	0.012	0.018	0.014	0.042	0.011	0.027	0.014	0.024	0.031
Dichloroethene, 1,1 -	2.8E-04	1.0E-04	1.0E-04	2.2E-04	3.7E-04	2.8E-04	8.6E-05	7.7E-05	1.1E-04	9.4E-05	2.7E-04	7.0E-05	1.8E-04	9.1E-05	1.5E-04	2.0E-04
Dichloromethane	0.088	0.032	0.032	0.069	0.11	0.087	0.027	0.024	0.036	0.029	0.085	0.022	0.054	0.028	0.048	0.063
Ethylbenzene	5.2E-04	1.9E-04	1.9E-04	4.1E-04	6.7E-04	5.1E-04	1.6E-04	1.4E-04	2.1E-04	1.7E-04	5.0E-04	1.3E-04	3.2E-04	1.7E-04	2.8E-04	3.7E-04
Ethylene Dibromide	2.0E-04	7.5E-05	7.3E-05	1.6E-04	2.6E-04	2.0E-04	6.1E-05	5.5E-05	8.2E-05	6.7E-05	1.9E-04	5.1E-05	1.3E-04	6.5E-05	1.1E-04	1.5E-04
Formaldehyde	0.024	0.0088	0.0086	0.019	0.031	0.023	0.0072	0.0064	0.0096	0.0079	0.023	0.0059	0.015	0.0076	0.013	0.017
O-terphenyl	4.1E-05	1.5E-05	1.5E-05	3.2E-05	5.3E-05	4.0E-05	1.2E-05	1.1E-05	1.7E-05	1.4E-05	3.9E-05	1.0E-05	2.5E-05	1.3E-05	2.2E-05	2.9E-05
Tetrachloroethene	0.0028	0.0010	0.0010	0.0022	0.0037	0.0028	8.6E-04	7.7E-04	0.0011	9.4E-04	0.0027	7.1E-04	0.0018	9.1E-04	0.0015	0.0020
Tetralin	2.5E-04	9.2E-05	9.0E-05	2.0E-04	3.2E-04	2.5E-04	7.5E-05	6.8E-05	1.0E-04	8.3E-05	2.4E-04	6.2E-05	1.5E-04	8.0E-05	1.3E-04	1.8E-04
Toluene	0.025	0.0093	0.0091	0.020	0.033	0.025	0.0076	0.0068	0.010	0.0083	0.024	0.0063	0.016	0.0081	0.014	0.018
Trichloroethane, 1,1,1 -	7.1E-04	2.6E-04	2.6E-04	5.6E-04	9.3E-04	7.0E-04	2.2E-04	1.9E-04	2.9E-04	2.4E-04	6.9E-04	1.8E-04	4.4E-04	2.3E-04	3.9E-04	5.1E-04
Trichloroethylene, 1,1,2 -	2.5E-04	9.1E-05	8.9E-05	1.9E-04	3.2E-04	2.4E-04	7.4E-05	6.7E-05	1.0E-04	8.2E-05	2.4E-04	6.1E-05	1.5E-04	7.9E-05	1.3E-04	1.8E-04
Trichlorofluoromethane	0.086	0.032	0.031	0.068	0.11	0.085	0.026	0.023	0.035	0.029	0.083	0.021	0.053	0.028	0.047	0.062
Vinyl chloride	0.022	0.0080	0.0079	0.017	0.028	0.022	0.0066	0.0059	0.0088	0.0072	0.021	0.0054	0.014	0.0070	0.012	0.016
Xylenes, m-, p- and o-	0.30	0.11	0.11	0.24	0.39	0.30	0.091	0.082	0.12	0.10	0.29	0.075	0.19	0.097	0.16	0.22

Annual Exposure Point Concentrations for Process Upset COPC Exposure Scenarios

Process Upset - 140,000 tpy

COPC	Annual Exposure Point Concentrations ($\mu g/m^3$) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Criteria Air Contaminants (CAC)																
Ammonia	0.011	0.0049	0.0049	0.011	0.0097	0.011	0.0042	0.0046	0.0058	0.0038	0.011	0.0050	0.0076	0.0053	0.0092	0.010
Carbon Monoxide (CO)	0.095	0.041	0.041	0.095	0.081	0.096	0.035	0.038	0.049	0.031	0.091	0.042	0.064	0.044	0.077	0.085
Hydrogen Chloride (HCl)	0.019	0.0082	0.0082	0.019	0.016	0.019	0.0070	0.0076	0.0097	0.0063	0.018	0.0083	0.013	0.0089	0.015	0.017
Hydrogen Fluoride (HF)	0.0019	8.2E-04	8.2E-04	0.0019	0.0016	0.0019	7.0E-04	7.6E-04	9.7E-04	6.3E-04	0.0018	8.3E-04	0.0013	8.9E-04	0.0015	0.0017
Nitrogen Dioxide (NO_2)	0.18	0.078	0.078	0.18	0.15	0.18	0.067	0.073	0.093	0.060	0.17	0.079	0.12	0.085	0.15	0.16
Particulate Matter - PM_{10}	0.022	0.012	0.012	0.022	0.019	0.023	0.011	0.012	0.013	0.011	0.021	0.013	0.016	0.012	0.019	0.019
Particulate Matter - $PM_{2.5}$	0.022	0.012	0.012	0.022	0.019	0.023	0.011	0.012	0.013	0.011	0.021	0.013	0.016	0.012	0.019	0.019
Particulate Matter - Total	0.022	0.012	0.012	0.022	0.019	0.023	0.011	0.012	0.013	0.011	0.021	0.013	0.016	0.012	0.019	0.019
Sulfur Dioxide (SO_2)	0.089	0.038	0.038	0.089	0.076	0.090	0.033	0.036	0.046	0.030	0.086	0.039	0.060	0.042	0.072	0.079
Metals																
Antimony	5.8E-06	2.5E-06	2.5E-06	5.8E-06	4.9E-06	5.8E-06	2.1E-06	2.3E-06	3.0E-06	1.9E-06	5.6E-06	2.5E-06	3.9E-06	2.7E-06	4.7E-06	5.1E-06
Arsenic	8.9E-07	3.8E-07	3.8E-07	8.9E-07	7.6E-07	8.9E-07	3.3E-07	3.6E-07	4.5E-07	2.9E-07	8.5E-07	3.9E-07	5.9E-07	4.1E-07	7.2E-07	7.9E-07
Barium	4.5E-06	1.9E-06	1.9E-06	4.5E-06	3.8E-06	4.5E-06	1.6E-06	1.8E-06	2.3E-06	1.5E-06	4.3E-06	2.0E-06	3.0E-06	2.1E-06	3.6E-06	4.0E-06
Beryllium	7.0E-07	3.0E-07	3.0E-07	7.0E-07	6.0E-07	7.1E-07	2.6E-07	2.8E-07	3.6E-07	2.3E-07	6.8E-07	3.1E-07	4.7E-07	3.3E-07	5.7E-07	6.3E-07
Boron	3.2E-04	1.4E-04	1.4E-04	3.2E-04	2.8E-04	3.2E-04	1.2E-04	1.3E-04	1.7E-04	1.1E-04	3.1E-04	1.4E-04	2.2E-04	1.5E-04	2.6E-04	2.9E-04
Cadmium	1.5E-05	6.4E-06	6.4E-06	1.5E-05	1.3E-05	1.5E-05	5.4E-06	5.9E-06	7.6E-06	4.9E-06	1.4E-05	6.5E-06	9.9E-06	6.9E-06	1.2E-05	1.3E-05
Chromium (hexavalent)	6.7E-07	2.9E-07	2.9E-07	6.8E-07	5.8E-07	6.8E-07	2.5E-07	2.7E-07	3.5E-07	2.2E-07	6.5E-07	3.0E-07	4.5E-07	3.2E-07	5.5E-07	6.0E-07
Total Chromium (and compounds)	4.7E-06	2.0E-06	2.0E-06	4.8E-06	4.1E-06	4.8E-06	1.7E-06	1.9E-06	2.4E-06	1.6E-06	4.6E-06	2.1E-06	3.2E-06	2.2E-06	3.8E-06	4.2E-06
Cobalt	1.2E-05	5.3E-06	5.3E-06	1.2E-05	1.0E-05	1.2E-05	4.5E-06	4.9E-06	6.3E-06	4.0E-06	1.2E-05	5.4E-06	8.2E-06	5.7E-06	9.9E-06	1.1E-05
Lead	1.1E-04	4.6E-05	4.5E-05	1.1E-04	9.0E-05	1.1E-04	3.9E-05	4.2E-05	5.4E-05	3.5E-05	1.0E-04	4.6E-05	7.1E-05	4.9E-05	8.5E-05	9.4E-05
Mercury - Inorganic	3.2E-05	1.4E-05	1.4E-05	3.2E-05	2.7E-05	3.2E-05	1.2E-05	1.3E-05	1.6E-05	1.0E-05	3.0E-05	1.4E-05	2.1E-05	1.5E-05	2.6E-05	2.8E-05
Nickel	1.8E-04	7.9E-05	7.9E-05	1.8E-04	1.6E-04	1.8E-04	6.7E-05	7.4E-05	9.4E-05	6.1E-05	1.8E-04	8.1E-05	1.2E-04	8.6E-05	1.5E-04	1.6E-04
Phosphorus	9.7E-05	4.2E-05	4.2E-05	9.7E-05	8.3E-05	9.8E-05	3.6E-05	3.9E-05	5.0E-05	3.2E-05	9.3E-05	4.3E-05	6.5E-05	4.5E-05	7.9E-05	8.7E-05
Selenium	1.0E-06	4.4E-07	4.4E-07	1.0E-06	8.7E-07	1.0E-06	3.7E-07	4.1E-07	5.2E-07	3.4E-07	9.7E-07	4.4E-07	6.8E-07	4.7E-07	8.2E-07	9.0E-07
Silver	7.1E-06	3.1E-06	3.0E-06	7.1E-06	6.0E-06	7.1E-06	2.6E-06	2.8E-06	3.6E-06	2.3E-06	6.8E-06	3.1E-06	4.7E-06	3.3E-06	5.7E-06	6.3E-06
Thallium	8.2E-05	3.6E-05	3.5E-05	8.3E-05	7.0E-05	8.3E-05	3.0E-05	3.3E-05	4.2E-05	2.7E-05	7.9E-05	3.6E-05	5.5E-05	3.8E-05	6.7E-05	7.3E-05
Tin	3.7E-05	1.6E-05	1.6E-05	3.7E-05	3.2E-05	3.7E-05	1.4E-05	1.5E-05	1.9E-05	1.2E-05	3.6E-05	1.6E-05	2.5E-05	1.7E-05	3.0E-05	3.3E-05
Vanadium	2.5E-06	1.1E-06	1.1E-06	2.5E-06	2.1E-06	2.5E-06	9.0E-07	9.8E-07	1.3E-06	8.1E-07	2.4E-06	1.1E-06	1.6E-06	1.1E-06	2.0E-06	2.2E-06
Zinc	4.2E-04	1.8E-04	1.8E-04	4.2E-04	3.6E-04	4.2E-04	1.5E-04	1.7E-04	2.2E-04	1.4E-04	4.0E-04	1.8E-04	2.8E-04	2.0E-04	3.4E-04	3.7E-04
Polycyclic Aromatic Hydrocarbons (PAH)																
Acenaphthene	7.6E-08	3.3E-08	3.3E-08	7.6E-08	6.5E-08	7.6E-08	2.8E-08	3.0E-08	3.9E-08	2.5E-08	7.3E-08	3.3E-08	5.1E-08	3.5E-08	6.1E-08	6.7E-08
Acenaphthylene	5.9E-08	2.5E-08	2.5E-08	5.9E-08	5.0E-08	5.9E-08	2.2E-08	2.4E-08	3.0E-08	2.0E-08	5.7E-08	2.6E-08	4.0E-08	2.8E-08	4.8E-08	5.3E-08
Anthracene	1.7E-08	7.2E-09	7.1E-09	1.7E-08	1.4E-08	1.7E-08	6.1E-09	6.7E-09	8.5E-09	5.5E-09	1.6E-08	7.3E-09	1.1E-08	7.7E-09	1.3E-08	1.5E-08
Benzo(a)anthracene	6.1E-09	2.6E-09	2.6E-09	6.1E-09	5.2E-09	6.1E-09	2.2E-09	2.5E-09	3.1E-09	2.0E-09	5.9E-09	2.7E-09	4.1E-09	2.9E-09	4.9E-09	5.4E-09
Benzo(b)fluoranthene	1.6E-08	6.7E-09	6.7E-09	1.6E-08	1.3E-08	1.6E-08	5.7E-09	6.3E-09	8.0E-09	5.2E-09	1.5E-08	6.8E-09	1.0E-08	7.3E-09	1.3E-08	1.4E-08
Benzo(k)fluoranthene	4.1E-09	1.8E-09	1.8E-09	4.1E-09	3.5E-09	4.1E-09	1.5E-09	1.7E-09	2.1E-09	1.4E-09	4.0E-09	1.8E-09	2.8E-09	1.9E-09	3.3E-09	3.7E-09
Benzo(a)fluorene	1.1E-07	4.9E-08	4.8E-08	1.1E-07	9.6E-08	1.1E-07	4.1E-08	4.5E-08	5.8E-08	3.7E-08	1.1E-07	4.9E-08	7.5E-08	5.3E-08	9.1E-08	1.0E-07
Benzo(b)fluorene	7.7E-08	3.3E-08	3.3E-08	7.7E-08	6.6E-08	7.8E-08	2.8E-08	3.1E-08	3.9E-08	2.6E-08	7.4E-08	3.4E-08	5.2E-08	3.6E-08	6.2E-08	6.9E-08
Benzo(ghi)perylene	1.7E-07	7.3E-08	7.2E-08	1.7E-07	1.4E-07	1.7E-07	6.2E-08	6.7E-08	8.6E-08	5.6E-08	1.6E-07	7.4E-08	1.1E-07	7.9E-08	1.4E-07	1.5E-07
Benzo(a)pyrene	1.4E-08	6.0E-09	6.0E-09	1.4E-08	1.2E-08	1.4E-08	5.1E-09	5.6E-09	7.2E-09	4.6E-09	1.3E-08	6.1E-09	9.4E-09	6.5E-09	1.1E-08	1.2E-08
Benzo(e)pyrene	3.5E-08	1.5E-08	1.5E-08	3.6E-08	3.0E-08	3.6E-08	1.3E-08	1.4E-08	1.8E-08	1.2E-08	3.4E-08	1.6E-08	2.4E-08	1.7E-08	2.9E-08	3.2E-08
Chrysene	1.5E-08	6.6E-09	6.6E-09	1.5E-08	1.3E-08	1.5E-08	5.6E-09	6.2E-09	7.9E-09	5.1E-09	1.5E-08	6.7E-09	1.0E-08	7.2E-09	1.2E-08	1.4E-08
Dibenzo(a,c)anthracene	1.1E-07	4.7E-08	4.7E-08	1.1E-07	9.3E-08	1.1E-07	4.0E-08	4.4E-08	5.6E-08	3.6E-08	1.1E-07	4.8E-08	7.3E-08	5.1E-08	8.8E-08	9.7E-08
Dibenzo(a,h)anthracene	4.9E-09	2.1E-09	2.1E-09	4.9E-09	4.2E-09	5.0E-09	1.8E-09	2.0E-09	2.5E-09	1.6E-09	4.7E-09	2.2E-09	3.3E-09	2.3E-09	4.0E-09	4.4E-09
Fluoranthene	1.7E-07	7.3E-08	7.3E-08	1.7E-07	1.4E-07	1.7E-07	6.2E-08	6.8E-08	8.7E-08	5.6E-08	1.6E-07	7.4E-08	1.1E-07	7.9E-08	1.4E-07	1.5E-07
Fluorene	1.3E-07	5.5E-08	5.5E-08	1.3E-07	1.1E-07	1.3E-07	4.7E-08	5.1E-08	6.5E-08	4.2E-08	1.2E-07	5.6E-08	8.5E-08	6.0E-08	1.0E-07	1.1E-07
Indeno(1,2,3 – cd)pyrene	3.1E-08	1.3E-08	1.3E-08	3.1E-08	2.6E-08	3.1E-08	1.1E-08	1.2E-08	1.6E-08	1.0E-08	3.0E-08	1.3E-08	2.1E-08	1.4E-08	2.5E-08	2.7E-08
1-Methylnaphthalene	4.0E-07	1.7E-07	1.7E-07	4.0E-07	3.4E-07	4.0E-07	1.5E-07	1.6E-07	2.0E-07	1.3E-07	3.8E-07	1.8E-07	2.7E-07	1.9E-07	3.2E-07	3.6E-07
2-Methylnaphthalene	2.2E-06	9.6E-07	9.5E-07	2.2E-06	1.9E-06	2.2E-06	8.1E-07	8.9E-07	1.1E-06	7.3E-07	2.1E-06	9.7E-07	1.5E-06	1.0E-06	1.8E-06	2.0E-06
Naphthalene	1.7E-06	7.4E-07	7.4E-07	1.7E-06	1.5E-06	1.7E-06	6.3E-07	6.9E-07	8.8E-07	5.7E-07	1.7E-06	7.5E-07	1.2E-06	8.0E-07	1.4E-06	1.5E-06
Perylene	6.1E-09	2.7E-09	2.6E-09	6.2E-09	5.3E-09	6.2E-09	2.3E-09	2.5E-09	3.1E-09	2.0E-09	5.9E-09	2.7E-09	4.1E-09	2.9E-09	5.0E-09	5.5E-09
Phenanthrene	3.8E-07	1.7E-07	1.7E-07	3.9E-07	3.3E-07	3.9E-07	1.4E-07	1.5E-07	2.0E-07	1.3E-07	3.7E-07	1.7E-07	2.6E-07	1.8E-07	3.1E-07	3.4E-07
Pyrene	2.0E-07	8.8E-08	8.8E-08	2.1E-07	1.7E-07	2.1E-07	7.5E-08	8.2E-08	1.0E-07	6.8E-08	2.0E-07	9.0E-08	1.4E-07	9.6E-08	1.7E-07	1.8E-07

Annual Exposure Point Concentrations for Process Upset COPC Exposure Scenarios

Process Upset - 140,000 tpy

COPC	Annual Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Chlorinated Polycyclic Aromatics																
Dioxins and Furans (as TEQ Toxic Equivalents)	2.4E-10	1.1E-10	1.1E-10	2.5E-10	2.1E-10	2.5E-10	9.0E-11	9.8E-11	1.3E-10	8.1E-11	2.4E-10	1.1E-10	1.6E-10	1.1E-10	2.0E-10	2.2E-10
Polychlorinated Biphenyls (PCBs)	2.9E-07	1.3E-07	1.3E-07	3.0E-07	2.5E-07	3.0E-07	1.1E-07	1.2E-07	1.5E-07	9.7E-08	2.8E-07	1.3E-07	2.0E-07	1.4E-07	2.4E-07	2.6E-07
Chlorinated Monocyclic Aromatics																
Dichlorobenzene, 1,2-	8.3E-06	3.6E-06	3.6E-06	8.4E-06	7.1E-06	8.4E-06	3.1E-06	3.3E-06	4.3E-06	2.8E-06	8.0E-06	3.7E-06	5.6E-06	3.9E-06	6.7E-06	7.4E-06
Dichlorophenol, 2,4-	4.2E-07	1.8E-07	1.8E-07	4.2E-07	3.6E-07	4.2E-07	1.5E-07	1.7E-07	2.1E-07	1.4E-07	4.0E-07	1.8E-07	2.8E-07	2.0E-07	3.4E-07	3.7E-07
Hexachlorobenzene	2.1E-07	9.1E-08	9.0E-08	2.1E-07	1.8E-07	2.1E-07	7.7E-08	8.4E-08	1.1E-07	6.9E-08	2.0E-07	9.2E-08	1.4E-07	9.8E-08	1.7E-07	1.9E-07
Pentachlorobenzene	5.5E-07	2.4E-07	2.4E-07	5.5E-07	4.7E-07	5.5E-07	2.0E-07	2.2E-07	2.8E-07	1.8E-07	5.3E-07	2.4E-07	3.7E-07	2.6E-07	4.5E-07	4.9E-07
Pentachlorophenol	8.4E-07	3.6E-07	3.6E-07	8.4E-07	7.2E-07	8.5E-07	3.1E-07	3.4E-07	4.3E-07	2.8E-07	8.1E-07	3.7E-07	5.6E-07	3.9E-07	6.8E-07	7.5E-07
Tetrachlorobenzene, 1,2,4,5-	2.1E-07	9.1E-08	9.0E-08	2.1E-07	1.8E-07	2.1E-07	7.7E-08	8.4E-08	1.1E-07	6.9E-08	2.0E-07	9.2E-08	1.4E-07	9.8E-08	1.7E-07	1.9E-07
Tetrachlorophenol, 2,3,4,6-	7.1E-07	3.1E-07	3.0E-07	7.1E-07	6.1E-07	7.1E-07	2.6E-07	2.8E-07	3.6E-07	2.3E-07	6.8E-07	3.1E-07	4.7E-07	3.3E-07	5.7E-07	6.3E-07
Trichlorobenzene, 1,2,4-	2.1E-07	9.1E-08	9.0E-08	2.1E-07	1.8E-07	2.1E-07	7.7E-08	8.4E-08	1.1E-07	6.9E-08	2.0E-07	9.2E-08	1.4E-07	9.8E-08	1.7E-07	1.9E-07
Trichlorophenol, 2,4,6-	2.1E-07	9.2E-08	9.2E-08	2.1E-07	1.8E-07	2.1E-07	7.8E-08	8.6E-08	1.1E-07	7.1E-08	2.1E-07	9.3E-08	1.4E-07	1.0E-07	1.7E-07	1.9E-07
Volatile Organic Chemicals (VOC)																
Acetaldehyde	2.9E-09	1.3E-09	1.3E-09	3.0E-09	2.5E-09	3.0E-09	1.1E-09	1.2E-09	1.5E-09	9.8E-10	2.8E-09	1.3E-09	2.0E-09	1.4E-09	2.4E-09	2.6E-09
Benzene	1.3E-04	5.4E-05	5.4E-05	1.3E-04	1.1E-04	1.3E-04	4.6E-05	5.1E-05	6.5E-05	4.2E-05	1.2E-04	5.5E-05	8.4E-05	5.9E-05	1.0E-04	1.1E-04
Biphenyl	1.2E-05	5.2E-06	5.2E-06	1.2E-05	1.0E-05	1.2E-05	4.5E-06	4.9E-06	6.2E-06	4.0E-06	1.2E-05	5.3E-06	8.1E-06	5.7E-06	9.8E-06	1.1E-05
Bromodichloromethane	0.0010	4.4E-04	4.4E-04	0.0010	8.8E-04	0.0010	3.8E-04	4.1E-04	5.3E-04	3.4E-04	9.9E-04	4.5E-04	6.9E-04	4.8E-04	8.3E-04	9.2E-04
Bromoform	2.8E-04	1.2E-04	1.2E-04	2.8E-04	2.4E-04	2.8E-04	1.0E-04	1.1E-04	1.4E-04	9.3E-05	2.7E-04	1.2E-04	1.9E-04	1.3E-04	2.3E-04	2.5E-04
Bromomethane	1.5E-04	6.3E-05	6.3E-05	1.5E-04	1.3E-04	1.5E-04	5.4E-05	5.9E-05	7.5E-05	4.9E-05	1.4E-04	6.4E-05	9.8E-05	6.8E-05	1.2E-04	1.3E-04
Carbon tetrachloride	1.8E-06	7.6E-07	7.5E-07	1.8E-06	1.5E-06	1.8E-06	6.4E-07	7.0E-07	9.0E-07	5.8E-07	1.7E-06	7.7E-07	1.2E-06	8.2E-07	1.4E-06	1.6E-06
Chloroform	2.1E-06	9.0E-07	8.9E-07	2.1E-06	1.8E-06	2.1E-06	7.6E-07	8.3E-07	1.1E-06	6.9E-07	2.0E-06	9.1E-07	1.4E-06	9.7E-07	1.7E-06	1.9E-06
Dichlorodifluoromethane	3.5E-04	1.5E-04	1.5E-04	3.6E-04	3.0E-04	3.6E-04	1.3E-04	1.4E-04	1.8E-04	1.2E-04	3.4E-04	1.6E-04	2.4E-04	1.7E-04	2.9E-04	3.2E-04
Dichloroethene, 1,1 -	2.3E-06	9.9E-07	9.9E-07	2.3E-06	2.0E-06	2.3E-06	8.5E-07	9.2E-07	1.2E-06	7.6E-07	2.2E-06	1.0E-06	1.5E-06	1.1E-06	1.9E-06	2.1E-06
Dichloromethane	7.2E-04	3.1E-04	3.1E-04	7.2E-04	6.1E-04	7.2E-04	2.6E-04	2.9E-04	3.7E-04	2.4E-04	6.9E-04	3.1E-04	4.8E-04	3.3E-04	5.8E-04	6.4E-04
Ethylbenzene	4.2E-06	1.8E-06	1.8E-06	4.2E-06	3.6E-06	4.2E-06	1.5E-06	1.7E-06	2.2E-06	1.4E-06	4.1E-06	1.8E-06	2.8E-06	2.0E-06	3.4E-06	3.8E-06
Ethylene Dibromide	1.6E-06	7.1E-07	7.1E-07	1.7E-06	1.4E-06	1.7E-06	6.1E-07	6.6E-07	8.5E-07	5.5E-07	1.6E-06	7.2E-07	1.1E-06	7.7E-07	1.3E-06	1.5E-06
Formaldehyde	1.9E-04	8.3E-05	8.3E-05	1.9E-04	1.7E-04	1.9E-04	7.1E-05	7.8E-05	9.9E-05	6.4E-05	1.9E-04	8.5E-05	1.3E-04	9.0E-05	1.6E-04	1.7E-04
O-terphenyl	3.3E-07	1.4E-07	1.4E-07	3.3E-07	2.8E-07	3.4E-07	1.2E-07	1.3E-07	1.7E-07	1.1E-07	3.2E-07	1.5E-07	2.2E-07	1.6E-07	2.7E-07	3.0E-07
Tetrachloroethene	2.3E-05	1.0E-05	9.9E-06	2.3E-05	2.0E-05	2.3E-05	8.5E-06	9.3E-06	1.2E-05	7.7E-06	2.2E-05	1.0E-05	1.5E-05	1.1E-05	1.9E-05	2.1E-05
Tetralin	2.0E-06	8.8E-07	8.7E-07	2.0E-06	1.7E-06	2.0E-06	7.5E-07	8.1E-07	1.0E-06	6.7E-07	2.0E-06	8.9E-07	1.4E-06	9.5E-07	1.6E-06	1.8E-06
Toluene	2.0E-04	8.8E-05	8.8E-05	2.1E-04	1.8E-04	2.1E-04	7.5E-05	8.2E-05	1.0E-04	6.8E-05	2.0E-04	9.0E-05	1.4E-04	9.6E-05	1.7E-04	1.8E-04
Trichloroethane, 1,1,1 -	5.8E-06	2.5E-06	2.5E-06	5.8E-06	5.0E-06	5.9E-06	2.1E-06	2.3E-06	3.0E-06	1.9E-06	5.6E-06	2.5E-06	3.9E-06	2.7E-06	4.7E-06	5.2E-06
Trichloroethylene, 1,1,2 -	2.0E-06	8.6E-07	8.6E-07	2.0E-06	1.7E-06	2.0E-06	7.4E-07	8.0E-07	1.0E-06	6.6E-07	1.9E-06	8.8E-07	1.3E-06	9.4E-07	1.6E-06	1.8E-06
Trichlorofluoromethane	7.0E-04	3.0E-04	3.0E-04	7.0E-04	6.0E-04	7.1E-04	2.6E-04	2.8E-04	3.6E-04	2.3E-04	6.7E-04	3.1E-04	4.7E-04	3.3E-04	5.7E-04	6.2E-04
Vinyl chloride	1.8E-04	7.7E-05	7.6E-05	1.8E-04	1.5E-04	1.8E-04	6.5E-05	7.1E-05	9.1E-05	5.9E-05	1.7E-04	7.8E-05	1.2E-04	8.3E-05	1.4E-04	1.6E-04
Xylenes, m-, p- and o-	0.0025	0.0011	0.0011	0.0025	0.0021	0.0025	9.0E-04	9.9E-04	0.0013	8.2E-04	0.0024	0.0011	0.0016	0.0011	0.0020	0.0022

APPENDIX E-3

Air Exposure Point Concentrations – Normal Operations (Project Alone Case) – 400,000 tpy

1-Hour Exposure Point Concentrations for COPC Exposure Scenarios

Normal Operations - 400,000 tpy

COPC	1-Hour Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Criteria Air Contaminants (CAC)																
Ammonia	4.2	2.5	2.7	3.6	5.3	4.1	0.94	0.98	1.2	2.2	3.4	1.1	1.8	1.0	2.4	2.9
Carbon Monoxide (CO)	35	21	22	30	44	34	7.9	8.2	9.8	18	28	9.6	15	8.5	20	24
Hydrogen Chloride (HCl)	7.1	4.1	4.5	6.0	8.8	6.8	1.6	1.6	2.0	3.6	5.7	1.9	2.9	1.7	3.9	4.8
Hydrogen Fluoride (HF)	0.71	0.41	0.45	0.60	0.88	0.68	0.16	0.16	0.20	0.36	0.57	0.19	0.29	0.17	0.39	0.48
Nitrogen Dioxide (NO_2)	95	56	60	80	119	92	21	22	26	49	76	26	40	23	53	65
Particulate Matter - PM_{10}	8.2	8.4	9.4	9.5	11	8.1	3.8	5.0	3.8	8.8	6.8	4.3	9.2	2.6	7.1	7.6
Particulate Matter - $PM_{2.5}$	8.2	8.4	9.4	9.5	11	8.1	3.8	5.0	3.8	8.8	6.8	4.3	9.2	2.6	7.1	7.6
Particulate Matter - Total	8.2	8.4	9.4	9.5	11	8.1	3.8	5.0	3.8	8.8	6.8	4.3	9.2	2.6	7.1	7.6
Sulfur Dioxide (SO_2)	28	16	17	23	34	27	6.1	6.3	7.7	14	22	7.4	11	6.6	15	19
Metals																
Antimony	0.0022	0.0013	0.0014	0.0018	0.0027	0.0021	4.8E-04	5.0E-04	6.0E-04	0.0011	0.0017	5.8E-04	9.0E-04	5.2E-04	0.0012	0.0015
Arsenic	3.3E-04	1.9E-04	2.1E-04	2.8E-04	4.1E-04	3.2E-04	7.3E-05	7.6E-05	9.2E-05	1.7E-04	2.7E-04	8.9E-05	1.4E-04	8.0E-05	1.8E-04	2.3E-04
Barium	0.0017	9.7E-04	0.0011	0.0014	0.0021	0.0016	3.7E-04	3.8E-04	4.6E-04	8.5E-04	0.0013	4.5E-04	6.9E-04	4.0E-04	9.2E-04	0.0011
Beryllium	2.6E-04	1.5E-04	1.7E-04	2.2E-04	3.3E-04	2.5E-04	5.8E-05	6.0E-05	7.3E-05	1.3E-04	2.1E-04	7.1E-05	1.1E-04	6.3E-05	1.5E-04	1.8E-04
Boron	0.12	0.070	0.076	0.10	0.15	0.12	0.027	0.028	0.033	0.062	0.097	0.033	0.050	0.029	0.067	0.082
Cadmium	0.0055	0.0032	0.0035	0.0046	0.0069	0.0053	0.0012	0.0013	0.0015	0.0028	0.0044	0.0015	0.0023	0.0013	0.0031	0.0038
Chromium (hexavalent)	2.5E-04	1.5E-04	1.6E-04	2.1E-04	3.1E-04	2.4E-04	5.6E-05	5.8E-05	7.0E-05	1.3E-04	2.0E-04	6.8E-05	1.0E-04	6.1E-05	1.4E-04	1.7E-04
Total Chromium (and compounds)	0.0018	0.0010	0.0011	0.0015	0.0022	0.0017	3.9E-04	4.1E-04	4.9E-04	9.1E-04	0.0014	4.8E-04	7.4E-04	4.3E-04	9.8E-04	0.0012
Cobalt	0.0046	0.0027	0.0029	0.0038	0.0057	0.0044	0.0010	0.0011	0.0013	0.0023	0.0037	0.0012	0.0019	0.0011	0.0025	0.0031
Lead	0.039	0.023	0.025	0.033	0.049	0.038	0.0087	0.0091	0.011	0.020	0.032	0.011	0.016	0.0095	0.022	0.027
Mercury - Inorganic	0.012	0.0069	0.0075	0.0099	0.015	0.011	0.0026	0.0027	0.0033	0.0061	0.0095	0.0032	0.0049	0.0028	0.0065	0.0080
Nickel	0.069	0.040	0.043	0.058	0.085	0.066	0.015	0.016	0.019	0.035	0.055	0.019	0.029	0.017	0.038	0.047
Phosphorus	0.036	0.021	0.023	0.030	0.045	0.035	0.0080	0.0083	0.010	0.019	0.029	0.0098	0.015	0.0087	0.020	0.025
Selenium	3.8E-04	2.2E-04	2.4E-04	3.2E-04	4.7E-04	3.6E-04	8.4E-05	8.7E-05	1.1E-04	1.9E-04	3.0E-04	1.0E-04	1.6E-04	9.1E-05	2.1E-04	2.6E-04
Silver	0.0026	0.0015	0.0017	0.0022	0.0033	0.0025	5.8E-04	6.1E-04	7.3E-04	0.0014	0.0021	7.1E-04	0.0011	6.4E-04	0.0015	0.0018
Thallium	0.031	0.018	0.019	0.026	0.038	0.030	0.0068	0.0071	0.0085	0.016	0.025	0.0083	0.013	0.0074	0.017	0.021
Tin	0.014	0.0081	0.0088	0.012	0.017	0.013	0.0031	0.0032	0.0039	0.0071	0.011	0.0037	0.0058	0.0033	0.0077	0.0094
Vanadium	9.1E-04	5.3E-04	5.8E-04	7.7E-04	0.0011	8.8E-04	2.0E-04	2.1E-04	2.5E-04	4.7E-04	7.3E-04	2.5E-04	3.8E-04	2.2E-04	5.1E-04	6.2E-04
Zinc	0.16	0.092	0.100	0.13	0.20	0.15	0.035	0.036	0.044	0.081	0.13	0.042	0.065	0.038	0.087	0.11
Polycyclic Aromatic Hydrocarbons (PAH)																
Acenaphthene	1.5E-05	8.6E-06	9.3E-06	1.2E-05	1.8E-05	1.4E-05	3.2E-06	3.4E-06	4.1E-06	7.5E-06	1.2E-05	4.0E-06	6.1E-06	3.5E-06	8.1E-06	1.0E-05
Acenaphthylene	1.1E-05	6.7E-06	7.2E-06	9.6E-06	1.4E-05	1.1E-05	2.5E-06	2.6E-06	3.2E-06	5.9E-06	9.2E-06	3.1E-06	4.7E-06	2.8E-06	6.3E-06	7.8E-06
Anthracene	3.2E-06	1.9E-06	2.0E-06	2.7E-06	4.0E-06	3.1E-06	7.1E-07	7.4E-07	8.9E-07	1.6E-06	2.6E-06	8.7E-07	1.3E-06	7.7E-07	1.8E-06	2.2E-06
Benzo(a)anthracene	1.2E-06	6.9E-07	7.5E-07	9.9E-07	1.5E-06	1.1E-06	2.6E-07	2.7E-07	3.3E-07	6.1E-07	9.5E-07	3.2E-07	4.9E-07	2.8E-07	6.5E-07	8.0E-07
Benzo(b)fluoranthene	3.0E-06	1.8E-06	1.9E-06	2.5E-06	3.8E-06	2.9E-06	6.7E-07	6.9E-07	8.4E-07	1.5E-06	2.4E-06	8.1E-07	1.3E-06	7.3E-07	1.7E-06	2.1E-06
Benzo(k)fluoranthene	7.9E-07	4.6E-07	5.0E-07	6.7E-07	9.9E-07	7.7E-07	1.8E-07	1.8E-07	2.2E-07	4.1E-07	6.4E-07	2.1E-07	3.3E-07	1.9E-07	4.4E-07	5.4E-07
Benzo(a)fluorene	2.2E-05	1.3E-05	1.4E-05	1.8E-05	2.7E-05	2.1E-05	4.8E-06	5.0E-06	6.0E-06	1.1E-05	1.7E-05	5.9E-06	9.1E-06	5.2E-06	1.2E-05	1.5E-05
Benzo(b)fluorene	1.5E-05	8.7E-06	9.4E-06	1.3E-05	1.9E-05	1.4E-05	3.3E-06	3.4E-06	4.1E-06	7.6E-06	1.2E-05	4.0E-06	6.2E-06	3.6E-06	8.3E-06	1.0E-05
Benzo(ghi)perylene	3.2E-05	1.9E-05	2.1E-05	2.7E-05	4.0E-05	3.1E-05	7.2E-06	7.5E-06	9.0E-06	1.7E-05	2.6E-05	8.8E-06	1.4E-05	7.8E-06	1.8E-05	2.2E-05
Benzo(a)pyrene	2.7E-06	1.6E-06	1.7E-06	2.3E-06	3.4E-06	2.6E-06	6.0E-07	6.2E-07	7.5E-07	1.4E-06	2.2E-06	7.3E-07	1.1E-06	6.5E-07	1.5E-06	1.8E-06
Benzo(e)pyrene	6.9E-06	4.0E-06	4.3E-06	5.8E-06	8.5E-06	6.6E-06	1.5E-06	1.6E-06	1.9E-06	3.5E-06	5.5E-06	1.9E-06	2.9E-06	1.7E-06	3.8E-06	4.7E-06
Chrysene	3.0E-06	1.7E-06	1.9E-06	2.5E-06	3.7E-06	2.9E-06	6.6E-07	6.8E-07	8.3E-07	1.5E-06	2.4E-06	8.0E-07	1.2E-06	7.2E-07	1.6E-06	2.0E-06
Dibenzo(a,c)anthracene	2.1E-05	1.2E-05	1.3E-05	1.8E-05	2.6E-05	2.0E-05	4.7E-06	4.9E-06	5.9E-06	1.1E-05	1.7E-05	5.7E-06	8.8E-06	5.1E-06	1.2E-05	1.4E-05
Dibenzo(a,h)anthracene	9.5E-07	5.6E-07	6.0E-07	8.0E-07	1.2E-06	9.2E-07	2.1E-07	2.2E-07	2.6E-07	4.9E-07	7.6E-07	2.6E-07	4.0E-07	2.3E-07	5.3E-07	6.5E-07
Fluoranthene	3.3E-05	1.9E-05	2.1E-05	2.8E-05	4.1E-05	3.2E-05	7.3E-06	7.5E-06	9.1E-06	1.7E-05	2.6E-05	8.8E-06	1.4E-05	7.9E-06	1.8E-05	2.2E-05
Fluorene	2.5E-05	1.4E-05	1.6E-05	2.1E-05	3.1E-05	2.4E-05	5.5E-06	5.7E-06	6.9E-06	1.3E-05	2.0E-05	6.7E-06	1.0E-05	5.9E-06	1.4E-05	1.7E-05
Indeno(1,2,3 – cd)pyrene	5.9E-06	3.5E-06	3.8E-06	5.0E-06	7.4E-06	5.7E-06	1.3E-06	1.4E-06	1.7E-06	3.0E-06	4.8E-06	1.6E-06	2.5E-06	1.4E-06	3.3E-06	4.0E-06
1-Methylnaphthalene	7.7E-05	4.5E-05	4.9E-05	6.5E-05	9.6E-05	7.5E-05	1.7E-05	1.8E-05	2.1E-05	4.0E-05	6.2E-05	2.1E-05	3.2E-05	1.9E-05	4.3E-05	5.3E-05
2-Methylnaphthalene	4.3E-04	2.5E-04	2.7E-04	3.6E-04	5.3E-04	4.1E-04	9.5E-05	9.9E-05	1.2E-04	2.2E-04	3.4E-04	1.2E-04	1.8E-04	1.0E-04	2.4E-04	2.9E-04
Naphthalene	3.3E-04	1.9E-04	2.1E-04	2.8E-04	4.1E-04	3.2E-04	7.4E-05	7.7E-05	9.3E-05	1.7E-04	2.7E-04	9.0E-05	1.4E-04	8.0E-05	1.8E-04	2.3E-04
Perylene	1.2E-06	6.9E-07	7.5E-07	1.0E-06	1.5E-06	1.1E-06	2.6E-07	2.7E-07	3.3E-07	6.1E-07	9.5E-07	3.2E-07	4.9E-07	2.9E-07	6.6E-07	8.1E-07
Phenanthrene	7.4E-05	4.4E-05	4.7E-05	6.3E-05	9.3E-05	7.2E-05	1.7E-05	1.7E-05	2.1E-05	3.8E-05	6.0E-05	2.0E-05	3.1E-05	1.8E-05	4.1E-05	5.1E-05
Pyrene	3.9E-05	2.3E-05	2.5E-05	3.3E-05	4.9E-05	3.8E-05	8.8E-06	9.1E-06	1.1E-05	2.0E-05	3.2E-05	1.1E-05	1.6E-05	9.5E-06	2.2E-05	2.7E-05

1-Hour Exposure Point Concentrations for COPC Exposure Scenarios

Normal Operations - 400,000 tpy

COPC	1-Hour Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Chlorinated Polycyclic Aromatics																
Dioxins and Furans (as TEQ Toxic Equivalents)	4.7E-08	2.8E-08	3.0E-08	4.0E-08	5.9E-08	4.6E-08	1.0E-08	1.1E-08	1.3E-08	2.4E-08	3.8E-08	1.3E-08	2.0E-08	1.1E-08	2.6E-08	3.2E-08
Polychlorinated Biphenyls (PCBs)	5.7E-05	3.3E-05	3.6E-05	4.8E-05	7.1E-05	5.5E-05	1.3E-05	1.3E-05	1.6E-05	2.9E-05	4.6E-05	1.5E-05	2.4E-05	1.4E-05	3.2E-05	3.9E-05
Chlorinated Monocyclic Aromatics																
Dichlorobenzene, 1,2-	0.0016	9.4E-04	0.0010	0.0014	0.0020	0.0016	3.6E-04	3.7E-04	4.5E-04	8.3E-04	0.0013	4.4E-04	6.7E-04	3.9E-04	8.9E-04	0.0011
Dichlorophenol, 2,4-	8.1E-05	4.7E-05	5.1E-05	6.8E-05	1.0E-04	7.8E-05	1.8E-05	1.9E-05	2.3E-05	4.2E-05	6.5E-05	2.2E-05	3.4E-05	2.0E-05	4.5E-05	5.5E-05
Hexachlorobenzene	4.1E-05	2.4E-05	2.6E-05	3.4E-05	5.0E-05	3.9E-05	9.0E-06	9.3E-06	1.1E-05	2.1E-05	3.3E-05	1.1E-05	1.7E-05	9.8E-06	2.2E-05	2.8E-05
Pentachlorobenzene	1.1E-04	6.2E-05	6.8E-05	8.9E-05	1.3E-04	1.0E-04	2.4E-05	2.5E-05	3.0E-05	5.5E-05	8.5E-05	2.9E-05	4.4E-05	2.6E-05	5.9E-05	7.3E-05
Pentachlorophenol	1.6E-04	9.5E-05	1.0E-04	1.4E-04	2.0E-04	1.6E-04	3.6E-05	3.7E-05	4.5E-05	8.3E-05	1.3E-04	4.4E-05	6.8E-05	3.9E-05	9.0E-05	1.1E-04
Tetrachlorobenzene, 1,2,4,5-	4.1E-05	2.4E-05	2.6E-05	3.4E-05	5.0E-05	3.9E-05	9.0E-06	9.3E-06	1.1E-05	2.1E-05	3.3E-05	1.1E-05	1.7E-05	9.8E-06	2.2E-05	2.8E-05
Tetrachlorophenol, 2,3,4,6-	1.4E-04	8.0E-05	8.7E-05	1.1E-04	1.7E-04	1.3E-04	3.0E-05	3.2E-05	3.8E-05	7.0E-05	1.1E-04	3.7E-05	5.7E-05	3.3E-05	7.6E-05	9.3E-05
Trichlorobenzene, 1,2,4-	4.1E-05	2.4E-05	2.6E-05	3.4E-05	5.0E-05	3.9E-05	9.0E-06	9.3E-06	1.1E-05	2.1E-05	3.3E-05	1.1E-05	1.7E-05	9.8E-06	2.2E-05	2.8E-05
Trichlorophenol, 2,4,6-	4.1E-05	2.4E-05	2.6E-05	3.5E-05	5.1E-05	4.0E-05	9.1E-06	9.5E-06	1.1E-05	2.1E-05	3.3E-05	1.1E-05	1.7E-05	9.9E-06	2.3E-05	2.8E-05
Volatile Organic Chemicals (VOC)																
Acetaldehyde	4.2E-07	2.4E-07	2.7E-07	3.5E-07	5.2E-07	4.0E-07	9.3E-08	9.6E-08	1.2E-07	2.1E-07	3.4E-07	1.1E-07	1.7E-07	1.0E-07	2.3E-07	2.8E-07
Benzene	0.024	0.014	0.015	0.020	0.030	0.024	0.0054	0.0056	0.0068	0.013	0.020	0.0066	0.010	0.0059	0.014	0.017
Biphenyl	0.0023	0.0014	0.0015	0.0020	0.0029	0.0023	5.2E-04	5.4E-04	6.5E-04	0.0012	0.0019	6.3E-04	9.8E-04	5.7E-04	0.0013	0.0016
Bromodichloromethane	0.15	0.085	0.093	0.12	0.18	0.14	0.032	0.034	0.041	0.075	0.12	0.039	0.061	0.035	0.081	0.099
Bromoform	0.040	0.023	0.025	0.033	0.050	0.039	0.0089	0.0092	0.011	0.020	0.032	0.011	0.017	0.0096	0.022	0.027
Bromomethane	0.028	0.017	0.018	0.024	0.035	0.027	0.0063	0.0065	0.0079	0.015	0.023	0.0077	0.012	0.0068	0.016	0.019
Carbon tetrachloride	2.5E-04	1.5E-04	1.6E-04	2.1E-04	3.1E-04	2.4E-04	5.5E-05	5.7E-05	6.9E-05	1.3E-04	2.0E-04	6.7E-05	1.0E-04	6.0E-05	1.4E-04	1.7E-04
Chloroform	4.0E-04	2.3E-04	2.5E-04	3.4E-04	5.0E-04	3.9E-04	8.9E-05	9.2E-05	1.1E-04	2.1E-04	3.2E-04	1.1E-04	1.7E-04	9.7E-05	2.2E-04	2.7E-04
Dichlorodifluoromethane	0.068	0.040	0.043	0.058	0.085	0.066	0.015	0.016	0.019	0.035	0.055	0.019	0.029	0.017	0.038	0.047
Dichloroethene, 1,1 -	4.4E-04	2.6E-04	2.8E-04	3.7E-04	5.5E-04	4.3E-04	9.9E-05	1.0E-04	1.2E-04	2.3E-04	3.6E-04	1.2E-04	1.9E-04	1.1E-04	2.5E-04	3.0E-04
Dichloromethane	0.14	0.081	0.088	0.12	0.17	0.13	0.031	0.032	0.039	0.071	0.11	0.037	0.058	0.033	0.077	0.094
Ethylbenzene	8.1E-04	4.8E-04	5.2E-04	6.8E-04	0.0010	7.9E-04	1.8E-04	1.9E-04	2.3E-04	4.2E-04	6.5E-04	2.2E-04	3.4E-04	2.0E-04	4.5E-04	5.6E-04
Ethylene Dibromide	2.3E-04	1.4E-04	1.5E-04	2.0E-04	2.9E-04	2.3E-04	5.2E-05	5.4E-05	6.5E-05	1.2E-04	1.9E-04	6.3E-05	9.7E-05	5.6E-05	1.3E-04	1.6E-04
Formaldehyde	0.037	0.022	0.024	0.031	0.047	0.036	0.0083	0.0086	0.010	0.019	0.030	0.010	0.016	0.0090	0.021	0.025
O-terphenyl	6.4E-05	3.8E-05	4.1E-05	5.4E-05	8.0E-05	6.2E-05	1.4E-05	1.5E-05	1.8E-05	3.3E-05	5.2E-05	1.7E-05	2.7E-05	1.6E-05	3.6E-05	4.4E-05
Tetrachloroethene	0.0045	0.0026	0.0028	0.0037	0.0056	0.0043	9.9E-04	0.0010	0.0012	0.0023	0.0036	0.0012	0.0019	0.0011	0.0025	0.0030
Tetralin	3.9E-04	2.3E-04	2.5E-04	3.3E-04	4.9E-04	3.8E-04	8.7E-05	9.0E-05	1.1E-04	2.0E-04	3.1E-04	1.1E-04	1.6E-04	9.5E-05	2.2E-04	2.7E-04
Toluene	0.040	0.023	0.025	0.033	0.049	0.038	0.0088	0.0091	0.011	0.020	0.032	0.011	0.016	0.0095	0.022	0.027
Trichloroethane, 1,1,1 -	0.0011	6.6E-04	7.1E-04	9.4E-04	0.0014	0.0011	2.5E-04	2.6E-04	3.1E-04	5.8E-04	9.0E-04	3.0E-04	4.7E-04	2.7E-04	6.2E-04	7.6E-04
Trichloroethylene, 1,1,2 -	3.9E-04	2.3E-04	2.5E-04	3.3E-04	4.8E-04	3.7E-04	8.6E-05	8.9E-05	1.1E-04	2.0E-04	3.1E-04	1.0E-04	1.6E-04	9.3E-05	2.1E-04	2.6E-04
Trichlorofluoromethane	0.14	0.079	0.086	0.11	0.17	0.13	0.030	0.031	0.038	0.070	0.11	0.037	0.056	0.033	0.075	0.092
Vinyl chloride	0.034	0.020	0.022	0.029	0.043	0.033	0.0076	0.0079	0.0095	0.018	0.028	0.0093	0.014	0.0083	0.019	0.023
Xylenes, m-, p- and o-	0.48	0.28	0.30	0.40	0.59	0.46	0.11	0.11	0.13	0.24	0.38	0.13	0.20	0.11	0.26	0.32

24-Hour Exposure Point Concentrations for COPC Exposure Scenarios

Normal Operations - 400,000 tpy

COPC	24-Hour Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Criteria Air Contaminants (CAC)																
Ammonia	0.51	0.22	0.22	0.48	0.63	0.59	0.18	0.19	0.22	0.24	0.61	0.18	0.35	0.21	0.32	0.44
Carbon Monoxide (CO)	4.3	1.9	1.8	4.0	5.3	4.9	1.5	1.5	1.8	2.0	5.1	1.5	2.9	1.7	2.6	3.6
Hydrogen Chloride (HCl)	0.85	0.37	0.37	0.81	1.1	0.98	0.30	0.31	0.36	0.39	1.0	0.31	0.59	0.35	0.53	0.73
Hydrogen Fluoride (HF)	0.085	0.037	0.037	0.081	0.11	0.098	0.030	0.031	0.036	0.039	0.10	0.031	0.059	0.035	0.053	0.073
Nitrogen Dioxide (NO_2)	11	5.0	4.9	11	14	13	4.1	4.2	4.8	5.3	14	4.1	7.9	4.7	7.1	9.8
Particulate Matter - PM_{10}	1.0	0.88	0.94	1.6	1.7	1.6	0.59	0.65	0.53	0.97	1.5	0.70	0.75	0.39	1.1	1.7
Particulate Matter - $PM_{2.5}$	1.0	0.88	0.94	1.6	1.7	1.6	0.59	0.65	0.53	0.97	1.5	0.70	0.75	0.39	1.1	1.7
Particulate Matter - Total	1.0	0.88	0.94	1.6	1.7	1.6	0.59	0.65	0.53	0.97	1.5	0.70	0.75	0.39	1.1	1.7
Sulfur Dioxide (SO_2)	3.3	1.5	1.4	3.1	4.1	3.8	1.2	1.2	1.4	1.5	3.9	1.2	2.3	1.3	2.0	2.8
Metals																
Antimony	2.6E-04	1.1E-04	1.1E-04	2.5E-04	3.2E-04	3.0E-04	9.2E-05	9.4E-05	1.1E-04	1.2E-04	3.1E-04	9.3E-05	1.8E-04	1.1E-04	1.6E-04	2.2E-04
Arsenic	4.0E-05	1.7E-05	1.7E-05	3.8E-05	4.9E-05	4.6E-05	1.4E-05	1.4E-05	1.7E-05	1.8E-05	4.7E-05	1.4E-05	2.7E-05	1.6E-05	2.5E-05	3.4E-05
Barium	2.0E-04	8.8E-05	8.6E-05	1.9E-04	2.5E-04	2.3E-04	7.1E-05	7.3E-05	8.4E-05	9.3E-05	2.4E-04	7.2E-05	1.4E-04	8.2E-05	1.2E-04	1.7E-04
Beryllium	3.2E-05	1.4E-05	1.4E-05	3.0E-05	3.9E-05	3.6E-05	1.1E-05	1.1E-05	1.3E-05	1.5E-05	3.7E-05	1.1E-05	2.2E-05	1.3E-05	1.9E-05	2.7E-05
Boron	0.015	0.0063	0.0062	0.014	0.018	0.017	0.0052	0.0053	0.0061	0.0067	0.017	0.0052	0.0100	0.0059	0.0089	0.012
Cadmium	6.6E-04	2.9E-04	2.9E-04	6.3E-04	8.2E-04	7.7E-04	2.4E-04	2.4E-04	2.8E-04	3.1E-04	7.9E-04	2.4E-04	4.6E-04	2.7E-04	4.1E-04	5.7E-04
Chromium (hexavalent)	3.0E-05	1.3E-05	1.3E-05	2.9E-05	3.7E-05	3.5E-05	1.1E-05	1.1E-05	1.3E-05	1.4E-05	3.6E-05	1.1E-05	2.1E-05	1.2E-05	1.9E-05	2.6E-05
Total Chromium (and compounds)	2.1E-04	9.3E-05	9.2E-05	2.0E-04	2.6E-04	2.5E-04	7.6E-05	7.7E-05	9.0E-05	9.9E-05	2.5E-04	7.7E-05	1.5E-04	8.7E-05	1.3E-04	1.8E-04
Cobalt	5.5E-04	2.4E-04	2.4E-04	5.2E-04	6.8E-04	6.3E-04	2.0E-04	2.0E-04	2.3E-04	2.5E-04	6.5E-04	2.0E-04	3.8E-04	2.2E-04	3.4E-04	4.7E-04
Lead	0.0047	0.0021	0.0020	0.0045	0.0059	0.0055	0.0017	0.0017	0.0020	0.0022	0.0056	0.0017	0.0033	0.0019	0.0029	0.0041
Mercury - Inorganic	0.0014	6.2E-04	6.1E-04	0.0013	0.0018	0.0016	5.1E-04	5.2E-04	6.0E-04	6.6E-04	0.0017	5.1E-04	9.8E-04	5.8E-04	8.8E-04	0.0012
Nickel	0.0083	0.0036	0.0036	0.0078	0.010	0.0095	0.0029	0.0030	0.0035	0.0038	0.0098	0.0030	0.0057	0.0034	0.0051	0.0071
Phosphorus	0.0044	0.0019	0.0019	0.0041	0.0054	0.0050	0.0016	0.0016	0.0018	0.0020	0.0052	0.0016	0.0030	0.0018	0.0027	0.0037
Selenium	4.6E-05	2.0E-05	2.0E-05	4.3E-05	5.6E-05	5.3E-05	1.6E-05	1.7E-05	1.9E-05	2.1E-05	5.4E-05	1.6E-05	3.1E-05	1.9E-05	2.8E-05	3.9E-05
Silver	3.2E-04	1.4E-04	1.4E-04	3.0E-04	3.9E-04	3.7E-04	1.1E-04	1.2E-04	1.3E-04	1.5E-04	3.8E-04	1.1E-04	2.2E-04	1.3E-04	2.0E-04	2.7E-04
Thallium	0.0037	0.0016	0.0016	0.0035	0.0046	0.0043	0.0013	0.0013	0.0016	0.0017	0.0044	0.0013	0.0025	0.0015	0.0023	0.0032
Tin	0.0017	7.3E-04	7.2E-04	0.0016	0.0021	0.0019	5.9E-04	6.1E-04	7.0E-04	7.7E-04	0.0020	6.0E-04	0.0011	6.8E-04	0.0010	0.0014
Vanadium	1.1E-04	4.8E-05	4.7E-05	1.0E-04	1.4E-04	1.3E-04	3.9E-05	4.0E-05	4.6E-05	5.1E-05	1.3E-04	4.0E-05	7.6E-05	4.5E-05	6.8E-05	9.4E-05
Zinc	0.019	0.0083	0.0081	0.018	0.023	0.022	0.0067	0.0069	0.0080	0.0087	0.022	0.0068	0.013	0.0077	0.012	0.016
Polycyclic Aromatic Hydrocarbons (PAH)																
Acenaphthene	1.8E-06	7.7E-07	7.6E-07	1.7E-06	2.2E-06	2.0E-06	6.3E-07	6.4E-07	7.4E-07	8.2E-07	2.1E-06	6.3E-07	1.2E-06	7.2E-07	1.1E-06	1.5E-06
Acenaphthylene	1.4E-06	6.0E-07	5.9E-07	1.3E-06	1.7E-06	1.6E-06	4.9E-07	5.0E-07	5.8E-07	6.4E-07	1.6E-06	4.9E-07	9.5E-07	5.6E-07	8.5E-07	1.2E-06
Anthracene	3.9E-07	1.7E-07	1.7E-07	3.7E-07	4.8E-07	4.5E-07	1.4E-07	1.4E-07	1.6E-07	1.8E-07	4.6E-07	1.4E-07	2.7E-07	1.6E-07	2.4E-07	3.3E-07
Benzo(a)anthracene	1.4E-07	6.2E-08	6.1E-08	1.3E-07	1.8E-07	1.6E-07	5.1E-08	5.2E-08	6.0E-08	6.6E-08	1.7E-07	5.1E-08	9.8E-08	5.8E-08	8.8E-08	1.2E-07
Benzo(b)fluoranthene	3.6E-07	1.6E-07	1.6E-07	3.4E-07	4.5E-07	4.2E-07	1.3E-07	1.3E-07	1.5E-07	1.7E-07	4.3E-07	1.3E-07	2.5E-07	1.5E-07	2.2E-07	3.1E-07
Benzo(k)fluoranthene	9.6E-08	4.2E-08	4.1E-08	9.1E-08	1.2E-07	1.1E-07	3.4E-08	3.5E-08	4.0E-08	4.4E-08	1.1E-07	3.4E-08	6.6E-08	3.9E-08	5.9E-08	8.2E-08
Benzo(a)fluorene	2.6E-06	1.1E-06	1.1E-06	2.5E-06	3.2E-06	3.0E-06	9.3E-07	9.5E-07	1.1E-06	1.2E-06	3.1E-06	9.4E-07	1.8E-06	1.1E-06	1.6E-06	2.2E-06
Benzo(b)fluorene	1.8E-06	7.8E-07	7.7E-07	1.7E-06	2.2E-06	2.1E-06	6.4E-07	6.5E-07	7.5E-07	8.3E-07	2.1E-06	6.4E-07	1.2E-06	7.3E-07	1.1E-06	1.5E-06
Benzo(ghi)perylene	3.9E-06	1.7E-06	1.7E-06	3.7E-06	4.8E-06	4.5E-06	1.4E-06	1.4E-06	1.6E-06	1.8E-06	4.6E-06	1.4E-06	2.7E-06	1.6E-06	2.4E-06	3.3E-06
Benzo(a)pyrene	3.3E-07	1.4E-07	1.4E-07	3.1E-07	4.0E-07	3.8E-07	1.2E-07	1.2E-07	1.4E-07	1.5E-07	3.9E-07	1.2E-07	2.2E-07	1.3E-07	2.0E-07	2.8E-07
Benzo(e)pyrene	8.3E-07	3.6E-07	3.6E-07	7.8E-07	1.0E-06	9.5E-07	2.9E-07	3.0E-07	3.5E-07	3.8E-07	9.8E-07	3.0E-07	5.7E-07	3.4E-07	5.1E-07	7.1E-07
Chrysene	3.6E-07	1.6E-07	1.5E-07	3.4E-07	4.4E-07	4.1E-07	1.3E-07	1.3E-07	1.5E-07	1.7E-07	4.2E-07	1.3E-07	2.5E-07	1.5E-07	2.2E-07	3.1E-07
Dibenzo(a,c)anthracene	2.5E-06	1.1E-06	1.1E-06	2.4E-06	3.1E-06	2.9E-06	9.0E-07	9.2E-07	1.1E-06	1.2E-06	3.0E-06	9.1E-07	1.7E-06	1.0E-06	1.6E-06	2.2E-06
Dibenzo(a,h)anthracene	1.1E-07	5.0E-08	4.9E-08	1.1E-07	1.4E-07	1.3E-07	4.1E-08	4.2E-08	4.8E-08	5.3E-08	1.4E-07	4.1E-08	7.9E-08	4.7E-08	7.1E-08	9.8E-08
Fluoranthene	3.9E-06	1.7E-06	1.7E-06	3.7E-06	4.9E-06	4.6E-06	1.4E-06	1.4E-06	1.7E-06	1.8E-06	4.7E-06	1.4E-06	2.7E-06	1.6E-06	2.4E-06	3.4E-06
Fluorene	3.0E-06	1.3E-06	1.3E-06	2.8E-06	3.7E-06	3.4E-06	1.1E-06	1.1E-06	1.2E-06	1.4E-06	3.5E-06	1.1E-06	2.0E-06	1.2E-06	1.8E-06	2.5E-06
Indeno(1,2,3 – cd)pyrene	7.1E-07	3.1E-07	3.1E-07	6.8E-07	8.8E-07	8.2E-07	2.5E-07	2.6E-07	3.0E-07	3.3E-07	8.5E-07	2.6E-07	4.9E-07	2.9E-07	4.4E-07	6.1E-07
1-Methylnaphthalene	9.3E-06	4.1E-06	4.0E-06	8.8E-06	1.2E-05	1.1E-05	3.3E-06	3.4E-06	3.9E-06	4.3E-06	1.1E-05	3.3E-06	6.4E-06	3.8E-06	5.7E-06	8.0E-06
2-Methylnaphthalene	5.2E-05	2.3E-05	2.2E-05	4.9E-05	6.4E-05	6.0E-05	1.8E-05	1.9E-05	2.2E-05	2.4E-05	6.1E-05	1.8E-05	3.5E-05	2.1E-05	3.2E-05	4.4E-05
Naphthalene	4.0E-05	1.8E-05	1.7E-05	3.8E-05	5.0E-05	4.6E-05	1.4E-05	1.5E-05	1.7E-05	1.9E-05	4.8E-05	1.4E-05	2.8E-05	1.6E-05	2.5E-05	3.4E-05
Perylene	1.4E-07	6.3E-08	6.2E-08	1.4E-07	1.8E-07	1.7E-07	5.1E-08	5.2E-08	6.0E-08	6.6E-08	1.7E-07	5.1E-08	9.8E-08	5.8E-08	8.8E-08	1.2E-07
Phenanthrene	9.0E-06	3.9E-06	3.9E-06	8.5E-06	1.1E-05	1.0E-05	3.2E-06	3.3E-06	3.8E-06	4.1E-06	1.1E-05	3.2E-06	6.2E-06	3.6E-06	5.5E-06	7.7E-06
Pyrene	4.8E-06	2.1E-06	2.1E-06	4.5E-06	5.9E-06	5.5E-06	1.7E-06	1.7E-06	2.0E-06	2.2E-06	5.6E-06	1.7E-06	3.3E-06	1.9E-06	2.9E-06	4.1E-06

24-Hour Exposure Point Concentrations for COPC Exposure Scenarios

Normal Operations - 400,000 tpy

COPC	24-Hour Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Chlorinated Polycyclic Aromatics																
Dioxins and Furans (as TEQ Toxic Equivalents)	5.7E-09	2.5E-09	2.5E-09	5.4E-09	7.0E-09	6.6E-09	2.0E-09	2.1E-09	2.4E-09	2.6E-09	6.7E-09	2.0E-09	3.9E-09	2.3E-09	3.5E-09	4.9E-09
Polychlorinated Biphenyls (PCBs)	6.8E-06	3.0E-06	2.9E-06	6.5E-06	8.5E-06	7.9E-06	2.4E-06	2.5E-06	2.9E-06	3.2E-06	8.1E-06	2.5E-06	4.7E-06	2.8E-06	4.2E-06	5.9E-06
Chlorinated Monocyclic Aromatics																
Dichlorobenzene, 1,2-	1.9E-04	8.5E-05	8.4E-05	1.8E-04	2.4E-04	2.2E-04	6.9E-05	7.0E-05	8.2E-05	9.0E-05	2.3E-04	7.0E-05	1.3E-04	7.9E-05	1.2E-04	1.7E-04
Dichlorophenol, 2,4-	9.8E-06	4.3E-06	4.2E-06	9.2E-06	1.2E-05	1.1E-05	3.5E-06	3.5E-06	4.1E-06	4.5E-06	1.2E-05	3.5E-06	6.7E-06	4.0E-06	6.0E-06	8.3E-06
Hexachlorobenzene	4.9E-06	2.1E-06	2.1E-06	4.6E-06	6.0E-06	5.6E-06	1.7E-06	1.8E-06	2.1E-06	2.3E-06	5.8E-06	1.8E-06	3.4E-06	2.0E-06	3.0E-06	4.2E-06
Pentachlorobenzene	1.3E-05	5.6E-06	5.5E-06	1.2E-05	1.6E-05	1.5E-05	4.6E-06	4.7E-06	5.4E-06	5.9E-06	1.5E-05	4.6E-06	8.8E-06	5.2E-06	7.9E-06	1.1E-05
Pentachlorophenol	2.0E-05	8.5E-06	8.4E-06	1.9E-05	2.4E-05	2.3E-05	7.0E-06	7.1E-06	8.2E-06	9.0E-06	2.3E-05	7.0E-06	1.3E-05	7.9E-06	1.2E-05	1.7E-05
Tetrachlorobenzene, 1,2,4,5-	4.9E-06	2.1E-06	2.1E-06	4.6E-06	6.0E-06	5.6E-06	1.7E-06	1.8E-06	2.1E-06	2.3E-06	5.8E-06	1.8E-06	3.4E-06	2.0E-06	3.0E-06	4.2E-06
Tetrachlorophenol, 2,3,4,6-	1.6E-05	7.2E-06	7.1E-06	1.6E-05	2.0E-05	1.9E-05	5.9E-06	6.0E-06	6.9E-06	7.6E-06	2.0E-05	5.9E-06	1.1E-05	6.7E-06	1.0E-05	1.4E-05
Trichlorobenzene, 1,2,4-	4.9E-06	2.1E-06	2.1E-06	4.6E-06	6.0E-06	5.6E-06	1.7E-06	1.8E-06	2.1E-06	2.3E-06	5.8E-06	1.8E-06	3.4E-06	2.0E-06	3.0E-06	4.2E-06
Trichlorophenol, 2,4,6-	5.0E-06	2.2E-06	2.1E-06	4.7E-06	6.1E-06	5.7E-06	1.8E-06	1.8E-06	2.1E-06	2.3E-06	5.9E-06	1.8E-06	3.4E-06	2.0E-06	3.1E-06	4.2E-06
Volatile Organic Chemicals (VOC)																
Acetaldehyde	5.0E-08	2.2E-08	2.2E-08	4.8E-08	6.2E-08	5.8E-08	1.8E-08	1.8E-08	2.1E-08	2.3E-08	6.0E-08	1.8E-08	3.5E-08	2.0E-08	3.1E-08	4.3E-08
Benzene	0.0029	0.0013	0.0013	0.0028	0.0036	0.0034	0.0010	0.0011	0.0012	0.0014	0.0035	0.0011	0.0020	0.0012	0.0018	0.0025
Biphenyl	2.8E-04	1.2E-04	1.2E-04	2.7E-04	3.5E-04	3.3E-04	1.0E-04	1.0E-04	1.2E-04	1.3E-04	3.4E-04	1.0E-04	1.9E-04	1.2E-04	1.7E-04	2.4E-04
Bromodichloromethane	0.018	0.0077	0.0076	0.017	0.022	0.020	0.0062	0.0064	0.0074	0.0081	0.021	0.0063	0.012	0.0071	0.011	0.015
Bromoform	0.0048	0.0021	0.0021	0.0046	0.0059	0.0055	0.0017	0.0017	0.0020	0.0022	0.0057	0.0017	0.0033	0.0020	0.0030	0.0041
Bromomethane	0.0034	0.0015	0.0015	0.0032	0.0042	0.0039	0.0012	0.0012	0.0014	0.0016	0.0040	0.0012	0.0023	0.0014	0.0021	0.0029
Carbon tetrachloride	3.0E-05	1.3E-05	1.3E-05	2.8E-05	3.7E-05	3.5E-05	1.1E-05	1.1E-05	1.3E-05	1.4E-05	3.6E-05	1.1E-05	2.1E-05	1.2E-05	1.8E-05	2.6E-05
Chloroform	4.8E-05	2.1E-05	2.1E-05	4.6E-05	6.0E-05	5.6E-05	1.7E-05	1.8E-05	2.0E-05	2.2E-05	5.7E-05	1.7E-05	3.3E-05	2.0E-05	3.0E-05	4.1E-05
Dichlorodifluoromethane	0.0083	0.0036	0.0036	0.0078	0.010	0.0095	0.0029	0.0030	0.0035	0.0038	0.0098	0.0030	0.0057	0.0034	0.0051	0.0071
Dichloroethene, 1,1 -	5.4E-05	2.3E-05	2.3E-05	5.1E-05	6.6E-05	6.2E-05	1.9E-05	1.9E-05	2.3E-05	2.5E-05	6.4E-05	1.9E-05	3.7E-05	2.2E-05	3.3E-05	4.6E-05
Dichloromethane	0.017	0.0073	0.0072	0.016	0.021	0.019	0.0059	0.0061	0.0070	0.0077	0.020	0.0060	0.011	0.0068	0.010	0.014
Ethylbenzene	9.8E-05	4.3E-05	4.2E-05	9.3E-05	1.2E-04	1.1E-04	3.5E-05	3.6E-05	4.1E-05	4.5E-05	1.2E-04	3.5E-05	6.8E-05	4.0E-05	6.1E-05	8.4E-05
Ethylene Dibromide	2.8E-05	1.2E-05	1.2E-05	2.7E-05	3.5E-05	3.3E-05	1.0E-05	1.0E-05	1.2E-05	1.3E-05	3.3E-05	1.0E-05	1.9E-05	1.1E-05	1.7E-05	2.4E-05
Formaldehyde	0.0045	0.0020	0.0019	0.0043	0.0056	0.0052	0.0016	0.0016	0.0019	0.0021	0.0053	0.0016	0.0031	0.0018	0.0028	0.0038
O-terphenyl	7.8E-06	3.4E-06	3.3E-06	7.3E-06	9.6E-06	9.0E-06	2.8E-06	2.8E-06	3.3E-06	3.6E-06	9.2E-06	2.8E-06	5.3E-06	3.2E-06	4.8E-06	6.6E-06
Tetrachloroethene	5.4E-04	2.4E-04	2.3E-04	5.1E-04	6.6E-04	6.2E-04	1.9E-04	2.0E-04	2.3E-04	2.5E-04	6.4E-04	1.9E-04	3.7E-04	2.2E-04	3.3E-04	4.6E-04
Tetralin	4.7E-05	2.1E-05	2.0E-05	4.5E-05	5.8E-05	5.5E-05	1.7E-05	1.7E-05	2.0E-05	2.2E-05	5.6E-05	1.7E-05	3.3E-05	1.9E-05	2.9E-05	4.0E-05
Toluene	0.0048	0.0021	0.0021	0.0045	0.0059	0.0055	0.0017	0.0017	0.0020	0.0022	0.0057	0.0017	0.0033	0.0019	0.0029	0.0041
Trichloroethane, 1,1,1 -	1.4E-04	5.9E-05	5.8E-05	1.3E-04	1.7E-04	1.6E-04	4.8E-05	4.9E-05	5.7E-05	6.3E-05	1.6E-04	4.9E-05	9.3E-05	5.5E-05	8.3E-05	1.2E-04
Trichloroethylene, 1,1,2 -	4.7E-05	2.0E-05	2.0E-05	4.4E-05	5.8E-05	5.4E-05	1.7E-05	1.7E-05	2.0E-05	2.2E-05	5.5E-05	1.7E-05	3.2E-05	1.9E-05	2.9E-05	4.0E-05
Trichlorofluoromethane	0.016	0.0071	0.0070	0.015	0.020	0.019	0.0058	0.0059	0.0069	0.0075	0.019	0.0059	0.011	0.0066	0.010	0.014
Vinyl chloride	0.0041	0.0018	0.0018	0.0039	0.0051	0.0048	0.0015	0.0015	0.0017	0.0019	0.0049	0.0015	0.0028	0.0017	0.0025	0.0035
Xylenes, m-, p- and o-	0.057	0.025	0.025	0.054	0.071	0.066	0.020	0.021	0.024	0.026	0.068	0.021	0.039	0.023	0.035	0.049

Annual Exposure Point Concentrations for COPC Exposure Scenarios

Normal Operations - 400,000 tpy

COPC	Annual Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Criteria Air Contaminants (CAC)																
Ammonia	0.017	0.0088	0.0088	0.016	0.013	0.017	0.0072	0.0085	0.0098	0.0068	0.016	0.0083	0.012	0.0089	0.013	0.013
Carbon Monoxide (CO)	0.15	0.073	0.073	0.13	0.11	0.14	0.060	0.071	0.082	0.056	0.14	0.069	0.10	0.074	0.11	0.11
Hydrogen Chloride (HCl)	0.029	0.015	0.015	0.026	0.021	0.028	0.012	0.014	0.016	0.011	0.027	0.014	0.021	0.015	0.021	0.022
Hydrogen Fluoride (HF)	0.0029	0.0015	0.0015	0.0026	0.0021	0.0028	0.0012	0.0014	0.0016	0.0011	0.0027	0.0014	0.0021	0.0015	0.0021	0.0022
Nitrogen Dioxide (NO_2)	0.39	0.20	0.20	0.36	0.29	0.37	0.16	0.19	0.22	0.15	0.37	0.19	0.28	0.20	0.28	0.30
Particulate Matter - PM_{10}	0.034	0.022	0.021	0.033	0.026	0.034	0.019	0.021	0.023	0.019	0.031	0.022	0.026	0.020	0.028	0.026
Particulate Matter - $PM_{2.5}$	0.034	0.022	0.021	0.033	0.026	0.034	0.019	0.021	0.023	0.019	0.031	0.022	0.026	0.020	0.028	0.026
Particulate Matter - Total	0.034	0.022	0.021	0.033	0.026	0.034	0.019	0.021	0.023	0.019	0.031	0.022	0.026	0.020	0.028	0.026
Sulfur Dioxide (SO_2)	0.11	0.057	0.057	0.10	0.083	0.11	0.047	0.055	0.064	0.044	0.11	0.054	0.080	0.058	0.082	0.086
Metals																
Antimony	8.8E-06	4.5E-06	4.4E-06	8.0E-06	6.5E-06	8.4E-06	3.6E-06	4.3E-06	5.0E-06	3.4E-06	8.3E-06	4.2E-06	6.3E-06	4.5E-06	6.4E-06	6.7E-06
Arsenic	1.4E-06	6.8E-07	6.8E-07	1.2E-06	9.9E-07	1.3E-06	5.6E-07	6.6E-07	7.7E-07	5.3E-07	1.3E-06	6.4E-07	9.6E-07	6.9E-07	9.9E-07	1.0E-06
Barium	6.8E-06	3.4E-06	3.4E-06	6.2E-06	5.0E-06	6.5E-06	2.8E-06	3.3E-06	3.9E-06	2.6E-06	6.4E-06	3.2E-06	4.9E-06	3.5E-06	5.0E-06	5.2E-06
Beryllium	1.1E-06	5.4E-07	5.4E-07	9.8E-07	7.9E-07	1.0E-06	4.4E-07	5.3E-07	6.1E-07	4.2E-07	1.0E-06	5.1E-07	7.6E-07	5.5E-07	7.8E-07	8.2E-07
Boron	4.9E-04	2.5E-04	2.5E-04	4.5E-04	3.6E-04	4.7E-04	2.0E-04	2.4E-04	2.8E-04	1.9E-04	4.6E-04	2.3E-04	3.5E-04	2.5E-04	3.6E-04	3.8E-04
Cadmium	2.3E-05	1.1E-05	1.1E-05	2.1E-05	1.7E-05	2.2E-05	9.3E-06	1.1E-05	1.3E-05	8.8E-06	2.1E-05	1.1E-05	1.6E-05	1.2E-05	1.6E-05	1.7E-05
Chromium (hexavalent)	1.0E-06	5.2E-07	5.2E-07	9.4E-07	7.6E-07	9.8E-07	4.3E-07	5.0E-07	5.8E-07	4.0E-07	9.7E-07	4.9E-07	7.3E-07	5.3E-07	7.5E-07	7.9E-07
Total Chromium (and compounds)	7.3E-06	3.7E-06	3.7E-06	6.6E-06	5.3E-06	6.9E-06	3.0E-06	3.5E-06	4.1E-06	2.8E-06	6.8E-06	3.4E-06	5.2E-06	3.7E-06	5.3E-06	5.5E-06
Cobalt	1.9E-05	9.4E-06	9.4E-06	1.7E-05	1.4E-05	1.8E-05	7.7E-06	9.1E-06	1.1E-05	7.3E-06	1.8E-05	8.9E-06	1.3E-05	9.6E-06	1.4E-05	1.4E-05
Lead	1.6E-04	8.1E-05	8.1E-05	1.5E-04	1.2E-04	1.5E-04	6.7E-05	7.9E-05	9.1E-05	6.3E-05	1.5E-04	7.7E-05	1.1E-04	8.3E-05	1.2E-04	1.2E-04
Mercury - Inorganic	4.8E-05	2.4E-05	2.4E-05	4.4E-05	3.5E-05	4.6E-05	2.0E-05	2.4E-05	2.7E-05	1.9E-05	4.6E-05	2.3E-05	3.4E-05	2.5E-05	3.5E-05	3.7E-05
Nickel	2.8E-04	1.4E-04	1.4E-04	2.6E-04	2.1E-04	2.7E-04	1.2E-04	1.4E-04	1.6E-04	1.1E-04	2.6E-04	1.3E-04	2.0E-04	1.4E-04	2.0E-04	2.1E-04
Phosphorus	1.5E-04	7.5E-05	7.5E-05	1.4E-04	1.1E-04	1.4E-04	6.1E-05	7.3E-05	8.4E-05	5.8E-05	1.4E-04	7.1E-05	1.1E-04	7.6E-05	1.1E-04	1.1E-04
Selenium	1.5E-06	7.8E-07	7.8E-07	1.4E-06	1.1E-06	1.5E-06	6.4E-07	7.6E-07	8.7E-07	6.0E-07	1.5E-06	7.4E-07	1.1E-06	7.9E-07	1.1E-06	1.2E-06
Silver	1.1E-05	5.5E-06	5.4E-06	9.8E-06	7.9E-06	1.0E-05	4.5E-06	5.3E-06	6.1E-06	4.2E-06	1.0E-05	5.1E-06	7.7E-06	5.5E-06	7.9E-06	8.2E-06
Thallium	1.3E-04	6.3E-05	6.3E-05	1.1E-04	9.2E-05	1.2E-04	5.2E-05	6.2E-05	7.1E-05	4.9E-05	1.2E-04	6.0E-05	9.0E-05	6.4E-05	9.2E-05	9.6E-05
Tin	5.7E-05	2.9E-05	2.9E-05	5.2E-05	4.2E-05	5.4E-05	2.3E-05	2.8E-05	3.2E-05	2.2E-05	5.3E-05	2.7E-05	4.0E-05	2.9E-05	4.1E-05	4.3E-05
Vanadium	3.8E-06	1.9E-06	1.9E-06	3.4E-06	2.7E-06	3.6E-06	1.5E-06	1.8E-06	2.1E-06	1.5E-06	3.5E-06	1.8E-06	2.7E-06	1.9E-06	2.7E-06	2.9E-06
Zinc	6.4E-04	3.2E-04	3.2E-04	5.9E-04	4.7E-04	6.1E-04	2.7E-04	3.1E-04	3.6E-04	2.5E-04	6.1E-04	3.1E-04	4.6E-04	3.3E-04	4.7E-04	4.9E-04
Polycyclic Aromatic Hydrocarbons (PAH)																
Acenaphthene	6.0E-08	3.0E-08	3.0E-08	5.5E-08	4.4E-08	5.7E-08	2.5E-08	2.9E-08	3.4E-08	2.3E-08	5.7E-08	2.8E-08	4.3E-08	3.1E-08	4.4E-08	4.6E-08
Acenaphthylene	4.7E-08	2.4E-08	2.4E-08	4.3E-08	3.4E-08	4.5E-08	1.9E-08	2.3E-08	2.6E-08	1.8E-08	4.4E-08	2.2E-08	3.3E-08	2.4E-08	3.4E-08	3.6E-08
Anthracene	1.3E-08	6.6E-09	6.6E-09	1.2E-08	9.6E-09	1.3E-08	5.4E-09	6.4E-09	7.4E-09	5.1E-09	1.2E-08	6.2E-09	9.3E-09	6.7E-09	9.6E-09	1.0E-08
Benzo(a)anthracene	4.8E-09	2.4E-09	2.4E-09	4.4E-09	3.5E-09	4.6E-09	2.0E-09	2.4E-09	2.7E-09	1.9E-09	4.6E-09	2.3E-09	3.4E-09	2.5E-09	3.5E-09	3.7E-09
Benzo(b)fluoranthene	1.2E-08	6.2E-09	6.2E-09	1.1E-08	9.0E-09	1.2E-08	5.1E-09	6.0E-09	7.0E-09	4.8E-09	1.2E-08	5.9E-09	8.8E-09	6.3E-09	9.0E-09	9.4E-09
Benzo(k)fluoranthene	3.3E-09	1.6E-09	1.6E-09	3.0E-09	2.4E-09	3.1E-09	1.3E-09	1.6E-09	1.8E-09	1.3E-09	3.1E-09	1.5E-09	2.3E-09	1.7E-09	2.4E-09	2.5E-09
Benzo(a)fluorene	8.9E-08	4.5E-08	4.5E-08	8.1E-08	6.5E-08	8.5E-08	3.7E-08	4.4E-08	5.0E-08	3.5E-08	8.4E-08	4.2E-08	6.3E-08	4.6E-08	6.5E-08	6.8E-08
Benzo(b)fluorene	6.1E-08	3.1E-08	3.1E-08	5.5E-08	4.5E-08	5.8E-08	2.5E-08	3.0E-08	3.4E-08	2.4E-08	5.7E-08	2.9E-08	4.3E-08	3.1E-08	4.4E-08	4.6E-08
Benzo(ghi)perylene	1.3E-07	6.7E-08	6.7E-08	1.2E-07	9.7E-08	1.3E-07	5.5E-08	6.5E-08	7.5E-08	5.2E-08	1.3E-07	6.3E-08	9.5E-08	6.8E-08	9.7E-08	1.0E-07
Benzo(a)pyrene	1.1E-08	5.6E-09	5.6E-09	1.0E-08	8.1E-09	1.1E-08	4.6E-09	5.4E-09	6.3E-09	4.3E-09	1.0E-08	5.3E-09	7.9E-09	5.7E-09	8.1E-09	8.4E-09
Benzo(e)pyrene	2.8E-08	1.4E-08	1.4E-08	2.6E-08	2.1E-08	2.7E-08	1.2E-08	1.4E-08	1.6E-08	1.1E-08	2.6E-08	1.3E-08	2.0E-08	1.4E-08	2.0E-08	2.1E-08
Chrysene	1.2E-08	6.1E-09	6.1E-09	1.1E-08	8.9E-09	1.2E-08	5.0E-09	5.9E-09	6.9E-09	4.7E-09	1.1E-08	5.8E-09	8.7E-09	6.2E-09	8.9E-09	9.3E-09
Dibenzo(a,c)anthracene	8.6E-08	4.4E-08	4.3E-08	7.9E-08	6.3E-08	8.2E-08	3.6E-08	4.2E-08	4.9E-08	3.4E-08	8.1E-08	4.1E-08	6.2E-08	4.4E-08	6.3E-08	6.6E-08
Dibenzo(a,h)anthracene	3.9E-09	2.0E-09	2.0E-09	3.6E-09	2.9E-09	3.7E-09	1.6E-09	1.9E-09	2.2E-09	1.5E-09	3.7E-09	1.9E-09	2.8E-09	2.0E-09	2.8E-09	3.0E-09
Fluoranthene	1.3E-07	6.8E-08	6.7E-08	1.2E-07	9.8E-08	1.3E-07	5.5E-08	6.6E-08	7.6E-08	5.2E-08	1.3E-07	6.4E-08	9.6E-08	6.9E-08	9.8E-08	1.0E-07
Fluorene	1.0E-07	5.1E-08	5.1E-08	9.2E-08	7.4E-08	9.6E-08	4.2E-08	4.9E-08	5.7E-08	3.9E-08	9.5E-08	4.8E-08	7.2E-08	5.2E-08	7.4E-08	7.7E-08
Indeno(1,2,3 – cd)pyrene	2.4E-08	1.2E-08	1.2E-08	2.2E-08	1.8E-08	2.3E-08	1.0E-08	1.2E-08	1.4E-08	9.4E-09	2.3E-08	1.2E-08	1.7E-08	1.2E-08	1.8E-08	1.9E-08
1-Methylnaphthalene	3.2E-07	1.6E-07	1.6E-07	2.9E-07	2.3E-07	3.0E-07	1.3E-07	1.5E-07	1.8E-07	1.2E-07	3.0E-07	1.5E-07	2.3E-07	1.6E-07	2.3E-07	2.4E-07
2-Methylnaphthalene	1.8E-06	8.8E-07	8.8E-07	1.6E-06	1.3E-06	1.7E-06	7.2E-07	8.6E-07	9.9E-07	6.8E-07	1.7E-06	8.3E-07	1.2E-06	9.0E-07	1.3E-06	1.3E-06
Naphthalene	1.4E-06	6.9E-07	6.9E-07	1.2E-06	1.0E-06	1.3E-06	5.6E-07	6.7E-07	7.7E-07	5.3E-07	1.3E-06	6.5E-07	9.7E-07	7.0E-07	1.0E-06	1.0E-06
Perylene	4.9E-09	2.5E-09	2.4E-09	4.4E-09	3.6E-09	4.6E-09	2.0E-09	2.4E-09	2.8E-09	1.9E-09	4.6E-09	2.3E-09	3.5E-09	2.5E-09	3.6E-09	3.7E-09
Phenanthrene	3.1E-07	1.5E-07	1.5E-07	2.8E-07	2.2E-07	2.9E-07	1.3E-07	1.5E-07	1.7E-07	1.2E-07	2.9E-07	1.4E-07	2.2E-07	1.6E-07	2.2E-07	2.3E-07
Pyrene	1.6E-07	8.2E-08	8.1E-08	1.5E-07	1.2E-07	1.5E-07	6.7E-08	7.9E-08	9.1E-08	6.3E-08	1.5E-07	7.7E-08	1.2E-07	8.3E-08	1.2E-07	1.2E-07

Annual Exposure Point Concentrations for COPC Exposure Scenarios

Normal Operations - 400,000 tpy

COPC	Annual Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Chlorinated Polycyclic Aromatics																
Dioxins and Furans (as TEQ Toxic Equivalents)	1.9E-10	9.8E-11	9.7E-11	1.8E-10	1.4E-10	1.8E-10	8.0E-11	9.5E-11	1.1E-10	7.5E-11	1.8E-10	9.2E-11	1.4E-10	9.9E-11	1.4E-10	1.5E-10
Polychlorinated Biphenyls (PCBs)	2.3E-07	1.2E-07	1.2E-07	2.1E-07	1.7E-07	2.2E-07	9.6E-08	1.1E-07	1.3E-07	9.0E-08	2.2E-07	1.1E-07	1.7E-07	1.2E-07	1.7E-07	1.8E-07
Chlorinated Monocyclic Aromatics																
Dichlorobenzene, 1,2-	6.6E-06	3.3E-06	3.3E-06	6.0E-06	4.8E-06	6.3E-06	2.7E-06	3.2E-06	3.7E-06	2.6E-06	6.2E-06	3.1E-06	4.7E-06	3.4E-06	4.8E-06	5.0E-06
Dichlorophenol, 2,4-	3.3E-07	1.7E-07	1.7E-07	3.0E-07	2.4E-07	3.2E-07	1.4E-07	1.6E-07	1.9E-07	1.3E-07	3.1E-07	1.6E-07	2.4E-07	1.7E-07	2.4E-07	2.5E-07
Hexachlorobenzene	1.7E-07	8.4E-08	8.4E-08	1.5E-07	1.2E-07	1.6E-07	6.9E-08	8.1E-08	9.4E-08	6.5E-08	1.6E-07	7.9E-08	1.2E-07	8.5E-08	1.2E-07	1.3E-07
Pentachlorobenzene	4.4E-07	2.2E-07	2.2E-07	4.0E-07	3.2E-07	4.2E-07	1.8E-07	2.1E-07	2.5E-07	1.7E-07	4.1E-07	2.1E-07	3.1E-07	2.2E-07	3.2E-07	3.3E-07
Pentachlorophenol	6.7E-07	3.4E-07	3.3E-07	6.1E-07	4.9E-07	6.3E-07	2.7E-07	3.3E-07	3.8E-07	2.6E-07	6.3E-07	3.2E-07	4.7E-07	3.4E-07	4.9E-07	5.1E-07
Tetrachlorobenzene, 1,2,4,5-	1.7E-07	8.4E-08	8.4E-08	1.5E-07	1.2E-07	1.6E-07	6.9E-08	8.1E-08	9.4E-08	6.5E-08	1.6E-07	7.9E-08	1.2E-07	8.5E-08	1.2E-07	1.3E-07
Tetrachlorophenol, 2,3,4,6-	5.6E-07	2.8E-07	2.8E-07	5.1E-07	4.1E-07	5.3E-07	2.3E-07	2.7E-07	3.2E-07	2.2E-07	5.3E-07	2.7E-07	4.0E-07	2.9E-07	4.1E-07	4.3E-07
Trichlorobenzene, 1,2,4-	1.7E-07	8.4E-08	8.4E-08	1.5E-07	1.2E-07	1.6E-07	6.9E-08	8.1E-08	9.4E-08	6.5E-08	1.6E-07	7.9E-08	1.2E-07	8.5E-08	1.2E-07	1.3E-07
Trichlorophenol, 2,4,6-	1.7E-07	8.5E-08	8.5E-08	1.5E-07	1.2E-07	1.6E-07	7.0E-08	8.3E-08	9.5E-08	6.6E-08	1.6E-07	8.0E-08	1.2E-07	8.6E-08	1.2E-07	1.3E-07
Volatile Organic Chemicals (VOC)																
Acetaldehyde	1.7E-09	8.6E-10	8.6E-10	1.6E-09	1.3E-09	1.6E-09	7.1E-10	8.4E-10	9.7E-10	6.7E-10	1.6E-09	8.1E-10	1.2E-09	8.8E-10	1.2E-09	1.3E-09
Benzene	1.0E-04	5.0E-05	5.0E-05	9.1E-05	7.3E-05	9.5E-05	4.1E-05	4.9E-05	5.6E-05	3.9E-05	9.4E-05	4.7E-05	7.1E-05	5.1E-05	7.3E-05	7.6E-05
Biphenyl	9.6E-06	4.9E-06	4.8E-06	8.8E-06	7.0E-06	9.2E-06	4.0E-06	4.7E-06	5.4E-06	3.7E-06	9.1E-06	4.6E-06	6.9E-06	4.9E-06	7.0E-06	7.3E-06
Bromodichloromethane	6.0E-04	3.0E-04	3.0E-04	5.4E-04	4.4E-04	5.7E-04	2.5E-04	2.9E-04	3.4E-04	2.3E-04	5.6E-04	2.8E-04	4.3E-04	3.1E-04	4.4E-04	4.5E-04
Bromoform	1.6E-04	8.2E-05	8.2E-05	1.5E-04	1.2E-04	1.6E-04	6.7E-05	8.0E-05	9.2E-05	6.3E-05	1.5E-04	7.8E-05	1.2E-04	8.4E-05	1.2E-04	1.2E-04
Bromomethane	1.2E-04	5.9E-05	5.8E-05	1.1E-04	8.5E-05	1.1E-04	4.8E-05	5.7E-05	6.6E-05	4.5E-05	1.1E-04	5.5E-05	8.3E-05	5.9E-05	8.5E-05	8.8E-05
Carbon tetrachloride	1.0E-06	5.1E-07	5.1E-07	9.3E-07	7.5E-07	9.7E-07	4.2E-07	5.0E-07	5.8E-07	4.0E-07	9.6E-07	4.8E-07	7.3E-07	5.2E-07	7.4E-07	7.8E-07
Chloroform	1.6E-06	8.3E-07	8.3E-07	1.5E-06	1.2E-06	1.6E-06	6.8E-07	8.0E-07	9.3E-07	6.4E-07	1.5E-06	7.8E-07	1.2E-06	8.4E-07	1.2E-06	1.3E-06
Dichlorodifluoromethane	2.8E-04	1.4E-04	1.4E-04	2.6E-04	2.1E-04	2.7E-04	1.2E-04	1.4E-04	1.6E-04	1.1E-04	2.6E-04	1.3E-04	2.0E-04	1.4E-04	2.0E-04	2.1E-04
Dichloroethene, 1,1 -	1.8E-06	9.2E-07	9.2E-07	1.7E-06	1.3E-06	1.7E-06	7.5E-07	8.9E-07	1.0E-06	7.1E-07	1.7E-06	8.7E-07	1.3E-06	9.3E-07	1.3E-06	1.4E-06
Dichloromethane	5.7E-04	2.9E-04	2.9E-04	5.2E-04	4.2E-04	5.4E-04	2.3E-04	2.8E-04	3.2E-04	2.2E-04	5.3E-04	2.7E-04	4.0E-04	2.9E-04	4.1E-04	4.3E-04
Ethylbenzene	3.3E-06	1.7E-06	1.7E-06	3.0E-06	2.4E-06	3.2E-06	1.4E-06	1.6E-06	1.9E-06	1.3E-06	3.1E-06	1.6E-06	2.4E-06	1.7E-06	2.4E-06	2.5E-06
Ethylene Dibromide	9.6E-07	4.8E-07	4.8E-07	8.7E-07	7.0E-07	9.2E-07	4.0E-07	4.7E-07	5.4E-07	3.7E-07	9.0E-07	4.6E-07	6.8E-07	4.9E-07	7.0E-07	7.3E-07
Formaldehyde	1.5E-04	7.7E-05	7.7E-05	1.4E-04	1.1E-04	1.5E-04	6.3E-05	7.5E-05	8.7E-05	5.9E-05	1.4E-04	7.3E-05	1.1E-04	7.8E-05	1.1E-04	1.2E-04
O-terphenyl	2.6E-07	1.3E-07	1.3E-07	2.4E-07	1.9E-07	2.5E-07	1.1E-07	1.3E-07	1.5E-07	1.0E-07	2.5E-07	1.3E-07	1.9E-07	1.4E-07	1.9E-07	2.0E-07
Tetrachloroethene	1.8E-05	9.2E-06	9.2E-06	1.7E-05	1.3E-05	1.7E-05	7.5E-06	8.9E-06	1.0E-05	7.1E-06	1.7E-05	8.7E-06	1.3E-05	9.4E-06	1.3E-05	1.4E-05
Tetralin	1.6E-06	8.1E-07	8.1E-07	1.5E-06	1.2E-06	1.5E-06	6.6E-07	7.9E-07	9.1E-07	6.2E-07	1.5E-06	7.6E-07	1.1E-06	8.2E-07	1.2E-06	1.2E-06
Toluene	1.6E-04	8.2E-05	8.2E-05	1.5E-04	1.2E-04	1.5E-04	6.7E-05	7.9E-05	9.2E-05	6.3E-05	1.5E-04	7.7E-05	1.2E-04	8.3E-05	1.2E-04	1.2E-04
Trichloroethane, 1,1,1 -	4.6E-06	2.3E-06	2.3E-06	4.2E-06	3.4E-06	4.4E-06	1.9E-06	2.3E-06	2.6E-06	1.8E-06	4.3E-06	2.2E-06	3.3E-06	2.4E-06	3.4E-06	3.5E-06
Trichloroethylene, 1,1,2 -	1.6E-06	8.0E-07	8.0E-07	1.4E-06	1.2E-06	1.5E-06	6.5E-07	7.8E-07	9.0E-07	6.2E-07	1.5E-06	7.5E-07	1.1E-06	8.1E-07	1.2E-06	1.2E-06
Trichlorofluoromethane	5.6E-04	2.8E-04	2.8E-04	5.1E-04	4.1E-04	5.3E-04	2.3E-04	2.7E-04	3.1E-04	2.2E-04	5.2E-04	2.6E-04	4.0E-04	2.8E-04	4.1E-04	4.2E-04
Vinyl chloride	1.4E-04	7.1E-05	7.1E-05	1.3E-04	1.0E-04	1.3E-04	5.8E-05	6.9E-05	7.9E-05	5.5E-05	1.3E-04	6.7E-05	1.0E-04	7.2E-05	1.0E-04	1.1E-04
Xylenes, m-, p- and o-	0.0019	9.8E-04	9.8E-04	0.0018	0.0014	0.0019	8.0E-04	9.5E-04	0.0011	7.6E-04	0.0018	9.3E-04	0.0014	1.0E-03	0.0014	0.0015

APPENDIX E-4

Air Exposure Point Concentrations – Upset Operations (Process Upset Case) – 400,000 tpy

1-Hour Exposure Point Concentrations for Process Upset COPC Exposure Scenarios

Process Upset - 400,000 tpy

COPC	1-Hour Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Criteria Air Contaminants (CAC)																
Ammonia	33	18	20	29	47	29	7.9	7.9	9.3	17	27	8.2	13	7.7	18	22
Carbon Monoxide (CO)	277	152	167	239	392	240	66	66	78	146	222	68	112	64	148	185
Hydrogen Chloride (HCl)	55	30	33	48	78	48	13	13	16	29	44	14	22	13	30	37
Hydrogen Fluoride (HF)	5.5	3.0	3.3	4.8	7.8	4.8	1.3	1.3	1.6	2.9	4.4	1.4	2.2	1.3	3.0	3.7
Nitrogen Dioxide (NO_2)	140	81	88	120	184	126	32	33	39	73	113	37	58	33	77	95
Particulate Matter - PM_{10}	57	31	34	49	80	49	13	13	16	30	45	14	32	13	32	40
Particulate Matter - $PM_{2.5}$	57	31	34	49	80	49	13	13	16	30	45	14	32	13	32	40
Particulate Matter - Total	57	31	34	49	80	49	13	13	16	30	45	14	32	13	32	40
Sulfur Dioxide (SO_2)	341	187	205	294	486	295	82	81	96	180	273	84	137	79	181	227
Metals																
Antimony	0.017	0.0093	0.010	0.015	0.024	0.015	0.0040	0.0040	0.0047	0.0089	0.014	0.0042	0.0068	0.0039	0.0090	0.011
Arsenic	0.0026	0.0014	0.0016	0.0022	0.0037	0.0022	6.2E-04	6.2E-04	7.3E-04	0.0014	0.0021	6.4E-04	0.0010	6.0E-04	0.0014	0.0017
Barium	0.013	0.0071	0.0078	0.011	0.018	0.011	0.0031	0.0031	0.0037	0.0068	0.010	0.0032	0.0053	0.0030	0.0069	0.0087
Beryllium	0.0020	0.0011	0.0012	0.0018	0.0029	0.0018	4.9E-04	4.9E-04	5.8E-04	0.0011	0.0016	5.1E-04	8.3E-04	4.7E-04	0.0011	0.0014
Boron	0.94	0.52	0.57	0.81	1.3	0.82	0.22	0.22	0.26	0.50	0.75	0.23	0.38	0.22	0.50	0.63
Cadmium	0.043	0.024	0.026	0.037	0.061	0.037	0.010	0.010	0.012	0.023	0.035	0.011	0.017	0.0100	0.023	0.029
Chromium (hexavalent)	0.0020	0.0011	0.0012	0.0017	0.0028	0.0017	4.7E-04	4.7E-04	5.5E-04	0.0010	0.0016	4.9E-04	7.9E-04	4.6E-04	0.0010	0.0013
Total Chromium (and compounds)	0.014	0.0076	0.0084	0.012	0.020	0.012	0.0033	0.0033	0.0039	0.0073	0.011	0.0034	0.0056	0.0032	0.0074	0.0092
Cobalt	0.036	0.020	0.022	0.031	0.050	0.031	0.0085	0.0085	0.010	0.019	0.029	0.0088	0.014	0.0083	0.019	0.024
Lead	0.31	0.17	0.19	0.27	0.44	0.27	0.073	0.073	0.086	0.16	0.25	0.076	0.12	0.071	0.16	0.21
Mercury - Inorganic	0.092	0.051	0.056	0.080	0.13	0.080	0.022	0.022	0.026	0.049	0.074	0.023	0.037	0.021	0.049	0.062
Nickel	0.54	0.29	0.32	0.46	0.76	0.47	0.13	0.13	0.15	0.28	0.43	0.13	0.22	0.12	0.29	0.36
Phosphorus	0.28	0.16	0.17	0.24	0.40	0.25	0.068	0.067	0.080	0.15	0.23	0.070	0.11	0.066	0.15	0.19
Selenium	0.0030	0.0016	0.0018	0.0025	0.0042	0.0026	7.0E-04	7.0E-04	8.3E-04	0.0016	0.0024	7.3E-04	0.0012	6.8E-04	0.0016	0.0020
Silver	0.021	0.011	0.012	0.018	0.029	0.018	0.0049	0.0049	0.0058	0.011	0.017	0.0051	0.0083	0.0048	0.011	0.014
Thallium	0.24	0.13	0.14	0.21	0.34	0.21	0.057	0.057	0.067	0.13	0.19	0.059	0.097	0.056	0.13	0.16
Tin	0.11	0.059	0.065	0.093	0.15	0.094	0.026	0.026	0.030	0.057	0.087	0.027	0.044	0.025	0.058	0.072
Vanadium	0.0071	0.0039	0.0043	0.0062	0.010	0.0062	0.0017	0.0017	0.0020	0.0038	0.0057	0.0018	0.0029	0.0017	0.0038	0.0048
Zinc	1.2	0.67	0.74	1.1	1.7	1.1	0.29	0.29	0.35	0.65	0.98	0.30	0.50	0.28	0.65	0.82
Polycyclic Aromatic Hydrocarbons (PAH)																
Acenaphthene	1.1E-04	6.3E-05	6.9E-05	9.9E-05	1.6E-04	9.9E-05	2.7E-05	2.7E-05	3.2E-05	6.0E-05	9.2E-05	2.8E-05	4.6E-05	2.7E-05	6.1E-05	7.6E-05
Acenaphthylene	8.9E-05	4.9E-05	5.4E-05	7.7E-05	1.3E-04	7.7E-05	2.1E-05	2.1E-05	2.5E-05	4.7E-05	7.1E-05	2.2E-05	3.6E-05	2.1E-05	4.8E-05	5.9E-05
Anthracene	2.5E-05	1.4E-05	1.5E-05	2.2E-05	3.5E-05	2.2E-05	6.0E-06	6.0E-06	7.0E-06	1.3E-05	2.0E-05	6.2E-06	1.0E-05	5.8E-06	1.3E-05	1.7E-05
Benzo(a)anthracene	9.2E-06	5.1E-06	5.6E-06	8.0E-06	1.3E-05	8.0E-06	2.2E-06	2.2E-06	2.6E-06	4.9E-06	7.4E-06	2.3E-06	3.7E-06	2.1E-06	4.9E-06	6.2E-06
Benzo(b)fluoranthene	2.4E-05	1.3E-05	1.4E-05	2.0E-05	3.3E-05	2.0E-05	5.6E-06	5.6E-06	6.6E-06	1.2E-05	1.9E-05	5.8E-06	9.5E-06	5.5E-06	1.3E-05	1.6E-05
Benzo(k)fluoranthene	6.2E-06	3.4E-06	3.7E-06	5.4E-06	8.8E-06	5.4E-06	1.5E-06	1.5E-06	1.7E-06	3.3E-06	5.0E-06	1.5E-06	2.5E-06	1.4E-06	3.3E-06	4.1E-06
Benzo(a)fluorene	1.7E-04	9.3E-05	1.0E-04	1.5E-04	2.4E-04	1.5E-04	4.1E-05	4.1E-05	4.8E-05	9.0E-05	1.4E-04	4.2E-05	6.9E-05	3.9E-05	9.1E-05	1.1E-04
Benzo(b)fluorene	1.2E-04	6.4E-05	7.0E-05	1.0E-04	1.6E-04	1.0E-04	2.8E-05	2.8E-05	3.3E-05	6.1E-05	9.3E-05	2.9E-05	4.7E-05	2.7E-05	6.2E-05	7.8E-05
Benzo(ghi)perylene	2.5E-04	1.4E-04	1.5E-04	2.2E-04	3.6E-04	2.2E-04	6.1E-05	6.1E-05	7.1E-05	1.3E-04	2.0E-04	6.3E-05	1.0E-04	5.9E-05	1.4E-04	1.7E-04
Benzo(a)pyrene	2.1E-05	1.2E-05	1.3E-05	1.8E-05	3.0E-05	1.8E-05	5.0E-06	5.0E-06	6.0E-06	1.1E-05	1.7E-05	5.2E-06	8.5E-06	4.9E-06	1.1E-05	1.4E-05
Benzo(e)pyrene	5.4E-05	2.9E-05	3.2E-05	4.6E-05	7.6E-05	4.7E-05	1.3E-05	1.3E-05	1.5E-05	2.8E-05	4.3E-05	1.3E-05	2.2E-05	1.2E-05	2.9E-05	3.6E-05
Chrysene	2.3E-05	1.3E-05	1.4E-05	2.0E-05	3.3E-05	2.0E-05	5.5E-06	5.5E-06	6.5E-06	1.2E-05	1.9E-05	5.7E-06	9.4E-06	5.4E-06	1.2E-05	1.5E-05
Dibenzo(a,c)anthracene	1.6E-04	9.1E-05	9.9E-05	1.4E-04	2.3E-04	1.4E-04	3.9E-05	3.9E-05	4.6E-05	8.7E-05	1.3E-04	4.1E-05	6.7E-05	3.8E-05	8.8E-05	1.1E-04
Dibenzo(a,h)anthracene	7.4E-06	4.1E-06	4.5E-06	6.4E-06	1.1E-05	6.5E-06	1.8E-06	1.8E-06	2.1E-06	3.9E-06	6.0E-06	1.8E-06	3.0E-06	1.7E-06	4.0E-06	5.0E-06
Fluoranthene	2.6E-04	1.4E-04	1.5E-04	2.2E-04	3.6E-04	2.2E-04	6.1E-05	6.1E-05	7.2E-05	1.3E-04	2.1E-04	6.3E-05	1.0E-04	5.9E-05	1.4E-04	1.7E-04
Fluorene	1.9E-04	1.1E-04	1.2E-04	1.7E-04	2.7E-04	1.7E-04	4.6E-05	4.6E-05	5.4E-05	1.0E-04	1.5E-04	4.8E-05	7.8E-05	4.5E-05	1.0E-04	1.3E-04
Indeno(1,2,3 – cd)pyrene	4.6E-05	2.5E-05	2.8E-05	4.0E-05	6.6E-05	4.0E-05	1.1E-05	1.1E-05	1.3E-05	2.4E-05	3.7E-05	1.1E-05	1.9E-05	1.1E-05	2.5E-05	3.1E-05
1-Methylnaphthalene	6.0E-04	3.3E-04	3.6E-04	5.2E-04	8.6E-04	5.2E-04	1.4E-04	1.4E-04	1.7E-04	3.2E-04	4.8E-04	1.5E-04	2.4E-04	1.4E-04	3.2E-04	4.0E-04
2-Methylnaphthalene	0.0033	0.0018	0.0020	0.0029	0.0047	0.0029	8.0E-04	8.0E-04	9.4E-04	0.0018	0.0027	8.3E-04	0.0014	7.8E-04	0.0018	0.0022
Naphthalene	0.0026	0.0014	0.0016	0.0022	0.0037	0.0023	6.2E-04	6.2E-04	7.3E-04	0.0014	0.0021	6.4E-04	0.0011	6.0E-04	0.0014	0.0017
Perylene	9.3E-06	5.1E-06	5.6E-06	8.0E-06	1.3E-05	8.1E-06	2.2E-06	2.2E-06	2.6E-06	4.9E-06	7.4E-06	2.3E-06	3.8E-06	2.2E-06	5.0E-06	6.2E-06
Phenanthrene	5.8E-04	3.2E-04	3.5E-04	5.0E-04	8.2E-04	5.1E-04	1.4E-04	1.4E-04	1.6E-04	3.1E-04	4.7E-04	1.4E-04	2.3E-04	1.3E-04	3.1E-04	3.9E-04
Pyrene	3.1E-04	1.7E-04	1.9E-04	2.7E-04	4.4E-04	2.7E-04	7.4E-05	7.4E-05	8.7E-05	1.6E-04	2.5E-04	7.6E-05	1.2E-04	7.2E-05	1.6E-04	2.1E-04

1-Hour Exposure Point Concentrations for Process Upset COPC Exposure Scenarios

Process Upset - 400,000 tpy

COPC	1-Hour Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Chlorinated Polycyclic Aromatics																
Dioxins and Furans (as TEQ Toxic Equivalents)	3.7E-07	2.0E-07	2.2E-07	3.2E-07	5.2E-07	3.2E-07	8.8E-08	8.8E-08	1.0E-07	1.9E-07	3.0E-07	9.1E-08	1.5E-07	8.6E-08	2.0E-07	2.5E-07
Polychlorinated Biphenyls (PCBs)	4.4E-04	2.4E-04	2.7E-04	3.8E-04	6.3E-04	3.9E-04	1.1E-04	1.1E-04	1.2E-04	2.3E-04	3.6E-04	1.1E-04	1.8E-04	1.0E-04	2.4E-04	3.0E-04
Chlorinated Monocyclic Aromatics																
Dichlorobenzene, 1,2-	0.013	0.0069	0.0076	0.011	0.018	0.011	0.0030	0.0030	0.0035	0.0066	0.010	0.0031	0.0051	0.0029	0.0067	0.0084
Dichlorophenol, 2,4-	6.3E-04	3.5E-04	3.8E-04	5.5E-04	9.0E-04	5.5E-04	1.5E-04	1.5E-04	1.8E-04	3.3E-04	5.1E-04	1.6E-04	2.6E-04	1.5E-04	3.4E-04	4.2E-04
Hexachlorobenzene	3.2E-04	1.7E-04	1.9E-04	2.7E-04	4.5E-04	2.7E-04	7.6E-05	7.5E-05	8.9E-05	1.7E-04	2.5E-04	7.8E-05	1.3E-04	7.3E-05	1.7E-04	2.1E-04
Pentachlorobenzene	8.3E-04	4.6E-04	5.0E-04	7.2E-04	0.0012	7.2E-04	2.0E-04	2.0E-04	2.3E-04	4.4E-04	6.7E-04	2.1E-04	3.4E-04	1.9E-04	4.4E-04	5.5E-04
Pentachlorophenol	0.0013	7.0E-04	7.7E-04	0.0011	0.0018	0.0011	3.0E-04	3.0E-04	3.6E-04	6.7E-04	0.0010	3.1E-04	5.1E-04	2.9E-04	6.8E-04	8.5E-04
Tetrachlorobenzene, 1,2,4,5-	3.2E-04	1.7E-04	1.9E-04	2.7E-04	4.5E-04	2.7E-04	7.6E-05	7.5E-05	8.9E-05	1.7E-04	2.5E-04	7.8E-05	1.3E-04	7.3E-05	1.7E-04	2.1E-04
Tetrachlorophenol, 2,3,4,6-	0.0011	5.9E-04	6.5E-04	9.2E-04	0.0015	9.3E-04	2.5E-04	2.5E-04	3.0E-04	5.6E-04	8.6E-04	2.6E-04	4.3E-04	2.5E-04	5.7E-04	7.1E-04
Trichlorobenzene, 1,2,4-	3.2E-04	1.7E-04	1.9E-04	2.7E-04	4.5E-04	2.7E-04	7.6E-05	7.5E-05	8.9E-05	1.7E-04	2.5E-04	7.8E-05	1.3E-04	7.3E-05	1.7E-04	2.1E-04
Trichlorophenol, 2,4,6-	3.2E-04	1.8E-04	1.9E-04	2.8E-04	4.6E-04	2.8E-04	7.7E-05	7.7E-05	9.1E-05	1.7E-04	2.6E-04	8.0E-05	1.3E-04	7.5E-05	1.7E-04	2.1E-04
Volatile Organic Chemicals (VOC)																
Acetaldehyde	3.3E-06	1.8E-06	2.0E-06	2.8E-06	4.6E-06	2.8E-06	7.8E-07	7.8E-07	9.2E-07	1.7E-06	2.6E-06	8.1E-07	1.3E-06	7.6E-07	1.7E-06	2.2E-06
Benzene	0.19	0.10	0.12	0.16	0.27	0.17	0.045	0.045	0.054	0.10	0.15	0.047	0.077	0.044	0.10	0.13
Biphenyl	0.018	0.010	0.011	0.016	0.026	0.016	0.0044	0.0044	0.0052	0.0097	0.015	0.0045	0.0074	0.0043	0.0098	0.012
Bromodichloromethane	1.1	0.63	0.69	0.98	1.6	0.99	0.27	0.27	0.32	0.60	0.91	0.28	0.46	0.27	0.61	0.76
Bromoform	0.31	0.17	0.19	0.27	0.44	0.27	0.074	0.074	0.088	0.16	0.25	0.078	0.13	0.073	0.17	0.21
Bromomethane	0.22	0.12	0.13	0.19	0.31	0.19	0.053	0.053	0.062	0.12	0.18	0.055	0.089	0.051	0.12	0.15
Carbon tetrachloride	0.0019	0.0011	0.0012	0.0017	0.0027	0.0017	4.6E-04	4.6E-04	5.5E-04	0.0010	0.0016	4.8E-04	7.9E-04	4.5E-04	0.0010	0.0013
Chloroform	0.0031	0.0017	0.0019	0.0027	0.0044	0.0027	7.5E-04	7.5E-04	8.8E-04	0.0017	0.0025	7.8E-04	0.0013	7.3E-04	0.0017	0.0021
Dichlorodifluoromethane	0.54	0.29	0.32	0.46	0.76	0.46	0.13	0.13	0.15	0.28	0.43	0.13	0.22	0.12	0.29	0.36
Dichloroethene, 1,1 -	0.0035	0.0019	0.0021	0.0030	0.0049	0.0030	8.3E-04	8.3E-04	9.8E-04	0.0018	0.0028	8.6E-04	0.0014	8.1E-04	0.0019	0.0023
Dichloromethane	1.1	0.60	0.65	0.93	1.5	0.94	0.26	0.26	0.30	0.57	0.87	0.27	0.44	0.25	0.58	0.72
Ethylbenzene	0.0064	0.0035	0.0038	0.0055	0.0090	0.0055	0.0015	0.0015	0.0018	0.0034	0.0051	0.0016	0.0026	0.0015	0.0034	0.0043
Ethylene Dibromide	0.0018	0.0010	0.0011	0.0016	0.0026	0.0016	4.3E-04	4.4E-04	5.2E-04	9.6E-04	0.0015	4.6E-04	7.4E-04	4.3E-04	9.8E-04	0.0012
Formaldehyde	0.29	0.16	0.18	0.25	0.41	0.25	0.070	0.070	0.082	0.15	0.23	0.072	0.12	0.068	0.16	0.19
O-terphenyl	5.0E-04	2.8E-04	3.0E-04	4.3E-04	7.1E-04	4.4E-04	1.2E-04	1.2E-04	1.4E-04	2.7E-04	4.0E-04	1.2E-04	2.0E-04	1.2E-04	2.7E-04	3.4E-04
Tetrachloroethene	0.035	0.019	0.021	0.030	0.049	0.030	0.0083	0.0083	0.0098	0.018	0.028	0.0086	0.014	0.0081	0.019	0.023
Tetralin	0.0031	0.0017	0.0019	0.0026	0.0043	0.0027	7.3E-04	7.3E-04	8.6E-04	0.0016	0.0025	7.6E-04	0.0012	7.1E-04	0.0016	0.0020
Toluene	0.31	0.17	0.19	0.27	0.44	0.27	0.074	0.074	0.087	0.16	0.25	0.076	0.12	0.072	0.16	0.21
Trichloroethane, 1,1,1 -	0.0088	0.0048	0.0053	0.0076	0.012	0.0076	0.0021	0.0021	0.0025	0.0046	0.0070	0.0022	0.0035	0.0020	0.0047	0.0059
Trichloroethylene, 1,1,2 -	0.0030	0.0017	0.0018	0.0026	0.0043	0.0026	7.2E-04	7.2E-04	8.5E-04	0.0016	0.0024	7.5E-04	0.0012	7.0E-04	0.0016	0.0020
Trichlorofluoromethane	1.1	0.58	0.64	0.91	1.5	0.92	0.25	0.25	0.30	0.56	0.85	0.26	0.43	0.25	0.56	0.71
Vinyl chloride	0.27	0.15	0.16	0.23	0.38	0.23	0.064	0.064	0.075	0.14	0.21	0.066	0.11	0.062	0.14	0.18
Xylenes, m-, p- and o-	3.7	2.0	2.2	3.2	5.3	3.2	0.89	0.89	1.0	2.0	3.0	0.92	1.5	0.86	2.0	2.5

24-Hour Exposure Point Concentrations for Process Upset COPC Exposure Scenarios

Process Upset - 400,000 tpy

COPC	24-Hour Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Criteria Air Contaminants (CAC)																
Ammonia	4.0	1.7	1.7	3.5	4.9	4.4	1.4	1.4	1.7	1.8	4.7	1.3	2.9	1.6	2.4	3.3
Carbon Monoxide (CO)	33	0.0061	0.0060	0.012	0.017	15	0.0049	0.0050	0.0060	0.0064	0.017	0.0046	0.0100	0.0056	0.0084	0.012
Hydrogen Chloride (HCl)	6.7	2.9	2.8	5.8	8.2	7.4	2.3	2.4	2.8	3.0	7.9	2.2	4.8	2.7	4.0	5.6
Hydrogen Fluoride (HF)	0.67	0.29	0.28	0.58	0.82	0.74	0.23	0.24	0.28	0.30	0.79	0.22	0.48	0.27	0.40	0.56
Nitrogen Dioxide (NO_2)	17	7.4	7.3	16	21	19	6.0	6.1	7.2	7.8	20	5.8	12	6.9	10	14
Particulate Matter - PM_{10}	6.8	2.9	2.9	5.9	8.5	7.5	2.4	2.5	2.9	3.1	8.0	2.3	4.9	2.7	4.6	6.5
Particulate Matter - $PM_{2.5}$	6.8	2.9	2.9	5.9	8.5	7.5	2.4	2.5	2.9	3.1	8.0	2.3	4.9	2.7	4.6	6.5
Particulate Matter - Total	6.8	2.9	2.9	5.9	8.5	7.5	2.4	2.5	2.9	3.1	8.0	2.3	4.9	2.7	4.6	6.5
Sulfur Dioxide (SO_2)	41	18	17	36	50	45	14	15	18	19	49	14	29	16	25	34
Metals																
Antimony	0.0020	8.8E-04	8.7E-04	0.0018	0.0025	0.0023	7.1E-04	7.2E-04	8.7E-04	9.2E-04	0.0024	6.7E-04	0.0015	8.1E-04	0.0012	0.0017
Arsenic	3.1E-04	1.3E-04	1.3E-04	2.7E-04	3.8E-04	3.5E-04	1.1E-04	1.1E-04	1.3E-04	1.4E-04	3.7E-04	1.0E-04	2.2E-04	1.2E-04	1.9E-04	2.6E-04
Barium	0.0016	6.8E-04	6.7E-04	0.0014	0.0019	0.0017	5.5E-04	5.6E-04	6.7E-04	7.1E-04	0.0019	5.2E-04	0.0011	6.2E-04	9.5E-04	0.0013
Beryllium	2.5E-04	1.1E-04	1.1E-04	2.2E-04	3.0E-04	2.7E-04	8.7E-05	8.8E-05	1.1E-04	1.1E-04	2.9E-04	8.2E-05	1.8E-04	9.8E-05	1.5E-04	2.1E-04
Boron	0.11	0.049	0.048	0.099	0.14	0.13	0.040	0.040	0.048	0.051	0.13	0.038	0.081	0.045	0.068	0.095
Cadmium	0.0052	0.0022	0.0022	0.0045	0.0064	0.0058	0.0018	0.0018	0.0022	0.0024	0.0061	0.0017	0.0037	0.0021	0.0031	0.0043
Chromium (hexavalent)	2.4E-04	1.0E-04	1.0E-04	2.1E-04	2.9E-04	2.6E-04	8.3E-05	8.4E-05	1.0E-04	1.1E-04	2.8E-04	7.9E-05	1.7E-04	9.4E-05	1.4E-04	2.0E-04
Total Chromium (and compounds)	0.0017	7.2E-04	7.1E-04	0.0015	0.0020	0.0019	5.9E-04	5.9E-04	7.1E-04	7.6E-04	0.0020	5.5E-04	0.0012	6.6E-04	0.0010	0.0014
Cobalt	0.0043	0.0019	0.0018	0.0037	0.0053	0.0048	0.0015	0.0015	0.0018	0.0019	0.0051	0.0014	0.0031	0.0017	0.0026	0.0036
Lead	0.037	0.016	0.016	0.032	0.046	0.041	0.013	0.013	0.016	0.017	0.044	0.012	0.026	0.015	0.022	0.031
Mercury - Inorganic	0.011	0.0048	0.0047	0.0097	0.014	0.012	0.0039	0.0040	0.0047	0.0050	0.013	0.0037	0.0079	0.0044	0.0067	0.0093
Nickel	0.065	0.028	0.028	0.056	0.079	0.072	0.023	0.023	0.028	0.029	0.076	0.021	0.046	0.026	0.039	0.054
Phosphorus	0.034	0.015	0.015	0.030	0.042	0.038	0.012	0.012	0.015	0.015	0.040	0.011	0.024	0.014	0.021	0.028
Selenium	3.6E-04	1.5E-04	1.5E-04	3.1E-04	4.4E-04	4.0E-04	1.2E-04	1.3E-04	1.5E-04	1.6E-04	4.2E-04	1.2E-04	2.5E-04	1.4E-04	2.1E-04	3.0E-04
Silver	0.0025	0.0011	0.0011	0.0022	0.0031	0.0028	8.7E-04	8.8E-04	0.0011	0.0011	0.0029	8.2E-04	0.0018	9.9E-04	0.0015	0.0021
Thallium	0.029	0.013	0.012	0.025	0.036	0.032	0.010	0.010	0.012	0.013	0.034	0.0096	0.021	0.011	0.017	0.024
Tin	0.013	0.0056	0.0056	0.011	0.016	0.014	0.0046	0.0046	0.0056	0.0059	0.015	0.0043	0.0093	0.0052	0.0079	0.011
Vanadium	8.6E-04	3.7E-04	3.7E-04	7.5E-04	0.0011	9.6E-04	3.0E-04	3.1E-04	3.7E-04	3.9E-04	0.0010	2.9E-04	6.2E-04	3.4E-04	5.2E-04	7.2E-04
Zinc	0.15	0.064	0.063	0.13	0.18	0.16	0.052	0.053	0.063	0.067	0.17	0.049	0.11	0.059	0.089	0.12
Polycyclic Aromatic Hydrocarbons (PAH)																
Acenaphthene	1.4E-05	6.0E-06	5.9E-06	1.2E-05	1.7E-05	1.5E-05	4.8E-06	4.9E-06	5.9E-06	6.3E-06	1.6E-05	4.6E-06	9.8E-06	5.5E-06	8.3E-06	1.2E-05
Acenaphthylene	1.1E-05	4.7E-06	4.6E-06	9.4E-06	1.3E-05	1.2E-05	3.8E-06	3.8E-06	4.6E-06	4.9E-06	1.3E-05	3.6E-06	7.7E-06	4.3E-06	6.5E-06	9.0E-06
Anthracene	3.0E-06	1.3E-06	1.3E-06	2.6E-06	3.7E-06	3.3E-06	1.1E-06	1.1E-06	1.3E-06	1.4E-06	3.6E-06	1.0E-06	2.2E-06	1.2E-06	1.8E-06	2.5E-06
Benzo(a)anthracene	1.1E-06	4.8E-07	4.7E-07	9.7E-07	1.4E-06	1.2E-06	3.9E-07	4.0E-07	4.7E-07	5.0E-07	1.3E-06	3.7E-07	7.9E-07	4.4E-07	6.7E-07	9.3E-07
Benzo(b)fluoranthene	2.8E-06	1.2E-06	1.2E-06	2.5E-06	3.5E-06	3.2E-06	1.0E-06	1.0E-06	1.2E-06	1.3E-06	3.4E-06	9.4E-07	2.0E-06	1.1E-06	1.7E-06	2.4E-06
Benzo(k)fluoranthene	7.5E-07	3.2E-07	3.2E-07	6.5E-07	9.2E-07	8.3E-07	2.6E-07	2.7E-07	3.2E-07	3.4E-07	8.8E-07	2.5E-07	5.3E-07	3.0E-07	4.5E-07	6.2E-07
Benzo(a)fluorene	2.1E-05	8.9E-06	8.7E-06	1.8E-05	2.5E-05	2.3E-05	7.2E-06	7.3E-06	8.7E-06	9.3E-06	2.4E-05	6.8E-06	1.5E-05	8.1E-06	1.2E-05	1.7E-05
Benzo(b)fluorene	1.4E-05	6.1E-06	6.0E-06	1.2E-05	1.7E-05	1.6E-05	4.9E-06	5.0E-06	6.0E-06	6.4E-06	1.7E-05	4.6E-06	1.0E-05	5.6E-06	8.5E-06	1.2E-05
Benzo(ghi)perylene	3.1E-05	1.3E-05	1.3E-05	2.7E-05	3.8E-05	3.4E-05	1.1E-05	1.1E-05	1.3E-05	1.4E-05	3.6E-05	1.0E-05	2.2E-05	1.2E-05	1.8E-05	2.6E-05
Benzo(a)pyrene	2.6E-06	1.1E-06	1.1E-06	2.2E-06	3.1E-06	2.8E-06	8.9E-07	9.1E-07	1.1E-06	1.2E-06	3.0E-06	8.5E-07	1.8E-06	1.0E-06	1.5E-06	2.1E-06
Benzo(e)pyrene	6.5E-06	2.8E-06	2.8E-06	5.6E-06	7.9E-06	7.2E-06	2.3E-06	2.3E-06	2.8E-06	2.9E-06	7.6E-06	2.1E-06	4.6E-06	2.6E-06	3.9E-06	5.4E-06
Chrysene	2.8E-06	1.2E-06	1.2E-06	2.4E-06	3.4E-06	3.1E-06	9.8E-07	9.9E-07	1.2E-06	1.3E-06	3.3E-06	9.3E-07	2.0E-06	1.1E-06	1.7E-06	2.3E-06
Dibenzo(a,c)anthracene	2.0E-05	8.6E-06	8.5E-06	1.7E-05	2.4E-05	2.2E-05	7.0E-06	7.1E-06	8.5E-06	9.0E-06	2.3E-05	6.6E-06	1.4E-05	7.9E-06	1.2E-05	1.7E-05
Dibenzo(a,h)anthracene	9.0E-07	3.9E-07	3.8E-07	7.8E-07	1.1E-06	1.0E-06	3.1E-07	3.2E-07	3.8E-07	4.1E-07	1.1E-06	3.0E-07	6.4E-07	3.6E-07	5.4E-07	7.5E-07
Fluoranthene	3.1E-05	1.3E-05	1.3E-05	2.7E-05	3.8E-05	3.4E-05	1.1E-05	1.1E-05	1.3E-05	1.4E-05	3.6E-05	1.0E-05	2.2E-05	1.2E-05	1.9E-05	2.6E-05
Fluorene	2.3E-05	1.0E-05	9.9E-06	2.0E-05	2.9E-05	2.6E-05	8.1E-06	8.2E-06	9.9E-06	1.1E-05	2.7E-05	7.7E-06	1.7E-05	9.2E-06	1.4E-05	1.9E-05
Indeno(1,2,3 – cd)pyrene	5.6E-06	2.4E-06	2.4E-06	4.9E-06	6.9E-06	6.2E-06	2.0E-06	2.0E-06	2.4E-06	2.5E-06	6.6E-06	1.9E-06	4.0E-06	2.2E-06	3.4E-06	4.7E-06
1-Methylnaphthalene	7.3E-05	3.2E-05	3.1E-05	6.3E-05	8.9E-05	8.1E-05	2.6E-05	2.6E-05	3.1E-05	3.3E-05	8.6E-05	2.4E-05	5.2E-05	2.9E-05	4.4E-05	6.1E-05
2-Methylnaphthalene	4.0E-04	1.7E-04	1.7E-04	3.5E-04	5.0E-04	4.5E-04	1.4E-04	1.4E-04	1.7E-04	1.8E-04	4.8E-04	1.3E-04	2.9E-04	1.6E-04	2.4E-04	3.4E-04
Naphthalene	3.1E-04	1.4E-04	1.3E-04	2.7E-04	3.9E-04	3.5E-04	1.1E-04	1.1E-04	1.3E-04	1.4E-04	3.7E-04	1.0E-04	2.2E-04	1.2E-04	1.9E-04	2.6E-04
Perylene	1.1E-06	4.8E-07	4.8E-07	9.7E-07	1.4E-06	1.2E-06	3.9E-07	4.0E-07	4.8E-07	5.1E-07	1.3E-06	3.7E-07	8.0E-07	4.4E-07	6.8E-07	9.3E-07
Phenanthrene	7.0E-05	3.0E-05	3.0E-05	6.1E-05	8.6E-05	7.8E-05	2.5E-05	2.5E-05	3.0E-05	3.2E-05	8.3E-05	2.3E-05	5.0E-05	2.8E-05	4.2E-05	5.9E-05
Pyrene	3.7E-05	1.6E-05	1.6E-05	3.2E-05	4.6E-05	4.1E-05	1.3E-05	1.3E-05	1.6E-05	1.7E-05	4.4E-05	1.2E-05	2.7E-05	1.5E-05	2.2E-05	3.1E-05

24-Hour Exposure Point Concentrations for Process Upset COPC Exposure Scenarios

Process Upset - 400,000 tpy

COPC	24-Hour Exposure Point Concentrations ($\mu g/m^3$) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Chlorinated Polycyclic Aromatics																
Dioxins and Furans (as TEQ Toxic Equivalents)	4.5E-08	1.9E-08	1.9E-08	3.9E-08	5.5E-08	4.9E-08	1.6E-08	1.6E-08	1.9E-08	2.0E-08	5.3E-08	1.5E-08	3.2E-08	1.8E-08	2.7E-08	3.7E-08
Polychlorinated Biphenyls (PCBs)	5.4E-05	2.3E-05	2.3E-05	4.7E-05	6.6E-05	5.9E-05	1.9E-05	1.9E-05	2.3E-05	2.4E-05	6.3E-05	1.8E-05	3.8E-05	2.1E-05	3.2E-05	4.5E-05
Chlorinated Monocyclic Aromatics																
Dichlorobenzene, 1,2-	0.0015	6.6E-04	6.5E-04	0.0013	0.0019	0.0017	5.3E-04	5.4E-04	6.5E-04	6.9E-04	0.0018	5.0E-04	0.0011	6.0E-04	9.2E-04	0.0013
Dichlorophenol, 2,4-	7.6E-05	3.3E-05	3.3E-05	6.6E-05	9.4E-05	8.5E-05	2.7E-05	2.7E-05	3.3E-05	3.5E-05	9.0E-05	2.5E-05	5.5E-05	3.0E-05	4.6E-05	6.4E-05
Hexachlorobenzene	3.8E-05	1.7E-05	1.6E-05	3.3E-05	4.7E-05	4.2E-05	1.3E-05	1.4E-05	1.6E-05	1.7E-05	4.5E-05	1.3E-05	2.7E-05	1.5E-05	2.3E-05	3.2E-05
Pentachlorobenzene	1.0E-04	4.3E-05	4.3E-05	8.7E-05	1.2E-04	1.1E-04	3.5E-05	3.6E-05	4.3E-05	4.6E-05	1.2E-04	3.3E-05	7.2E-05	4.0E-05	6.1E-05	8.4E-05
Pentachlorophenol	1.5E-04	6.6E-05	6.5E-05	1.3E-04	1.9E-04	1.7E-04	5.4E-05	5.4E-05	6.5E-05	6.9E-05	1.8E-04	5.1E-05	1.1E-04	6.1E-05	9.2E-05	1.3E-04
Tetrachlorobenzene, 1,2,4,5-	3.8E-05	1.7E-05	1.6E-05	3.3E-05	4.7E-05	4.2E-05	1.3E-05	1.4E-05	1.6E-05	1.7E-05	4.5E-05	1.3E-05	2.7E-05	1.5E-05	2.3E-05	3.2E-05
Tetrachlorophenol, 2,3,4,6-	1.3E-04	5.6E-05	5.5E-05	1.1E-04	1.6E-04	1.4E-04	4.5E-05	4.6E-05	5.5E-05	5.9E-05	1.5E-04	4.3E-05	9.2E-05	5.1E-05	7.8E-05	1.1E-04
Trichlorobenzene, 1,2,4-	3.8E-05	1.7E-05	1.6E-05	3.3E-05	4.7E-05	4.2E-05	1.3E-05	1.4E-05	1.6E-05	1.7E-05	4.5E-05	1.3E-05	2.7E-05	1.5E-05	2.3E-05	3.2E-05
Trichlorophenol, 2,4,6-	3.9E-05	1.7E-05	1.7E-05	3.4E-05	4.8E-05	4.3E-05	1.4E-05	1.4E-05	1.7E-05	1.8E-05	4.6E-05	1.3E-05	2.8E-05	1.5E-05	2.3E-05	3.2E-05
Volatile Organic Chemicals (VOC)																
Acetaldehyde	3.9E-07	1.7E-07	1.7E-07	3.5E-07	4.8E-07	4.4E-07	1.4E-07	1.4E-07	1.7E-07	1.8E-07	4.7E-07	1.3E-07	2.8E-07	1.6E-07	2.4E-07	3.3E-07
Benzene	0.023	0.0100	0.0098	0.020	0.028	0.026	0.0081	0.0082	0.0098	0.010	0.027	0.0076	0.016	0.0091	0.014	0.019
Biphenyl	0.0022	9.6E-04	9.4E-04	0.0019	0.0027	0.0025	7.8E-04	7.9E-04	9.4E-04	0.0010	0.0026	7.3E-04	0.0016	8.8E-04	0.0013	0.0018
Bromodichloromethane	0.14	0.060	0.059	0.12	0.17	0.15	0.048	0.049	0.059	0.063	0.16	0.046	0.098	0.055	0.083	0.12
Bromoform	0.038	0.016	0.016	0.033	0.046	0.042	0.013	0.013	0.016	0.017	0.044	0.013	0.027	0.015	0.023	0.031
Bromomethane	0.027	0.012	0.011	0.023	0.033	0.030	0.0094	0.0095	0.011	0.012	0.032	0.0088	0.019	0.011	0.016	0.022
Carbon tetrachloride	2.3E-04	1.0E-04	1.0E-04	2.1E-04	2.9E-04	2.6E-04	8.2E-05	8.4E-05	1.0E-04	1.1E-04	2.8E-04	7.8E-05	1.7E-04	9.3E-05	1.4E-04	2.0E-04
Chloroform	3.8E-04	1.6E-04	1.6E-04	3.3E-04	4.6E-04	4.2E-04	1.3E-04	1.3E-04	1.6E-04	1.7E-04	4.5E-04	1.3E-04	2.7E-04	1.5E-04	2.3E-04	3.2E-04
Dichlorodifluoromethane	0.065	0.028	0.028	0.056	0.079	0.072	0.023	0.023	0.028	0.029	0.076	0.021	0.046	0.026	0.039	0.054
Dichloroethene, 1,1 -	4.2E-04	1.8E-04	1.8E-04	3.7E-04	5.2E-04	4.7E-04	1.5E-04	1.5E-04	1.8E-04	1.9E-04	5.0E-04	1.4E-04	3.0E-04	1.7E-04	2.5E-04	3.5E-04
Dichloromethane	0.13	0.056	0.056	0.11	0.16	0.14	0.046	0.046	0.056	0.059	0.15	0.043	0.093	0.052	0.079	0.11
Ethylbenzene	7.7E-04	3.3E-04	3.3E-04	6.7E-04	9.4E-04	8.5E-04	2.7E-04	2.7E-04	3.3E-04	3.5E-04	9.1E-04	2.5E-04	5.5E-04	3.1E-04	4.6E-04	6.4E-04
Ethylene Dibromide	2.2E-04	9.6E-05	9.4E-05	1.9E-04	2.7E-04	2.5E-04	7.8E-05	7.9E-05	9.4E-05	1.0E-04	2.6E-04	7.3E-05	1.6E-04	8.8E-05	1.3E-04	1.8E-04
Formaldehyde	0.035	0.015	0.015	0.031	0.043	0.039	0.012	0.013	0.015	0.016	0.042	0.012	0.025	0.014	0.021	0.029
O-terphenyl	6.1E-05	2.6E-05	2.6E-05	5.3E-05	7.5E-05	6.7E-05	2.1E-05	2.2E-05	2.6E-05	2.8E-05	7.2E-05	2.0E-05	4.3E-05	2.4E-05	3.7E-05	5.1E-05
Tetrachloroethene	0.0042	0.0018	0.0018	0.0037	0.0052	0.0047	0.0015	0.0015	0.0018	0.0019	0.0050	0.0014	0.0030	0.0017	0.0025	0.0035
Tetralin	3.7E-04	1.6E-04	1.6E-04	3.2E-04	4.5E-04	4.1E-04	1.3E-04	1.3E-04	1.6E-04	1.7E-04	4.4E-04	1.2E-04	2.6E-04	1.5E-04	2.2E-04	3.1E-04
Toluene	0.037	0.016	0.016	0.032	0.046	0.041	0.013	0.013	0.016	0.017	0.044	0.012	0.027	0.015	0.022	0.031
Trichloroethane, 1,1,1 -	0.0011	4.6E-04	4.5E-04	9.2E-04	0.0013	0.0012	3.7E-04	3.8E-04	4.5E-04	4.8E-04	0.0012	3.5E-04	7.6E-04	4.2E-04	6.4E-04	8.8E-04
Trichloroethylene, 1,1,2 -	3.6E-04	1.6E-04	1.6E-04	3.2E-04	4.5E-04	4.0E-04	1.3E-04	1.3E-04	1.6E-04	1.7E-04	4.3E-04	1.2E-04	2.6E-04	1.4E-04	2.2E-04	3.0E-04
Trichlorofluoromethane	0.13	0.055	0.054	0.11	0.16	0.14	0.045	0.045	0.054	0.058	0.15	0.042	0.091	0.051	0.077	0.11
Vinyl chloride	0.032	0.014	0.014	0.028	0.040	0.036	0.011	0.011	0.014	0.015	0.038	0.011	0.023	0.013	0.020	0.027
Xylenes, m-, p- and o-	0.45	0.19	0.19	0.39	0.55	0.50	0.16	0.16	0.19	0.20	0.53	0.15	0.32	0.18	0.27	0.37

Annual Exposure Point Concentrations for Process Upset COPC Exposure Scenarios

Process Upset - 400,000 tpy

COPC	Annual Exposure Point Concentrations ($\mu g/m^3$) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Criteria Air Contaminants (CAC)																
Ammonia	0.025	0.012	0.012	0.022	0.018	0.023	0.010	0.012	0.014	0.0095	0.023	0.012	0.017	0.013	0.018	0.019
Carbon Monoxide (CO)	0.21	0.10	0.10	0.19	0.15	0.19	0.084	0.100	0.12	0.079	0.19	0.097	0.15	0.10	0.15	0.16
Hydrogen Chloride (HCl)	0.042	0.021	0.021	0.037	0.030	0.039	0.017	0.020	0.023	0.016	0.038	0.019	0.029	0.021	0.030	0.031
Hydrogen Fluoride (HF)	0.0042	0.0021	0.0021	0.0037	0.0030	0.0039	0.0017	0.0020	0.0023	0.0016	0.0038	0.0019	0.0029	0.0021	0.0030	0.0031
Nitrogen Dioxide (NO_2)	0.40	0.20	0.20	0.36	0.29	0.37	0.16	0.19	0.22	0.15	0.37	0.19	0.28	0.20	0.28	0.30
Particulate Matter - PM_{10}	0.049	0.031	0.031	0.048	0.038	0.049	0.027	0.031	0.034	0.027	0.045	0.031	0.037	0.029	0.040	0.038
Particulate Matter - $PM_{2.5}$	0.049	0.031	0.031	0.048	0.038	0.049	0.027	0.031	0.034	0.027	0.045	0.031	0.037	0.029	0.040	0.038
Particulate Matter - Total	0.049	0.031	0.031	0.048	0.038	0.049	0.027	0.031	0.034	0.027	0.045	0.031	0.037	0.029	0.040	0.038
Sulfur Dioxide (SO_2)	0.20	0.097	0.096	0.17	0.14	0.18	0.079	0.094	0.11	0.074	0.18	0.091	0.14	0.098	0.14	0.15
Metals																
Antimony	1.3E-05	6.3E-06	6.3E-06	1.1E-05	9.1E-06	1.2E-05	5.1E-06	6.1E-06	7.0E-06	4.8E-06	1.2E-05	5.9E-06	8.9E-06	6.4E-06	9.1E-06	9.5E-06
Arsenic	2.0E-06	9.6E-07	9.6E-07	1.7E-06	1.4E-06	1.8E-06	7.9E-07	9.3E-07	1.1E-06	7.4E-07	1.8E-06	9.1E-07	1.4E-06	9.8E-07	1.4E-06	1.5E-06
Barium	9.9E-06	4.8E-06	4.8E-06	8.7E-06	7.0E-06	9.2E-06	4.0E-06	4.7E-06	5.4E-06	3.7E-06	9.0E-06	4.6E-06	6.8E-06	4.9E-06	7.0E-06	7.3E-06
Beryllium	1.6E-06	7.6E-07	7.6E-07	1.4E-06	1.1E-06	1.4E-06	6.2E-07	7.4E-07	8.5E-07	5.9E-07	1.4E-06	7.2E-07	1.1E-06	7.7E-07	1.1E-06	1.2E-06
Boron	7.2E-04	3.5E-04	3.5E-04	6.3E-04	5.1E-04	6.6E-04	2.9E-04	3.4E-04	3.9E-04	2.7E-04	6.5E-04	3.3E-04	4.9E-04	3.6E-04	5.1E-04	5.3E-04
Cadmium	3.3E-05	1.6E-05	1.6E-05	2.9E-05	2.3E-05	3.0E-05	1.3E-05	1.6E-05	1.8E-05	1.2E-05	3.0E-05	1.5E-05	2.3E-05	1.6E-05	2.3E-05	2.4E-05
Chromium (hexavalent)	1.5E-06	7.3E-07	7.3E-07	1.3E-06	1.1E-06	1.4E-06	6.0E-07	7.1E-07	8.2E-07	5.6E-07	1.4E-06	6.9E-07	1.0E-06	7.4E-07	1.1E-06	1.1E-06
Total Chromium (and compounds)	1.1E-05	5.2E-06	5.1E-06	9.3E-06	7.5E-06	9.7E-06	4.2E-06	5.0E-06	5.8E-06	4.0E-06	9.6E-06	4.9E-06	7.3E-06	5.2E-06	7.5E-06	7.8E-06
Cobalt	2.7E-05	1.3E-05	1.3E-05	2.4E-05	1.9E-05	2.5E-05	1.1E-05	1.3E-05	1.5E-05	1.0E-05	2.5E-05	1.2E-05	1.9E-05	1.3E-05	1.9E-05	2.0E-05
Lead	2.3E-04	1.1E-04	1.1E-04	2.1E-04	1.7E-04	2.2E-04	9.4E-05	1.1E-04	1.3E-04	8.8E-05	2.1E-04	1.1E-04	1.6E-04	1.2E-04	1.7E-04	1.7E-04
Mercury - Inorganic	7.0E-05	3.4E-05	3.4E-05	6.2E-05	5.0E-05	6.5E-05	2.8E-05	3.3E-05	3.8E-05	2.6E-05	6.4E-05	3.2E-05	4.8E-05	3.5E-05	5.0E-05	5.2E-05
Nickel	4.1E-04	2.0E-04	2.0E-04	3.6E-04	2.9E-04	3.8E-04	1.6E-04	1.9E-04	2.2E-04	1.5E-04	3.7E-04	1.9E-04	2.8E-04	2.0E-04	2.9E-04	3.0E-04
Phosphorus	2.2E-04	1.1E-04	1.1E-04	1.9E-04	1.5E-04	2.0E-04	8.6E-05	1.0E-04	1.2E-04	8.1E-05	2.0E-04	9.9E-05	1.5E-04	1.1E-04	1.5E-04	1.6E-04
Selenium	2.2E-06	1.1E-06	1.1E-06	2.0E-06	1.6E-06	2.1E-06	9.0E-07	1.1E-06	1.2E-06	8.5E-07	2.1E-06	1.0E-06	1.6E-06	1.1E-06	1.6E-06	1.7E-06
Silver	1.6E-05	7.7E-06	7.7E-06	1.4E-05	1.1E-05	1.5E-05	6.3E-06	7.4E-06	8.6E-06	5.9E-06	1.4E-05	7.2E-06	1.1E-05	7.8E-06	1.1E-05	1.2E-05
Thallium	1.8E-04	8.9E-05	8.9E-05	1.6E-04	1.3E-04	1.7E-04	7.3E-05	8.7E-05	1.0E-04	6.9E-05	1.7E-04	8.4E-05	1.3E-04	9.1E-05	1.3E-04	1.3E-04
Tin	8.2E-05	4.0E-05	4.0E-05	7.3E-05	5.8E-05	7.6E-05	3.3E-05	3.9E-05	4.5E-05	3.1E-05	7.5E-05	3.8E-05	5.7E-05	4.1E-05	5.8E-05	6.1E-05
Vanadium	5.4E-06	2.7E-06	2.7E-06	4.8E-06	3.9E-06	5.0E-06	2.2E-06	2.6E-06	3.0E-06	2.1E-06	5.0E-06	2.5E-06	3.8E-06	2.7E-06	3.9E-06	4.0E-06
Zinc	9.3E-04	4.6E-04	4.6E-04	8.2E-04	6.6E-04	8.6E-04	3.7E-04	4.4E-04	5.1E-04	3.5E-04	8.5E-04	4.3E-04	6.5E-04	4.6E-04	6.6E-04	6.9E-04
Polycyclic Aromatic Hydrocarbons (PAH)																
Acenaphthene	1.7E-07	8.2E-08	8.2E-08	1.5E-07	1.2E-07	1.6E-07	6.7E-08	8.0E-08	9.2E-08	6.3E-08	1.5E-07	7.7E-08	1.2E-07	8.3E-08	1.2E-07	1.2E-07
Acenaphthylene	1.3E-07	6.4E-08	6.4E-08	1.2E-07	9.3E-08	1.2E-07	5.2E-08	6.2E-08	7.2E-08	4.9E-08	1.2E-07	6.0E-08	9.1E-08	6.5E-08	9.3E-08	9.7E-08
Anthracene	3.7E-08	1.8E-08	1.8E-08	3.2E-08	2.6E-08	3.4E-08	1.5E-08	1.7E-08	2.0E-08	1.4E-08	3.4E-08	1.7E-08	2.5E-08	1.8E-08	2.6E-08	2.7E-08
Benzo(a)anthracene	1.4E-08	6.6E-09	6.6E-09	1.2E-08	9.6E-09	1.3E-08	5.4E-09	6.4E-09	7.4E-09	5.1E-09	1.2E-08	6.2E-09	9.4E-09	6.7E-09	9.6E-09	1.0E-08
Benzo(b)fluoranthene	3.5E-08	1.7E-08	1.7E-08	3.1E-08	2.5E-08	3.2E-08	1.4E-08	1.6E-08	1.9E-08	1.3E-08	3.2E-08	1.6E-08	2.4E-08	1.7E-08	2.4E-08	2.6E-08
Benzo(k)fluoranthene	9.1E-09	4.5E-09	4.5E-09	8.1E-09	6.5E-09	8.4E-09	3.7E-09	4.3E-09	5.0E-09	3.4E-09	8.3E-09	4.2E-09	6.3E-09	4.5E-09	6.5E-09	6.7E-09
Benzo(a)fluorene	2.5E-07	1.2E-07	1.2E-07	2.2E-07	1.8E-07	2.3E-07	1.0E-07	1.2E-07	1.4E-07	9.4E-08	2.3E-07	1.2E-07	1.7E-07	1.2E-07	1.8E-07	1.8E-07
Benzo(b)fluorene	1.7E-07	8.4E-08	8.3E-08	1.5E-07	1.2E-07	1.6E-07	6.8E-08	8.1E-08	9.4E-08	6.4E-08	1.6E-07	7.9E-08	1.2E-07	8.5E-08	1.2E-07	1.3E-07
Benzo(ghi)perylene	3.7E-07	1.8E-07	1.8E-07	3.3E-07	2.6E-07	3.5E-07	1.5E-07	1.8E-07	2.0E-07	1.4E-07	3.4E-07	1.7E-07	2.6E-07	1.9E-07	2.6E-07	2.8E-07
Benzo(a)pyrene	3.1E-08	1.5E-08	1.5E-08	2.7E-08	2.2E-08	2.9E-08	1.2E-08	1.5E-08	1.7E-08	1.2E-08	2.8E-08	1.4E-08	2.1E-08	1.5E-08	2.2E-08	2.3E-08
Benzo(e)pyrene	7.9E-08	3.9E-08	3.8E-08	6.9E-08	5.6E-08	7.3E-08	3.2E-08	3.7E-08	4.3E-08	3.0E-08	7.2E-08	3.6E-08	5.4E-08	3.9E-08	5.6E-08	5.8E-08
Chrysene	3.4E-08	1.7E-08	1.7E-08	3.0E-08	2.4E-08	3.2E-08	1.4E-08	1.6E-08	1.9E-08	1.3E-08	3.1E-08	1.6E-08	2.4E-08	1.7E-08	2.4E-08	2.5E-08
Dibenzo(a,c)anthracene	2.4E-07	1.2E-07	1.2E-07	2.1E-07	1.7E-07	2.2E-07	9.7E-08	1.1E-07	1.3E-07	9.1E-08	2.2E-07	1.1E-07	1.7E-07	1.2E-07	1.7E-07	1.8E-07
Dibenzo(a,h)anthracene	1.1E-08	5.3E-09	5.3E-09	9.7E-09	7.8E-09	1.0E-08	4.4E-09	5.2E-09	6.0E-09	4.1E-09	1.0E-08	5.0E-09	7.6E-09	5.4E-09	7.7E-09	8.1E-09
Fluoranthene	3.8E-07	1.8E-07	1.8E-07	3.3E-07	2.7E-07	3.5E-07	1.5E-07	1.8E-07	2.1E-07	1.4E-07	3.4E-07	1.7E-07	2.6E-07	1.9E-07	2.7E-07	2.8E-07
Fluorene	2.8E-07	1.4E-07	1.4E-07	2.5E-07	2.0E-07	2.6E-07	1.1E-07	1.3E-07	1.6E-07	1.1E-07	2.6E-07	1.3E-07	2.0E-07	1.4E-07	2.0E-07	2.1E-07
Indeno(1,2,3 – cd)pyrene	6.8E-08	3.3E-08	3.3E-08	6.0E-08	4.8E-08	6.3E-08	2.7E-08	3.2E-08	3.7E-08	2.6E-08	6.2E-08	3.1E-08	4.7E-08	3.4E-08	4.8E-08	5.0E-08
1-Methylnaphthalene	8.9E-07	4.3E-07	4.3E-07	7.8E-07	6.3E-07	8.2E-07	3.6E-07	4.2E-07	4.9E-07	3.3E-07	8.1E-07	4.1E-07	6.1E-07	4.4E-07	6.3E-07	6.6E-07
2-Methylnaphthalene	4.9E-06	2.4E-06	2.4E-06	4.3E-06	3.5E-06	4.6E-06	2.0E-06	2.3E-06	2.7E-06	1.9E-06	4.5E-06	2.3E-06	3.4E-06	2.4E-06	3.5E-06	3.6E-06
Naphthalene	3.8E-06	1.9E-06	1.9E-06	3.4E-06	2.7E-06	3.5E-06	1.5E-06	1.8E-06	2.1E-06	1.4E-06	3.5E-06	1.8E-06	2.6E-06	1.9E-06	2.7E-06	2.8E-06
Perylene	1.4E-08	6.7E-09	6.7E-09	1.2E-08	9.7E-09	1.3E-08	5.5E-09	6.5E-09	7.5E-09	5.1E-09	1.2E-08	6.3E-09	9.4E-09	6.8E-09	9.7E-09	1.0E-08
Phenanthrene	8.5E-07	4.2E-07	4.2E-07	7.5E-07	6.1E-07	7.9E-07	3.4E-07	4.1E-07	4.7E-07	3.2E-07	7.8E-07	3.9E-07	5.9E-07	4.2E-07	6.0E-07	6.3E-07
Pyrene	4.5E-07	2.2E-07	2.2E-07	4.0E-07	3.2E-07	4.2E-07	1.8E-07	2.2E-07	2.5E-07	1.7E-07	4.1E-07	2.1E-07	3.1E-07	2.3E-07	3.2E-07	3.4E-07

Annual Exposure Point Concentrations for Process Upset COPC Exposure Scenarios

Process Upset - 400,000 tpy

COPC	Annual Exposure Point Concentrations (µg/m^3) (based on maximum predicted air concentrations within the cluster)															
	Max GLC	Schools	Daycares	Farms	Commercial/ Industrial	Park/ Recreational	Hospitals	Retirement Homes	Bowmanville Subdivision	Courtice Subdivision	Courtice Rd. Subdivision	Maple Grove	Oshawa Subdivision	Port Darlington	Solina Rd.	Tooley
Chlorinated Polycyclic Aromatics																
Dioxins and Furans (as TEQ Toxic Equivalents)	5.4E-10	2.7E-10	2.6E-10	4.8E-10	3.8E-10	5.0E-10	2.2E-10	2.6E-10	3.0E-10	2.0E-10	5.0E-10	2.5E-10	3.7E-10	2.7E-10	3.8E-10	4.0E-10
Polychlorinated Biphenyls (PCBs)	6.5E-07	3.2E-07	3.2E-07	5.8E-07	4.6E-07	6.0E-07	2.6E-07	3.1E-07	3.6E-07	2.5E-07	6.0E-07	3.0E-07	4.5E-07	3.2E-07	4.6E-07	4.8E-07
Chlorinated Monocyclic Aromatics																
Dichlorobenzene, 1,2-	1.8E-05	9.0E-06	9.0E-06	1.6E-05	1.3E-05	1.7E-05	7.4E-06	8.8E-06	1.0E-05	7.0E-06	1.7E-05	8.5E-06	1.3E-05	9.2E-06	1.3E-05	1.4E-05
Dichlorophenol, 2,4-	9.3E-07	4.6E-07	4.5E-07	8.2E-07	6.6E-07	8.6E-07	3.7E-07	4.4E-07	5.1E-07	3.5E-07	8.5E-07	4.3E-07	6.4E-07	4.6E-07	6.6E-07	6.9E-07
Hexachlorobenzene	4.7E-07	2.3E-07	2.3E-07	4.1E-07	3.3E-07	4.3E-07	1.9E-07	2.2E-07	2.6E-07	1.8E-07	4.3E-07	2.1E-07	3.2E-07	2.3E-07	3.3E-07	3.4E-07
Pentachlorobenzene	1.2E-06	6.0E-07	6.0E-07	1.1E-06	8.7E-07	1.1E-06	4.9E-07	5.8E-07	6.7E-07	4.6E-07	1.1E-06	5.6E-07	8.4E-07	6.1E-07	8.7E-07	9.0E-07
Pentachlorophenol	1.9E-06	9.1E-07	9.1E-07	1.6E-06	1.3E-06	1.7E-06	7.5E-07	8.8E-07	1.0E-06	7.0E-07	1.7E-06	8.6E-07	1.3E-06	9.2E-07	1.3E-06	1.4E-06
Tetrachlorobenzene, 1,2,4,5-	4.7E-07	2.3E-07	2.3E-07	4.1E-07	3.3E-07	4.3E-07	1.9E-07	2.2E-07	2.6E-07	1.8E-07	4.3E-07	2.1E-07	3.2E-07	2.3E-07	3.3E-07	3.4E-07
Tetrachlorophenol, 2,3,4,6-	1.6E-06	7.7E-07	7.7E-07	1.4E-06	1.1E-06	1.5E-06	6.3E-07	7.5E-07	8.6E-07	5.9E-07	1.4E-06	7.2E-07	1.1E-06	7.8E-07	1.1E-06	1.2E-06
Trichlorobenzene, 1,2,4-	4.7E-07	2.3E-07	2.3E-07	4.1E-07	3.3E-07	4.3E-07	1.9E-07	2.2E-07	2.6E-07	1.8E-07	4.3E-07	2.1E-07	3.2E-07	2.3E-07	3.3E-07	3.4E-07
Trichlorophenol, 2,4,6-	4.7E-07	2.3E-07	2.3E-07	4.2E-07	3.4E-07	4.4E-07	1.9E-07	2.2E-07	2.6E-07	1.8E-07	4.3E-07	2.2E-07	3.3E-07	2.3E-07	3.3E-07	3.5E-07
Volatile Organic Chemicals (VOC)																
Acetaldehyde	4.8E-09	8.6E-10	8.6E-10	1.6E-09	1.3E-09	1.6E-09	7.1E-10	8.4E-10	9.7E-10	6.7E-10	1.6E-09	8.1E-10	1.2E-09	8.8E-10	1.2E-09	1.3E-09
Benzene	2.8E-04	1.4E-04	1.4E-04	2.5E-04	2.0E-04	2.6E-04	1.1E-04	1.3E-04	1.5E-04	1.1E-04	2.6E-04	1.3E-04	1.9E-04	1.4E-04	2.0E-04	2.1E-04
Biphenyl	2.7E-05	1.3E-05	1.3E-05	2.4E-05	1.9E-05	2.5E-05	1.1E-05	1.3E-05	1.5E-05	1.0E-05	2.5E-05	1.2E-05	1.9E-05	1.3E-05	1.9E-05	2.0E-05
Bromodichloromethane	0.0017	3.0E-04	3.0E-04	5.4E-04	4.4E-04	5.7E-04	2.5E-04	2.9E-04	3.4E-04	2.3E-04	5.6E-04	2.8E-04	4.3E-04	3.1E-04	4.4E-04	4.5E-04
Bromoform	4.6E-04	8.2E-05	8.2E-05	1.5E-04	1.2E-04	1.6E-04	6.7E-05	8.0E-05	9.2E-05	6.3E-05	1.5E-04	7.8E-05	1.2E-04	8.4E-05	1.2E-04	1.2E-04
Bromomethane	3.3E-04	1.6E-04	1.6E-04	2.9E-04	2.3E-04	3.0E-04	1.3E-04	1.5E-04	1.8E-04	1.2E-04	3.0E-04	1.5E-04	2.2E-04	1.6E-04	2.3E-04	2.4E-04
Carbon tetrachloride	2.9E-06	5.1E-07	5.1E-07	9.3E-07	7.5E-07	9.7E-07	4.2E-07	5.0E-07	5.8E-07	4.0E-07	9.6E-07	4.8E-07	7.3E-07	5.2E-07	7.4E-07	7.8E-07
Chloroform	4.6E-06	2.3E-06	2.2E-06	4.1E-06	3.3E-06	4.3E-06	1.8E-06	2.2E-06	2.5E-06	1.7E-06	4.2E-06	2.1E-06	3.2E-06	2.3E-06	3.3E-06	3.4E-06
Dichlorodifluoromethane	7.9E-04	3.8E-04	3.8E-04	6.9E-04	5.6E-04	7.3E-04	3.2E-04	3.7E-04	4.3E-04	3.0E-04	7.2E-04	3.6E-04	5.4E-04	3.9E-04	5.6E-04	5.8E-04
Dichloroethene, 1,1 -	5.1E-06	2.5E-06	2.5E-06	4.5E-06	3.6E-06	4.7E-06	2.0E-06	2.4E-06	2.8E-06	1.9E-06	4.7E-06	2.4E-06	3.5E-06	2.5E-06	3.6E-06	3.8E-06
Dichloromethane	0.0016	7.8E-04	7.8E-04	0.0014	0.0011	0.0015	6.4E-04	7.5E-04	8.7E-04	6.0E-04	0.0015	7.3E-04	0.0011	7.9E-04	0.0011	0.0012
Ethylbenzene	9.4E-06	4.6E-06	4.6E-06	8.3E-06	6.6E-06	8.7E-06	3.7E-06	4.4E-06	5.1E-06	3.5E-06	8.6E-06	4.3E-06	6.5E-06	4.6E-06	6.6E-06	6.9E-06
Ethylene Dibromide	2.7E-06	4.8E-07	4.8E-07	8.7E-07	7.0E-07	9.2E-07	4.0E-07	4.7E-07	5.4E-07	3.7E-07	9.0E-07	4.6E-07	6.8E-07	4.9E-07	7.0E-07	7.3E-07
Formaldehyde	4.3E-04	2.1E-04	2.1E-04	3.8E-04	3.0E-04	4.0E-04	1.7E-04	2.0E-04	2.4E-04	1.6E-04	3.9E-04	2.0E-04	3.0E-04	2.1E-04	3.0E-04	3.2E-04
O-terphenyl	7.4E-07	3.6E-07	3.6E-07	6.5E-07	5.2E-07	6.8E-07	3.0E-07	3.5E-07	4.1E-07	2.8E-07	6.8E-07	3.4E-07	5.1E-07	3.7E-07	5.2E-07	5.5E-07
Tetrachloroethene	5.1E-05	2.5E-05	2.5E-05	4.5E-05	3.6E-05	4.7E-05	2.1E-05	2.4E-05	2.8E-05	1.9E-05	4.7E-05	2.4E-05	3.5E-05	2.5E-05	3.6E-05	3.8E-05
Tetralin	4.5E-06	2.2E-06	2.2E-06	4.0E-06	3.2E-06	4.2E-06	1.8E-06	2.1E-06	2.5E-06	1.7E-06	4.1E-06	2.1E-06	3.1E-06	2.2E-06	3.2E-06	3.3E-06
Toluene	4.5E-04	2.2E-04	2.2E-04	4.0E-04	3.2E-04	4.2E-04	1.8E-04	2.2E-04	2.5E-04	1.7E-04	4.2E-04	2.1E-04	3.1E-04	2.3E-04	3.2E-04	3.4E-04
Trichloroethane, 1,1,1 -	1.3E-05	6.3E-06	6.3E-06	1.1E-05	9.2E-06	1.2E-05	5.2E-06	6.1E-06	7.1E-06	4.9E-06	1.2E-05	5.9E-06	8.9E-06	6.4E-06	9.1E-06	9.5E-06
Trichloroethylene, 1,1,2 -	4.4E-06	2.2E-06	2.2E-06	3.9E-06	3.2E-06	4.1E-06	1.8E-06	2.1E-06	2.4E-06	1.7E-06	4.1E-06	2.0E-06	3.1E-06	2.2E-06	3.1E-06	3.3E-06
Trichlorofluoromethane	0.0016	7.6E-04	7.6E-04	0.0014	0.0011	0.0014	6.2E-04	7.4E-04	8.5E-04	5.9E-04	0.0014	7.2E-04	0.0011	7.7E-04	0.0011	0.0011
Vinyl chloride	3.9E-04	1.9E-04	1.9E-04	3.5E-04	2.8E-04	3.6E-04	1.6E-04	1.9E-04	2.2E-04	1.5E-04	3.6E-04	1.8E-04	2.7E-04	2.0E-04	2.8E-04	2.9E-04
Xylenes, m-, p- and o-	0.0055	0.0027	0.0027	0.0048	0.0039	0.0051	0.0022	0.0026	0.0030	0.0021	0.0050	0.0025	0.0038	0.0027	0.0039	0.0040

APPENDIX E-5

Baseline Traffic Case and Traffic Case Exposure Point Concentrations

Baseline Traffic Case and Traffic Case Exposure Point Concentrations (µg/m^3)

COPC	1-Hour	24-Hour	Annual
Baseline Traffic Case - 140 tpy			
Carbon Monoxide	4151.38	1597.50	740.63
Nitrogen Dioxide	155.55	105.74	46.47
Particulate Matter - PM_{10}	11.42	1.05	0.21
Particulate Matter - $PM_{2.5}$	30.29	21.12	9.92
Particulate Matter - Total	109.00	37.48	21.69
Sulfur Dioxide	21.39	19.46	5.96
Traffic Case - 140 tpy			
Carbon Monoxide	4171.63	1600.13	740.94
Nitrogen Dioxide	193.16	109.90	46.68
Particulate Matter - PM_{10}	22.26	2.07	0.24
Particulate Matter - $PM_{2.5}$	32.61	21.64	9.93
Particulate Matter - Total	186.99	44.17	22.02
Sulfur Dioxide	39.59	21.20	5.99
Traffic Case - 400 tpy			
Carbon Monoxide	4184.84	1601.76	740.99
Nitrogen Dioxide	253.71	114.28	46.78
Particulate Matter - PM_{10}	22.26	2.49	0.25
Particulate Matter - $PM_{2.5}$	36.98	22.57	9.94
Particulate Matter - Total	186.99	44.17	22.03
Sulfur Dioxide	54.25	22.69	6.03

APPENDIX E-6

Multi-Pathway Exposure Point Concentrations – Normal Operations
(Project Alone Case) – 140,000 tpy

Calculated Exposure Point Concentrations for the Bowmanville Subdivision Receptor Cluster
Normal Operations - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	6.98E-08	1.58E-10	--	1.51E-08	5.74E-11
Acenaphthylene	208-96-8	1.63E-08	8.86E-11	--	3.09E-09	1.10E-10
Anthracene	120-12-7	6.89E-08	5.94E-11	1.56E-11	6.69E-09	1.34E-12
Benz(a)anthracene	56-55-3	3.79E-08	2.95E-11	1.49E-09	7.46E-10	8.70E-11
Benzo(a)fluorene	30777-18-5	7.48E-08	2.30E-10	4.24E-10	2.19E-09	2.02E-10
Benzo(a)pyrene	50-32-8	6.70E-08	1.28E-10	4.65E-09	8.85E-10	7.83E-10
Benzo(b)fluoranthene	205-99-2	8.70E-08	3.66E-11	2.50E-10	9.75E-10	3.85E-11
Benzo(b)fluorene	243-17-4	5.17E-08	1.86E-10	2.90E-10	9.50E-10	5.31E-10
Benzo(e)pyrene	192-97-20	1.83E-07	1.25E-09	5.68E-10	1.34E-09	1.07E-07
Benzo(g,h,i)perylene	191-24-2	9.46E-07	1.00E-09	--	6.41E-09	1.62E-07
Benzo(k)fluoranthene	207-08-9	7.61E-08	8.61E-11	1.41E-09	8.75E-10	3.62E-10
Chrysene	218-01-9	1.41E-07	4.16E-11	1.85E-09	2.77E-09	1.20E-11
Dibenz(a,c)anthracene	215-58-7	1.19E-07	9.54E-10	4.85E-08	6.18E-10	1.43E-08
Dibenz(a,h)anthracene	53-70-3	4.18E-08	6.71E-11	2.19E-09	2.84E-10	1.29E-08
Fluoranthene	206-44-0	6.82E-07	1.77E-09	6.38E-10	3.40E-08	1.89E-10
Fluorene	86-73-7	6.94E-08	4.55E-10	--	1.01E-08	5.05E-12
Indeno(1,2,3-cd)pyrene	193-39-5	2.01E-07	2.37E-10	1.44E-08	1.19E-09	8.74E-11
Perylene	198-55-0	3.94E-08	2.10E-10	2.31E-11	3.72E-10	7.96E-08
Phenanthrene	85-01-8	7.02E-07	3.00E-09	1.81E-10	6.81E-08	8.86E-11
Pyrene	129-00-0	3.49E-06	3.01E-09	5.77E-10	1.99E-07	2.60E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	1.30E-05	4.84E-10	--	8.84E-08	7.40E-10
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	1.46E-08	3.58E-13	5.92E-11	6.64E-11	1.62E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	3.99E-11	6.65E-09	--	5.55E-11	1.34E-12
Bromoform	75-25-2	1.51E-10	2.89E-07	--	2.50E-10	1.23E-13
Carbon Tetrachloride	56-23-5	1.09E-11	2.00E-09	--	1.01E-11	4.78E-13
Chloroform	67-66-3	1.79E-11	2.19E-09	--	4.82E-11	6.46E-13
Dichloromethane	75-09-2	3.20E-09	6.82E-07	--	2.20E-08	6.73E-11
O-Terphenyl	84-15-1	2.21E-07	5.83E-10	--	5.52E-09	3.52E-10
Trichlorofluoromethane (FREON 11)	75-69-4	8.26E-10	7.51E-07	--	1.15E-09	2.83E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	3.14E-08	2.63E-10	--	2.04E-09	8.89E-13
1,2,4-Trichlorobenzene	120-82-1	7.40E-10	2.56E-10	--	1.40E-10	2.32E-13
1,2-Dichlorobenzene	95-50-1	9.95E-09	1.03E-08	--	4.29E-09	1.49E-10
Hexachlorobenzene	118-74-1	1.35E-08	3.15E-10	--	4.51E-10	6.07E-12
Pentachlorobenzene	608-93-5	4.88E-07	8.00E-10	--	1.94E-08	2.12E-11
Pentachlorophenol	87-86-5	2.29E-07	2.60E-07	--	1.00E-08	8.05E-07
Inorganics						
Antimony	7440-36-0	1.77E-04	3.69E-06	8.05E-06	5.64E-06	--
Arsenic	7440-38-2	1.75E-05	5.68E-07	1.23E-06	1.11E-07	--
Barium	7440-39-3	1.24E-04	2.85E-06	6.21E-06	4.01E-06	--
Beryllium	7440-41-7	1.11E-04	2.17E-07	9.79E-07	2.87E-07	--
Boron	7440-42-8	6.88E-04	2.07E-04	4.50E-04	1.55E-03	--
Cadmium	7440-43-9	7.34E-04	9.27E-06	2.06E-05	9.18E-05	--
Chromium (Total)	7440-47-3	6.17E-05	3.04E-06	6.61E-06	3.01E-07	--
Chromium VI	18540-29-9	8.78E-06	4.33E-07	9.40E-07	4.28E-08	--
Cobalt	7440-48-4	3.74E-04	7.81E-06	1.70E-05	3.23E-06	--
Lead	7439-92-1	1.71E-02	3.09E-05	1.47E-04	2.32E-04	--
Mercury - Inorganic	7487-94-7	1.21E-03	3.04E-07	1.98E-06	1.75E-05	5.33E-06
Methyl Mercury	22967-92-6	4.47E-05	1.28E-09	5.58E-07	1.31E-06	1.50E-06
Nickel	7440-02-0	8.01E-03	1.16E-04	2.56E-04	7.46E-05	--
Phosphorus	7723-14-0	2.40E-04	6.23E-05	1.35E-04	8.40E-04	--
Selenium	7782-49-2	3.53E-06	6.50E-07	1.41E-06	6.89E-08	--
Silver	7440-22-4	4.05E-05	4.54E-06	9.85E-06	5.59E-06	--
Thallium	7440-28-0	3.89E-03	5.18E-05	1.15E-04	3.34E-06	--
Tin	7440-31-5	4.22E-03	1.81E-05	5.17E-05	3.82E-05	--
Vanadium	7440-62-2	4.03E-04	6.88E-07	3.42E-06	1.34E-06	--
Zinc	7440-66-6	1.75E-02	2.67E-04	5.86E-04	1.70E-03	--

Calculated Exposure Point Concentrations for the Bowmanville Subdivision Receptor Cluster
Normal Operations - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.49E-08	1.56E-11	6.29E-11	6.10E-11	1.91E-11	2.99E-11	8.41E-11	4.80E-11
Acenaphthylene	208-96-8	1.04E-07	3.67E-12	4.44E-11	2.21E-11	6.03E-12	8.12E-12	2.15E-11	1.23E-11
Anthracene	120-12-7	1.04E-10	1.10E-11	9.41E-11	4.27E-11	1.27E-11	2.39E-11	7.20E-11	4.12E-11
Benz(a)anthracene	56-55-3	3.59E-11	4.32E-11	7.41E-10	9.54E-11	2.93E-11	1.49E-11	2.93E-11	1.67E-11
Benzo(a)fluorene	30777-18-5	2.52E-09	3.04E-11	2.90E-09	1.53E-10	4.38E-11	3.16E-11	7.11E-11	4.06E-11
Benzo(a)pyrene	50-32-8	4.06E-11	1.56E-10	6.39E-09	4.56E-10	1.43E-10	4.82E-11	4.63E-11	2.65E-11
Benzo(b)fluoranthene	205-99-2	1.00E-09	1.17E-11	2.43E-09	4.31E-11	1.14E-11	1.81E-11	5.68E-11	3.24E-11
Benzo(b)fluorene	243-17-4	3.16E-09	4.57E-11	5.23E-09	2.57E-10	7.84E-11	3.32E-11	4.46E-11	2.55E-11
Benzo(e)pyrene	192-97-20	9.69E-09	5.75E-09	1.72E-07	3.43E-08	1.09E-08	2.92E-09	1.03E-10	5.86E-11
Benzo(g,h,i)perylene	191-24-2	4.93E-09	8.48E-09	1.56E-07	5.06E-08	1.61E-08	4.40E-09	5.07E-10	2.90E-10
Benzo(k)fluoranthene	207-08-9	4.63E-11	5.60E-11	5.41E-09	1.92E-10	5.94E-11	2.84E-11	4.99E-11	2.85E-11
Chrysene	218-01-9	1.33E-10	5.32E-11	1.04E-09	1.08E-10	3.06E-11	3.64E-11	1.08E-10	6.17E-11
Dibenz(a,c)anthracene	215-58-7	2.05E-09	1.47E-09	2.38E-07	5.11E-09	1.63E-09	4.29E-10	5.86E-11	3.35E-11
Dibenz(a,h)anthracene	53-70-3	1.69E-11	7.13E-10	1.06E-08	4.07E-09	1.30E-09	3.48E-10	2.24E-11	1.28E-11
Fluoranthene	206-44-0	1.02E-09	1.01E-10	8.86E-09	4.36E-10	1.20E-10	2.11E-10	6.44E-10	3.68E-10
Fluorene	86-73-7	1.32E-10	1.36E-11	3.61E-10	7.00E-11	1.98E-11	2.98E-11	8.28E-11	4.73E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.07E-10	2.59E-10	4.67E-08	4.03E-10	1.24E-10	5.46E-11	1.02E-10	5.81E-11
Perylene	198-55-0	7.40E-10	4.64E-09	1.87E-08	2.77E-08	8.84E-09	2.34E-09	2.43E-11	1.39E-11
Phenanthrene	85-01-8	1.29E-09	1.18E-10	4.75E-09	5.21E-10	1.50E-10	2.55E-10	7.50E-10	4.29E-10
Pyrene	129-00-0	5.07E-09	4.35E-10	1.20E-08	1.76E-09	4.92E-10	1.06E-09	3.32E-09	1.90E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.25E-07	4.81E-08	1.24E-04	2.60E-07	5.36E-08	1.99E-07	6.96E-09	3.98E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	1.50E-10	1.54E-10	**1.11E-08**	7.63E-10	2.16E-10	2.25E-10	6.44E-12	3.68E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	3.54E-09	1.97E-10	1.05E-08	7.58E-09	1.60E-09	1.21E-09	2.07E-11	1.18E-11
Bromoform	75-25-2	1.86E-09	7.50E-09	3.40E-07	2.83E-07	5.96E-08	4.52E-08	7.71E-10	4.40E-10
Carbon Tetrachloride	56-23-5	1.03E-09	8.56E-11	6.34E-09	3.30E-09	6.95E-10	5.26E-10	8.99E-12	5.13E-12
Chloroform	67-66-3	1.80E-09	3.55E-11	1.10E-09	1.36E-09	2.87E-10	2.18E-10	3.72E-12	2.13E-12
Dichloromethane	75-09-2	1.15E-06	3.76E-09	6.82E-08	1.44E-07	3.03E-08	2.30E-08	3.94E-10	2.25E-10
O-Terphenyl	84-15-1	4.96E-09	4.15E-09	9.66E-07	2.90E-08	7.89E-09	7.71E-09	1.99E-10	1.14E-10
Trichlorofluoromethane (FREON 11)	75-69-4	6.71E-08	2.27E-08	1.19E-06	8.65E-07	1.82E-07	1.38E-07	2.35E-09	1.35E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	3.29E-08	4.82E-10	8.33E-08	3.82E-09	9.20E-10	1.33E-09	3.66E-11	2.09E-11
1,2,4-Trichlorobenzene	120-82-1	5.73E-10	5.41E-11	1.61E-08	1.56E-09	3.35E-10	2.69E-10	4.93E-12	2.82E-12
1,2-Dichlorobenzene	95-50-1	2.44E-07	1.14E-09	1.24E-07	3.59E-08	7.69E-09	6.05E-09	1.08E-10	6.17E-11
Hexachlorobenzene	118-74-1	3.43E-09	2.17E-10	3.15E-07	3.23E-09	7.29E-10	7.69E-10	1.84E-11	1.05E-11
Pentachlorobenzene	608-93-5	8.97E-09	4.94E-09	5.93E-07	2.70E-08	6.76E-09	1.44E-08	4.52E-10	2.58E-10
Pentachlorophenol	87-86-5	3.75E-06	8.99E-09	1.46E-04	5.38E-08	1.72E-08	4.56E-09	9.59E-13	5.48E-13
Inorganics									
Antimony	7440-36-0	5.30E-06	3.96E-07	7.39E-04	1.22E-06	1.76E-07	2.17E-07	3.85E-09	2.20E-09
Arsenic	7440-38-2	1.40E-07	9.48E-08	2.84E-05	2.54E-07	1.08E-08	3.58E-08	6.52E-10	3.73E-10
Barium	7440-39-3	1.87E-06	4.23E-08	2.85E-05	1.25E-07	4.19E-07	2.08E-08	3.68E-10	2.10E-10
Beryllium	7440-41-7	1.67E-07	4.48E-08	2.17E-05	1.51E-07	1.69E-10	5.85E-08	1.84E-09	1.05E-09
Boron	7440-42-8	1.38E-03	1.89E-05	--	5.81E-05	1.87E-05	1.09E-05	1.80E-07	1.03E-07
Cadmium	7440-43-9	4.70E-05	1.80E-07	1.11E-02	6.31E-07	5.04E-08	1.75E-07	2.76E-06	6.49E-08
Chromium (Total)	7440-47-3	2.78E-07	1.34E-06	6.09E-04	3.48E-06	1.36E-06	4.19E-07	6.65E-09	3.80E-09
Chromium VI	18540-29-9	3.95E-08	1.91E-07	1.60E-05	4.95E-07	1.93E-07	5.96E-08	9.46E-10	5.41E-10
Cobalt	7440-48-4	2.62E-06	1.32E-05	7.81E-04	3.61E-05	1.06E-05	6.21E-06	1.38E-07	7.86E-08
Lead	7439-92-1	1.54E-04	2.50E-06	3.23E-03	8.91E-06	9.77E-06	3.14E-06	9.02E-08	5.16E-08
Mercury - Inorganic	7487-94-7	4.35E-05	7.39E-07	--	4.34E-06	1.92E-06	1.69E-08	6.91E-07	6.91E-07
Methyl Mercury	22967-92-6	4.42E-06	1.97E-08	8.17E-04	6.48E-08	3.78E-08	1.16E-10	4.12E-09	4.12E-09
Nickel	7440-02-0	6.41E-05	6.25E-05	1.81E-02	1.80E-04	4.15E-05	3.61E-05	8.60E-07	4.91E-07
Phosphorus	7723-14-0	8.40E-04	3.93E-04	--	1.22E-03	4.05E-04	3.21E-04	7.21E-06	4.12E-06
Selenium	7782-49-2	7.78E-08	1.16E-07	1.10E-04	2.93E-07	1.10E-06	1.81E-06	1.44E-07	1.44E-07
Silver	7440-22-4	4.05E-06	1.21E-06	4.02E-04	3.28E-06	3.21E-05	3.94E-07	4.52E-09	2.58E-09
Thallium	7440-28-0	1.56E-06	1.77E-04	--	4.97E-04	3.38E-05	1.03E-04	2.65E-06	1.51E-06
Tin	7440-31-5	2.53E-05	1.96E-04	5.42E-02	6.47E-04	1.79E-04	2.04E-04	5.85E-06	3.34E-06
Vanadium	7440-62-2	1.21E-06	3.82E-07	1.10E-04	1.29E-06	3.33E-07	5.25E-07	1.69E-08	9.63E-09
Zinc	7440-66-6	1.58E-02	3.06E-06	2.49E-01	1.00E-05	5.29E-06	2.45E-06	5.21E-06	5.21E-06

Calculated Exposure Point Concentrations for the Courtice Subdivision Receptor Cluster
Normal Operations - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	5.24E-08	1.58E-10	--	1.13E-08	3.71E-11
Acenaphthylene	208-96-8	1.23E-08	8.86E-11	--	2.31E-09	7.15E-11
Anthracene	120-12-7	5.16E-08	5.94E-11	1.12E-11	5.01E-09	8.69E-13
Benz(a)anthracene	56-55-3	2.84E-08	2.95E-11	1.07E-09	5.59E-10	5.63E-11
Benzo(a)fluorene	30777-18-5	5.61E-08	2.30E-10	3.04E-10	1.64E-09	1.30E-10
Benzo(a)pyrene	50-32-8	5.02E-08	1.28E-10	3.34E-09	6.63E-10	5.07E-10
Benzo(b)fluoranthene	205-99-2	6.52E-08	3.66E-11	1.79E-10	7.31E-10	2.49E-11
Benzo(b)fluorene	243-17-4	3.88E-08	1.86E-10	2.08E-10	7.13E-10	3.44E-10
Benzo(e)pyrene	192-97-20	1.37E-07	1.25E-09	4.07E-10	1.00E-09	6.91E-08
Benzo(g,h,i)perylene	191-24-2	7.09E-07	1.00E-09	--	4.80E-09	1.05E-07
Benzo(k)fluoranthene	207-08-9	5.70E-08	8.61E-11	1.01E-09	6.55E-10	2.34E-10
Chrysene	218-01-9	1.05E-07	4.16E-11	1.33E-09	2.07E-09	7.79E-12
Dibenz(a,c)anthracene	215-58-7	8.93E-08	9.54E-10	3.48E-08	4.64E-10	9.25E-09
Dibenz(a,h)anthracene	53-70-3	3.13E-08	6.71E-11	1.57E-09	2.13E-10	8.33E-09
Fluoranthene	206-44-0	5.11E-07	1.77E-09	4.58E-10	2.55E-08	1.22E-10
Fluorene	86-73-7	5.21E-08	4.55E-10	--	7.55E-09	3.27E-12
Indeno(1,2,3-cd)pyrene	193-39-5	1.51E-07	2.37E-10	1.03E-08	8.95E-10	5.65E-11
Perylene	198-55-0	2.95E-08	2.10E-10	1.66E-11	2.79E-10	5.15E-08
Phenanthrene	85-01-8	5.26E-07	3.00E-09	1.30E-10	5.10E-08	5.73E-11
Pyrene	129-00-0	2.62E-06	3.01E-09	4.14E-10	1.49E-07	1.68E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	9.75E-06	4.84E-10	--	6.61E-08	4.79E-10
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	1.05E-08	3.58E-13	4.12E-11	4.79E-11	1.05E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	2.99E-11	6.65E-09	--	4.16E-11	8.66E-13
Bromoform	75-25-2	1.14E-10	2.89E-07	--	1.87E-10	7.96E-14
Carbon Tetrachloride	56-23-5	8.14E-12	2.00E-09	--	7.59E-12	3.09E-13
Chloroform	67-66-3	1.34E-11	2.19E-09	--	3.62E-11	4.18E-13
Dichloromethane	75-09-2	2.40E-09	6.82E-07	--	1.65E-08	4.35E-11
O-Terphenyl	84-15-1	1.66E-07	5.83E-10	--	4.14E-09	2.27E-10
Trichlorofluoromethane (FREON 11)	75-69-4	6.19E-10	7.51E-07	--	8.61E-10	1.83E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	2.35E-08	2.63E-10	--	1.53E-09	5.75E-13
1,2,4-Trichlorobenzene	120-82-1	5.55E-10	2.56E-10	--	1.05E-10	1.50E-13
1,2-Dichlorobenzene	95-50-1	7.46E-09	1.03E-08	--	3.22E-09	9.61E-11
Hexachlorobenzene	118-74-1	1.01E-08	3.15E-10	--	3.39E-10	3.93E-12
Pentachlorobenzene	608-93-5	3.66E-07	8.00E-10	--	1.46E-08	1.37E-11
Pentachlorophenol	87-86-5	1.72E-07	2.60E-07	--	7.51E-09	5.21E-07
Inorganics						
Antimony	7440-36-0	1.28E-04	3.69E-06	5.60E-06	4.08E-06	--
Arsenic	7440-38-2	1.27E-05	5.68E-07	8.59E-07	8.03E-08	--
Barium	7440-39-3	9.00E-05	2.85E-06	4.32E-06	2.90E-06	--
Beryllium	7440-41-7	8.05E-05	2.17E-07	6.81E-07	2.08E-07	--
Boron	7440-42-8	4.98E-04	2.07E-04	3.13E-04	1.12E-03	--
Cadmium	7440-43-9	5.31E-04	9.27E-06	1.43E-05	6.64E-05	--
Chromium (Total)	7440-47-3	4.47E-05	3.04E-06	4.60E-06	2.18E-07	--
Chromium VI	18540-29-9	6.35E-06	4.33E-07	6.54E-07	3.10E-08	--
Cobalt	7440-48-4	2.70E-04	7.81E-06	1.18E-05	2.34E-06	--
Lead	7439-92-1	1.23E-02	3.09E-05	1.02E-04	1.68E-04	--
Mercury - Inorganic	7487-94-7	7.96E-04	3.04E-07	1.38E-06	1.15E-05	3.45E-06
Methyl Mercury	22967-92-6	3.23E-05	1.28E-09	3.89E-07	9.49E-07	9.73E-07
Nickel	7440-02-0	5.79E-03	1.16E-04	1.78E-04	5.39E-05	--
Phosphorus	7723-14-0	1.74E-04	6.23E-05	9.41E-05	6.08E-04	--
Selenium	7782-49-2	2.56E-06	6.50E-07	9.81E-07	4.99E-08	--
Silver	7440-22-4	2.93E-05	4.54E-06	6.85E-06	4.05E-06	--
Thallium	7440-28-0	2.81E-03	5.18E-05	7.97E-05	2.41E-06	--
Tin	7440-31-5	3.05E-03	1.81E-05	3.60E-05	2.76E-05	--
Vanadium	7440-62-2	2.91E-04	6.88E-07	2.38E-06	9.66E-07	--
Zinc	7440-66-6	1.27E-02	2.67E-04	4.08E-04	1.23E-03	--

Calculated Exposure Point Concentrations for the Courtice Subdivision Receptor Cluster
Normal Operations - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.11E-08	1.56E-11	6.29E-11	4.08E-11	1.33E-11	2.17E-11	6.17E-11	3.53E-11
Acenaphthylene	208-96-8	7.80E-08	3.67E-12	4.44E-11	1.17E-11	3.49E-12	5.31E-12	1.48E-11	8.45E-12
Anthracene	120-12-7	7.78E-11	1.10E-11	9.41E-11	3.02E-11	9.09E-12	1.76E-11	5.35E-11	3.06E-11
Benz(a)anthracene	56-55-3	2.69E-11	4.32E-11	7.41E-10	6.56E-11	2.02E-11	1.07E-11	2.18E-11	1.24E-11
Benzo(a)fluorene	30777-18-5	1.89E-09	3.04E-11	2.90E-09	9.02E-11	2.66E-11	2.04E-11	4.90E-11	2.80E-11
Benzo(a)pyrene	50-32-8	3.04E-11	1.56E-10	6.39E-09	3.05E-10	9.62E-11	3.31E-11	3.44E-11	1.97E-11
Benzo(b)fluoranthene	205-99-2	7.51E-10	1.17E-11	2.43E-09	2.96E-11	7.77E-12	1.33E-11	4.23E-11	2.42E-11
Benzo(b)fluorene	243-17-4	2.37E-09	4.57E-11	5.23E-09	1.60E-10	4.95E-11	2.13E-11	3.05E-11	1.74E-11
Benzo(e)pyrene	192-97-20	7.26E-09	5.75E-09	1.72E-07	2.22E-08	7.08E-09	1.89E-09	7.59E-11	4.34E-11
Benzo(g,h,i)perylene	191-24-2	3.70E-09	8.48E-09	1.56E-07	3.28E-08	1.04E-08	2.86E-09	3.79E-10	2.16E-10
Benzo(k)fluoranthene	207-08-9	3.47E-11	5.60E-11	5.41E-09	1.29E-10	3.97E-11	2.00E-11	3.72E-11	2.13E-11
Chrysene	218-01-9	9.98E-11	5.32E-11	1.04E-09	7.74E-11	2.19E-11	2.69E-11	8.05E-11	4.60E-11
Dibenz(a,c)anthracene	215-58-7	1.53E-09	1.47E-09	2.38E-07	3.38E-09	1.08E-09	2.84E-10	4.26E-11	2.44E-11
Dibenz(a,h)anthracene	53-70-3	1.27E-11	7.13E-10	1.06E-08	2.64E-09	8.42E-10	2.26E-10	1.67E-11	9.56E-12
Fluoranthene	206-44-0	7.64E-10	1.01E-10	8.86E-09	2.94E-10	8.24E-11	1.54E-10	4.76E-10	2.72E-10
Fluorene	86-73-7	9.87E-11	1.36E-11	3.61E-10	4.00E-11	1.22E-11	2.03E-11	5.87E-11	3.36E-11
Indeno(1,2,3-cd)pyrene	193-39-5	7.99E-11	2.59E-10	4.67E-08	2.88E-10	8.84E-11	3.98E-11	7.59E-11	4.34E-11
Perylene	198-55-0	5.55E-10	4.64E-09	1.87E-08	1.79E-08	5.72E-09	1.51E-09	1.80E-11	1.03E-11
Phenanthrene	85-01-8	9.64E-10	1.18E-10	4.75E-09	3.39E-10	1.01E-10	1.84E-10	5.49E-10	3.14E-10
Pyrene	129-00-0	3.79E-09	4.35E-10	1.20E-08	1.27E-09	3.59E-10	7.86E-10	2.48E-09	1.42E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	9.33E-08	4.81E-08	1.24E-04	1.91E-07	3.91E-08	1.48E-07	5.20E-09	2.97E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	1.08E-10	1.54E-10	**1.11E-08**	5.15E-10	1.44E-10	1.60E-10	4.64E-12	2.65E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	2.65E-09	1.97E-10	1.05E-08	1.41E-09	2.96E-10	2.25E-10	3.85E-12	2.20E-12
Bromoform	75-25-2	1.40E-09	7.50E-09	3.40E-07	5.21E-08	1.10E-08	8.31E-09	1.42E-10	8.10E-11
Carbon Tetrachloride	56-23-5	7.75E-10	8.56E-11	6.34E-09	6.11E-10	1.29E-10	9.77E-11	1.67E-12	9.55E-13
Chloroform	67-66-3	1.35E-09	3.55E-11	1.10E-09	2.54E-10	5.36E-11	4.09E-11	7.03E-13	4.02E-13
Dichloromethane	75-09-2	8.65E-07	3.76E-09	6.82E-08	2.68E-08	5.67E-09	4.33E-09	7.46E-11	4.26E-11
O-Terphenyl	84-15-1	3.72E-09	4.15E-09	9.66E-07	1.63E-08	4.61E-09	5.02E-09	1.38E-10	7.91E-11
Trichlorofluoromethane (FREON 11)	75-69-4	5.03E-08	2.27E-08	1.19E-06	1.59E-07	3.36E-08	2.55E-08	4.35E-10	2.48E-10
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	2.47E-08	4.82E-10	8.33E-08	1.77E-09	4.59E-10	8.24E-10	2.45E-11	1.40E-11
1,2,4-Trichlorobenzene	120-82-1	4.30E-10	5.41E-11	1.61E-08	3.38E-10	7.61E-11	6.93E-11	1.44E-12	8.21E-13
1,2-Dichlorobenzene	95-50-1	1.83E-07	1.14E-09	1.24E-07	7.35E-09	1.64E-09	1.41E-09	2.77E-11	1.58E-11
Hexachlorobenzene	118-74-1	2.57E-09	2.17E-10	3.15E-07	1.01E-09	2.47E-10	3.53E-10	1.00E-11	5.72E-12
Pentachlorobenzene	608-93-5	6.73E-09	4.94E-09	5.93E-07	1.62E-08	4.22E-09	1.02E-08	3.29E-10	1.88E-10
Pentachlorophenol	87-86-5	2.81E-06	8.99E-09	1.46E-04	3.48E-08	1.11E-08	2.96E-09	7.08E-13	4.04E-13
Inorganics									
Antimony	7440-36-0	3.84E-06	3.96E-07	7.39E-04	8.62E-07	1.24E-07	1.56E-07	2.79E-09	1.59E-09
Arsenic	7440-38-2	1.01E-07	9.48E-08	2.84E-05	1.79E-07	7.59E-09	2.55E-08	4.72E-10	2.70E-10
Barium	7440-39-3	1.35E-06	4.23E-08	2.85E-05	8.84E-08	2.96E-07	1.49E-08	2.66E-10	1.52E-10
Beryllium	7440-41-7	1.21E-07	4.48E-08	2.17E-05	1.07E-07	1.19E-10	4.21E-08	1.33E-09	7.60E-10
Boron	7440-42-8	9.95E-04	1.89E-05	--	4.12E-05	1.33E-05	7.84E-06	1.30E-07	7.45E-08
Cadmium	7440-43-9	3.40E-05	1.80E-07	1.11E-02	4.51E-07	3.60E-08	1.26E-07	1.99E-06	4.69E-08
Chromium (Total)	7440-47-3	2.01E-07	1.34E-06	6.09E-04	2.43E-06	9.48E-07	2.98E-07	4.81E-09	2.75E-09
Chromium VI	18540-29-9	2.86E-08	1.91E-07	1.60E-05	3.46E-07	1.35E-07	4.23E-08	6.85E-10	3.91E-10
Cobalt	7440-48-4	1.89E-06	1.32E-05	7.81E-04	2.54E-05	7.46E-06	4.44E-06	9.95E-08	5.68E-08
Lead	7439-92-1	1.11E-04	2.50E-06	3.23E-03	6.32E-06	6.92E-06	2.26E-06	6.51E-08	3.72E-08
Mercury - Inorganic	7487-94-7	2.86E-05	7.39E-07	--	2.87E-06	1.27E-06	1.11E-08	4.54E-07	4.54E-07
Methyl Mercury	22967-92-6	3.20E-06	1.97E-08	8.17E-04	4.50E-08	2.61E-08	8.34E-11	2.98E-09	2.98E-09
Nickel	7440-02-0	4.63E-05	6.25E-05	1.81E-02	1.27E-04	2.91E-05	2.59E-05	6.22E-07	3.55E-07
Phosphorus	7723-14-0	6.08E-04	3.93E-04	--	8.67E-04	2.88E-04	2.31E-04	5.22E-06	2.98E-06
Selenium	7782-49-2	5.63E-08	1.16E-07	1.10E-04	2.05E-07	7.69E-07	1.28E-06	1.04E-07	1.04E-07
Silver	7440-22-4	2.93E-06	1.21E-06	4.02E-04	2.31E-06	2.26E-05	2.81E-07	3.27E-09	1.87E-09
Thallium	7440-28-0	1.13E-06	1.77E-04	--	3.49E-04	2.37E-05	7.40E-05	1.91E-06	1.09E-06
Tin	7440-31-5	1.83E-05	1.96E-04	5.42E-02	4.57E-04	1.26E-04	1.47E-04	4.22E-06	2.41E-06
Vanadium	7440-62-2	8.73E-07	3.82E-07	1.10E-04	9.07E-07	2.34E-07	3.77E-07	1.22E-08	6.95E-09
Zinc	7440-66-6	1.14E-02	3.06E-06	2.49E-01	7.15E-06	3.77E-06	1.76E-06	3.77E-06	3.77E-06

Calculated Exposure Point Concentrations for the Courtice Road Receptor Cluster
Normal Operations - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	2.24E-07	1.58E-10	--	4.84E-08	1.08E-10
Acenaphthylene	208-96-8	5.25E-08	8.86E-11	--	9.91E-09	2.08E-10
Anthracene	120-12-7	2.21E-07	5.94E-11	4.64E-11	2.15E-08	2.53E-12
Benz(a)anthracene	56-55-3	1.21E-07	2.95E-11	4.42E-09	2.39E-09	1.63E-10
Benzo(a)fluorene	30777-18-5	2.40E-07	2.30E-10	1.26E-09	7.04E-09	3.79E-10
Benzo(a)pyrene	50-32-8	2.15E-07	1.28E-10	1.38E-08	2.84E-09	1.47E-09
Benzo(b)fluoranthene	205-99-2	2.79E-07	3.66E-11	7.42E-10	3.13E-09	7.23E-11
Benzo(b)fluorene	243-17-4	1.66E-07	1.86E-10	8.63E-10	3.05E-09	9.98E-10
Benzo(e)pyrene	192-97-20	5.86E-07	1.25E-09	1.69E-09	4.30E-09	2.01E-07
Benzo(g,h,i)perylene	191-24-2	3.04E-06	1.00E-09	--	2.06E-08	3.04E-07
Benzo(k)fluoranthene	207-08-9	2.44E-07	8.61E-11	4.19E-09	2.81E-09	6.79E-10
Chrysene	218-01-9	4.51E-07	4.16E-11	5.50E-09	8.88E-09	2.26E-11
Dibenz(a,c)anthracene	215-58-7	3.82E-07	9.54E-10	1.44E-07	1.98E-09	2.69E-08
Dibenz(a,h)anthracene	53-70-3	1.34E-07	6.71E-11	6.52E-09	9.10E-10	2.42E-08
Fluoranthene	206-44-0	2.19E-06	1.77E-09	1.90E-09	1.09E-07	3.55E-10
Fluorene	86-73-7	2.23E-07	4.55E-10	--	3.23E-08	9.49E-12
Indeno(1,2,3-cd)pyrene	193-39-5	6.46E-07	2.37E-10	4.28E-08	3.83E-09	1.64E-10
Perylene	198-55-0	1.26E-07	2.10E-10	6.89E-11	1.19E-09	1.49E-07
Phenanthrene	85-01-8	2.25E-06	3.00E-09	5.39E-10	2.18E-07	1.66E-10
Pyrene	129-00-0	1.12E-05	3.01E-09	1.72E-09	6.39E-07	4.89E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	4.18E-05	4.84E-10	--	2.83E-07	1.39E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	3.21E-08	3.58E-13	1.06E-10	1.46E-10	3.04E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	1.28E-10	6.65E-09	--	1.78E-10	2.51E-12
Bromoform	75-25-2	4.86E-10	2.89E-07	--	8.02E-10	2.31E-13
Carbon Tetrachloride	56-23-5	3.48E-11	2.00E-09	--	3.25E-11	8.99E-13
Chloroform	67-66-3	5.73E-11	2.19E-09	--	1.55E-10	1.21E-12
Dichloromethane	75-09-2	1.03E-08	6.82E-07	--	7.05E-08	1.26E-10
O-Terphenyl	84-15-1	7.09E-07	5.83E-10	--	1.77E-08	6.61E-10
Trichlorofluoromethane (FREON 11)	75-69-4	2.65E-09	7.51E-07	--	3.68E-09	5.32E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.01E-07	2.63E-10	--	6.55E-09	1.67E-12
1,2,4-Trichlorobenzene	120-82-1	2.37E-09	2.56E-10	--	4.49E-10	4.37E-13
1,2-Dichlorobenzene	95-50-1	3.19E-08	1.03E-08	--	1.38E-08	2.79E-10
Hexachlorobenzene	118-74-1	4.32E-08	3.15E-10	--	1.45E-09	1.14E-11
Pentachlorobenzene	608-93-5	1.57E-06	8.00E-10	--	6.23E-08	3.98E-11
Pentachlorophenol	87-86-5	7.36E-07	2.60E-07	--	3.22E-08	1.51E-06
Inorganics						
Antimony	7440-36-0	3.90E-04	3.69E-06	1.44E-05	1.24E-05	--
Arsenic	7440-38-2	3.87E-05	5.68E-07	2.21E-06	2.45E-07	--
Barium	7440-39-3	2.74E-04	2.85E-06	1.11E-05	8.83E-06	--
Beryllium	7440-41-7	2.45E-04	2.17E-07	1.75E-06	6.33E-07	--
Boron	7440-42-8	1.52E-03	2.07E-04	8.06E-04	3.42E-03	--
Cadmium	7440-43-9	1.62E-03	9.27E-06	3.69E-05	2.02E-04	--
Chromium (Total)	7440-47-3	1.36E-04	3.04E-06	1.19E-05	6.64E-07	--
Chromium VI	18540-29-9	1.93E-05	4.33E-07	1.69E-06	9.44E-08	--
Cobalt	7440-48-4	8.24E-04	7.81E-06	3.05E-05	7.13E-06	--
Lead	7439-92-1	3.76E-02	3.09E-05	2.63E-04	5.11E-04	--
Mercury - Inorganic	7487-94-7	2.93E-03	3.04E-07	3.55E-06	4.26E-05	1.00E-05
Methyl Mercury	22967-92-6	9.84E-05	1.28E-09	1.00E-06	2.89E-06	2.83E-06
Nickel	7440-02-0	1.76E-02	1.16E-04	4.59E-04	1.64E-04	--
Phosphorus	7723-14-0	5.29E-04	6.23E-05	2.43E-04	1.85E-03	--
Selenium	7782-49-2	7.79E-06	6.50E-07	2.53E-06	1.52E-07	--
Silver	7440-22-4	8.94E-05	4.54E-06	1.77E-05	1.23E-05	--
Thallium	7440-28-0	8.57E-03	5.18E-05	2.05E-04	7.36E-06	--
Tin	7440-31-5	9.29E-03	1.81E-05	9.27E-05	8.41E-05	--
Vanadium	7440-62-2	8.87E-04	6.88E-07	6.13E-06	2.94E-06	--
Zinc	7440-66-6	3.87E-02	2.67E-04	1.05E-03	3.75E-03	--

Calculated Exposure Point Concentrations for the Courtice Road Receptor Cluster
Normal Operations - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	4.77E-08	1.56E-11	6.29E-11	1.71E-10	5.61E-11	9.22E-11	2.63E-10	1.50E-10
Acenaphthylene	208-96-8	3.34E-07	3.67E-12	4.44E-11	4.61E-11	1.41E-11	2.21E-11	6.23E-11	3.56E-11
Anthracene	120-12-7	3.33E-10	1.10E-11	9.41E-11	1.28E-10	3.85E-11	7.53E-11	2.29E-10	1.31E-10
Benz(a)anthracene	56-55-3	1.15E-10	4.32E-11	7.41E-10	2.45E-10	7.49E-11	4.28E-11	9.31E-11	5.32E-11
Benzo(a)fluorene	30777-18-5	8.10E-09	3.04E-11	2.90E-09	3.05E-10	8.87E-11	8.02E-11	2.08E-10	1.19E-10
Benzo(a)pyrene	50-32-8	1.30E-10	1.56E-10	6.39E-09	1.03E-09	3.23E-10	1.18E-10	1.47E-10	8.41E-11
Benzo(b)fluoranthene	205-99-2	3.22E-09	1.17E-11	2.43E-09	1.13E-10	2.90E-11	5.57E-11	1.81E-10	1.03E-10
Benzo(b)fluorene	243-17-4	1.01E-08	4.57E-11	5.23E-09	4.91E-10	1.50E-10	7.47E-11	1.30E-10	7.40E-11
Benzo(e)pyrene	192-97-20	3.11E-08	5.75E-09	1.72E-07	6.45E-08	2.06E-08	5.52E-09	3.25E-10	1.86E-10
Benzo(g,h,i)perylene	191-24-2	1.58E-08	8.48E-09	1.56E-07	9.53E-08	3.04E-08	8.45E-09	1.62E-09	9.26E-10
Benzo(k)fluoranthene	207-08-9	1.49E-10	5.60E-11	5.41E-09	4.30E-10	1.31E-10	7.53E-11	1.60E-10	9.12E-11
Chrysene	218-01-9	4.28E-10	5.32E-11	1.04E-09	3.20E-10	9.03E-11	1.14E-10	3.45E-10	1.97E-10
Dibenz(a,c)anthracene	215-58-7	6.57E-09	1.47E-09	2.38E-07	1.08E-08	3.44E-09	9.07E-10	1.82E-10	1.04E-10
Dibenz(a,h)anthracene	53-70-3	5.44E-11	7.13E-10	1.06E-08	7.72E-09	2.46E-09	6.67E-10	7.17E-11	4.10E-11
Fluoranthene	206-44-0	3.27E-09	1.01E-10	8.86E-09	1.18E-09	3.29E-10	6.51E-10	2.04E-09	1.16E-09
Fluorene	86-73-7	4.22E-10	1.36E-11	3.61E-10	1.63E-10	5.02E-11	8.58E-11	2.49E-10	1.43E-10
Indeno(1,2,3-cd)pyrene	193-39-5	3.42E-10	2.59E-10	4.67E-08	1.17E-09	3.61E-10	1.66E-10	3.25E-10	1.86E-10
Perylene	198-55-0	2.37E-09	4.64E-09	1.87E-08	5.20E-08	1.66E-08	4.41E-09	7.72E-11	4.41E-11
Phenanthrene	85-01-8	4.13E-09	1.18E-10	4.75E-09	1.40E-09	4.20E-10	7.80E-10	2.34E-09	1.34E-09
Pyrene	129-00-0	1.62E-08	4.35E-10	1.20E-08	5.36E-09	1.50E-09	3.36E-09	1.06E-08	6.07E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	4.00E-07	4.81E-08	1.24E-04	7.96E-07	1.61E-07	6.34E-07	2.23E-08	1.27E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	3.30E-10	1.54E-10	**1.11E-08**	1.49E-09	4.14E-10	4.81E-10	1.42E-11	8.10E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	1.14E-08	1.97E-10	1.05E-08	2.36E-09	4.99E-10	3.81E-10	6.55E-12	3.75E-12
Bromoform	75-25-2	5.98E-09	7.50E-09	3.40E-07	8.50E-08	1.79E-08	1.36E-08	2.32E-10	1.32E-10
Carbon Tetrachloride	56-23-5	3.31E-09	8.56E-11	6.34E-09	1.02E-09	2.15E-10	1.63E-10	2.80E-12	1.60E-12
Chloroform	67-66-3	5.77E-09	3.55E-11	1.10E-09	4.50E-10	9.55E-11	7.35E-11	1.28E-12	7.30E-13
Dichloromethane	75-09-2	3.70E-06	3.76E-09	6.82E-08	4.95E-08	1.05E-08	8.13E-09	1.42E-10	8.11E-11
O-Terphenyl	84-15-1	1.59E-08	4.15E-09	9.66E-07	5.53E-08	1.53E-08	2.01E-08	5.87E-10	3.36E-10
Trichlorofluoromethane (FREON 11)	75-69-4	2.15E-07	2.27E-08	1.19E-06	2.62E-07	5.52E-08	4.19E-08	7.16E-10	4.09E-10
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	1.06E-07	4.82E-10	8.33E-08	6.04E-09	1.64E-09	3.29E-09	1.01E-10	5.75E-11
1,2,4-Trichlorobenzene	120-82-1	1.84E-09	5.41E-11	1.61E-08	7.49E-10	1.79E-10	1.86E-10	4.27E-12	2.44E-12
1,2-Dichlorobenzene	95-50-1	7.83E-07	1.14E-09	1.24E-07	1.53E-08	3.62E-09	3.47E-09	7.46E-11	4.26E-11
Hexachlorobenzene	118-74-1	1.10E-08	2.17E-10	3.15E-07	3.00E-09	7.50E-10	1.31E-09	3.98E-11	2.27E-11
Pentachlorobenzene	608-93-5	2.88E-08	4.94E-09	5.93E-07	6.57E-08	1.72E-08	4.31E-08	1.40E-09	7.99E-10
Pentachlorophenol	87-86-5	1.20E-05	8.99E-09	1.46E-04	1.01E-07	3.23E-08	8.63E-09	2.97E-12	1.70E-12
Inorganics									
Antimony	7440-36-0	1.17E-05	3.96E-07	7.39E-04	2.41E-06	3.47E-07	4.59E-07	8.47E-09	4.84E-09
Arsenic	7440-38-2	3.09E-07	9.48E-08	2.84E-05	4.77E-07	2.01E-08	7.31E-08	1.43E-09	8.19E-10
Barium	7440-39-3	4.11E-06	4.23E-08	2.85E-05	2.44E-07	8.12E-07	4.36E-08	8.09E-10	4.62E-10
Beryllium	7440-41-7	3.68E-07	4.48E-08	2.17E-05	2.99E-07	3.27E-10	1.26E-07	4.05E-09	2.32E-09
Boron	7440-42-8	3.03E-03	1.89E-05	--	1.16E-04	3.74E-05	2.32E-05	3.97E-07	2.27E-07
Cadmium	7440-43-9	1.04E-04	1.80E-07	1.11E-02	1.31E-06	1.04E-07	3.78E-07	6.07E-06	1.43E-07
Chromium (Total)	7440-47-3	6.12E-07	1.34E-06	6.09E-04	6.43E-06	2.48E-06	8.37E-07	1.46E-08	8.35E-09
Chromium VI	18540-29-9	8.71E-08	1.91E-07	1.60E-05	9.15E-07	3.53E-07	1.19E-07	2.08E-09	1.19E-09
Cobalt	7440-48-4	5.77E-06	1.32E-05	7.81E-04	6.81E-05	1.98E-05	1.29E-05	3.03E-07	1.73E-07
Lead	7439-92-1	3.38E-04	2.50E-06	3.23E-03	1.81E-05	1.96E-05	6.80E-06	1.99E-07	1.13E-07
Mercury - Inorganic	7487-94-7	1.06E-04	7.39E-07	--	9.78E-06	4.18E-06	4.07E-08	1.68E-06	1.68E-06
Methyl Mercury	22967-92-6	9.74E-06	1.97E-08	8.17E-04	1.25E-07	7.13E-08	2.50E-10	9.08E-09	9.08E-09
Nickel	7440-02-0	1.41E-04	6.25E-05	1.81E-02	3.44E-04	7.83E-05	7.59E-05	1.89E-06	1.08E-06
Phosphorus	7723-14-0	1.85E-03	3.93E-04	--	2.44E-03	8.13E-04	6.90E-04	1.59E-05	9.08E-06
Selenium	7782-49-2	1.71E-07	1.16E-07	1.10E-04	5.39E-07	2.01E-06	3.47E-06	3.14E-07	3.14E-07
Silver	7440-22-4	8.94E-06	1.21E-06	4.02E-04	6.23E-06	6.08E-05	7.98E-07	9.90E-09	5.66E-09
Thallium	7440-28-0	3.43E-06	1.77E-04	--	9.41E-04	6.28E-05	2.17E-04	5.82E-06	3.33E-06
Tin	7440-31-5	5.58E-05	1.96E-04	5.42E-02	1.28E-03	3.50E-04	4.39E-04	1.29E-05	7.35E-06
Vanadium	7440-62-2	2.66E-06	3.82E-07	1.10E-04	2.54E-06	6.40E-07	1.13E-06	3.71E-08	2.12E-08
Zinc	7440-66-6	3.48E-02	3.06E-06	2.49E-01	2.03E-05	1.07E-05	5.25E-06	1.15E-05	1.15E-05

Calculated Exposure Point Concentrations for the Maple Grove Receptor Cluster
Normal Operations - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	6.25E-08	1.58E-10	--	1.35E-08	4.91E-11
Acenaphthylene	208-96-8	1.46E-08	8.86E-11	--	2.76E-09	9.45E-11
Anthracene	120-12-7	6.17E-08	5.94E-11	1.38E-11	5.99E-09	1.15E-12
Benz(a)anthracene	56-55-3	3.39E-08	2.95E-11	1.31E-09	6.68E-10	7.44E-11
Benzo(a)fluorene	30777-18-5	6.70E-08	2.30E-10	3.75E-10	1.96E-09	1.73E-10
Benzo(a)pyrene	50-32-8	6.00E-08	1.28E-10	4.12E-09	7.92E-10	6.70E-10
Benzo(b)fluoranthene	205-99-2	7.79E-08	3.66E-11	2.21E-10	8.73E-10	3.29E-11
Benzo(b)fluorene	243-17-4	4.63E-08	1.86E-10	2.56E-10	8.51E-10	4.54E-10
Benzo(e)pyrene	192-97-20	1.63E-07	1.25E-09	5.02E-10	1.20E-09	9.14E-08
Benzo(g,h,i)perylene	191-24-2	8.47E-07	1.00E-09	--	5.74E-09	1.39E-07
Benzo(k)fluoranthene	207-08-9	6.81E-08	8.61E-11	1.24E-09	7.83E-10	3.09E-10
Chrysene	218-01-9	1.26E-07	4.16E-11	1.64E-09	2.48E-09	1.03E-11
Dibenz(a,c)anthracene	215-58-7	1.07E-07	9.54E-10	4.29E-08	5.54E-10	1.22E-08
Dibenz(a,h)anthracene	53-70-3	3.75E-08	6.71E-11	1.94E-09	2.54E-10	1.10E-08
Fluoranthene	206-44-0	6.11E-07	1.77E-09	5.64E-10	3.05E-08	1.62E-10
Fluorene	86-73-7	6.22E-08	4.55E-10	--	9.01E-09	4.32E-12
Indeno(1,2,3-cd)pyrene	193-39-5	1.80E-07	2.37E-10	1.27E-08	1.07E-09	7.48E-11
Perylene	198-55-0	3.53E-08	2.10E-10	2.05E-11	3.33E-10	6.81E-08
Phenanthrene	85-01-8	6.28E-07	3.00E-09	1.60E-10	6.10E-08	7.58E-11
Pyrene	129-00-0	3.13E-06	3.01E-09	5.10E-10	1.78E-07	2.23E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	1.17E-05	4.84E-10	--	7.91E-08	6.34E-10
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	7.83E-09	3.58E-13	2.62E-11	3.56E-11	1.39E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	3.57E-11	6.65E-09	--	4.97E-11	1.14E-12
Bromoform	75-25-2	1.36E-10	2.89E-07	--	2.24E-10	1.05E-13
Carbon Tetrachloride	56-23-5	9.72E-12	2.00E-09	--	9.06E-12	4.09E-13
Chloroform	67-66-3	1.60E-11	2.19E-09	--	4.32E-11	5.53E-13
Dichloromethane	75-09-2	2.87E-09	6.82E-07	--	1.97E-08	5.76E-11
O-Terphenyl	84-15-1	1.98E-07	5.83E-10	--	4.94E-09	3.01E-10
Trichlorofluoromethane (FREON 11)	75-69-4	7.39E-10	7.51E-07	--	1.03E-09	2.42E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	2.81E-08	2.63E-10	--	1.83E-09	7.60E-13
1,2,4-Trichlorobenzene	120-82-1	6.62E-10	2.56E-10	--	1.25E-10	1.99E-13
1,2-Dichlorobenzene	95-50-1	8.91E-09	1.03E-08	--	3.84E-09	1.27E-10
Hexachlorobenzene	118-74-1	1.21E-08	3.15E-10	--	4.04E-10	5.20E-12
Pentachlorobenzene	608-93-5	4.37E-07	8.00E-10	--	1.74E-08	1.81E-11
Pentachlorophenol	87-86-5	2.05E-07	2.60E-07	--	8.97E-09	6.89E-07
Inorganics						
Antimony	7440-36-0	9.50E-05	3.69E-06	3.56E-06	3.03E-06	--
Arsenic	7440-38-2	9.42E-06	5.68E-07	5.45E-07	5.97E-08	--
Barium	7440-39-3	6.69E-05	2.85E-06	2.74E-06	2.15E-06	--
Beryllium	7440-41-7	5.98E-05	2.17E-07	4.32E-07	1.54E-07	--
Boron	7440-42-8	3.70E-04	2.07E-04	1.99E-04	8.33E-04	--
Cadmium	7440-43-9	3.94E-04	9.27E-06	9.08E-06	4.93E-05	--
Chromium (Total)	7440-47-3	3.32E-05	3.04E-06	2.92E-06	1.62E-07	--
Chromium VI	18540-29-9	4.72E-06	4.33E-07	4.15E-07	2.30E-08	--
Cobalt	7440-48-4	2.01E-04	7.81E-06	7.52E-06	1.74E-06	--
Lead	7439-92-1	9.17E-03	3.09E-05	6.49E-05	1.25E-04	--
Mercury - Inorganic	7487-94-7	9.18E-04	3.04E-07	8.74E-07	1.33E-05	4.56E-06
Methyl Mercury	22967-92-6	2.40E-05	1.28E-09	2.47E-07	7.05E-07	1.29E-06
Nickel	7440-02-0	4.30E-03	1.16E-04	1.13E-04	4.01E-05	--
Phosphorus	7723-14-0	1.29E-04	6.23E-05	5.97E-05	4.51E-04	--
Selenium	7782-49-2	1.90E-06	6.50E-07	6.23E-07	3.70E-08	--
Silver	7440-22-4	2.18E-05	4.54E-06	4.35E-06	3.01E-06	--
Thallium	7440-28-0	2.09E-03	5.18E-05	5.06E-05	1.79E-06	--
Tin	7440-31-5	2.27E-03	1.81E-05	2.28E-05	2.05E-05	--
Vanadium	7440-62-2	2.16E-04	6.88E-07	1.51E-06	7.18E-07	--
Zinc	7440-66-6	9.43E-03	2.67E-04	2.59E-04	9.15E-04	--

Calculated Exposure Point Concentrations for the Maple Grove Receptor Cluster
Normal Operations - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.33E-08	1.56E-11	6.29E-11	4.89E-11	1.59E-11	2.59E-11	7.37E-11	4.21E-11
Acenaphthylene	208-96-8	9.31E-08	3.67E-12	4.44E-11	1.40E-11	4.19E-12	6.36E-12	1.77E-11	1.01E-11
Anthracene	120-12-7	9.29E-11	1.10E-11	9.41E-11	3.61E-11	1.09E-11	2.11E-11	6.39E-11	3.65E-11
Benz(a)anthracene	56-55-3	3.21E-11	4.32E-11	7.41E-10	8.27E-11	2.55E-11	1.31E-11	2.60E-11	1.49E-11
Benzo(a)fluorene	30777-18-5	2.26E-09	3.04E-11	2.90E-09	1.17E-10	3.44E-11	2.53E-11	5.89E-11	3.37E-11
Benzo(a)pyrene	50-32-8	3.63E-11	1.56E-10	6.39E-09	3.94E-10	1.24E-10	4.19E-11	4.12E-11	2.35E-11
Benzo(b)fluoranthene	205-99-2	8.98E-10	1.17E-11	2.43E-09	3.69E-11	9.75E-12	1.60E-11	5.06E-11	2.89E-11
Benzo(b)fluorene	243-17-4	2.83E-09	4.57E-11	5.23E-09	2.10E-10	6.50E-11	2.72E-11	3.68E-11	2.10E-11
Benzo(e)pyrene	192-97-20	8.68E-09	5.75E-09	1.72E-07	2.93E-08	9.37E-09	2.50E-09	9.09E-11	5.19E-11
Benzo(g,h,i)perylene	191-24-2	4.42E-09	8.48E-09	1.56E-07	4.33E-08	1.38E-08	3.77E-09	4.53E-10	2.59E-10
Benzo(k)fluoranthene	207-08-9	4.14E-11	5.60E-11	5.41E-09	1.66E-10	5.13E-11	2.49E-11	4.46E-11	2.55E-11
Chrysene	218-01-9	1.19E-10	5.32E-11	1.04E-09	9.46E-11	2.68E-11	3.23E-11	9.63E-11	5.50E-11
Dibenz(a,c)anthracene	215-58-7	1.83E-09	1.47E-09	2.38E-07	4.40E-09	1.40E-09	3.69E-10	5.13E-11	2.93E-11
Dibenz(a,h)anthracene	53-70-3	1.52E-11	7.13E-10	1.06E-08	3.49E-09	1.11E-09	2.98E-10	2.00E-11	1.14E-11
Fluoranthene	206-44-0	9.12E-10	1.01E-10	8.86E-09	3.60E-10	1.01E-10	1.85E-10	5.69E-10	3.25E-10
Fluorene	86-73-7	1.18E-10	1.36E-11	3.61E-10	4.85E-11	1.47E-11	2.44E-11	7.03E-11	4.02E-11
Indeno(1,2,3-cd)pyrene	193-39-5	9.54E-11	2.59E-10	4.67E-08	3.55E-10	1.09E-10	4.84E-11	9.08E-11	5.19E-11
Perylene	198-55-0	6.63E-10	4.64E-09	1.87E-08	2.37E-08	7.56E-09	2.00E-09	2.16E-11	1.23E-11
Phenanthrene	85-01-8	1.15E-09	1.18E-10	4.75E-09	4.12E-10	1.22E-10	2.20E-10	6.57E-10	3.75E-10
Pyrene	129-00-0	4.53E-09	4.35E-10	1.20E-08	1.54E-09	4.32E-10	9.41E-10	2.97E-09	1.69E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.12E-07	4.81E-08	1.24E-04	2.30E-07	4.74E-08	1.78E-07	6.22E-09	3.55E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	8.05E-11	1.54E-10	**1.11E-08**	5.33E-10	1.55E-10	1.32E-10	3.46E-12	1.97E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	3.17E-09	1.97E-10	1.05E-08	1.82E-09	3.83E-10	2.91E-10	4.98E-12	2.85E-12
Bromoform	75-25-2	1.67E-09	7.50E-09	3.40E-07	6.74E-08	1.42E-08	1.07E-08	1.83E-10	1.05E-10
Carbon Tetrachloride	56-23-5	9.25E-10	8.56E-11	6.34E-09	7.90E-10	1.67E-10	1.26E-10	2.16E-12	1.23E-12
Chloroform	67-66-3	1.61E-09	3.55E-11	1.10E-09	3.25E-10	6.86E-11	5.23E-11	8.99E-13	5.14E-13
Dichloromethane	75-09-2	1.03E-06	3.76E-09	6.82E-08	3.41E-08	7.21E-09	5.50E-09	9.48E-11	5.42E-11
O-Terphenyl	84-15-1	4.44E-09	4.15E-09	9.66E-07	2.11E-08	5.96E-09	6.16E-09	1.66E-10	9.50E-11
Trichlorofluoromethane (FREON 11)	75-69-4	6.01E-08	2.27E-08	1.19E-06	2.06E-07	4.35E-08	3.29E-08	5.62E-10	3.21E-10
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	2.95E-08	4.82E-10	8.33E-08	2.07E-09	5.41E-10	9.78E-10	2.91E-11	1.66E-11
1,2,4-Trichlorobenzene	120-82-1	5.13E-10	5.41E-11	1.61E-08	4.22E-10	9.50E-11	8.57E-11	1.77E-12	1.01E-12
1,2-Dichlorobenzene	95-50-1	2.19E-07	1.14E-09	1.24E-07	9.31E-09	2.07E-09	1.77E-09	3.45E-11	1.97E-11
Hexachlorobenzene	118-74-1	3.07E-09	2.17E-10	3.15E-07	1.28E-09	3.12E-10	4.32E-10	1.21E-11	6.91E-12
Pentachlorobenzene	608-93-5	8.03E-09	4.94E-09	5.93E-07	1.96E-08	5.09E-09	1.22E-08	3.93E-10	2.25E-10
Pentachlorophenol	87-86-5	3.36E-06	8.99E-09	1.46E-04	4.60E-08	1.47E-08	3.90E-09	8.01E-13	4.58E-13
Inorganics									
Antimony	7440-36-0	2.85E-06	3.96E-07	7.39E-04	5.88E-07	8.47E-08	1.12E-07	2.06E-09	1.18E-09
Arsenic	7440-38-2	7.54E-08	9.48E-08	2.84E-05	1.17E-07	4.93E-09	1.78E-08	3.47E-10	1.99E-10
Barium	7440-39-3	1.00E-06	4.23E-08	2.85E-05	5.96E-08	1.99E-07	1.06E-08	1.96E-10	1.12E-10
Beryllium	7440-41-7	8.98E-08	4.48E-08	2.17E-05	7.33E-08	8.02E-11	3.08E-08	9.88E-10	5.64E-10
Boron	7440-42-8	7.39E-04	1.89E-05	--	2.83E-05	9.15E-06	5.65E-06	9.64E-08	5.51E-08
Cadmium	7440-43-9	2.52E-05	1.80E-07	1.11E-02	3.19E-07	2.55E-08	9.22E-08	1.48E-06	3.48E-08
Chromium (Total)	7440-47-3	1.49E-07	1.34E-06	6.09E-04	1.57E-06	6.08E-07	2.03E-07	3.53E-09	2.02E-09
Chromium VI	18540-29-9	2.12E-08	1.91E-07	1.60E-05	2.23E-07	8.65E-08	2.89E-08	5.02E-10	2.87E-10
Cobalt	7440-48-4	1.41E-06	1.32E-05	7.81E-04	1.66E-05	4.85E-06	3.13E-06	7.35E-08	4.20E-08
Lead	7439-92-1	8.25E-05	2.50E-06	3.23E-03	4.42E-06	4.80E-06	1.66E-06	4.84E-08	2.77E-08
Mercury - Inorganic	7487-94-7	3.30E-05	7.39E-07	--	3.04E-06	1.29E-06	1.27E-08	5.24E-07	5.24E-07
Methyl Mercury	22967-92-6	2.38E-06	1.97E-08	8.17E-04	3.52E-08	2.06E-08	6.30E-11	2.21E-09	2.21E-09
Nickel	7440-02-0	3.44E-05	6.25E-05	1.81E-02	8.41E-05	1.92E-05	1.85E-05	4.60E-07	2.63E-07
Phosphorus	7723-14-0	4.51E-04	3.93E-04	--	5.95E-04	1.99E-04	1.68E-04	3.87E-06	2.21E-06
Selenium	7782-49-2	4.18E-08	1.16E-07	1.10E-04	1.32E-07	4.92E-07	8.40E-07	7.48E-08	7.48E-08
Silver	7440-22-4	2.18E-06	1.21E-06	4.02E-04	1.52E-06	1.49E-05	1.94E-07	2.39E-09	1.37E-09
Thallium	7440-28-0	8.36E-07	1.77E-04	--	2.30E-04	1.54E-05	5.27E-05	1.42E-06	8.10E-07
Tin	7440-31-5	1.36E-05	1.96E-04	5.42E-02	3.14E-04	8.56E-05	1.07E-04	3.13E-06	1.79E-06
Vanadium	7440-62-2	6.49E-07	3.82E-07	1.10E-04	6.22E-07	1.57E-07	2.77E-07	9.04E-09	5.17E-09
Zinc	7440-66-6	8.49E-03	3.06E-06	2.49E-01	4.97E-06	2.61E-06	1.28E-06	2.79E-06	2.79E-06

Calculated Exposure Point Concentrations for the Oshawa Subdivision Receptor Cluster
Normal Operations - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	9.50E-08	1.58E-10	--	2.05E-08	7.50E-11
Acenaphthylene	208-96-8	2.22E-08	8.86E-11	--	4.20E-09	1.44E-10
Anthracene	120-12-7	9.37E-08	5.94E-11	2.05E-11	9.10E-09	1.76E-12
Benz(a)anthracene	56-55-3	5.15E-08	2.95E-11	1.95E-09	1.01E-09	1.14E-10
Benzo(a)fluorene	30777-18-5	1.02E-07	2.30E-10	5.57E-10	2.98E-09	2.63E-10
Benzo(a)pyrene	50-32-8	9.12E-08	1.28E-10	6.12E-09	1.20E-09	1.02E-09
Benzo(b)fluoranthene	205-99-2	1.18E-07	3.66E-11	3.28E-10	1.33E-09	5.03E-11
Benzo(b)fluorene	243-17-4	7.03E-08	1.86E-10	3.81E-10	1.29E-09	6.94E-10
Benzo(e)pyrene	192-97-20	2.48E-07	1.25E-09	7.46E-10	1.82E-09	1.40E-07
Benzo(g,h,i)perylene	191-24-2	1.29E-06	1.00E-09	--	8.72E-09	2.12E-07
Benzo(k)fluoranthene	207-08-9	1.03E-07	8.61E-11	1.85E-09	1.19E-09	4.72E-10
Chrysene	218-01-9	1.91E-07	4.16E-11	2.43E-09	3.76E-09	1.57E-11
Dibenz(a,c)anthracene	215-58-7	1.62E-07	9.54E-10	6.38E-08	8.41E-10	1.87E-08
Dibenz(a,h)anthracene	53-70-3	5.69E-08	6.71E-11	2.88E-09	3.86E-10	1.68E-08
Fluoranthene	206-44-0	9.27E-07	1.77E-09	8.38E-10	4.63E-08	2.47E-10
Fluorene	86-73-7	9.45E-08	4.55E-10	--	1.37E-08	6.60E-12
Indeno(1,2,3-cd)pyrene	193-39-5	2.74E-07	2.37E-10	1.89E-08	1.62E-09	1.14E-10
Perylene	198-55-0	5.36E-08	2.10E-10	3.04E-11	5.06E-10	1.04E-07
Phenanthrene	85-01-8	9.55E-07	3.00E-09	2.38E-10	9.26E-08	1.16E-10
Pyrene	129-00-0	4.75E-06	3.01E-09	7.58E-10	2.71E-07	3.40E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	1.77E-05	4.84E-10	--	1.20E-07	9.67E-10
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	1.47E-08	3.58E-13	5.30E-11	6.69E-11	2.12E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	5.43E-11	6.65E-09	--	7.55E-11	1.75E-12
Bromoform	75-25-2	2.06E-10	2.89E-07	--	3.40E-10	1.61E-13
Carbon Tetrachloride	56-23-5	1.48E-11	2.00E-09	--	1.38E-11	6.25E-13
Chloroform	67-66-3	2.43E-11	2.19E-09	--	6.57E-11	8.44E-13
Dichloromethane	75-09-2	4.36E-09	6.82E-07	--	2.99E-08	8.79E-11
O-Terphenyl	84-15-1	3.01E-07	5.83E-10	--	7.51E-09	4.59E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.12E-09	7.51E-07	--	1.56E-09	3.70E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	4.27E-08	2.63E-10	--	2.78E-09	1.16E-12
1,2,4-Trichlorobenzene	120-82-1	1.01E-09	2.56E-10	--	1.90E-10	3.04E-13
1,2-Dichlorobenzene	95-50-1	1.35E-08	1.03E-08	--	5.83E-09	1.94E-10
Hexachlorobenzene	118-74-1	1.83E-08	3.15E-10	--	6.14E-10	7.94E-12
Pentachlorobenzene	608-93-5	6.64E-07	8.00E-10	--	2.64E-08	2.77E-11
Pentachlorophenol	87-86-5	3.12E-07	2.60E-07	--	1.36E-08	1.05E-06
Inorganics						
Antimony	7440-36-0	1.79E-04	3.69E-06	7.20E-06	5.69E-06	--
Arsenic	7440-38-2	1.77E-05	5.68E-07	1.10E-06	1.12E-07	--
Barium	7440-39-3	1.26E-04	2.85E-06	5.55E-06	4.05E-06	--
Beryllium	7440-41-7	1.12E-04	2.17E-07	8.75E-07	2.90E-07	--
Boron	7440-42-8	6.95E-04	2.07E-04	4.02E-04	1.57E-03	--
Cadmium	7440-43-9	7.41E-04	9.27E-06	1.84E-05	9.26E-05	--
Chromium (Total)	7440-47-3	6.23E-05	3.04E-06	5.91E-06	3.04E-07	--
Chromium VI	18540-29-9	8.87E-06	4.33E-07	8.41E-07	4.33E-08	--
Cobalt	7440-48-4	3.77E-04	7.81E-06	1.52E-05	3.27E-06	--
Lead	7439-92-1	1.72E-02	3.09E-05	1.31E-04	2.34E-04	--
Mercury - Inorganic	7487-94-7	1.40E-03	3.04E-07	1.77E-06	2.03E-05	6.97E-06
Methyl Mercury	22967-92-6	4.51E-05	1.28E-09	4.99E-07	1.32E-06	1.97E-06
Nickel	7440-02-0	8.09E-03	1.16E-04	2.29E-04	7.53E-05	--
Phosphorus	7723-14-0	2.42E-04	6.23E-05	1.21E-04	8.49E-04	--
Selenium	7782-49-2	3.57E-06	6.50E-07	1.26E-06	6.96E-08	--
Silver	7440-22-4	4.10E-05	4.54E-06	8.80E-06	5.65E-06	--
Thallium	7440-28-0	3.93E-03	5.18E-05	1.02E-04	3.37E-06	--
Tin	7440-31-5	4.26E-03	1.81E-05	4.62E-05	3.85E-05	--
Vanadium	7440-62-2	4.06E-04	6.88E-07	3.05E-06	1.35E-06	--
Zinc	7440-66-6	1.77E-02	2.67E-04	5.24E-04	1.72E-03	--

Calculated Exposure Point Concentrations for the Oshawa Subdivision Receptor Cluster
Normal Operations - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	2.02E-08	1.56E-11	6.29E-11	7.41E-11	2.41E-11	3.93E-11	1.12E-10	6.40E-11
Acenaphthylene	208-96-8	1.42E-07	3.67E-12	4.44E-11	2.12E-11	6.34E-12	9.64E-12	2.68E-11	1.53E-11
Anthracene	120-12-7	1.41E-10	1.10E-11	9.41E-11	5.48E-11	1.65E-11	3.20E-11	9.71E-11	5.55E-11
Benz(a)anthracene	56-55-3	4.88E-11	4.32E-11	7.41E-10	1.24E-10	3.82E-11	1.98E-11	3.95E-11	2.26E-11
Benzo(a)fluorene	30777-18-5	3.44E-09	3.04E-11	2.90E-09	1.75E-10	5.18E-11	3.80E-11	8.88E-11	5.08E-11
Benzo(a)pyrene	50-32-8	5.52E-11	1.56E-10	6.39E-09	5.95E-10	1.88E-10	6.34E-11	6.24E-11	3.57E-11
Benzo(b)fluoranthene	205-99-2	1.36E-09	1.17E-11	2.43E-09	5.57E-11	1.47E-11	2.42E-11	7.67E-11	4.38E-11
Benzo(b)fluorene	243-17-4	4.30E-09	4.57E-11	5.23E-09	3.18E-10	9.87E-11	4.11E-11	5.53E-11	3.16E-11
Benzo(e)pyrene	192-97-20	1.32E-08	5.75E-09	1.72E-07	4.48E-08	1.43E-08	3.81E-09	1.38E-10	7.87E-11
Benzo(g,h,i)perylene	191-24-2	6.71E-09	8.48E-09	1.56E-07	6.61E-08	2.11E-08	5.75E-09	6.87E-10	3.92E-10
Benzo(k)fluoranthene	207-08-9	6.29E-11	5.60E-11	5.41E-09	2.52E-10	7.78E-11	3.78E-11	6.76E-11	3.86E-11
Chrysene	218-01-9	1.81E-10	5.32E-11	1.04E-09	1.42E-10	4.01E-11	4.88E-11	1.46E-10	8.35E-11
Dibenz(a,c)anthracene	215-58-7	2.78E-09	1.47E-09	2.38E-07	6.67E-09	2.13E-09	5.60E-10	7.73E-11	4.42E-11
Dibenz(a,h)anthracene	53-70-3	2.30E-11	7.13E-10	1.06E-08	5.32E-09	1.70E-09	4.55E-10	3.04E-11	1.74E-11
Fluoranthene	206-44-0	1.39E-09	1.01E-10	8.86E-09	5.43E-10	1.53E-10	2.80E-10	8.64E-10	4.94E-10
Fluorene	86-73-7	1.79E-10	1.36E-11	3.61E-10	7.27E-11	2.21E-11	3.69E-11	1.07E-10	6.09E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.45E-10	2.59E-10	4.67E-08	5.29E-10	1.63E-10	7.27E-11	1.38E-10	7.87E-11
Perylene	198-55-0	1.01E-09	4.64E-09	1.87E-08	3.62E-08	1.16E-08	3.06E-09	3.27E-11	1.87E-11
Phenanthrene	85-01-8	1.75E-09	1.18E-10	4.75E-09	6.19E-10	1.85E-10	3.33E-10	9.96E-10	5.69E-10
Pyrene	129-00-0	6.88E-09	4.35E-10	1.20E-08	2.33E-09	6.55E-10	1.43E-09	4.50E-09	2.57E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.69E-07	4.81E-08	1.24E-04	3.49E-07	7.19E-08	2.69E-07	9.43E-09	5.39E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	1.51E-10	1.54E-10	**1.11E-08**	8.81E-10	2.53E-10	2.37E-10	6.48E-12	3.70E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	4.81E-09	1.97E-10	1.05E-08	2.55E-09	5.38E-10	4.08E-10	6.99E-12	4.00E-12
Bromoform	75-25-2	2.53E-09	7.50E-09	3.40E-07	9.45E-08	1.99E-08	1.51E-08	2.57E-10	1.47E-10
Carbon Tetrachloride	56-23-5	1.41E-09	8.56E-11	6.34E-09	1.11E-09	2.34E-10	1.77E-10	3.03E-12	1.73E-12
Chloroform	67-66-3	2.45E-09	3.55E-11	1.10E-09	4.60E-10	9.72E-11	7.41E-11	1.27E-12	7.29E-13
Dichloromethane	75-09-2	1.57E-06	3.76E-09	6.82E-08	4.86E-08	1.03E-08	7.86E-09	1.35E-10	7.74E-11
O-Terphenyl	84-15-1	6.75E-09	4.15E-09	9.66E-07	3.15E-08	8.97E-09	9.27E-09	2.51E-10	1.44E-10
Trichlorofluoromethane (FREON 11)	75-69-4	9.13E-08	2.27E-08	1.19E-06	2.89E-07	6.09E-08	4.62E-08	7.88E-10	4.51E-10
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	4.47E-08	4.82E-10	8.33E-08	3.21E-09	8.35E-10	1.50E-09	4.44E-11	2.54E-11
1,2,4-Trichlorobenzene	120-82-1	7.80E-10	5.41E-11	1.61E-08	6.14E-10	1.38E-10	1.26E-10	2.61E-12	1.49E-12
1,2-Dichlorobenzene	95-50-1	3.32E-07	1.14E-09	1.24E-07	1.33E-08	2.97E-09	2.56E-09	5.02E-11	2.87E-11
Hexachlorobenzene	118-74-1	4.67E-09	2.17E-10	3.15E-07	1.87E-09	4.58E-10	6.44E-10	1.82E-11	1.04E-11
Pentachlorobenzene	608-93-5	1.22E-08	4.94E-09	5.93E-07	2.96E-08	7.69E-09	1.85E-08	5.96E-10	3.41E-10
Pentachlorophenol	87-86-5	5.10E-06	8.99E-09	1.46E-04	7.03E-08	2.24E-08	5.97E-09	1.28E-12	7.34E-13
Inorganics									
Antimony	7440-36-0	5.36E-06	3.96E-07	7.39E-04	1.15E-06	1.66E-07	2.14E-07	3.89E-09	2.22E-09
Arsenic	7440-38-2	1.42E-07	9.48E-08	2.84E-05	2.34E-07	9.90E-09	3.46E-08	6.58E-10	3.76E-10
Barium	7440-39-3	1.89E-06	4.23E-08	2.85E-05	1.18E-07	3.92E-07	2.04E-08	3.71E-10	2.12E-10
Beryllium	7440-41-7	1.69E-07	4.48E-08	2.17E-05	1.43E-07	1.58E-10	5.83E-08	1.86E-09	1.06E-09
Boron	7440-42-8	1.39E-03	1.89E-05	--	5.53E-05	1.78E-05	1.08E-05	1.82E-07	1.04E-07
Cadmium	7440-43-9	4.74E-05	1.80E-07	1.11E-02	6.14E-07	4.90E-08	1.75E-07	2.78E-06	6.55E-08
Chromium (Total)	7440-47-3	2.81E-07	1.34E-06	6.09E-04	3.17E-06	1.23E-06	4.00E-07	6.72E-09	3.84E-09
Chromium VI	18540-29-9	3.99E-08	1.91E-07	1.60E-05	4.51E-07	1.75E-07	5.69E-08	9.56E-10	5.46E-10
Cobalt	7440-48-4	2.64E-06	1.32E-05	7.81E-04	3.33E-05	9.73E-06	6.06E-06	1.39E-07	7.94E-08
Lead	7439-92-1	1.55E-04	2.50E-06	3.23E-03	8.55E-06	9.32E-06	3.13E-06	9.10E-08	5.20E-08
Mercury - Inorganic	7487-94-7	5.03E-05	7.39E-07	--	4.81E-06	2.09E-06	1.95E-08	7.99E-07	7.99E-07
Methyl Mercury	22967-92-6	4.46E-06	1.97E-08	8.17E-04	6.49E-08	3.78E-08	1.18E-10	4.16E-09	4.16E-09
Nickel	7440-02-0	6.47E-05	6.25E-05	1.81E-02	1.67E-04	3.82E-05	3.55E-05	8.68E-07	4.96E-07
Phosphorus	7723-14-0	8.49E-04	3.93E-04	--	1.16E-03	3.87E-04	3.20E-04	7.29E-06	4.16E-06
Selenium	7782-49-2	7.86E-08	1.16E-07	1.10E-04	2.66E-07	9.96E-07	1.69E-06	1.45E-07	1.45E-07
Silver	7440-22-4	4.10E-06	1.21E-06	4.02E-04	3.04E-06	2.96E-05	3.79E-07	4.56E-09	2.61E-09
Thallium	7440-28-0	1.57E-06	1.77E-04	--	4.59E-04	3.09E-05	1.01E-04	2.67E-06	1.53E-06
Tin	7440-31-5	2.55E-05	1.96E-04	5.42E-02	6.13E-04	1.68E-04	2.03E-04	5.89E-06	3.37E-06
Vanadium	7440-62-2	1.22E-06	3.82E-07	1.10E-04	1.21E-06	3.10E-07	5.23E-07	1.70E-08	9.71E-09
Zinc	7440-66-6	1.59E-02	3.06E-06	2.49E-01	9.65E-06	5.08E-06	2.43E-06	5.26E-06	5.26E-06

Calculated Exposure Point Concentrations for the Port Darlington Receptor Cluster
Normal Operations - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	4.33E-08	1.58E-10	--	9.35E-09	5.23E-11
Acenaphthylene	208-96-8	1.01E-08	8.86E-11	--	1.91E-09	1.01E-10
Anthracene	120-12-7	4.27E-08	5.94E-11	1.08E-11	4.15E-09	1.23E-12
Benz(a)anthracene	56-55-3	2.35E-08	2.95E-11	1.03E-09	4.63E-10	7.93E-11
Benzo(a)fluorene	30777-18-5	4.64E-08	2.30E-10	2.94E-10	1.36E-09	1.84E-10
Benzo(a)pyrene	50-32-8	4.16E-08	1.28E-10	3.23E-09	5.49E-10	7.14E-10
Benzo(b)fluoranthene	205-99-2	5.40E-08	3.66E-11	1.73E-10	6.05E-10	3.51E-11
Benzo(b)fluorene	243-17-4	3.21E-08	1.86E-10	2.01E-10	5.90E-10	4.84E-10
Benzo(e)pyrene	192-97-20	1.13E-07	1.25E-09	3.94E-10	8.31E-10	9.74E-08
Benzo(g,h,i)perylene	191-24-2	5.87E-07	1.00E-09	--	3.98E-09	1.48E-07
Benzo(k)fluoranthene	207-08-9	4.72E-08	8.61E-11	9.76E-10	5.43E-10	3.30E-10
Chrysene	218-01-9	8.72E-08	4.16E-11	1.28E-09	1.72E-09	1.10E-11
Dibenz(a,c)anthracene	215-58-7	7.39E-08	9.54E-10	3.37E-08	3.84E-10	1.30E-08
Dibenz(a,h)anthracene	53-70-3	2.60E-08	6.71E-11	1.52E-09	1.76E-10	1.17E-08
Fluoranthene	206-44-0	4.23E-07	1.77E-09	4.42E-10	2.11E-08	1.72E-10
Fluorene	86-73-7	4.31E-08	4.55E-10	--	6.24E-09	4.61E-12
Indeno(1,2,3-cd)pyrene	193-39-5	1.25E-07	2.37E-10	9.97E-09	7.41E-10	7.97E-11
Perylene	198-55-0	2.44E-08	2.10E-10	1.61E-11	2.31E-10	7.26E-08
Phenanthrene	85-01-8	4.35E-07	3.00E-09	1.26E-10	4.22E-08	8.08E-11
Pyrene	129-00-0	2.17E-06	3.01E-09	4.00E-10	1.24E-07	2.37E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	8.09E-06	4.84E-10	--	5.48E-08	6.75E-10
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	5.09E-09	3.58E-13	1.98E-11	2.32E-11	1.48E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	2.48E-11	6.65E-09	--	3.44E-11	1.22E-12
Bromoform	75-25-2	9.39E-11	2.89E-07	--	1.55E-10	1.12E-13
Carbon Tetrachloride	56-23-5	6.73E-12	2.00E-09	--	6.28E-12	4.36E-13
Chloroform	67-66-3	1.11E-11	2.19E-09	--	2.99E-11	5.89E-13
Dichloromethane	75-09-2	1.99E-09	6.82E-07	--	1.36E-08	6.14E-11
O-Terphenyl	84-15-1	1.37E-07	5.83E-10	--	3.42E-09	3.21E-10
Trichlorofluoromethane (FREON 11)	75-69-4	5.12E-10	7.51E-07	--	7.12E-10	2.58E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.95E-08	2.63E-10	--	1.27E-09	8.11E-13
1,2,4-Trichlorobenzene	120-82-1	4.59E-10	2.56E-10	--	8.67E-11	2.12E-13
1,2-Dichlorobenzene	95-50-1	6.17E-09	1.03E-08	--	2.66E-09	1.36E-10
Hexachlorobenzene	118-74-1	8.36E-09	3.15E-10	--	2.80E-10	5.54E-12
Pentachlorobenzene	608-93-5	3.03E-07	8.00E-10	--	1.20E-08	1.93E-11
Pentachlorophenol	87-86-5	1.42E-07	2.60E-07	--	6.22E-09	7.34E-07
Inorganics						
Antimony	7440-36-0	6.16E-05	3.69E-06	2.69E-06	1.97E-06	--
Arsenic	7440-38-2	6.11E-06	5.68E-07	4.13E-07	3.87E-08	--
Barium	7440-39-3	4.34E-05	2.85E-06	2.08E-06	1.40E-06	--
Beryllium	7440-41-7	3.88E-05	2.17E-07	3.27E-07	1.00E-07	--
Boron	7440-42-8	2.40E-04	2.07E-04	1.50E-04	5.41E-04	--
Cadmium	7440-43-9	2.56E-04	9.27E-06	6.88E-06	3.20E-05	--
Chromium (Total)	7440-47-3	2.15E-05	3.04E-06	2.21E-06	1.05E-07	--
Chromium VI	18540-29-9	3.06E-06	4.33E-07	3.14E-07	1.49E-08	--
Cobalt	7440-48-4	1.30E-04	7.81E-06	5.69E-06	1.13E-06	--
Lead	7439-92-1	5.95E-03	3.09E-05	4.91E-05	8.09E-05	--
Mercury - Inorganic	7487-94-7	8.61E-04	3.04E-07	6.62E-07	1.25E-05	4.87E-06
Methyl Mercury	22967-92-6	1.56E-05	1.28E-09	1.87E-07	4.58E-07	1.37E-06
Nickel	7440-02-0	2.79E-03	1.16E-04	8.56E-05	2.60E-05	--
Phosphorus	7723-14-0	8.37E-05	6.23E-05	4.52E-05	2.93E-04	--
Selenium	7782-49-2	1.23E-06	6.50E-07	4.72E-07	2.40E-08	--
Silver	7440-22-4	1.41E-05	4.54E-06	3.29E-06	1.95E-06	--
Thallium	7440-28-0	1.36E-03	5.18E-05	3.83E-05	1.16E-06	--
Tin	7440-31-5	1.47E-03	1.81E-05	1.73E-05	1.33E-05	--
Vanadium	7440-62-2	1.40E-04	6.88E-07	1.14E-06	4.66E-07	--
Zinc	7440-66-6	6.12E-03	2.67E-04	1.96E-04	5.93E-04	--

Calculated Exposure Point Concentrations for the Port Darlington Receptor Cluster
Normal Operations - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	9.21E-09	1.56E-11	6.29E-11	3.79E-11	1.19E-11	1.86E-11	5.22E-11	2.98E-11
Acenaphthylene	208-96-8	6.45E-08	3.67E-12	4.44E-11	1.38E-11	3.77E-12	5.05E-12	1.33E-11	7.62E-12
Anthracene	120-12-7	6.44E-11	1.10E-11	9.41E-11	2.67E-11	7.91E-12	1.49E-11	4.47E-11	2.55E-11
Benz(a)anthracene	56-55-3	2.23E-11	4.32E-11	7.41E-10	7.29E-11	2.25E-11	1.04E-11	1.82E-11	1.04E-11
Benzo(a)fluorene	30777-18-5	1.57E-09	3.04E-11	2.90E-09	1.20E-10	3.52E-11	2.17E-11	4.41E-11	2.52E-11
Benzo(a)pyrene	50-32-8	2.52E-11	1.56E-10	6.39E-09	3.79E-10	1.20E-10	3.79E-11	2.87E-11	1.64E-11
Benzo(b)fluoranthene	205-99-2	6.22E-10	1.17E-11	2.43E-09	3.14E-11	8.52E-12	1.16E-11	3.52E-11	2.01E-11
Benzo(b)fluorene	243-17-4	1.96E-09	4.57E-11	5.23E-09	2.22E-10	6.86E-11	2.59E-11	2.77E-11	1.58E-11
Benzo(e)pyrene	192-97-20	6.01E-09	5.75E-09	1.72E-07	3.13E-08	9.99E-09	2.65E-09	6.36E-11	3.63E-11
Benzo(g,h,i)perylene	191-24-2	3.06E-09	8.48E-09	1.56E-07	4.61E-08	1.47E-08	3.97E-09	3.15E-10	1.80E-10
Benzo(k)fluoranthene	207-08-9	2.87E-11	5.60E-11	5.41E-09	1.61E-10	5.02E-11	2.11E-11	3.09E-11	1.77E-11
Chrysene	218-01-9	8.27E-11	5.32E-11	1.04E-09	7.30E-11	2.08E-11	2.30E-11	6.70E-11	3.83E-11
Dibenz(a,c)anthracene	215-58-7	1.27E-09	1.47E-09	2.38E-07	4.41E-09	1.41E-09	3.70E-10	3.64E-11	2.08E-11
Dibenz(a,h)anthracene	53-70-3	1.05E-11	7.13E-10	1.06E-08	3.70E-09	1.18E-09	3.15E-10	1.39E-11	7.95E-12
Fluoranthene	206-44-0	6.32E-10	1.01E-10	8.86E-09	2.94E-10	8.21E-11	1.33E-10	4.00E-10	2.28E-10
Fluorene	86-73-7	8.16E-11	1.36E-11	3.61E-10	4.38E-11	1.24E-11	1.85E-11	5.14E-11	2.93E-11
Indeno(1,2,3-cd)pyrene	193-39-5	6.61E-11	2.59E-10	4.67E-08	2.83E-10	8.73E-11	3.62E-11	6.31E-11	3.61E-11
Perylene	198-55-0	4.59E-10	4.64E-09	1.87E-08	2.52E-08	8.06E-09	2.13E-09	1.51E-11	8.60E-12
Phenanthrene	85-01-8	7.98E-10	1.18E-10	4.75E-09	3.32E-10	9.59E-11	1.59E-10	4.65E-10	2.66E-10
Pyrene	129-00-0	3.14E-09	4.35E-10	1.20E-08	1.12E-09	3.15E-10	6.58E-10	2.06E-09	1.18E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	7.75E-08	4.81E-08	1.24E-04	1.68E-07	3.54E-08	1.24E-07	4.32E-09	2.47E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	5.23E-11	1.54E-10	**1.11E-08**	5.04E-10	1.51E-10	9.87E-11	2.25E-12	1.28E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	2.19E-09	1.97E-10	1.05E-08	4.70E-09	9.90E-10	7.50E-10	1.28E-11	7.32E-12
Bromoform	75-25-2	1.16E-09	7.50E-09	3.40E-07	1.76E-07	3.70E-08	2.80E-08	4.78E-10	2.73E-10
Carbon Tetrachloride	56-23-5	6.41E-10	8.56E-11	6.34E-09	2.05E-09	4.31E-10	3.27E-10	5.57E-12	3.19E-12
Chloroform	67-66-3	1.12E-09	3.55E-11	1.10E-09	8.45E-10	1.78E-10	1.35E-10	2.31E-12	1.32E-12
Dichloromethane	75-09-2	7.16E-07	3.76E-09	6.82E-08	8.93E-08	1.88E-08	1.43E-08	2.44E-10	1.40E-10
O-Terphenyl	84-15-1	3.08E-09	4.15E-09	9.66E-07	2.22E-08	6.23E-09	5.14E-09	1.23E-10	7.06E-11
Trichlorofluoromethane (FREON 11)	75-69-4	4.16E-08	2.27E-08	1.19E-06	5.37E-07	1.13E-07	8.56E-08	1.46E-09	8.35E-10
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	2.04E-08	4.82E-10	8.33E-08	2.38E-09	5.74E-10	8.27E-10	2.27E-11	1.30E-11
1,2,4-Trichlorobenzene	120-82-1	3.56E-10	5.41E-11	1.61E-08	9.70E-10	2.09E-10	1.67E-10	3.06E-12	1.75E-12
1,2-Dichlorobenzene	95-50-1	1.51E-07	1.14E-09	1.24E-07	2.23E-08	4.77E-09	3.75E-09	6.70E-11	3.83E-11
Hexachlorobenzene	118-74-1	2.13E-09	2.17E-10	3.15E-07	2.08E-09	4.75E-10	4.83E-10	1.14E-11	6.52E-12
Pentachlorobenzene	608-93-5	5.56E-09	4.94E-09	5.93E-07	1.70E-08	4.27E-09	8.97E-09	2.81E-10	1.60E-10
Pentachlorophenol	87-86-5	2.33E-06	8.99E-09	1.46E-04	4.90E-08	1.56E-08	4.15E-09	5.95E-13	3.40E-13
Inorganics									
Antimony	7440-36-0	1.85E-06	3.96E-07	7.39E-04	4.15E-07	5.99E-08	7.51E-08	1.34E-09	7.67E-10
Arsenic	7440-38-2	4.89E-08	9.48E-08	2.84E-05	8.58E-08	3.65E-09	1.23E-08	2.27E-10	1.30E-10
Barium	7440-39-3	6.51E-07	4.23E-08	2.85E-05	4.25E-08	1.42E-07	7.18E-09	1.28E-10	7.32E-11
Beryllium	7440-41-7	5.83E-08	4.48E-08	2.17E-05	5.16E-08	5.75E-11	2.03E-08	6.42E-10	3.67E-10
Boron	7440-42-8	4.80E-04	1.89E-05	--	1.98E-05	6.40E-06	3.78E-06	6.28E-08	3.59E-08
Cadmium	7440-43-9	1.64E-05	1.80E-07	1.11E-02	2.17E-07	1.73E-08	6.09E-08	9.61E-07	2.26E-08
Chromium (Total)	7440-47-3	9.68E-08	1.34E-06	6.09E-04	1.17E-06	4.56E-07	1.43E-07	2.32E-09	1.33E-09
Chromium VI	18540-29-9	1.38E-08	1.91E-07	1.60E-05	1.66E-07	6.48E-08	2.04E-08	3.30E-10	1.89E-10
Cobalt	7440-48-4	9.12E-07	1.32E-05	7.81E-04	1.22E-05	3.59E-06	2.14E-06	4.80E-08	2.74E-08
Lead	7439-92-1	5.36E-05	2.50E-06	3.23E-03	3.06E-06	3.34E-06	1.09E-06	3.15E-08	1.80E-08
Mercury - Inorganic	7487-94-7	3.10E-05	7.39E-07	--	2.83E-06	1.20E-06	1.20E-08	4.92E-07	4.92E-07
Methyl Mercury	22967-92-6	1.54E-06	1.97E-08	8.17E-04	2.87E-08	1.72E-08	4.34E-11	1.44E-09	1.44E-09
Nickel	7440-02-0	2.23E-05	6.25E-05	1.81E-02	6.09E-05	1.40E-05	1.25E-05	3.00E-07	1.71E-07
Phosphorus	7723-14-0	2.93E-04	3.93E-04	--	4.17E-04	1.38E-04	1.11E-04	2.51E-06	1.44E-06
Selenium	7782-49-2	2.71E-08	1.16E-07	1.10E-04	9.86E-08	3.70E-07	6.13E-07	5.02E-08	5.02E-08
Silver	7440-22-4	1.41E-06	1.21E-06	4.02E-04	1.11E-06	1.09E-05	1.35E-07	1.57E-09	9.00E-10
Thallium	7440-28-0	5.43E-07	1.77E-04	--	1.68E-04	1.14E-05	3.56E-05	9.23E-07	5.27E-07
Tin	7440-31-5	8.82E-06	1.96E-04	5.42E-02	2.21E-04	6.09E-05	7.08E-05	2.04E-06	1.16E-06
Vanadium	7440-62-2	4.21E-07	3.82E-07	1.10E-04	4.39E-07	1.13E-07	1.82E-07	5.88E-09	3.36E-09
Zinc	7440-66-6	5.51E-03	3.06E-06	2.49E-01	3.44E-06	1.81E-06	8.49E-07	1.82E-06	1.82E-06

Calculated Exposure Point Concentrations for the Solina Receptor Cluster
Normal Operations - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.41E-07	1.58E-10	--	3.04E-08	9.07E-11
Acenaphthylene	208-96-8	3.30E-08	8.86E-11	--	6.23E-09	1.75E-10
Anthracene	120-12-7	1.39E-07	5.94E-11	3.01E-11	1.35E-08	2.13E-12
Benz(a)anthracene	56-55-3	7.64E-08	2.95E-11	2.86E-09	1.50E-09	1.38E-10
Benzo(a)fluorene	30777-18-5	1.51E-07	2.30E-10	8.16E-10	4.42E-09	3.19E-10
Benzo(a)pyrene	50-32-8	1.35E-07	1.28E-10	8.97E-09	1.78E-09	1.24E-09
Benzo(b)fluoranthene	205-99-2	1.76E-07	3.66E-11	4.81E-10	1.97E-09	6.08E-11
Benzo(b)fluorene	243-17-4	1.04E-07	1.86E-10	5.59E-10	1.92E-09	8.40E-10
Benzo(e)pyrene	192-97-20	3.68E-07	1.25E-09	1.09E-09	2.70E-09	1.69E-07
Benzo(g,h,i)perylene	191-24-2	1.91E-06	1.00E-09	--	1.29E-08	2.56E-07
Benzo(k)fluoranthene	207-08-9	1.53E-07	8.61E-11	2.71E-09	1.76E-09	5.72E-10
Chrysene	218-01-9	2.84E-07	4.16E-11	3.56E-09	5.59E-09	1.91E-11
Dibenz(a,c)anthracene	215-58-7	2.40E-07	9.54E-10	9.35E-08	1.25E-09	2.26E-08
Dibenz(a,h)anthracene	53-70-3	8.44E-08	6.71E-11	4.22E-09	5.72E-10	2.04E-08
Fluoranthene	206-44-0	1.38E-06	1.77E-09	1.23E-09	6.86E-08	2.99E-10
Fluorene	86-73-7	1.40E-07	4.55E-10	--	2.03E-08	7.99E-12
Indeno(1,2,3-cd)pyrene	193-39-5	4.06E-07	2.37E-10	2.77E-08	2.41E-09	1.38E-10
Perylene	198-55-0	7.95E-08	2.10E-10	4.46E-11	7.51E-10	1.26E-07
Phenanthrene	85-01-8	1.42E-06	3.00E-09	3.49E-10	1.37E-07	1.40E-10
Pyrene	129-00-0	7.05E-06	3.01E-09	1.11E-09	4.02E-07	4.11E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	2.63E-05	4.84E-10	--	1.78E-07	1.17E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	1.78E-08	3.58E-13	5.70E-11	8.10E-11	2.56E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	8.05E-11	6.65E-09	--	1.12E-10	2.12E-12
Bromoform	75-25-2	3.06E-10	2.89E-07	--	5.04E-10	1.95E-13
Carbon Tetrachloride	56-23-5	2.19E-11	2.00E-09	--	2.04E-11	7.56E-13
Chloroform	67-66-3	3.61E-11	2.19E-09	--	9.74E-11	1.02E-12
Dichloromethane	75-09-2	6.47E-09	6.82E-07	--	4.44E-08	1.06E-10
O-Terphenyl	84-15-1	4.46E-07	5.83E-10	--	1.11E-08	5.56E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.67E-09	7.51E-07	--	2.32E-09	4.48E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	6.33E-08	2.63E-10	--	4.12E-09	1.41E-12
1,2,4-Trichlorobenzene	120-82-1	1.49E-09	2.56E-10	--	2.82E-10	3.68E-13
1,2-Dichlorobenzene	95-50-1	2.01E-08	1.03E-08	--	8.65E-09	2.35E-10
Hexachlorobenzene	118-74-1	2.72E-08	3.15E-10	--	9.11E-10	9.60E-12
Pentachlorobenzene	608-93-5	9.84E-07	8.00E-10	--	3.92E-08	3.35E-11
Pentachlorophenol	87-86-5	4.63E-07	2.60E-07	--	2.02E-08	1.27E-06
Inorganics						
Antimony	7440-36-0	2.16E-04	3.69E-06	7.74E-06	6.89E-06	--
Arsenic	7440-38-2	2.14E-05	5.68E-07	1.19E-06	1.36E-07	--
Barium	7440-39-3	1.52E-04	2.85E-06	5.97E-06	4.90E-06	--
Beryllium	7440-41-7	1.36E-04	2.17E-07	9.41E-07	3.51E-07	--
Boron	7440-42-8	8.41E-04	2.07E-04	4.32E-04	1.89E-03	--
Cadmium	7440-43-9	8.97E-04	9.27E-06	1.98E-05	1.12E-04	--
Chromium (Total)	7440-47-3	7.54E-05	3.04E-06	6.36E-06	3.68E-07	--
Chromium VI	18540-29-9	1.07E-05	4.33E-07	9.04E-07	5.24E-08	--
Cobalt	7440-48-4	4.57E-04	7.81E-06	1.64E-05	3.95E-06	--
Lead	7439-92-1	2.08E-02	3.09E-05	1.41E-04	2.84E-04	--
Mercury - Inorganic	7487-94-7	1.94E-03	3.04E-07	1.90E-06	2.82E-05	8.43E-06
Methyl Mercury	22967-92-6	5.46E-05	1.28E-09	5.37E-07	1.60E-06	2.38E-06
Nickel	7440-02-0	9.79E-03	1.16E-04	2.46E-04	9.11E-05	--
Phosphorus	7723-14-0	2.93E-04	6.23E-05	1.30E-04	1.03E-03	--
Selenium	7782-49-2	4.32E-06	6.50E-07	1.36E-06	8.42E-08	--
Silver	7440-22-4	4.95E-05	4.54E-06	9.47E-06	6.84E-06	--
Thallium	7440-28-0	4.75E-03	5.18E-05	1.10E-04	4.08E-06	--
Tin	7440-31-5	5.15E-03	1.81E-05	4.97E-05	4.66E-05	--
Vanadium	7440-62-2	4.92E-04	6.88E-07	3.29E-06	1.63E-06	--
Zinc	7440-66-6	2.14E-02	2.67E-04	5.64E-04	2.08E-03	--

Calculated Exposure Point Concentrations for the Solina Receptor Cluster
Normal Operations - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	3.00E-08	1.56E-11	6.29E-11	1.10E-10	3.58E-11	5.84E-11	1.66E-10	9.49E-11
Acenaphthylene	208-96-8	2.10E-07	3.67E-12	4.44E-11	3.15E-11	9.40E-12	1.43E-11	3.98E-11	2.28E-11
Anthracene	120-12-7	2.09E-10	1.10E-11	9.41E-11	8.13E-11	2.45E-11	4.75E-11	1.44E-10	8.23E-11
Benz(a)anthracene	56-55-3	7.24E-11	4.32E-11	7.41E-10	1.71E-10	5.25E-11	2.83E-11	5.86E-11	3.35E-11
Benzo(a)fluorene	30777-18-5	5.09E-09	3.04E-11	2.90E-09	2.33E-10	6.81E-11	5.45E-11	1.33E-10	7.59E-11
Benzo(a)pyrene	50-32-8	8.18E-11	1.56E-10	6.39E-09	7.75E-10	2.44E-10	8.51E-11	9.28E-11	5.30E-11
Benzo(b)fluoranthene	205-99-2	2.02E-09	1.17E-11	2.43E-09	7.79E-11	2.03E-11	3.56E-11	1.14E-10	6.51E-11
Benzo(b)fluorene	243-17-4	6.38E-09	4.57E-11	5.23E-09	3.99E-10	1.23E-10	5.50E-11	8.29E-11	4.73E-11
Benzo(e)pyrene	192-97-20	1.95E-08	5.75E-09	1.72E-07	5.42E-08	1.73E-08	4.63E-09	2.05E-10	1.17E-10
Benzo(g,h,i)perylene	191-24-2	9.95E-09	8.48E-09	1.56E-07	8.01E-08	2.55E-08	7.01E-09	1.02E-09	5.83E-10
Benzo(k)fluoranthene	207-08-9	9.34E-11	5.60E-11	5.41E-09	3.26E-10	1.00E-10	5.20E-11	1.00E-10	5.74E-11
Chrysene	218-01-9	2.69E-10	5.32E-11	1.04E-09	2.08E-10	5.86E-11	7.23E-11	2.17E-10	1.24E-10
Dibenz(a,c)anthracene	215-58-7	4.13E-09	1.47E-09	2.38E-07	8.45E-09	2.69E-09	7.10E-10	1.16E-10	6.61E-11
Dibenz(a,h)anthracene	53-70-3	3.42E-11	7.13E-10	1.06E-08	6.46E-09	2.06E-09	5.55E-10	4.51E-11	2.58E-11
Fluoranthene	206-44-0	2.06E-09	1.01E-10	8.86E-09	7.84E-10	2.19E-10	4.14E-10	1.28E-09	7.33E-10
Fluorene	86-73-7	2.65E-10	1.36E-11	3.61E-10	1.09E-10	3.30E-11	5.49E-11	1.58E-10	9.05E-11
Indeno(1,2,3-cd)pyrene	193-39-5	2.15E-10	2.59E-10	4.67E-08	7.69E-10	2.36E-10	1.07E-10	2.05E-10	1.17E-10
Perylene	198-55-0	1.49E-09	4.64E-09	1.87E-08	4.38E-08	1.40E-08	3.70E-09	4.86E-11	2.78E-11
Phenanthrene	85-01-8	2.59E-09	1.18E-10	4.75E-09	9.17E-10	2.73E-10	4.95E-10	1.48E-09	8.46E-10
Pyrene	129-00-0	1.02E-08	4.35E-10	1.20E-08	3.42E-09	9.62E-10	2.12E-09	6.68E-09	3.82E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	2.52E-07	4.81E-08	1.24E-04	5.11E-07	1.04E-07	3.99E-07	1.40E-08	8.01E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	1.83E-10	1.54E-10	**1.11E-08**	1.05E-09	3.02E-10	2.86E-10	7.86E-12	4.49E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	7.14E-09	1.97E-10	1.05E-08	4.09E-09	8.63E-10	6.55E-10	1.12E-11	6.41E-12
Bromoform	75-25-2	3.76E-09	7.50E-09	3.40E-07	1.52E-07	3.20E-08	2.42E-08	4.13E-10	2.36E-10
Carbon Tetrachloride	56-23-5	2.08E-09	8.56E-11	6.34E-09	1.78E-09	3.75E-10	2.85E-10	4.87E-12	2.78E-12
Chloroform	67-66-3	3.63E-09	3.55E-11	1.10E-09	7.32E-10	1.55E-10	1.18E-10	2.03E-12	1.16E-12
Dichloromethane	75-09-2	2.33E-06	3.76E-09	6.82E-08	7.68E-08	1.62E-08	1.24E-08	2.14E-10	1.22E-10
O-Terphenyl	84-15-1	1.00E-08	4.15E-09	9.66E-07	4.25E-08	1.18E-08	1.35E-08	3.75E-10	2.14E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.35E-07	2.27E-08	1.19E-06	4.65E-07	9.79E-08	7.42E-08	1.27E-09	7.24E-10
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	6.64E-08	4.82E-10	8.33E-08	4.66E-09	1.21E-09	2.20E-09	6.56E-11	3.75E-11
1,2,4-Trichlorobenzene	120-82-1	1.16E-09	5.41E-11	1.61E-08	9.49E-10	2.13E-10	1.93E-10	3.98E-12	2.27E-12
1,2-Dichlorobenzene	95-50-1	4.93E-07	1.14E-09	1.24E-07	2.10E-08	4.66E-09	3.98E-09	7.77E-11	4.44E-11
Hexachlorobenzene	118-74-1	6.92E-09	2.17E-10	3.15E-07	2.80E-09	6.76E-10	9.66E-10	2.73E-11	1.56E-11
Pentachlorobenzene	608-93-5	1.81E-08	4.94E-09	5.93E-07	4.39E-08	1.14E-08	2.75E-08	8.85E-10	5.06E-10
Pentachlorophenol	87-86-5	7.57E-06	8.99E-09	1.46E-04	8.52E-08	2.72E-08	7.23E-09	1.81E-12	1.03E-12
Inorganics									
Antimony	7440-36-0	6.48E-06	3.96E-07	7.39E-04	1.31E-06	1.88E-07	2.52E-07	4.68E-09	2.68E-09
Arsenic	7440-38-2	1.71E-07	9.48E-08	2.84E-05	2.56E-07	1.08E-08	3.98E-08	7.90E-10	4.51E-10
Barium	7440-39-3	2.28E-06	4.23E-08	2.85E-05	1.32E-07	4.40E-07	2.39E-08	4.47E-10	2.55E-10
Beryllium	7440-41-7	2.04E-07	4.48E-08	2.17E-05	1.63E-07	1.78E-10	6.99E-08	2.25E-09	1.28E-09
Boron	7440-42-8	1.68E-03	1.89E-05	--	6.31E-05	2.04E-05	1.28E-05	2.19E-07	1.25E-07
Cadmium	7440-43-9	5.74E-05	1.80E-07	1.11E-02	7.17E-07	5.72E-08	2.09E-07	3.36E-06	7.91E-08
Chromium (Total)	7440-47-3	3.39E-07	1.34E-06	6.09E-04	3.45E-06	1.33E-06	4.54E-07	8.03E-09	4.59E-09
Chromium VI	18540-29-9	4.83E-08	1.91E-07	1.60E-05	4.90E-07	1.89E-07	6.46E-08	1.14E-09	6.53E-10
Cobalt	7440-48-4	3.20E-06	1.32E-05	7.81E-04	3.67E-05	1.07E-05	7.05E-06	1.67E-07	9.55E-08
Lead	7439-92-1	1.88E-04	2.50E-06	3.23E-03	9.91E-06	1.07E-05	3.76E-06	1.10E-07	6.29E-08
Mercury - Inorganic	7487-94-7	7.00E-05	7.39E-07	--	6.39E-06	2.71E-06	2.69E-08	1.11E-06	1.11E-06
Methyl Mercury	22967-92-6	5.40E-06	1.97E-08	8.17E-04	7.43E-08	4.30E-08	1.41E-10	5.03E-09	5.03E-09
Nickel	7440-02-0	7.83E-05	6.25E-05	1.81E-02	1.86E-04	4.23E-05	4.16E-05	1.05E-06	5.98E-07
Phosphorus	7723-14-0	1.03E-03	3.93E-04	--	1.33E-03	4.43E-04	3.81E-04	8.79E-06	5.02E-06
Selenium	7782-49-2	9.50E-08	1.16E-07	1.10E-04	2.88E-07	1.08E-06	1.86E-06	1.70E-07	1.70E-07
Silver	7440-22-4	4.95E-06	1.21E-06	4.02E-04	3.36E-06	3.28E-05	4.34E-07	5.44E-09	3.11E-09
Thallium	7440-28-0	1.90E-06	1.77E-04	--	5.07E-04	3.38E-05	1.19E-04	3.22E-06	1.84E-06
Tin	7440-31-5	3.09E-05	1.96E-04	5.42E-02	6.99E-04	1.90E-04	2.42E-04	7.13E-06	4.07E-06
Vanadium	7440-62-2	1.48E-06	3.82E-07	1.10E-04	1.38E-06	3.48E-07	6.27E-07	2.06E-08	1.17E-08
Zinc	7440-66-6	1.93E-02	3.06E-06	2.49E-01	1.11E-05	5.84E-06	2.89E-06	6.35E-06	6.35E-06

Calculated Exposure Point Concentrations for the Tooley Residential Receptor Cluster

Normal Operations - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	2.50E-07	1.58E-10	--	5.41E-08	9.98E-11
Acenaphthylene	208-96-8	5.87E-08	8.86E-11	--	1.11E-08	1.92E-10
Anthracene	120-12-7	2.47E-07	5.94E-11	5.12E-11	2.40E-08	2.34E-12
Benz(a)anthracene	56-55-3	1.36E-07	2.95E-11	4.88E-09	2.67E-09	1.51E-10
Benzo(a)fluorene	30777-18-5	2.68E-07	2.30E-10	1.39E-09	7.87E-09	3.51E-10
Benzo(a)pyrene	50-32-8	2.40E-07	1.28E-10	1.53E-08	3.17E-09	1.36E-09
Benzo(b)fluoranthene	205-99-2	3.12E-07	3.66E-11	8.19E-10	3.49E-09	6.69E-11
Benzo(b)fluorene	243-17-4	1.85E-07	1.86E-10	9.52E-10	3.41E-09	9.24E-10
Benzo(e)pyrene	192-97-20	6.54E-07	1.25E-09	1.86E-09	4.80E-09	1.86E-07
Benzo(g,h,i)perylene	191-24-2	3.39E-06	1.00E-09	--	2.30E-08	2.82E-07
Benzo(k)fluoranthene	207-08-9	2.72E-07	8.61E-11	4.62E-09	3.13E-09	6.29E-10
Chrysene	218-01-9	5.03E-07	4.16E-11	6.07E-09	9.92E-09	2.10E-11
Dibenz(a,c)anthracene	215-58-7	4.27E-07	9.54E-10	1.59E-07	2.22E-09	2.49E-08
Dibenz(a,h)anthracene	53-70-3	1.50E-07	6.71E-11	7.20E-09	1.02E-09	2.24E-08
Fluoranthene	206-44-0	2.44E-06	1.77E-09	2.09E-09	1.22E-07	3.29E-10
Fluorene	86-73-7	2.49E-07	4.55E-10	--	3.61E-08	8.79E-12
Indeno(1,2,3-cd)pyrene	193-39-5	7.21E-07	2.37E-10	4.72E-08	4.28E-09	1.52E-10
Perylene	198-55-0	1.41E-07	2.10E-10	7.60E-11	1.33E-09	1.38E-07
Phenanthrene	85-01-8	2.52E-06	3.00E-09	5.95E-10	2.44E-07	1.54E-10
Pyrene	129-00-0	1.25E-05	3.01E-09	1.90E-09	7.13E-07	4.53E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	4.65E-05	4.84E-10	--	3.15E-07	1.29E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	3.31E-08	3.58E-13	1.03E-10	1.51E-10	2.82E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	1.43E-10	6.65E-09	--	1.99E-10	2.33E-12
Bromoform	75-25-2	5.43E-10	2.89E-07	--	8.96E-10	2.14E-13
Carbon Tetrachloride	56-23-5	3.89E-11	2.00E-09	--	3.63E-11	8.32E-13
Chloroform	67-66-3	6.41E-11	2.19E-09	--	1.73E-10	1.12E-12
Dichloromethane	75-09-2	1.15E-08	6.82E-07	--	7.89E-08	1.17E-10
O-Terphenyl	84-15-1	7.93E-07	5.83E-10	--	1.98E-08	6.12E-10
Trichlorofluoromethane (FREON 11)	75-69-4	2.96E-09	7.51E-07	--	4.12E-09	4.93E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.13E-07	2.63E-10	--	7.33E-09	1.55E-12
1,2,4-Trichlorobenzene	120-82-1	2.65E-09	2.56E-10	--	5.02E-10	4.04E-13
1,2-Dichlorobenzene	95-50-1	3.57E-08	1.03E-08	--	1.54E-08	2.58E-10
Hexachlorobenzene	118-74-1	4.83E-08	3.15E-10	--	1.62E-09	1.06E-11
Pentachlorobenzene	608-93-5	1.75E-06	8.00E-10	--	6.96E-08	3.68E-11
Pentachlorophenol	87-86-5	8.23E-07	2.60E-07	--	3.59E-08	1.40E-06
Inorganics						
Antimony	7440-36-0	4.03E-04	3.69E-06	1.40E-05	1.29E-05	--
Arsenic	7440-38-2	4.00E-05	5.68E-07	2.15E-06	2.53E-07	--
Barium	7440-39-3	2.84E-04	2.85E-06	1.08E-05	9.14E-06	--
Beryllium	7440-41-7	2.54E-04	2.17E-07	1.71E-06	6.54E-07	--
Boron	7440-42-8	1.57E-03	2.07E-04	7.84E-04	3.54E-03	--
Cadmium	7440-43-9	1.67E-03	9.27E-06	3.59E-05	2.09E-04	--
Chromium (Total)	7440-47-3	1.41E-04	3.04E-06	1.15E-05	6.87E-07	--
Chromium VI	18540-29-9	2.00E-05	4.33E-07	1.64E-06	9.77E-08	--
Cobalt	7440-48-4	8.52E-04	7.81E-06	2.97E-05	7.37E-06	--
Lead	7439-92-1	3.89E-02	3.09E-05	2.56E-04	5.28E-04	--
Mercury - Inorganic	7487-94-7	3.09E-03	3.04E-07	3.45E-06	4.49E-05	9.28E-06
Methyl Mercury	22967-92-6	1.02E-04	1.28E-09	9.74E-07	2.99E-06	2.62E-06
Nickel	7440-02-0	1.83E-02	1.16E-04	4.46E-04	1.70E-04	--
Phosphorus	7723-14-0	5.47E-04	6.23E-05	2.36E-04	1.92E-03	--
Selenium	7782-49-2	8.06E-06	6.50E-07	2.46E-06	1.57E-07	--
Silver	7440-22-4	9.25E-05	4.54E-06	1.72E-05	1.28E-05	--
Thallium	7440-28-0	8.87E-03	5.18E-05	2.00E-04	7.61E-06	--
Tin	7440-31-5	9.61E-03	1.81E-05	9.01E-05	8.69E-05	--
Vanadium	7440-62-2	9.17E-04	6.88E-07	5.96E-06	3.04E-06	--
Zinc	7440-66-6	4.00E-02	2.67E-04	1.02E-03	3.88E-03	--

Calculated Exposure Point Concentrations for the Tooley Residential Receptor Cluster
Normal Operations - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	5.33E-08	1.56E-11	6.29E-11	1.88E-10	6.20E-11	1.03E-10	2.93E-10	1.68E-10
Acenaphthylene	208-96-8	3.73E-07	3.67E-12	4.44E-11	4.53E-11	1.44E-11	2.38E-11	6.80E-11	3.89E-11
Anthracene	120-12-7	3.72E-10	1.10E-11	9.41E-11	1.40E-10	4.26E-11	8.38E-11	2.55E-10	1.46E-10
Benz(a)anthracene	56-55-3	1.29E-10	4.32E-11	7.41E-10	2.58E-10	7.88E-11	4.64E-11	1.04E-10	5.92E-11
Benzo(a)fluorene	30777-18-5	9.06E-09	3.04E-11	2.90E-09	2.90E-10	8.50E-11	8.37E-11	2.27E-10	1.29E-10
Benzo(a)pyrene	50-32-8	1.45E-10	1.56E-10	6.39E-09	1.04E-09	3.25E-10	1.23E-10	1.64E-10	9.38E-11
Benzo(b)fluoranthene	205-99-2	3.59E-09	1.17E-11	2.43E-09	1.20E-10	3.05E-11	6.16E-11	2.02E-10	1.15E-10
Benzo(b)fluorene	243-17-4	1.13E-08	4.57E-11	5.23E-09	4.56E-10	1.40E-10	7.46E-11	1.40E-10	8.03E-11
Benzo(e)pyrene	192-97-20	3.47E-08	5.75E-09	1.72E-07	5.97E-08	1.91E-08	5.13E-09	3.61E-10	2.07E-10
Benzo(g,h,i)perylene	191-24-2	1.77E-08	8.48E-09	1.56E-07	8.83E-08	2.81E-08	7.91E-09	1.81E-09	1.03E-09
Benzo(k)fluoranthene	207-08-9	1.66E-10	5.60E-11	5.41E-09	4.30E-10	1.30E-10	7.98E-11	1.78E-10	1.02E-10
Chrysene	218-01-9	4.77E-10	5.32E-11	1.04E-09	3.52E-10	9.92E-11	1.27E-10	3.84E-10	2.20E-10
Dibenz(a,c)anthracene	215-58-7	7.34E-09	1.47E-09	2.38E-07	1.06E-08	3.37E-09	8.89E-10	2.02E-10	1.16E-10
Dibenz(a,h)anthracene	53-70-3	6.07E-11	7.13E-10	1.06E-08	7.18E-09	2.29E-09	6.23E-10	7.99E-11	4.57E-11
Fluoranthene	206-44-0	3.65E-09	1.01E-10	8.86E-09	1.25E-09	3.50E-10	7.19E-10	2.26E-09	1.29E-09
Fluorene	86-73-7	4.72E-10	1.36E-11	3.61E-10	1.69E-10	5.34E-11	9.39E-11	2.76E-10	1.57E-10
Indeno(1,2,3-cd)pyrene	193-39-5	3.82E-10	2.59E-10	4.67E-08	1.29E-09	3.95E-10	1.83E-10	3.63E-10	2.07E-10
Perylene	198-55-0	2.65E-09	4.64E-09	1.87E-08	4.82E-08	1.54E-08	4.08E-09	8.61E-11	4.92E-11
Phenanthrene	85-01-8	4.61E-09	1.18E-10	4.75E-09	1.49E-09	4.51E-10	8.60E-10	2.60E-09	1.49E-09
Pyrene	129-00-0	1.81E-08	4.35E-10	1.20E-08	5.88E-09	1.65E-09	3.73E-09	1.18E-08	6.76E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	4.46E-07	4.81E-08	1.24E-04	8.77E-07	1.76E-07	7.05E-07	2.48E-08	1.42E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	3.40E-10	1.54E-10	**1.11E-08**	1.44E-09	3.96E-10	4.87E-10	1.46E-11	8.35E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	1.27E-08	1.97E-10	1.05E-08	3.10E-09	6.54E-10	4.98E-10	8.57E-12	4.90E-12
Bromoform	75-25-2	6.68E-09	7.50E-09	3.40E-07	1.18E-07	2.49E-08	1.89E-08	3.22E-10	1.84E-10
Carbon Tetrachloride	56-23-5	3.71E-09	8.56E-11	6.34E-09	1.35E-09	2.85E-10	2.16E-10	3.71E-12	2.12E-12
Chloroform	67-66-3	6.45E-09	3.55E-11	1.10E-09	5.57E-10	1.18E-10	9.08E-11	1.58E-12	9.00E-13
Dichloromethane	75-09-2	4.14E-06	3.76E-09	6.82E-08	5.89E-08	1.25E-08	9.66E-09	1.68E-10	9.62E-11
O-Terphenyl	84-15-1	1.78E-08	4.15E-09	9.66E-07	5.26E-08	1.46E-08	2.14E-08	6.46E-10	3.69E-10
Trichlorofluoromethane (FREON 11)	75-69-4	2.41E-07	2.27E-08	1.19E-06	3.58E-07	7.55E-08	5.72E-08	9.78E-10	5.59E-10
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	1.18E-07	4.82E-10	8.33E-08	6.75E-09	1.83E-09	3.67E-09	1.13E-10	6.43E-11
1,2,4-Trichlorobenzene	120-82-1	2.06E-09	5.41E-11	1.61E-08	7.91E-10	1.90E-10	2.00E-10	4.65E-12	2.66E-12
1,2-Dichlorobenzene	95-50-1	8.76E-07	1.14E-09	1.24E-07	1.68E-08	3.98E-09	3.83E-09	8.26E-11	4.72E-11
Hexachlorobenzene	118-74-1	1.23E-08	2.17E-10	3.15E-07	3.13E-09	7.81E-10	1.44E-09	4.41E-11	2.52E-11
Pentachlorobenzene	608-93-5	3.22E-08	4.94E-09	5.93E-07	7.23E-08	1.89E-08	4.80E-08	1.56E-09	8.92E-10
Pentachlorophenol	87-86-5	1.35E-05	8.99E-09	1.46E-04	9.34E-08	2.98E-08	7.92E-09	2.87E-12	1.64E-12
Inorganics									
Antimony	7440-36-0	1.21E-05	3.96E-07	7.39E-04	2.28E-06	3.34E-07	4.48E-07	8.39E-09	4.80E-09
Arsenic	7440-38-2	3.20E-07	9.48E-08	2.84E-05	4.29E-07	1.85E-08	6.74E-08	1.37E-09	7.81E-10
Barium	7440-39-3	4.26E-06	4.23E-08	2.85E-05	2.28E-07	7.73E-07	4.20E-08	7.93E-10	4.53E-10
Beryllium	7440-41-7	3.81E-07	4.48E-08	2.17E-05	2.95E-07	3.21E-10	1.29E-07	4.17E-09	2.38E-09
Boron	7440-42-8	3.14E-03	1.89E-05	--	1.10E-04	3.64E-05	2.28E-05	3.94E-07	2.25E-07
Cadmium	7440-43-9	1.07E-04	1.80E-07	1.11E-02	1.29E-06	1.04E-07	3.81E-07	6.14E-06	1.45E-07
Chromium (Total)	7440-47-3	6.33E-07	1.34E-06	6.09E-04	5.71E-06	2.27E-06	7.59E-07	1.37E-08	7.82E-09
Chromium VI	18540-29-9	9.01E-08	1.91E-07	1.60E-05	8.11E-07	3.22E-07	1.08E-07	1.95E-09	1.11E-09
Cobalt	7440-48-4	5.96E-06	1.32E-05	7.81E-04	6.16E-05	1.83E-05	1.22E-05	2.97E-07	1.70E-07
Lead	7439-92-1	3.50E-04	2.50E-06	3.23E-03	1.81E-05	1.96E-05	6.97E-06	2.05E-07	1.17E-07
Mercury - Inorganic	7487-94-7	1.11E-04	7.39E-07	--	1.01E-05	4.28E-06	4.28E-08	1.77E-06	1.77E-06
Methyl Mercury	22967-92-6	1.01E-05	1.97E-08	8.17E-04	1.22E-07	6.95E-08	2.55E-10	9.38E-09	9.38E-09
Nickel	7440-02-0	1.46E-04	6.25E-05	1.81E-02	3.16E-04	7.32E-05	7.34E-05	1.89E-06	1.08E-06
Phosphorus	7723-14-0	1.92E-03	3.93E-04	--	2.33E-03	7.93E-04	6.90E-04	1.61E-05	9.19E-06
Selenium	7782-49-2	1.77E-07	1.16E-07	1.10E-04	4.74E-07	1.82E-06	3.09E-06	2.94E-07	2.94E-07
Silver	7440-22-4	9.25E-06	1.21E-06	4.02E-04	5.67E-06	5.68E-05	7.27E-07	9.28E-09	5.30E-09
Thallium	7440-28-0	3.55E-06	1.77E-04	--	8.55E-04	5.80E-05	2.09E-04	5.81E-06	3.32E-06
Tin	7440-31-5	5.76E-05	1.96E-04	5.42E-02	1.24E-03	3.40E-04	4.44E-04	1.32E-05	7.52E-06
Vanadium	7440-62-2	2.75E-06	3.82E-07	1.10E-04	2.50E-06	6.29E-07	1.16E-06	3.82E-08	2.18E-08
Zinc	7440-66-6	3.60E-02	3.06E-06	2.49E-01	1.97E-05	1.05E-05	5.22E-06	1.15E-05	1.15E-05

Calculated Exposure Point Concentrations for the Farmer Receptor Cluster

Normal Operations - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	3.12E-07	1.58E-10	--	6.75E-08	1.12E-10
Acenaphthylene	208-96-8	7.31E-08	8.86E-11	--	1.38E-08	2.16E-10
Anthracene	120-12-7	3.08E-07	5.94E-11	6.00E-11	2.99E-08	2.63E-12
Benz(a)anthracene	56-55-3	1.69E-07	2.95E-11	5.72E-09	3.33E-09	1.70E-10
Benzo(a)fluorene	30777-18-5	3.35E-07	2.30E-10	1.63E-09	9.81E-09	3.95E-10
Benzo(a)pyrene	50-32-8	3.00E-07	1.28E-10	1.79E-08	3.96E-09	1.53E-09
Benzo(b)fluoranthene	205-99-2	3.89E-07	3.66E-11	9.60E-10	4.36E-09	7.54E-11
Benzo(b)fluorene	243-17-4	2.31E-07	1.86E-10	1.12E-09	4.25E-09	1.04E-09
Benzo(e)pyrene	192-97-20	8.16E-07	1.25E-09	2.18E-09	5.99E-09	2.09E-07
Benzo(g,h,i)perylene	191-24-2	4.23E-06	1.00E-09	--	2.87E-08	3.17E-07
Benzo(k)fluoranthene	207-08-9	3.39E-07	8.61E-11	5.41E-09	3.90E-09	7.08E-10
Chrysene	218-01-9	6.28E-07	4.16E-11	7.12E-09	1.24E-08	2.36E-11
Dibenz(a,c)anthracene	215-58-7	5.33E-07	9.54E-10	1.87E-07	2.77E-09	2.80E-08
Dibenz(a,h)anthracene	53-70-3	1.87E-07	6.71E-11	8.43E-09	1.27E-09	2.52E-08
Fluoranthene	206-44-0	3.05E-06	1.77E-09	2.45E-09	1.52E-07	3.70E-10
Fluorene	86-73-7	3.11E-07	4.55E-10	--	4.50E-08	9.90E-12
Indeno(1,2,3-cd)pyrene	193-39-5	9.00E-07	2.37E-10	5.53E-08	5.34E-09	1.71E-10
Perylene	198-55-0	1.76E-07	2.10E-10	8.91E-11	1.66E-09	1.56E-07
Phenanthrene	85-01-8	3.14E-06	3.00E-09	6.97E-10	3.04E-07	1.74E-10
Pyrene	129-00-0	1.56E-05	3.01E-09	2.22E-09	8.89E-07	5.10E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	5.80E-05	4.84E-10	--	3.93E-07	1.45E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	4.59E-08	3.58E-13	1.42E-10	2.09E-10	3.17E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	1.79E-10	6.65E-09	--	2.48E-10	2.62E-12
Bromoform	75-25-2	6.78E-10	2.89E-07	--	1.12E-09	2.41E-13
Carbon Tetrachloride	56-23-5	4.86E-11	2.00E-09	--	4.53E-11	9.37E-13
Chloroform	67-66-3	8.00E-11	2.19E-09	--	2.16E-10	1.27E-12
Dichloromethane	75-09-2	1.43E-08	6.82E-07	--	9.83E-08	1.32E-10
O-Terphenyl	84-15-1	9.88E-07	5.83E-10	--	2.47E-08	6.89E-10
Trichlorofluoromethane (FREON 11)	75-69-4	3.69E-09	7.51E-07	--	5.13E-09	5.55E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.40E-07	2.63E-10	--	9.14E-09	1.74E-12
1,2,4-Trichlorobenzene	120-82-1	3.31E-09	2.56E-10	--	6.25E-10	4.55E-13
1,2-Dichlorobenzene	95-50-1	4.45E-08	1.03E-08	--	1.92E-08	2.91E-10
Hexachlorobenzene	118-74-1	6.03E-08	3.15E-10	--	2.02E-09	1.19E-11
Pentachlorobenzene	608-93-5	2.18E-06	8.00E-10	--	8.68E-08	4.15E-11
Pentachlorophenol	87-86-5	1.03E-06	2.60E-07	--	4.48E-08	1.58E-06
Inorganics						
Antimony	7440-36-0	5.58E-04	3.69E-06	1.92E-05	1.78E-05	--
Arsenic	7440-38-2	5.54E-05	5.68E-07	2.95E-06	3.51E-07	--
Barium	7440-39-3	3.93E-04	2.85E-06	1.49E-05	1.27E-05	--
Beryllium	7440-41-7	3.51E-04	2.17E-07	2.34E-06	9.07E-07	--
Boron	7440-42-8	2.17E-03	2.07E-04	1.07E-03	4.90E-03	--
Cadmium	7440-43-9	2.32E-03	9.27E-06	4.92E-05	2.90E-04	--
Chromium (Total)	7440-47-3	1.95E-04	3.04E-06	1.58E-05	9.52E-07	--
Chromium VI	18540-29-9	2.77E-05	4.33E-07	2.25E-06	1.35E-07	--
Cobalt	7440-48-4	1.18E-03	7.81E-06	4.07E-05	1.02E-05	--
Lead	7439-92-1	5.38E-02	3.09E-05	3.51E-04	7.32E-04	--
Mercury - Inorganic	7487-94-7	3.24E-03	3.04E-07	4.73E-06	4.69E-05	1.04E-05
Methyl Mercury	22967-92-6	1.41E-04	1.28E-09	1.34E-06	4.14E-06	2.95E-06
Nickel	7440-02-0	2.53E-02	1.16E-04	6.12E-04	2.35E-04	--
Phosphorus	7723-14-0	7.59E-04	6.23E-05	3.23E-04	2.66E-03	--
Selenium	7782-49-2	1.12E-05	6.50E-07	3.37E-06	2.18E-07	--
Silver	7440-22-4	1.28E-04	4.54E-06	2.35E-05	1.77E-05	--
Thallium	7440-28-0	1.23E-02	5.18E-05	2.74E-04	1.05E-05	--
Tin	7440-31-5	1.33E-02	1.81E-05	1.24E-04	1.20E-04	--
Vanadium	7440-62-2	1.27E-03	6.88E-07	8.17E-06	4.22E-06	--
Zinc	7440-66-6	5.54E-02	2.67E-04	1.40E-03	5.38E-03	--

Calculated Exposure Point Concentrations for the Farmer Receptor Cluster
Normal Operations - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	6.64E-08	1.56E-11	6.29E-11	2.35E-10	7.73E-11	1.28E-10	3.66E-10	2.09E-10
Acenaphthylene	208-96-8	4.65E-07	3.67E-12	4.44E-11	7.10E-11	1.79E-11	2.96E-11	8.48E-11	4.85E-11
Anthracene	120-12-7	4.64E-10	1.10E-11	9.41E-11	1.74E-10	5.29E-11	1.04E-10	3.18E-10	1.82E-10
Benz(a)anthracene	56-55-3	1.60E-10	4.32E-11	7.41E-10	2.71E-10	8.21E-11	5.38E-11	1.29E-10	7.39E-11
Benzo(a)fluorene	30777-18-5	1.13E-08	3.04E-11	2.90E-09	3.17E-10	8.85E-11	9.64E-11	2.83E-10	1.61E-10
Benzo(a)pyrene	50-32-8	1.81E-10	1.56E-10	6.39E-09	1.04E-09	3.25E-10	1.23E-10	2.05E-10	1.17E-10
Benzo(b)fluoranthene	205-99-2	4.48E-09	1.17E-11	2.43E-09	1.33E-10	3.25E-11	7.54E-11	2.52E-10	1.44E-10
Benzo(b)fluorene	243-17-4	1.41E-08	4.57E-11	5.23E-09	5.04E-10	1.55E-10	7.30E-11	1.75E-10	1.00E-10
Benzo(e)pyrene	192-97-20	4.33E-08	5.75E-09	1.72E-07	6.72E-08	2.15E-08	5.74E-09	4.51E-10	2.58E-10
Benzo(g,h,i)perylene	191-24-2	2.20E-08	8.48E-09	1.56E-07	9.93E-08	3.17E-08	8.73E-09	2.26E-09	1.29E-09
Benzo(k)fluoranthene	207-08-9	2.07E-10	5.60E-11	5.41E-09	4.31E-10	1.31E-10	8.65E-11	2.22E-10	1.27E-10
Chrysene	218-01-9	5.95E-10	5.32E-11	1.04E-09	4.19E-10	1.17E-10	1.57E-10	4.79E-10	2.74E-10
Dibenz(a,c)anthracene	215-58-7	9.15E-09	1.47E-09	2.38E-07	1.08E-08	3.45E-09	9.08E-10	2.53E-10	1.44E-10
Dibenz(a,h)anthracene	53-70-3	7.57E-11	7.13E-10	1.06E-08	8.02E-09	2.56E-09	6.90E-10	9.97E-11	5.70E-11
Fluoranthene	206-44-0	4.56E-09	1.01E-10	8.86E-09	1.47E-09	4.09E-10	8.90E-10	2.82E-09	1.61E-09
Fluorene	86-73-7	5.89E-10	1.36E-11	3.61E-10	2.10E-10	6.61E-11	1.17E-10	3.44E-10	1.96E-10
Indeno(1,2,3-cd)pyrene	193-39-5	4.76E-10	2.59E-10	4.67E-08	1.49E-09	4.57E-10	2.21E-10	4.52E-10	2.58E-10
Perylene	198-55-0	3.31E-09	4.64E-09	1.87E-08	5.42E-08	1.73E-08	4.59E-09	1.07E-10	6.13E-11
Phenanthrene	85-01-8	5.75E-09	1.18E-10	4.75E-09	1.82E-09	5.51E-10	1.07E-09	3.24E-09	1.85E-09
Pyrene	129-00-0	2.26E-08	4.35E-10	1.20E-08	7.22E-09	2.03E-09	4.64E-09	1.48E-08	8.43E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	5.56E-07	4.81E-08	1.24E-04	1.07E-06	2.12E-07	8.77E-07	3.09E-08	1.77E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	4.72E-10	1.54E-10	**1.11E-08**	1.41E-09	3.94E-10	6.27E-10	2.02E-11	1.16E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	1.58E-08	1.97E-10	1.05E-08	6.36E-08	1.34E-08	1.02E-08	1.73E-10	9.90E-11
Bromoform	75-25-2	8.33E-09	7.50E-09	3.40E-07	2.39E-06	5.03E-07	3.81E-07	6.50E-09	3.72E-09
Carbon Tetrachloride	56-23-5	4.62E-09	8.56E-11	6.34E-09	2.75E-08	5.78E-09	4.38E-09	7.48E-11	4.27E-11
Chloroform	67-66-3	8.05E-09	3.55E-11	1.10E-09	1.22E-08	2.58E-09	1.95E-09	3.33E-11	1.90E-11
Dichloromethane	75-09-2	5.16E-06	3.76E-09	6.82E-08	1.35E-06	2.83E-07	2.15E-07	3.67E-09	2.10E-09
O-Terphenyl	84-15-1	2.22E-08	4.15E-09	9.66E-07	6.91E-08	1.70E-08	2.54E-08	8.05E-10	4.60E-10
Trichlorofluoromethane (FREON 11)	75-69-4	3.00E-07	2.27E-08	1.19E-06	7.26E-06	1.53E-06	1.16E-06	1.98E-08	1.13E-08
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	1.47E-07	4.82E-10	8.33E-08	2.10E-08	4.66E-09	4.91E-09	1.40E-10	8.02E-11
1,2,4-Trichlorobenzene	120-82-1	2.56E-09	5.41E-11	1.61E-08	1.28E-08	2.71E-09	2.09E-09	3.64E-11	2.08E-11
1,2-Dichlorobenzene	95-50-1	1.09E-06	1.14E-09	1.24E-07	3.01E-07	6.37E-08	4.87E-08	8.42E-10	4.81E-10
Hexachlorobenzene	118-74-1	1.53E-08	2.17E-10	3.15E-07	2.09E-08	4.49E-09	3.90E-09	7.83E-11	4.48E-11
Pentachlorobenzene	608-93-5	4.01E-08	4.94E-09	5.93E-07	9.53E-08	2.33E-08	5.98E-08	1.95E-09	1.11E-09
Pentachlorophenol	87-86-5	1.68E-05	8.99E-09	1.46E-04	1.06E-07	3.37E-08	8.97E-09	2.56E-12	1.46E-12
Inorganics									
Antimony	7440-36-0	1.68E-05	3.96E-07	7.39E-04	3.14E-06	4.60E-07	6.20E-07	1.16E-08	6.64E-09
Arsenic	7440-38-2	4.43E-07	9.48E-08	2.84E-05	5.90E-07	2.55E-08	9.30E-08	1.89E-09	1.08E-09
Barium	7440-39-3	5.90E-06	4.23E-08	2.85E-05	3.14E-07	1.06E-06	5.81E-08	1.10E-09	6.28E-10
Beryllium	7440-41-7	5.27E-07	4.48E-08	2.17E-05	4.07E-07	4.42E-10	1.79E-07	5.78E-09	3.30E-09
Boron	7440-42-8	4.35E-03	1.89E-05	--	1.52E-04	5.02E-05	3.15E-05	5.46E-07	3.12E-07
Cadmium	7440-43-9	1.48E-04	1.80E-07	1.11E-02	1.78E-06	1.43E-07	5.27E-07	8.51E-06	2.00E-07
Chromium (Total)	7440-47-3	8.78E-07	1.34E-06	6.09E-04	7.83E-06	3.11E-06	1.03E-06	1.86E-08	1.06E-08
Chromium VI	18540-29-9	1.25E-07	1.91E-07	1.60E-05	1.11E-06	4.42E-07	1.46E-07	2.64E-09	1.51E-09
Cobalt	7440-48-4	8.26E-06	1.32E-05	7.81E-04	8.47E-05	2.51E-05	1.68E-05	4.12E-07	2.35E-07
Lead	7439-92-1	4.85E-04	2.50E-06	3.23E-03	2.49E-05	2.70E-05	9.65E-06	2.83E-07	1.62E-07
Mercury - Inorganic	7487-94-7	1.17E-04	7.39E-07	--	1.08E-05	4.64E-06	4.49E-08	1.85E-06	1.85E-06
Methyl Mercury	22967-92-6	1.39E-05	1.97E-08	8.17E-04	1.53E-07	8.52E-08	3.46E-10	1.30E-08	1.30E-08
Nickel	7440-02-0	2.02E-04	6.25E-05	1.81E-02	4.35E-04	1.01E-04	1.01E-04	2.61E-06	1.49E-06
Phosphorus	7723-14-0	2.66E-03	3.93E-04	--	3.21E-03	1.09E-03	9.54E-04	2.23E-05	1.27E-05
Selenium	7782-49-2	2.46E-07	1.16E-07	1.10E-04	6.50E-07	2.50E-06	3.92E-06	3.11E-07	3.11E-07
Silver	7440-22-4	1.28E-05	1.21E-06	4.02E-04	7.80E-06	7.81E-05	1.00E-06	1.23E-08	7.02E-09
Thallium	7440-28-0	4.91E-06	1.77E-04	--	1.18E-03	7.97E-05	2.89E-04	8.06E-06	4.60E-06
Tin	7440-31-5	7.99E-05	1.96E-04	5.42E-02	1.71E-03	4.68E-04	6.14E-04	1.82E-05	1.04E-05
Vanadium	7440-62-2	3.81E-06	3.82E-07	1.10E-04	3.45E-06	8.66E-07	1.61E-06	5.29E-08	3.02E-08
Zinc	7440-66-6	4.99E-02	3.06E-06	2.49E-01	2.72E-05	1.45E-05	7.23E-06	1.60E-05	1.60E-05

Calculated Exposure Point Concentrations for the Daycare Receptor Cluster

Normal Operations - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	5.89E-08	1.58E-10	--	1.27E-08	4.57E-11
Acenaphthylene	208-96-8	1.38E-08	8.86E-11	--	2.60E-09	8.80E-11
Anthracene	120-12-7	5.81E-08	5.94E-11	1.34E-11	5.64E-09	1.07E-12
Benz(a)anthracene	56-55-3	3.19E-08	2.95E-11	1.27E-09	6.29E-10	6.93E-11
Benzo(a)fluorene	30777-18-5	6.31E-08	2.30E-10	3.63E-10	1.85E-09	1.61E-10
Benzo(a)pyrene	50-32-8	5.65E-08	1.28E-10	3.98E-09	7.46E-10	6.24E-10
Benzo(b)fluoranthene	205-99-2	7.34E-08	3.66E-11	2.14E-10	8.22E-10	3.07E-11
Benzo(b)fluorene	243-17-4	4.36E-08	1.86E-10	2.48E-10	8.02E-10	4.23E-10
Benzo(e)pyrene	192-97-20	1.54E-07	1.25E-09	4.86E-10	1.13E-09	8.51E-08
Benzo(g,h,i)perylene	191-24-2	7.98E-07	1.00E-09	--	5.41E-09	1.29E-07
Benzo(k)fluoranthene	207-08-9	6.42E-08	8.61E-11	1.20E-09	7.38E-10	2.88E-10
Chrysene	218-01-9	1.19E-07	4.16E-11	1.58E-09	2.34E-09	9.60E-12
Dibenz(a,c)anthracene	215-58-7	1.00E-07	9.54E-10	4.15E-08	5.22E-10	1.14E-08
Dibenz(a,h)anthracene	53-70-3	3.53E-08	6.71E-11	1.88E-09	2.39E-10	1.03E-08
Fluoranthene	206-44-0	5.75E-07	1.77E-09	5.46E-10	2.87E-08	1.51E-10
Fluorene	86-73-7	5.86E-08	4.55E-10	--	8.49E-09	4.03E-12
Indeno(1,2,3-cd)pyrene	193-39-5	1.70E-07	2.37E-10	1.23E-08	1.01E-09	6.96E-11
Perylene	198-55-0	3.32E-08	2.10E-10	1.98E-11	3.14E-10	6.34E-08
Phenanthrene	85-01-8	5.92E-07	3.00E-09	1.55E-10	5.74E-08	7.06E-11
Pyrene	129-00-0	2.95E-06	3.01E-09	4.94E-10	1.68E-07	2.07E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	1.10E-05	4.84E-10	--	7.46E-08	5.90E-10
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	1.32E-08	3.58E-13	5.48E-11	6.00E-11	1.29E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	3.37E-11	6.65E-09	--	4.68E-11	1.07E-12
Bromoform	75-25-2	1.28E-10	2.89E-07	--	2.11E-10	9.80E-14
Carbon Tetrachloride	56-23-5	9.16E-12	2.00E-09	--	8.53E-12	3.81E-13
Chloroform	67-66-3	1.51E-11	2.19E-09	--	4.07E-11	5.15E-13
Dichloromethane	75-09-2	2.70E-09	6.82E-07	--	1.85E-08	5.36E-11
O-Terphenyl	84-15-1	1.86E-07	5.83E-10	--	4.65E-09	2.80E-10
Trichlorofluoromethane (FREON 11)	75-69-4	6.96E-10	7.51E-07	--	9.68E-10	2.26E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	2.65E-08	2.63E-10	--	1.72E-09	7.08E-13
1,2,4-Trichlorobenzene	120-82-1	6.24E-10	2.56E-10	--	1.18E-10	1.85E-13
1,2-Dichlorobenzene	95-50-1	8.39E-09	1.03E-08	--	3.62E-09	1.18E-10
Hexachlorobenzene	118-74-1	1.14E-08	3.15E-10	--	3.81E-10	4.84E-12
Pentachlorobenzene	608-93-5	4.11E-07	8.00E-10	--	1.64E-08	1.69E-11
Pentachlorophenol	87-86-5	1.93E-07	2.60E-07	--	8.45E-09	6.42E-07
Inorganics						
Antimony	7440-36-0	1.60E-04	3.69E-06	7.45E-06	5.09E-06	--
Arsenic	7440-38-2	1.58E-05	5.68E-07	1.14E-06	1.00E-07	--
Barium	7440-39-3	1.12E-04	2.85E-06	5.75E-06	3.62E-06	--
Beryllium	7440-41-7	1.01E-04	2.17E-07	9.06E-07	2.60E-07	--
Boron	7440-42-8	6.21E-04	2.07E-04	4.16E-04	1.40E-03	--
Cadmium	7440-43-9	6.63E-04	9.27E-06	1.90E-05	8.28E-05	--
Chromium (Total)	7440-47-3	5.57E-05	3.04E-06	6.12E-06	2.72E-07	--
Chromium VI	18540-29-9	7.93E-06	4.33E-07	8.71E-07	3.87E-08	--
Cobalt	7440-48-4	3.37E-04	7.81E-06	1.58E-05	2.92E-06	--
Lead	7439-92-1	1.54E-02	3.09E-05	1.36E-04	2.10E-04	--
Mercury - Inorganic	7487-94-7	1.08E-03	3.04E-07	1.83E-06	1.57E-05	4.25E-06
Methyl Mercury	22967-92-6	4.03E-05	1.28E-09	5.17E-07	1.19E-06	1.20E-06
Nickel	7440-02-0	7.23E-03	1.16E-04	2.37E-04	6.73E-05	--
Phosphorus	7723-14-0	2.17E-04	6.23E-05	1.25E-04	7.58E-04	--
Selenium	7782-49-2	3.19E-06	6.50E-07	1.31E-06	6.22E-08	--
Silver	7440-22-4	3.66E-05	4.54E-06	9.12E-06	5.05E-06	--
Thallium	7440-28-0	3.51E-03	5.18E-05	1.06E-04	3.01E-06	--
Tin	7440-31-5	3.81E-03	1.81E-05	4.79E-05	3.45E-05	--
Vanadium	7440-62-2	3.64E-04	6.88E-07	3.16E-06	1.21E-06	--
Zinc	7440-66-6	1.58E-02	2.67E-04	5.43E-04	1.54E-03	--

Calculated Exposure Point Concentrations for the Daycare Receptor Cluster
Normal Operations - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.25E-08	1.56E-11	6.29E-11	5.14E-11	1.61E-11	2.53E-11	7.09E-11	4.05E-11
Acenaphthylene	208-96-8	8.77E-08	3.67E-12	4.44E-11	1.86E-11	5.08E-12	6.85E-12	1.81E-11	1.04E-11
Anthracene	120-12-7	8.75E-11	1.10E-11	9.41E-11	3.60E-11	1.07E-11	2.02E-11	6.08E-11	3.47E-11
Benz(a)anthracene	56-55-3	3.03E-11	4.32E-11	7.41E-10	7.94E-11	2.44E-11	1.25E-11	2.47E-11	1.41E-11
Benzo(a)fluorene	30777-18-5	2.13E-09	3.04E-11	2.90E-09	1.26E-10	3.57E-11	2.64E-11	5.99E-11	3.42E-11
Benzo(a)pyrene	50-32-8	3.42E-11	1.56E-10	6.39E-09	3.72E-10	1.17E-10	3.96E-11	3.91E-11	2.23E-11
Benzo(b)fluoranthene	205-99-2	8.46E-10	1.17E-11	2.43E-09	3.58E-11	9.40E-12	1.52E-11	4.79E-11	2.74E-11
Benzo(b)fluorene	243-17-4	2.67E-09	4.57E-11	5.23E-09	2.07E-10	6.30E-11	2.72E-11	3.77E-11	2.15E-11
Benzo(e)pyrene	192-97-20	8.17E-09	5.75E-09	1.72E-07	2.73E-08	8.73E-09	2.33E-09	8.65E-11	4.94E-11
Benzo(g,h,i)perylene	191-24-2	4.16E-09	8.48E-09	1.56E-07	4.03E-08	1.29E-08	3.51E-09	4.28E-10	2.44E-10
Benzo(k)fluoranthene	207-08-9	3.91E-11	5.60E-11	5.41E-09	1.57E-10	4.83E-11	2.35E-11	4.21E-11	2.40E-11
Chrysene	218-01-9	1.12E-10	5.32E-11	1.04E-09	9.19E-11	2.60E-11	3.07E-11	9.11E-11	5.21E-11
Dibenz(a,c)anthracene	215-58-7	1.73E-09	1.47E-09	2.38E-07	4.13E-09	1.32E-09	3.47E-10	4.94E-11	2.82E-11
Dibenz(a,h)anthracene	53-70-3	1.43E-11	7.13E-10	1.06E-08	3.25E-09	1.04E-09	2.78E-10	1.89E-11	1.08E-11
Fluoranthene	206-44-0	8.60E-10	1.01E-10	8.86E-09	3.64E-10	1.01E-10	1.78E-10	5.43E-10	3.10E-10
Fluorene	86-73-7	1.11E-10	1.36E-11	3.61E-10	5.89E-11	1.66E-11	2.51E-11	6.98E-11	3.99E-11
Indeno(1,2,3-cd)pyrene	193-39-5	8.99E-11	2.59E-10	4.67E-08	3.43E-10	1.06E-10	4.62E-11	8.58E-11	4.90E-11
Perylene	198-55-0	6.24E-10	4.64E-09	1.87E-08	2.21E-08	7.04E-09	1.86E-09	2.05E-11	1.17E-11
Phenanthrene	85-01-8	1.08E-09	1.18E-10	4.75E-09	4.38E-10	1.26E-10	2.15E-10	6.33E-10	3.61E-10
Pyrene	129-00-0	4.27E-09	4.35E-10	1.20E-08	1.48E-09	4.13E-10	8.91E-10	2.80E-09	1.60E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.05E-07	4.81E-08	1.24E-04	2.18E-07	4.48E-08	1.68E-07	5.87E-09	3.35E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	1.35E-10	1.54E-10	**1.11E-08**	6.47E-10	1.81E-10	2.00E-10	5.82E-12	3.32E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	2.98E-09	1.97E-10	1.05E-08	6.39E-09	1.35E-09	1.02E-09	1.74E-11	9.95E-12
Bromoform	75-25-2	1.57E-09	7.50E-09	3.40E-07	2.39E-07	5.03E-08	3.81E-08	6.50E-10	3.72E-10
Carbon Tetrachloride	56-23-5	8.71E-10	8.56E-11	6.34E-09	2.78E-09	5.86E-10	4.44E-10	7.58E-12	4.33E-12
Chloroform	67-66-3	1.52E-09	3.55E-11	1.10E-09	1.15E-09	2.42E-10	1.84E-10	3.14E-12	1.79E-12
Dichloromethane	75-09-2	9.73E-07	3.76E-09	6.82E-08	1.21E-07	2.56E-08	1.94E-08	3.32E-10	1.90E-10
O-Terphenyl	84-15-1	4.19E-09	4.15E-09	9.66E-07	2.38E-08	6.44E-09	6.45E-09	1.68E-10	9.59E-11
Trichlorofluoromethane (FREON 11)	75-69-4	5.66E-08	2.27E-08	1.19E-06	7.30E-07	1.54E-07	1.16E-07	1.99E-09	1.14E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	2.77E-08	4.82E-10	8.33E-08	3.22E-09	7.76E-10	1.12E-09	3.09E-11	1.76E-11
1,2,4-Trichlorobenzene	120-82-1	4.84E-10	5.41E-11	1.61E-08	1.32E-09	2.83E-10	2.27E-10	4.16E-12	2.38E-12
1,2-Dichlorobenzene	95-50-1	2.06E-07	1.14E-09	1.24E-07	3.03E-08	6.48E-09	5.10E-09	9.11E-11	5.20E-11
Hexachlorobenzene	118-74-1	2.89E-09	2.17E-10	3.15E-07	2.72E-09	6.11E-10	6.47E-10	1.55E-11	8.86E-12
Pentachlorobenzene	608-93-5	7.56E-09	4.94E-09	5.93E-07	2.27E-08	5.69E-09	1.22E-08	3.82E-10	2.18E-10
Pentachlorophenol	87-86-5	3.16E-06	8.99E-09	1.46E-04	4.29E-08	1.37E-08	3.64E-09	8.09E-13	4.62E-13
Inorganics									
Antimony	7440-36-0	4.79E-06	3.96E-07	7.39E-04	1.11E-06	1.61E-07	1.97E-07	3.48E-09	1.99E-09
Arsenic	7440-38-2	1.27E-07	9.48E-08	2.84E-05	2.34E-07	1.00E-08	3.27E-08	5.89E-10	3.36E-10
Barium	7440-39-3	1.69E-06	4.23E-08	2.85E-05	1.15E-07	3.84E-07	1.89E-08	3.32E-10	1.90E-10
Beryllium	7440-41-7	1.51E-07	4.48E-08	2.17E-05	1.38E-07	1.55E-10	5.30E-08	1.66E-09	9.50E-10
Boron	7440-42-8	1.24E-03	1.89E-05	--	5.31E-05	1.71E-05	9.90E-06	1.63E-07	9.30E-08
Cadmium	7440-43-9	4.24E-05	1.80E-07	1.11E-02	5.74E-07	4.59E-08	1.59E-07	2.49E-06	5.86E-08
Chromium (Total)	7440-47-3	2.51E-07	1.34E-06	6.09E-04	3.21E-06	1.25E-06	3.83E-07	6.01E-09	3.43E-09
Chromium VI	18540-29-9	3.57E-08	1.91E-07	1.60E-05	4.56E-07	1.78E-07	5.45E-08	8.54E-10	4.88E-10
Cobalt	7440-48-4	2.36E-06	1.32E-05	7.81E-04	3.33E-05	9.81E-06	5.65E-06	1.24E-07	7.09E-08
Lead	7439-92-1	1.39E-04	2.50E-06	3.23E-03	8.13E-06	8.93E-06	2.84E-06	8.15E-08	4.66E-08
Mercury - Inorganic	7487-94-7	3.89E-05	7.39E-07	--	3.88E-06	1.72E-06	1.51E-08	6.18E-07	6.18E-07
Methyl Mercury	22967-92-6	3.99E-06	1.97E-08	8.17E-04	5.81E-08	3.38E-08	1.05E-10	3.72E-09	3.72E-09
Nickel	7440-02-0	5.78E-05	6.25E-05	1.81E-02	1.65E-04	3.82E-05	3.28E-05	7.76E-07	4.44E-07
Phosphorus	7723-14-0	7.58E-04	3.93E-04	--	1.12E-03	3.70E-04	2.91E-04	6.51E-06	3.72E-06
Selenium	7782-49-2	7.02E-08	1.16E-07	1.10E-04	2.71E-07	1.02E-06	1.66E-06	1.30E-07	1.30E-07
Silver	7440-22-4	3.66E-06	1.21E-06	4.02E-04	3.02E-06	2.96E-05	3.60E-07	4.08E-09	2.33E-09
Thallium	7440-28-0	1.40E-06	1.77E-04	--	4.58E-04	3.12E-05	9.38E-05	2.39E-06	1.37E-06
Tin	7440-31-5	2.28E-05	1.96E-04	5.42E-02	5.91E-04	1.64E-04	1.85E-04	5.28E-06	3.02E-06
Vanadium	7440-62-2	1.09E-06	3.82E-07	1.10E-04	1.18E-06	3.06E-07	4.75E-07	1.52E-08	8.69E-09
Zinc	7440-66-6	1.43E-02	3.06E-06	2.49E-01	9.17E-06	4.83E-06	2.22E-06	4.70E-06	4.70E-06

Calculated Exposure Point Concentrations for the Recreation User - Sport Receptor Cluster

Normal Operations - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.46E-07	1.58E-10	--	3.16E-08	8.51E-11
Acenaphthylene	208-96-8	3.43E-08	8.86E-11	--	6.47E-09	1.64E-10
Anthracene	120-12-7	1.44E-07	5.94E-11	3.13E-11	1.40E-08	1.99E-12
Benz(a)anthracene	56-55-3	7.94E-08	2.95E-11	2.98E-09	1.56E-09	1.29E-10
Benzo(a)fluorene	30777-18-5	1.57E-07	2.30E-10	8.51E-10	4.60E-09	2.99E-10
Benzo(a)pyrene	50-32-8	1.40E-07	1.28E-10	9.34E-09	1.85E-09	1.16E-09
Benzo(b)fluoranthene	205-99-2	1.82E-07	3.66E-11	5.01E-10	2.04E-09	5.70E-11
Benzo(b)fluorene	243-17-4	1.08E-07	1.86E-10	5.82E-10	1.99E-09	7.88E-10
Benzo(e)pyrene	192-97-20	3.83E-07	1.25E-09	1.14E-09	2.81E-09	1.58E-07
Benzo(g,h,i)perylene	191-24-2	1.98E-06	1.00E-09	--	1.34E-08	2.40E-07
Benzo(k)fluoranthene	207-08-9	1.60E-07	8.61E-11	2.83E-09	1.83E-09	5.36E-10
Chrysene	218-01-9	2.95E-07	4.16E-11	3.71E-09	5.80E-09	1.79E-11
Dibenz(a,c)anthracene	215-58-7	2.50E-07	9.54E-10	9.74E-08	1.30E-09	2.12E-08
Dibenz(a,h)anthracene	53-70-3	8.77E-08	6.71E-11	4.40E-09	5.94E-10	1.91E-08
Fluoranthene	206-44-0	1.43E-06	1.77E-09	1.28E-09	7.13E-08	2.80E-10
Fluorene	86-73-7	1.46E-07	4.55E-10	--	2.11E-08	7.49E-12
Indeno(1,2,3-cd)pyrene	193-39-5	4.22E-07	2.37E-10	2.89E-08	2.50E-09	1.30E-10
Perylene	198-55-0	8.26E-08	2.10E-10	4.65E-11	7.80E-10	1.18E-07
Phenanthrene	85-01-8	1.47E-06	3.00E-09	3.64E-10	1.43E-07	1.31E-10
Pyrene	129-00-0	7.32E-06	3.01E-09	1.16E-09	4.17E-07	3.86E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	2.73E-05	4.84E-10	--	1.85E-07	1.10E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	1.78E-08	3.58E-13	5.58E-11	8.11E-11	2.40E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	8.37E-11	6.65E-09	--	1.16E-10	1.98E-12
Bromoform	75-25-2	3.17E-10	2.89E-07	--	5.24E-10	1.82E-13
Carbon Tetrachloride	56-23-5	2.28E-11	2.00E-09	--	2.12E-11	7.09E-13
Chloroform	67-66-3	3.75E-11	2.19E-09	--	1.01E-10	9.58E-13
Dichloromethane	75-09-2	6.72E-09	6.82E-07	--	4.61E-08	9.98E-11
O-Terphenyl	84-15-1	4.63E-07	5.83E-10	--	1.16E-08	5.21E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.73E-09	7.51E-07	--	2.41E-09	4.20E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	6.58E-08	2.63E-10	--	4.28E-09	1.32E-12
1,2,4-Trichlorobenzene	120-82-1	1.55E-09	2.56E-10	--	2.93E-10	3.45E-13
1,2-Dichlorobenzene	95-50-1	2.09E-08	1.03E-08	--	8.99E-09	2.20E-10
Hexachlorobenzene	118-74-1	2.82E-08	3.15E-10	--	9.46E-10	9.01E-12
Pentachlorobenzene	608-93-5	1.02E-06	8.00E-10	--	4.07E-08	3.14E-11
Pentachlorophenol	87-86-5	4.81E-07	2.60E-07	--	2.10E-08	1.19E-06
Inorganics						
Antimony	7440-36-0	2.16E-04	3.69E-06	7.59E-06	6.89E-06	--
Arsenic	7440-38-2	2.14E-05	5.68E-07	1.16E-06	1.36E-07	--
Barium	7440-39-3	1.52E-04	2.85E-06	5.86E-06	4.89E-06	--
Beryllium	7440-41-7	1.36E-04	2.17E-07	9.23E-07	3.51E-07	--
Boron	7440-42-8	8.40E-04	2.07E-04	4.24E-04	1.89E-03	--
Cadmium	7440-43-9	8.96E-04	9.27E-06	1.94E-05	1.12E-04	--
Chromium (Total)	7440-47-3	7.54E-05	3.04E-06	6.23E-06	3.68E-07	--
Chromium VI	18540-29-9	1.07E-05	4.33E-07	8.86E-07	5.23E-08	--
Cobalt	7440-48-4	4.56E-04	7.81E-06	1.60E-05	3.95E-06	--
Lead	7439-92-1	2.08E-02	3.09E-05	1.39E-04	2.83E-04	--
Mercury - Inorganic	7487-94-7	2.03E-03	3.04E-07	1.87E-06	2.94E-05	7.91E-06
Methyl Mercury	22967-92-6	5.45E-05	1.28E-09	5.27E-07	1.60E-06	2.23E-06
Nickel	7440-02-0	9.78E-03	1.16E-04	2.41E-04	9.11E-05	--
Phosphorus	7723-14-0	2.93E-04	6.23E-05	1.28E-04	1.03E-03	--
Selenium	7782-49-2	4.32E-06	6.50E-07	1.33E-06	8.42E-08	--
Silver	7440-22-4	4.95E-05	4.54E-06	9.28E-06	6.83E-06	--
Thallium	7440-28-0	4.75E-03	5.18E-05	1.08E-04	4.08E-06	--
Tin	7440-31-5	5.15E-03	1.81E-05	4.87E-05	4.66E-05	--
Vanadium	7440-62-2	4.92E-04	6.88E-07	3.22E-06	1.63E-06	--
Zinc	7440-66-6	2.14E-02	2.67E-04	5.53E-04	2.08E-03	--

Calculated Exposure Point Concentrations for the Recreation User - Sport Receptor Cluster
Normal Operations - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	3.11E-08	1.56E-11	6.29E-11	1.59E-10	4.65E-11	6.77E-11	1.85E-10	1.06E-10
Acenaphthylene	208-96-8	2.18E-07	3.67E-12	4.44E-11	6.87E-11	1.73E-11	2.06E-11	5.12E-11	2.92E-11
Anthracene	120-12-7	2.18E-10	1.10E-11	9.41E-11	9.73E-11	2.81E-11	5.14E-11	1.53E-10	8.76E-11
Benz(a)anthracene	56-55-3	7.52E-11	4.32E-11	7.41E-10	1.77E-10	5.38E-11	2.97E-11	6.21E-11	3.55E-11
Benzo(a)fluorene	30777-18-5	5.29E-09	3.04E-11	2.90E-09	3.27E-10	8.73E-11	7.11E-11	1.65E-10	9.41E-11
Benzo(a)pyrene	50-32-8	8.50E-11	1.56E-10	6.39E-09	7.66E-10	2.40E-10	8.57E-11	9.85E-11	5.63E-11
Benzo(b)fluoranthene	205-99-2	2.10E-09	1.17E-11	2.43E-09	8.72E-11	2.21E-11	3.81E-11	1.21E-10	6.89E-11
Benzo(b)fluorene	243-17-4	6.63E-09	4.57E-11	5.23E-09	4.45E-10	1.30E-10	6.45E-11	1.04E-10	5.92E-11
Benzo(e)pyrene	192-97-20	2.03E-08	5.75E-09	1.72E-07	5.09E-08	1.62E-08	4.35E-09	2.18E-10	1.25E-10
Benzo(g,h,i)perylene	191-24-2	1.03E-08	8.48E-09	1.56E-07	7.52E-08	2.40E-08	6.61E-09	1.07E-09	6.12E-10
Benzo(k)fluoranthene	207-08-9	9.71E-11	5.60E-11	5.41E-09	3.20E-10	9.77E-11	5.26E-11	1.05E-10	6.00E-11
Chrysene	218-01-9	2.79E-10	5.32E-11	1.04E-09	2.27E-10	6.32E-11	7.70E-11	2.29E-10	1.31E-10
Dibenz(a,c)anthracene	215-58-7	4.29E-09	1.47E-09	2.38E-07	8.19E-09	2.60E-09	6.90E-10	1.30E-10	7.41E-11
Dibenz(a,h)anthracene	53-70-3	3.55E-11	7.13E-10	1.06E-08	6.07E-09	1.94E-09	5.22E-10	4.74E-11	2.71E-11
Fluoranthene	206-44-0	2.14E-09	1.01E-10	8.86E-09	9.46E-10	2.54E-10	4.52E-10	1.37E-09	7.84E-10
Fluorene	86-73-7	2.76E-10	1.36E-11	3.61E-10	2.01E-10	5.26E-11	7.10E-11	1.88E-10	1.08E-10
Indeno(1,2,3-cd)pyrene	193-39-5	2.23E-10	2.59E-10	4.67E-08	8.06E-10	2.47E-10	1.12E-10	2.15E-10	1.23E-10
Perylene	198-55-0	1.55E-09	4.64E-09	1.87E-08	4.11E-08	1.31E-08	3.47E-09	5.14E-11	2.94E-11
Phenanthrene	85-01-8	2.70E-09	1.18E-10	4.75E-09	1.24E-09	3.42E-10	5.60E-10	1.62E-09	9.24E-10
Pyrene	129-00-0	1.06E-08	4.35E-10	1.20E-08	3.70E-09	1.03E-09	2.22E-09	6.99E-09	3.99E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	2.62E-07	4.81E-08	1.24E-04	5.37E-07	1.09E-07	4.17E-07	1.46E-08	8.34E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	1.83E-10	1.54E-10	**1.11E-08**	1.01E-09	2.89E-10	2.83E-10	7.87E-12	4.50E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	7.42E-09	1.97E-10	1.05E-08	6.15E-08	1.30E-08	9.81E-09	1.67E-10	9.57E-11
Bromoform	75-25-2	3.90E-09	7.50E-09	3.40E-07	2.31E-06	4.86E-07	3.68E-07	6.29E-09	3.59E-09
Carbon Tetrachloride	56-23-5	2.16E-09	8.56E-11	6.34E-09	2.65E-08	5.59E-09	4.23E-09	7.23E-11	4.13E-11
Chloroform	67-66-3	3.77E-09	3.55E-11	1.10E-09	1.18E-08	2.49E-09	1.89E-09	3.22E-11	1.84E-11
Dichloromethane	75-09-2	2.42E-06	3.76E-09	6.82E-08	1.30E-06	2.74E-07	2.08E-07	3.54E-09	2.03E-09
O-Terphenyl	84-15-1	1.04E-08	4.15E-09	9.66E-07	7.04E-08	1.76E-08	1.83E-08	4.67E-10	2.67E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.41E-07	2.27E-08	1.19E-06	7.02E-06	1.48E-06	1.12E-06	1.91E-08	1.09E-08
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	6.89E-08	4.82E-10	8.33E-08	2.03E-08	4.51E-09	4.75E-09	1.10E-10	6.29E-11
1,2,4-Trichlorobenzene	120-82-1	1.20E-09	5.41E-11	1.61E-08	1.24E-08	2.62E-09	2.02E-09	3.52E-11	2.01E-11
1,2-Dichlorobenzene	95-50-1	5.12E-07	1.14E-09	1.24E-07	2.91E-07	6.15E-08	4.71E-08	8.13E-10	4.65E-10
Hexachlorobenzene	118-74-1	7.19E-09	2.17E-10	3.15E-07	2.03E-08	4.36E-09	3.78E-09	7.57E-11	4.33E-11
Pentachlorobenzene	608-93-5	1.88E-08	4.94E-09	5.93E-07	9.24E-08	2.17E-08	3.60E-08	1.05E-09	5.98E-10
Pentachlorophenol	87-86-5	7.86E-06	8.99E-09	1.46E-04	7.98E-08	2.55E-08	6.77E-09	1.59E-12	9.07E-13
Inorganics									
Antimony	7440-36-0	6.48E-06	3.96E-07	7.39E-04	1.27E-06	1.84E-07	2.47E-07	4.61E-09	2.64E-09
Arsenic	7440-38-2	1.71E-07	9.48E-08	2.84E-05	2.45E-07	1.04E-08	3.83E-08	7.68E-10	4.39E-10
Barium	7440-39-3	2.28E-06	4.23E-08	2.85E-05	1.28E-07	4.28E-07	2.33E-08	4.38E-10	2.50E-10
Beryllium	7440-41-7	2.04E-07	4.48E-08	2.17E-05	1.62E-07	1.76E-10	6.99E-08	2.25E-09	1.28E-09
Boron	7440-42-8	1.68E-03	1.89E-05	--	6.14E-05	2.00E-05	1.25E-05	2.16E-07	1.23E-07
Cadmium	7440-43-9	5.74E-05	1.80E-07	1.11E-02	7.05E-07	5.65E-08	2.07E-07	3.33E-06	7.85E-08
Chromium (Total)	7440-47-3	3.39E-07	1.34E-06	6.09E-04	3.28E-06	1.28E-06	4.32E-07	7.71E-09	4.41E-09
Chromium VI	18540-29-9	4.82E-08	1.91E-07	1.60E-05	4.66E-07	1.82E-07	6.14E-08	1.10E-09	6.27E-10
Cobalt	7440-48-4	3.20E-06	1.32E-05	7.81E-04	3.51E-05	1.03E-05	6.84E-06	1.64E-07	9.38E-08
Lead	7439-92-1	1.88E-04	2.50E-06	3.23E-03	9.88E-06	1.07E-05	3.76E-06	1.10E-07	6.30E-08
Mercury - Inorganic	7487-94-7	7.29E-05	7.39E-07	--	6.67E-06	2.81E-06	2.81E-08	1.16E-06	1.16E-06
Methyl Mercury	22967-92-6	5.40E-06	1.97E-08	8.17E-04	7.24E-08	4.17E-08	1.40E-10	5.03E-09	5.03E-09
Nickel	7440-02-0	7.82E-05	6.25E-05	1.81E-02	1.79E-04	4.09E-05	4.07E-05	1.03E-06	5.90E-07
Phosphorus	7723-14-0	1.03E-03	3.93E-04	--	1.29E-03	4.35E-04	3.76E-04	8.72E-06	4.98E-06
Selenium	7782-49-2	9.50E-08	1.16E-07	1.10E-04	2.73E-07	1.03E-06	1.73E-06	1.52E-07	1.52E-07
Silver	7440-22-4	4.95E-06	1.21E-06	4.02E-04	3.22E-06	3.17E-05	4.16E-07	5.18E-09	2.96E-09
Thallium	7440-28-0	1.90E-06	1.77E-04	--	4.86E-04	3.26E-05	1.16E-04	3.18E-06	1.82E-06
Tin	7440-31-5	3.09E-05	1.96E-04	5.42E-02	6.87E-04	1.87E-04	2.41E-04	7.11E-06	4.06E-06
Vanadium	7440-62-2	1.48E-06	3.82E-07	1.10E-04	1.38E-06	3.46E-07	6.28E-07	2.06E-08	1.18E-08
Zinc	7440-66-6	1.93E-02	3.06E-06	2.49E-01	1.09E-05	5.74E-06	2.85E-06	6.29E-06	6.29E-06

Calculated Exposure Point Concentrations for the Additional Exposure Due to Swimming and Recreation User - Camping Rece

Normal Operations - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.17E-07	1.58E-10	--	2.53E-08	9.21E-11
Acenaphthylene	208-96-8	2.74E-08	8.86E-11	--	5.18E-09	1.77E-10
Anthracene	120-12-7	1.16E-07	5.94E-11	2.54E-11	1.12E-08	2.16E-12
Benz(a)anthracene	56-55-3	6.35E-08	2.95E-11	2.42E-09	1.25E-09	1.40E-10
Benzo(a)fluorene	30777-18-5	1.26E-07	2.30E-10	6.89E-10	3.68E-09	3.24E-10
Benzo(a)pyrene	50-32-8	1.12E-07	1.28E-10	7.57E-09	1.48E-09	1.26E-09
Benzo(b)fluoranthene	205-99-2	1.46E-07	3.66E-11	4.06E-10	1.64E-09	6.17E-11
Benzo(b)fluorene	243-17-4	8.67E-08	1.86E-10	4.71E-10	1.60E-09	8.52E-10
Benzo(e)pyrene	192-97-20	3.06E-07	1.25E-09	9.23E-10	2.25E-09	1.71E-07
Benzo(g,h,i)perylene	191-24-2	1.59E-06	1.00E-09	--	1.08E-08	2.60E-07
Benzo(k)fluoranthene	207-08-9	1.27E-07	8.61E-11	2.29E-09	1.47E-09	5.80E-10
Chrysene	218-01-9	2.36E-07	4.16E-11	3.01E-09	4.64E-09	1.93E-11
Dibenz(a,c)anthracene	215-58-7	2.00E-07	9.54E-10	7.89E-08	1.04E-09	2.29E-08
Dibenz(a,h)anthracene	53-70-3	7.01E-08	6.71E-11	3.56E-09	4.76E-10	2.07E-08
Fluoranthene	206-44-0	1.14E-06	1.77E-09	1.04E-09	5.71E-08	3.03E-10
Fluorene	86-73-7	1.17E-07	4.55E-10	--	1.69E-08	8.11E-12
Indeno(1,2,3-cd)pyrene	193-39-5	3.38E-07	2.37E-10	2.34E-08	2.00E-09	1.40E-10
Perylene	198-55-0	6.61E-08	2.10E-10	3.76E-11	6.24E-10	1.28E-07
Phenanthrene	85-01-8	1.18E-06	3.00E-09	2.95E-10	1.14E-07	1.42E-10
Pyrene	129-00-0	5.85E-06	3.01E-09	9.39E-10	3.34E-07	4.18E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	2.18E-05	4.84E-10	--	1.48E-07	1.19E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	1.93E-08	3.58E-13	7.12E-11	8.77E-11	2.60E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	6.70E-11	6.65E-09	--	9.31E-11	2.15E-12
Bromoform	75-25-2	2.54E-10	2.89E-07	--	4.19E-10	1.97E-13
Carbon Tetrachloride	56-23-5	1.82E-11	2.00E-09	--	1.70E-11	7.68E-13
Chloroform	67-66-3	3.00E-11	2.19E-09	--	8.10E-11	1.04E-12
Dichloromethane	75-09-2	5.38E-09	6.82E-07	--	3.69E-08	1.08E-10
O-Terphenyl	84-15-1	3.71E-07	5.83E-10	--	9.26E-09	5.64E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.39E-09	7.51E-07	--	1.93E-09	4.55E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	5.27E-08	2.63E-10	--	3.43E-09	1.43E-12
1,2,4-Trichlorobenzene	120-82-1	1.24E-09	2.56E-10	--	2.35E-10	3.73E-13
1,2-Dichlorobenzene	95-50-1	1.67E-08	1.03E-08	--	7.20E-09	2.38E-10
Hexachlorobenzene	118-74-1	2.26E-08	3.15E-10	--	7.58E-10	9.75E-12
Pentachlorobenzene	608-93-5	8.18E-07	8.00E-10	--	3.26E-08	3.40E-11
Pentachlorophenol	87-86-5	3.85E-07	2.60E-07	--	1.68E-08	1.29E-06
Inorganics						
Antimony	7440-36-0	2.34E-04	3.69E-06	9.68E-06	7.47E-06	--
Arsenic	7440-38-2	2.32E-05	5.68E-07	1.48E-06	1.47E-07	--
Barium	7440-39-3	1.65E-04	2.85E-06	7.47E-06	5.31E-06	--
Beryllium	7440-41-7	1.48E-04	2.17E-07	1.18E-06	3.81E-07	--
Boron	7440-42-8	9.12E-04	2.07E-04	5.40E-04	2.06E-03	--
Cadmium	7440-43-9	9.73E-04	9.27E-06	2.47E-05	1.22E-04	--
Chromium (Total)	7440-47-3	8.18E-05	3.04E-06	7.95E-06	3.99E-07	--
Chromium VI	18540-29-9	1.16E-05	4.33E-07	1.13E-06	5.68E-08	--
Cobalt	7440-48-4	4.95E-04	7.81E-06	2.05E-05	4.29E-06	--
Lead	7439-92-1	2.26E-02	3.09E-05	1.77E-04	3.07E-04	--
Mercury - Inorganic	7487-94-7	1.79E-03	3.04E-07	2.38E-06	2.60E-05	8.56E-06
Methyl Mercury	22967-92-6	5.91E-05	1.28E-09	6.71E-07	1.74E-06	2.41E-06
Nickel	7440-02-0	1.06E-02	1.16E-04	3.08E-04	9.88E-05	--
Phosphorus	7723-14-0	3.18E-04	6.23E-05	1.63E-04	1.11E-03	--
Selenium	7782-49-2	4.69E-06	6.50E-07	1.70E-06	9.14E-08	--
Silver	7440-22-4	5.38E-05	4.54E-06	1.18E-05	7.42E-06	--
Thallium	7440-28-0	5.16E-03	5.18E-05	1.38E-04	4.42E-06	--
Tin	7440-31-5	5.59E-03	1.81E-05	6.22E-05	5.06E-05	--
Vanadium	7440-62-2	5.33E-04	6.88E-07	4.11E-06	1.77E-06	--
Zinc	7440-66-6	2.33E-02	2.67E-04	7.05E-04	2.26E-03	--

Calculated Exposure Point Concentrations for the Additional Exposure Due to Swimming and Recreation User - Camping Receptor Clusters
Normal Operations - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	2.49E-08	1.56E-11	6.29E-11	9.14E-11	2.97E-11	4.85E-11	1.38E-10	7.89E-11
Acenaphthylene	208-96-8	1.75E-07	3.67E-12	4.44E-11	2.61E-11	7.82E-12	1.19E-11	3.31E-11	1.89E-11
Anthracene	120-12-7	1.74E-10	1.10E-11	9.41E-11	6.76E-11	2.04E-11	3.95E-11	1.20E-10	6.84E-11
Benz(a)anthracene	56-55-3	6.02E-11	4.32E-11	7.41E-10	1.53E-10	4.72E-11	2.44E-11	4.87E-11	2.78E-11
Benzo(a)fluorene	30777-18-5	4.24E-09	3.04E-11	2.90E-09	2.15E-10	6.38E-11	4.68E-11	1.10E-10	6.26E-11
Benzo(a)pyrene	50-32-8	6.81E-11	1.56E-10	6.39E-09	7.33E-10	2.31E-10	7.81E-11	7.70E-11	4.40E-11
Benzo(b)fluoranthene	205-99-2	1.68E-09	1.17E-11	2.43E-09	6.86E-11	1.81E-11	2.99E-11	9.46E-11	5.41E-11
Benzo(b)fluorene	243-17-4	5.31E-09	4.57E-11	5.23E-09	3.91E-10	1.21E-10	5.05E-11	6.83E-11	3.90E-11
Benzo(e)pyrene	192-97-20	1.63E-08	5.75E-09	1.72E-07	5.50E-08	1.76E-08	4.68E-09	1.70E-10	9.71E-11
Benzo(g,h,i)perylene	191-24-2	8.27E-09	8.48E-09	1.56E-07	8.12E-08	2.59E-08	7.06E-09	8.47E-10	4.84E-10
Benzo(k)fluoranthene	207-08-9	7.76E-11	5.60E-11	5.41E-09	3.10E-10	9.57E-11	4.65E-11	8.34E-11	4.76E-11
Chrysene	218-01-9	2.23E-10	5.32E-11	1.04E-09	1.75E-10	4.96E-11	6.03E-11	1.80E-10	1.03E-10
Dibenz(a,c)anthracene	215-58-7	3.43E-09	1.47E-09	2.38E-07	8.21E-09	2.62E-09	6.89E-10	9.54E-11	5.45E-11
Dibenz(a,h)anthracene	53-70-3	2.84E-11	7.13E-10	1.06E-08	6.54E-09	2.09E-09	5.59E-10	3.75E-11	2.14E-11
Fluoranthene	206-44-0	1.71E-09	1.01E-10	8.86E-09	6.69E-10	1.88E-10	3.45E-10	1.07E-09	6.09E-10
Fluorene	86-73-7	2.21E-10	1.36E-11	3.61E-10	8.97E-11	2.73E-11	4.55E-11	1.31E-10	7.51E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.79E-10	2.59E-10	4.67E-08	6.54E-10	2.01E-10	8.98E-11	1.70E-10	9.71E-11
Perylene	198-55-0	1.24E-09	4.64E-09	1.87E-08	4.44E-08	1.42E-08	3.76E-09	4.04E-11	2.31E-11
Phenanthrene	85-01-8	2.16E-09	1.18E-10	4.75E-09	7.63E-10	2.28E-10	4.11E-10	1.23E-09	7.02E-10
Pyrene	129-00-0	8.49E-09	4.35E-10	1.20E-08	2.87E-09	8.08E-10	1.76E-09	5.55E-09	3.17E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	2.09E-07	4.81E-08	1.24E-04	4.30E-07	8.86E-08	3.32E-07	1.16E-08	6.65E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	1.98E-10	1.54E-10	**1.11E-08**	1.11E-09	3.18E-10	3.07E-10	8.51E-12	4.86E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	5.94E-09	1.97E-10	1.05E-08	4.49E-09	9.45E-10	7.16E-10	1.22E-11	6.99E-12
Bromoform	75-25-2	3.13E-09	7.50E-09	3.40E-07	1.68E-07	3.53E-08	2.68E-08	4.57E-10	2.61E-10
Carbon Tetrachloride	56-23-5	1.73E-09	8.56E-11	6.34E-09	1.95E-09	4.12E-10	3.12E-10	5.32E-12	3.04E-12
Chloroform	67-66-3	3.02E-09	3.55E-11	1.10E-09	8.07E-10	1.70E-10	1.29E-10	2.21E-12	1.26E-12
Dichloromethane	75-09-2	1.94E-06	3.76E-09	6.82E-08	8.53E-08	1.80E-08	1.36E-08	2.33E-10	1.33E-10
O-Terphenyl	84-15-1	8.33E-09	4.15E-09	9.66E-07	3.88E-08	1.10E-08	1.14E-08	3.10E-10	1.77E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.13E-07	2.27E-08	1.19E-06	5.13E-07	1.08E-07	8.18E-08	1.40E-09	7.97E-10
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	5.52E-08	4.82E-10	8.33E-08	3.96E-09	1.03E-09	1.84E-09	5.48E-11	3.13E-11
1,2,4-Trichlorobenzene	120-82-1	9.62E-10	5.41E-11	1.61E-08	9.26E-10	1.99E-10	1.61E-10	3.22E-12	1.84E-12
1,2-Dichlorobenzene	95-50-1	4.10E-07	1.14E-09	1.24E-07	2.13E-08	4.56E-09	3.58E-09	6.40E-11	3.66E-11
Hexachlorobenzene	118-74-1	5.76E-09	2.17E-10	3.15E-07	2.31E-09	5.65E-10	7.94E-10	2.24E-11	1.28E-11
Pentachlorobenzene	608-93-5	1.51E-08	4.94E-09	5.93E-07	3.65E-08	9.48E-09	2.28E-08	7.35E-10	4.20E-10
Pentachlorophenol	87-86-5	6.30E-06	8.99E-09	1.46E-04	8.64E-08	2.76E-08	7.33E-09	1.61E-12	9.20E-13
Inorganics									
Antimony	7440-36-0	7.03E-06	3.96E-07	7.39E-04	1.53E-06	2.21E-07	2.82E-07	5.10E-09	2.92E-09
Arsenic	7440-38-2	1.86E-07	9.48E-08	2.84E-05	3.13E-07	1.33E-08	4.58E-08	8.64E-10	4.94E-10
Barium	7440-39-3	2.47E-06	4.23E-08	2.85E-05	1.57E-07	5.22E-07	2.69E-08	4.87E-10	2.78E-10
Beryllium	7440-41-7	2.21E-07	4.48E-08	2.17E-05	1.90E-07	2.10E-10	7.67E-08	2.44E-09	1.39E-09
Boron	7440-42-8	1.82E-03	1.89E-05	--	7.34E-05	2.37E-05	1.42E-05	2.39E-07	1.37E-07
Cadmium	7440-43-9	6.22E-05	1.80E-07	1.11E-02	8.11E-07	6.48E-08	2.30E-07	3.65E-06	8.59E-08
Chromium (Total)	7440-47-3	3.68E-07	1.34E-06	6.09E-04	4.25E-06	1.65E-06	5.31E-07	8.82E-09	5.04E-09
Chromium VI	18540-29-9	5.24E-08	1.91E-07	1.60E-05	6.04E-07	2.34E-07	7.55E-08	1.25E-09	7.17E-10
Cobalt	7440-48-4	3.47E-06	1.32E-05	7.81E-04	4.45E-05	1.30E-05	8.00E-06	1.82E-07	1.04E-07
Lead	7439-92-1	2.03E-04	2.50E-06	3.23E-03	1.13E-05	1.24E-05	4.12E-06	1.19E-07	6.82E-08
Mercury - Inorganic	7487-94-7	6.44E-05	7.39E-07	--	6.19E-06	2.70E-06	2.49E-08	1.02E-06	1.02E-06
Methyl Mercury	22967-92-6	5.86E-06	1.97E-08	8.17E-04	8.49E-08	4.94E-08	1.54E-10	5.46E-09	5.46E-09
Nickel	7440-02-0	8.49E-05	6.25E-05	1.81E-02	2.23E-04	5.11E-05	4.68E-05	1.14E-06	6.51E-07
Phosphorus	7723-14-0	1.11E-03	3.93E-04	--	1.54E-03	5.13E-04	4.21E-04	9.56E-06	5.46E-06
Selenium	7782-49-2	1.03E-07	1.16E-07	1.10E-04	3.57E-07	1.34E-06	2.25E-06	1.91E-07	1.91E-07
Silver	7440-22-4	5.38E-06	1.21E-06	4.02E-04	4.05E-06	3.96E-05	5.02E-07	5.99E-09	3.42E-09
Thallium	7440-28-0	2.06E-06	1.77E-04	--	6.13E-04	4.13E-05	1.34E-04	3.51E-06	2.00E-06
Tin	7440-31-5	3.35E-05	1.96E-04	5.42E-02	8.14E-04	2.24E-04	2.67E-04	7.74E-06	4.42E-06
Vanadium	7440-62-2	1.60E-06	3.82E-07	1.10E-04	1.61E-06	4.13E-07	6.88E-07	2.23E-08	1.27E-08
Zinc	7440-66-6	2.09E-02	3.06E-06	2.49E-01	1.28E-05	6.73E-06	3.20E-06	6.91E-06	6.91E-06

Calculated Exposure Point Concentrations for the Additional Exposure due to Hunting and Angling Cluster

Normal Operations - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.90E-07	1.58E-10	--	4.10E-08	1.13E-10
Acenaphthylene	208-96-8	4.45E-08	8.86E-11	--	8.39E-09	2.17E-10
Anthracene	120-12-7	1.87E-07	5.94E-11	3.90E-11	1.82E-08	2.64E-12
Benz(a)anthracene	56-55-3	1.03E-07	2.95E-11	3.72E-09	2.03E-09	1.71E-10
Benzo(a)fluorene	30777-18-5	2.04E-07	2.30E-10	1.06E-09	5.96E-09	3.96E-10
Benzo(a)pyrene	50-32-8	1.82E-07	1.28E-10	1.16E-08	2.41E-09	1.54E-09
Benzo(b)fluoranthene	205-99-2	2.37E-07	3.66E-11	6.24E-10	2.65E-09	7.56E-11
Benzo(b)fluorene	243-17-4	1.41E-07	1.86E-10	7.25E-10	2.58E-09	1.04E-09
Benzo(e)pyrene	192-97-20	4.96E-07	1.25E-09	1.42E-09	3.64E-09	2.10E-07
Benzo(g,h,i)perylene	191-24-2	2.57E-06	1.00E-09	--	1.74E-08	3.18E-07
Benzo(k)fluoranthene	207-08-9	2.07E-07	8.61E-11	3.52E-09	2.38E-09	7.11E-10
Chrysene	218-01-9	3.82E-07	4.16E-11	4.63E-09	7.53E-09	2.37E-11
Dibenz(a,c)anthracene	215-58-7	3.24E-07	9.54E-10	1.21E-07	1.68E-09	2.81E-08
Dibenz(a,h)anthracene	53-70-3	1.14E-07	6.71E-11	5.48E-09	7.71E-10	2.53E-08
Fluoranthene	206-44-0	1.85E-06	1.77E-09	1.60E-09	9.25E-08	3.72E-10
Fluorene	86-73-7	1.89E-07	4.55E-10	--	2.74E-08	9.93E-12
Indeno(1,2,3-cd)pyrene	193-39-5	5.47E-07	2.37E-10	3.60E-08	3.25E-09	1.72E-10
Perylene	198-55-0	1.07E-07	2.10E-10	5.79E-11	1.01E-09	1.56E-07
Phenanthrene	85-01-8	1.91E-06	3.00E-09	4.54E-10	1.85E-07	1.74E-10
Pyrene	129-00-0	9.50E-06	3.01E-09	1.44E-09	5.41E-07	5.11E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	3.54E-05	4.84E-10	--	2.40E-07	1.46E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	2.46E-08	3.58E-13	8.98E-11	1.12E-10	3.18E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	1.09E-10	6.65E-09	--	1.51E-10	2.63E-12
Bromoform	75-25-2	4.12E-10	2.89E-07	--	6.79E-10	2.42E-13
Carbon Tetrachloride	56-23-5	2.95E-11	2.00E-09	--	2.75E-11	9.40E-13
Chloroform	67-66-3	4.86E-11	2.19E-09	--	1.31E-10	1.27E-12
Dichloromethane	75-09-2	8.71E-09	6.82E-07	--	5.98E-08	1.32E-10
O-Terphenyl	84-15-1	6.01E-07	5.83E-10	--	1.50E-08	6.91E-10
Trichlorofluoromethane (FREON 11)	75-69-4	2.25E-09	7.51E-07	--	3.12E-09	5.57E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	8.53E-08	2.63E-10	--	5.55E-09	1.75E-12
1,2,4-Trichlorobenzene	120-82-1	2.01E-09	2.56E-10	--	3.80E-10	4.57E-13
1,2-Dichlorobenzene	95-50-1	2.71E-08	1.03E-08	--	1.17E-08	2.92E-10
Hexachlorobenzene	118-74-1	3.66E-08	3.15E-10	--	1.23E-09	1.19E-11
Pentachlorobenzene	608-93-5	1.33E-06	8.00E-10	--	5.28E-08	4.16E-11
Pentachlorophenol	87-86-5	6.23E-07	2.60E-07	--	2.72E-08	1.58E-06
Inorganics						
Antimony	7440-36-0	2.98E-04	3.69E-06	1.22E-05	9.51E-06	--
Arsenic	7440-38-2	2.96E-05	5.68E-07	1.87E-06	1.87E-07	--
Barium	7440-39-3	2.10E-04	2.85E-06	9.42E-06	6.76E-06	--
Beryllium	7440-41-7	1.88E-04	2.17E-07	1.48E-06	4.85E-07	--
Boron	7440-42-8	1.16E-03	2.07E-04	6.82E-04	2.62E-03	--
Cadmium	7440-43-9	1.24E-03	9.27E-06	3.12E-05	1.55E-04	--
Chromium (Total)	7440-47-3	1.04E-04	3.04E-06	1.00E-05	5.08E-07	--
Chromium VI	18540-29-9	1.48E-05	4.33E-07	1.43E-06	7.23E-08	--
Cobalt	7440-48-4	6.30E-04	7.81E-06	2.58E-05	5.45E-06	--
Lead	7439-92-1	2.88E-02	3.09E-05	2.23E-04	3.91E-04	--
Mercury - Inorganic	7487-94-7	2.58E-03	3.04E-07	3.00E-06	3.74E-05	1.05E-05
Methyl Mercury	22967-92-6	7.53E-05	1.28E-09	8.47E-07	2.21E-06	2.96E-06
Nickel	7440-02-0	1.35E-02	1.16E-04	3.88E-04	1.26E-04	--
Phosphorus	7723-14-0	4.05E-04	6.23E-05	2.05E-04	1.42E-03	--
Selenium	7782-49-2	5.96E-06	6.50E-07	2.14E-06	1.16E-07	--
Silver	7440-22-4	6.84E-05	4.54E-06	1.49E-05	9.44E-06	--
Thallium	7440-28-0	6.56E-03	5.18E-05	1.74E-04	5.63E-06	--
Tin	7440-31-5	7.11E-03	1.81E-05	7.84E-05	6.44E-05	--
Vanadium	7440-62-2	6.79E-04	6.88E-07	5.18E-06	2.25E-06	--
Zinc	7440-66-6	2.96E-02	2.67E-04	8.89E-04	2.87E-03	--

Calculated Exposure Point Concentrations for the Additional Exposure due to Hunting and Angling Cluster
Normal Operations - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	4.04E-08	1.56E-11	6.29E-11	1.45E-10	4.75E-11	7.82E-11	2.23E-10	1.27E-10
Acenaphthylene	208-96-8	2.83E-07	3.67E-12	4.44E-11	3.90E-11	1.19E-11	1.88E-11	5.28E-11	3.02E-11
Anthracene	120-12-7	2.82E-10	1.10E-11	9.41E-11	1.08E-10	3.26E-11	6.38E-11	1.94E-10	1.11E-10
Benz(a)anthracene	56-55-3	9.76E-11	4.32E-11	7.41E-10	2.04E-10	6.26E-11	3.55E-11	7.89E-11	4.51E-11
Benzo(a)fluorene	30777-18-5	6.87E-09	3.04E-11	2.90E-09	2.79E-10	8.20E-11	6.64E-11	1.76E-10	1.01E-10
Benzo(a)pyrene	50-32-8	1.10E-10	1.56E-10	6.39E-09	9.40E-10	2.96E-10	1.01E-10	1.25E-10	7.13E-11
Benzo(b)fluoranthene	205-99-2	2.73E-09	1.17E-11	2.43E-09	9.29E-11	2.38E-11	4.69E-11	1.53E-10	8.76E-11
Benzo(b)fluorene	243-17-4	8.60E-09	4.57E-11	5.23E-09	4.89E-10	1.51E-10	6.52E-11	1.10E-10	6.27E-11
Benzo(e)pyrene	192-97-20	2.63E-08	5.75E-09	1.72E-07	6.74E-08	2.15E-08	5.74E-09	2.75E-10	1.57E-10
Benzo(g,h,i)perylene	191-24-2	1.34E-08	8.48E-09	1.56E-07	9.95E-08	3.17E-08	8.68E-09	1.37E-09	7.85E-10
Benzo(k)fluoranthene	207-08-9	1.26E-10	5.60E-11	5.41E-09	3.95E-10	1.22E-10	6.14E-11	1.35E-10	7.73E-11
Chrysene	218-01-9	3.62E-10	5.32E-11	1.04E-09	2.69E-10	7.58E-11	9.66E-11	2.92E-10	1.67E-10
Dibenz(a,c)anthracene	215-58-7	5.56E-09	1.47E-09	2.38E-07	1.04E-08	3.30E-09	8.68E-10	1.55E-10	8.83E-11
Dibenz(a,h)anthracene	53-70-3	4.61E-11	7.13E-10	1.06E-08	8.02E-09	2.56E-09	6.87E-10	6.07E-11	3.47E-11
Fluoranthene	206-44-0	2.77E-09	1.01E-10	8.86E-09	9.83E-10	2.73E-10	5.51E-10	1.72E-09	9.85E-10
Fluorene	86-73-7	3.58E-10	1.36E-11	3.61E-10	1.38E-10	4.24E-11	7.27E-11	2.11E-10	1.21E-10
Indeno(1,2,3-cd)pyrene	193-39-5	2.90E-10	2.59E-10	4.67E-08	9.84E-10	3.02E-10	1.40E-10	2.75E-10	1.57E-10
Perylene	198-55-0	2.01E-09	4.64E-09	1.87E-08	5.44E-08	1.74E-08	4.60E-09	6.55E-11	3.74E-11
Phenanthrene	85-01-8	3.50E-09	1.18E-10	4.75E-09	1.18E-09	3.53E-10	6.60E-10	1.99E-09	1.14E-09
Pyrene	129-00-0	1.38E-08	4.35E-10	1.20E-08	4.52E-09	1.27E-09	2.84E-09	9.00E-09	5.14E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	3.39E-07	4.81E-08	1.24E-04	6.70E-07	1.35E-07	5.37E-07	1.89E-08	1.08E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	2.53E-10	1.54E-10	**1.11E-08**	1.38E-09	3.94E-10	3.84E-10	1.08E-11	6.20E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	9.62E-09	1.97E-10	1.05E-08	4.59E-09	9.68E-10	7.36E-10	1.26E-11	7.20E-12
Bromoform	75-25-2	5.07E-09	7.50E-09	3.40E-07	1.70E-07	3.59E-08	2.72E-08	4.64E-10	2.65E-10
Carbon Tetrachloride	56-23-5	2.81E-09	8.56E-11	6.34E-09	2.00E-09	4.21E-10	3.20E-10	5.47E-12	3.12E-12
Chloroform	67-66-3	4.89E-09	3.55E-11	1.10E-09	8.22E-10	1.74E-10	1.32E-10	2.27E-12	1.30E-12
Dichloromethane	75-09-2	3.14E-06	3.76E-09	6.82E-08	8.62E-08	1.82E-08	1.39E-08	2.40E-10	1.37E-10
O-Terphenyl	84-15-1	1.35E-08	4.15E-09	9.66E-07	5.04E-08	1.42E-08	1.68E-08	4.98E-10	2.84E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.82E-07	2.27E-08	1.19E-06	5.22E-07	1.10E-07	8.33E-08	1.42E-09	8.13E-10
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	8.94E-08	4.82E-10	8.33E-08	5.24E-09	1.39E-09	2.78E-09	8.53E-11	4.87E-11
1,2,4-Trichlorobenzene	120-82-1	1.56E-09	5.41E-11	1.61E-08	1.07E-09	2.40E-10	2.17E-10	4.47E-12	2.55E-12
1,2-Dichlorobenzene	95-50-1	6.64E-07	1.14E-09	1.24E-07	2.35E-08	5.23E-09	4.47E-09	8.72E-11	4.98E-11
Hexachlorobenzene	118-74-1	9.32E-09	2.17E-10	3.15E-07	3.20E-09	7.74E-10	1.11E-09	3.37E-11	1.93E-11
Pentachlorobenzene	608-93-5	2.44E-08	4.94E-09	5.93E-07	5.55E-08	1.45E-08	3.65E-08	1.18E-09	6.77E-10
Pentachlorophenol	87-86-5	1.02E-05	8.99E-09	1.46E-04	1.06E-07	3.37E-08	8.98E-09	2.52E-12	1.44E-12
Inorganics									
Antimony	7440-36-0	8.94E-06	3.96E-07	7.39E-04	1.92E-06	2.77E-07	3.53E-07	6.49E-09	3.71E-09
Arsenic	7440-38-2	2.37E-07	9.48E-08	2.84E-05	3.91E-07	1.66E-08	5.71E-08	1.10E-09	6.27E-10
Barium	7440-39-3	3.15E-06	4.23E-08	2.85E-05	1.96E-07	6.55E-07	3.37E-08	6.19E-10	3.54E-10
Beryllium	7440-41-7	2.82E-07	4.48E-08	2.17E-05	2.39E-07	2.64E-10	9.64E-08	3.10E-09	1.77E-09
Boron	7440-42-8	2.32E-03	1.89E-05	--	9.19E-05	2.97E-05	1.78E-05	3.04E-07	1.73E-07
Cadmium	7440-43-9	7.92E-05	1.80E-07	1.11E-02	1.02E-06	8.14E-08	2.88E-07	4.64E-06	1.09E-07
Chromium (Total)	7440-47-3	4.68E-07	1.34E-06	6.09E-04	5.30E-06	2.06E-06	6.60E-07	1.12E-08	6.39E-09
Chromium VI	18540-29-9	6.66E-08	1.91E-07	1.60E-05	7.54E-07	2.94E-07	9.39E-08	1.59E-09	9.08E-10
Cobalt	7440-48-4	4.41E-06	1.32E-05	7.81E-04	5.56E-05	1.63E-05	9.99E-06	2.32E-07	1.32E-07
Lead	7439-92-1	2.59E-04	2.50E-06	3.23E-03	1.42E-05	1.56E-05	5.18E-06	1.52E-07	8.68E-08
Mercury - Inorganic	7487-94-7	9.28E-05	7.39E-07	--	8.65E-06	3.71E-06	3.58E-08	1.47E-06	1.47E-06
Methyl Mercury	22967-92-6	7.45E-06	1.97E-08	8.17E-04	1.06E-07	6.18E-08	1.94E-10	6.95E-09	6.95E-09
Nickel	7440-02-0	1.08E-04	6.25E-05	1.81E-02	2.79E-04	6.40E-05	5.85E-05	1.45E-06	8.28E-07
Phosphorus	7723-14-0	1.42E-03	3.93E-04	--	1.93E-03	6.44E-04	5.27E-04	1.22E-05	6.95E-06
Selenium	7782-49-2	1.31E-07	1.16E-07	1.10E-04	4.46E-07	1.67E-06	2.78E-06	2.40E-07	2.40E-07
Silver	7440-22-4	6.84E-06	1.21E-06	4.02E-04	5.07E-06	4.96E-05	6.26E-07	7.58E-09	4.33E-09
Thallium	7440-28-0	2.62E-06	1.77E-04	--	7.67E-04	5.18E-05	1.67E-04	4.46E-06	2.55E-06
Tin	7440-31-5	4.27E-05	1.96E-04	5.42E-02	1.02E-03	2.81E-04	3.35E-04	9.84E-06	5.63E-06
Vanadium	7440-62-2	2.04E-06	3.82E-07	1.10E-04	2.03E-06	5.20E-07	8.65E-07	2.84E-08	1.62E-08
Zinc	7440-66-6	2.66E-02	3.06E-06	2.49E-01	1.60E-05	8.44E-06	4.01E-06	8.78E-06	8.78E-06

APPENDIX E-7

Multi-Pathway Exposure Point Concentrations – Upset Operations
(Process Upset Case) – 140,000 tpy

Calculated Exposure Point Concentrations for the Bowmanville Subdivision Receptor Cluster
Process Upset - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.95E-07	4.43E-10	--	4.22E-08	1.61E-10
Acenaphthylene	208-96-8	4.58E-08	2.48E-10	--	8.64E-09	3.09E-10
Anthracene	120-12-7	1.93E-07	1.66E-10	4.37E-11	1.87E-08	3.76E-12
Benz(a)anthracene	56-55-3	1.06E-07	8.27E-11	4.16E-09	2.09E-09	2.43E-10
Benzo(a)fluorene	30777-18-5	2.10E-07	6.45E-10	1.19E-09	6.14E-09	5.64E-10
Benzo(a)pyrene	50-32-8	1.88E-07	3.59E-10	1.30E-08	2.48E-09	2.19E-09
Benzo(b)fluoranthene	205-99-2	2.44E-07	1.02E-10	6.99E-10	2.73E-09	1.08E-10
Benzo(b)fluorene	243-17-4	1.45E-07	5.20E-10	8.12E-10	2.66E-09	1.49E-09
Benzo(e)pyrene	192-97-20	5.11E-07	3.50E-09	1.59E-09	3.75E-09	2.99E-07
Benzo(g,h,i)perylene	191-24-2	2.65E-06	2.81E-09	--	1.79E-08	4.54E-07
Benzo(k)fluoranthene	207-08-9	2.13E-07	2.41E-10	3.94E-09	2.45E-09	1.01E-09
Chrysene	218-01-9	3.94E-07	1.17E-10	5.18E-09	7.75E-09	3.37E-11
Dibenz(a,c)anthracene	215-58-7	3.33E-07	2.67E-09	1.36E-07	1.73E-09	4.00E-08
Dibenz(a,h)anthracene	53-70-3	1.17E-07	1.88E-10	6.14E-09	7.94E-10	3.61E-08
Fluoranthene	206-44-0	1.91E-06	4.95E-09	1.79E-09	9.53E-08	5.29E-10
Fluorene	86-73-7	1.94E-07	1.27E-09	--	2.82E-08	1.41E-11
Indeno(1,2,3-cd)pyrene	193-39-5	5.64E-07	6.63E-10	4.03E-08	3.34E-09	2.45E-10
Perylene	198-55-0	1.10E-07	5.88E-10	6.48E-11	1.04E-09	2.23E-07
Phenanthrene	85-01-8	1.96E-06	8.40E-09	5.08E-10	1.91E-07	2.48E-10
Pyrene	129-00-0	9.79E-06	8.42E-09	1.62E-09	5.58E-07	7.28E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	3.65E-05	1.35E-09	--	2.48E-07	2.07E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	4.09E-08	1.00E-12	1.66E-10	1.86E-10	4.54E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	1.12E-10	1.86E-08	--	1.55E-10	3.75E-12
Bromoform	75-25-2	4.24E-10	8.11E-07	--	7.00E-10	3.44E-13
Carbon Tetrachloride	56-23-5	3.04E-11	5.61E-09	--	2.83E-11	1.34E-12
Chloroform	67-66-3	5.00E-11	6.13E-09	--	1.35E-10	1.81E-12
Dichloromethane	75-09-2	8.97E-09	1.91E-06	--	6.15E-08	1.88E-10
O-Terphenyl	84-15-1	6.19E-07	1.63E-09	--	1.54E-08	9.84E-10
Trichlorofluoromethane (FREON 11)	75-69-4	2.31E-09	2.10E-06	--	3.21E-09	7.93E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	8.78E-08	7.37E-10	--	5.72E-09	2.49E-12
1,2,4-Trichlorobenzene	120-82-1	2.07E-09	7.17E-10	--	3.91E-10	6.51E-13
1,2-Dichlorobenzene	95-50-1	2.79E-08	2.89E-08	--	1.20E-08	4.16E-10
Hexachlorobenzene	118-74-1	3.77E-08	8.82E-10	--	1.26E-09	1.70E-11
Pentachlorobenzene	608-93-5	1.37E-06	2.24E-09	--	5.43E-08	5.92E-11
Pentachlorophenol	87-86-5	6.42E-07	7.28E-07	--	2.81E-08	2.25E-06
Inorganics						
Antimony	7440-36-0	2.56E-04	5.36E-06	1.17E-05	8.18E-06	--
Arsenic	7440-38-2	2.54E-05	8.23E-07	1.79E-06	1.61E-07	--
Barium	7440-39-3	1.80E-04	4.14E-06	9.01E-06	5.81E-06	--
Beryllium	7440-41-7	1.62E-04	3.14E-07	1.42E-06	4.17E-07	--
Boron	7440-42-8	9.97E-04	3.00E-04	6.52E-04	2.25E-03	--
Cadmium	7440-43-9	1.06E-03	1.34E-05	2.98E-05	1.33E-04	--
Chromium (Total)	7440-47-3	8.95E-05	4.41E-06	9.58E-06	4.37E-07	--
Chromium VI	18540-29-9	1.27E-05	6.28E-07	1.36E-06	6.21E-08	--
Cobalt	7440-48-4	5.42E-04	1.13E-05	2.47E-05	4.69E-06	--
Lead	7439-92-1	2.47E-02	4.47E-05	2.13E-04	3.37E-04	--
Mercury - Inorganic	7487-94-7	1.75E-03	4.40E-07	2.87E-06	2.54E-05	7.73E-06
Methyl Mercury	22967-92-6	6.48E-05	1.86E-09	8.10E-07	1.90E-06	2.18E-06
Nickel	7440-02-0	1.16E-02	1.69E-04	3.71E-04	1.08E-04	--
Phosphorus	7723-14-0	3.48E-04	9.04E-05	1.96E-04	1.22E-03	--
Selenium	7782-49-2	5.13E-06	9.42E-07	2.04E-06	1.00E-07	--
Silver	7440-22-4	5.88E-05	6.58E-06	1.43E-05	8.11E-06	--
Thallium	7440-28-0	5.64E-03	7.51E-05	1.66E-04	4.84E-06	--
Tin	7440-31-5	6.12E-03	2.62E-05	7.50E-05	5.54E-05	--
Vanadium	7440-62-2	5.84E-04	9.98E-07	4.95E-06	1.94E-06	--
Zinc	7440-66-6	2.54E-02	3.87E-04	8.50E-04	2.47E-03	--

Calculated Exposure Point Concentrations for the Bowmanville Subdivision Receptor Cluster
Process Upset - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	4.16E-08	4.37E-11	1.76E-10	1.71E-10	5.34E-11	8.39E-11	2.35E-10	1.35E-10
Acenaphthylene	208-96-8	2.91E-07	1.03E-11	1.24E-10	6.18E-11	1.69E-11	2.27E-11	6.02E-11	3.44E-11
Anthracene	120-12-7	2.91E-10	3.09E-11	2.63E-10	1.20E-10	3.55E-11	6.70E-11	2.02E-10	1.15E-10
Benz(a)anthracene	56-55-3	1.01E-10	1.21E-10	2.07E-09	2.67E-10	8.20E-11	4.19E-11	8.20E-11	4.69E-11
Benzo(a)fluorene	30777-18-5	7.07E-09	8.52E-11	8.11E-09	4.29E-10	1.23E-10	8.85E-11	1.99E-10	1.14E-10
Benzo(a)pyrene	50-32-8	1.14E-10	4.36E-10	1.79E-08	1.28E-09	4.02E-10	1.35E-10	1.30E-10	7.41E-11
Benzo(b)fluoranthene	205-99-2	2.81E-09	3.27E-11	6.80E-09	1.21E-10	3.18E-11	5.07E-11	1.59E-10	9.08E-11
Benzo(b)fluorene	243-17-4	8.85E-09	1.28E-10	1.46E-08	7.20E-10	2.20E-10	9.31E-11	1.25E-10	7.14E-11
Benzo(e)pyrene	192-97-20	2.71E-08	1.61E-08	4.83E-07	9.60E-08	3.07E-08	8.17E-09	2.87E-10	1.64E-10
Benzo(g,h,i)perylene	191-24-2	1.38E-08	2.37E-08	4.37E-07	1.42E-07	4.52E-08	1.23E-08	1.42E-09	8.11E-10
Benzo(k)fluoranthene	207-08-9	1.30E-10	1.57E-10	1.52E-08	5.38E-10	1.66E-10	7.95E-11	1.40E-10	7.98E-11
Chrysene	218-01-9	3.73E-10	1.49E-10	2.92E-09	3.03E-10	8.57E-11	1.02E-10	3.02E-10	1.73E-10
Dibenz(a,c)anthracene	215-58-7	5.73E-09	4.10E-09	6.65E-07	1.43E-08	4.56E-09	1.20E-09	1.64E-10	9.38E-11
Dibenz(a,h)anthracene	53-70-3	4.75E-11	2.00E-09	2.96E-08	1.14E-08	3.64E-09	9.75E-10	6.28E-11	3.59E-11
Fluoranthene	206-44-0	2.85E-09	2.84E-10	2.48E-08	1.22E-09	3.37E-10	5.92E-10	1.80E-09	1.03E-09
Fluorene	86-73-7	3.68E-10	3.80E-11	1.01E-09	1.96E-10	5.53E-11	8.33E-11	2.32E-10	1.32E-10
Indeno(1,2,3-cd)pyrene	193-39-5	2.98E-10	7.26E-10	1.31E-07	1.13E-09	3.47E-10	1.53E-10	2.85E-10	1.63E-10
Perylene	198-55-0	2.07E-09	1.30E-08	5.23E-08	7.75E-08	2.48E-08	6.55E-09	6.79E-11	3.88E-11
Phenanthrene	85-01-8	3.60E-09	3.30E-10	1.33E-08	1.46E-09	4.20E-10	7.15E-10	2.10E-09	1.20E-09
Pyrene	129-00-0	1.42E-08	1.22E-09	3.35E-08	4.92E-09	1.38E-09	2.96E-09	9.31E-09	5.32E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	3.50E-07	1.35E-07	3.48E-04	7.27E-07	1.50E-07	5.57E-07	1.95E-08	1.11E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	4.20E-10	4.31E-10	**3.12E-08**	2.14E-09	6.04E-10	6.31E-10	1.80E-11	1.03E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	9.91E-09	5.51E-10	2.95E-08	2.12E-08	4.47E-09	3.39E-09	5.78E-11	3.30E-11
Bromoform	75-25-2	5.22E-09	2.10E-08	9.52E-07	7.93E-07	1.67E-07	1.26E-07	2.16E-09	1.23E-09
Carbon Tetrachloride	56-23-5	2.89E-09	2.40E-10	1.77E-08	9.24E-09	1.94E-09	1.47E-09	2.52E-11	1.44E-11
Chloroform	67-66-3	5.03E-09	9.93E-11	3.07E-09	3.81E-09	8.03E-10	6.10E-10	1.04E-11	5.96E-12
Dichloromethane	75-09-2	3.23E-06	1.05E-08	1.91E-07	4.03E-07	8.49E-08	6.45E-08	1.10E-09	6.30E-10
O-Terphenyl	84-15-1	1.39E-08	1.16E-08	2.71E-06	8.13E-08	2.21E-08	2.16E-08	5.57E-10	3.18E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.88E-07	6.36E-08	3.33E-06	2.42E-06	5.10E-07	3.86E-07	6.59E-09	3.77E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	9.21E-08	1.35E-09	2.33E-07	1.07E-08	2.58E-09	3.73E-09	1.02E-10	5.85E-11
1,2,4-Trichlorobenzene	120-82-1	1.61E-09	1.51E-10	4.52E-08	4.37E-09	9.39E-10	7.54E-10	1.38E-11	7.89E-12
1,2-Dichlorobenzene	95-50-1	6.84E-07	3.20E-09	3.47E-07	1.01E-07	2.15E-08	1.69E-08	3.02E-10	1.73E-10
Hexachlorobenzene	118-74-1	9.60E-09	6.07E-10	8.82E-07	9.06E-09	2.04E-09	2.15E-09	5.15E-11	2.94E-11
Pentachlorobenzene	608-93-5	2.51E-08	1.38E-08	1.66E-06	7.55E-08	1.89E-08	4.04E-08	1.27E-09	7.24E-10
Pentachlorophenol	87-86-5	1.05E-05	2.52E-08	4.09E-04	1.51E-07	4.81E-08	1.28E-08	2.69E-12	1.54E-12
Inorganics									
Antimony	7440-36-0	7.69E-06	5.74E-07	1.07E-03	1.76E-06	2.55E-07	3.15E-07	5.58E-09	3.19E-09
Arsenic	7440-38-2	2.03E-07	1.37E-07	4.12E-05	3.69E-07	1.57E-08	5.20E-08	9.45E-10	5.40E-10
Barium	7440-39-3	2.71E-06	6.13E-08	4.14E-05	1.81E-07	6.07E-07	3.02E-08	5.33E-10	3.05E-10
Beryllium	7440-41-7	2.42E-07	6.49E-08	3.14E-05	2.19E-07	2.45E-10	8.49E-08	2.67E-09	1.53E-09
Boron	7440-42-8	1.99E-03	2.74E-05	--	8.42E-05	2.72E-05	1.58E-05	2.61E-07	1.49E-07
Cadmium	7440-43-9	6.81E-05	2.61E-07	1.62E-02	9.15E-07	7.31E-08	2.54E-07	4.00E-06	9.41E-08
Chromium (Total)	7440-47-3	4.03E-07	1.95E-06	8.83E-04	5.04E-06	1.97E-06	6.08E-07	9.65E-09	5.51E-09
Chromium VI	18540-29-9	5.73E-08	2.77E-07	2.32E-05	7.17E-07	2.80E-07	8.65E-08	1.37E-09	7.84E-10
Cobalt	7440-48-4	3.79E-06	1.91E-05	1.13E-03	5.24E-05	1.54E-05	9.01E-06	1.99E-07	1.14E-07
Lead	7439-92-1	2.23E-04	3.63E-06	4.68E-03	1.29E-05	1.42E-05	4.55E-06	1.31E-07	7.48E-08
Mercury - Inorganic	7487-94-7	6.31E-05	1.07E-06	--	6.29E-06	2.78E-06	2.45E-08	1.00E-06	1.00E-06
Methyl Mercury	22967-92-6	6.41E-06	2.85E-08	1.18E-03	9.40E-08	5.48E-08	1.69E-10	5.98E-09	5.98E-09
Nickel	7440-02-0	9.29E-05	9.07E-05	2.63E-02	2.61E-04	6.01E-05	5.23E-05	1.25E-06	7.13E-07
Phosphorus	7723-14-0	1.22E-03	5.71E-04	--	1.77E-03	5.87E-04	4.66E-04	1.05E-05	5.98E-06
Selenium	7782-49-2	1.13E-07	1.69E-07	1.60E-04	4.25E-07	1.60E-06	2.62E-06	2.09E-07	2.09E-07
Silver	7440-22-4	5.88E-06	1.75E-06	5.83E-04	4.76E-06	4.66E-05	5.72E-07	6.55E-09	3.74E-09
Thallium	7440-28-0	2.26E-06	2.56E-04	--	7.21E-04	4.90E-05	1.50E-04	3.84E-06	2.19E-06
Tin	7440-31-5	3.67E-05	2.85E-04	7.85E-02	9.38E-04	2.60E-04	2.96E-04	8.48E-06	4.84E-06
Vanadium	7440-62-2	1.75E-06	5.53E-07	1.60E-04	1.87E-06	4.83E-07	7.61E-07	2.44E-08	1.40E-08
Zinc	7440-66-6	2.29E-02	4.43E-06	3.60E-01	1.46E-05	7.68E-06	3.55E-06	7.56E-06	7.56E-06

Calculated Exposure Point Concentrations for the Courtice Subdivision Receptor Cluster
Process Upset - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.47E-07	4.43E-10	--	3.17E-08	1.04E-10
Acenaphthylene	208-96-8	3.43E-08	2.48E-10	--	6.48E-09	2.00E-10
Anthracene	120-12-7	1.45E-07	1.66E-10	3.13E-11	1.40E-08	2.43E-12
Benz(a)anthracene	56-55-3	7.95E-08	8.27E-11	2.99E-09	1.57E-09	1.58E-10
Benzo(a)fluorene	30777-18-5	1.57E-07	6.45E-10	8.51E-10	4.60E-09	3.65E-10
Benzo(a)pyrene	50-32-8	1.41E-07	3.59E-10	9.35E-09	1.86E-09	1.42E-09
Benzo(b)fluoranthene	205-99-2	1.83E-07	1.02E-10	5.01E-10	2.05E-09	6.97E-11
Benzo(b)fluorene	243-17-4	1.09E-07	5.20E-10	5.82E-10	2.00E-09	9.62E-10
Benzo(e)pyrene	192-97-20	3.83E-07	3.50E-09	1.14E-09	2.81E-09	1.93E-07
Benzo(g,h,i)perylene	191-24-2	1.99E-06	2.81E-09	--	1.35E-08	2.93E-07
Benzo(k)fluoranthene	207-08-9	1.60E-07	2.41E-10	2.83E-09	1.83E-09	6.55E-10
Chrysene	218-01-9	2.95E-07	1.17E-10	3.72E-09	5.81E-09	2.18E-11
Dibenz(a,c)anthracene	215-58-7	2.50E-07	2.67E-09	9.75E-08	1.30E-09	2.59E-08
Dibenz(a,h)anthracene	53-70-3	8.78E-08	1.88E-10	4.40E-09	5.95E-10	2.33E-08
Fluoranthene	206-44-0	1.43E-06	4.95E-09	1.28E-09	7.14E-08	3.42E-10
Fluorene	86-73-7	1.46E-07	1.27E-09	--	2.11E-08	9.15E-12
Indeno(1,2,3-cd)pyrene	193-39-5	4.22E-07	6.63E-10	2.89E-08	2.51E-09	1.58E-10
Perylene	198-55-0	8.27E-08	5.88E-10	4.65E-11	7.81E-10	1.44E-07
Phenanthrene	85-01-8	1.47E-06	8.40E-09	3.64E-10	1.43E-07	1.60E-10
Pyrene	129-00-0	7.32E-06	8.42E-09	1.16E-09	4.18E-07	4.71E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	2.73E-05	1.35E-09	--	1.85E-07	1.34E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	2.95E-08	1.00E-12	1.15E-10	1.34E-10	2.93E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	8.38E-11	1.86E-08	--	1.17E-10	2.42E-12
Bromoform	75-25-2	3.18E-10	8.11E-07	--	5.25E-10	2.23E-13
Carbon Tetrachloride	56-23-5	2.28E-11	5.61E-09	--	2.12E-11	8.67E-13
Chloroform	67-66-3	3.75E-11	6.13E-09	--	1.01E-10	1.17E-12
Dichloromethane	75-09-2	6.73E-09	1.91E-06	--	4.62E-08	1.22E-10
O-Terphenyl	84-15-1	4.64E-07	1.63E-09	--	1.16E-08	6.37E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.73E-09	2.10E-06	--	2.41E-09	5.13E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	6.59E-08	7.37E-10	--	4.29E-09	1.61E-12
1,2,4-Trichlorobenzene	120-82-1	1.55E-09	7.17E-10	--	2.94E-10	4.21E-13
1,2-Dichlorobenzene	95-50-1	2.09E-08	2.89E-08	--	9.00E-09	2.69E-10
Hexachlorobenzene	118-74-1	2.83E-08	8.82E-10	--	9.48E-10	1.10E-11
Pentachlorobenzene	608-93-5	1.02E-06	2.24E-09	--	4.08E-08	3.83E-11
Pentachlorophenol	87-86-5	4.81E-07	7.28E-07	--	2.10E-08	1.46E-06
Inorganics						
Antimony	7440-36-0	1.85E-04	5.36E-06	8.12E-06	5.91E-06	--
Arsenic	7440-38-2	1.84E-05	8.23E-07	1.25E-06	1.16E-07	--
Barium	7440-39-3	1.31E-04	4.14E-06	6.27E-06	4.20E-06	--
Beryllium	7440-41-7	1.17E-04	3.14E-07	9.87E-07	3.01E-07	--
Boron	7440-42-8	7.22E-04	3.00E-04	4.54E-04	1.63E-03	--
Cadmium	7440-43-9	7.70E-04	1.34E-05	2.08E-05	9.62E-05	--
Chromium (Total)	7440-47-3	6.48E-05	4.41E-06	6.67E-06	3.16E-07	--
Chromium VI	18540-29-9	9.21E-06	6.28E-07	9.49E-07	4.49E-08	--
Cobalt	7440-48-4	3.92E-04	1.13E-05	1.72E-05	3.39E-06	--
Lead	7439-92-1	1.79E-02	4.47E-05	1.48E-04	2.43E-04	--
Mercury - Inorganic	7487-94-7	1.15E-03	4.40E-07	2.00E-06	1.67E-05	5.00E-06
Methyl Mercury	22967-92-6	4.68E-05	1.86E-09	5.63E-07	1.38E-06	1.41E-06
Nickel	7440-02-0	8.40E-03	1.69E-04	2.58E-04	7.82E-05	--
Phosphorus	7723-14-0	2.52E-04	9.04E-05	1.36E-04	8.81E-04	--
Selenium	7782-49-2	3.71E-06	9.42E-07	1.42E-06	7.23E-08	--
Silver	7440-22-4	4.25E-05	6.58E-06	9.94E-06	5.87E-06	--
Thallium	7440-28-0	4.08E-03	7.51E-05	1.16E-04	3.50E-06	--
Tin	7440-31-5	4.42E-03	2.62E-05	5.22E-05	4.00E-05	--
Vanadium	7440-62-2	4.22E-04	9.98E-07	3.45E-06	1.40E-06	--
Zinc	7440-66-6	1.84E-02	3.87E-04	5.92E-04	1.78E-03	--

Calculated Exposure Point Concentrations for the Courtice Subdivision Receptor Cluster
Process Upset - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	3.12E-08	4.37E-11	1.76E-10	1.14E-10	3.72E-11	6.07E-11	1.73E-10	9.87E-11
Acenaphthylene	208-96-8	2.18E-07	1.03E-11	1.24E-10	3.27E-11	9.77E-12	1.49E-11	4.14E-11	2.37E-11
Anthracene	120-12-7	2.18E-10	3.09E-11	2.63E-10	8.44E-11	2.54E-11	4.94E-11	1.50E-10	8.56E-11
Benz(a)anthracene	56-55-3	7.53E-11	1.21E-10	2.07E-09	1.84E-10	5.65E-11	2.99E-11	6.09E-11	3.48E-11
Benzo(a)fluorene	30777-18-5	5.30E-09	8.52E-11	8.11E-09	2.53E-10	7.45E-11	5.72E-11	1.37E-10	7.83E-11
Benzo(a)pyrene	50-32-8	8.51E-11	4.36E-10	1.79E-08	8.55E-10	2.69E-10	9.26E-11	9.63E-11	5.50E-11
Benzo(b)fluoranthene	205-99-2	2.10E-09	3.27E-11	6.80E-09	8.30E-11	2.17E-11	3.72E-11	1.18E-10	6.77E-11
Benzo(b)fluorene	243-17-4	6.64E-09	1.28E-10	1.46E-08	4.47E-10	1.38E-10	5.97E-11	8.54E-11	4.88E-11
Benzo(e)pyrene	192-97-20	2.03E-08	1.61E-08	4.83E-07	6.21E-08	1.98E-08	5.29E-09	2.13E-10	1.21E-10
Benzo(g,h,i)perylene	191-24-2	1.03E-08	2.37E-08	4.37E-07	9.17E-08	2.93E-08	8.00E-09	1.06E-09	6.06E-10
Benzo(k)fluoranthene	207-08-9	9.71E-11	1.57E-10	1.52E-08	3.61E-10	1.11E-10	5.59E-11	1.04E-10	5.96E-11
Chrysene	218-01-9	2.80E-10	1.49E-10	2.92E-09	2.17E-10	6.12E-11	7.52E-11	2.26E-10	1.29E-10
Dibenz(a,c)anthracene	215-58-7	4.30E-09	4.10E-09	6.65E-07	9.46E-09	3.01E-09	7.94E-10	1.19E-10	6.82E-11
Dibenz(a,h)anthracene	53-70-3	3.56E-11	2.00E-09	2.96E-08	7.39E-09	2.36E-09	6.33E-10	4.69E-11	2.68E-11
Fluoranthene	206-44-0	2.14E-09	2.84E-10	2.48E-08	8.22E-10	2.31E-10	4.31E-10	1.33E-09	7.62E-10
Fluorene	86-73-7	2.76E-10	3.80E-11	1.01E-09	1.12E-10	3.41E-11	5.69E-11	1.64E-10	9.40E-11
Indeno(1,2,3-cd)pyrene	193-39-5	2.24E-10	7.26E-10	1.31E-07	8.05E-10	2.48E-10	1.11E-10	2.13E-10	1.21E-10
Perylene	198-55-0	1.55E-09	1.30E-08	5.23E-08	5.01E-08	1.60E-08	4.24E-09	5.05E-11	2.89E-11
Phenanthrene	85-01-8	2.70E-09	3.30E-10	1.33E-08	9.49E-10	2.83E-10	5.14E-10	1.54E-09	8.79E-10
Pyrene	129-00-0	1.06E-08	1.22E-09	3.35E-08	3.57E-09	1.00E-09	2.20E-09	6.94E-09	3.97E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	2.61E-07	1.35E-07	3.48E-04	5.34E-07	1.09E-07	4.15E-07	1.46E-08	8.31E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	3.03E-10	4.31E-10	**3.12E-08**	1.44E-09	4.04E-10	4.47E-10	1.30E-11	7.43E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	7.43E-09	5.51E-10	2.95E-08	3.94E-09	8.30E-10	6.30E-10	1.08E-11	6.17E-12
Bromoform	75-25-2	3.91E-09	2.10E-08	9.52E-07	1.46E-07	3.07E-08	2.33E-08	3.97E-10	2.27E-10
Carbon Tetrachloride	56-23-5	2.17E-09	2.40E-10	1.77E-08	1.71E-09	3.61E-10	2.74E-10	4.68E-12	2.67E-12
Chloroform	67-66-3	3.78E-09	9.93E-11	3.07E-09	7.10E-10	1.50E-10	1.14E-10	1.97E-12	1.12E-12
Dichloromethane	75-09-2	2.42E-06	1.05E-08	1.91E-07	7.50E-08	1.59E-08	1.21E-08	2.09E-10	1.19E-10
O-Terphenyl	84-15-1	1.04E-08	1.16E-08	2.71E-06	4.57E-08	1.29E-08	1.41E-08	3.88E-10	2.21E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.41E-07	6.36E-08	3.33E-06	4.47E-07	9.40E-08	7.13E-08	1.22E-09	6.95E-10
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	6.91E-08	1.35E-09	2.33E-07	4.95E-09	1.29E-09	2.31E-09	6.85E-11	3.92E-11
1,2,4-Trichlorobenzene	120-82-1	1.20E-09	1.51E-10	4.52E-08	9.46E-10	2.13E-10	1.94E-10	4.02E-12	2.30E-12
1,2-Dichlorobenzene	95-50-1	5.13E-07	3.20E-09	3.47E-07	2.06E-08	4.59E-09	3.95E-09	7.74E-11	4.42E-11
Hexachlorobenzene	118-74-1	7.20E-09	6.07E-10	8.82E-07	2.84E-09	6.91E-10	9.89E-10	2.80E-11	1.60E-11
Pentachlorobenzene	608-93-5	1.88E-08	1.38E-08	1.66E-06	4.54E-08	1.18E-08	2.85E-08	9.20E-10	5.26E-10
Pentachlorophenol	87-86-5	7.88E-06	2.52E-08	4.09E-04	9.76E-08	3.11E-08	8.28E-09	1.98E-12	1.13E-12
Inorganics									
Antimony	7440-36-0	5.56E-06	5.74E-07	1.07E-03	1.25E-06	1.80E-07	2.26E-07	4.04E-09	2.31E-09
Arsenic	7440-38-2	1.47E-07	1.37E-07	4.12E-05	2.59E-07	1.10E-08	3.70E-08	6.84E-10	3.91E-10
Barium	7440-39-3	1.96E-06	6.13E-08	4.14E-05	1.28E-07	4.29E-07	2.16E-08	3.85E-10	2.20E-10
Beryllium	7440-41-7	1.75E-07	6.49E-08	3.14E-05	1.55E-07	1.72E-10	6.10E-08	1.93E-09	1.10E-09
Boron	7440-42-8	1.44E-03	2.74E-05	--	5.98E-05	1.93E-05	1.14E-05	1.89E-07	1.08E-07
Cadmium	7440-43-9	4.93E-05	2.61E-07	1.62E-02	6.54E-07	5.22E-08	1.83E-07	2.89E-06	6.80E-08
Chromium (Total)	7440-47-3	2.91E-07	1.95E-06	8.83E-04	3.53E-06	1.37E-06	4.32E-07	6.98E-09	3.99E-09
Chromium VI	18540-29-9	4.14E-08	2.77E-07	2.32E-05	5.02E-07	1.95E-07	6.14E-08	9.93E-10	5.67E-10
Cobalt	7440-48-4	2.74E-06	1.91E-05	1.13E-03	3.68E-05	1.08E-05	6.44E-06	1.44E-07	8.24E-08
Lead	7439-92-1	1.61E-04	3.63E-06	4.68E-03	9.16E-06	1.00E-05	3.27E-06	9.45E-08	5.40E-08
Mercury - Inorganic	7487-94-7	4.15E-05	1.07E-06	--	4.16E-06	1.85E-06	1.61E-08	6.59E-07	6.59E-07
Methyl Mercury	22967-92-6	4.63E-06	2.85E-08	1.18E-03	6.53E-08	3.79E-08	1.21E-10	4.32E-09	4.32E-09
Nickel	7440-02-0	6.72E-05	9.07E-05	2.63E-02	1.84E-04	4.22E-05	3.75E-05	9.02E-07	5.15E-07
Phosphorus	7723-14-0	8.81E-04	5.71E-04	--	1.26E-03	4.17E-04	3.35E-04	7.57E-06	4.32E-06
Selenium	7782-49-2	8.16E-08	1.69E-07	1.60E-04	2.97E-07	1.12E-06	1.85E-06	1.51E-07	1.51E-07
Silver	7440-22-4	4.25E-06	1.75E-06	5.83E-04	3.34E-06	3.27E-05	4.07E-07	4.74E-09	2.71E-09
Thallium	7440-28-0	1.63E-06	2.56E-04	--	5.07E-04	3.43E-05	1.07E-04	2.77E-06	1.59E-06
Tin	7440-31-5	2.65E-05	2.85E-04	7.85E-02	6.63E-04	1.83E-04	2.13E-04	6.12E-06	3.50E-06
Vanadium	7440-62-2	1.27E-06	5.53E-07	1.60E-04	1.32E-06	3.39E-07	5.47E-07	1.76E-08	1.01E-08
Zinc	7440-66-6	1.66E-02	4.43E-06	3.60E-01	1.04E-05	5.46E-06	2.55E-06	5.46E-06	5.46E-06

Calculated Exposure Point Concentrations for the Courtice Road Receptor Cluster
Process Upset - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	6.27E-07	4.43E-10	--	1.36E-07	3.02E-10
Acenaphthylene	208-96-8	1.47E-07	2.48E-10	--	2.77E-08	5.81E-10
Anthracene	120-12-7	6.19E-07	1.66E-10	1.30E-10	6.01E-08	7.07E-12
Benz(a)anthracene	56-55-3	3.40E-07	8.27E-11	1.24E-08	6.70E-09	4.58E-10
Benzo(a)fluorene	30777-18-5	6.73E-07	6.45E-10	3.53E-09	1.97E-08	1.06E-09
Benzo(a)pyrene	50-32-8	6.02E-07	3.59E-10	3.88E-08	7.95E-09	4.12E-09
Benzo(b)fluoranthene	205-99-2	7.82E-07	1.02E-10	2.08E-09	8.76E-09	2.02E-10
Benzo(b)fluorene	243-17-4	4.64E-07	5.20E-10	2.42E-09	8.54E-09	2.79E-09
Benzo(e)pyrene	192-97-20	1.64E-06	3.50E-09	4.73E-09	1.20E-08	5.62E-07
Benzo(g,h,i)perylene	191-24-2	8.50E-06	2.81E-09	--	5.76E-08	8.52E-07
Benzo(k)fluoranthene	207-08-9	6.83E-07	2.41E-10	1.17E-08	7.86E-09	1.90E-09
Chrysene	218-01-9	1.26E-06	1.17E-10	1.54E-08	2.49E-08	6.34E-11
Dibenz(a,c)anthracene	215-58-7	1.07E-06	2.67E-09	4.04E-07	5.56E-09	7.52E-08
Dibenz(a,h)anthracene	53-70-3	3.76E-07	1.88E-10	1.83E-08	2.55E-09	6.78E-08
Fluoranthene	206-44-0	6.13E-06	4.95E-09	5.31E-09	3.06E-07	9.95E-10
Fluorene	86-73-7	6.24E-07	1.27E-09	--	9.04E-08	2.66E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.81E-06	6.63E-10	1.20E-07	1.07E-08	4.60E-10
Perylene	198-55-0	3.54E-07	5.88E-10	1.93E-10	3.34E-09	4.19E-07
Phenanthrene	85-01-8	6.30E-06	8.40E-09	1.51E-09	6.12E-07	4.66E-10
Pyrene	129-00-0	3.14E-05	8.42E-09	4.81E-09	1.79E-06	1.37E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	1.17E-04	1.35E-09	--	7.93E-07	3.90E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	9.00E-08	1.00E-12	2.97E-10	4.09E-10	8.52E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	3.59E-10	1.86E-08	--	4.99E-10	7.04E-12
Bromoform	75-25-2	1.36E-09	8.11E-07	--	2.25E-09	6.47E-13
Carbon Tetrachloride	56-23-5	9.75E-11	5.61E-09	--	9.09E-11	2.52E-12
Chloroform	67-66-3	1.61E-10	6.13E-09	--	4.34E-10	3.40E-12
Dichloromethane	75-09-2	2.88E-08	1.91E-06	--	1.98E-07	3.54E-10
O-Terphenyl	84-15-1	1.99E-06	1.63E-09	--	4.96E-08	1.85E-09
Trichlorofluoromethane (FREON 11)	75-69-4	7.42E-09	2.10E-06	--	1.03E-08	1.49E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	2.82E-07	7.37E-10	--	1.84E-08	4.68E-12
1,2,4-Trichlorobenzene	120-82-1	6.65E-09	7.17E-10	--	1.26E-09	1.22E-12
1,2-Dichlorobenzene	95-50-1	8.94E-08	2.89E-08	--	3.85E-08	7.82E-10
Hexachlorobenzene	118-74-1	1.21E-07	8.82E-10	--	4.06E-09	3.20E-11
Pentachlorobenzene	608-93-5	4.38E-06	2.24E-09	--	1.74E-07	1.11E-10
Pentachlorophenol	87-86-5	2.06E-06	7.28E-07	--	9.00E-08	4.24E-06
Inorganics						
Antimony	7440-36-0	5.65E-04	5.36E-06	2.09E-05	1.80E-05	--
Arsenic	7440-38-2	5.60E-05	8.23E-07	3.21E-06	3.55E-07	--
Barium	7440-39-3	3.98E-04	4.14E-06	1.61E-05	1.28E-05	--
Beryllium	7440-41-7	3.56E-04	3.14E-07	2.54E-06	9.18E-07	--
Boron	7440-42-8	2.20E-03	3.00E-04	1.17E-03	4.96E-03	--
Cadmium	7440-43-9	2.35E-03	1.34E-05	5.35E-05	2.93E-04	--
Chromium (Total)	7440-47-3	1.97E-04	4.41E-06	1.72E-05	9.63E-07	--
Chromium VI	18540-29-9	2.81E-05	6.28E-07	2.44E-06	1.37E-07	--
Cobalt	7440-48-4	1.19E-03	1.13E-05	4.42E-05	1.03E-05	--
Lead	7439-92-1	5.45E-02	4.47E-05	3.82E-04	7.42E-04	--
Mercury - Inorganic	7487-94-7	4.26E-03	4.40E-07	5.15E-06	6.17E-05	1.45E-05
Methyl Mercury	22967-92-6	1.43E-04	1.86E-09	1.45E-06	4.20E-06	4.10E-06
Nickel	7440-02-0	2.56E-02	1.69E-04	6.65E-04	2.38E-04	--
Phosphorus	7723-14-0	7.67E-04	9.04E-05	3.52E-04	2.68E-03	--
Selenium	7782-49-2	1.13E-05	9.42E-07	3.67E-06	2.20E-07	--
Silver	7440-22-4	1.30E-04	6.58E-06	2.56E-05	1.79E-05	--
Thallium	7440-28-0	1.24E-02	7.51E-05	2.98E-04	1.07E-05	--
Tin	7440-31-5	1.35E-02	2.62E-05	1.34E-04	1.22E-04	--
Vanadium	7440-62-2	1.29E-03	9.98E-07	8.88E-06	4.27E-06	--
Zinc	7440-66-6	5.61E-02	3.87E-04	1.52E-03	5.44E-03	--

Calculated Exposure Point Concentrations for the Courtice Road Receptor Cluster
Process Upset - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.33E-07	4.37E-11	1.76E-10	4.80E-10	1.57E-10	2.58E-10	7.37E-10	4.21E-10
Acenaphthylene	208-96-8	9.35E-07	1.03E-11	1.24E-10	1.29E-10	3.95E-11	6.20E-11	1.75E-10	9.97E-11
Anthracene	120-12-7	9.32E-10	3.09E-11	2.63E-10	3.57E-10	1.08E-10	2.11E-10	6.41E-10	3.66E-10
Benz(a)anthracene	56-55-3	3.23E-10	1.21E-10	2.07E-09	6.86E-10	2.10E-10	1.20E-10	2.61E-10	1.49E-10
Benzo(a)fluorene	30777-18-5	2.27E-08	8.52E-11	8.11E-09	8.54E-10	2.48E-10	2.24E-10	5.82E-10	3.33E-10
Benzo(a)pyrene	50-32-8	3.64E-10	4.36E-10	1.79E-08	2.89E-09	9.05E-10	3.32E-10	4.12E-10	2.36E-10
Benzo(b)fluoranthene	205-99-2	9.01E-09	3.27E-11	6.80E-09	3.17E-10	8.11E-11	1.56E-10	5.07E-10	2.89E-10
Benzo(b)fluorene	243-17-4	2.84E-08	1.28E-10	1.46E-08	1.37E-09	4.21E-10	2.09E-10	3.63E-10	2.07E-10
Benzo(e)pyrene	192-97-20	8.70E-08	1.61E-08	4.83E-07	1.81E-07	5.76E-08	1.55E-08	9.10E-10	5.20E-10
Benzo(g,h,i)perylene	191-24-2	4.43E-08	2.37E-08	4.37E-07	2.67E-07	8.51E-08	2.37E-08	4.54E-09	2.59E-09
Benzo(k)fluoranthene	207-08-9	4.16E-10	1.57E-10	1.52E-08	1.20E-09	3.67E-10	2.11E-10	4.47E-10	2.55E-10
Chrysene	218-01-9	1.20E-09	1.49E-10	2.92E-09	8.97E-10	2.53E-10	3.20E-10	9.65E-10	5.51E-10
Dibenz(a,c)anthracene	215-58-7	1.84E-08	4.10E-09	6.65E-07	3.02E-08	9.63E-09	2.54E-09	5.11E-10	2.92E-10
Dibenz(a,h)anthracene	53-70-3	1.52E-10	2.00E-09	2.96E-08	2.16E-08	6.90E-09	1.87E-09	2.01E-10	1.15E-10
Fluoranthene	206-44-0	9.16E-09	2.84E-10	2.48E-08	3.30E-09	9.21E-10	1.82E-09	5.70E-09	3.26E-09
Fluorene	86-73-7	1.18E-09	3.80E-11	1.01E-09	4.56E-10	1.41E-10	2.40E-10	6.98E-10	3.99E-10
Indeno(1,2,3-cd)pyrene	193-39-5	9.57E-10	7.26E-10	1.31E-07	3.29E-09	1.01E-09	4.65E-10	9.10E-10	5.20E-10
Perylene	198-55-0	6.65E-09	1.30E-08	5.23E-08	1.46E-07	4.65E-08	1.23E-08	2.16E-10	1.24E-10
Phenanthrene	85-01-8	1.16E-08	3.30E-10	1.33E-08	3.93E-09	1.17E-09	2.18E-09	6.56E-09	3.75E-09
Pyrene	129-00-0	4.55E-08	1.22E-09	3.35E-08	1.50E-08	4.21E-09	9.40E-09	2.97E-08	1.70E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.12E-06	1.35E-07	3.48E-04	2.23E-06	4.50E-07	1.77E-06	6.24E-08	3.57E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	9.25E-10	4.31E-10	**3.12E-08**	4.17E-09	1.16E-09	1.35E-09	3.97E-11	2.27E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	3.18E-08	5.51E-10	2.95E-08	6.61E-09	1.40E-09	1.07E-09	1.84E-11	1.05E-11
Bromoform	75-25-2	1.67E-08	2.10E-08	9.52E-07	2.38E-07	5.01E-08	3.80E-08	6.49E-10	3.71E-10
Carbon Tetrachloride	56-23-5	9.28E-09	2.40E-10	1.77E-08	2.85E-09	6.01E-10	4.58E-10	7.85E-12	4.49E-12
Chloroform	67-66-3	1.62E-08	9.93E-11	3.07E-09	1.26E-09	2.67E-10	2.06E-10	3.58E-12	2.04E-12
Dichloromethane	75-09-2	1.04E-05	1.05E-08	1.91E-07	1.39E-07	2.95E-08	2.28E-08	3.97E-10	2.27E-10
O-Terphenyl	84-15-1	4.46E-08	1.16E-08	2.71E-06	1.55E-07	4.27E-08	5.64E-08	1.64E-09	9.40E-10
Trichlorofluoromethane (FREON 11)	75-69-4	6.03E-07	6.36E-08	3.33E-06	7.34E-07	1.55E-07	1.17E-07	2.00E-09	1.15E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	2.96E-07	1.35E-09	2.33E-07	1.69E-08	4.60E-09	9.20E-09	2.82E-10	1.61E-10
1,2,4-Trichlorobenzene	120-82-1	5.15E-09	1.51E-10	4.52E-08	2.10E-09	5.00E-10	5.20E-10	1.19E-11	6.83E-12
1,2-Dichlorobenzene	95-50-1	2.19E-06	3.20E-09	3.47E-07	4.29E-08	1.01E-08	9.71E-09	2.09E-10	1.19E-10
Hexachlorobenzene	118-74-1	3.08E-08	6.07E-10	8.82E-07	8.40E-09	2.10E-09	3.68E-09	1.11E-10	6.37E-11
Pentachlorobenzene	608-93-5	8.06E-08	1.38E-08	1.66E-06	1.84E-07	4.81E-08	1.21E-07	3.91E-09	2.24E-09
Pentachlorophenol	87-86-5	3.37E-05	2.52E-08	4.09E-04	2.84E-07	9.05E-08	2.42E-08	8.32E-12	4.76E-12
Inorganics									
Antimony	7440-36-0	1.69E-05	5.74E-07	1.07E-03	3.49E-06	5.02E-07	6.66E-07	1.23E-08	7.02E-09
Arsenic	7440-38-2	4.48E-07	1.37E-07	4.12E-05	6.92E-07	2.92E-08	1.06E-07	2.08E-09	1.19E-09
Barium	7440-39-3	5.97E-06	6.13E-08	4.14E-05	3.54E-07	1.18E-06	6.33E-08	1.17E-09	6.70E-10
Beryllium	7440-41-7	5.34E-07	6.49E-08	3.14E-05	4.34E-07	4.74E-10	1.83E-07	5.88E-09	3.36E-09
Boron	7440-42-8	4.40E-03	2.74E-05	--	1.68E-04	5.43E-05	3.36E-05	5.75E-07	3.29E-07
Cadmium	7440-43-9	1.50E-04	2.61E-07	1.62E-02	1.90E-06	1.51E-07	5.49E-07	8.80E-06	2.07E-07
Chromium (Total)	7440-47-3	8.88E-07	1.95E-06	8.83E-04	9.33E-06	3.60E-06	1.21E-06	2.12E-08	1.21E-08
Chromium VI	18540-29-9	1.26E-07	2.77E-07	2.32E-05	1.33E-06	5.12E-07	1.73E-07	3.01E-09	1.72E-09
Cobalt	7440-48-4	8.36E-06	1.91E-05	1.13E-03	9.88E-05	2.87E-05	1.87E-05	4.39E-07	2.51E-07
Lead	7439-92-1	4.91E-04	3.63E-06	4.68E-03	2.62E-05	2.84E-05	9.86E-06	2.88E-07	1.65E-07
Mercury - Inorganic	7487-94-7	1.53E-04	1.07E-06	--	1.42E-05	6.07E-06	5.90E-08	2.43E-06	2.43E-06
Methyl Mercury	22967-92-6	1.41E-05	2.85E-08	1.18E-03	1.81E-07	1.03E-07	3.62E-10	1.32E-08	1.32E-08
Nickel	7440-02-0	2.05E-04	9.07E-05	2.63E-02	4.99E-04	1.14E-04	1.10E-04	2.74E-06	1.57E-06
Phosphorus	7723-14-0	2.68E-03	5.71E-04	--	3.54E-03	1.18E-03	1.00E-03	2.30E-05	1.32E-05
Selenium	7782-49-2	2.49E-07	1.69E-07	1.60E-04	7.81E-07	2.91E-06	5.03E-06	4.55E-07	4.55E-07
Silver	7440-22-4	1.30E-05	1.75E-06	5.83E-04	9.03E-06	8.81E-05	1.16E-06	1.44E-08	8.21E-09
Thallium	7440-28-0	4.97E-06	2.56E-04	--	1.36E-03	9.11E-05	3.14E-04	8.45E-06	4.83E-06
Tin	7440-31-5	8.09E-05	2.85E-04	7.85E-02	1.86E-03	5.07E-04	6.37E-04	1.87E-05	1.07E-05
Vanadium	7440-62-2	3.86E-06	5.53E-07	1.60E-04	3.68E-06	9.29E-07	1.64E-06	5.38E-08	3.07E-08
Zinc	7440-66-6	5.05E-02	4.43E-06	3.60E-01	2.95E-05	1.55E-05	7.61E-06	1.66E-05	1.66E-05

Calculated Exposure Point Concentrations for the Maple Grove Receptor Cluster
Process Upset - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.75E-07	4.43E-10	--	3.78E-08	1.37E-10
Acenaphthylene	208-96-8	4.10E-08	2.48E-10	--	7.74E-09	2.65E-10
Anthracene	120-12-7	1.73E-07	1.66E-10	3.86E-11	1.68E-08	3.22E-12
Benz(a)anthracene	56-55-3	9.49E-08	8.27E-11	3.68E-09	1.87E-09	2.08E-10
Benzo(a)fluorene	30777-18-5	1.88E-07	6.45E-10	1.05E-09	5.50E-09	4.83E-10
Benzo(a)pyrene	50-32-8	1.68E-07	3.59E-10	1.15E-08	2.22E-09	1.88E-09
Benzo(b)fluoranthene	205-99-2	2.18E-07	1.02E-10	6.18E-10	2.44E-09	9.22E-11
Benzo(b)fluorene	243-17-4	1.30E-07	5.20E-10	7.18E-10	2.38E-09	1.27E-09
Benzo(e)pyrene	192-97-20	4.58E-07	3.50E-09	1.41E-09	3.36E-09	2.56E-07
Benzo(g,h,i)perylene	191-24-2	2.37E-06	2.81E-09	--	1.61E-08	3.88E-07
Benzo(k)fluoranthene	207-08-9	1.91E-07	2.41E-10	3.48E-09	2.19E-09	8.66E-10
Chrysene	218-01-9	3.52E-07	1.17E-10	4.58E-09	6.94E-09	2.89E-11
Dibenz(a,c)anthracene	215-58-7	2.99E-07	2.67E-09	1.20E-07	1.55E-09	3.42E-08
Dibenz(a,h)anthracene	53-70-3	1.05E-07	1.88E-10	5.43E-09	7.11E-10	3.09E-08
Fluoranthene	206-44-0	1.71E-06	4.95E-09	1.58E-09	8.53E-08	4.53E-10
Fluorene	86-73-7	1.74E-07	1.27E-09	--	2.52E-08	1.21E-11
Indeno(1,2,3-cd)pyrene	193-39-5	5.05E-07	6.63E-10	3.56E-08	2.99E-09	2.09E-10
Perylene	198-55-0	9.88E-08	5.88E-10	5.73E-11	9.33E-10	1.91E-07
Phenanthrene	85-01-8	1.76E-06	8.40E-09	4.49E-10	1.71E-07	2.12E-10
Pyrene	129-00-0	8.76E-06	8.42E-09	1.43E-09	4.99E-07	6.23E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	3.26E-05	1.35E-09	--	2.21E-07	1.77E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	2.19E-08	1.00E-12	7.32E-11	9.98E-11	3.88E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	1.00E-10	1.86E-08	--	1.39E-10	3.21E-12
Bromoform	75-25-2	3.80E-10	8.11E-07	--	6.27E-10	2.95E-13
Carbon Tetrachloride	56-23-5	2.72E-11	5.61E-09	--	2.54E-11	1.15E-12
Chloroform	67-66-3	4.48E-11	6.13E-09	--	1.21E-10	1.55E-12
Dichloromethane	75-09-2	8.03E-09	1.91E-06	--	5.51E-08	1.61E-10
O-Terphenyl	84-15-1	5.54E-07	1.63E-09	--	1.38E-08	8.42E-10
Trichlorofluoromethane (FREON 11)	75-69-4	2.07E-09	2.10E-06	--	2.88E-09	6.79E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	7.87E-08	7.37E-10	--	5.12E-09	2.13E-12
1,2,4-Trichlorobenzene	120-82-1	1.85E-09	7.17E-10	--	3.51E-10	5.57E-13
1,2-Dichlorobenzene	95-50-1	2.49E-08	2.89E-08	--	1.08E-08	3.56E-10
Hexachlorobenzene	118-74-1	3.38E-08	8.82E-10	--	1.13E-09	1.46E-11
Pentachlorobenzene	608-93-5	1.22E-06	2.24E-09	--	4.87E-08	5.07E-11
Pentachlorophenol	87-86-5	5.75E-07	7.28E-07	--	2.51E-08	1.93E-06
Inorganics						
Antimony	7440-36-0	1.38E-04	5.36E-06	5.16E-06	4.39E-06	--
Arsenic	7440-38-2	1.37E-05	8.23E-07	7.90E-07	8.65E-08	--
Barium	7440-39-3	9.70E-05	4.14E-06	3.98E-06	3.12E-06	--
Beryllium	7440-41-7	8.68E-05	3.14E-07	6.27E-07	2.24E-07	--
Boron	7440-42-8	5.36E-04	3.00E-04	2.88E-04	1.21E-03	--
Cadmium	7440-43-9	5.72E-04	1.34E-05	1.32E-05	7.15E-05	--
Chromium (Total)	7440-47-3	4.81E-05	4.41E-06	4.23E-06	2.35E-07	--
Chromium VI	18540-29-9	6.84E-06	6.28E-07	6.02E-07	3.34E-08	--
Cobalt	7440-48-4	2.91E-04	1.13E-05	1.09E-05	2.52E-06	--
Lead	7439-92-1	1.33E-02	4.47E-05	9.41E-05	1.81E-04	--
Mercury - Inorganic	7487-94-7	1.33E-03	4.40E-07	1.27E-06	1.93E-05	6.62E-06
Methyl Mercury	22967-92-6	3.48E-05	1.86E-09	3.58E-07	1.02E-06	1.87E-06
Nickel	7440-02-0	6.24E-03	1.69E-04	1.64E-04	5.81E-05	--
Phosphorus	7723-14-0	1.87E-04	9.04E-05	8.66E-05	6.55E-04	--
Selenium	7782-49-2	2.75E-06	9.42E-07	9.03E-07	5.37E-08	--
Silver	7440-22-4	3.16E-05	6.58E-06	6.31E-06	4.36E-06	--
Thallium	7440-28-0	3.03E-03	7.51E-05	7.34E-05	2.60E-06	--
Tin	7440-31-5	3.29E-03	2.62E-05	3.31E-05	2.97E-05	--
Vanadium	7440-62-2	3.14E-04	9.98E-07	2.19E-06	1.04E-06	--
Zinc	7440-66-6	1.37E-02	3.87E-04	3.75E-04	1.33E-03	--

Calculated Exposure Point Concentrations for the Maple Grove Receptor Cluster
Process Upset - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	3.72E-08	4.37E-11	1.76E-10	1.37E-10	4.45E-11	7.25E-11	2.06E-10	1.18E-10
Acenaphthylene	208-96-8	2.61E-07	1.03E-11	1.24E-10	3.92E-11	1.17E-11	1.78E-11	4.95E-11	2.83E-11
Anthracene	120-12-7	2.60E-10	3.09E-11	2.63E-10	1.01E-10	3.05E-11	5.91E-11	1.79E-10	1.02E-10
Benz(a)anthracene	56-55-3	9.00E-11	1.21E-10	2.07E-09	2.32E-10	7.13E-11	3.67E-11	7.29E-11	4.16E-11
Benzo(a)fluorene	30777-18-5	6.33E-09	8.52E-11	8.11E-09	3.26E-10	9.64E-11	7.07E-11	1.65E-10	9.43E-11
Benzo(a)pyrene	50-32-8	1.02E-10	4.36E-10	1.79E-08	1.10E-09	3.47E-10	1.17E-10	1.15E-10	6.59E-11
Benzo(b)fluoranthene	205-99-2	2.51E-09	3.27E-11	6.80E-09	1.03E-10	2.73E-11	4.48E-11	1.42E-10	8.09E-11
Benzo(b)fluorene	243-17-4	7.93E-09	1.28E-10	1.46E-08	5.88E-10	1.82E-10	7.61E-11	1.03E-10	5.88E-11
Benzo(e)pyrene	192-97-20	2.43E-08	1.61E-08	4.83E-07	8.22E-08	2.62E-08	6.99E-09	2.54E-10	1.45E-10
Benzo(g,h,i)perylene	191-24-2	1.24E-08	2.37E-08	4.37E-07	1.21E-07	3.87E-08	1.05E-08	1.27E-09	7.25E-10
Benzo(k)fluoranthene	207-08-9	1.16E-10	1.57E-10	1.52E-08	4.65E-10	1.44E-10	6.97E-11	1.25E-10	7.13E-11
Chrysene	218-01-9	3.34E-10	1.49E-10	2.92E-09	2.65E-10	7.50E-11	9.04E-11	2.70E-10	1.54E-10
Dibenz(a,c)anthracene	215-58-7	5.13E-09	4.10E-09	6.65E-07	1.23E-08	3.92E-09	1.03E-09	1.44E-10	8.21E-11
Dibenz(a,h)anthracene	53-70-3	4.25E-11	2.00E-09	2.96E-08	9.76E-09	3.12E-09	8.35E-10	5.61E-11	3.20E-11
Fluoranthene	206-44-0	2.55E-09	2.84E-10	2.48E-08	1.01E-09	2.83E-10	5.17E-10	1.59E-09	9.11E-10
Fluorene	86-73-7	3.30E-10	3.80E-11	1.01E-09	1.36E-10	4.12E-11	6.83E-11	1.97E-10	1.12E-10
Indeno(1,2,3-cd)pyrene	193-39-5	2.67E-10	7.26E-10	1.31E-07	9.95E-10	3.06E-10	1.35E-10	2.54E-10	1.45E-10
Perylene	198-55-0	1.86E-09	1.30E-08	5.23E-08	6.63E-08	2.12E-08	5.61E-09	6.05E-11	3.45E-11
Phenanthrene	85-01-8	3.22E-09	3.30E-10	1.33E-08	1.15E-09	3.43E-10	6.16E-10	1.84E-09	1.05E-09
Pyrene	129-00-0	1.27E-08	1.22E-09	3.35E-08	4.30E-09	1.21E-09	2.63E-09	8.30E-09	4.74E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	3.13E-07	1.35E-07	3.48E-04	6.45E-07	1.33E-07	4.97E-07	1.74E-08	9.95E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	2.25E-10	4.31E-10	**3.12E-08**	1.49E-09	4.35E-10	3.68E-10	9.68E-12	5.53E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	8.87E-09	5.51E-10	2.95E-08	5.09E-09	1.07E-09	8.14E-10	1.39E-11	7.97E-12
Bromoform	75-25-2	4.67E-09	2.10E-08	9.52E-07	1.89E-07	3.97E-08	3.01E-08	5.14E-10	2.94E-10
Carbon Tetrachloride	56-23-5	2.59E-09	2.40E-10	1.77E-08	2.21E-09	4.66E-10	3.54E-10	6.05E-12	3.46E-12
Chloroform	67-66-3	4.51E-09	9.93E-11	3.07E-09	9.10E-10	1.92E-10	1.46E-10	2.52E-12	1.44E-12
Dichloromethane	75-09-2	2.89E-06	1.05E-08	1.91E-07	9.55E-08	2.02E-08	1.54E-08	2.65E-10	1.52E-10
O-Terphenyl	84-15-1	1.24E-08	1.16E-08	2.71E-06	5.89E-08	1.67E-08	1.72E-08	4.66E-10	2.66E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.68E-07	6.36E-08	3.33E-06	5.78E-07	1.22E-07	9.22E-08	1.57E-09	8.99E-10
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	8.25E-08	1.35E-09	2.33E-07	5.80E-09	1.51E-09	2.74E-09	8.15E-11	4.66E-11
1,2,4-Trichlorobenzene	120-82-1	1.44E-09	1.51E-10	4.52E-08	1.18E-09	2.66E-10	2.40E-10	4.95E-12	2.83E-12
1,2-Dichlorobenzene	95-50-1	6.12E-07	3.20E-09	3.47E-07	2.61E-08	5.79E-09	4.95E-09	9.65E-11	5.52E-11
Hexachlorobenzene	118-74-1	8.60E-09	6.07E-10	8.82E-07	3.59E-09	8.74E-10	1.21E-09	3.39E-11	1.94E-11
Pentachlorobenzene	608-93-5	2.25E-08	1.38E-08	1.66E-06	5.49E-08	1.43E-08	3.42E-08	1.10E-09	6.29E-10
Pentachlorophenol	87-86-5	9.41E-06	2.52E-08	4.09E-04	1.29E-07	4.11E-08	1.09E-08	2.24E-12	1.28E-12
Inorganics									
Antimony	7440-36-0	4.13E-06	5.74E-07	1.07E-03	8.52E-07	1.23E-07	1.62E-07	2.99E-09	1.71E-09
Arsenic	7440-38-2	1.09E-07	1.37E-07	4.12E-05	1.69E-07	7.14E-09	2.58E-08	5.04E-10	2.88E-10
Barium	7440-39-3	1.45E-06	6.13E-08	4.14E-05	8.64E-08	2.88E-07	1.54E-08	2.85E-10	1.63E-10
Beryllium	7440-41-7	1.30E-07	6.49E-08	3.14E-05	1.06E-07	1.16E-10	4.47E-08	1.43E-09	8.18E-10
Boron	7440-42-8	1.07E-03	2.74E-05	--	4.10E-05	1.33E-05	8.19E-06	1.40E-07	7.99E-08
Cadmium	7440-43-9	3.66E-05	2.61E-07	1.62E-02	4.62E-07	3.69E-08	1.34E-07	2.14E-06	5.04E-08
Chromium (Total)	7440-47-3	2.16E-07	1.95E-06	8.83E-04	2.28E-06	8.82E-07	2.95E-07	5.12E-09	2.93E-09
Chromium VI	18540-29-9	3.08E-08	2.77E-07	2.32E-05	3.24E-07	1.25E-07	4.20E-08	7.28E-10	4.16E-10
Cobalt	7440-48-4	2.04E-06	1.91E-05	1.13E-03	2.41E-05	7.03E-06	4.54E-06	1.07E-07	6.09E-08
Lead	7439-92-1	1.20E-04	3.63E-06	4.68E-03	6.42E-06	6.96E-06	2.41E-06	7.02E-08	4.01E-08
Mercury - Inorganic	7487-94-7	4.79E-05	1.07E-06	--	4.41E-06	1.88E-06	1.85E-08	7.60E-07	7.60E-07
Methyl Mercury	22967-92-6	3.44E-06	2.85E-08	1.18E-03	5.11E-08	2.98E-08	9.14E-11	3.21E-09	3.21E-09
Nickel	7440-02-0	4.99E-05	9.07E-05	2.63E-02	1.22E-04	2.78E-05	2.68E-05	6.67E-07	3.81E-07
Phosphorus	7723-14-0	6.55E-04	5.71E-04	--	8.63E-04	2.88E-04	2.44E-04	5.61E-06	3.20E-06
Selenium	7782-49-2	6.06E-08	1.69E-07	1.60E-04	1.91E-07	7.13E-07	1.22E-06	1.09E-07	1.09E-07
Silver	7440-22-4	3.16E-06	1.75E-06	5.83E-04	2.21E-06	2.16E-05	2.81E-07	3.47E-09	1.98E-09
Thallium	7440-28-0	1.21E-06	2.56E-04	--	3.33E-04	2.23E-05	7.65E-05	2.05E-06	1.17E-06
Tin	7440-31-5	1.97E-05	2.85E-04	7.85E-02	4.55E-04	1.24E-04	1.55E-04	4.55E-06	2.60E-06
Vanadium	7440-62-2	9.41E-07	5.53E-07	1.60E-04	9.02E-07	2.28E-07	4.01E-07	1.31E-08	7.49E-09
Zinc	7440-66-6	1.23E-02	4.43E-06	3.60E-01	7.20E-06	3.79E-06	1.85E-06	4.05E-06	4.05E-06

Calculated Exposure Point Concentrations for the Oshawa Subdivision Receptor Cluster
Process Upset - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	2.66E-07	4.43E-10	--	5.75E-08	2.10E-10
Acenaphthylene	208-96-8	6.23E-08	2.48E-10	--	1.18E-08	4.04E-10
Anthracene	120-12-7	2.62E-07	1.66E-10	5.74E-11	2.55E-08	4.92E-12
Benz(a)anthracene	56-55-3	1.44E-07	8.27E-11	5.47E-09	2.84E-09	3.18E-10
Benzo(a)fluorene	30777-18-5	2.85E-07	6.45E-10	1.56E-09	8.35E-09	7.38E-10
Benzo(a)pyrene	50-32-8	2.55E-07	3.59E-10	1.71E-08	3.37E-09	2.87E-09
Benzo(b)fluoranthene	205-99-2	3.31E-07	1.02E-10	9.18E-10	3.71E-09	1.41E-10
Benzo(b)fluorene	243-17-4	1.97E-07	5.20E-10	1.07E-09	3.62E-09	1.94E-09
Benzo(e)pyrene	192-97-20	6.95E-07	3.50E-09	2.09E-09	5.10E-09	3.91E-07
Benzo(g,h,i)perylene	191-24-2	3.60E-06	2.81E-09	--	2.44E-08	5.93E-07
Benzo(k)fluoranthene	207-08-9	2.89E-07	2.41E-10	5.18E-09	3.33E-09	1.32E-09
Chrysene	218-01-9	5.35E-07	1.17E-10	6.80E-09	1.05E-08	4.41E-11
Dibenz(a,c)anthracene	215-58-7	4.54E-07	2.67E-09	1.79E-07	2.36E-09	5.23E-08
Dibenz(a,h)anthracene	53-70-3	1.59E-07	1.88E-10	8.06E-09	1.08E-09	4.71E-08
Fluoranthene	206-44-0	2.60E-06	4.95E-09	2.35E-09	1.30E-07	6.92E-10
Fluorene	86-73-7	2.64E-07	1.27E-09	--	3.83E-08	1.85E-11
Indeno(1,2,3-cd)pyrene	193-39-5	7.66E-07	6.63E-10	5.29E-08	4.55E-09	3.20E-10
Perylene	198-55-0	1.50E-07	5.88E-10	8.52E-11	1.42E-09	2.91E-07
Phenanthrene	85-01-8	2.67E-06	8.40E-09	6.67E-10	2.59E-07	3.24E-10
Pyrene	129-00-0	1.33E-05	8.42E-09	2.12E-09	7.57E-07	9.52E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	4.95E-05	1.35E-09	--	3.36E-07	2.71E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	4.11E-08	1.00E-12	1.48E-10	1.87E-10	5.93E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	1.52E-10	1.86E-08	--	2.11E-10	4.89E-12
Bromoform	75-25-2	5.77E-10	8.11E-07	--	9.52E-10	4.50E-13
Carbon Tetrachloride	56-23-5	4.14E-11	5.61E-09	--	3.85E-11	1.75E-12
Chloroform	67-66-3	6.81E-11	6.13E-09	--	1.84E-10	2.36E-12
Dichloromethane	75-09-2	1.22E-08	1.91E-06	--	8.37E-08	2.46E-10
O-Terphenyl	84-15-1	8.42E-07	1.63E-09	--	2.10E-08	1.29E-09
Trichlorofluoromethane (FREON 11)	75-69-4	3.15E-09	2.10E-06	--	4.37E-09	1.04E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.20E-07	7.37E-10	--	7.78E-09	3.25E-12
1,2,4-Trichlorobenzene	120-82-1	2.82E-09	7.17E-10	--	5.33E-10	8.50E-13
1,2-Dichlorobenzene	95-50-1	3.79E-08	2.89E-08	--	1.63E-08	5.44E-10
Hexachlorobenzene	118-74-1	5.13E-08	8.82E-10	--	1.72E-09	2.22E-11
Pentachlorobenzene	608-93-5	1.86E-06	2.24E-09	--	7.39E-08	7.74E-11
Pentachlorophenol	87-86-5	8.74E-07	7.28E-07	--	3.82E-08	2.95E-06
Inorganics						
Antimony	7440-36-0	2.59E-04	5.36E-06	1.04E-05	8.26E-06	--
Arsenic	7440-38-2	2.57E-05	8.23E-07	1.60E-06	1.63E-07	--
Barium	7440-39-3	1.82E-04	4.14E-06	8.05E-06	5.87E-06	--
Beryllium	7440-41-7	1.63E-04	3.14E-07	1.27E-06	4.21E-07	--
Boron	7440-42-8	1.01E-03	3.00E-04	5.83E-04	2.27E-03	--
Cadmium	7440-43-9	1.07E-03	1.34E-05	2.67E-05	1.34E-04	--
Chromium (Total)	7440-47-3	9.04E-05	4.41E-06	8.57E-06	4.41E-07	--
Chromium VI	18540-29-9	1.29E-05	6.28E-07	1.22E-06	6.27E-08	--
Cobalt	7440-48-4	5.47E-04	1.13E-05	2.21E-05	4.74E-06	--
Lead	7439-92-1	2.50E-02	4.47E-05	1.90E-04	3.40E-04	--
Mercury - Inorganic	7487-94-7	2.03E-03	4.40E-07	2.57E-06	2.94E-05	1.01E-05
Methyl Mercury	22967-92-6	6.53E-05	1.86E-09	7.24E-07	1.92E-06	2.85E-06
Nickel	7440-02-0	1.17E-02	1.69E-04	3.32E-04	1.09E-04	--
Phosphorus	7723-14-0	3.52E-04	9.04E-05	1.75E-04	1.23E-03	--
Selenium	7782-49-2	5.18E-06	9.42E-07	1.83E-06	1.01E-07	--
Silver	7440-22-4	5.94E-05	6.58E-06	1.28E-05	8.20E-06	--
Thallium	7440-28-0	5.70E-03	7.51E-05	1.49E-04	4.89E-06	--
Tin	7440-31-5	6.17E-03	2.62E-05	6.70E-05	5.59E-05	--
Vanadium	7440-62-2	5.89E-04	9.98E-07	4.43E-06	1.96E-06	--
Zinc	7440-66-6	2.57E-02	3.87E-04	7.60E-04	2.49E-03	--

Calculated Exposure Point Concentrations for the Oshawa Subdivision Receptor Cluster
Process Upset - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	5.66E-08	4.37E-11	1.76E-10	2.07E-10	6.75E-11	1.10E-10	3.14E-10	1.79E-10
Acenaphthylene	208-96-8	3.96E-07	1.03E-11	1.24E-10	5.94E-11	1.78E-11	2.70E-11	7.52E-11	4.29E-11
Anthracene	120-12-7	3.95E-10	3.09E-11	2.63E-10	1.53E-10	4.62E-11	8.97E-11	2.72E-10	1.55E-10
Benz(a)anthracene	56-55-3	1.37E-10	1.21E-10	2.07E-09	3.48E-10	1.07E-10	5.55E-11	1.11E-10	6.31E-11
Benzo(a)fluorene	30777-18-5	9.62E-09	8.52E-11	8.11E-09	4.89E-10	1.45E-10	1.06E-10	2.49E-10	1.42E-10
Benzo(a)pyrene	50-32-8	1.54E-10	4.36E-10	1.79E-08	1.67E-09	5.25E-10	1.78E-10	1.75E-10	9.99E-11
Benzo(b)fluoranthene	205-99-2	3.82E-09	3.27E-11	6.80E-09	1.56E-10	4.12E-11	6.79E-11	2.15E-10	1.23E-10
Benzo(b)fluorene	243-17-4	1.20E-08	1.28E-10	1.46E-08	8.91E-10	2.76E-10	1.15E-10	1.55E-10	8.85E-11
Benzo(e)pyrene	192-97-20	3.69E-08	1.61E-08	4.83E-07	1.25E-07	4.01E-08	1.07E-08	3.86E-10	2.20E-10
Benzo(g,h,i)perylene	191-24-2	1.88E-08	2.37E-08	4.37E-07	1.85E-07	5.91E-08	1.61E-08	1.92E-09	1.10E-09
Benzo(k)fluoranthene	207-08-9	1.76E-10	1.57E-10	1.52E-08	7.05E-10	2.18E-10	1.06E-10	1.89E-10	1.08E-10
Chrysene	218-01-9	5.07E-10	1.49E-10	2.92E-09	3.97E-10	1.12E-10	1.37E-10	4.09E-10	2.34E-10
Dibenz(a,c)anthracene	215-58-7	7.80E-09	4.10E-09	6.65E-07	1.87E-08	5.96E-09	1.57E-09	2.17E-10	1.24E-10
Dibenz(a,h)anthracene	53-70-3	6.45E-11	2.00E-09	2.96E-08	1.49E-08	4.76E-09	1.27E-09	8.50E-11	4.86E-11
Fluoranthene	206-44-0	3.88E-09	2.84E-10	2.48E-08	1.52E-09	4.28E-10	7.84E-10	2.42E-09	1.38E-09
Fluorene	86-73-7	5.01E-10	3.80E-11	1.01E-09	2.04E-10	6.20E-11	1.03E-10	2.98E-10	1.70E-10
Indeno(1,2,3-cd)pyrene	193-39-5	4.06E-10	7.26E-10	1.31E-07	1.48E-09	4.56E-10	2.04E-10	3.86E-10	2.20E-10
Perylene	198-55-0	2.82E-09	1.30E-08	5.23E-08	1.01E-07	3.23E-08	8.56E-09	9.17E-11	5.24E-11
Phenanthrene	85-01-8	4.90E-09	3.30E-10	1.33E-08	1.73E-09	5.17E-10	9.33E-10	2.79E-09	1.59E-09
Pyrene	129-00-0	1.93E-08	1.22E-09	3.35E-08	6.51E-09	1.83E-09	4.00E-09	1.26E-08	7.20E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	4.74E-07	1.35E-07	3.48E-04	9.77E-07	2.01E-07	7.54E-07	2.64E-08	1.51E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	4.23E-10	4.31E-10	**3.12E-08**	2.47E-09	7.09E-10	6.62E-10	1.81E-11	1.04E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	1.35E-08	5.51E-10	2.95E-08	7.14E-09	1.51E-09	1.14E-09	1.96E-11	1.12E-11
Bromoform	75-25-2	7.10E-09	2.10E-08	9.52E-07	2.65E-07	5.57E-08	4.22E-08	7.20E-10	4.12E-10
Carbon Tetrachloride	56-23-5	3.93E-09	2.40E-10	1.77E-08	3.10E-09	6.54E-10	4.96E-10	8.49E-12	4.85E-12
Chloroform	67-66-3	6.85E-09	9.93E-11	3.07E-09	1.29E-09	2.72E-10	2.08E-10	3.57E-12	2.04E-12
Dichloromethane	75-09-2	4.39E-06	1.05E-08	1.91E-07	1.36E-07	2.88E-08	2.20E-08	3.79E-10	2.17E-10
O-Terphenyl	84-15-1	1.89E-08	1.16E-08	2.71E-06	8.82E-08	2.51E-08	2.60E-08	7.03E-10	4.02E-10
Trichlorofluoromethane (FREON 11)	75-69-4	2.56E-07	6.36E-08	3.33E-06	8.10E-07	1.71E-07	1.29E-07	2.21E-09	1.26E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	1.25E-07	1.35E-09	2.33E-07	9.00E-09	2.34E-09	4.19E-09	1.24E-10	7.10E-11
1,2,4-Trichlorobenzene	120-82-1	2.18E-09	1.51E-10	4.52E-08	1.72E-09	3.87E-10	3.52E-10	7.30E-12	4.17E-12
1,2-Dichlorobenzene	95-50-1	9.30E-07	3.20E-09	3.47E-07	3.73E-08	8.32E-09	7.17E-09	1.40E-10	8.03E-11
Hexachlorobenzene	118-74-1	1.31E-08	6.07E-10	8.82E-07	5.25E-09	1.28E-09	1.80E-09	5.09E-11	2.91E-11
Pentachlorobenzene	608-93-5	3.42E-08	1.38E-08	1.66E-06	8.28E-08	2.15E-08	5.18E-08	1.67E-09	9.54E-10
Pentachlorophenol	87-86-5	1.43E-05	2.52E-08	4.09E-04	1.97E-07	6.28E-08	1.67E-08	3.60E-12	2.05E-12
Inorganics									
Antimony	7440-36-0	7.77E-06	5.74E-07	1.07E-03	1.67E-06	2.41E-07	3.10E-07	5.64E-09	3.22E-09
Arsenic	7440-38-2	2.05E-07	1.37E-07	4.12E-05	3.39E-07	1.44E-08	5.02E-08	9.55E-10	5.46E-10
Barium	7440-39-3	2.73E-06	6.13E-08	4.14E-05	1.71E-07	5.68E-07	2.96E-08	5.38E-10	3.08E-10
Beryllium	7440-41-7	2.45E-07	6.49E-08	3.14E-05	2.07E-07	2.29E-10	8.46E-08	2.69E-09	1.54E-09
Boron	7440-42-8	2.02E-03	2.74E-05	--	8.02E-05	2.59E-05	1.56E-05	2.64E-07	1.51E-07
Cadmium	7440-43-9	6.88E-05	2.61E-07	1.62E-02	8.90E-07	7.11E-08	2.54E-07	4.04E-06	9.50E-08
Chromium (Total)	7440-47-3	4.07E-07	1.95E-06	8.83E-04	4.60E-06	1.78E-06	5.80E-07	9.74E-09	5.57E-09
Chromium VI	18540-29-9	5.79E-08	2.77E-07	2.32E-05	6.54E-07	2.53E-07	8.25E-08	1.39E-09	7.92E-10
Cobalt	7440-48-4	3.83E-06	1.91E-05	1.13E-03	4.83E-05	1.41E-05	8.78E-06	2.01E-07	1.15E-07
Lead	7439-92-1	2.25E-04	3.63E-06	4.68E-03	1.24E-05	1.35E-05	4.54E-06	1.32E-07	7.54E-08
Mercury - Inorganic	7487-94-7	7.30E-05	1.07E-06	--	6.98E-06	3.03E-06	2.82E-08	1.16E-06	1.16E-06
Methyl Mercury	22967-92-6	6.47E-06	2.85E-08	1.18E-03	9.41E-08	5.48E-08	1.71E-10	6.03E-09	6.03E-09
Nickel	7440-02-0	9.38E-05	9.07E-05	2.63E-02	2.42E-04	5.54E-05	5.14E-05	1.26E-06	7.19E-07
Phosphorus	7723-14-0	1.23E-03	5.71E-04	--	1.69E-03	5.61E-04	4.64E-04	1.06E-05	6.04E-06
Selenium	7782-49-2	1.14E-07	1.69E-07	1.60E-04	3.86E-07	1.44E-06	2.44E-06	2.11E-07	2.11E-07
Silver	7440-22-4	5.94E-06	1.75E-06	5.83E-04	4.40E-06	4.30E-05	5.50E-07	6.61E-09	3.78E-09
Thallium	7440-28-0	2.28E-06	2.56E-04	--	6.66E-04	4.48E-05	1.47E-04	3.87E-06	2.21E-06
Tin	7440-31-5	3.70E-05	2.85E-04	7.85E-02	8.88E-04	2.44E-04	2.94E-04	8.55E-06	4.88E-06
Vanadium	7440-62-2	1.77E-06	5.53E-07	1.60E-04	1.76E-06	4.49E-07	7.59E-07	2.46E-08	1.41E-08
Zinc	7440-66-6	2.31E-02	4.43E-06	3.60E-01	1.40E-05	7.36E-06	3.53E-06	7.63E-06	7.63E-06

Calculated Exposure Point Concentrations for the Port Darlington Receptor Cluster
Process Upset - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.21E-07	4.43E-10	--	2.62E-08	1.47E-10
Acenaphthylene	208-96-8	2.84E-08	2.48E-10	--	5.36E-09	2.82E-10
Anthracene	120-12-7	1.20E-07	1.66E-10	3.03E-11	1.16E-08	3.43E-12
Benz(a)anthracene	56-55-3	6.58E-08	8.27E-11	2.89E-09	1.30E-09	2.22E-10
Benzo(a)fluorene	30777-18-5	1.30E-07	6.45E-10	8.23E-10	3.81E-09	5.15E-10
Benzo(a)pyrene	50-32-8	1.16E-07	3.59E-10	9.04E-09	1.54E-09	2.00E-09
Benzo(b)fluoranthene	205-99-2	1.51E-07	1.02E-10	4.85E-10	1.69E-09	9.83E-11
Benzo(b)fluorene	243-17-4	8.98E-08	5.20E-10	5.63E-10	1.65E-09	1.36E-09
Benzo(e)pyrene	192-97-20	3.17E-07	3.50E-09	1.10E-09	2.33E-09	2.73E-07
Benzo(g,h,i)perylene	191-24-2	1.64E-06	2.81E-09	--	1.11E-08	4.14E-07
Benzo(k)fluoranthene	207-08-9	1.32E-07	2.41E-10	2.73E-09	1.52E-09	9.24E-10
Chrysene	218-01-9	2.44E-07	1.17E-10	3.59E-09	4.81E-09	3.08E-11
Dibenz(a,c)anthracene	215-58-7	2.07E-07	2.67E-09	9.43E-08	1.07E-09	3.65E-08
Dibenz(a,h)anthracene	53-70-3	7.27E-08	1.88E-10	4.26E-09	4.93E-10	3.29E-08
Fluoranthene	206-44-0	1.18E-06	4.95E-09	1.24E-09	5.91E-08	4.83E-10
Fluorene	86-73-7	1.21E-07	1.27E-09	--	1.75E-08	1.29E-11
Indeno(1,2,3-cd)pyrene	193-39-5	3.50E-07	6.63E-10	2.79E-08	2.07E-09	2.23E-10
Perylene	198-55-0	6.84E-08	5.88E-10	4.50E-11	6.47E-10	2.03E-07
Phenanthrene	85-01-8	1.22E-06	8.40E-09	3.52E-10	1.18E-07	2.26E-10
Pyrene	129-00-0	6.07E-06	8.42E-09	1.12E-09	3.46E-07	6.65E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	2.27E-05	1.35E-09	--	1.54E-07	1.89E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	1.42E-08	1.00E-12	5.55E-11	6.48E-11	4.14E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	6.93E-11	1.86E-08	--	9.64E-11	3.42E-12
Bromoform	75-25-2	2.63E-10	8.11E-07	--	4.34E-10	3.14E-13
Carbon Tetrachloride	56-23-5	1.89E-11	5.61E-09	--	1.76E-11	1.22E-12
Chloroform	67-66-3	3.10E-11	6.13E-09	--	8.38E-11	1.65E-12
Dichloromethane	75-09-2	5.57E-09	1.91E-06	--	3.82E-08	1.72E-10
O-Terphenyl	84-15-1	3.84E-07	1.63E-09	--	9.58E-09	8.98E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.43E-09	2.10E-06	--	1.99E-09	7.24E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	5.45E-08	7.37E-10	--	3.55E-09	2.27E-12
1,2,4-Trichlorobenzene	120-82-1	1.28E-09	7.17E-10	--	2.43E-10	5.94E-13
1,2-Dichlorobenzene	95-50-1	1.73E-08	2.89E-08	--	7.45E-09	3.79E-10
Hexachlorobenzene	118-74-1	2.34E-08	8.82E-10	--	7.84E-10	1.55E-11
Pentachlorobenzene	608-93-5	8.47E-07	2.24E-09	--	3.37E-08	5.40E-11
Pentachlorophenol	87-86-5	3.98E-07	7.28E-07	--	1.74E-08	2.06E-06
Inorganics						
Antimony	7440-36-0	8.94E-05	5.36E-06	3.90E-06	2.85E-06	--
Arsenic	7440-38-2	8.87E-06	8.23E-07	5.98E-07	5.61E-08	--
Barium	7440-39-3	6.29E-05	4.14E-06	3.01E-06	2.03E-06	--
Beryllium	7440-41-7	5.63E-05	3.14E-07	4.75E-07	1.45E-07	--
Boron	7440-42-8	3.48E-04	3.00E-04	2.18E-04	7.84E-04	--
Cadmium	7440-43-9	3.71E-04	1.34E-05	9.97E-06	4.64E-05	--
Chromium (Total)	7440-47-3	3.12E-05	4.41E-06	3.21E-06	1.52E-07	--
Chromium VI	18540-29-9	4.44E-06	6.28E-07	4.56E-07	2.17E-08	--
Cobalt	7440-48-4	1.89E-04	1.13E-05	8.25E-06	1.63E-06	--
Lead	7439-92-1	8.63E-03	4.47E-05	7.12E-05	1.17E-04	--
Mercury - Inorganic	7487-94-7	1.25E-03	4.40E-07	9.60E-07	1.81E-05	7.05E-06
Methyl Mercury	22967-92-6	2.26E-05	1.86E-09	2.71E-07	6.64E-07	1.99E-06
Nickel	7440-02-0	4.05E-03	1.69E-04	1.24E-04	3.77E-05	--
Phosphorus	7723-14-0	1.21E-04	9.04E-05	6.56E-05	4.25E-04	--
Selenium	7782-49-2	1.79E-06	9.42E-07	6.84E-07	3.48E-08	--
Silver	7440-22-4	2.05E-05	6.58E-06	4.77E-06	2.83E-06	--
Thallium	7440-28-0	1.97E-03	7.51E-05	5.56E-05	1.69E-06	--
Tin	7440-31-5	2.13E-03	2.62E-05	2.51E-05	1.93E-05	--
Vanadium	7440-62-2	2.04E-04	9.98E-07	1.66E-06	6.76E-07	--
Zinc	7440-66-6	8.87E-03	3.87E-04	2.84E-04	8.61E-04	--

Calculated Exposure Point Concentrations for the Port Darlington Receptor Cluster
Process Upset - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	2.58E-08	4.37E-11	1.76E-10	1.06E-10	3.32E-11	5.20E-11	1.46E-10	8.34E-11
Acenaphthylene	208-96-8	1.81E-07	1.03E-11	1.24E-10	3.86E-11	1.06E-11	1.41E-11	3.73E-11	2.13E-11
Anthracene	120-12-7	1.80E-10	3.09E-11	2.63E-10	7.47E-11	2.21E-11	4.16E-11	1.25E-10	7.15E-11
Benz(a)anthracene	56-55-3	6.24E-11	1.21E-10	2.07E-09	2.04E-10	6.31E-11	2.91E-11	5.09E-11	2.91E-11
Benzo(a)fluorene	30777-18-5	4.39E-09	8.52E-11	8.11E-09	3.37E-10	9.85E-11	6.08E-11	1.23E-10	7.05E-11
Benzo(a)pyrene	50-32-8	7.05E-11	4.36E-10	1.79E-08	1.06E-09	3.36E-10	1.06E-10	8.04E-11	4.60E-11
Benzo(b)fluoranthene	205-99-2	1.74E-09	3.27E-11	6.80E-09	8.78E-11	2.39E-11	3.25E-11	9.86E-11	5.64E-11
Benzo(b)fluorene	243-17-4	5.49E-09	1.28E-10	1.46E-08	6.21E-10	1.92E-10	7.24E-11	7.75E-11	4.43E-11
Benzo(e)pyrene	192-97-20	1.68E-08	1.61E-08	4.83E-07	8.75E-08	2.80E-08	7.43E-09	1.78E-10	1.02E-10
Benzo(g,h,i)perylene	191-24-2	8.57E-09	2.37E-08	4.37E-07	1.29E-07	4.12E-08	1.11E-08	8.81E-10	5.03E-10
Benzo(k)fluoranthene	207-08-9	8.05E-11	1.57E-10	1.52E-08	4.51E-10	1.40E-10	5.90E-11	8.67E-11	4.95E-11
Chrysene	218-01-9	2.32E-10	1.49E-10	2.92E-09	2.04E-10	5.83E-11	6.44E-11	1.88E-10	1.07E-10
Dibenz(a,c)anthracene	215-58-7	3.55E-09	4.10E-09	6.65E-07	1.24E-08	3.94E-09	1.03E-09	1.02E-10	5.82E-11
Dibenz(a,h)anthracene	53-70-3	2.94E-11	2.00E-09	2.96E-08	1.04E-08	3.31E-09	8.82E-10	3.90E-11	2.23E-11
Fluoranthene	206-44-0	1.77E-09	2.84E-10	2.48E-08	8.22E-10	2.30E-10	3.73E-10	1.12E-09	6.39E-10
Fluorene	86-73-7	2.29E-10	3.80E-11	1.01E-09	1.23E-10	3.47E-11	5.18E-11	1.44E-10	8.22E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.85E-10	7.26E-10	1.31E-07	7.92E-10	2.45E-10	1.01E-10	1.77E-10	1.01E-10
Perylene	198-55-0	1.29E-09	1.30E-08	5.23E-08	7.07E-08	2.26E-08	5.97E-09	4.21E-11	2.41E-11
Phenanthrene	85-01-8	2.23E-09	3.30E-10	1.33E-08	9.31E-10	2.68E-10	4.46E-10	1.30E-09	7.44E-10
Pyrene	129-00-0	8.80E-09	1.22E-09	3.35E-08	3.14E-09	8.81E-10	1.84E-09	5.77E-09	3.30E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	2.17E-07	1.35E-07	3.48E-04	4.70E-07	9.91E-08	3.47E-07	1.21E-08	6.91E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	1.47E-10	4.31E-10	**3.12E-08**	1.41E-09	4.23E-10	2.76E-10	6.29E-12	3.59E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	6.15E-09	5.51E-10	2.95E-08	1.32E-08	2.77E-09	2.10E-09	3.59E-11	2.05E-11
Bromoform	75-25-2	3.24E-09	2.10E-08	9.52E-07	4.92E-07	1.04E-07	7.85E-08	1.34E-09	7.65E-10
Carbon Tetrachloride	56-23-5	1.79E-09	2.40E-10	1.77E-08	5.73E-09	1.21E-09	9.14E-10	1.56E-11	8.92E-12
Chloroform	67-66-3	3.12E-09	9.93E-11	3.07E-09	2.37E-09	4.98E-10	3.78E-10	6.47E-12	3.69E-12
Dichloromethane	75-09-2	2.00E-06	1.05E-08	1.91E-07	2.50E-07	5.27E-08	4.00E-08	6.84E-10	3.91E-10
O-Terphenyl	84-15-1	8.62E-09	1.16E-08	2.71E-06	6.22E-08	1.75E-08	1.44E-08	3.46E-10	1.98E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.17E-07	6.36E-08	3.33E-06	1.50E-06	3.16E-07	2.40E-07	4.09E-09	2.34E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	5.71E-08	1.35E-09	2.33E-07	6.66E-09	1.61E-09	2.31E-09	6.36E-11	3.63E-11
1,2,4-Trichlorobenzene	120-82-1	9.96E-10	1.51E-10	4.52E-08	2.72E-09	5.84E-10	4.68E-10	8.57E-12	4.90E-12
1,2-Dichlorobenzene	95-50-1	4.24E-07	3.20E-09	3.47E-07	6.24E-08	1.34E-08	1.05E-08	1.88E-10	1.07E-10
Hexachlorobenzene	118-74-1	5.96E-09	6.07E-10	8.82E-07	5.82E-09	1.33E-09	1.35E-09	3.19E-11	1.82E-11
Pentachlorobenzene	608-93-5	1.56E-08	1.38E-08	1.66E-06	4.75E-08	1.20E-08	2.51E-08	7.86E-10	4.49E-10
Pentachlorophenol	87-86-5	6.51E-06	2.52E-08	4.09E-04	1.37E-07	4.38E-08	1.16E-08	1.67E-12	9.52E-13
Inorganics									
Antimony	7440-36-0	2.68E-06	5.74E-07	1.07E-03	6.01E-07	8.69E-08	1.09E-07	1.95E-09	1.11E-09
Arsenic	7440-38-2	7.09E-08	1.37E-07	4.12E-05	1.24E-07	5.29E-09	1.78E-08	3.30E-10	1.88E-10
Barium	7440-39-3	9.44E-07	6.13E-08	4.14E-05	6.17E-08	2.06E-07	1.04E-08	1.86E-10	1.06E-10
Beryllium	7440-41-7	8.45E-08	6.49E-08	3.14E-05	7.49E-08	8.33E-11	2.95E-08	9.31E-10	5.32E-10
Boron	7440-42-8	6.95E-04	2.74E-05	--	2.88E-05	9.28E-06	5.48E-06	9.11E-08	5.21E-08
Cadmium	7440-43-9	2.38E-05	2.61E-07	1.62E-02	3.15E-07	2.52E-08	8.82E-08	1.39E-06	3.28E-08
Chromium (Total)	7440-47-3	1.40E-07	1.95E-06	8.83E-04	1.70E-06	6.61E-07	2.08E-07	3.36E-09	1.92E-09
Chromium VI	18540-29-9	2.00E-08	2.77E-07	2.32E-05	2.41E-07	9.40E-08	2.96E-08	4.78E-10	2.73E-10
Cobalt	7440-48-4	1.32E-06	1.91E-05	1.13E-03	1.77E-05	5.20E-06	3.10E-06	6.95E-08	3.97E-08
Lead	7439-92-1	7.77E-05	3.63E-06	4.68E-03	4.43E-06	4.85E-06	1.58E-06	4.56E-08	2.61E-08
Mercury - Inorganic	7487-94-7	4.50E-05	1.07E-06	--	4.10E-06	1.74E-06	1.73E-08	7.14E-07	7.14E-07
Methyl Mercury	22967-92-6	2.24E-06	2.85E-08	1.18E-03	4.17E-08	2.50E-08	6.30E-11	2.08E-09	2.08E-09
Nickel	7440-02-0	3.24E-05	9.07E-05	2.63E-02	8.83E-05	2.03E-05	1.81E-05	4.35E-07	2.48E-07
Phosphorus	7723-14-0	4.25E-04	5.71E-04	--	6.05E-04	2.01E-04	1.62E-04	3.65E-06	2.08E-06
Selenium	7782-49-2	3.93E-08	1.69E-07	1.60E-04	1.43E-07	5.36E-07	8.90E-07	7.28E-08	7.28E-08
Silver	7440-22-4	2.05E-06	1.75E-06	5.83E-04	1.61E-06	1.57E-05	1.96E-07	2.28E-09	1.30E-09
Thallium	7440-28-0	7.87E-07	2.56E-04	--	2.44E-04	1.65E-05	5.17E-05	1.34E-06	7.65E-07
Tin	7440-31-5	1.28E-05	2.85E-04	7.85E-02	3.20E-04	8.83E-05	1.03E-04	2.96E-06	1.69E-06
Vanadium	7440-62-2	6.11E-07	5.53E-07	1.60E-04	6.37E-07	1.64E-07	2.64E-07	8.52E-09	4.87E-09
Zinc	7440-66-6	7.98E-03	4.43E-06	3.60E-01	4.99E-06	2.63E-06	1.23E-06	2.63E-06	2.63E-06

Calculated Exposure Point Concentrations for the Solina Receptor Cluster
Process Upset - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	3.94E-07	4.43E-10	--	8.52E-08	2.54E-10
Acenaphthylene	208-96-8	9.24E-08	2.48E-10	--	1.74E-08	4.89E-10
Anthracene	120-12-7	3.89E-07	1.66E-10	8.42E-11	3.78E-08	5.95E-12
Benz(a)anthracene	56-55-3	2.14E-07	8.27E-11	8.02E-09	4.21E-09	3.85E-10
Benzo(a)fluorene	30777-18-5	4.23E-07	6.45E-10	2.29E-09	1.24E-08	8.93E-10
Benzo(a)pyrene	50-32-8	3.79E-07	3.59E-10	2.51E-08	5.00E-09	3.47E-09
Benzo(b)fluoranthene	205-99-2	4.92E-07	1.02E-10	1.35E-09	5.51E-09	1.70E-10
Benzo(b)fluorene	243-17-4	2.92E-07	5.20E-10	1.56E-09	5.37E-09	2.35E-09
Benzo(e)pyrene	192-97-20	1.03E-06	3.50E-09	3.06E-09	7.57E-09	4.73E-07
Benzo(g,h,i)perylene	191-24-2	5.34E-06	2.81E-09	--	3.62E-08	7.17E-07
Benzo(k)fluoranthene	207-08-9	4.30E-07	2.41E-10	7.59E-09	4.94E-09	1.60E-09
Chrysene	218-01-9	7.94E-07	1.17E-10	9.98E-09	1.56E-08	5.33E-11
Dibenz(a,c)anthracene	215-58-7	6.73E-07	2.67E-09	2.62E-07	3.49E-09	6.33E-08
Dibenz(a,h)anthracene	53-70-3	2.36E-07	1.88E-10	1.18E-08	1.60E-09	5.70E-08
Fluoranthene	206-44-0	3.85E-06	4.95E-09	3.44E-09	1.92E-07	8.37E-10
Fluorene	86-73-7	3.92E-07	1.27E-09	--	5.69E-08	2.24E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.14E-06	6.63E-10	7.76E-08	6.74E-09	3.87E-10
Perylene	198-55-0	2.23E-07	5.88E-10	1.25E-10	2.10E-09	3.52E-07
Phenanthrene	85-01-8	3.96E-06	8.40E-09	9.78E-10	3.85E-07	3.92E-10
Pyrene	129-00-0	1.97E-05	8.42E-09	3.11E-09	1.12E-06	1.15E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	7.36E-05	1.35E-09	--	4.99E-07	3.28E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	4.99E-08	1.00E-12	1.59E-10	2.27E-10	7.17E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	2.26E-10	1.86E-08	--	3.13E-10	5.92E-12
Bromoform	75-25-2	8.56E-10	8.11E-07	--	1.41E-09	5.45E-13
Carbon Tetrachloride	56-23-5	6.13E-11	5.61E-09	--	5.72E-11	2.12E-12
Chloroform	67-66-3	1.01E-10	6.13E-09	--	2.73E-10	2.86E-12
Dichloromethane	75-09-2	1.81E-08	1.91E-06	--	1.24E-07	2.98E-10
O-Terphenyl	84-15-1	1.25E-06	1.63E-09	--	3.12E-08	1.56E-09
Trichlorofluoromethane (FREON 11)	75-69-4	4.66E-09	2.10E-06	--	6.48E-09	1.25E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.77E-07	7.37E-10	--	1.15E-08	3.93E-12
1,2,4-Trichlorobenzene	120-82-1	4.18E-09	7.17E-10	--	7.90E-10	1.03E-12
1,2-Dichlorobenzene	95-50-1	5.62E-08	2.89E-08	--	2.42E-08	6.58E-10
Hexachlorobenzene	118-74-1	7.61E-08	8.82E-10	--	2.55E-09	2.69E-11
Pentachlorobenzene	608-93-5	2.76E-06	2.24E-09	--	1.10E-07	9.37E-11
Pentachlorophenol	87-86-5	1.30E-06	7.28E-07	--	5.66E-08	3.56E-06
Inorganics						
Antimony	7440-36-0	3.13E-04	5.36E-06	1.12E-05	9.99E-06	--
Arsenic	7440-38-2	3.11E-05	8.23E-07	1.72E-06	1.97E-07	--
Barium	7440-39-3	2.21E-04	4.14E-06	8.66E-06	7.10E-06	--
Beryllium	7440-41-7	1.97E-04	3.14E-07	1.36E-06	5.09E-07	--
Boron	7440-42-8	1.22E-03	3.00E-04	6.27E-04	2.75E-03	--
Cadmium	7440-43-9	1.30E-03	1.34E-05	2.87E-05	1.63E-04	--
Chromium (Total)	7440-47-3	1.09E-04	4.41E-06	9.22E-06	5.34E-07	--
Chromium VI	18540-29-9	1.56E-05	6.28E-07	1.31E-06	7.59E-08	--
Cobalt	7440-48-4	6.62E-04	1.13E-05	2.37E-05	5.73E-06	--
Lead	7439-92-1	3.02E-02	4.47E-05	2.05E-04	4.11E-04	--
Mercury - Inorganic	7487-94-7	2.82E-03	4.40E-07	2.76E-06	4.09E-05	1.22E-05
Methyl Mercury	22967-92-6	7.91E-05	1.86E-09	7.79E-07	2.33E-06	3.45E-06
Nickel	7440-02-0	1.42E-02	1.69E-04	3.57E-04	1.32E-04	--
Phosphorus	7723-14-0	4.25E-04	9.04E-05	1.89E-04	1.49E-03	--
Selenium	7782-49-2	6.26E-06	9.42E-07	1.97E-06	1.22E-07	--
Silver	7440-22-4	7.18E-05	6.58E-06	1.37E-05	9.91E-06	--
Thallium	7440-28-0	6.89E-03	7.51E-05	1.60E-04	5.91E-06	--
Tin	7440-31-5	7.47E-03	2.62E-05	7.21E-05	6.76E-05	--
Vanadium	7440-62-2	7.13E-04	9.98E-07	4.76E-06	2.37E-06	--
Zinc	7440-66-6	3.11E-02	3.87E-04	8.17E-04	3.02E-03	--

Calculated Exposure Point Concentrations for the Solina Receptor Cluster
Process Upset - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	8.39E-08	4.37E-11	1.76E-10	3.08E-10	1.00E-10	1.63E-10	4.65E-10	2.66E-10
Acenaphthylene	208-96-8	5.88E-07	1.03E-11	1.24E-10	8.81E-11	2.63E-11	4.01E-11	1.12E-10	6.37E-11
Anthracene	120-12-7	5.86E-10	3.09E-11	2.63E-10	2.28E-10	6.85E-11	1.33E-10	4.03E-10	2.31E-10
Benz(a)anthracene	56-55-3	2.03E-10	1.21E-10	2.07E-09	4.79E-10	1.47E-10	7.93E-11	1.64E-10	9.38E-11
Benzo(a)fluorene	30777-18-5	1.43E-08	8.52E-11	8.11E-09	6.53E-10	1.91E-10	1.52E-10	3.72E-10	2.12E-10
Benzo(a)pyrene	50-32-8	2.29E-10	4.36E-10	1.79E-08	2.17E-09	6.82E-10	2.38E-10	2.60E-10	1.48E-10
Benzo(b)fluoranthene	205-99-2	5.66E-09	3.27E-11	6.80E-09	2.18E-10	5.67E-11	9.97E-11	3.19E-10	1.82E-10
Benzo(b)fluorene	243-17-4	1.79E-08	1.28E-10	1.46E-08	1.12E-09	3.44E-10	1.54E-10	2.32E-10	1.33E-10
Benzo(e)pyrene	192-97-20	5.47E-08	1.61E-08	4.83E-07	1.52E-07	4.85E-08	1.30E-08	5.73E-10	3.28E-10
Benzo(g,h,i)perylene	191-24-2	2.79E-08	2.37E-08	4.37E-07	2.24E-07	7.15E-08	1.96E-08	2.86E-09	1.63E-09
Benzo(k)fluoranthene	207-08-9	2.61E-10	1.57E-10	1.52E-08	9.12E-10	2.80E-10	1.46E-10	2.81E-10	1.61E-10
Chrysene	218-01-9	7.53E-10	1.49E-10	2.92E-09	5.81E-10	1.64E-10	2.02E-10	6.07E-10	3.47E-10
Dibenz(a,c)anthracene	215-58-7	1.16E-08	4.10E-09	6.65E-07	2.37E-08	7.54E-09	1.99E-09	3.24E-10	1.85E-10
Dibenz(a,h)anthracene	53-70-3	9.57E-11	2.00E-09	2.96E-08	1.81E-08	5.77E-09	1.55E-09	1.26E-10	7.22E-11
Fluoranthene	206-44-0	5.76E-09	2.84E-10	2.48E-08	2.19E-09	6.13E-10	1.16E-09	3.59E-09	2.05E-09
Fluorene	86-73-7	7.43E-10	3.80E-11	1.01E-09	3.05E-10	9.23E-11	1.54E-10	4.44E-10	2.53E-10
Indeno(1,2,3-cd)pyrene	193-39-5	6.02E-10	7.26E-10	1.31E-07	2.15E-09	6.62E-10	2.99E-10	5.73E-10	3.27E-10
Perylene	198-55-0	4.18E-09	1.30E-08	5.23E-08	1.23E-07	3.91E-08	1.04E-08	1.36E-10	7.78E-11
Phenanthrene	85-01-8	7.26E-09	3.30E-10	1.33E-08	2.57E-09	7.63E-10	1.39E-09	4.14E-09	2.37E-09
Pyrene	129-00-0	2.86E-08	1.22E-09	3.35E-08	9.58E-09	2.69E-09	5.93E-09	1.87E-08	1.07E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	7.05E-07	1.35E-07	3.48E-04	1.43E-06	2.92E-07	1.12E-06	3.92E-08	2.24E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	5.13E-10	4.31E-10	**3.12E-08**	2.95E-09	8.45E-10	8.00E-10	2.20E-11	1.26E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	2.00E-08	5.51E-10	2.95E-08	1.15E-08	2.42E-09	1.83E-09	3.14E-11	1.79E-11
Bromoform	75-25-2	1.05E-08	2.10E-08	9.52E-07	4.25E-07	8.95E-08	6.78E-08	1.16E-09	6.61E-10
Carbon Tetrachloride	56-23-5	5.83E-09	2.40E-10	1.77E-08	4.99E-09	1.05E-09	7.97E-10	1.36E-11	7.79E-12
Chloroform	67-66-3	1.02E-08	9.93E-11	3.07E-09	2.05E-09	4.33E-10	3.30E-10	5.67E-12	3.24E-12
Dichloromethane	75-09-2	6.52E-06	1.05E-08	1.91E-07	2.15E-07	4.55E-08	3.47E-08	5.98E-10	3.42E-10
O-Terphenyl	84-15-1	2.80E-08	1.16E-08	2.71E-06	1.19E-07	3.32E-08	3.77E-08	1.05E-09	6.00E-10
Trichlorofluoromethane (FREON 11)	75-69-4	3.79E-07	6.36E-08	3.33E-06	1.30E-06	2.74E-07	2.08E-07	3.55E-09	2.03E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	1.86E-07	1.35E-09	2.33E-07	1.30E-08	3.40E-09	6.16E-09	1.84E-10	1.05E-10
1,2,4-Trichlorobenzene	120-82-1	3.24E-09	1.51E-10	4.52E-08	2.66E-09	5.97E-10	5.40E-10	1.11E-11	6.37E-12
1,2-Dichlorobenzene	95-50-1	1.38E-06	3.20E-09	3.47E-07	5.87E-08	1.30E-08	1.12E-08	2.17E-10	1.24E-10
Hexachlorobenzene	118-74-1	1.94E-08	6.07E-10	8.82E-07	7.85E-09	1.89E-09	2.70E-09	7.63E-11	4.36E-11
Pentachlorobenzene	608-93-5	5.07E-08	1.38E-08	1.66E-06	1.23E-07	3.19E-08	7.69E-08	2.48E-09	1.42E-09
Pentachlorophenol	87-86-5	2.12E-05	2.52E-08	4.09E-04	2.38E-07	7.61E-08	2.02E-08	5.05E-12	2.89E-12
Inorganics									
Antimony	7440-36-0	9.40E-06	5.74E-07	1.07E-03	1.90E-06	2.73E-07	3.66E-07	6.79E-09	3.88E-09
Arsenic	7440-38-2	2.49E-07	1.37E-07	4.12E-05	3.72E-07	1.57E-08	5.78E-08	1.15E-09	6.55E-10
Barium	7440-39-3	3.31E-06	6.13E-08	4.14E-05	1.92E-07	6.38E-07	3.47E-08	6.48E-10	3.70E-10
Beryllium	7440-41-7	2.96E-07	6.49E-08	3.14E-05	2.37E-07	2.58E-10	1.01E-07	3.26E-09	1.86E-09
Boron	7440-42-8	2.44E-03	2.74E-05	--	9.14E-05	2.96E-05	1.85E-05	3.18E-07	1.82E-07
Cadmium	7440-43-9	8.32E-05	2.61E-07	1.62E-02	1.04E-06	8.30E-08	3.03E-07	4.87E-06	1.15E-07
Chromium (Total)	7440-47-3	4.92E-07	1.95E-06	8.83E-04	5.00E-06	1.93E-06	6.58E-07	1.16E-08	6.66E-09
Chromium VI	18540-29-9	7.00E-08	2.77E-07	2.32E-05	7.11E-07	2.75E-07	9.36E-08	1.66E-09	9.47E-10
Cobalt	7440-48-4	4.64E-06	1.91E-05	1.13E-03	5.32E-05	1.54E-05	1.02E-05	2.42E-07	1.38E-07
Lead	7439-92-1	2.72E-04	3.63E-06	4.68E-03	1.44E-05	1.56E-05	5.46E-06	1.60E-07	9.12E-08
Mercury - Inorganic	7487-94-7	1.01E-04	1.07E-06	--	9.27E-06	3.93E-06	3.91E-08	1.61E-06	1.61E-06
Methyl Mercury	22967-92-6	7.83E-06	2.85E-08	1.18E-03	1.08E-07	6.23E-08	2.04E-10	7.30E-09	7.30E-09
Nickel	7440-02-0	1.14E-04	9.07E-05	2.63E-02	2.70E-04	6.13E-05	6.04E-05	1.52E-06	8.67E-07
Phosphorus	7723-14-0	1.49E-03	5.71E-04	--	1.93E-03	6.43E-04	5.52E-04	1.28E-05	7.29E-06
Selenium	7782-49-2	1.38E-07	1.69E-07	1.60E-04	4.18E-07	1.56E-06	2.70E-06	2.47E-07	2.47E-07
Silver	7440-22-4	7.18E-06	1.75E-06	5.83E-04	4.87E-06	4.75E-05	6.30E-07	7.89E-09	4.51E-09
Thallium	7440-28-0	2.76E-06	2.56E-04	--	7.35E-04	4.90E-05	1.72E-04	4.67E-06	2.67E-06
Tin	7440-31-5	4.48E-05	2.85E-04	7.85E-02	1.01E-03	2.76E-04	3.52E-04	1.03E-05	5.91E-06
Vanadium	7440-62-2	2.14E-06	5.53E-07	1.60E-04	2.01E-06	5.05E-07	9.10E-07	2.98E-08	1.70E-08
Zinc	7440-66-6	2.80E-02	4.43E-06	3.60E-01	1.61E-05	8.47E-06	4.19E-06	9.21E-06	9.21E-06

Calculated Exposure Point Concentrations for the Tooley Residential Receptor Cluster

Process Upset - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	7.01E-07	4.43E-10	--	1.51E-07	2.79E-10
Acenaphthylene	208-96-8	1.64E-07	2.48E-10	--	3.10E-08	5.38E-10
Anthracene	120-12-7	6.91E-07	1.66E-10	1.43E-10	6.71E-08	6.55E-12
Benz(a)anthracene	56-55-3	3.80E-07	8.27E-11	1.37E-08	7.48E-09	4.24E-10
Benzo(a)fluorene	30777-18-5	7.52E-07	6.45E-10	3.90E-09	2.20E-08	9.82E-10
Benzo(a)pyrene	50-32-8	6.73E-07	3.59E-10	4.28E-08	8.88E-09	3.81E-09
Benzo(b)fluoranthene	205-99-2	8.73E-07	1.02E-10	2.29E-09	9.78E-09	1.87E-10
Benzo(b)fluorene	243-17-4	5.19E-07	5.20E-10	2.67E-09	9.55E-09	2.59E-09
Benzo(e)pyrene	192-97-20	1.83E-06	3.50E-09	5.22E-09	1.34E-08	5.20E-07
Benzo(g,h,i)perylene	191-24-2	9.49E-06	2.81E-09	--	6.43E-08	7.89E-07
Benzo(k)fluoranthene	207-08-9	7.62E-07	2.41E-10	1.29E-08	8.76E-09	1.76E-09
Chrysene	218-01-9	1.41E-06	1.17E-10	1.70E-08	2.78E-08	5.87E-11
Dibenz(a,c)anthracene	215-58-7	1.20E-06	2.67E-09	4.46E-07	6.21E-09	6.96E-08
Dibenz(a,h)anthracene	53-70-3	4.20E-07	1.88E-10	2.01E-08	2.84E-09	6.27E-08
Fluoranthene	206-44-0	6.84E-06	4.95E-09	5.86E-09	3.42E-07	9.21E-10
Fluorene	86-73-7	6.97E-07	1.27E-09	--	1.01E-07	2.46E-11
Indeno(1,2,3-cd)pyrene	193-39-5	2.02E-06	6.63E-10	1.32E-07	1.20E-08	4.26E-10
Perylene	198-55-0	3.95E-07	5.88E-10	2.13E-10	3.74E-09	3.88E-07
Phenanthrene	85-01-8	7.05E-06	8.40E-09	1.67E-09	6.84E-07	4.31E-10
Pyrene	129-00-0	3.50E-05	8.42E-09	5.31E-09	2.00E-06	1.27E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	1.30E-04	1.35E-09	--	8.83E-07	3.61E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	9.27E-08	1.00E-12	2.89E-10	4.22E-10	7.89E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	4.01E-10	1.86E-08	--	5.57E-10	6.52E-12
Bromoform	75-25-2	1.52E-09	8.11E-07	--	2.51E-09	5.99E-13
Carbon Tetrachloride	56-23-5	1.09E-10	5.61E-09	--	1.02E-10	2.33E-12
Chloroform	67-66-3	1.80E-10	6.13E-09	--	4.85E-10	3.15E-12
Dichloromethane	75-09-2	3.22E-08	1.91E-06	--	2.21E-07	3.28E-10
O-Terphenyl	84-15-1	2.22E-06	1.63E-09	--	5.54E-08	1.71E-09
Trichlorofluoromethane (FREON 11)	75-69-4	8.29E-09	2.10E-06	--	1.15E-08	1.38E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	3.15E-07	7.37E-10	--	2.05E-08	4.33E-12
1,2,4-Trichlorobenzene	120-82-1	7.43E-09	7.17E-10	--	1.40E-09	1.13E-12
1,2-Dichlorobenzene	95-50-1	9.99E-08	2.89E-08	--	4.31E-08	7.24E-10
Hexachlorobenzene	118-74-1	1.35E-07	8.82E-10	--	4.53E-09	2.96E-11
Pentachlorobenzene	608-93-5	4.90E-06	2.24E-09	--	1.95E-07	1.03E-10
Pentachlorophenol	87-86-5	2.30E-06	7.28E-07	--	1.01E-07	3.92E-06
Inorganics						
Antimony	7440-36-0	5.84E-04	5.36E-06	2.04E-05	1.86E-05	--
Arsenic	7440-38-2	5.80E-05	8.23E-07	3.12E-06	3.67E-07	--
Barium	7440-39-3	4.11E-04	4.14E-06	1.57E-05	1.32E-05	--
Beryllium	7440-41-7	3.68E-04	3.14E-07	2.47E-06	9.49E-07	--
Boron	7440-42-8	2.28E-03	3.00E-04	1.14E-03	5.13E-03	--
Cadmium	7440-43-9	2.43E-03	1.34E-05	5.20E-05	3.03E-04	--
Chromium (Total)	7440-47-3	2.04E-04	4.41E-06	1.67E-05	9.96E-07	--
Chromium VI	18540-29-9	2.90E-05	6.28E-07	2.38E-06	1.42E-07	--
Cobalt	7440-48-4	1.24E-03	1.13E-05	4.30E-05	1.07E-05	--
Lead	7439-92-1	5.63E-02	4.47E-05	3.71E-04	7.66E-04	--
Mercury - Inorganic	7487-94-7	4.49E-03	4.40E-07	5.01E-06	6.51E-05	1.35E-05
Methyl Mercury	22967-92-6	1.47E-04	1.86E-09	1.41E-06	4.33E-06	3.79E-06
Nickel	7440-02-0	2.65E-02	1.69E-04	6.47E-04	2.46E-04	--
Phosphorus	7723-14-0	7.94E-04	9.04E-05	3.42E-04	2.78E-03	--
Selenium	7782-49-2	1.17E-05	9.42E-07	3.57E-06	2.28E-07	--
Silver	7440-22-4	1.34E-04	6.58E-06	2.49E-05	1.85E-05	--
Thallium	7440-28-0	1.29E-02	7.51E-05	2.90E-04	1.10E-05	--
Tin	7440-31-5	1.39E-02	2.62E-05	1.31E-04	1.26E-04	--
Vanadium	7440-62-2	1.33E-03	9.98E-07	8.64E-06	4.41E-06	--
Zinc	7440-66-6	5.80E-02	3.87E-04	1.48E-03	5.63E-03	--

Calculated Exposure Point Concentrations for the Tooley Residential Receptor Cluster
Process Upset - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.49E-07	4.37E-11	1.76E-10	5.27E-10	1.74E-10	2.87E-10	8.21E-10	4.69E-10
Acenaphthylene	208-96-8	1.04E-06	1.03E-11	1.24E-10	1.27E-10	4.04E-11	6.65E-11	1.90E-10	1.09E-10
Anthracene	120-12-7	1.04E-09	3.09E-11	2.63E-10	3.93E-10	1.19E-10	2.35E-10	7.14E-10	4.08E-10
Benz(a)anthracene	56-55-3	3.60E-10	1.21E-10	2.07E-09	7.23E-10	2.21E-10	1.30E-10	2.90E-10	1.66E-10
Benzo(a)fluorene	30777-18-5	2.54E-08	8.52E-11	8.11E-09	8.11E-10	2.38E-10	2.34E-10	6.35E-10	3.63E-10
Benzo(a)pyrene	50-32-8	4.07E-10	4.36E-10	1.79E-08	2.91E-09	9.10E-10	3.44E-10	4.59E-10	2.63E-10
Benzo(b)fluoranthene	205-99-2	1.01E-08	3.27E-11	6.80E-09	3.37E-10	8.54E-11	1.72E-10	5.65E-10	3.23E-10
Benzo(b)fluorene	243-17-4	3.18E-08	1.28E-10	1.46E-08	1.28E-09	3.93E-10	2.09E-10	3.93E-10	2.25E-10
Benzo(e)pyrene	192-97-20	9.72E-08	1.61E-08	4.83E-07	1.67E-07	5.34E-08	1.44E-08	1.01E-09	5.78E-10
Benzo(g,h,i)perylene	191-24-2	4.95E-08	2.37E-08	4.37E-07	2.47E-07	7.88E-08	2.21E-08	5.06E-09	2.89E-09
Benzo(k)fluoranthene	207-08-9	4.64E-10	1.57E-10	1.52E-08	1.20E-09	3.65E-10	2.24E-10	4.98E-10	2.85E-10
Chrysene	218-01-9	1.34E-09	1.49E-10	2.92E-09	9.87E-10	2.78E-10	3.55E-10	1.08E-09	6.15E-10
Dibenz(a,c)anthracene	215-58-7	2.06E-08	4.10E-09	6.65E-07	2.96E-08	9.44E-09	2.49E-09	5.67E-10	3.24E-10
Dibenz(a,h)anthracene	53-70-3	1.70E-10	2.00E-09	2.96E-08	2.01E-08	6.41E-09	1.74E-09	2.24E-10	1.28E-10
Fluoranthene	206-44-0	1.02E-08	2.84E-10	2.48E-08	3.50E-09	9.81E-10	2.01E-09	6.34E-09	3.62E-09
Fluorene	86-73-7	1.32E-09	3.80E-11	1.01E-09	4.74E-10	1.49E-10	2.63E-10	7.71E-10	4.41E-10
Indeno(1,2,3-cd)pyrene	193-39-5	1.07E-09	7.26E-10	1.31E-07	3.61E-09	1.11E-09	5.14E-10	1.02E-09	5.80E-10
Perylene	198-55-0	7.42E-09	1.30E-08	5.23E-08	1.35E-07	4.31E-08	1.14E-08	2.41E-10	1.38E-10
Phenanthrene	85-01-8	1.29E-08	3.30E-10	1.33E-08	4.17E-09	1.26E-09	2.41E-09	7.28E-09	4.16E-09
Pyrene	129-00-0	5.07E-08	1.22E-09	3.35E-08	1.65E-08	4.63E-09	1.04E-08	3.31E-08	1.89E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.25E-06	1.35E-07	3.48E-04	2.46E-06	4.94E-07	1.97E-06	6.95E-08	3.97E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	9.53E-10	4.31E-10	**3.12E-08**	4.03E-09	1.11E-09	1.36E-09	4.09E-11	2.34E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	3.55E-08	5.51E-10	2.95E-08	8.67E-09	1.83E-09	1.40E-09	2.40E-11	1.37E-11
Bromoform	75-25-2	1.87E-08	2.10E-08	9.52E-07	3.31E-07	6.97E-08	5.28E-08	9.02E-10	5.16E-10
Carbon Tetrachloride	56-23-5	1.04E-08	2.40E-10	1.77E-08	3.78E-09	7.97E-10	6.06E-10	1.04E-11	5.94E-12
Chloroform	67-66-3	1.81E-08	9.93E-11	3.07E-09	1.56E-09	3.31E-10	2.54E-10	4.41E-12	2.52E-12
Dichloromethane	75-09-2	1.16E-05	1.05E-08	1.91E-07	1.65E-07	3.51E-08	2.70E-08	4.71E-10	2.69E-10
O-Terphenyl	84-15-1	4.98E-08	1.16E-08	2.71E-06	1.47E-07	4.08E-08	6.00E-08	1.81E-09	1.03E-09
Trichlorofluoromethane (FREON 11)	75-69-4	6.74E-07	6.36E-08	3.33E-06	1.00E-06	2.11E-07	1.60E-07	2.74E-09	1.56E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	3.30E-07	1.35E-09	2.33E-07	1.89E-08	5.13E-09	1.03E-08	3.15E-10	1.80E-10
1,2,4-Trichlorobenzene	120-82-1	5.76E-09	1.51E-10	4.52E-08	2.21E-09	5.31E-10	5.61E-10	1.30E-11	7.44E-12
1,2-Dichlorobenzene	95-50-1	2.45E-06	3.20E-09	3.47E-07	4.72E-08	1.11E-08	1.07E-08	2.31E-10	1.32E-10
Hexachlorobenzene	118-74-1	3.44E-08	6.07E-10	8.82E-07	8.76E-09	2.19E-09	4.03E-09	1.24E-10	7.06E-11
Pentachlorobenzene	608-93-5	9.01E-08	1.38E-08	1.66E-06	2.02E-07	5.30E-08	1.34E-07	4.37E-09	2.50E-09
Pentachlorophenol	87-86-5	3.77E-05	2.52E-08	4.09E-04	2.62E-07	8.35E-08	2.22E-08	8.05E-12	4.60E-12
Inorganics									
Antimony	7440-36-0	1.75E-05	5.74E-07	1.07E-03	3.31E-06	4.84E-07	6.50E-07	1.22E-08	6.95E-09
Arsenic	7440-38-2	4.64E-07	1.37E-07	4.12E-05	6.22E-07	2.69E-08	9.77E-08	1.98E-09	1.13E-09
Barium	7440-39-3	6.17E-06	6.13E-08	4.14E-05	3.31E-07	1.12E-06	6.09E-08	1.15E-09	6.57E-10
Beryllium	7440-41-7	5.52E-07	6.49E-08	3.14E-05	4.27E-07	4.65E-10	1.87E-07	6.05E-09	3.46E-09
Boron	7440-42-8	4.55E-03	2.74E-05	--	1.60E-04	5.28E-05	3.31E-05	5.71E-07	3.26E-07
Cadmium	7440-43-9	1.55E-04	2.61E-07	1.62E-02	1.87E-06	1.51E-07	5.52E-07	8.91E-06	2.10E-07
Chromium (Total)	7440-47-3	9.19E-07	1.95E-06	8.83E-04	8.27E-06	3.28E-06	1.10E-06	1.98E-08	1.13E-08
Chromium VI	18540-29-9	1.31E-07	2.77E-07	2.32E-05	1.18E-06	4.67E-07	1.57E-07	2.82E-09	1.61E-09
Cobalt	7440-48-4	8.65E-06	1.91E-05	1.13E-03	8.93E-05	2.65E-05	1.77E-05	4.31E-07	2.46E-07
Lead	7439-92-1	5.07E-04	3.63E-06	4.68E-03	2.62E-05	2.84E-05	1.01E-05	2.97E-07	1.69E-07
Mercury - Inorganic	7487-94-7	1.62E-04	1.07E-06	--	1.47E-05	6.20E-06	6.21E-08	2.56E-06	2.56E-06
Methyl Mercury	22967-92-6	1.46E-05	2.85E-08	1.18E-03	1.77E-07	1.01E-07	3.70E-10	1.36E-08	1.36E-08
Nickel	7440-02-0	2.12E-04	9.07E-05	2.63E-02	4.59E-04	1.06E-04	1.06E-04	2.74E-06	1.56E-06
Phosphorus	7723-14-0	2.78E-03	5.71E-04	--	3.38E-03	1.15E-03	1.00E-03	2.33E-05	1.33E-05
Selenium	7782-49-2	2.57E-07	1.69E-07	1.60E-04	6.87E-07	2.64E-06	4.49E-06	4.26E-07	4.26E-07
Silver	7440-22-4	1.34E-05	1.75E-06	5.83E-04	8.22E-06	8.24E-05	1.05E-06	1.35E-08	7.69E-09
Thallium	7440-28-0	5.14E-06	2.56E-04	--	1.24E-03	8.41E-05	3.03E-04	8.43E-06	4.82E-06
Tin	7440-31-5	8.36E-05	2.85E-04	7.85E-02	1.80E-03	4.92E-04	6.43E-04	1.91E-05	1.09E-05
Vanadium	7440-62-2	3.99E-06	5.53E-07	1.60E-04	3.63E-06	9.12E-07	1.68E-06	5.54E-08	3.17E-08
Zinc	7440-66-6	5.22E-02	4.43E-06	3.60E-01	2.85E-05	1.52E-05	7.57E-06	1.67E-05	1.67E-05

Calculated Exposure Point Concentrations for the Farmer Receptor Cluster

Process Upset - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	8.75E-07	4.43E-10	--	1.89E-07	3.15E-10
Acenaphthylene	208-96-8	2.05E-07	2.48E-10	--	3.87E-08	6.06E-10
Anthracene	120-12-7	8.62E-07	1.66E-10	1.68E-10	8.37E-08	7.37E-12
Benz(a)anthracene	56-55-3	4.74E-07	8.27E-11	1.60E-08	9.33E-09	4.77E-10
Benzo(a)fluorene	30777-18-5	9.38E-07	6.45E-10	4.56E-09	2.75E-08	1.11E-09
Benzo(a)pyrene	50-32-8	8.39E-07	3.59E-10	5.01E-08	1.11E-08	4.30E-09
Benzo(b)fluoranthene	205-99-2	1.09E-06	1.02E-10	2.69E-09	1.22E-08	2.11E-10
Benzo(b)fluorene	243-17-4	6.47E-07	5.20E-10	3.12E-09	1.19E-08	2.91E-09
Benzo(e)pyrene	192-97-20	2.28E-06	3.50E-09	6.11E-09	1.68E-08	5.86E-07
Benzo(g,h,i)perylene	191-24-2	1.18E-05	2.81E-09	--	8.02E-08	8.89E-07
Benzo(k)fluoranthene	207-08-9	9.50E-07	2.41E-10	1.52E-08	1.09E-08	1.98E-09
Chrysene	218-01-9	1.76E-06	1.17E-10	1.99E-08	3.46E-08	6.61E-11
Dibenz(a,c)anthracene	215-58-7	1.49E-06	2.67E-09	5.23E-07	7.75E-09	7.84E-08
Dibenz(a,h)anthracene	53-70-3	5.23E-07	1.88E-10	2.36E-08	3.55E-09	7.07E-08
Fluoranthene	206-44-0	8.54E-06	4.95E-09	6.87E-09	4.26E-07	1.04E-09
Fluorene	86-73-7	8.70E-07	1.27E-09	--	1.26E-07	2.77E-11
Indeno(1,2,3-cd)pyrene	193-39-5	2.52E-06	6.63E-10	1.55E-07	1.49E-08	4.79E-10
Perylene	198-55-0	4.93E-07	5.88E-10	2.49E-10	4.66E-09	4.36E-07
Phenanthrene	85-01-8	8.79E-06	8.40E-09	1.95E-09	8.52E-07	4.86E-10
Pyrene	129-00-0	4.36E-05	8.42E-09	6.22E-09	2.49E-06	1.43E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	1.62E-04	1.35E-09	--	1.10E-06	4.06E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	1.28E-07	1.00E-12	3.97E-10	5.85E-10	8.89E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	5.00E-10	1.86E-08	--	6.95E-10	7.34E-12
Bromoform	75-25-2	1.90E-09	8.11E-07	--	3.13E-09	6.75E-13
Carbon Tetrachloride	56-23-5	1.36E-10	5.61E-09	--	1.27E-10	2.62E-12
Chloroform	67-66-3	2.24E-10	6.13E-09	--	6.04E-10	3.54E-12
Dichloromethane	75-09-2	4.01E-08	1.91E-06	--	2.75E-07	3.69E-10
O-Terphenyl	84-15-1	2.77E-06	1.63E-09	--	6.91E-08	1.93E-09
Trichlorofluoromethane (FREON 11)	75-69-4	1.03E-08	2.10E-06	--	1.44E-08	1.55E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	3.93E-07	7.37E-10	--	2.56E-08	4.88E-12
1,2,4-Trichlorobenzene	120-82-1	9.27E-09	7.17E-10	--	1.75E-09	1.27E-12
1,2-Dichlorobenzene	95-50-1	1.25E-07	2.89E-08	--	5.37E-08	8.15E-10
Hexachlorobenzene	118-74-1	1.69E-07	8.82E-10	--	5.66E-09	3.33E-11
Pentachlorobenzene	608-93-5	6.11E-06	2.24E-09	--	2.43E-07	1.16E-10
Pentachlorophenol	87-86-5	2.87E-06	7.28E-07	--	1.26E-07	4.42E-06
Inorganics						
Antimony	7440-36-0	8.10E-04	5.36E-06	2.79E-05	2.58E-05	--
Arsenic	7440-38-2	8.03E-05	8.23E-07	4.28E-06	5.09E-07	--
Barium	7440-39-3	5.70E-04	4.14E-06	2.15E-05	1.84E-05	--
Beryllium	7440-41-7	5.10E-04	3.14E-07	3.39E-06	1.31E-06	--
Boron	7440-42-8	3.15E-03	3.00E-04	1.56E-03	7.11E-03	--
Cadmium	7440-43-9	3.36E-03	1.34E-05	7.13E-05	4.20E-04	--
Chromium (Total)	7440-47-3	2.83E-04	4.41E-06	2.29E-05	1.38E-06	--
Chromium VI	18540-29-9	4.02E-05	6.28E-07	3.26E-06	1.96E-07	--
Cobalt	7440-48-4	1.71E-03	1.13E-05	5.90E-05	1.48E-05	--
Lead	7439-92-1	7.81E-02	4.47E-05	5.09E-04	1.06E-03	--
Mercury - Inorganic	7487-94-7	4.69E-03	4.40E-07	6.86E-06	6.80E-05	1.52E-05
Methyl Mercury	22967-92-6	2.04E-04	1.86E-09	1.94E-06	6.01E-06	4.27E-06
Nickel	7440-02-0	3.67E-02	1.69E-04	8.87E-04	3.41E-04	--
Phosphorus	7723-14-0	1.10E-03	9.04E-05	4.69E-04	3.85E-03	--
Selenium	7782-49-2	1.62E-05	9.42E-07	4.89E-06	3.16E-07	--
Silver	7440-22-4	1.86E-04	6.58E-06	3.41E-05	2.56E-05	--
Thallium	7440-28-0	1.78E-02	7.51E-05	3.97E-04	1.53E-05	--
Tin	7440-31-5	1.93E-02	2.62E-05	1.79E-04	1.75E-04	--
Vanadium	7440-62-2	1.84E-03	9.98E-07	1.18E-05	6.11E-06	--
Zinc	7440-66-6	8.04E-02	3.87E-04	2.03E-03	7.79E-03	--

Calculated Exposure Point Concentrations for the Farmer Receptor Cluster
Process Upset - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.86E-07	4.37E-11	1.76E-10	6.57E-10	2.16E-10	3.58E-10	1.02E-09	5.85E-10
Acenaphthylene	208-96-8	1.30E-06	1.03E-11	1.24E-10	1.99E-10	5.02E-11	8.29E-11	2.37E-10	1.36E-10
Anthracene	120-12-7	1.30E-09	3.09E-11	2.63E-10	4.88E-10	1.48E-10	2.93E-10	8.91E-10	5.09E-10
Benz(a)anthracene	56-55-3	4.49E-10	1.21E-10	2.07E-09	7.60E-10	2.30E-10	1.51E-10	3.62E-10	2.07E-10
Benzo(a)fluorene	30777-18-5	3.16E-08	8.52E-11	8.11E-09	8.86E-10	2.48E-10	2.70E-10	7.91E-10	4.52E-10
Benzo(a)pyrene	50-32-8	5.08E-10	4.36E-10	1.79E-08	2.90E-09	9.10E-10	3.44E-10	5.73E-10	3.27E-10
Benzo(b)fluoranthene	205-99-2	1.25E-08	3.27E-11	6.80E-09	3.72E-10	9.10E-11	2.11E-10	7.05E-10	4.03E-10
Benzo(b)fluorene	243-17-4	3.96E-08	1.28E-10	1.46E-08	1.41E-09	4.33E-10	2.05E-10	4.91E-10	2.80E-10
Benzo(e)pyrene	192-97-20	1.21E-07	1.61E-08	4.83E-07	1.88E-07	6.01E-08	1.61E-08	1.26E-09	7.21E-10
Benzo(g,h,i)perylene	191-24-2	6.17E-08	2.37E-08	4.37E-07	2.78E-07	8.86E-08	2.44E-08	6.32E-09	3.61E-09
Benzo(k)fluoranthene	207-08-9	5.78E-10	1.57E-10	1.52E-08	1.21E-09	3.68E-10	2.42E-10	6.21E-10	3.55E-10
Chrysene	218-01-9	1.67E-09	1.49E-10	2.92E-09	1.17E-09	3.28E-10	4.39E-10	1.34E-09	7.67E-10
Dibenz(a,c)anthracene	215-58-7	2.56E-08	4.10E-09	6.65E-07	3.03E-08	9.65E-09	2.54E-09	7.07E-10	4.04E-10
Dibenz(a,h)anthracene	53-70-3	2.12E-10	2.00E-09	2.96E-08	2.25E-08	7.17E-09	1.93E-09	2.79E-10	1.60E-10
Fluoranthene	206-44-0	1.28E-08	2.84E-10	2.48E-08	4.12E-09	1.15E-09	2.49E-09	7.90E-09	4.52E-09
Fluorene	86-73-7	1.65E-09	3.80E-11	1.01E-09	5.87E-10	1.85E-10	3.28E-10	9.62E-10	5.50E-10
Indeno(1,2,3-cd)pyrene	193-39-5	1.33E-09	7.26E-10	1.31E-07	4.18E-09	1.28E-09	6.18E-10	1.27E-09	7.24E-10
Perylene	198-55-0	9.26E-09	1.30E-08	5.23E-08	1.52E-07	4.85E-08	1.29E-08	3.01E-10	1.72E-10
Phenanthrene	85-01-8	1.61E-08	3.30E-10	1.33E-08	5.10E-09	1.54E-09	2.99E-09	9.08E-09	5.19E-09
Pyrene	129-00-0	6.33E-08	1.22E-09	3.35E-08	2.02E-08	5.67E-09	1.30E-08	4.13E-08	2.36E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.56E-06	1.35E-07	3.48E-04	2.99E-06	5.93E-07	2.45E-06	8.66E-08	4.95E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	1.32E-09	4.31E-10	**3.12E-08**	3.96E-09	1.10E-09	1.75E-09	5.67E-11	3.24E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	4.43E-08	5.51E-10	2.95E-08	1.78E-07	3.75E-08	2.84E-08	4.85E-10	2.77E-10
Bromoform	75-25-2	2.33E-08	2.10E-08	9.52E-07	6.69E-06	1.41E-06	1.07E-06	1.82E-08	1.04E-08
Carbon Tetrachloride	56-23-5	1.29E-08	2.40E-10	1.77E-08	7.69E-08	1.62E-08	1.23E-08	2.09E-10	1.20E-10
Chloroform	67-66-3	2.25E-08	9.93E-11	3.07E-09	3.43E-08	7.21E-09	5.47E-09	9.33E-11	5.33E-11
Dichloromethane	75-09-2	1.45E-05	1.05E-08	1.91E-07	3.77E-06	7.94E-07	6.01E-07	1.03E-08	5.87E-09
O-Terphenyl	84-15-1	6.22E-08	1.16E-08	2.71E-06	1.94E-07	4.76E-08	7.11E-08	2.26E-09	1.29E-09
Trichlorofluoromethane (FREON 11)	75-69-4	8.40E-07	6.36E-08	3.33E-06	2.03E-05	4.28E-06	3.24E-06	5.53E-08	3.16E-08
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	4.12E-07	1.35E-09	2.33E-07	5.87E-08	1.31E-08	1.38E-08	3.93E-10	2.25E-10
1,2,4-Trichlorobenzene	120-82-1	7.18E-09	1.51E-10	4.52E-08	3.59E-08	7.60E-09	5.85E-09	1.02E-10	5.83E-11
1,2-Dichlorobenzene	95-50-1	3.06E-06	3.20E-09	3.47E-07	8.43E-07	1.78E-07	1.36E-07	2.36E-09	1.35E-09
Hexachlorobenzene	118-74-1	4.30E-08	6.07E-10	8.82E-07	5.86E-08	1.26E-08	1.09E-08	2.19E-10	1.25E-10
Pentachlorobenzene	608-93-5	1.12E-07	1.38E-08	1.66E-06	2.67E-07	6.53E-08	1.67E-07	5.45E-09	3.11E-09
Pentachlorophenol	87-86-5	4.70E-05	2.52E-08	4.09E-04	2.96E-07	9.43E-08	2.51E-08	7.16E-12	4.09E-12
Inorganics									
Antimony	7440-36-0	2.43E-05	5.74E-07	1.07E-03	4.56E-06	6.67E-07	8.99E-07	1.69E-08	9.63E-09
Arsenic	7440-38-2	6.43E-07	1.37E-07	4.12E-05	8.55E-07	3.69E-08	1.35E-07	2.75E-09	1.57E-09
Barium	7440-39-3	8.55E-06	6.13E-08	4.14E-05	4.56E-07	1.54E-06	8.42E-08	1.59E-09	9.10E-10
Beryllium	7440-41-7	7.64E-07	6.49E-08	3.14E-05	5.89E-07	6.41E-10	2.59E-07	8.38E-09	4.79E-09
Boron	7440-42-8	6.30E-03	2.74E-05	--	2.21E-04	7.28E-05	4.57E-05	7.91E-07	4.52E-07
Cadmium	7440-43-9	2.15E-04	2.61E-07	1.62E-02	2.58E-06	2.08E-07	7.64E-07	1.23E-05	2.90E-07
Chromium (Total)	7440-47-3	1.27E-06	1.95E-06	8.83E-04	1.14E-05	4.51E-06	1.49E-06	2.70E-08	1.54E-08
Chromium VI	18540-29-9	1.81E-07	2.77E-07	2.32E-05	1.62E-06	6.41E-07	2.12E-07	3.83E-09	2.19E-09
Cobalt	7440-48-4	1.20E-05	1.91E-05	1.13E-03	1.23E-04	3.64E-05	2.44E-05	5.97E-07	3.41E-07
Lead	7439-92-1	7.03E-04	3.63E-06	4.68E-03	3.62E-05	3.92E-05	1.40E-05	4.11E-07	2.35E-07
Mercury - Inorganic	7487-94-7	1.69E-04	1.07E-06	--	1.57E-05	6.73E-06	6.51E-08	2.68E-06	2.68E-06
Methyl Mercury	22967-92-6	2.02E-05	2.85E-08	1.18E-03	2.21E-07	1.24E-07	5.02E-10	1.88E-08	1.88E-08
Nickel	7440-02-0	2.93E-04	9.07E-05	2.63E-02	6.31E-04	1.46E-04	1.47E-04	3.79E-06	2.17E-06
Phosphorus	7723-14-0	3.85E-03	5.71E-04	--	4.66E-03	1.59E-03	1.38E-03	3.23E-05	1.85E-05
Selenium	7782-49-2	3.56E-07	1.69E-07	1.60E-04	9.43E-07	3.63E-06	5.69E-06	4.50E-07	4.50E-07
Silver	7440-22-4	1.86E-05	1.75E-06	5.83E-04	1.13E-05	1.13E-04	1.45E-06	1.78E-08	1.02E-08
Thallium	7440-28-0	7.13E-06	2.56E-04	--	1.70E-03	1.16E-04	4.19E-04	1.17E-05	6.67E-06
Tin	7440-31-5	1.16E-04	2.85E-04	7.85E-02	2.48E-03	6.78E-04	8.90E-04	2.64E-05	1.51E-05
Vanadium	7440-62-2	5.53E-06	5.53E-07	1.60E-04	5.01E-06	1.26E-06	2.33E-06	7.68E-08	4.39E-08
Zinc	7440-66-6	7.23E-02	4.43E-06	3.60E-01	3.94E-05	2.10E-05	1.05E-05	2.32E-05	2.32E-05

Calculated Exposure Point Concentrations for the Daycare Receptor Cluster

Process Upset - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.65E-07	4.43E-10	--	3.56E-08	1.28E-10
Acenaphthylene	208-96-8	3.86E-08	2.48E-10	--	7.29E-09	2.46E-10
Anthracene	120-12-7	1.63E-07	1.66E-10	3.74E-11	1.58E-08	3.00E-12
Benz(a)anthracene	56-55-3	8.94E-08	8.27E-11	3.56E-09	1.76E-09	1.94E-10
Benzo(a)fluorene	30777-18-5	1.77E-07	6.45E-10	1.02E-09	5.18E-09	4.50E-10
Benzo(a)pyrene	50-32-8	1.58E-07	3.59E-10	1.12E-08	2.09E-09	1.75E-09
Benzo(b)fluoranthene	205-99-2	2.06E-07	1.02E-10	5.98E-10	2.30E-09	8.58E-11
Benzo(b)fluorene	243-17-4	1.22E-07	5.20E-10	6.95E-10	2.24E-09	1.18E-09
Benzo(e)pyrene	192-97-20	4.31E-07	3.50E-09	1.36E-09	3.16E-09	2.38E-07
Benzo(g,h,i)perylene	191-24-2	2.23E-06	2.81E-09	--	1.51E-08	3.61E-07
Benzo(k)fluoranthene	207-08-9	1.80E-07	2.41E-10	3.37E-09	2.07E-09	8.07E-10
Chrysene	218-01-9	3.32E-07	1.17E-10	4.43E-09	6.54E-09	2.69E-11
Dibenz(a,c)anthracene	215-58-7	2.81E-07	2.67E-09	1.16E-07	1.46E-09	3.19E-08
Dibenz(a,h)anthracene	53-70-3	9.88E-08	1.88E-10	5.25E-09	6.70E-10	2.87E-08
Fluoranthene	206-44-0	1.61E-06	4.95E-09	1.53E-09	8.04E-08	4.22E-10
Fluorene	86-73-7	1.64E-07	1.27E-09	--	2.38E-08	1.13E-11
Indeno(1,2,3-cd)pyrene	193-39-5	4.76E-07	6.63E-10	3.45E-08	2.82E-09	1.95E-10
Perylene	198-55-0	9.30E-08	5.88E-10	5.55E-11	8.79E-10	1.78E-07
Phenanthrene	85-01-8	1.66E-06	8.40E-09	4.34E-10	1.61E-07	1.98E-10
Pyrene	129-00-0	8.25E-06	8.42E-09	1.38E-09	4.70E-07	5.80E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	3.08E-05	1.35E-09	--	2.09E-07	1.65E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	3.69E-08	1.00E-12	1.54E-10	1.68E-10	3.61E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	9.43E-11	1.86E-08	--	1.31E-10	2.98E-12
Bromoform	75-25-2	3.58E-10	8.11E-07	--	5.90E-10	2.74E-13
Carbon Tetrachloride	56-23-5	2.56E-11	5.61E-09	--	2.39E-11	1.07E-12
Chloroform	67-66-3	4.22E-11	6.13E-09	--	1.14E-10	1.44E-12
Dichloromethane	75-09-2	7.57E-09	1.91E-06	--	5.19E-08	1.50E-10
O-Terphenyl	84-15-1	5.22E-07	1.63E-09	--	1.30E-08	7.84E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.95E-09	2.10E-06	--	2.71E-09	6.32E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	7.41E-08	7.37E-10	--	4.82E-09	1.98E-12
1,2,4-Trichlorobenzene	120-82-1	1.75E-09	7.17E-10	--	3.30E-10	5.19E-13
1,2-Dichlorobenzene	95-50-1	2.35E-08	2.89E-08	--	1.01E-08	3.31E-10
Hexachlorobenzene	118-74-1	3.18E-08	8.82E-10	--	1.07E-09	1.36E-11
Pentachlorobenzene	608-93-5	1.15E-06	2.24E-09	--	4.58E-08	4.72E-11
Pentachlorophenol	87-86-5	5.42E-07	7.28E-07	--	2.37E-08	1.80E-06
Inorganics						
Antimony	7440-36-0	2.31E-04	5.36E-06	1.08E-05	7.38E-06	--
Arsenic	7440-38-2	2.30E-05	8.23E-07	1.66E-06	1.45E-07	--
Barium	7440-39-3	1.63E-04	4.14E-06	8.34E-06	5.25E-06	--
Beryllium	7440-41-7	1.46E-04	3.14E-07	1.31E-06	3.76E-07	--
Boron	7440-42-8	9.00E-04	3.00E-04	6.04E-04	2.03E-03	--
Cadmium	7440-43-9	9.61E-04	1.34E-05	2.76E-05	1.20E-04	--
Chromium (Total)	7440-47-3	8.08E-05	4.41E-06	8.88E-06	3.94E-07	--
Chromium VI	18540-29-9	1.15E-05	6.28E-07	1.26E-06	5.61E-08	--
Cobalt	7440-48-4	4.89E-04	1.13E-05	2.29E-05	4.23E-06	--
Lead	7439-92-1	2.23E-02	4.47E-05	1.97E-04	3.04E-04	--
Mercury - Inorganic	7487-94-7	1.57E-03	4.40E-07	2.66E-06	2.27E-05	6.16E-06
Methyl Mercury	22967-92-6	5.85E-05	1.86E-09	7.50E-07	1.72E-06	1.74E-06
Nickel	7440-02-0	1.05E-02	1.69E-04	3.44E-04	9.76E-05	--
Phosphorus	7723-14-0	3.14E-04	9.04E-05	1.82E-04	1.10E-03	--
Selenium	7782-49-2	4.63E-06	9.42E-07	1.89E-06	9.02E-08	--
Silver	7440-22-4	5.31E-05	6.58E-06	1.32E-05	7.32E-06	--
Thallium	7440-28-0	5.09E-03	7.51E-05	1.54E-04	4.37E-06	--
Tin	7440-31-5	5.52E-03	2.62E-05	6.94E-05	5.00E-05	--
Vanadium	7440-62-2	5.27E-04	9.98E-07	4.59E-06	1.75E-06	--
Zinc	7440-66-6	2.30E-02	3.87E-04	7.87E-04	2.23E-03	--

Calculated Exposure Point Concentrations for the Daycare Receptor Cluster
Process Upset - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	3.51E-08	4.37E-11	1.76E-10	1.44E-10	4.51E-11	7.07E-11	1.99E-10	1.13E-10
Acenaphthylene	208-96-8	2.46E-07	1.03E-11	1.24E-10	5.21E-11	1.42E-11	1.92E-11	5.08E-11	2.90E-11
Anthracene	120-12-7	2.45E-10	3.09E-11	2.63E-10	1.01E-10	2.99E-11	5.65E-11	1.70E-10	9.72E-11
Benz(a)anthracene	56-55-3	8.48E-11	1.21E-10	2.07E-09	2.22E-10	6.82E-11	3.50E-11	6.92E-11	3.95E-11
Benzo(a)fluorene	30777-18-5	5.96E-09	8.52E-11	8.11E-09	3.52E-10	1.00E-10	7.38E-11	1.68E-10	9.59E-11
Benzo(a)pyrene	50-32-8	9.58E-11	4.36E-10	1.79E-08	1.04E-09	3.28E-10	1.11E-10	1.09E-10	6.25E-11
Benzo(b)fluoranthene	205-99-2	2.37E-09	3.27E-11	6.80E-09	1.00E-10	2.63E-11	4.26E-11	1.34E-10	7.66E-11
Benzo(b)fluorene	243-17-4	7.47E-09	1.28E-10	1.46E-08	5.80E-10	1.76E-10	7.62E-11	1.05E-10	6.02E-11
Benzo(e)pyrene	192-97-20	2.29E-08	1.61E-08	4.83E-07	7.65E-08	2.44E-08	6.51E-09	2.42E-10	1.38E-10
Benzo(g,h,i)perylene	191-24-2	1.16E-08	2.37E-08	4.37E-07	1.13E-07	3.60E-08	9.83E-09	1.20E-09	6.84E-10
Benzo(k)fluoranthene	207-08-9	1.09E-10	1.57E-10	1.52E-08	4.38E-10	1.35E-10	6.57E-11	1.18E-10	6.73E-11
Chrysene	218-01-9	3.15E-10	1.49E-10	2.92E-09	2.57E-10	7.28E-11	8.61E-11	2.55E-10	1.46E-10
Dibenz(a,c)anthracene	215-58-7	4.83E-09	4.10E-09	6.65E-07	1.16E-08	3.69E-09	9.71E-10	1.38E-10	7.91E-11
Dibenz(a,h)anthracene	53-70-3	4.00E-11	2.00E-09	2.96E-08	9.09E-09	2.90E-09	7.78E-10	5.30E-11	3.03E-11
Fluoranthene	206-44-0	2.41E-09	2.84E-10	2.48E-08	1.02E-09	2.81E-10	4.99E-10	1.52E-09	8.69E-10
Fluorene	86-73-7	3.11E-10	3.80E-11	1.01E-09	1.65E-10	4.66E-11	7.03E-11	1.96E-10	1.12E-10
Indeno(1,2,3-cd)pyrene	193-39-5	2.52E-10	7.26E-10	1.31E-07	9.61E-10	2.96E-10	1.29E-10	2.40E-10	1.37E-10
Perylene	198-55-0	1.75E-09	1.30E-08	5.23E-08	6.17E-08	1.97E-08	5.22E-09	5.73E-11	3.27E-11
Phenanthrene	85-01-8	3.04E-09	3.30E-10	1.33E-08	1.23E-09	3.53E-10	6.03E-10	1.77E-09	1.01E-09
Pyrene	129-00-0	1.20E-08	1.22E-09	3.35E-08	4.13E-09	1.16E-09	2.50E-09	7.85E-09	4.49E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	2.95E-07	1.35E-07	3.48E-04	6.10E-07	1.26E-07	4.69E-07	1.64E-08	9.39E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	3.79E-10	4.31E-10	**3.12E-08**	1.81E-09	5.07E-10	5.60E-10	1.63E-11	9.30E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	8.36E-09	5.51E-10	2.95E-08	1.79E-08	3.77E-09	2.86E-09	4.88E-11	2.79E-11
Bromoform	75-25-2	4.40E-09	2.10E-08	9.52E-07	6.69E-07	1.41E-07	1.07E-07	1.82E-09	1.04E-09
Carbon Tetrachloride	56-23-5	2.44E-09	2.40E-10	1.77E-08	7.79E-09	1.64E-09	1.24E-09	2.12E-11	1.21E-11
Chloroform	67-66-3	4.25E-09	9.93E-11	3.07E-09	3.22E-09	6.78E-10	5.14E-10	8.79E-12	5.02E-12
Dichloromethane	75-09-2	2.72E-06	1.05E-08	1.91E-07	3.40E-07	7.16E-08	5.44E-08	9.30E-10	5.31E-10
O-Terphenyl	84-15-1	1.17E-08	1.16E-08	2.71E-06	6.67E-08	1.80E-08	1.81E-08	4.70E-10	2.69E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.58E-07	6.36E-08	3.33E-06	2.04E-06	4.30E-07	3.26E-07	5.56E-09	3.18E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	7.77E-08	1.35E-09	2.33E-07	9.02E-09	2.17E-09	3.14E-09	8.64E-11	4.94E-11
1,2,4-Trichlorobenzene	120-82-1	1.35E-09	1.51E-10	4.52E-08	3.68E-09	7.92E-10	6.36E-10	1.17E-11	6.66E-12
1,2-Dichlorobenzene	95-50-1	5.77E-07	3.20E-09	3.47E-07	8.48E-08	1.82E-08	1.43E-08	2.55E-10	1.46E-10
Hexachlorobenzene	118-74-1	8.10E-09	6.07E-10	8.82E-07	7.61E-09	1.71E-09	1.81E-09	4.34E-11	2.48E-11
Pentachlorobenzene	608-93-5	2.12E-08	1.38E-08	1.66E-06	6.36E-08	1.59E-08	3.41E-08	1.07E-09	6.11E-10
Pentachlorophenol	87-86-5	8.86E-06	2.52E-08	4.09E-04	1.20E-07	3.83E-08	1.02E-08	2.27E-12	1.29E-12
Inorganics									
Antimony	7440-36-0	6.94E-06	5.74E-07	1.07E-03	1.61E-06	2.33E-07	2.86E-07	5.04E-09	2.88E-09
Arsenic	7440-38-2	1.84E-07	1.37E-07	4.12E-05	3.40E-07	1.45E-08	4.74E-08	8.53E-10	4.88E-10
Barium	7440-39-3	2.44E-06	6.13E-08	4.14E-05	1.66E-07	5.57E-07	2.74E-08	4.81E-10	2.75E-10
Beryllium	7440-41-7	2.19E-07	6.49E-08	3.14E-05	2.01E-07	2.25E-10	7.68E-08	2.41E-09	1.38E-09
Boron	7440-42-8	1.80E-03	2.74E-05	--	7.70E-05	2.48E-05	1.44E-05	2.36E-07	1.35E-07
Cadmium	7440-43-9	6.15E-05	2.61E-07	1.62E-02	8.33E-07	6.66E-08	2.30E-07	3.61E-06	8.49E-08
Chromium (Total)	7440-47-3	3.64E-07	1.95E-06	8.83E-04	4.65E-06	1.82E-06	5.56E-07	8.71E-09	4.98E-09
Chromium VI	18540-29-9	5.17E-08	2.77E-07	2.32E-05	6.61E-07	2.58E-07	7.90E-08	1.24E-09	7.08E-10
Cobalt	7440-48-4	3.42E-06	1.91E-05	1.13E-03	4.82E-05	1.42E-05	8.20E-06	1.80E-07	1.03E-07
Lead	7439-92-1	2.01E-04	3.63E-06	4.68E-03	1.18E-05	1.29E-05	4.12E-06	1.18E-07	6.75E-08
Mercury - Inorganic	7487-94-7	5.64E-05	1.07E-06	--	5.62E-06	2.49E-06	2.19E-08	8.96E-07	8.96E-07
Methyl Mercury	22967-92-6	5.79E-06	2.85E-08	1.18E-03	8.42E-08	4.91E-08	1.52E-10	5.40E-09	5.40E-09
Nickel	7440-02-0	8.39E-05	9.07E-05	2.63E-02	2.40E-04	5.53E-05	4.75E-05	1.13E-06	6.43E-07
Phosphorus	7723-14-0	1.10E-03	5.71E-04	--	1.62E-03	5.36E-04	4.22E-04	9.44E-06	5.39E-06
Selenium	7782-49-2	1.02E-07	1.69E-07	1.60E-04	3.93E-07	1.48E-06	2.41E-06	1.89E-07	1.89E-07
Silver	7440-22-4	5.31E-06	1.75E-06	5.83E-04	4.37E-06	4.29E-05	5.22E-07	5.91E-09	3.38E-09
Thallium	7440-28-0	2.04E-06	2.56E-04	--	6.64E-04	4.52E-05	1.36E-04	3.46E-06	1.98E-06
Tin	7440-31-5	3.31E-05	2.85E-04	7.85E-02	8.58E-04	2.38E-04	2.68E-04	7.65E-06	4.37E-06
Vanadium	7440-62-2	1.58E-06	5.53E-07	1.60E-04	1.71E-06	4.44E-07	6.89E-07	2.21E-08	1.26E-08
Zinc	7440-66-6	2.07E-02	4.43E-06	3.60E-01	1.33E-05	7.01E-06	3.22E-06	6.82E-06	6.82E-06

Calculated Exposure Point Concentrations for the Recreation User - Sport Receptor Cluster

Process Upset - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	4.10E-07	4.43E-10	--	8.85E-08	2.38E-10
Acenaphthylene	208-96-8	9.60E-08	2.48E-10	--	1.81E-08	4.59E-10
Anthracene	120-12-7	4.04E-07	1.66E-10	8.77E-11	3.93E-08	5.58E-12
Benz(a)anthracene	56-55-3	2.22E-07	8.27E-11	8.35E-09	4.38E-09	3.61E-10
Benzo(a)fluorene	30777-18-5	4.39E-07	6.45E-10	2.38E-09	1.29E-08	8.37E-10
Benzo(a)pyrene	50-32-8	3.93E-07	3.59E-10	2.62E-08	5.19E-09	3.25E-09
Benzo(b)fluoranthene	205-99-2	5.11E-07	1.02E-10	1.40E-09	5.72E-09	1.60E-10
Benzo(b)fluorene	243-17-4	3.03E-07	5.20E-10	1.63E-09	5.58E-09	2.21E-09
Benzo(e)pyrene	192-97-20	1.07E-06	3.50E-09	3.19E-09	7.86E-09	4.44E-07
Benzo(g,h,i)perylene	191-24-2	5.55E-06	2.81E-09	--	3.76E-08	6.73E-07
Benzo(k)fluoranthene	207-08-9	4.47E-07	2.41E-10	7.91E-09	5.14E-09	1.50E-09
Chrysene	218-01-9	8.25E-07	1.17E-10	1.04E-08	1.63E-08	5.00E-11
Dibenz(a,c)anthracene	215-58-7	6.99E-07	2.67E-09	2.73E-07	3.63E-09	5.93E-08
Dibenz(a,h)anthracene	53-70-3	2.46E-07	1.88E-10	1.23E-08	1.66E-09	5.35E-08
Fluoranthene	206-44-0	4.00E-06	4.95E-09	3.59E-09	2.00E-07	7.85E-10
Fluorene	86-73-7	4.07E-07	1.27E-09	--	5.91E-08	2.10E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.18E-06	6.63E-10	8.08E-08	7.01E-09	3.63E-10
Perylene	198-55-0	2.31E-07	5.88E-10	1.30E-10	2.19E-09	3.30E-07
Phenanthrene	85-01-8	4.12E-06	8.40E-09	1.02E-09	3.99E-07	3.68E-10
Pyrene	129-00-0	2.05E-05	8.42E-09	3.24E-09	1.17E-06	1.08E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	7.65E-05	1.35E-09	--	5.19E-07	3.07E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	4.99E-08	1.00E-12	1.56E-10	2.27E-10	6.73E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	2.34E-10	1.86E-08	--	3.26E-10	5.56E-12
Bromoform	75-25-2	8.89E-10	8.11E-07	--	1.47E-09	5.11E-13
Carbon Tetrachloride	56-23-5	6.37E-11	5.61E-09	--	5.94E-11	1.99E-12
Chloroform	67-66-3	1.05E-10	6.13E-09	--	2.83E-10	2.68E-12
Dichloromethane	75-09-2	1.88E-08	1.91E-06	--	1.29E-07	2.79E-10
O-Terphenyl	84-15-1	1.30E-06	1.63E-09	--	3.24E-08	1.46E-09
Trichlorofluoromethane (FREON 11)	75-69-4	4.85E-09	2.10E-06	--	6.74E-09	1.18E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.84E-07	7.37E-10	--	1.20E-08	3.69E-12
1,2,4-Trichlorobenzene	120-82-1	4.34E-09	7.17E-10	--	8.20E-10	9.65E-13
1,2-Dichlorobenzene	95-50-1	5.84E-08	2.89E-08	--	2.52E-08	6.17E-10
Hexachlorobenzene	118-74-1	7.91E-08	8.82E-10	--	2.65E-09	2.52E-11
Pentachlorobenzene	608-93-5	2.86E-06	2.24E-09	--	1.14E-07	8.79E-11
Pentachlorophenol	87-86-5	1.35E-06	7.28E-07	--	5.88E-08	3.34E-06
Inorganics						
Antimony	7440-36-0	3.13E-04	5.36E-06	1.10E-05	9.99E-06	--
Arsenic	7440-38-2	3.11E-05	8.23E-07	1.69E-06	1.97E-07	--
Barium	7440-39-3	2.20E-04	4.14E-06	8.49E-06	7.10E-06	--
Beryllium	7440-41-7	1.97E-04	3.14E-07	1.34E-06	5.09E-07	--
Boron	7440-42-8	1.22E-03	3.00E-04	6.15E-04	2.75E-03	--
Cadmium	7440-43-9	1.30E-03	1.34E-05	2.81E-05	1.62E-04	--
Chromium (Total)	7440-47-3	1.09E-04	4.41E-06	9.04E-06	5.33E-07	--
Chromium VI	18540-29-9	1.55E-05	6.28E-07	1.29E-06	7.59E-08	--
Cobalt	7440-48-4	6.62E-04	1.13E-05	2.33E-05	5.73E-06	--
Lead	7439-92-1	3.02E-02	4.47E-05	2.01E-04	4.11E-04	--
Mercury - Inorganic	7487-94-7	2.94E-03	4.40E-07	2.71E-06	4.26E-05	1.15E-05
Methyl Mercury	22967-92-6	7.91E-05	1.86E-09	7.64E-07	2.33E-06	3.23E-06
Nickel	7440-02-0	1.42E-02	1.69E-04	3.50E-04	1.32E-04	--
Phosphorus	7723-14-0	4.25E-04	9.04E-05	1.85E-04	1.49E-03	--
Selenium	7782-49-2	6.26E-06	9.42E-07	1.93E-06	1.22E-07	--
Silver	7440-22-4	7.18E-05	6.58E-06	1.35E-05	9.91E-06	--
Thallium	7440-28-0	6.89E-03	7.51E-05	1.57E-04	5.91E-06	--
Tin	7440-31-5	7.47E-03	2.62E-05	7.07E-05	6.76E-05	--
Vanadium	7440-62-2	7.13E-04	9.98E-07	4.67E-06	2.37E-06	--
Zinc	7440-66-6	3.11E-02	3.87E-04	8.02E-04	3.01E-03	--

Calculated Exposure Point Concentrations for the Recreation User - Sport Receptor Cluster
Process Upset - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	8.72E-08	4.37E-11	1.76E-10	4.45E-10	1.30E-10	1.90E-10	5.17E-10	2.95E-10
Acenaphthylene	208-96-8	6.10E-07	1.03E-11	1.24E-10	1.92E-10	4.85E-11	5.77E-11	1.43E-10	8.19E-11
Anthracene	120-12-7	6.09E-10	3.09E-11	2.63E-10	2.73E-10	7.88E-11	1.44E-10	4.29E-10	2.45E-10
Benz(a)anthracene	56-55-3	2.11E-10	1.21E-10	2.07E-09	4.95E-10	1.51E-10	8.31E-11	1.74E-10	9.94E-11
Benzo(a)fluorene	30777-18-5	1.48E-08	8.52E-11	8.11E-09	9.16E-10	2.44E-10	1.99E-10	4.61E-10	2.63E-10
Benzo(a)pyrene	50-32-8	2.38E-10	4.36E-10	1.79E-08	2.15E-09	6.72E-10	2.40E-10	2.76E-10	1.58E-10
Benzo(b)fluoranthene	205-99-2	5.88E-09	3.27E-11	6.80E-09	2.44E-10	6.20E-11	1.07E-10	3.38E-10	1.93E-10
Benzo(b)fluorene	243-17-4	1.86E-08	1.28E-10	1.46E-08	1.25E-09	3.65E-10	1.81E-10	2.90E-10	1.66E-10
Benzo(e)pyrene	192-97-20	5.69E-08	1.61E-08	4.83E-07	1.43E-07	4.55E-08	1.22E-08	6.11E-10	3.49E-10
Benzo(g,h,i)perylene	191-24-2	2.89E-08	2.37E-08	4.37E-07	2.11E-07	6.71E-08	1.85E-08	3.00E-09	1.71E-09
Benzo(k)fluoranthene	207-08-9	2.72E-10	1.57E-10	1.52E-08	8.95E-10	2.74E-10	1.47E-10	2.94E-10	1.68E-10
Chrysene	218-01-9	7.82E-10	1.49E-10	2.92E-09	6.36E-10	1.77E-10	2.15E-10	6.40E-10	3.66E-10
Dibenz(a,c)anthracene	215-58-7	1.20E-08	4.10E-09	6.65E-07	2.29E-08	7.29E-09	1.93E-09	3.63E-10	2.07E-10
Dibenz(a,h)anthracene	53-70-3	9.95E-11	2.00E-09	2.96E-08	1.70E-08	5.43E-09	1.46E-09	1.33E-10	7.58E-11
Fluoranthene	206-44-0	5.98E-09	2.84E-10	2.48E-08	2.65E-09	7.11E-10	1.27E-09	3.84E-09	2.19E-09
Fluorene	86-73-7	7.72E-10	3.80E-11	1.01E-09	5.61E-10	1.47E-10	1.99E-10	5.28E-10	3.01E-10
Indeno(1,2,3-cd)pyrene	193-39-5	6.25E-10	7.26E-10	1.31E-07	2.26E-09	6.91E-10	3.14E-10	6.02E-10	3.44E-10
Perylene	198-55-0	4.34E-09	1.30E-08	5.23E-08	1.15E-07	3.67E-08	9.73E-09	1.44E-10	8.23E-11
Phenanthrene	85-01-8	7.55E-09	3.30E-10	1.33E-08	3.46E-09	9.59E-10	1.57E-09	4.53E-09	2.59E-09
Pyrene	129-00-0	2.97E-08	1.22E-09	3.35E-08	1.04E-08	2.88E-09	6.23E-09	1.96E-08	1.12E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	7.33E-07	1.35E-07	3.48E-04	1.50E-06	3.06E-07	1.17E-06	4.09E-08	2.34E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	5.13E-10	4.31E-10	**3.12E-08**	2.83E-09	8.08E-10	7.92E-10	2.20E-11	1.26E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	2.08E-08	5.51E-10	2.95E-08	1.72E-07	3.63E-08	2.75E-08	4.69E-10	2.68E-10
Bromoform	75-25-2	1.09E-08	2.10E-08	9.52E-07	6.47E-06	1.36E-06	1.03E-06	1.76E-08	1.01E-08
Carbon Tetrachloride	56-23-5	6.06E-09	2.40E-10	1.77E-08	7.43E-08	1.57E-08	1.19E-08	2.02E-10	1.16E-10
Chloroform	67-66-3	1.06E-08	9.93E-11	3.07E-09	3.31E-08	6.97E-09	5.28E-09	9.02E-11	5.15E-11
Dichloromethane	75-09-2	6.77E-06	1.05E-08	1.91E-07	3.64E-06	7.67E-07	5.81E-07	9.92E-09	5.67E-09
O-Terphenyl	84-15-1	2.91E-08	1.16E-08	2.71E-06	1.97E-07	4.92E-08	5.14E-08	1.31E-09	7.47E-10
Trichlorofluoromethane (FREON 11)	75-69-4	3.94E-07	6.36E-08	3.33E-06	1.97E-05	4.14E-06	3.13E-06	5.35E-08	3.06E-08
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	1.93E-07	1.35E-09	2.33E-07	5.68E-08	1.26E-08	1.33E-08	3.08E-10	1.76E-10
1,2,4-Trichlorobenzene	120-82-1	3.36E-09	1.51E-10	4.52E-08	3.47E-08	7.35E-09	5.66E-09	9.85E-11	5.63E-11
1,2-Dichlorobenzene	95-50-1	1.43E-06	3.20E-09	3.47E-07	8.15E-07	1.72E-07	1.32E-07	2.28E-09	1.30E-09
Hexachlorobenzene	118-74-1	2.01E-08	6.07E-10	8.82E-07	5.68E-08	1.22E-08	1.06E-08	2.12E-10	1.21E-10
Pentachlorobenzene	608-93-5	5.26E-08	1.38E-08	1.66E-06	2.59E-07	6.06E-08	1.01E-07	2.93E-09	1.68E-09
Pentachlorophenol	87-86-5	2.20E-05	2.52E-08	4.09E-04	2.23E-07	7.13E-08	1.90E-08	4.45E-12	2.54E-12
Inorganics									
Antimony	7440-36-0	9.39E-06	5.74E-07	1.07E-03	1.84E-06	2.67E-07	3.59E-07	6.69E-09	3.82E-09
Arsenic	7440-38-2	2.48E-07	1.37E-07	4.12E-05	3.55E-07	1.51E-08	5.56E-08	1.11E-09	6.37E-10
Barium	7440-39-3	3.31E-06	6.13E-08	4.14E-05	1.86E-07	6.21E-07	3.39E-08	6.36E-10	3.63E-10
Beryllium	7440-41-7	2.96E-07	6.49E-08	3.14E-05	2.36E-07	2.56E-10	1.01E-07	3.26E-09	1.86E-09
Boron	7440-42-8	2.44E-03	2.74E-05	--	8.90E-05	2.90E-05	1.82E-05	3.13E-07	1.79E-07
Cadmium	7440-43-9	8.32E-05	2.61E-07	1.62E-02	1.02E-06	8.19E-08	3.00E-07	4.83E-06	1.14E-07
Chromium (Total)	7440-47-3	4.92E-07	1.95E-06	8.83E-04	4.75E-06	1.85E-06	6.26E-07	1.12E-08	6.39E-09
Chromium VI	18540-29-9	7.00E-08	2.77E-07	2.32E-05	6.76E-07	2.63E-07	8.90E-08	1.59E-09	9.09E-10
Cobalt	7440-48-4	4.63E-06	1.91E-05	1.13E-03	5.08E-05	1.49E-05	9.91E-06	2.38E-07	1.36E-07
Lead	7439-92-1	2.72E-04	3.63E-06	4.68E-03	1.43E-05	1.55E-05	5.46E-06	1.60E-07	9.13E-08
Mercury - Inorganic	7487-94-7	1.06E-04	1.07E-06	--	9.67E-06	4.07E-06	4.08E-08	1.68E-06	1.68E-06
Methyl Mercury	22967-92-6	7.83E-06	2.85E-08	1.18E-03	1.05E-07	6.05E-08	2.03E-10	7.30E-09	7.30E-09
Nickel	7440-02-0	1.13E-04	9.07E-05	2.63E-02	2.59E-04	5.93E-05	5.90E-05	1.50E-06	8.56E-07
Phosphorus	7723-14-0	1.49E-03	5.71E-04	--	1.87E-03	6.30E-04	5.45E-04	1.26E-05	7.23E-06
Selenium	7782-49-2	1.38E-07	1.69E-07	1.60E-04	3.96E-07	1.49E-06	2.50E-06	2.20E-07	2.20E-07
Silver	7440-22-4	7.18E-06	1.75E-06	5.83E-04	4.67E-06	4.60E-05	6.03E-07	7.51E-09	4.29E-09
Thallium	7440-28-0	2.76E-06	2.56E-04	--	7.04E-04	4.72E-05	1.68E-04	4.61E-06	2.64E-06
Tin	7440-31-5	4.48E-05	2.85E-04	7.85E-02	9.96E-04	2.71E-04	3.50E-04	1.03E-05	5.89E-06
Vanadium	7440-62-2	2.14E-06	5.53E-07	1.60E-04	2.00E-06	5.01E-07	9.10E-07	2.98E-08	1.71E-08
Zinc	7440-66-6	2.80E-02	4.43E-06	3.60E-01	1.58E-05	8.32E-06	4.14E-06	9.12E-06	9.12E-06

Calculated Exposure Point Concentrations for the Additional Exposure Due to Swimming and Recreation User - Camping Rece

Process Upset - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	3.28E-07	4.43E-10	--	7.09E-08	2.58E-10
Acenaphthylene	208-96-8	7.68E-08	2.48E-10	--	1.45E-08	4.96E-10
Anthracene	120-12-7	3.24E-07	1.66E-10	7.10E-11	3.14E-08	6.04E-12
Benz(a)anthracene	56-55-3	1.78E-07	8.27E-11	6.77E-09	3.50E-09	3.91E-10
Benzo(a)fluorene	30777-18-5	3.52E-07	6.45E-10	1.93E-09	1.03E-08	9.06E-10
Benzo(a)pyrene	50-32-8	3.15E-07	3.59E-10	2.12E-08	4.16E-09	3.52E-09
Benzo(b)fluoranthene	205-99-2	4.09E-07	1.02E-10	1.14E-09	4.58E-09	1.73E-10
Benzo(b)fluorene	243-17-4	2.43E-07	5.20E-10	1.32E-09	4.47E-09	2.39E-09
Benzo(e)pyrene	192-97-20	8.57E-07	3.50E-09	2.58E-09	6.29E-09	4.80E-07
Benzo(g,h,i)perylene	191-24-2	4.44E-06	2.81E-09	--	3.01E-08	7.28E-07
Benzo(k)fluoranthene	207-08-9	3.57E-07	2.41E-10	6.41E-09	4.11E-09	1.62E-09
Chrysene	218-01-9	6.60E-07	1.17E-10	8.42E-09	1.30E-08	5.41E-11
Dibenz(a,c)anthracene	215-58-7	5.60E-07	2.67E-09	2.21E-07	2.91E-09	6.42E-08
Dibenz(a,h)anthracene	53-70-3	1.96E-07	1.88E-10	9.98E-09	1.33E-09	5.79E-08
Fluoranthene	206-44-0	3.20E-06	4.95E-09	2.90E-09	1.60E-07	8.50E-10
Fluorene	86-73-7	3.26E-07	1.27E-09	--	4.73E-08	2.27E-11
Indeno(1,2,3-cd)pyrene	193-39-5	9.45E-07	6.63E-10	6.55E-08	5.61E-09	3.93E-10
Perylene	198-55-0	1.85E-07	5.88E-10	1.05E-10	1.75E-09	3.58E-07
Phenanthrene	85-01-8	3.30E-06	8.40E-09	8.25E-10	3.20E-07	3.98E-10
Pyrene	129-00-0	1.64E-05	8.42E-09	2.63E-09	9.34E-07	1.17E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	6.11E-05	1.35E-09	--	4.14E-07	3.33E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	5.40E-08	1.00E-12	1.99E-10	2.46E-10	7.28E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	1.88E-10	1.86E-08	--	2.61E-10	6.01E-12
Bromoform	75-25-2	7.12E-10	8.11E-07	--	1.17E-09	5.53E-13
Carbon Tetrachloride	56-23-5	5.10E-11	5.61E-09	--	4.75E-11	2.15E-12
Chloroform	67-66-3	8.40E-11	6.13E-09	--	2.27E-10	2.90E-12
Dichloromethane	75-09-2	1.51E-08	1.91E-06	--	1.03E-07	3.02E-10
O-Terphenyl	84-15-1	1.04E-06	1.63E-09	--	2.59E-08	1.58E-09
Trichlorofluoromethane (FREON 11)	75-69-4	3.88E-09	2.10E-06	--	5.39E-09	1.27E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.47E-07	7.37E-10	--	9.60E-09	3.99E-12
1,2,4-Trichlorobenzene	120-82-1	3.48E-09	7.17E-10	--	6.57E-10	1.04E-12
1,2-Dichlorobenzene	95-50-1	4.68E-08	2.89E-08	--	2.02E-08	6.68E-10
Hexachlorobenzene	118-74-1	6.33E-08	8.82E-10	--	2.12E-09	2.73E-11
Pentachlorobenzene	608-93-5	2.29E-06	2.24E-09	--	9.12E-08	9.51E-11
Pentachlorophenol	87-86-5	1.08E-06	7.28E-07	--	4.71E-08	3.62E-06
Inorganics						
Antimony	7440-36-0	3.40E-04	5.36E-06	1.40E-05	1.08E-05	--
Arsenic	7440-38-2	3.37E-05	8.23E-07	2.15E-06	2.13E-07	--
Barium	7440-39-3	2.39E-04	4.14E-06	1.08E-05	7.70E-06	--
Beryllium	7440-41-7	2.14E-04	3.14E-07	1.71E-06	5.52E-07	--
Boron	7440-42-8	1.32E-03	3.00E-04	7.84E-04	2.98E-03	--
Cadmium	7440-43-9	1.41E-03	1.34E-05	3.58E-05	1.76E-04	--
Chromium (Total)	7440-47-3	1.19E-04	4.41E-06	1.15E-05	5.79E-07	--
Chromium VI	18540-29-9	1.69E-05	6.28E-07	1.64E-06	8.23E-08	--
Cobalt	7440-48-4	7.18E-04	1.13E-05	2.97E-05	6.21E-06	--
Lead	7439-92-1	3.28E-02	4.47E-05	2.56E-04	4.46E-04	--
Mercury - Inorganic	7487-94-7	2.60E-03	4.40E-07	3.45E-06	3.76E-05	1.24E-05
Methyl Mercury	22967-92-6	8.58E-05	1.86E-09	9.73E-07	2.52E-06	3.50E-06
Nickel	7440-02-0	1.54E-02	1.69E-04	4.46E-04	1.43E-04	--
Phosphorus	7723-14-0	4.61E-04	9.04E-05	2.36E-04	1.61E-03	--
Selenium	7782-49-2	6.80E-06	9.42E-07	2.46E-06	1.33E-07	--
Silver	7440-22-4	7.79E-05	6.58E-06	1.72E-05	1.08E-05	--
Thallium	7440-28-0	7.48E-03	7.51E-05	2.00E-04	6.41E-06	--
Tin	7440-31-5	8.10E-03	2.62E-05	9.01E-05	7.33E-05	--
Vanadium	7440-62-2	7.73E-04	9.98E-07	5.96E-06	2.57E-06	--
Zinc	7440-66-6	3.37E-02	3.87E-04	1.02E-03	3.27E-03	--

Calculated Exposure Point Concentrations for the Additional Exposure Due to Swimming and Recreation User - Camping Receptor Clusters
Process Upset - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	6.98E-08	4.37E-11	1.76E-10	2.56E-10	8.32E-11	1.36E-10	3.87E-10	2.21E-10
Acenaphthylene	208-96-8	4.89E-07	1.03E-11	1.24E-10	7.32E-11	2.19E-11	3.33E-11	9.27E-11	5.30E-11
Anthracene	120-12-7	4.88E-10	3.09E-11	2.63E-10	1.89E-10	5.70E-11	1.11E-10	3.35E-10	1.92E-10
Benz(a)anthracene	56-55-3	1.69E-10	1.21E-10	2.07E-09	4.29E-10	1.32E-10	6.84E-11	1.36E-10	7.79E-11
Benzo(a)fluorene	30777-18-5	1.19E-08	8.52E-11	8.11E-09	6.02E-10	1.79E-10	1.31E-10	3.07E-10	1.75E-10
Benzo(a)pyrene	50-32-8	1.91E-10	4.36E-10	1.79E-08	2.05E-09	6.47E-10	2.19E-10	2.16E-10	1.23E-10
Benzo(b)fluoranthene	205-99-2	4.71E-09	3.27E-11	6.80E-09	1.92E-10	5.08E-11	8.37E-11	2.65E-10	1.51E-10
Benzo(b)fluorene	243-17-4	1.49E-08	1.28E-10	1.46E-08	1.09E-09	3.40E-10	1.42E-10	1.91E-10	1.09E-10
Benzo(e)pyrene	192-97-20	4.55E-08	1.61E-08	4.83E-07	1.54E-07	4.92E-08	1.31E-08	4.76E-10	2.72E-10
Benzo(g,h,i)perylene	191-24-2	2.32E-08	2.37E-08	4.37E-07	2.27E-07	7.25E-08	1.98E-08	2.37E-09	1.36E-09
Benzo(k)fluoranthene	207-08-9	2.17E-10	1.57E-10	1.52E-08	8.68E-10	2.68E-10	1.30E-10	2.33E-10	1.33E-10
Chrysene	218-01-9	6.26E-10	1.49E-10	2.92E-09	4.90E-10	1.39E-10	1.69E-10	5.05E-10	2.88E-10
Dibenz(a,c)anthracene	215-58-7	9.62E-09	4.10E-09	6.65E-07	2.30E-08	7.33E-09	1.93E-09	2.67E-10	1.53E-10
Dibenz(a,h)anthracene	53-70-3	7.96E-11	2.00E-09	2.96E-08	1.83E-08	5.84E-09	1.57E-09	1.05E-10	5.99E-11
Fluoranthene	206-44-0	4.79E-09	2.84E-10	2.48E-08	1.87E-09	5.27E-10	9.67E-10	2.98E-09	1.70E-09
Fluorene	86-73-7	6.18E-10	3.80E-11	1.01E-09	2.51E-10	7.64E-11	1.27E-10	3.68E-10	2.10E-10
Indeno(1,2,3-cd)pyrene	193-39-5	5.01E-10	7.26E-10	1.31E-07	1.83E-09	5.64E-10	2.51E-10	4.76E-10	2.72E-10
Perylene	198-55-0	3.48E-09	1.30E-08	5.23E-08	1.24E-07	3.97E-08	1.05E-08	1.13E-10	6.46E-11
Phenanthrene	85-01-8	6.04E-09	3.30E-10	1.33E-08	2.14E-09	6.38E-10	1.15E-09	3.44E-09	1.97E-09
Pyrene	129-00-0	2.38E-08	1.22E-09	3.35E-08	8.03E-09	2.26E-09	4.93E-09	1.55E-08	8.88E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	5.85E-07	1.35E-07	3.48E-04	1.20E-06	2.48E-07	9.30E-07	3.26E-08	1.86E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	5.55E-10	4.31E-10	**3.12E-08**	3.12E-09	8.91E-10	8.59E-10	2.38E-11	1.36E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	1.66E-08	5.51E-10	2.95E-08	1.26E-08	2.65E-09	2.01E-09	3.43E-11	1.96E-11
Bromoform	75-25-2	8.75E-09	2.10E-08	9.52E-07	4.70E-07	9.89E-08	7.49E-08	1.28E-09	7.31E-10
Carbon Tetrachloride	56-23-5	4.85E-09	2.40E-10	1.77E-08	5.47E-09	1.15E-09	8.73E-10	1.49E-11	8.52E-12
Chloroform	67-66-3	8.45E-09	9.93E-11	3.07E-09	2.26E-09	4.76E-10	3.61E-10	6.17E-12	3.53E-12
Dichloromethane	75-09-2	5.42E-06	1.05E-08	1.91E-07	2.39E-07	5.03E-08	3.82E-08	6.53E-10	3.73E-10
O-Terphenyl	84-15-1	2.33E-08	1.16E-08	2.71E-06	1.09E-07	3.09E-08	3.20E-08	8.67E-10	4.96E-10
Trichlorofluoromethane (FREON 11)	75-69-4	3.15E-07	6.36E-08	3.33E-06	1.44E-06	3.02E-07	2.29E-07	3.91E-09	2.23E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	1.55E-07	1.35E-09	2.33E-07	1.11E-08	2.88E-09	5.16E-09	1.53E-10	8.76E-11
1,2,4-Trichlorobenzene	120-82-1	2.69E-09	1.51E-10	4.52E-08	2.59E-09	5.58E-10	4.51E-10	9.00E-12	5.14E-12
1,2-Dichlorobenzene	95-50-1	1.15E-06	3.20E-09	3.47E-07	5.96E-08	1.28E-08	1.00E-08	1.79E-10	1.02E-10
Hexachlorobenzene	118-74-1	1.61E-08	6.07E-10	8.82E-07	6.47E-09	1.58E-09	2.22E-09	6.28E-11	3.59E-11
Pentachlorobenzene	608-93-5	4.21E-08	1.38E-08	1.66E-06	1.02E-07	2.66E-08	6.39E-08	2.06E-09	1.18E-09
Pentachlorophenol	87-86-5	1.76E-05	2.52E-08	4.09E-04	2.42E-07	7.72E-08	2.05E-08	4.51E-12	2.58E-12
Inorganics									
Antimony	7440-36-0	1.02E-05	5.74E-07	1.07E-03	2.22E-06	3.20E-07	4.09E-07	7.40E-09	4.23E-09
Arsenic	7440-38-2	2.70E-07	1.37E-07	4.12E-05	4.53E-07	1.92E-08	6.64E-08	1.25E-09	7.16E-10
Barium	7440-39-3	3.59E-06	6.13E-08	4.14E-05	2.27E-07	7.57E-07	3.91E-08	7.06E-10	4.04E-10
Beryllium	7440-41-7	3.21E-07	6.49E-08	3.14E-05	2.75E-07	3.05E-10	1.11E-07	3.53E-09	2.02E-09
Boron	7440-42-8	2.64E-03	2.74E-05	--	1.06E-04	3.43E-05	2.06E-05	3.47E-07	1.98E-07
Cadmium	7440-43-9	9.03E-05	2.61E-07	1.62E-02	1.18E-06	9.40E-08	3.34E-07	5.30E-06	1.25E-07
Chromium (Total)	7440-47-3	5.34E-07	1.95E-06	8.83E-04	6.16E-06	2.39E-06	7.70E-07	1.28E-08	7.31E-09
Chromium VI	18540-29-9	7.59E-08	2.77E-07	2.32E-05	8.76E-07	3.40E-07	1.09E-07	1.82E-09	1.04E-09
Cobalt	7440-48-4	5.03E-06	1.91E-05	1.13E-03	6.45E-05	1.89E-05	1.16E-05	2.64E-07	1.51E-07
Lead	7439-92-1	2.95E-04	3.63E-06	4.68E-03	1.64E-05	1.79E-05	5.97E-06	1.73E-07	9.89E-08
Mercury - Inorganic	7487-94-7	9.34E-05	1.07E-06	--	8.97E-06	3.91E-06	3.61E-08	1.48E-06	1.48E-06
Methyl Mercury	22967-92-6	8.49E-06	2.85E-08	1.18E-03	1.23E-07	7.17E-08	2.24E-10	7.91E-09	7.91E-09
Nickel	7440-02-0	1.23E-04	9.07E-05	2.63E-02	3.23E-04	7.41E-05	6.78E-05	1.65E-06	9.44E-07
Phosphorus	7723-14-0	1.61E-03	5.71E-04	--	2.24E-03	7.44E-04	6.10E-04	1.39E-05	7.92E-06
Selenium	7782-49-2	1.50E-07	1.69E-07	1.60E-04	5.18E-07	1.94E-06	3.26E-06	2.77E-07	2.77E-07
Silver	7440-22-4	7.79E-06	1.75E-06	5.83E-04	5.88E-06	5.74E-05	7.28E-07	8.68E-09	4.96E-09
Thallium	7440-28-0	2.99E-06	2.56E-04	--	8.89E-04	5.99E-05	1.94E-04	5.08E-06	2.91E-06
Tin	7440-31-5	4.86E-05	2.85E-04	7.85E-02	1.18E-03	3.24E-04	3.87E-04	1.12E-05	6.41E-06
Vanadium	7440-62-2	2.32E-06	5.53E-07	1.60E-04	2.34E-06	5.98E-07	9.97E-07	3.23E-08	1.85E-08
Zinc	7440-66-6	3.03E-02	4.43E-06	3.60E-01	1.85E-05	9.76E-06	4.64E-06	1.00E-05	1.00E-05

Calculated Exposure Point Concentrations for the Additional Exposure due to Hunting and Angling Cluster

Process Upset - 140,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	5.32E-07	4.43E-10	--	1.15E-07	3.16E-10
Acenaphthylene	208-96-8	1.24E-07	2.48E-10	--	2.35E-08	6.08E-10
Anthracene	120-12-7	5.24E-07	1.66E-10	1.09E-10	5.09E-08	7.40E-12
Benz(a)anthracene	56-55-3	2.88E-07	8.27E-11	1.04E-08	5.68E-09	4.79E-10
Benzo(a)fluorene	30777-18-5	5.70E-07	6.45E-10	2.97E-09	1.67E-08	1.11E-09
Benzo(a)pyrene	50-32-8	5.10E-07	3.59E-10	3.26E-08	6.74E-09	4.31E-09
Benzo(b)fluoranthene	205-99-2	6.63E-07	1.02E-10	1.75E-09	7.42E-09	2.12E-10
Benzo(b)fluorene	243-17-4	3.94E-07	5.20E-10	2.03E-09	7.24E-09	2.92E-09
Benzo(e)pyrene	192-97-20	1.39E-06	3.50E-09	3.98E-09	1.02E-08	5.88E-07
Benzo(g,h,i)perylene	191-24-2	7.20E-06	2.81E-09	--	4.88E-08	8.91E-07
Benzo(k)fluoranthene	207-08-9	5.79E-07	2.41E-10	9.86E-09	6.66E-09	1.99E-09
Chrysene	218-01-9	1.07E-06	1.17E-10	1.30E-08	2.11E-08	6.63E-11
Dibenz(a,c)anthracene	215-58-7	9.07E-07	2.67E-09	3.40E-07	4.71E-09	7.86E-08
Dibenz(a,h)anthracene	53-70-3	3.18E-07	1.88E-10	1.54E-08	2.16E-09	7.09E-08
Fluoranthene	206-44-0	5.19E-06	4.95E-09	4.47E-09	2.59E-07	1.04E-09
Fluorene	86-73-7	5.29E-07	1.27E-09	--	7.66E-08	2.78E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.53E-06	6.63E-10	1.01E-07	9.09E-09	4.81E-10
Perylene	198-55-0	3.00E-07	5.88E-10	1.62E-10	2.83E-09	4.38E-07
Phenanthrene	85-01-8	5.34E-06	8.40E-09	1.27E-09	5.18E-07	4.87E-10
Pyrene	129-00-0	2.66E-05	8.42E-09	4.04E-09	1.52E-06	1.43E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	9.91E-05	1.35E-09	--	6.72E-07	4.07E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	6.88E-08	1.00E-12	2.51E-10	3.13E-10	8.91E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	3.04E-10	1.86E-08	--	4.22E-10	7.36E-12
Bromoform	75-25-2	1.15E-09	8.11E-07	--	1.90E-09	6.77E-13
Carbon Tetrachloride	56-23-5	8.26E-11	5.61E-09	--	7.70E-11	2.63E-12
Chloroform	67-66-3	1.36E-10	6.13E-09	--	3.67E-10	3.55E-12
Dichloromethane	75-09-2	2.44E-08	1.91E-06	--	1.67E-07	3.70E-10
O-Terphenyl	84-15-1	1.68E-06	1.63E-09	--	4.20E-08	1.93E-09
Trichlorofluoromethane (FREON 11)	75-69-4	6.29E-09	2.10E-06	--	8.74E-09	1.56E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	2.39E-07	7.37E-10	--	1.56E-08	4.89E-12
1,2,4-Trichlorobenzene	120-82-1	5.63E-09	7.17E-10	--	1.06E-09	1.28E-12
1,2-Dichlorobenzene	95-50-1	7.57E-08	2.89E-08	--	3.26E-08	8.17E-10
Hexachlorobenzene	118-74-1	1.03E-07	8.82E-10	--	3.44E-09	3.34E-11
Pentachlorobenzene	608-93-5	3.71E-06	2.24E-09	--	1.48E-07	1.16E-10
Pentachlorophenol	87-86-5	1.75E-06	7.28E-07	--	7.63E-08	4.43E-06
Inorganics						
Antimony	7440-36-0	4.32E-04	5.36E-06	1.77E-05	1.38E-05	--
Arsenic	7440-38-2	4.29E-05	8.23E-07	2.71E-06	2.71E-07	--
Barium	7440-39-3	3.04E-04	4.14E-06	1.37E-05	9.80E-06	--
Beryllium	7440-41-7	2.72E-04	3.14E-07	2.15E-06	7.03E-07	--
Boron	7440-42-8	1.68E-03	3.00E-04	9.88E-04	3.79E-03	--
Cadmium	7440-43-9	1.79E-03	1.34E-05	4.52E-05	2.24E-04	--
Chromium (Total)	7440-47-3	1.51E-04	4.41E-06	1.45E-05	7.37E-07	--
Chromium VI	18540-29-9	2.15E-05	6.28E-07	2.07E-06	1.05E-07	--
Cobalt	7440-48-4	9.14E-04	1.13E-05	3.74E-05	7.91E-06	--
Lead	7439-92-1	4.17E-02	4.47E-05	3.23E-04	5.67E-04	--
Mercury - Inorganic	7487-94-7	3.74E-03	4.40E-07	4.35E-06	5.42E-05	1.52E-05
Methyl Mercury	22967-92-6	1.09E-04	1.86E-09	1.23E-06	3.21E-06	4.29E-06
Nickel	7440-02-0	1.96E-02	1.69E-04	5.63E-04	1.82E-04	--
Phosphorus	7723-14-0	5.87E-04	9.04E-05	2.97E-04	2.05E-03	--
Selenium	7782-49-2	8.65E-06	9.42E-07	3.10E-06	1.69E-07	--
Silver	7440-22-4	9.92E-05	6.58E-06	2.17E-05	1.37E-05	--
Thallium	7440-28-0	9.51E-03	7.51E-05	2.52E-04	8.16E-06	--
Tin	7440-31-5	1.03E-02	2.62E-05	1.14E-04	9.33E-05	--
Vanadium	7440-62-2	9.85E-04	9.98E-07	7.51E-06	3.27E-06	--
Zinc	7440-66-6	4.29E-02	3.87E-04	1.29E-03	4.16E-03	--

Calculated Exposure Point Concentrations for the Additional Exposure due to Hunting and Angling Cluster
Process Upset - 140,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.13E-07	4.37E-11	1.76E-10	4.06E-10	1.33E-10	2.19E-10	6.24E-10	3.57E-10
Acenaphthylene	208-96-8	7.92E-07	1.03E-11	1.24E-10	1.09E-10	3.34E-11	5.25E-11	1.48E-10	8.45E-11
Anthracene	120-12-7	7.90E-10	3.09E-11	2.63E-10	3.02E-10	9.13E-11	1.79E-10	5.43E-10	3.10E-10
Benz(a)anthracene	56-55-3	2.73E-10	1.21E-10	2.07E-09	5.70E-10	1.75E-10	9.95E-11	2.21E-10	1.26E-10
Benzo(a)fluorene	30777-18-5	1.92E-08	8.52E-11	8.11E-09	7.81E-10	2.29E-10	1.86E-10	4.93E-10	2.82E-10
Benzo(a)pyrene	50-32-8	3.09E-10	4.36E-10	1.79E-08	2.63E-09	8.29E-10	2.83E-10	3.49E-10	2.00E-10
Benzo(b)fluoranthene	205-99-2	7.63E-09	3.27E-11	6.80E-09	2.60E-10	6.67E-11	1.31E-10	4.29E-10	2.45E-10
Benzo(b)fluorene	243-17-4	2.41E-08	1.28E-10	1.46E-08	1.37E-09	4.23E-10	1.83E-10	3.07E-10	1.76E-10
Benzo(e)pyrene	192-97-20	7.38E-08	1.61E-08	4.83E-07	1.89E-07	6.03E-08	1.61E-08	7.71E-10	4.40E-10
Benzo(g,h,i)perylene	191-24-2	3.75E-08	2.37E-08	4.37E-07	2.79E-07	8.89E-08	2.43E-08	3.84E-09	2.20E-09
Benzo(k)fluoranthene	207-08-9	3.52E-10	1.57E-10	1.52E-08	1.11E-09	3.41E-10	1.72E-10	3.79E-10	2.16E-10
Chrysene	218-01-9	1.01E-09	1.49E-10	2.92E-09	7.54E-10	2.12E-10	2.70E-10	8.18E-10	4.67E-10
Dibenz(a,c)anthracene	215-58-7	1.56E-08	4.10E-09	6.65E-07	2.90E-08	9.24E-09	2.43E-09	4.33E-10	2.47E-10
Dibenz(a,h)anthracene	53-70-3	1.29E-10	2.00E-09	2.96E-08	2.25E-08	7.17E-09	1.92E-09	1.70E-10	9.72E-11
Fluoranthene	206-44-0	7.76E-09	2.84E-10	2.48E-08	2.75E-09	7.66E-10	1.54E-09	4.83E-09	2.76E-09
Fluorene	86-73-7	1.00E-09	3.80E-11	1.01E-09	3.86E-10	1.19E-10	2.04E-10	5.92E-10	3.38E-10
Indeno(1,2,3-cd)pyrene	193-39-5	8.11E-10	7.26E-10	1.31E-07	2.75E-09	8.45E-10	3.91E-10	7.71E-10	4.41E-10
Perylene	198-55-0	5.63E-09	1.30E-08	5.23E-08	1.52E-07	4.86E-08	1.29E-08	1.83E-10	1.05E-10
Phenanthrene	85-01-8	9.79E-09	3.30E-10	1.33E-08	3.31E-09	9.90E-10	1.85E-09	5.56E-09	3.18E-09
Pyrene	129-00-0	3.85E-08	1.22E-09	3.35E-08	1.27E-08	3.55E-09	7.96E-09	2.52E-08	1.44E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	9.50E-07	1.35E-07	3.48E-04	1.88E-06	3.77E-07	1.50E-06	5.29E-08	3.02E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	7.08E-10	4.31E-10	**3.12E-08**	3.86E-09	1.10E-09	1.08E-09	3.04E-11	1.74E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	2.69E-08	5.51E-10	2.95E-08	1.29E-08	2.71E-09	2.06E-09	3.53E-11	2.01E-11
Bromoform	75-25-2	1.42E-08	2.10E-08	9.52E-07	4.77E-07	1.00E-07	7.61E-08	1.30E-09	7.42E-10
Carbon Tetrachloride	56-23-5	7.86E-09	2.40E-10	1.77E-08	5.60E-09	1.18E-09	8.95E-10	1.53E-11	8.74E-12
Chloroform	67-66-3	1.37E-08	9.93E-11	3.07E-09	2.30E-09	4.86E-10	3.70E-10	6.37E-12	3.64E-12
Dichloromethane	75-09-2	8.78E-06	1.05E-08	1.91E-07	2.41E-07	5.11E-08	3.90E-08	6.71E-10	3.84E-10
O-Terphenyl	84-15-1	3.78E-08	1.16E-08	2.71E-06	1.41E-07	3.97E-08	4.70E-08	1.39E-09	7.96E-10
Trichlorofluoromethane (FREON 11)	75-69-4	5.11E-07	6.36E-08	3.33E-06	1.46E-06	3.08E-07	2.33E-07	3.98E-09	2.28E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	2.50E-07	1.35E-09	2.33E-07	1.47E-08	3.89E-09	7.79E-09	2.39E-10	1.36E-10
1,2,4-Trichlorobenzene	120-82-1	4.36E-09	1.51E-10	4.52E-08	2.99E-09	6.72E-10	6.07E-10	1.25E-11	7.15E-12
1,2-Dichlorobenzene	95-50-1	1.86E-06	3.20E-09	3.47E-07	6.59E-08	1.46E-08	1.25E-08	2.44E-10	1.39E-10
Hexachlorobenzene	118-74-1	2.61E-08	6.07E-10	8.82E-07	8.95E-09	2.17E-09	3.11E-09	9.44E-11	5.40E-11
Pentachlorobenzene	608-93-5	6.83E-08	1.38E-08	1.66E-06	1.55E-07	4.06E-08	1.02E-07	3.32E-09	1.90E-09
Pentachlorophenol	87-86-5	2.86E-05	2.52E-08	4.09E-04	2.96E-07	9.45E-08	2.51E-08	7.05E-12	4.03E-12
Inorganics									
Antimony	7440-36-0	1.30E-05	5.74E-07	1.07E-03	2.78E-06	4.02E-07	5.12E-07	9.40E-09	5.37E-09
Arsenic	7440-38-2	3.43E-07	1.37E-07	4.12E-05	5.66E-07	2.41E-08	8.28E-08	1.59E-09	9.09E-10
Barium	7440-39-3	4.56E-06	6.13E-08	4.14E-05	2.84E-07	9.49E-07	4.88E-08	8.97E-10	5.13E-10
Beryllium	7440-41-7	4.09E-07	6.49E-08	3.14E-05	3.46E-07	3.83E-10	1.40E-07	4.50E-09	2.57E-09
Boron	7440-42-8	3.36E-03	2.74E-05	--	1.33E-04	4.31E-05	2.58E-05	4.40E-07	2.52E-07
Cadmium	7440-43-9	1.15E-04	2.61E-07	1.62E-02	1.48E-06	1.18E-07	4.18E-07	6.74E-06	1.58E-07
Chromium (Total)	7440-47-3	6.79E-07	1.95E-06	8.83E-04	7.69E-06	2.99E-06	9.58E-07	1.62E-08	9.26E-09
Chromium VI	18540-29-9	9.66E-08	2.77E-07	2.32E-05	1.09E-06	4.26E-07	1.36E-07	2.30E-09	1.32E-09
Cobalt	7440-48-4	6.40E-06	1.91E-05	1.13E-03	8.07E-05	2.37E-05	1.45E-05	3.36E-07	1.92E-07
Lead	7439-92-1	3.75E-04	3.63E-06	4.68E-03	2.06E-05	2.25E-05	7.52E-06	2.20E-07	1.26E-07
Mercury - Inorganic	7487-94-7	1.35E-04	1.07E-06	--	1.25E-05	5.38E-06	5.19E-08	2.14E-06	2.14E-06
Methyl Mercury	22967-92-6	1.08E-05	2.85E-08	1.18E-03	1.54E-07	8.97E-08	2.81E-10	1.01E-08	1.01E-08
Nickel	7440-02-0	1.57E-04	9.07E-05	2.63E-02	4.04E-04	9.29E-05	8.48E-05	2.10E-06	1.20E-06
Phosphorus	7723-14-0	2.05E-03	5.71E-04	--	2.80E-03	9.33E-04	7.65E-04	1.76E-05	1.01E-05
Selenium	7782-49-2	1.90E-07	1.69E-07	1.60E-04	6.47E-07	2.43E-06	4.04E-06	3.48E-07	3.48E-07
Silver	7440-22-4	9.92E-06	1.75E-06	5.83E-04	7.35E-06	7.20E-05	9.07E-07	1.10E-08	6.28E-09
Thallium	7440-28-0	3.81E-06	2.56E-04	--	1.11E-03	7.51E-05	2.42E-04	6.46E-06	3.69E-06
Tin	7440-31-5	6.19E-05	2.85E-04	7.85E-02	1.48E-03	4.08E-04	4.86E-04	1.43E-05	8.16E-06
Vanadium	7440-62-2	2.95E-06	5.53E-07	1.60E-04	2.94E-06	7.53E-07	1.25E-06	4.11E-08	2.35E-08
Zinc	7440-66-6	3.86E-02	4.43E-06	3.60E-01	2.32E-05	1.22E-05	5.82E-06	1.27E-05	1.27E-05

APPENDIX E-8

Multi-Pathway Exposure Point Concentrations – Normal Operations
(Project Alone Case) – 400,000 tpy

Calculated Exposure Point Concentrations for the Bowmanville Subdivision Receptor Cluster
Normal Operations - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.99E-07	4.11E-10	--	4.29E-08	1.40E-10
Acenaphthylene	208-96-8	4.65E-08	2.30E-10	--	8.79E-09	2.70E-10
Anthracene	120-12-7	1.96E-07	1.54E-10	4.34E-11	1.90E-08	3.29E-12
Benz(a)anthracene	56-55-3	1.08E-07	7.63E-11	4.13E-09	2.12E-09	2.13E-10
Benzo(a)fluorene	30777-18-5	2.13E-07	5.96E-10	1.18E-09	6.24E-09	4.93E-10
Benzo(a)pyrene	50-32-8	1.91E-07	3.32E-10	1.29E-08	2.52E-09	1.92E-09
Benzo(b)fluoranthene	205-99-2	2.48E-07	9.50E-11	6.94E-10	2.77E-09	9.41E-11
Benzo(b)fluorene	243-17-4	1.47E-07	4.80E-10	8.06E-10	2.71E-09	1.30E-09
Benzo(e)pyrene	192-97-20	5.20E-07	3.21E-09	1.58E-09	3.81E-09	2.61E-07
Benzo(g,h,i)perylene	191-24-2	2.69E-06	2.58E-09	--	1.82E-08	3.96E-07
Benzo(k)fluoranthene	207-08-9	2.17E-07	2.24E-10	3.91E-09	2.49E-09	8.85E-10
Chrysene	218-01-9	4.00E-07	1.08E-10	5.14E-09	7.88E-09	2.95E-11
Dibenz(a,c)anthracene	215-58-7	3.39E-07	2.48E-09	1.35E-07	1.76E-09	3.50E-08
Dibenz(a,h)anthracene	53-70-3	1.19E-07	1.74E-10	6.09E-09	8.07E-10	3.15E-08
Fluoranthene	206-44-0	1.94E-06	4.59E-09	1.77E-09	9.68E-08	4.63E-10
Fluorene	86-73-7	1.98E-07	1.18E-09	--	2.86E-08	1.24E-11
Indeno(1,2,3-cd)pyrene	193-39-5	5.73E-07	6.15E-10	4.00E-08	3.40E-09	2.14E-10
Perylene	198-55-0	1.12E-07	5.39E-10	6.44E-11	1.06E-09	1.95E-07
Phenanthrene	85-01-8	2.00E-06	7.79E-09	5.04E-10	1.94E-07	2.17E-10
Pyrene	129-00-0	9.95E-06	7.81E-09	1.61E-09	5.67E-07	6.37E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	3.71E-05	1.26E-09	--	2.52E-07	1.81E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	4.13E-08	9.51E-13	1.65E-10	1.88E-10	3.96E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	1.14E-10	1.73E-08	--	1.58E-10	3.27E-12
Bromoform	75-25-2	3.17E-10	5.52E-07	--	5.22E-10	2.21E-13
Carbon Tetrachloride	56-23-5	2.27E-11	3.82E-09	--	2.11E-11	8.59E-13
Chloroform	67-66-3	5.09E-11	5.69E-09	--	1.37E-10	1.58E-12
Dichloromethane	75-09-2	9.12E-09	1.77E-06	--	6.26E-08	1.65E-10
O-Terphenyl	84-15-1	6.29E-07	1.51E-09	--	1.57E-08	8.60E-10
Trichlorofluoromethane (FREON 11)	75-69-4	2.35E-09	1.95E-06	--	3.27E-09	6.93E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	8.93E-08	6.84E-10	--	5.81E-09	2.17E-12
1,2,4-Trichlorobenzene	120-82-1	2.11E-09	6.65E-10	--	3.98E-10	5.69E-13
1,2-Dichlorobenzene	95-50-1	2.83E-08	2.68E-08	--	1.22E-08	3.63E-10
Hexachlorobenzene	118-74-1	3.84E-08	8.18E-10	--	1.28E-09	1.49E-11
Pentachlorobenzene	608-93-5	1.39E-06	2.08E-09	--	5.52E-08	5.18E-11
Pentachlorophenol	87-86-5	6.53E-07	6.71E-07	--	2.85E-08	1.97E-06
Inorganics						
Antimony	7440-36-0	5.00E-04	9.85E-06	2.24E-05	1.60E-05	--
Arsenic	7440-38-2	4.96E-05	1.51E-06	3.43E-06	3.14E-07	--
Barium	7440-39-3	3.52E-04	7.61E-06	1.73E-05	1.13E-05	--
Beryllium	7440-41-7	3.15E-04	5.78E-07	2.72E-06	8.14E-07	--
Boron	7440-42-8	1.95E-03	5.53E-04	1.25E-03	4.39E-03	--
Cadmium	7440-43-9	2.08E-03	2.47E-05	5.72E-05	2.60E-04	--
Chromium (Total)	7440-47-3	1.75E-04	8.12E-06	1.84E-05	8.53E-07	--
Chromium VI	18540-29-9	2.49E-05	1.15E-06	2.62E-06	1.21E-07	--
Cobalt	7440-48-4	1.06E-03	2.08E-05	4.73E-05	9.16E-06	--
Lead	7439-92-1	4.83E-02	8.23E-05	4.09E-04	6.57E-04	--
Mercury - Inorganic	7487-94-7	3.26E-03	7.67E-07	5.51E-06	4.73E-05	1.31E-05
Methyl Mercury	22967-92-6	1.26E-04	3.42E-09	1.55E-06	3.72E-06	3.68E-06
Nickel	7440-02-0	2.27E-02	3.10E-04	7.12E-04	2.11E-04	--
Phosphorus	7723-14-0	6.79E-04	1.66E-04	3.76E-04	2.38E-03	--
Selenium	7782-49-2	1.00E-05	1.73E-06	3.92E-06	1.95E-07	--
Silver	7440-22-4	1.15E-04	1.21E-05	2.74E-05	1.58E-05	--
Thallium	7440-28-0	1.10E-02	1.38E-04	3.19E-04	9.45E-06	--
Tin	7440-31-5	1.19E-02	4.82E-05	1.44E-04	1.08E-04	--
Vanadium	7440-62-2	1.14E-03	1.84E-06	9.50E-06	3.78E-06	--
Zinc	7440-66-6	4.97E-02	7.12E-04	1.63E-03	4.82E-03	--

Calculated Exposure Point Concentrations for the Bowmanville Subdivision Receptor Cluster
Normal Operations - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	4.23E-08	4.42E-11	1.63E-10	1.74E-10	5.43E-11	8.52E-11	2.39E-10	1.37E-10
Acenaphthylene	208-96-8	2.96E-07	1.03E-11	1.15E-10	6.27E-11	1.71E-11	2.31E-11	6.12E-11	3.50E-11
Anthracene	120-12-7	2.95E-10	3.11E-11	2.44E-10	1.21E-10	3.60E-11	6.81E-11	2.05E-10	1.17E-10
Benz(a)anthracene	56-55-3	1.02E-10	1.15E-10	1.91E-09	2.54E-10	7.79E-11	4.12E-11	8.34E-11	4.77E-11
Benzo(a)fluorene	30777-18-5	7.19E-09	7.39E-11	7.50E-09	4.03E-10	1.14E-10	8.72E-11	2.02E-10	1.16E-10
Benzo(a)pyrene	50-32-8	1.15E-10	3.93E-10	1.66E-08	1.17E-09	3.68E-10	1.27E-10	1.32E-10	7.53E-11
Benzo(b)fluoranthene	205-99-2	2.85E-09	3.08E-11	6.31E-09	1.17E-10	3.04E-11	5.10E-11	1.62E-10	9.24E-11
Benzo(b)fluorene	243-17-4	9.00E-09	9.91E-11	1.35E-08	6.47E-10	1.96E-10	8.74E-11	1.27E-10	7.26E-11
Benzo(e)pyrene	192-97-20	2.76E-08	1.15E-08	4.43E-07	8.39E-08	2.68E-08	7.15E-09	2.92E-10	1.67E-10
Benzo(g,h,i)perylene	191-24-2	1.40E-08	1.69E-08	4.01E-07	1.24E-07	3.95E-08	1.08E-08	1.44E-09	8.25E-10
Benzo(k)fluoranthene	207-08-9	1.32E-10	1.38E-10	1.41E-08	4.92E-10	1.51E-10	7.62E-11	1.42E-10	8.11E-11
Chrysene	218-01-9	3.79E-10	1.47E-10	2.71E-09	3.03E-10	8.53E-11	1.03E-10	3.08E-10	1.76E-10
Dibenz(a,c)anthracene	215-58-7	5.82E-09	3.54E-09	6.17E-07	1.29E-08	4.10E-09	1.08E-09	1.67E-10	9.53E-11
Dibenz(a,h)anthracene	53-70-3	4.82E-11	1.45E-09	2.74E-08	9.98E-09	3.19E-09	8.56E-10	6.39E-11	3.65E-11
Fluoranthene	206-44-0	2.90E-09	2.75E-10	2.30E-08	1.21E-09	3.33E-10	5.99E-10	1.83E-09	1.05E-09
Fluorene	86-73-7	3.74E-10	3.82E-11	9.38E-10	1.99E-10	5.60E-11	8.46E-11	2.36E-10	1.35E-10
Indeno(1,2,3-cd)pyrene	193-39-5	3.03E-10	7.15E-10	1.21E-07	1.12E-09	3.43E-10	1.53E-10	2.90E-10	1.65E-10
Perylene	198-55-0	2.11E-09	9.23E-09	4.79E-08	6.77E-08	2.16E-08	5.73E-09	6.91E-11	3.95E-11
Phenanthrene	85-01-8	3.66E-09	3.29E-10	1.23E-08	1.47E-09	4.23E-10	7.26E-10	2.13E-09	1.22E-09
Pyrene	129-00-0	1.44E-08	1.21E-09	3.11E-08	4.96E-09	1.39E-09	3.01E-09	9.46E-09	5.41E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	3.56E-07	1.33E-07	3.23E-04	7.30E-07	1.50E-07	5.65E-07	1.98E-08	1.13E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	4.25E-10	3.83E-10	**2.96E-08**	1.99E-09	5.56E-10	6.24E-10	1.82E-11	1.04E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	1.01E-08	5.56E-10	2.74E-08	2.16E-08	4.54E-09	3.44E-09	5.88E-11	3.36E-11
Bromoform	75-25-2	3.89E-09	1.56E-08	6.49E-07	5.92E-07	1.25E-07	9.44E-08	1.61E-09	9.21E-10
Carbon Tetrachloride	56-23-5	2.16E-09	1.78E-10	1.21E-08	6.90E-09	1.45E-09	1.10E-09	1.88E-11	1.07E-11
Chloroform	67-66-3	5.12E-09	1.00E-10	2.85E-09	3.88E-09	8.17E-10	6.20E-10	1.06E-11	6.05E-12
Dichloromethane	75-09-2	3.28E-06	1.06E-08	1.77E-07	4.10E-07	8.63E-08	6.55E-08	1.12E-09	6.41E-10
O-Terphenyl	84-15-1	1.41E-08	9.71E-09	2.51E-06	7.70E-08	2.06E-08	2.15E-08	5.67E-10	3.24E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.91E-07	6.43E-08	3.09E-06	2.46E-06	5.19E-07	3.93E-07	6.70E-09	3.83E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	9.36E-08	1.36E-09	2.16E-07	1.09E-08	2.62E-09	3.79E-09	1.04E-10	5.95E-11
1,2,4-Trichlorobenzene	120-82-1	1.63E-09	1.52E-10	4.20E-08	4.44E-09	9.53E-10	7.66E-10	1.40E-11	8.02E-12
1,2-Dichlorobenzene	95-50-1	6.95E-07	3.23E-09	3.22E-07	1.02E-07	2.19E-08	1.72E-08	3.07E-10	1.76E-10
Hexachlorobenzene	118-74-1	9.76E-09	5.78E-10	8.18E-07	9.11E-09	2.04E-09	2.18E-09	5.23E-11	2.99E-11
Pentachlorobenzene	608-93-5	2.55E-08	1.38E-08	1.54E-06	7.64E-08	1.91E-08	4.11E-08	1.29E-09	7.36E-10
Pentachlorophenol	87-86-5	1.07E-05	1.79E-08	3.77E-04	1.32E-07	4.20E-08	1.12E-08	2.73E-12	1.56E-12
Inorganics									
Antimony	7440-36-0	1.50E-05	1.16E-06	1.97E-03	3.41E-06	4.93E-07	6.12E-07	1.09E-08	6.23E-09
Arsenic	7440-38-2	3.97E-07	2.76E-07	7.57E-05	7.10E-07	3.02E-08	1.01E-07	1.85E-09	1.05E-09
Barium	7440-39-3	5.28E-06	1.23E-07	7.61E-05	3.50E-07	1.17E-06	5.86E-08	1.04E-09	5.95E-10
Beryllium	7440-41-7	4.73E-07	1.31E-07	5.78E-05	4.25E-07	4.74E-10	1.65E-07	5.21E-09	2.98E-09
Boron	7440-42-8	3.89E-03	5.52E-05	--	1.63E-04	5.26E-05	3.08E-05	5.10E-07	2.92E-07
Cadmium	7440-43-9	1.33E-04	5.25E-07	2.97E-02	1.78E-06	1.42E-07	4.95E-07	7.81E-06	1.84E-07
Chromium (Total)	7440-47-3	7.86E-07	3.91E-06	1.62E-03	9.70E-06	3.78E-06	1.18E-06	1.88E-08	1.08E-08
Chromium VI	18540-29-9	1.12E-07	5.57E-07	4.27E-05	1.38E-06	5.38E-07	1.67E-07	2.68E-09	1.53E-09
Cobalt	7440-48-4	7.41E-06	3.84E-05	2.08E-03	1.01E-04	2.97E-05	1.75E-05	3.89E-07	2.22E-07
Lead	7439-92-1	4.35E-04	7.30E-06	8.62E-03	2.51E-05	2.75E-05	8.88E-06	2.55E-07	1.46E-07
Mercury - Inorganic	7487-94-7	1.17E-04	2.03E-06	--	1.17E-05	5.18E-06	4.56E-08	1.86E-06	1.86E-06
Methyl Mercury	22967-92-6	1.25E-05	5.56E-08	2.06E-03	1.77E-07	1.03E-07	3.27E-10	1.17E-08	1.17E-08
Nickel	7440-02-0	1.81E-04	1.82E-04	4.84E-02	5.03E-04	1.16E-04	1.02E-04	2.43E-06	1.39E-06
Phosphorus	7723-14-0	2.38E-03	1.15E-03	--	3.43E-03	1.14E-03	9.08E-04	2.04E-05	1.17E-05
Selenium	7782-49-2	2.20E-07	3.39E-07	2.95E-04	8.18E-07	3.07E-06	5.06E-06	4.08E-07	4.08E-07
Silver	7440-22-4	1.15E-05	3.52E-06	1.07E-03	9.17E-06	8.97E-05	1.11E-06	1.28E-08	7.31E-09
Thallium	7440-28-0	4.41E-06	5.15E-04	--	1.39E-03	9.43E-05	2.91E-04	7.49E-06	4.28E-06
Tin	7440-31-5	7.17E-05	5.72E-04	1.44E-01	1.81E-03	5.02E-04	5.76E-04	1.65E-05	9.46E-06
Vanadium	7440-62-2	3.42E-06	1.11E-06	2.94E-04	3.61E-06	9.33E-07	1.48E-06	4.77E-08	2.73E-08
Zinc	7440-66-6	4.47E-02	8.91E-06	6.63E-01	2.82E-05	1.49E-05	6.91E-06	1.48E-05	1.48E-05

Calculated Exposure Point Concentrations for the Courtice Subdivision Receptor Cluster
Normal Operations - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.49E-07	4.11E-10	--	3.22E-08	9.65E-11
Acenaphthylene	208-96-8	3.49E-08	2.30E-10	--	6.58E-09	1.86E-10
Anthracene	120-12-7	1.47E-07	1.54E-10	3.14E-11	1.43E-08	2.26E-12
Benz(a)anthracene	56-55-3	8.07E-08	7.63E-11	2.99E-09	1.59E-09	1.46E-10
Benzo(a)fluorene	30777-18-5	1.60E-07	5.96E-10	8.53E-10	4.68E-09	3.39E-10
Benzo(a)pyrene	50-32-8	1.43E-07	3.32E-10	9.37E-09	1.89E-09	1.32E-09
Benzo(b)fluoranthene	205-99-2	1.86E-07	9.50E-11	5.02E-10	2.08E-09	6.47E-11
Benzo(b)fluorene	243-17-4	1.10E-07	4.80E-10	5.84E-10	2.03E-09	8.93E-10
Benzo(e)pyrene	192-97-20	3.89E-07	3.21E-09	1.14E-09	2.86E-09	1.80E-07
Benzo(g,h,i)perylene	191-24-2	2.02E-06	2.58E-09	--	1.37E-08	2.72E-07
Benzo(k)fluoranthene	207-08-9	1.62E-07	2.24E-10	2.83E-09	1.86E-09	6.08E-10
Chrysene	218-01-9	2.99E-07	1.08E-10	3.72E-09	5.90E-09	2.03E-11
Dibenz(a,c)anthracene	215-58-7	2.54E-07	2.48E-09	9.77E-08	1.32E-09	2.40E-08
Dibenz(a,h)anthracene	53-70-3	8.91E-08	1.74E-10	4.41E-09	6.04E-10	2.17E-08
Fluoranthene	206-44-0	1.45E-06	4.59E-09	1.28E-09	7.25E-08	3.18E-10
Fluorene	86-73-7	1.48E-07	1.18E-09	--	2.15E-08	8.49E-12
Indeno(1,2,3-cd)pyrene	193-39-5	4.29E-07	6.15E-10	2.89E-08	2.54E-09	1.47E-10
Perylene	198-55-0	8.40E-08	5.39E-10	4.66E-11	7.94E-10	1.34E-07
Phenanthrene	85-01-8	1.50E-06	7.79E-09	3.65E-10	1.45E-07	1.49E-10
Pyrene	129-00-0	7.44E-06	7.81E-09	1.16E-09	4.24E-07	4.37E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	2.77E-05	1.26E-09	--	1.88E-07	1.24E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	2.96E-08	9.51E-13	1.14E-10	1.35E-10	2.72E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	8.51E-11	1.73E-08	--	1.18E-10	2.25E-12
Bromoform	75-25-2	2.37E-10	5.52E-07	--	3.91E-10	1.52E-13
Carbon Tetrachloride	56-23-5	1.70E-11	3.82E-09	--	1.58E-11	5.90E-13
Chloroform	67-66-3	3.81E-11	5.69E-09	--	1.03E-10	1.09E-12
Dichloromethane	75-09-2	6.83E-09	1.77E-06	--	4.69E-08	1.13E-10
O-Terphenyl	84-15-1	4.71E-07	1.51E-09	--	1.18E-08	5.91E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.76E-09	1.95E-06	--	2.45E-09	4.76E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	6.69E-08	6.84E-10	--	4.36E-09	1.49E-12
1,2,4-Trichlorobenzene	120-82-1	1.58E-09	6.65E-10	--	2.98E-10	3.91E-13
1,2-Dichlorobenzene	95-50-1	2.12E-08	2.68E-08	--	9.15E-09	2.50E-10
Hexachlorobenzene	118-74-1	2.87E-08	8.18E-10	--	9.63E-10	1.02E-11
Pentachlorobenzene	608-93-5	1.04E-06	2.08E-09	--	4.14E-08	3.56E-11
Pentachlorophenol	87-86-5	4.89E-07	6.71E-07	--	2.14E-08	1.35E-06
Inorganics						
Antimony	7440-36-0	3.59E-04	9.85E-06	1.55E-05	1.15E-05	--
Arsenic	7440-38-2	3.57E-05	1.51E-06	2.38E-06	2.26E-07	--
Barium	7440-39-3	2.53E-04	7.61E-06	1.20E-05	8.15E-06	--
Beryllium	7440-41-7	2.26E-04	5.78E-07	1.89E-06	5.84E-07	--
Boron	7440-42-8	1.40E-03	5.53E-04	8.68E-04	3.15E-03	--
Cadmium	7440-43-9	1.49E-03	2.47E-05	3.97E-05	1.86E-04	--
Chromium (Total)	7440-47-3	1.26E-04	8.12E-06	1.28E-05	6.12E-07	--
Chromium VI	18540-29-9	1.78E-05	1.15E-06	1.81E-06	8.71E-08	--
Cobalt	7440-48-4	7.60E-04	2.08E-05	3.29E-05	6.57E-06	--
Lead	7439-92-1	3.47E-02	8.23E-05	2.84E-04	4.71E-04	--
Mercury - Inorganic	7487-94-7	2.19E-03	7.67E-07	3.82E-06	3.18E-05	8.97E-06
Methyl Mercury	22967-92-6	9.07E-05	3.42E-09	1.08E-06	2.67E-06	2.53E-06
Nickel	7440-02-0	1.63E-02	3.10E-04	4.94E-04	1.52E-04	--
Phosphorus	7723-14-0	4.88E-04	1.66E-04	2.61E-04	1.71E-03	--
Selenium	7782-49-2	7.19E-06	1.73E-06	2.72E-06	1.40E-07	--
Silver	7440-22-4	8.24E-05	1.21E-05	1.90E-05	1.14E-05	--
Thallium	7440-28-0	7.91E-03	1.38E-04	2.21E-04	6.78E-06	--
Tin	7440-31-5	8.57E-03	4.82E-05	9.98E-05	7.76E-05	--
Vanadium	7440-62-2	8.18E-04	1.84E-06	6.60E-06	2.71E-06	--
Zinc	7440-66-6	3.57E-02	7.12E-04	1.13E-03	3.46E-03	--

Calculated Exposure Point Concentrations for the Courtice Subdivision Receptor Cluster
Normal Operations - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	3.17E-08	4.42E-11	1.63E-10	1.16E-10	3.77E-11	6.16E-11	1.76E-10	1.00E-10
Acenaphthylene	208-96-8	2.22E-07	1.03E-11	1.15E-10	3.31E-11	9.91E-12	1.51E-11	4.21E-11	2.40E-11
Anthracene	120-12-7	2.21E-10	3.11E-11	2.44E-10	8.57E-11	2.58E-11	5.02E-11	1.52E-10	8.70E-11
Benz(a)anthracene	56-55-3	7.65E-11	1.15E-10	1.91E-09	1.80E-10	5.52E-11	2.98E-11	6.19E-11	3.54E-11
Benzo(a)fluorene	30777-18-5	5.38E-09	7.39E-11	7.50E-09	2.43E-10	7.14E-11	5.70E-11	1.39E-10	7.96E-11
Benzo(a)pyrene	50-32-8	8.65E-11	3.93E-10	1.66E-08	8.18E-10	2.57E-10	8.98E-11	9.78E-11	5.59E-11
Benzo(b)fluoranthene	205-99-2	2.14E-09	3.08E-11	6.31E-09	8.18E-11	2.13E-11	3.75E-11	1.20E-10	6.87E-11
Benzo(b)fluorene	243-17-4	6.74E-09	9.91E-11	1.35E-08	4.21E-10	1.30E-10	5.78E-11	8.67E-11	4.96E-11
Benzo(e)pyrene	192-97-20	2.07E-08	1.15E-08	4.43E-07	5.77E-08	1.84E-08	4.92E-09	2.16E-10	1.23E-10
Benzo(g,h,i)perylene	191-24-2	1.05E-08	1.69E-08	4.01E-07	8.52E-08	2.72E-08	7.45E-09	1.08E-09	6.15E-10
Benzo(k)fluoranthene	207-08-9	9.86E-11	1.38E-10	1.41E-08	3.44E-10	1.06E-10	5.50E-11	1.06E-10	6.05E-11
Chrysene	218-01-9	2.84E-10	1.47E-10	2.71E-09	2.18E-10	6.14E-11	7.62E-11	2.29E-10	1.31E-10
Dibenz(a,c)anthracene	215-58-7	4.36E-09	3.54E-09	6.17E-07	8.94E-09	2.85E-09	7.51E-10	1.21E-10	6.93E-11
Dibenz(a,h)anthracene	53-70-3	3.61E-11	1.45E-09	2.74E-08	6.87E-09	2.19E-09	5.89E-10	4.76E-11	2.72E-11
Fluoranthene	206-44-0	2.17E-09	2.75E-10	2.30E-08	8.23E-10	2.30E-10	4.37E-10	1.35E-09	7.74E-10
Fluorene	86-73-7	2.81E-10	3.82E-11	9.38E-10	1.13E-10	3.45E-11	5.78E-11	1.67E-10	9.54E-11
Indeno(1,2,3-cd)pyrene	193-39-5	2.27E-10	7.15E-10	1.21E-07	8.04E-10	2.47E-10	1.12E-10	2.16E-10	1.23E-10
Perylene	198-55-0	1.58E-09	9.23E-09	4.79E-08	4.65E-08	1.49E-08	3.94E-09	5.13E-11	2.93E-11
Phenanthrene	85-01-8	2.74E-09	3.29E-10	1.23E-08	9.59E-10	2.86E-10	5.22E-10	1.56E-09	8.92E-10
Pyrene	129-00-0	1.08E-08	1.21E-09	3.11E-08	3.61E-09	1.01E-09	2.23E-09	7.05E-09	4.03E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	2.65E-07	1.33E-07	3.23E-04	5.38E-07	1.10E-07	4.21E-07	1.48E-08	8.44E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	3.04E-10	3.83E-10	**2.96E-08**	1.39E-09	3.86E-10	4.43E-10	1.30E-11	7.46E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	7.55E-09	5.56E-10	2.74E-08	4.00E-09	8.43E-10	6.40E-10	1.10E-11	6.26E-12
Bromoform	75-25-2	2.92E-09	1.56E-08	6.49E-07	1.09E-07	2.29E-08	1.74E-08	2.96E-10	1.69E-10
Carbon Tetrachloride	56-23-5	1.62E-09	1.78E-10	1.21E-08	1.28E-09	2.69E-10	2.04E-10	3.49E-12	1.99E-12
Chloroform	67-66-3	3.84E-09	1.00E-10	2.85E-09	7.21E-10	1.52E-10	1.16E-10	2.00E-12	1.14E-12
Dichloromethane	75-09-2	2.46E-06	1.06E-08	1.77E-07	7.62E-08	1.61E-08	1.23E-08	2.12E-10	1.21E-10
O-Terphenyl	84-15-1	1.06E-08	9.71E-09	2.51E-06	4.41E-08	1.24E-08	1.41E-08	3.94E-10	2.25E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.43E-07	6.43E-08	3.09E-06	4.54E-07	9.55E-08	7.24E-08	1.24E-09	7.06E-10
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	7.01E-08	1.36E-09	2.16E-07	5.03E-09	1.30E-09	2.34E-09	6.96E-11	3.98E-11
1,2,4-Trichlorobenzene	120-82-1	1.22E-09	1.52E-10	4.20E-08	9.60E-10	2.16E-10	1.97E-10	4.09E-12	2.33E-12
1,2-Dichlorobenzene	95-50-1	5.21E-07	3.23E-09	3.22E-07	2.09E-08	4.66E-09	4.01E-09	7.86E-11	4.49E-11
Hexachlorobenzene	118-74-1	7.31E-09	5.78E-10	8.18E-07	2.85E-09	6.90E-10	1.00E-09	2.85E-11	1.63E-11
Pentachlorobenzene	608-93-5	1.91E-08	1.38E-08	1.54E-06	4.60E-08	1.20E-08	2.90E-08	9.35E-10	5.34E-10
Pentachlorophenol	87-86-5	8.00E-06	1.79E-08	3.77E-04	9.06E-08	2.89E-08	7.69E-09	2.01E-12	1.15E-12
Inorganics									
Antimony	7440-36-0	1.08E-05	1.16E-06	1.97E-03	2.41E-06	3.47E-07	4.37E-07	7.83E-09	4.47E-09
Arsenic	7440-38-2	2.85E-07	2.76E-07	7.57E-05	4.97E-07	2.11E-08	7.15E-08	1.33E-09	7.57E-10
Barium	7440-39-3	3.79E-06	1.23E-07	7.61E-05	2.47E-07	8.24E-07	4.18E-08	7.47E-10	4.27E-10
Beryllium	7440-41-7	3.39E-07	1.31E-07	5.78E-05	2.98E-07	3.31E-10	1.18E-07	3.74E-09	2.13E-09
Boron	7440-42-8	2.80E-03	5.52E-05	--	1.15E-04	3.71E-05	2.20E-05	3.67E-07	2.09E-07
Cadmium	7440-43-9	9.55E-05	5.25E-07	2.97E-02	1.26E-06	1.01E-07	3.54E-07	5.60E-06	1.32E-07
Chromium (Total)	7440-47-3	5.65E-07	3.91E-06	1.62E-03	6.77E-06	2.63E-06	8.32E-07	1.35E-08	7.73E-09
Chromium VI	18540-29-9	8.03E-08	5.57E-07	4.27E-05	9.62E-07	3.74E-07	1.18E-07	1.92E-09	1.10E-09
Cobalt	7440-48-4	5.32E-06	3.84E-05	2.08E-03	7.06E-05	2.07E-05	1.24E-05	2.80E-07	1.60E-07
Lead	7439-92-1	3.12E-04	7.30E-06	8.62E-03	1.77E-05	1.93E-05	6.34E-06	1.83E-07	1.05E-07
Mercury - Inorganic	7487-94-7	7.89E-05	2.03E-06	--	7.88E-06	3.50E-06	3.06E-08	1.25E-06	1.25E-06
Methyl Mercury	22967-92-6	8.98E-06	5.56E-08	2.06E-03	1.24E-07	7.18E-08	2.33E-10	8.37E-09	8.37E-09
Nickel	7440-02-0	1.30E-04	1.82E-04	4.84E-02	3.53E-04	8.11E-05	7.25E-05	1.75E-06	9.99E-07
Phosphorus	7723-14-0	1.71E-03	1.15E-03	--	2.42E-03	8.03E-04	6.49E-04	1.47E-05	8.38E-06
Selenium	7782-49-2	1.58E-07	3.39E-07	2.95E-04	5.70E-07	2.14E-06	3.55E-06	2.93E-07	2.93E-07
Silver	7440-22-4	8.24E-06	3.52E-06	1.07E-03	6.42E-06	6.28E-05	7.85E-07	9.18E-09	5.25E-09
Thallium	7440-28-0	3.16E-06	5.15E-04	--	9.73E-04	6.58E-05	2.07E-04	5.38E-06	3.07E-06
Tin	7440-31-5	5.14E-05	5.72E-04	1.44E-01	1.28E-03	3.52E-04	4.12E-04	1.19E-05	6.78E-06
Vanadium	7440-62-2	2.45E-06	1.11E-06	2.94E-04	2.53E-06	6.52E-07	1.06E-06	3.42E-08	1.95E-08
Zinc	7440-66-6	3.21E-02	8.91E-06	6.63E-01	2.00E-05	1.05E-05	4.94E-06	1.06E-05	1.06E-05

Calculated Exposure Point Concentrations for the Courtice Road Receptor Cluster
Normal Operations - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	6.22E-07	4.11E-10	--	1.34E-07	2.34E-10
Acenaphthylene	208-96-8	1.46E-07	2.30E-10	--	2.75E-08	4.51E-10
Anthracene	120-12-7	6.13E-07	1.54E-10	1.25E-10	5.96E-08	5.48E-12
Benz(a)anthracene	56-55-3	3.37E-07	7.63E-11	1.19E-08	6.64E-09	3.55E-10
Benzo(a)fluorene	30777-18-5	6.67E-07	5.96E-10	3.40E-09	1.95E-08	8.22E-10
Benzo(a)pyrene	50-32-8	5.97E-07	3.32E-10	3.73E-08	7.88E-09	3.19E-09
Benzo(b)fluoranthene	205-99-2	7.75E-07	9.50E-11	2.00E-09	8.68E-09	1.57E-10
Benzo(b)fluorene	243-17-4	4.60E-07	4.80E-10	2.32E-09	8.46E-09	2.17E-09
Benzo(e)pyrene	192-97-20	1.63E-06	3.21E-09	4.55E-09	1.19E-08	4.36E-07
Benzo(g,h,i)perylene	191-24-2	8.42E-06	2.58E-09	--	5.71E-08	6.61E-07
Benzo(k)fluoranthene	207-08-9	6.77E-07	2.24E-10	1.13E-08	7.79E-09	1.48E-09
Chrysene	218-01-9	1.25E-06	1.08E-10	1.48E-08	2.47E-08	4.92E-11
Dibenz(a,c)anthracene	215-58-7	1.06E-06	2.48E-09	3.89E-07	5.51E-09	5.83E-08
Dibenz(a,h)anthracene	53-70-3	3.72E-07	1.74E-10	1.76E-08	2.52E-09	5.25E-08
Fluoranthene	206-44-0	6.07E-06	4.59E-09	5.11E-09	3.03E-07	7.71E-10
Fluorene	86-73-7	6.18E-07	1.18E-09	--	8.96E-08	2.06E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.79E-06	6.15E-10	1.15E-07	1.06E-08	3.57E-10
Perylene	198-55-0	3.51E-07	5.39E-10	1.85E-10	3.32E-09	3.25E-07
Phenanthrene	85-01-8	6.25E-06	7.79E-09	1.45E-09	6.06E-07	3.61E-10
Pyrene	129-00-0	3.11E-05	7.81E-09	4.63E-09	1.77E-06	1.06E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	1.16E-04	1.26E-09	--	7.86E-07	3.02E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	9.20E-08	9.51E-13	2.99E-10	4.18E-10	6.61E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	3.55E-10	1.73E-08	--	4.94E-10	5.46E-12
Bromoform	75-25-2	9.90E-10	5.52E-07	--	1.63E-09	3.68E-13
Carbon Tetrachloride	56-23-5	7.10E-11	3.82E-09	--	6.62E-11	1.43E-12
Chloroform	67-66-3	1.59E-10	5.69E-09	--	4.30E-10	2.63E-12
Dichloromethane	75-09-2	2.85E-08	1.77E-06	--	1.96E-07	2.75E-10
O-Terphenyl	84-15-1	1.97E-06	1.51E-09	--	4.91E-08	1.43E-09
Trichlorofluoromethane (FREON 11)	75-69-4	7.35E-09	1.95E-06	--	1.02E-08	1.16E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	2.79E-07	6.84E-10	--	1.82E-08	3.63E-12
1,2,4-Trichlorobenzene	120-82-1	6.59E-09	6.65E-10	--	1.24E-09	9.48E-13
1,2-Dichlorobenzene	95-50-1	8.86E-08	2.68E-08	--	3.82E-08	6.06E-10
Hexachlorobenzene	118-74-1	1.20E-07	8.18E-10	--	4.02E-09	2.48E-11
Pentachlorobenzene	608-93-5	4.34E-06	2.08E-09	--	1.73E-07	8.63E-11
Pentachlorophenol	87-86-5	2.04E-06	6.71E-07	--	8.92E-08	3.28E-06
Inorganics						
Antimony	7440-36-0	1.12E-03	9.85E-06	4.06E-05	3.56E-05	--
Arsenic	7440-38-2	1.11E-04	1.51E-06	6.22E-06	7.00E-07	--
Barium	7440-39-3	7.85E-04	7.61E-06	3.13E-05	2.53E-05	--
Beryllium	7440-41-7	7.03E-04	5.78E-07	4.93E-06	1.81E-06	--
Boron	7440-42-8	4.34E-03	5.53E-04	2.27E-03	9.78E-03	--
Cadmium	7440-43-9	4.63E-03	2.47E-05	1.04E-04	5.79E-04	--
Chromium (Total)	7440-47-3	3.89E-04	8.12E-06	3.33E-05	1.90E-06	--
Chromium VI	18540-29-9	5.54E-05	1.15E-06	4.74E-06	2.70E-07	--
Cobalt	7440-48-4	2.36E-03	2.08E-05	8.58E-05	2.04E-05	--
Lead	7439-92-1	1.08E-01	8.23E-05	7.41E-04	1.46E-03	--
Mercury - Inorganic	7487-94-7	7.51E-03	7.67E-07	9.98E-06	1.09E-04	2.18E-05
Methyl Mercury	22967-92-6	2.82E-04	3.42E-09	2.82E-06	8.28E-06	6.14E-06
Nickel	7440-02-0	5.05E-02	3.10E-04	1.29E-03	4.70E-04	--
Phosphorus	7723-14-0	1.51E-03	1.66E-04	6.82E-04	5.30E-03	--
Selenium	7782-49-2	2.23E-05	1.73E-06	7.11E-06	4.35E-07	--
Silver	7440-22-4	2.56E-04	1.21E-05	4.97E-05	3.53E-05	--
Thallium	7440-28-0	2.45E-02	1.38E-04	5.78E-04	2.11E-05	--
Tin	7440-31-5	2.66E-02	4.82E-05	2.61E-04	2.41E-04	--
Vanadium	7440-62-2	2.54E-03	1.84E-06	1.72E-05	8.43E-06	--
Zinc	7440-66-6	1.11E-01	7.12E-04	2.96E-03	1.07E-02	--

Calculated Exposure Point Concentrations for the Courtice Road Receptor Cluster
Normal Operations - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.32E-07	4.42E-11	1.63E-10	4.75E-10	1.56E-10	2.56E-10	7.30E-10	4.17E-10
Acenaphthylene	208-96-8	9.26E-07	1.03E-11	1.15E-10	1.28E-10	3.90E-11	6.14E-11	1.73E-10	9.88E-11
Anthracene	120-12-7	9.24E-10	3.11E-11	2.44E-10	3.53E-10	1.07E-10	2.09E-10	6.35E-10	3.63E-10
Benz(a)anthracene	56-55-3	3.20E-10	1.15E-10	1.91E-09	6.29E-10	1.91E-10	1.15E-10	2.58E-10	1.48E-10
Benzo(a)fluorene	30777-18-5	2.25E-08	7.39E-11	7.50E-09	7.49E-10	2.15E-10	2.14E-10	5.77E-10	3.30E-10
Benzo(a)pyrene	50-32-8	3.61E-10	3.93E-10	1.66E-08	2.49E-09	7.79E-10	2.98E-10	4.09E-10	2.33E-10
Benzo(b)fluoranthene	205-99-2	8.93E-09	3.08E-11	6.31E-09	2.97E-10	7.48E-11	1.53E-10	5.02E-10	2.87E-10
Benzo(b)fluorene	243-17-4	2.82E-08	9.91E-11	1.35E-08	1.12E-09	3.40E-10	1.87E-10	3.59E-10	2.05E-10
Benzo(e)pyrene	192-97-20	8.63E-08	1.15E-08	4.43E-07	1.40E-07	4.47E-08	1.20E-08	9.02E-10	5.15E-10
Benzo(g,h,i)perylene	191-24-2	4.39E-08	1.69E-08	4.01E-07	2.07E-07	6.60E-08	1.86E-08	4.50E-09	2.57E-09
Benzo(k)fluoranthene	207-08-9	4.12E-10	1.38E-10	1.41E-08	1.03E-09	3.12E-10	1.96E-10	4.43E-10	2.53E-10
Chrysene	218-01-9	1.19E-09	1.47E-10	2.71E-09	8.69E-10	2.44E-10	3.15E-10	9.56E-10	5.47E-10
Dibenz(a,c)anthracene	215-58-7	1.82E-08	3.54E-09	6.17E-07	2.52E-08	8.02E-09	2.12E-09	5.06E-10	2.89E-10
Dibenz(a,h)anthracene	53-70-3	1.51E-10	1.45E-09	2.74E-08	1.69E-08	5.38E-09	1.47E-09	1.99E-10	1.14E-10
Fluoranthene	206-44-0	9.07E-09	2.75E-10	2.30E-08	3.18E-09	8.84E-10	1.80E-09	5.65E-09	3.23E-09
Fluorene	86-73-7	1.17E-09	3.82E-11	9.38E-10	4.50E-10	1.39E-10	2.38E-10	6.92E-10	3.96E-10
Indeno(1,2,3-cd)pyrene	193-39-5	9.49E-10	7.15E-10	1.21E-07	3.15E-09	9.65E-10	4.52E-10	9.02E-10	5.15E-10
Perylene	198-55-0	6.59E-09	9.23E-09	4.79E-08	1.13E-07	3.61E-08	9.58E-09	2.14E-10	1.22E-10
Phenanthrene	85-01-8	1.15E-08	3.29E-10	1.23E-08	3.86E-09	1.15E-09	2.16E-09	6.51E-09	3.72E-09
Pyrene	129-00-0	4.51E-08	1.21E-09	3.11E-08	1.47E-08	4.14E-09	9.31E-09	2.95E-08	1.68E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.11E-06	1.33E-07	3.23E-04	2.18E-06	4.38E-07	1.76E-06	6.18E-08	3.53E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	9.46E-10	3.83E-10	**2.96E-08**	3.70E-09	1.01E-09	1.33E-09	4.06E-11	2.32E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	3.15E-08	5.56E-10	2.74E-08	6.55E-09	1.38E-09	1.06E-09	1.82E-11	1.04E-11
Bromoform	75-25-2	1.22E-08	1.56E-08	6.49E-07	1.73E-07	3.65E-08	2.77E-08	4.73E-10	2.70E-10
Carbon Tetrachloride	56-23-5	6.75E-09	1.78E-10	1.21E-08	2.07E-09	4.37E-10	3.33E-10	5.72E-12	3.27E-12
Chloroform	67-66-3	1.60E-08	1.00E-10	2.85E-09	1.25E-09	2.65E-10	2.04E-10	3.55E-12	2.03E-12
Dichloromethane	75-09-2	1.03E-05	1.06E-08	1.77E-07	1.37E-07	2.92E-08	2.26E-08	3.94E-10	2.25E-10
O-Terphenyl	84-15-1	4.42E-08	9.71E-09	2.51E-06	1.37E-07	3.71E-08	5.45E-08	1.63E-09	9.32E-10
Trichlorofluoromethane (FREON 11)	75-69-4	5.97E-07	6.43E-08	3.09E-06	7.27E-07	1.53E-07	1.16E-07	1.99E-09	1.14E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	2.93E-07	1.36E-09	2.16E-07	1.67E-08	4.54E-09	9.11E-09	2.79E-10	1.60E-10
1,2,4-Trichlorobenzene	120-82-1	5.11E-09	1.52E-10	4.20E-08	2.07E-09	4.93E-10	5.15E-10	1.18E-11	6.77E-12
1,2-Dichlorobenzene	95-50-1	2.17E-06	3.23E-09	3.22E-07	4.25E-08	1.00E-08	9.62E-09	2.07E-10	1.18E-10
Hexachlorobenzene	118-74-1	3.05E-08	5.78E-10	8.18E-07	8.04E-09	1.99E-09	3.62E-09	1.10E-10	6.31E-11
Pentachlorobenzene	608-93-5	7.99E-08	1.38E-08	1.54E-06	1.81E-07	4.74E-08	1.19E-07	3.88E-09	2.22E-09
Pentachlorophenol	87-86-5	3.34E-05	1.79E-08	3.77E-04	2.21E-07	7.03E-08	1.88E-08	8.25E-12	4.71E-12
Inorganics									
Antimony	7440-36-0	3.35E-05	1.16E-06	1.97E-03	6.83E-06	9.83E-07	1.31E-06	2.43E-08	1.39E-08
Arsenic	7440-38-2	8.85E-07	2.76E-07	7.57E-05	1.35E-06	5.68E-08	2.08E-07	4.10E-09	2.34E-09
Barium	7440-39-3	1.18E-05	1.23E-07	7.61E-05	6.92E-07	2.30E-06	1.24E-07	2.31E-09	1.32E-09
Beryllium	7440-41-7	1.05E-06	1.31E-07	5.78E-05	8.49E-07	9.26E-10	3.61E-07	1.16E-08	6.63E-09
Boron	7440-42-8	8.68E-03	5.52E-05	--	3.29E-04	1.06E-04	6.62E-05	1.14E-06	6.49E-07
Cadmium	7440-43-9	2.96E-04	5.25E-07	2.97E-02	3.72E-06	2.97E-07	1.08E-06	1.74E-05	4.09E-07
Chromium (Total)	7440-47-3	1.75E-06	3.91E-06	1.62E-03	1.82E-05	7.00E-06	2.38E-06	4.18E-08	2.39E-08
Chromium VI	18540-29-9	2.49E-07	5.57E-07	4.27E-05	2.58E-06	9.96E-07	3.38E-07	5.95E-09	3.40E-09
Cobalt	7440-48-4	1.65E-05	3.84E-05	2.08E-03	1.93E-04	5.59E-05	3.67E-05	8.66E-07	4.95E-07
Lead	7439-92-1	9.69E-04	7.30E-06	8.62E-03	5.14E-05	5.58E-05	1.94E-05	5.68E-07	3.25E-07
Mercury - Inorganic	7487-94-7	2.70E-04	2.03E-06	--	2.52E-05	1.08E-05	1.04E-07	4.29E-06	4.29E-06
Methyl Mercury	22967-92-6	2.79E-05	5.56E-08	2.06E-03	3.38E-07	1.92E-07	7.06E-10	2.60E-08	2.60E-08
Nickel	7440-02-0	4.04E-04	1.82E-04	4.84E-02	9.75E-04	2.21E-04	2.16E-04	5.42E-06	3.10E-06
Phosphorus	7723-14-0	5.30E-03	1.15E-03	--	6.93E-03	2.31E-03	1.97E-03	4.55E-05	2.60E-05
Selenium	7782-49-2	4.91E-07	3.39E-07	2.95E-04	1.52E-06	5.66E-06	9.81E-06	8.99E-07	8.99E-07
Silver	7440-22-4	2.56E-05	3.52E-06	1.07E-03	1.76E-05	1.72E-04	2.27E-06	2.84E-08	1.62E-08
Thallium	7440-28-0	9.82E-06	5.15E-04	--	2.66E-03	1.77E-04	6.18E-04	1.67E-05	9.53E-06
Tin	7440-31-5	1.60E-04	5.72E-04	1.44E-01	3.64E-03	9.92E-04	1.25E-03	3.68E-05	2.10E-05
Vanadium	7440-62-2	7.62E-06	1.11E-06	2.94E-04	7.20E-06	1.81E-06	3.24E-06	1.06E-07	6.07E-08
Zinc	7440-66-6	9.96E-02	8.91E-06	6.63E-01	5.79E-05	3.04E-05	1.50E-05	3.28E-05	3.28E-05

Calculated Exposure Point Concentrations for the Maple Grove Receptor Cluster
Normal Operations - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.72E-07	4.11E-10	--	3.71E-08	1.18E-10
Acenaphthylene	208-96-8	4.02E-08	2.30E-10	--	7.59E-09	2.27E-10
Anthracene	120-12-7	1.69E-07	1.54E-10	3.71E-11	1.64E-08	2.76E-12
Benz(a)anthracene	56-55-3	9.30E-08	7.63E-11	3.53E-09	1.83E-09	1.79E-10
Benzo(a)fluorene	30777-18-5	1.84E-07	5.96E-10	1.01E-09	5.39E-09	4.15E-10
Benzo(a)pyrene	50-32-8	1.65E-07	3.32E-10	1.11E-08	2.17E-09	1.61E-09
Benzo(b)fluoranthene	205-99-2	2.14E-07	9.50E-11	5.93E-10	2.39E-09	7.91E-11
Benzo(b)fluorene	243-17-4	1.27E-07	4.80E-10	6.89E-10	2.34E-09	1.09E-09
Benzo(e)pyrene	192-97-20	4.49E-07	3.21E-09	1.35E-09	3.29E-09	2.20E-07
Benzo(g,h,i)perylene	191-24-2	2.32E-06	2.58E-09	--	1.57E-08	3.33E-07
Benzo(k)fluoranthene	207-08-9	1.87E-07	2.24E-10	3.34E-09	2.15E-09	7.44E-10
Chrysene	218-01-9	3.45E-07	1.08E-10	4.39E-09	6.80E-09	2.48E-11
Dibenz(a,c)anthracene	215-58-7	2.93E-07	2.48E-09	1.15E-07	1.52E-09	2.94E-08
Dibenz(a,h)anthracene	53-70-3	1.03E-07	1.74E-10	5.21E-09	6.97E-10	2.65E-08
Fluoranthene	206-44-0	1.68E-06	4.59E-09	1.52E-09	8.36E-08	3.89E-10
Fluorene	86-73-7	1.71E-07	1.18E-09	--	2.47E-08	1.04E-11
Indeno(1,2,3-cd)pyrene	193-39-5	4.95E-07	6.15E-10	3.42E-08	2.93E-09	1.80E-10
Perylene	198-55-0	9.68E-08	5.39E-10	5.50E-11	9.15E-10	1.64E-07
Phenanthrene	85-01-8	1.72E-06	7.79E-09	4.31E-10	1.67E-07	1.82E-10
Pyrene	129-00-0	8.58E-06	7.81E-09	1.37E-09	4.89E-07	5.35E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	3.20E-05	1.26E-09	--	2.17E-07	1.52E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	2.23E-08	9.51E-13	7.35E-11	1.01E-10	3.33E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	9.81E-11	1.73E-08	--	1.36E-10	2.75E-12
Bromoform	75-25-2	2.73E-10	5.52E-07	--	4.51E-10	1.86E-13
Carbon Tetrachloride	56-23-5	1.96E-11	3.82E-09	--	1.83E-11	7.22E-13
Chloroform	67-66-3	4.39E-11	5.69E-09	--	1.19E-10	1.33E-12
Dichloromethane	75-09-2	7.87E-09	1.77E-06	--	5.40E-08	1.38E-10
O-Terphenyl	84-15-1	5.43E-07	1.51E-09	--	1.36E-08	7.23E-10
Trichlorofluoromethane (FREON 11)	75-69-4	2.03E-09	1.95E-06	--	2.82E-09	5.83E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	7.71E-08	6.84E-10	--	5.02E-09	1.83E-12
1,2,4-Trichlorobenzene	120-82-1	1.82E-09	6.65E-10	--	3.44E-10	4.78E-13
1,2-Dichlorobenzene	95-50-1	2.44E-08	2.68E-08	--	1.05E-08	3.05E-10
Hexachlorobenzene	118-74-1	3.31E-08	8.18E-10	--	1.11E-09	1.25E-11
Pentachlorobenzene	608-93-5	1.20E-06	2.08E-09	--	4.77E-08	4.35E-11
Pentachlorophenol	87-86-5	5.63E-07	6.71E-07	--	2.46E-08	1.66E-06
Inorganics						
Antimony	7440-36-0	2.70E-04	9.85E-06	9.99E-06	8.61E-06	--
Arsenic	7440-38-2	2.68E-05	1.51E-06	1.53E-06	1.69E-07	--
Barium	7440-39-3	1.90E-04	7.61E-06	7.71E-06	6.12E-06	--
Beryllium	7440-41-7	1.70E-04	5.78E-07	1.21E-06	4.39E-07	--
Boron	7440-42-8	1.05E-03	5.53E-04	5.58E-04	2.37E-03	--
Cadmium	7440-43-9	1.12E-03	2.47E-05	2.55E-05	1.40E-04	--
Chromium (Total)	7440-47-3	9.42E-05	8.12E-06	8.21E-06	4.60E-07	--
Chromium VI	18540-29-9	1.34E-05	1.15E-06	1.17E-06	6.54E-08	--
Cobalt	7440-48-4	5.71E-04	2.08E-05	2.11E-05	4.94E-06	--
Lead	7439-92-1	2.60E-02	8.23E-05	1.82E-04	3.54E-04	--
Mercury - Inorganic	7487-94-7	2.41E-03	7.67E-07	2.46E-06	3.50E-05	1.10E-05
Methyl Mercury	22967-92-6	6.82E-05	3.42E-09	6.93E-07	2.00E-06	3.09E-06
Nickel	7440-02-0	1.22E-02	3.10E-04	3.18E-04	1.14E-04	--
Phosphorus	7723-14-0	3.66E-04	1.66E-04	1.68E-04	1.28E-03	--
Selenium	7782-49-2	5.40E-06	1.73E-06	1.75E-06	1.05E-07	--
Silver	7440-22-4	6.19E-05	1.21E-05	1.22E-05	8.54E-06	--
Thallium	7440-28-0	5.94E-03	1.38E-04	1.42E-04	5.10E-06	--
Tin	7440-31-5	6.44E-03	4.82E-05	6.42E-05	5.83E-05	--
Vanadium	7440-62-2	6.15E-04	1.84E-06	4.24E-06	2.04E-06	--
Zinc	7440-66-6	2.68E-02	7.12E-04	7.28E-04	2.60E-03	--

Calculated Exposure Point Concentrations for the Maple Grove Receptor Cluster
Normal Operations - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	3.65E-08	4.42E-11	1.63E-10	1.34E-10	4.36E-11	7.11E-11	2.02E-10	1.16E-10
Acenaphthylene	208-96-8	2.56E-07	1.03E-11	1.15E-10	3.84E-11	1.15E-11	1.74E-11	4.85E-11	2.77E-11
Anthracene	120-12-7	2.55E-10	3.11E-11	2.44E-10	9.90E-11	2.98E-11	5.79E-11	1.75E-10	1.00E-10
Benz(a)anthracene	56-55-3	8.82E-11	1.15E-10	1.91E-09	2.14E-10	6.58E-11	3.50E-11	7.14E-11	4.08E-11
Benzo(a)fluorene	30777-18-5	6.20E-09	7.39E-11	7.50E-09	2.95E-10	8.66E-11	6.73E-11	1.62E-10	9.24E-11
Benzo(a)pyrene	50-32-8	9.97E-11	3.93E-10	1.66E-08	9.86E-10	3.10E-10	1.07E-10	1.13E-10	6.46E-11
Benzo(b)fluoranthene	205-99-2	2.46E-09	3.08E-11	6.31E-09	9.69E-11	2.53E-11	4.35E-11	1.39E-10	7.93E-11
Benzo(b)fluorene	243-17-4	7.77E-09	9.91E-11	1.35E-08	5.14E-10	1.59E-10	6.93E-11	1.01E-10	5.77E-11
Benzo(e)pyrene	192-97-20	2.38E-08	1.15E-08	4.43E-07	7.05E-08	2.25E-08	6.01E-09	2.49E-10	1.42E-10
Benzo(g,h,i)perylene	191-24-2	1.21E-08	1.69E-08	4.01E-07	1.04E-07	3.32E-08	9.09E-09	1.24E-09	7.10E-10
Benzo(k)fluoranthene	207-08-9	1.14E-10	1.38E-10	1.41E-08	4.15E-10	1.28E-10	6.49E-11	1.22E-10	6.99E-11
Chrysene	218-01-9	3.27E-10	1.47E-10	2.71E-09	2.55E-10	7.21E-11	8.82E-11	2.64E-10	1.51E-10
Dibenz(a,c)anthracene	215-58-7	5.03E-09	3.54E-09	6.17E-07	1.08E-08	3.46E-09	9.11E-10	1.41E-10	8.04E-11
Dibenz(a,h)anthracene	53-70-3	4.16E-11	1.45E-09	2.74E-08	8.39E-09	2.68E-09	7.20E-10	5.49E-11	3.14E-11
Fluoranthene	206-44-0	2.50E-09	2.75E-10	2.30E-08	9.65E-10	2.70E-10	5.05E-10	1.56E-09	8.93E-10
Fluorene	86-73-7	3.23E-10	3.82E-11	9.38E-10	1.33E-10	4.02E-11	6.69E-11	1.93E-10	1.10E-10
Indeno(1,2,3-cd)pyrene	193-39-5	2.62E-10	7.15E-10	1.21E-07	9.50E-10	2.92E-10	1.31E-10	2.49E-10	1.42E-10
Perylene	198-55-0	1.82E-09	9.23E-09	4.79E-08	5.69E-08	1.82E-08	4.81E-09	5.92E-11	3.39E-11
Phenanthrene	85-01-8	3.16E-09	3.29E-10	1.23E-08	1.12E-09	3.33E-10	6.03E-10	1.80E-09	1.03E-09
Pyrene	129-00-0	1.24E-08	1.21E-09	3.11E-08	4.18E-09	1.18E-09	2.58E-09	8.14E-09	4.65E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	3.06E-07	1.33E-07	3.23E-04	6.25E-07	1.28E-07	4.87E-07	1.71E-08	9.75E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	2.29E-10	3.83E-10	**2.96E-08**	1.35E-09	3.89E-10	3.60E-10	9.82E-12	5.61E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	8.69E-09	5.56E-10	2.74E-08	4.98E-09	1.05E-09	7.98E-10	1.37E-11	7.81E-12
Bromoform	75-25-2	3.36E-09	1.56E-08	6.49E-07	1.36E-07	2.86E-08	2.17E-08	3.70E-10	2.11E-10
Carbon Tetrachloride	56-23-5	1.86E-09	1.78E-10	1.21E-08	1.59E-09	3.36E-10	2.55E-10	4.35E-12	2.49E-12
Chloroform	67-66-3	4.42E-09	1.00E-10	2.85E-09	8.91E-10	1.88E-10	1.44E-10	2.47E-12	1.41E-12
Dichloromethane	75-09-2	2.83E-06	1.06E-08	1.77E-07	9.35E-08	1.98E-08	1.51E-08	2.60E-10	1.49E-10
O-Terphenyl	84-15-1	1.22E-08	9.71E-09	2.51E-06	5.36E-08	1.50E-08	1.65E-08	4.56E-10	2.61E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.65E-07	6.43E-08	3.09E-06	5.66E-07	1.19E-07	9.03E-08	1.54E-09	8.81E-10
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	8.08E-08	1.36E-09	2.16E-07	5.68E-09	1.48E-09	2.68E-09	7.99E-11	4.56E-11
1,2,4-Trichlorobenzene	120-82-1	1.41E-09	1.52E-10	4.20E-08	1.16E-09	2.60E-10	2.35E-10	4.85E-12	2.77E-12
1,2-Dichlorobenzene	95-50-1	6.00E-07	3.23E-09	3.22E-07	2.55E-08	5.67E-09	4.85E-09	9.46E-11	5.40E-11
Hexachlorobenzene	118-74-1	8.43E-09	5.78E-10	8.18E-07	3.45E-09	8.33E-10	1.18E-09	3.32E-11	1.90E-11
Pentachlorobenzene	608-93-5	2.20E-08	1.38E-08	1.54E-06	5.35E-08	1.39E-08	3.35E-08	1.08E-09	6.16E-10
Pentachlorophenol	87-86-5	9.22E-06	1.79E-08	3.77E-04	1.11E-07	3.53E-08	9.40E-09	2.20E-12	1.26E-12
Inorganics									
Antimony	7440-36-0	8.10E-06	1.16E-06	1.97E-03	1.66E-06	2.39E-07	3.17E-07	5.85E-09	3.34E-09
Arsenic	7440-38-2	2.14E-07	2.76E-07	7.57E-05	3.28E-07	1.39E-08	5.03E-08	9.87E-10	5.64E-10
Barium	7440-39-3	2.85E-06	1.23E-07	7.61E-05	1.68E-07	5.61E-07	3.01E-08	5.58E-10	3.19E-10
Beryllium	7440-41-7	2.55E-07	1.31E-07	5.78E-05	2.07E-07	2.26E-10	8.76E-08	2.81E-09	1.60E-09
Boron	7440-42-8	2.10E-03	5.52E-05	--	7.99E-05	2.59E-05	1.60E-05	2.74E-07	1.57E-07
Cadmium	7440-43-9	7.17E-05	5.25E-07	2.97E-02	9.03E-07	7.21E-08	2.62E-07	4.20E-06	9.88E-08
Chromium (Total)	7440-47-3	4.24E-07	3.91E-06	1.62E-03	4.42E-06	1.71E-06	5.75E-07	1.00E-08	5.73E-09
Chromium VI	18540-29-9	6.03E-08	5.57E-07	4.27E-05	6.29E-07	2.43E-07	8.18E-08	1.43E-09	8.16E-10
Cobalt	7440-48-4	3.99E-06	3.84E-05	2.08E-03	4.69E-05	1.37E-05	8.88E-06	2.09E-07	1.19E-07
Lead	7439-92-1	2.34E-04	7.30E-06	8.62E-03	1.25E-05	1.36E-05	4.71E-06	1.38E-07	7.86E-08
Mercury - Inorganic	7487-94-7	8.68E-05	2.03E-06	--	8.00E-06	3.41E-06	3.35E-08	1.38E-06	1.38E-06
Methyl Mercury	22967-92-6	6.75E-06	5.56E-08	2.06E-03	9.52E-08	5.52E-08	1.77E-10	6.29E-09	6.29E-09
Nickel	7440-02-0	9.78E-05	1.82E-04	4.84E-02	2.37E-04	5.40E-05	5.24E-05	1.31E-06	7.47E-07
Phosphorus	7723-14-0	1.28E-03	1.15E-03	--	1.68E-03	5.61E-04	4.77E-04	1.10E-05	6.28E-06
Selenium	7782-49-2	1.19E-07	3.39E-07	2.95E-04	3.70E-07	1.38E-06	2.37E-06	2.13E-07	2.13E-07
Silver	7440-22-4	6.19E-06	3.52E-06	1.07E-03	4.29E-06	4.19E-05	5.49E-07	6.80E-09	3.88E-09
Thallium	7440-28-0	2.38E-06	5.15E-04	--	6.48E-04	4.33E-05	1.49E-04	4.02E-06	2.30E-06
Tin	7440-31-5	3.86E-05	5.72E-04	1.44E-01	8.86E-04	2.42E-04	3.04E-04	8.91E-06	5.09E-06
Vanadium	7440-62-2	1.84E-06	1.11E-06	2.94E-04	1.76E-06	4.44E-07	7.86E-07	2.57E-08	1.47E-08
Zinc	7440-66-6	2.41E-02	8.91E-06	6.63E-01	1.41E-05	7.39E-06	3.63E-06	7.93E-06	7.93E-06

Calculated Exposure Point Concentrations for the Oshawa Subdivision Receptor Cluster
Normal Operations - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	2.49E-07	4.11E-10	--	5.38E-08	1.77E-10
Acenaphthylene	208-96-8	5.83E-08	2.30E-10	--	1.10E-08	3.41E-10
Anthracene	120-12-7	2.46E-07	1.54E-10	5.31E-11	2.39E-08	4.14E-12
Benz(a)anthracene	56-55-3	1.35E-07	7.63E-11	5.06E-09	2.66E-09	2.68E-10
Benzo(a)fluorene	30777-18-5	2.67E-07	5.96E-10	1.44E-09	7.82E-09	6.22E-10
Benzo(a)pyrene	50-32-8	2.39E-07	3.32E-10	1.58E-08	3.15E-09	2.41E-09
Benzo(b)fluoranthene	205-99-2	3.10E-07	9.50E-11	8.50E-10	3.48E-09	1.19E-10
Benzo(b)fluorene	243-17-4	1.84E-07	4.80E-10	9.87E-10	3.39E-09	1.64E-09
Benzo(e)pyrene	192-97-20	6.51E-07	3.21E-09	1.93E-09	4.78E-09	3.29E-07
Benzo(g,h,i)perylene	191-24-2	3.37E-06	2.58E-09	--	2.29E-08	4.99E-07
Benzo(k)fluoranthene	207-08-9	2.71E-07	2.24E-10	4.79E-09	3.12E-09	1.11E-09
Chrysene	218-01-9	5.01E-07	1.08E-10	6.30E-09	9.87E-09	3.71E-11
Dibenz(a,c)anthracene	215-58-7	4.25E-07	2.48E-09	1.65E-07	2.21E-09	4.41E-08
Dibenz(a,h)anthracene	53-70-3	1.49E-07	1.74E-10	7.46E-09	1.01E-09	3.97E-08
Fluoranthene	206-44-0	2.43E-06	4.59E-09	2.17E-09	1.21E-07	5.83E-10
Fluorene	86-73-7	2.48E-07	1.18E-09	--	3.59E-08	1.56E-11
Indeno(1,2,3-cd)pyrene	193-39-5	7.18E-07	6.15E-10	4.89E-08	4.26E-09	2.69E-10
Perylene	198-55-0	1.40E-07	5.39E-10	7.88E-11	1.33E-09	2.45E-07
Phenanthrene	85-01-8	2.50E-06	7.79E-09	6.17E-10	2.43E-07	2.73E-10
Pyrene	129-00-0	1.24E-05	7.81E-09	1.96E-09	7.09E-07	8.02E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	4.64E-05	1.26E-09	--	3.14E-07	2.28E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	3.91E-08	9.51E-13	1.40E-10	1.78E-10	4.99E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	1.42E-10	1.73E-08	--	1.98E-10	4.12E-12
Bromoform	75-25-2	3.97E-10	5.52E-07	--	6.54E-10	2.78E-13
Carbon Tetrachloride	56-23-5	2.84E-11	3.82E-09	--	2.65E-11	1.08E-12
Chloroform	67-66-3	6.38E-11	5.69E-09	--	1.72E-10	1.99E-12
Dichloromethane	75-09-2	1.14E-08	1.77E-06	--	7.84E-08	2.07E-10
O-Terphenyl	84-15-1	7.88E-07	1.51E-09	--	1.97E-08	1.08E-09
Trichlorofluoromethane (FREON 11)	75-69-4	2.95E-09	1.95E-06	--	4.09E-09	8.73E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.12E-07	6.84E-10	--	7.29E-09	2.74E-12
1,2,4-Trichlorobenzene	120-82-1	2.64E-09	6.65E-10	--	4.99E-10	7.17E-13
1,2-Dichlorobenzene	95-50-1	3.55E-08	2.68E-08	--	1.53E-08	4.58E-10
Hexachlorobenzene	118-74-1	4.81E-08	8.18E-10	--	1.61E-09	1.87E-11
Pentachlorobenzene	608-93-5	1.74E-06	2.08E-09	--	6.92E-08	6.52E-11
Pentachlorophenol	87-86-5	8.18E-07	6.71E-07	--	3.57E-08	2.48E-06
Inorganics						
Antimony	7440-36-0	4.75E-04	9.85E-06	1.91E-05	1.52E-05	--
Arsenic	7440-38-2	4.72E-05	1.51E-06	2.92E-06	2.99E-07	--
Barium	7440-39-3	3.35E-04	7.61E-06	1.47E-05	1.08E-05	--
Beryllium	7440-41-7	2.99E-04	5.78E-07	2.32E-06	7.72E-07	--
Boron	7440-42-8	1.85E-03	5.53E-04	1.06E-03	4.17E-03	--
Cadmium	7440-43-9	1.97E-03	2.47E-05	4.87E-05	2.47E-04	--
Chromium (Total)	7440-47-3	1.66E-04	8.12E-06	1.56E-05	8.10E-07	--
Chromium VI	18540-29-9	2.36E-05	1.15E-06	2.23E-06	1.15E-07	--
Cobalt	7440-48-4	1.01E-03	2.08E-05	4.03E-05	8.70E-06	--
Lead	7439-92-1	4.59E-02	8.23E-05	3.48E-04	6.24E-04	--
Mercury - Inorganic	7487-94-7	3.58E-03	7.67E-07	4.69E-06	5.20E-05	1.64E-05
Methyl Mercury	22967-92-6	1.20E-04	3.42E-09	1.32E-06	3.53E-06	4.64E-06
Nickel	7440-02-0	2.15E-02	3.10E-04	6.06E-04	2.00E-04	--
Phosphorus	7723-14-0	6.46E-04	1.66E-04	3.20E-04	2.26E-03	--
Selenium	7782-49-2	9.51E-06	1.73E-06	3.34E-06	1.85E-07	--
Silver	7440-22-4	1.09E-04	1.21E-05	2.33E-05	1.51E-05	--
Thallium	7440-28-0	1.05E-02	1.38E-04	2.71E-04	8.98E-06	--
Tin	7440-31-5	1.13E-02	4.82E-05	1.22E-04	1.03E-04	--
Vanadium	7440-62-2	1.08E-03	1.84E-06	8.09E-06	3.59E-06	--
Zinc	7440-66-6	4.72E-02	7.12E-04	1.39E-03	4.58E-03	--

Calculated Exposure Point Concentrations for the Oshawa Subdivision Receptor Cluster
Normal Operations - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	5.30E-08	4.42E-11	1.63E-10	1.94E-10	6.32E-11	1.03E-10	2.94E-10	1.68E-10
Acenaphthylene	208-96-8	3.71E-07	1.03E-11	1.15E-10	5.55E-11	1.66E-11	2.53E-11	7.04E-11	4.02E-11
Anthracene	120-12-7	3.70E-10	3.11E-11	2.44E-10	1.43E-10	4.32E-11	8.39E-11	2.55E-10	1.45E-10
Benz(a)anthracene	56-55-3	1.28E-10	1.15E-10	1.91E-09	3.12E-10	9.58E-11	5.08E-11	1.03E-10	5.91E-11
Benzo(a)fluorene	30777-18-5	9.01E-09	7.39E-11	7.50E-09	4.29E-10	1.27E-10	9.72E-11	2.33E-10	1.33E-10
Benzo(a)pyrene	50-32-8	1.45E-10	3.93E-10	1.66E-08	1.45E-09	4.58E-10	1.57E-10	1.64E-10	9.35E-11
Benzo(b)fluoranthene	205-99-2	3.57E-09	3.08E-11	6.31E-09	1.41E-10	3.70E-11	6.31E-11	2.01E-10	1.15E-10
Benzo(b)fluorene	243-17-4	1.13E-08	9.91E-11	1.35E-08	7.61E-10	2.36E-10	1.02E-10	1.45E-10	8.29E-11
Benzo(e)pyrene	192-97-20	3.45E-08	1.15E-08	4.43E-07	1.06E-07	3.38E-08	9.01E-09	3.61E-10	2.06E-10
Benzo(g,h,i)perylene	191-24-2	1.76E-08	1.69E-08	4.01E-07	1.56E-07	4.98E-08	1.36E-08	1.80E-09	1.03E-09
Benzo(k)fluoranthene	207-08-9	1.65E-10	1.38E-10	1.41E-08	6.13E-10	1.89E-10	9.51E-11	1.77E-10	1.01E-10
Chrysene	218-01-9	4.75E-10	1.47E-10	2.71E-09	3.68E-10	1.04E-10	1.28E-10	3.83E-10	2.19E-10
Dibenz(a,c)anthracene	215-58-7	7.30E-09	3.54E-09	6.17E-07	1.61E-08	5.13E-09	1.35E-09	2.03E-10	1.16E-10
Dibenz(a,h)anthracene	53-70-3	6.04E-11	1.45E-09	2.74E-08	1.26E-08	4.01E-09	1.08E-09	7.96E-11	4.55E-11
Fluoranthene	206-44-0	3.63E-09	2.75E-10	2.30E-08	1.40E-09	3.92E-10	7.32E-10	2.26E-09	1.29E-09
Fluorene	86-73-7	4.69E-10	3.82E-11	9.38E-10	1.90E-10	5.79E-11	9.67E-11	2.79E-10	1.60E-10
Indeno(1,2,3-cd)pyrene	193-39-5	3.80E-10	7.15E-10	1.21E-07	1.36E-09	4.20E-10	1.89E-10	3.61E-10	2.06E-10
Perylene	198-55-0	2.64E-09	9.23E-09	4.79E-08	8.53E-08	2.73E-08	7.22E-09	8.59E-11	4.91E-11
Phenanthrene	85-01-8	4.59E-09	3.29E-10	1.23E-08	1.61E-09	4.81E-10	8.73E-10	2.61E-09	1.49E-09
Pyrene	129-00-0	1.80E-08	1.21E-09	3.11E-08	6.07E-09	1.71E-09	3.74E-09	1.18E-08	6.74E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	4.44E-07	1.33E-07	3.23E-04	9.07E-07	1.86E-07	7.05E-07	2.47E-08	1.41E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	4.02E-10	3.83E-10	**2.96E-08**	2.18E-09	6.20E-10	6.16E-10	1.73E-11	9.86E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	1.26E-08	5.56E-10	2.74E-08	6.69E-09	1.41E-09	1.07E-09	1.83E-11	1.05E-11
Bromoform	75-25-2	4.88E-09	1.56E-08	6.49E-07	1.82E-07	3.83E-08	2.90E-08	4.95E-10	2.83E-10
Carbon Tetrachloride	56-23-5	2.70E-09	1.78E-10	1.21E-08	2.13E-09	4.50E-10	3.41E-10	5.84E-12	3.33E-12
Chloroform	67-66-3	6.42E-09	1.00E-10	2.85E-09	1.21E-09	2.55E-10	1.94E-10	3.34E-12	1.91E-12
Dichloromethane	75-09-2	4.12E-06	1.06E-08	1.77E-07	1.28E-07	2.70E-08	2.06E-08	3.55E-10	2.03E-10
O-Terphenyl	84-15-1	1.77E-08	9.71E-09	2.51E-06	7.77E-08	2.19E-08	2.39E-08	6.59E-10	3.76E-10
Trichlorofluoromethane (FREON 11)	75-69-4	2.39E-07	6.43E-08	3.09E-06	7.59E-07	1.60E-07	1.21E-07	2.07E-09	1.18E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	1.17E-07	1.36E-09	2.16E-07	8.42E-09	2.19E-09	3.92E-09	1.16E-10	6.65E-11
1,2,4-Trichlorobenzene	120-82-1	2.05E-09	1.52E-10	4.20E-08	1.61E-09	3.62E-10	3.29E-10	6.83E-12	3.91E-12
1,2-Dichlorobenzene	95-50-1	8.71E-07	3.23E-09	3.22E-07	3.49E-08	7.79E-09	6.71E-09	1.32E-10	7.52E-11
Hexachlorobenzene	118-74-1	1.22E-08	5.78E-10	8.18E-07	4.83E-09	1.17E-09	1.68E-09	4.76E-11	2.72E-11
Pentachlorobenzene	608-93-5	3.20E-08	1.38E-08	1.54E-06	7.72E-08	2.01E-08	4.85E-08	1.56E-09	8.93E-10
Pentachlorophenol	87-86-5	1.34E-05	1.79E-08	3.77E-04	1.66E-07	5.30E-08	1.41E-08	3.37E-12	1.92E-12
Inorganics									
Antimony	7440-36-0	1.43E-05	1.16E-06	1.97E-03	3.06E-06	4.41E-07	5.69E-07	1.04E-08	5.92E-09
Arsenic	7440-38-2	3.77E-07	2.76E-07	7.57E-05	6.20E-07	2.62E-08	9.20E-08	1.75E-09	1.00E-09
Barium	7440-39-3	5.02E-06	1.23E-07	7.61E-05	3.12E-07	1.04E-06	5.43E-08	9.89E-10	5.65E-10
Beryllium	7440-41-7	4.49E-07	1.31E-07	5.78E-05	3.79E-07	4.18E-10	1.55E-07	4.94E-09	2.82E-09
Boron	7440-42-8	3.70E-03	5.52E-05	--	1.47E-04	4.74E-05	2.87E-05	4.85E-07	2.77E-07
Cadmium	7440-43-9	1.26E-04	5.25E-07	2.97E-02	1.63E-06	1.30E-07	4.65E-07	7.41E-06	1.74E-07
Chromium (Total)	7440-47-3	7.47E-07	3.91E-06	1.62E-03	8.40E-06	3.26E-06	1.06E-06	1.79E-08	1.02E-08
Chromium VI	18540-29-9	1.06E-07	5.57E-07	4.27E-05	1.20E-06	4.63E-07	1.51E-07	2.55E-09	1.45E-09
Cobalt	7440-48-4	7.04E-06	3.84E-05	2.08E-03	8.83E-05	2.58E-05	1.61E-05	3.70E-07	2.11E-07
Lead	7439-92-1	4.13E-04	7.30E-06	8.62E-03	2.27E-05	2.48E-05	8.34E-06	2.42E-07	1.38E-07
Mercury - Inorganic	7487-94-7	1.29E-04	2.03E-06	--	1.23E-05	5.35E-06	4.99E-08	2.05E-06	2.05E-06
Methyl Mercury	22967-92-6	1.19E-05	5.56E-08	2.06E-03	1.68E-07	9.73E-08	3.11E-10	1.11E-08	1.11E-08
Nickel	7440-02-0	1.72E-04	1.82E-04	4.84E-02	4.44E-04	1.01E-04	9.43E-05	2.31E-06	1.32E-06
Phosphorus	7723-14-0	2.26E-03	1.15E-03	--	3.09E-03	1.03E-03	8.51E-04	1.94E-05	1.11E-05
Selenium	7782-49-2	2.09E-07	3.39E-07	2.95E-04	7.06E-07	2.64E-06	4.47E-06	3.87E-07	3.87E-07
Silver	7440-22-4	1.09E-05	3.52E-06	1.07E-03	8.05E-06	7.86E-05	1.01E-06	1.21E-08	6.94E-09
Thallium	7440-28-0	4.18E-06	5.15E-04	--	1.22E-03	8.19E-05	2.69E-04	7.12E-06	4.07E-06
Tin	7440-31-5	6.80E-05	5.72E-04	1.44E-01	1.63E-03	4.46E-04	5.40E-04	1.57E-05	8.97E-06
Vanadium	7440-62-2	3.25E-06	1.11E-06	2.94E-04	3.22E-06	8.21E-07	1.39E-06	4.52E-08	2.59E-08
Zinc	7440-66-6	4.25E-02	8.91E-06	6.63E-01	2.56E-05	1.35E-05	6.47E-06	1.40E-05	1.40E-05

Calculated Exposure Point Concentrations for the Port Darlington Receptor Cluster
Normal Operations - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.13E-07	4.11E-10	--	2.43E-08	1.27E-10
Acenaphthylene	208-96-8	2.64E-08	2.30E-10	--	4.97E-09	2.45E-10
Anthracene	120-12-7	1.11E-07	1.54E-10	2.75E-11	1.08E-08	2.98E-12
Benz(a)anthracene	56-55-3	6.10E-08	7.63E-11	2.62E-09	1.20E-09	1.93E-10
Benzo(a)fluorene	30777-18-5	1.21E-07	5.96E-10	7.48E-10	3.53E-09	4.47E-10
Benzo(a)pyrene	50-32-8	1.08E-07	3.32E-10	8.21E-09	1.43E-09	1.73E-09
Benzo(b)fluoranthene	205-99-2	1.40E-07	9.50E-11	4.40E-10	1.57E-09	8.52E-11
Benzo(b)fluorene	243-17-4	8.33E-08	4.80E-10	5.12E-10	1.53E-09	1.18E-09
Benzo(e)pyrene	192-97-20	2.94E-07	3.21E-09	1.00E-09	2.16E-09	2.37E-07
Benzo(g,h,i)perylene	191-24-2	1.52E-06	2.58E-09	--	1.03E-08	3.59E-07
Benzo(k)fluoranthene	207-08-9	1.23E-07	2.24E-10	2.48E-09	1.41E-09	8.01E-10
Chrysene	218-01-9	2.27E-07	1.08E-10	3.26E-09	4.46E-09	2.67E-11
Dibenz(a,c)anthracene	215-58-7	1.92E-07	2.48E-09	8.57E-08	9.97E-10	3.17E-08
Dibenz(a,h)anthracene	53-70-3	6.74E-08	1.74E-10	3.87E-09	4.57E-10	2.85E-08
Fluoranthene	206-44-0	1.10E-06	4.59E-09	1.13E-09	5.48E-08	4.19E-10
Fluorene	86-73-7	1.12E-07	1.18E-09	--	1.62E-08	1.12E-11
Indeno(1,2,3-cd)pyrene	193-39-5	3.25E-07	6.15E-10	2.54E-08	1.92E-09	1.94E-10
Perylene	198-55-0	6.35E-08	5.39E-10	4.09E-11	6.00E-10	1.76E-07
Phenanthrene	85-01-8	1.13E-06	7.79E-09	3.20E-10	1.10E-07	1.96E-10
Pyrene	129-00-0	5.63E-06	7.81E-09	1.02E-09	3.21E-07	5.76E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	2.10E-05	1.26E-09	--	1.43E-07	1.64E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	1.41E-08	9.51E-13	5.41E-11	6.39E-11	3.59E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	6.43E-11	1.73E-08	--	8.94E-11	2.96E-12
Bromoform	75-25-2	1.79E-10	5.52E-07	--	2.96E-10	2.00E-13
Carbon Tetrachloride	56-23-5	1.28E-11	3.82E-09	--	1.20E-11	7.78E-13
Chloroform	67-66-3	2.88E-11	5.69E-09	--	7.78E-11	1.43E-12
Dichloromethane	75-09-2	5.16E-09	1.77E-06	--	3.54E-08	1.49E-10
O-Terphenyl	84-15-1	3.56E-07	1.51E-09	--	8.89E-09	7.79E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.33E-09	1.95E-06	--	1.85E-09	6.28E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	5.06E-08	6.84E-10	--	3.29E-09	1.97E-12
1,2,4-Trichlorobenzene	120-82-1	1.19E-09	6.65E-10	--	2.25E-10	5.15E-13
1,2-Dichlorobenzene	95-50-1	1.60E-08	2.68E-08	--	6.91E-09	3.29E-10
Hexachlorobenzene	118-74-1	2.17E-08	8.18E-10	--	7.28E-10	1.35E-11
Pentachlorobenzene	608-93-5	7.86E-07	2.08E-09	--	3.13E-08	4.69E-11
Pentachlorophenol	87-86-5	3.70E-07	6.71E-07	--	1.61E-08	1.78E-06
Inorganics						
Antimony	7440-36-0	1.70E-04	9.85E-06	7.36E-06	5.43E-06	--
Arsenic	7440-38-2	1.69E-05	1.51E-06	1.13E-06	1.07E-07	--
Barium	7440-39-3	1.20E-04	7.61E-06	5.68E-06	3.86E-06	--
Beryllium	7440-41-7	1.07E-04	5.78E-07	8.94E-07	2.77E-07	--
Boron	7440-42-8	6.62E-04	5.53E-04	4.11E-04	1.49E-03	--
Cadmium	7440-43-9	7.07E-04	2.47E-05	1.88E-05	8.83E-05	--
Chromium (Total)	7440-47-3	5.94E-05	8.12E-06	6.04E-06	2.90E-07	--
Chromium VI	18540-29-9	8.45E-06	1.15E-06	8.59E-07	4.12E-08	--
Cobalt	7440-48-4	3.60E-04	2.08E-05	1.56E-05	3.11E-06	--
Lead	7439-92-1	1.64E-02	8.23E-05	1.34E-04	2.23E-04	--
Mercury - Inorganic	7487-94-7	2.17E-03	7.67E-07	1.81E-06	3.14E-05	1.18E-05
Methyl Mercury	22967-92-6	4.30E-05	3.42E-09	5.10E-07	1.26E-06	3.33E-06
Nickel	7440-02-0	7.71E-03	3.10E-04	2.34E-04	7.18E-05	--
Phosphorus	7723-14-0	2.31E-04	1.66E-04	1.24E-04	8.09E-04	--
Selenium	7782-49-2	3.40E-06	1.73E-06	1.29E-06	6.64E-08	--
Silver	7440-22-4	3.90E-05	1.21E-05	9.00E-06	5.39E-06	--
Thallium	7440-28-0	3.75E-03	1.38E-04	1.05E-04	3.21E-06	--
Tin	7440-31-5	4.06E-03	4.82E-05	4.72E-05	3.68E-05	--
Vanadium	7440-62-2	3.88E-04	1.84E-06	3.12E-06	1.29E-06	--
Zinc	7440-66-6	1.69E-02	7.12E-04	5.36E-04	1.64E-03	--

Calculated Exposure Point Concentrations for the Port Darlington Receptor Cluster
Normal Operations - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	2.39E-08	4.42E-11	1.63E-10	9.84E-11	3.08E-11	4.83E-11	1.36E-10	7.74E-11
Acenaphthylene	208-96-8	1.68E-07	1.03E-11	1.15E-10	3.58E-11	9.78E-12	1.31E-11	3.46E-11	1.98E-11
Anthracene	120-12-7	1.67E-10	3.11E-11	2.44E-10	6.92E-11	2.05E-11	3.86E-11	1.16E-10	6.64E-11
Benz(a)anthracene	56-55-3	5.79E-11	1.15E-10	1.91E-09	1.82E-10	5.63E-11	2.64E-11	4.72E-11	2.70E-11
Benzo(a)fluorene	30777-18-5	4.07E-09	7.39E-11	7.50E-09	2.99E-10	8.71E-11	5.53E-11	1.15E-10	6.54E-11
Benzo(a)pyrene	50-32-8	6.54E-11	3.93E-10	1.66E-08	9.34E-10	2.95E-10	9.42E-11	7.46E-11	4.27E-11
Benzo(b)fluoranthene	205-99-2	1.62E-09	3.08E-11	6.31E-09	7.90E-11	2.14E-11	3.00E-11	9.15E-11	5.23E-11
Benzo(b)fluorene	243-17-4	5.10E-09	9.91E-11	1.35E-08	5.44E-10	1.68E-10	6.44E-11	7.20E-11	4.11E-11
Benzo(e)pyrene	192-97-20	1.56E-08	1.15E-08	4.43E-07	7.59E-08	2.43E-08	6.44E-09	1.65E-10	9.44E-11
Benzo(g,h,i)perylene	191-24-2	7.95E-09	1.69E-08	4.01E-07	1.12E-07	3.57E-08	9.65E-09	8.17E-10	4.67E-10
Benzo(k)fluoranthene	207-08-9	7.47E-11	1.38E-10	1.41E-08	3.96E-10	1.23E-10	5.29E-11	8.04E-11	4.59E-11
Chrysene	218-01-9	2.15E-10	1.47E-10	2.71E-09	1.87E-10	5.32E-11	5.95E-11	1.74E-10	9.95E-11
Dibenz(a,c)anthracene	215-58-7	3.30E-09	3.54E-09	6.17E-07	1.08E-08	3.44E-09	9.06E-10	9.45E-11	5.40E-11
Dibenz(a,h)anthracene	53-70-3	2.73E-11	1.45E-09	2.74E-08	8.99E-09	2.87E-09	7.66E-10	3.62E-11	2.07E-11
Fluoranthene	206-44-0	1.64E-09	2.75E-10	2.30E-08	7.51E-10	2.09E-10	3.45E-10	1.04E-09	5.93E-10
Fluorene	86-73-7	2.12E-10	3.82E-11	9.38E-10	1.14E-10	3.21E-11	4.80E-11	1.33E-10	7.62E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.72E-10	7.15E-10	1.21E-07	7.18E-10	2.22E-10	9.29E-11	1.64E-10	9.37E-11
Perylene	198-55-0	1.19E-09	9.23E-09	4.79E-08	6.13E-08	1.96E-08	5.18E-09	3.91E-11	2.23E-11
Phenanthrene	85-01-8	2.07E-09	3.29E-10	1.23E-08	8.59E-10	2.48E-10	4.13E-10	1.21E-09	6.91E-10
Pyrene	129-00-0	8.17E-09	1.21E-09	3.11E-08	2.89E-09	8.13E-10	1.71E-09	5.36E-09	3.06E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	2.01E-07	1.33E-07	3.23E-04	4.32E-07	9.08E-08	3.22E-07	1.12E-08	6.41E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	1.44E-10	3.83E-10	**2.96E-08**	1.26E-09	3.76E-10	2.62E-10	6.20E-12	3.54E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	5.70E-09	5.56E-10	2.74E-08	1.22E-08	2.57E-09	1.95E-09	3.33E-11	1.90E-11
Bromoform	75-25-2	2.20E-09	1.56E-08	6.49E-07	3.35E-07	7.06E-08	5.35E-08	9.12E-10	5.21E-10
Carbon Tetrachloride	56-23-5	1.22E-09	1.78E-10	1.21E-08	3.90E-09	8.22E-10	6.23E-10	1.06E-11	6.08E-12
Chloroform	67-66-3	2.90E-09	1.00E-10	2.85E-09	2.19E-09	4.63E-10	3.51E-10	6.00E-12	3.43E-12
Dichloromethane	75-09-2	1.86E-06	1.06E-08	1.77E-07	2.32E-07	4.89E-08	3.71E-08	6.35E-10	3.63E-10
O-Terphenyl	84-15-1	8.00E-09	9.71E-09	2.51E-06	5.55E-08	1.55E-08	1.32E-08	3.21E-10	1.83E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.08E-07	6.43E-08	3.09E-06	1.39E-06	2.94E-07	2.22E-07	3.80E-09	2.17E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	5.30E-08	1.36E-09	2.16E-07	6.18E-09	1.49E-09	2.15E-09	5.90E-11	3.37E-11
1,2,4-Trichlorobenzene	120-82-1	9.24E-10	1.52E-10	4.20E-08	2.52E-09	5.42E-10	4.34E-10	7.95E-12	4.54E-12
1,2-Dichlorobenzene	95-50-1	3.93E-07	3.23E-09	3.22E-07	5.79E-08	1.24E-08	9.75E-09	1.74E-10	9.94E-11
Hexachlorobenzene	118-74-1	5.53E-09	5.78E-10	8.18E-07	5.36E-09	1.22E-09	1.25E-09	2.96E-11	1.69E-11
Pentachlorobenzene	608-93-5	1.45E-08	1.38E-08	1.54E-06	4.40E-08	1.11E-08	2.33E-08	7.29E-10	4.17E-10
Pentachlorophenol	87-86-5	6.05E-06	1.79E-08	3.77E-04	1.19E-07	3.80E-08	1.01E-08	1.55E-12	8.84E-13
Inorganics									
Antimony	7440-36-0	5.11E-06	1.16E-06	1.97E-03	1.14E-06	1.64E-07	2.07E-07	3.71E-09	2.12E-09
Arsenic	7440-38-2	1.35E-07	2.76E-07	7.57E-05	2.35E-07	9.99E-09	3.38E-08	6.28E-10	3.59E-10
Barium	7440-39-3	1.80E-06	1.23E-07	7.61E-05	1.17E-07	3.90E-07	1.98E-08	3.54E-10	2.02E-10
Beryllium	7440-41-7	1.61E-07	1.31E-07	5.78E-05	1.42E-07	1.58E-10	5.61E-08	1.77E-09	1.01E-09
Boron	7440-42-8	1.32E-03	5.52E-05	--	5.45E-05	1.76E-05	1.04E-05	1.74E-07	9.92E-08
Cadmium	7440-43-9	4.52E-05	5.25E-07	2.97E-02	5.98E-07	4.77E-08	1.68E-07	2.65E-06	6.24E-08
Chromium (Total)	7440-47-3	2.67E-07	3.91E-06	1.62E-03	3.20E-06	1.25E-06	3.94E-07	6.41E-09	3.66E-09
Chromium VI	18540-29-9	3.80E-08	5.57E-07	4.27E-05	4.56E-07	1.77E-07	5.60E-08	9.11E-10	5.21E-10
Cobalt	7440-48-4	2.52E-06	3.84E-05	2.08E-03	3.34E-05	9.82E-06	5.89E-06	1.32E-07	7.57E-08
Lead	7439-92-1	1.48E-04	7.30E-06	8.62E-03	8.40E-06	9.19E-06	3.01E-06	8.69E-08	4.96E-08
Mercury - Inorganic	7487-94-7	7.79E-05	2.03E-06	--	7.15E-06	3.03E-06	3.01E-08	1.24E-06	1.24E-06
Methyl Mercury	22967-92-6	4.26E-06	5.56E-08	2.06E-03	7.55E-08	4.50E-08	1.18E-10	3.97E-09	3.97E-09
Nickel	7440-02-0	6.17E-05	1.82E-04	4.84E-02	1.67E-04	3.84E-05	3.43E-05	8.28E-07	4.73E-07
Phosphorus	7723-14-0	8.09E-04	1.15E-03	--	1.15E-03	3.80E-04	3.07E-04	6.94E-06	3.97E-06
Selenium	7782-49-2	7.49E-08	3.39E-07	2.95E-04	2.70E-07	1.01E-06	1.68E-06	1.39E-07	1.39E-07
Silver	7440-22-4	3.90E-06	3.52E-06	1.07E-03	3.04E-06	2.97E-05	3.71E-07	4.35E-09	2.48E-09
Thallium	7440-28-0	1.50E-06	5.15E-04	--	4.61E-04	3.12E-05	9.82E-05	2.55E-06	1.46E-06
Tin	7440-31-5	2.44E-05	5.72E-04	1.44E-01	6.06E-04	1.67E-04	1.95E-04	5.63E-06	3.22E-06
Vanadium	7440-62-2	1.16E-06	1.11E-06	2.94E-04	1.21E-06	3.10E-07	5.03E-07	1.62E-08	9.27E-09
Zinc	7440-66-6	1.52E-02	8.91E-06	6.63E-01	9.46E-06	4.98E-06	2.34E-06	5.02E-06	5.02E-06

Calculated Exposure Point Concentrations for the Solina Receptor Cluster
Normal Operations - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	3.84E-07	4.11E-10	--	8.30E-08	1.81E-10
Acenaphthylene	208-96-8	9.00E-08	2.30E-10	--	1.70E-08	3.49E-10
Anthracene	120-12-7	3.79E-07	1.54E-10	7.88E-11	3.68E-08	4.24E-12
Benz(a)anthracene	56-55-3	2.08E-07	7.63E-11	7.51E-09	4.10E-09	2.75E-10
Benzo(a)fluorene	30777-18-5	4.12E-07	5.96E-10	2.14E-09	1.21E-08	6.37E-10
Benzo(a)pyrene	50-32-8	3.69E-07	3.32E-10	2.35E-08	4.87E-09	2.47E-09
Benzo(b)fluoranthene	205-99-2	4.79E-07	9.50E-11	1.26E-09	5.36E-09	1.21E-10
Benzo(b)fluorene	243-17-4	2.84E-07	4.80E-10	1.46E-09	5.23E-09	1.68E-09
Benzo(e)pyrene	192-97-20	1.00E-06	3.21E-09	2.87E-09	7.37E-09	3.37E-07
Benzo(g,h,i)perylene	191-24-2	5.21E-06	2.58E-09	--	3.53E-08	5.12E-07
Benzo(k)fluoranthene	207-08-9	4.19E-07	2.24E-10	7.11E-09	4.81E-09	1.14E-09
Chrysene	218-01-9	7.73E-07	1.08E-10	9.34E-09	1.52E-08	3.80E-11
Dibenz(a,c)anthracene	215-58-7	6.56E-07	2.48E-09	2.45E-07	3.40E-09	4.51E-08
Dibenz(a,h)anthracene	53-70-3	2.30E-07	1.74E-10	1.11E-08	1.56E-09	4.07E-08
Fluoranthene	206-44-0	3.75E-06	4.59E-09	3.22E-09	1.87E-07	5.97E-10
Fluorene	86-73-7	3.82E-07	1.18E-09	--	5.54E-08	1.60E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.11E-06	6.15E-10	7.26E-08	6.57E-09	2.76E-10
Perylene	198-55-0	2.17E-07	5.39E-10	1.17E-10	2.05E-09	2.51E-07
Phenanthrene	85-01-8	3.86E-06	7.79E-09	9.16E-10	3.75E-07	2.80E-10
Pyrene	129-00-0	1.92E-05	7.81E-09	2.92E-09	1.10E-06	8.22E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	7.17E-05	1.26E-09	--	4.86E-07	2.34E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	5.25E-08	9.51E-13	1.67E-10	2.39E-10	5.12E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	2.20E-10	1.73E-08	--	3.05E-10	4.22E-12
Bromoform	75-25-2	6.12E-10	5.52E-07	--	1.01E-09	2.85E-13
Carbon Tetrachloride	56-23-5	4.39E-11	3.82E-09	--	4.09E-11	1.11E-12
Chloroform	67-66-3	9.84E-11	5.69E-09	--	2.66E-10	2.04E-12
Dichloromethane	75-09-2	1.76E-08	1.77E-06	--	1.21E-07	2.13E-10
O-Terphenyl	84-15-1	1.22E-06	1.51E-09	--	3.04E-08	1.11E-09
Trichlorofluoromethane (FREON 11)	75-69-4	4.54E-09	1.95E-06	--	6.32E-09	8.95E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.73E-07	6.84E-10	--	1.12E-08	2.81E-12
1,2,4-Trichlorobenzene	120-82-1	4.07E-09	6.65E-10	--	7.69E-10	7.34E-13
1,2-Dichlorobenzene	95-50-1	5.48E-08	2.68E-08	--	2.36E-08	4.69E-10
Hexachlorobenzene	118-74-1	7.42E-08	8.18E-10	--	2.48E-09	1.92E-11
Pentachlorobenzene	608-93-5	2.68E-06	2.08E-09	--	1.07E-07	6.68E-11
Pentachlorophenol	87-86-5	1.26E-06	6.71E-07	--	5.51E-08	2.54E-06
Inorganics						
Antimony	7440-36-0	6.37E-04	9.85E-06	2.27E-05	2.03E-05	--
Arsenic	7440-38-2	6.32E-05	1.51E-06	3.47E-06	4.00E-07	--
Barium	7440-39-3	4.48E-04	7.61E-06	1.75E-05	1.44E-05	--
Beryllium	7440-41-7	4.01E-04	5.78E-07	2.75E-06	1.04E-06	--
Boron	7440-42-8	2.48E-03	5.53E-04	1.26E-03	5.59E-03	--
Cadmium	7440-43-9	2.65E-03	2.47E-05	5.79E-05	3.31E-04	--
Chromium (Total)	7440-47-3	2.22E-04	8.12E-06	1.86E-05	1.09E-06	--
Chromium VI	18540-29-9	3.16E-05	1.15E-06	2.65E-06	1.54E-07	--
Cobalt	7440-48-4	1.35E-03	2.08E-05	4.79E-05	1.17E-05	--
Lead	7439-92-1	6.15E-02	8.23E-05	4.13E-04	8.36E-04	--
Mercury - Inorganic	7487-94-7	4.80E-03	7.67E-07	5.57E-06	6.96E-05	1.68E-05
Methyl Mercury	22967-92-6	1.61E-04	3.42E-09	1.57E-06	4.73E-06	4.75E-06
Nickel	7440-02-0	2.89E-02	3.10E-04	7.20E-04	2.69E-04	--
Phosphorus	7723-14-0	8.65E-04	1.66E-04	3.81E-04	3.03E-03	--
Selenium	7782-49-2	1.27E-05	1.73E-06	3.97E-06	2.48E-07	--
Silver	7440-22-4	1.46E-04	1.21E-05	2.77E-05	2.02E-05	--
Thallium	7440-28-0	1.40E-02	1.38E-04	3.22E-04	1.20E-05	--
Tin	7440-31-5	1.52E-02	4.82E-05	1.45E-04	1.38E-04	--
Vanadium	7440-62-2	1.45E-03	1.84E-06	9.62E-06	4.81E-06	--
Zinc	7440-66-6	6.32E-02	7.12E-04	1.65E-03	6.13E-03	--

Calculated Exposure Point Concentrations for the Solina Receptor Cluster
Normal Operations - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	8.17E-08	4.42E-11	1.63E-10	3.00E-10	9.75E-11	1.59E-10	4.53E-10	2.59E-10
Acenaphthylene	208-96-8	5.72E-07	1.03E-11	1.15E-10	8.55E-11	2.55E-11	3.90E-11	1.09E-10	6.21E-11
Anthracene	120-12-7	5.71E-10	3.11E-11	2.44E-10	2.21E-10	6.66E-11	1.30E-10	3.93E-10	2.25E-10
Benz(a)anthracene	56-55-3	1.98E-10	1.15E-10	1.91E-09	4.17E-10	1.27E-10	7.31E-11	1.60E-10	9.14E-11
Benzo(a)fluorene	30777-18-5	1.39E-08	7.39E-11	7.50E-09	5.38E-10	1.54E-10	1.40E-10	3.62E-10	2.07E-10
Benzo(a)pyrene	50-32-8	2.23E-10	3.93E-10	1.66E-08	1.74E-09	5.46E-10	2.01E-10	2.53E-10	1.45E-10
Benzo(b)fluoranthene	205-99-2	5.52E-09	3.08E-11	6.31E-09	1.95E-10	4.96E-11	9.56E-11	3.11E-10	1.78E-10
Benzo(b)fluorene	243-17-4	1.74E-08	9.91E-11	1.35E-08	8.42E-10	2.56E-10	1.29E-10	2.26E-10	1.29E-10
Benzo(e)pyrene	192-97-20	5.33E-08	1.15E-08	4.43E-07	1.08E-07	3.46E-08	9.28E-09	5.59E-10	3.19E-10
Benzo(g,h,i)perylene	191-24-2	2.71E-08	1.69E-08	4.01E-07	1.60E-07	5.11E-08	1.42E-08	2.78E-09	1.59E-09
Benzo(k)fluoranthene	207-08-9	2.55E-10	1.38E-10	1.41E-08	7.27E-10	2.21E-10	1.28E-10	2.74E-10	1.56E-10
Chrysene	218-01-9	7.33E-10	1.47E-10	2.71E-09	5.48E-10	1.54E-10	1.96E-10	5.92E-10	3.38E-10
Dibenz(a,c)anthracene	215-58-7	1.13E-08	3.54E-09	6.17E-07	1.82E-08	5.80E-09	1.53E-09	3.15E-10	1.80E-10
Dibenz(a,h)anthracene	53-70-3	9.32E-11	1.45E-09	2.74E-08	1.30E-08	4.14E-09	1.12E-09	1.23E-10	7.03E-11
Fluoranthene	206-44-0	5.61E-09	2.75E-10	2.30E-08	2.05E-09	5.69E-10	1.12E-09	3.50E-09	2.00E-09
Fluorene	86-73-7	7.24E-10	3.82E-11	9.38E-10	2.95E-10	8.94E-11	1.50E-10	4.32E-10	2.47E-10
Indeno(1,2,3-cd)pyrene	193-39-5	5.86E-10	7.15E-10	1.21E-07	2.00E-09	6.13E-10	2.84E-10	5.58E-10	3.19E-10
Perylene	198-55-0	4.07E-09	9.23E-09	4.79E-08	8.74E-08	2.79E-08	7.40E-09	1.33E-10	7.58E-11
Phenanthrene	85-01-8	7.08E-09	3.29E-10	1.23E-08	2.46E-09	7.32E-10	1.35E-09	4.04E-09	2.31E-09
Pyrene	129-00-0	2.79E-08	1.21E-09	3.11E-08	9.22E-09	2.59E-09	5.76E-09	1.82E-08	1.04E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	6.86E-07	1.33E-07	3.23E-04	1.37E-06	2.76E-07	1.09E-06	3.82E-08	2.18E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	5.40E-10	3.83E-10	**2.96E-08**	2.46E-09	6.84E-10	7.88E-10	2.32E-11	1.32E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	1.95E-08	5.56E-10	2.74E-08	1.12E-08	2.35E-09	1.79E-09	3.06E-11	1.75E-11
Bromoform	75-25-2	7.53E-09	1.56E-08	6.49E-07	3.04E-07	6.40E-08	4.85E-08	8.28E-10	4.73E-10
Carbon Tetrachloride	56-23-5	4.17E-09	1.78E-10	1.21E-08	3.57E-09	7.51E-10	5.70E-10	9.75E-12	5.57E-12
Chloroform	67-66-3	9.90E-09	1.00E-10	2.85E-09	2.00E-09	4.22E-10	3.21E-10	5.52E-12	3.16E-12
Dichloromethane	75-09-2	6.35E-06	1.06E-08	1.77E-07	2.09E-07	4.43E-08	3.38E-08	5.82E-10	3.33E-10
O-Terphenyl	84-15-1	2.73E-08	9.71E-09	2.51E-06	9.92E-08	2.70E-08	3.53E-08	1.02E-09	5.84E-10
Trichlorofluoromethane (FREON 11)	75-69-4	3.69E-07	6.43E-08	3.09E-06	1.27E-06	2.67E-07	2.02E-07	3.45E-09	1.97E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	1.81E-07	1.36E-09	2.16E-07	1.27E-08	3.30E-09	6.00E-09	1.79E-10	1.02E-10
1,2,4-Trichlorobenzene	120-82-1	3.16E-09	1.52E-10	4.20E-08	2.58E-09	5.79E-10	5.26E-10	1.09E-11	6.20E-12
1,2-Dichlorobenzene	95-50-1	1.34E-06	3.23E-09	3.22E-07	5.71E-08	1.27E-08	1.09E-08	2.12E-10	1.21E-10
Hexachlorobenzene	118-74-1	1.89E-08	5.78E-10	8.18E-07	7.36E-09	1.75E-09	2.61E-09	7.43E-11	4.25E-11
Pentachlorobenzene	608-93-5	4.94E-08	1.38E-08	1.54E-06	1.19E-07	3.07E-08	7.48E-08	2.41E-09	1.38E-09
Pentachlorophenol	87-86-5	2.06E-05	1.79E-08	3.77E-04	1.70E-07	5.43E-08	1.45E-08	4.92E-12	2.81E-12
Inorganics									
Antimony	7440-36-0	1.91E-05	1.16E-06	1.97E-03	3.84E-06	5.54E-07	7.43E-07	1.38E-08	7.89E-09
Arsenic	7440-38-2	5.06E-07	2.76E-07	7.57E-05	7.52E-07	3.17E-08	1.17E-07	2.33E-09	1.33E-09
Barium	7440-39-3	6.73E-06	1.23E-07	7.61E-05	3.89E-07	1.29E-06	7.04E-08	1.32E-09	7.53E-10
Beryllium	7440-41-7	6.02E-07	1.31E-07	5.78E-05	4.80E-07	5.22E-10	2.06E-07	6.62E-09	3.79E-09
Boron	7440-42-8	4.96E-03	5.52E-05	--	1.85E-04	6.00E-05	3.76E-05	6.47E-07	3.70E-07
Cadmium	7440-43-9	1.69E-04	5.25E-07	2.97E-02	2.11E-06	1.68E-07	6.16E-07	9.91E-06	2.33E-07
Chromium (Total)	7440-47-3	1.00E-06	3.91E-06	1.62E-03	1.01E-05	3.90E-06	1.33E-06	2.37E-08	1.35E-08
Chromium VI	18540-29-9	1.42E-07	5.57E-07	4.27E-05	1.44E-06	5.55E-07	1.90E-07	3.37E-09	1.93E-09
Cobalt	7440-48-4	9.43E-06	3.84E-05	2.08E-03	1.08E-04	3.12E-05	2.07E-05	4.93E-07	2.82E-07
Lead	7439-92-1	5.53E-04	7.30E-06	8.62E-03	2.91E-05	3.15E-05	1.11E-05	3.25E-07	1.86E-07
Mercury - Inorganic	7487-94-7	1.73E-04	2.03E-06	--	1.60E-05	6.81E-06	6.66E-08	2.74E-06	2.74E-06
Methyl Mercury	22967-92-6	1.59E-05	5.56E-08	2.06E-03	2.01E-07	1.15E-07	4.07E-10	1.48E-08	1.48E-08
Nickel	7440-02-0	2.31E-04	1.82E-04	4.84E-02	5.46E-04	1.24E-04	1.23E-04	3.09E-06	1.76E-06
Phosphorus	7723-14-0	3.03E-03	1.15E-03	--	3.90E-03	1.30E-03	1.12E-03	2.59E-05	1.48E-05
Selenium	7782-49-2	2.80E-07	3.39E-07	2.95E-04	8.44E-07	3.15E-06	5.46E-06	5.02E-07	5.02E-07
Silver	7440-22-4	1.46E-05	3.52E-06	1.07E-03	9.85E-06	9.61E-05	1.28E-06	1.60E-08	9.17E-09
Thallium	7440-28-0	5.61E-06	5.15E-04	--	1.49E-03	9.90E-05	3.50E-04	9.50E-06	5.43E-06
Tin	7440-31-5	9.12E-05	5.72E-04	1.44E-01	2.05E-03	5.58E-04	7.15E-04	2.10E-05	1.20E-05
Vanadium	7440-62-2	4.35E-06	1.11E-06	2.94E-04	4.07E-06	1.02E-06	1.85E-06	6.06E-08	3.46E-08
Zinc	7440-66-6	5.69E-02	8.91E-06	6.63E-01	3.27E-05	1.72E-05	8.52E-06	1.87E-05	1.87E-05

Calculated Exposure Point Concentrations for the Tooley Residential Receptor Cluster

Normal Operations - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	6.86E-07	4.11E-10	--	1.48E-07	1.89E-10
Acenaphthylene	208-96-8	1.61E-07	2.30E-10	--	3.03E-08	3.64E-10
Anthracene	120-12-7	6.77E-07	1.54E-10	1.35E-10	6.57E-08	4.43E-12
Benz(a)anthracene	56-55-3	3.72E-07	7.63E-11	1.29E-08	7.33E-09	2.87E-10
Benzo(a)fluorene	30777-18-5	7.36E-07	5.96E-10	3.67E-09	2.16E-08	6.64E-10
Benzo(a)pyrene	50-32-8	6.58E-07	3.32E-10	4.04E-08	8.69E-09	2.58E-09
Benzo(b)fluoranthene	205-99-2	8.55E-07	9.50E-11	2.16E-09	9.58E-09	1.27E-10
Benzo(b)fluorene	243-17-4	5.08E-07	4.80E-10	2.51E-09	9.34E-09	1.75E-09
Benzo(e)pyrene	192-97-20	1.79E-06	3.21E-09	4.92E-09	1.32E-08	3.52E-07
Benzo(g,h,i)perylene	191-24-2	9.29E-06	2.58E-09	--	6.30E-08	5.34E-07
Benzo(k)fluoranthene	207-08-9	7.46E-07	2.24E-10	1.22E-08	8.58E-09	1.19E-09
Chrysene	218-01-9	1.38E-06	1.08E-10	1.60E-08	2.72E-08	3.97E-11
Dibenz(a,c)anthracene	215-58-7	1.17E-06	2.48E-09	4.21E-07	6.08E-09	4.71E-08
Dibenz(a,h)anthracene	53-70-3	4.11E-07	1.74E-10	1.90E-08	2.78E-09	4.24E-08
Fluoranthene	206-44-0	6.70E-06	4.59E-09	5.53E-09	3.34E-07	6.23E-10
Fluorene	86-73-7	6.83E-07	1.18E-09	--	9.90E-08	1.66E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.98E-06	6.15E-10	1.25E-07	1.17E-08	2.88E-10
Perylene	198-55-0	3.87E-07	5.39E-10	2.01E-10	3.66E-09	2.62E-07
Phenanthrene	85-01-8	6.90E-06	7.79E-09	1.57E-09	6.69E-07	2.92E-10
Pyrene	129-00-0	3.43E-05	7.81E-09	5.01E-09	1.95E-06	8.57E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	1.28E-04	1.26E-09	--	8.65E-07	2.44E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	9.68E-08	9.51E-13	3.00E-10	4.40E-10	5.34E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	3.92E-10	1.73E-08	--	5.46E-10	4.41E-12
Bromoform	75-25-2	1.09E-09	5.52E-07	--	1.80E-09	2.97E-13
Carbon Tetrachloride	56-23-5	7.83E-11	3.82E-09	--	7.30E-11	1.16E-12
Chloroform	67-66-3	1.76E-10	5.69E-09	--	4.74E-10	2.13E-12
Dichloromethane	75-09-2	3.15E-08	1.77E-06	--	2.16E-07	2.22E-10
O-Terphenyl	84-15-1	2.17E-06	1.51E-09	--	5.42E-08	1.16E-09
Trichlorofluoromethane (FREON 11)	75-69-4	8.12E-09	1.95E-06	--	1.13E-08	9.34E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	3.08E-07	6.84E-10	--	2.01E-08	2.93E-12
1,2,4-Trichlorobenzene	120-82-1	7.27E-09	6.65E-10	--	1.37E-09	7.66E-13
1,2-Dichlorobenzene	95-50-1	9.78E-08	2.68E-08	--	4.22E-08	4.90E-10
Hexachlorobenzene	118-74-1	1.32E-07	8.18E-10	--	4.44E-09	2.00E-11
Pentachlorobenzene	608-93-5	4.79E-06	2.08E-09	--	1.91E-07	6.97E-11
Pentachlorophenol	87-86-5	2.25E-06	6.71E-07	--	9.85E-08	2.65E-06
Inorganics						
Antimony	7440-36-0	1.18E-03	9.85E-06	4.08E-05	3.76E-05	--
Arsenic	7440-38-2	1.17E-04	1.51E-06	6.25E-06	7.40E-07	--
Barium	7440-39-3	8.29E-04	7.61E-06	3.15E-05	2.67E-05	--
Beryllium	7440-41-7	7.41E-04	5.78E-07	4.96E-06	1.91E-06	--
Boron	7440-42-8	4.59E-03	5.53E-04	2.28E-03	1.03E-02	--
Cadmium	7440-43-9	4.89E-03	2.47E-05	1.04E-04	6.11E-04	--
Chromium (Total)	7440-47-3	4.11E-04	8.12E-06	3.35E-05	2.01E-06	--
Chromium VI	18540-29-9	5.85E-05	1.15E-06	4.76E-06	2.86E-07	--
Cobalt	7440-48-4	2.49E-03	2.08E-05	8.62E-05	2.15E-05	--
Lead	7439-92-1	1.14E-01	8.23E-05	7.44E-04	1.54E-03	--
Mercury - Inorganic	7487-94-7	7.67E-03	7.67E-07	1.00E-05	1.11E-04	1.76E-05
Methyl Mercury	22967-92-6	2.97E-04	3.42E-09	2.83E-06	8.74E-06	4.96E-06
Nickel	7440-02-0	5.33E-02	3.10E-04	1.30E-03	4.97E-04	--
Phosphorus	7723-14-0	1.60E-03	1.66E-04	6.85E-04	5.60E-03	--
Selenium	7782-49-2	2.36E-05	1.73E-06	7.14E-06	4.60E-07	--
Silver	7440-22-4	2.70E-04	1.21E-05	4.99E-05	3.73E-05	--
Thallium	7440-28-0	2.59E-02	1.38E-04	5.80E-04	2.22E-05	--
Tin	7440-31-5	2.81E-02	4.82E-05	2.62E-04	2.54E-04	--
Vanadium	7440-62-2	2.68E-03	1.84E-06	1.73E-05	8.89E-06	--
Zinc	7440-66-6	1.17E-01	7.12E-04	2.97E-03	1.13E-02	--

Calculated Exposure Point Concentrations for the Tooley Residential Receptor Cluster
Normal Operations - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.46E-07	4.42E-11	1.63E-10	5.16E-10	1.70E-10	2.81E-10	8.04E-10	4.59E-10
Acenaphthylene	208-96-8	1.02E-06	1.03E-11	1.15E-10	1.24E-10	3.94E-11	6.51E-11	1.86E-10	1.07E-10
Anthracene	120-12-7	1.02E-09	3.11E-11	2.44E-10	3.84E-10	1.16E-10	2.30E-10	6.99E-10	3.99E-10
Benz(a)anthracene	56-55-3	3.53E-10	1.15E-10	1.91E-09	6.41E-10	1.95E-10	1.22E-10	2.84E-10	1.62E-10
Benzo(a)fluorene	30777-18-5	2.48E-08	7.39E-11	7.50E-09	6.67E-10	1.93E-10	2.19E-10	6.21E-10	3.55E-10
Benzo(a)pyrene	50-32-8	3.99E-10	3.93E-10	1.66E-08	2.36E-09	7.37E-10	2.96E-10	4.50E-10	2.57E-10
Benzo(b)fluoranthene	205-99-2	9.85E-09	3.08E-11	6.31E-09	3.07E-10	7.62E-11	1.67E-10	5.53E-10	3.16E-10
Benzo(b)fluorene	243-17-4	3.11E-08	9.91E-11	1.35E-08	9.36E-10	2.84E-10	1.78E-10	3.85E-10	2.20E-10
Benzo(e)pyrene	192-97-20	9.52E-08	1.15E-08	4.43E-07	1.13E-07	3.62E-08	9.80E-09	9.91E-10	5.66E-10
Benzo(g,h,i)perylene	191-24-2	4.84E-08	1.69E-08	4.01E-07	1.68E-07	5.34E-08	1.54E-08	4.96E-09	2.83E-09
Benzo(k)fluoranthene	207-08-9	4.54E-10	1.38E-10	1.41E-08	9.70E-10	2.91E-10	2.01E-10	4.87E-10	2.79E-10
Chrysene	218-01-9	1.31E-09	1.47E-10	2.71E-09	9.39E-10	2.63E-10	3.46E-10	1.05E-09	6.02E-10
Dibenz(a,c)anthracene	215-58-7	2.01E-08	3.54E-09	6.17E-07	2.28E-08	7.25E-09	1.92E-09	5.55E-10	3.17E-10
Dibenz(a,h)anthracene	53-70-3	1.66E-10	1.45E-09	2.74E-08	1.38E-08	4.39E-09	1.21E-09	2.19E-10	1.25E-10
Fluoranthene	206-44-0	1.00E-08	2.75E-10	2.30E-08	3.31E-09	9.23E-10	1.96E-09	6.20E-09	3.55E-09
Fluorene	86-73-7	1.29E-09	3.82E-11	9.38E-10	4.62E-10	1.46E-10	2.57E-10	7.55E-10	4.31E-10
Indeno(1,2,3-cd)pyrene	193-39-5	1.05E-09	7.15E-10	1.21E-07	3.38E-09	1.04E-09	4.92E-10	9.94E-10	5.68E-10
Perylene	198-55-0	7.27E-09	9.23E-09	4.79E-08	9.13E-08	2.91E-08	7.76E-09	2.36E-10	1.35E-10
Phenanthrene	85-01-8	1.26E-08	3.29E-10	1.23E-08	4.03E-09	1.22E-09	2.35E-09	7.13E-09	4.07E-09
Pyrene	129-00-0	4.97E-08	1.21E-09	3.11E-08	1.60E-08	4.48E-09	1.02E-08	3.24E-08	1.85E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.22E-06	1.33E-07	3.23E-04	2.37E-06	4.72E-07	1.93E-06	6.80E-08	3.88E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	9.95E-10	3.83E-10	**2.96E-08**	3.44E-09	9.12E-10	1.36E-09	4.27E-11	2.44E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	3.48E-08	5.56E-10	2.74E-08	8.48E-09	1.79E-09	1.37E-09	2.35E-11	1.34E-11
Bromoform	75-25-2	1.34E-08	1.56E-08	6.49E-07	2.38E-07	5.01E-08	3.80E-08	6.48E-10	3.70E-10
Carbon Tetrachloride	56-23-5	7.45E-09	1.78E-10	1.21E-08	2.71E-09	5.72E-10	4.35E-10	7.47E-12	4.27E-12
Chloroform	67-66-3	1.77E-08	1.00E-10	2.85E-09	1.53E-09	3.24E-10	2.49E-10	4.32E-12	2.47E-12
Dichloromethane	75-09-2	1.13E-05	1.06E-08	1.77E-07	1.61E-07	3.43E-08	2.65E-08	4.61E-10	2.64E-10
O-Terphenyl	84-15-1	4.88E-08	9.71E-09	2.51E-06	1.23E-07	3.32E-08	5.70E-08	1.77E-09	1.01E-09
Trichlorofluoromethane (FREON 11)	75-69-4	6.60E-07	6.43E-08	3.09E-06	9.82E-07	2.07E-07	1.57E-07	2.68E-09	1.53E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	3.23E-07	1.36E-09	2.16E-07	1.85E-08	5.00E-09	1.01E-08	3.08E-10	1.76E-10
1,2,4-Trichlorobenzene	120-82-1	5.64E-09	1.52E-10	4.20E-08	2.16E-09	5.17E-10	5.48E-10	1.27E-11	7.28E-12
1,2-Dichlorobenzene	95-50-1	2.40E-06	3.23E-09	3.22E-07	4.61E-08	1.09E-08	1.05E-08	2.26E-10	1.29E-10
Hexachlorobenzene	118-74-1	3.37E-08	5.78E-10	8.18E-07	8.21E-09	2.02E-09	3.92E-09	1.21E-10	6.91E-11
Pentachlorobenzene	608-93-5	8.82E-08	1.38E-08	1.54E-06	1.97E-07	5.15E-08	1.31E-07	4.28E-09	2.44E-09
Pentachlorophenol	87-86-5	3.69E-05	1.79E-08	3.77E-04	1.77E-07	5.65E-08	1.51E-08	8.03E-12	4.59E-12
Inorganics									
Antimony	7440-36-0	3.53E-05	1.16E-06	1.97E-03	6.64E-06	9.72E-07	1.31E-06	2.45E-08	1.40E-08
Arsenic	7440-38-2	9.35E-07	2.76E-07	7.57E-05	1.25E-06	5.39E-08	1.96E-07	4.00E-09	2.28E-09
Barium	7440-39-3	1.24E-05	1.23E-07	7.61E-05	6.65E-07	2.25E-06	1.23E-07	2.32E-09	1.32E-09
Beryllium	7440-41-7	1.11E-06	1.31E-07	5.78E-05	8.59E-07	9.34E-10	3.77E-07	1.22E-08	6.97E-09
Boron	7440-42-8	9.17E-03	5.52E-05	--	3.22E-04	1.06E-04	6.66E-05	1.15E-06	6.58E-07
Cadmium	7440-43-9	3.13E-04	5.25E-07	2.97E-02	3.76E-06	3.03E-07	1.11E-06	1.80E-05	4.22E-07
Chromium (Total)	7440-47-3	1.85E-06	3.91E-06	1.62E-03	1.66E-05	6.58E-06	2.20E-06	3.97E-08	2.27E-08
Chromium VI	18540-29-9	2.63E-07	5.57E-07	4.27E-05	2.36E-06	9.36E-07	3.13E-07	5.65E-09	3.23E-09
Cobalt	7440-48-4	1.74E-05	3.84E-05	2.08E-03	1.79E-04	5.32E-05	3.56E-05	8.68E-07	4.96E-07
Lead	7439-92-1	1.02E-03	7.30E-06	8.62E-03	5.27E-05	5.71E-05	2.03E-05	5.98E-07	3.42E-07
Mercury - Inorganic	7487-94-7	2.76E-04	2.03E-06	--	2.54E-05	1.08E-05	1.06E-07	4.38E-06	4.38E-06
Methyl Mercury	22967-92-6	2.94E-05	5.56E-08	2.06E-03	3.35E-07	1.88E-07	7.36E-10	2.74E-08	2.74E-08
Nickel	7440-02-0	4.27E-04	1.82E-04	4.84E-02	9.21E-04	2.13E-04	2.14E-04	5.51E-06	3.15E-06
Phosphorus	7723-14-0	5.60E-03	1.15E-03	--	6.79E-03	2.31E-03	2.01E-03	4.70E-05	2.69E-05
Selenium	7782-49-2	5.18E-07	3.39E-07	2.95E-04	1.38E-06	5.30E-06	8.98E-06	8.54E-07	8.54E-07
Silver	7440-22-4	2.70E-05	3.52E-06	1.07E-03	1.65E-05	1.65E-04	2.12E-06	2.70E-08	1.54E-08
Thallium	7440-28-0	1.04E-05	5.15E-04	--	2.49E-03	1.69E-04	6.10E-04	1.70E-05	9.71E-06
Tin	7440-31-5	1.68E-04	5.72E-04	1.44E-01	3.61E-03	9.89E-04	1.30E-03	3.85E-05	2.20E-05
Vanadium	7440-62-2	8.04E-06	1.11E-06	2.94E-04	7.30E-06	1.83E-06	3.39E-06	1.12E-07	6.38E-08
Zinc	7440-66-6	1.05E-01	8.91E-06	6.63E-01	5.74E-05	3.06E-05	1.52E-05	3.37E-05	3.37E-05

Calculated Exposure Point Concentrations for the Farmer Receptor Cluster

Normal Operations - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	9.26E-07	4.11E-10	--	2.00E-07	2.26E-10
Acenaphthylene	208-96-8	2.17E-07	2.30E-10	--	4.09E-08	4.35E-10
Anthracene	120-12-7	9.13E-07	1.54E-10	1.72E-10	8.87E-08	5.29E-12
Benz(a)anthracene	56-55-3	5.02E-07	7.63E-11	1.64E-08	9.88E-09	3.43E-10
Benzo(a)fluorene	30777-18-5	9.93E-07	5.96E-10	4.68E-09	2.91E-08	7.94E-10
Benzo(a)pyrene	50-32-8	8.88E-07	3.32E-10	5.14E-08	1.17E-08	3.09E-09
Benzo(b)fluoranthene	205-99-2	1.15E-06	9.50E-11	2.76E-09	1.29E-08	1.52E-10
Benzo(b)fluorene	243-17-4	6.86E-07	4.80E-10	3.20E-09	1.26E-08	2.09E-09
Benzo(e)pyrene	192-97-20	2.42E-06	3.21E-09	6.27E-09	1.78E-08	4.21E-07
Benzo(g,h,i)perylene	191-24-2	1.25E-05	2.58E-09	--	8.49E-08	6.38E-07
Benzo(k)fluoranthene	207-08-9	1.01E-06	2.24E-10	1.56E-08	1.16E-08	1.42E-09
Chrysene	218-01-9	1.86E-06	1.08E-10	2.04E-08	3.67E-08	4.75E-11
Dibenz(a,c)anthracene	215-58-7	1.58E-06	2.48E-09	5.36E-07	8.20E-09	5.63E-08
Dibenz(a,h)anthracene	53-70-3	5.54E-07	1.74E-10	2.42E-08	3.76E-09	5.07E-08
Fluoranthene	206-44-0	9.04E-06	4.59E-09	7.05E-09	4.51E-07	7.45E-10
Fluorene	86-73-7	9.21E-07	1.18E-09	--	1.34E-07	1.99E-11
Indeno(1,2,3-cd)pyrene	193-39-5	2.67E-06	6.15E-10	1.59E-07	1.58E-08	3.44E-10
Perylene	198-55-0	5.22E-07	5.39E-10	2.56E-10	4.93E-09	3.13E-07
Phenanthrene	85-01-8	9.30E-06	7.79E-09	2.00E-09	9.03E-07	3.49E-10
Pyrene	129-00-0	4.62E-05	7.81E-09	6.38E-09	2.63E-06	1.03E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	1.72E-04	1.26E-09	--	1.17E-06	2.92E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	1.42E-07	9.51E-13	4.37E-10	6.48E-10	6.38E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	5.29E-10	1.73E-08	--	7.36E-10	5.27E-12
Bromoform	75-25-2	1.47E-09	5.52E-07	--	2.43E-09	3.55E-13
Carbon Tetrachloride	56-23-5	1.06E-10	3.82E-09	--	9.85E-11	1.38E-12
Chloroform	67-66-3	2.37E-10	5.69E-09	--	6.40E-10	2.54E-12
Dichloromethane	75-09-2	4.25E-08	1.77E-06	--	2.92E-07	2.65E-10
O-Terphenyl	84-15-1	2.93E-06	1.51E-09	--	7.32E-08	1.39E-09
Trichlorofluoromethane (FREON 11)	75-69-4	1.10E-08	1.95E-06	--	1.52E-08	1.12E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	4.16E-07	6.84E-10	--	2.71E-08	3.50E-12
1,2,4-Trichlorobenzene	120-82-1	9.81E-09	6.65E-10	--	1.85E-09	9.16E-13
1,2-Dichlorobenzene	95-50-1	1.32E-07	2.68E-08	--	5.69E-08	5.85E-10
Hexachlorobenzene	118-74-1	1.79E-07	8.18E-10	--	5.99E-09	2.39E-11
Pentachlorobenzene	608-93-5	6.47E-06	2.08E-09	--	2.57E-07	8.34E-11
Pentachlorophenol	87-86-5	3.04E-06	6.71E-07	--	1.33E-07	3.17E-06
Inorganics						
Antimony	7440-36-0	1.73E-03	9.85E-06	5.94E-05	5.52E-05	--
Arsenic	7440-38-2	1.72E-04	1.51E-06	9.10E-06	1.09E-06	--
Barium	7440-39-3	1.22E-03	7.61E-06	4.58E-05	3.93E-05	--
Beryllium	7440-41-7	1.09E-03	5.78E-07	7.22E-06	2.81E-06	--
Boron	7440-42-8	6.74E-03	5.53E-04	3.32E-03	1.52E-02	--
Cadmium	7440-43-9	7.19E-03	2.47E-05	1.52E-04	8.99E-04	--
Chromium (Total)	7440-47-3	6.05E-04	8.12E-06	4.88E-05	2.95E-06	--
Chromium VI	18540-29-9	8.60E-05	1.15E-06	6.93E-06	4.20E-07	--
Cobalt	7440-48-4	3.66E-03	2.08E-05	1.26E-04	3.17E-05	--
Lead	7439-92-1	1.67E-01	8.23E-05	1.08E-03	2.27E-03	--
Mercury - Inorganic	7487-94-7	8.71E-03	7.67E-07	1.46E-05	1.26E-04	2.10E-05
Methyl Mercury	22967-92-6	4.37E-04	3.42E-09	4.12E-06	1.28E-05	5.93E-06
Nickel	7440-02-0	7.84E-02	3.10E-04	1.89E-03	7.30E-04	--
Phosphorus	7723-14-0	2.35E-03	1.66E-04	9.98E-04	8.23E-03	--
Selenium	7782-49-2	3.47E-05	1.73E-06	1.04E-05	6.76E-07	--
Silver	7440-22-4	3.97E-04	1.21E-05	7.26E-05	5.48E-05	--
Thallium	7440-28-0	3.81E-02	1.38E-04	8.45E-04	3.27E-05	--
Tin	7440-31-5	4.13E-02	4.82E-05	3.81E-04	3.74E-04	--
Vanadium	7440-62-2	3.94E-03	1.84E-06	2.52E-05	1.31E-05	--
Zinc	7440-66-6	1.72E-01	7.12E-04	4.32E-03	1.67E-02	--

Calculated Exposure Point Concentrations for the Farmer Receptor Cluster
Normal Operations - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.97E-07	4.42E-11	1.63E-10	6.96E-10	2.29E-10	3.79E-10	1.08E-09	6.20E-10
Acenaphthylene	208-96-8	1.38E-06	1.03E-11	1.15E-10	1.99E-10	5.29E-11	8.77E-11	2.51E-10	1.44E-10
Anthracene	120-12-7	1.38E-09	3.11E-11	2.44E-10	5.16E-10	1.57E-10	3.10E-10	9.43E-10	5.39E-10
Benz(a)anthracene	56-55-3	4.76E-10	1.15E-10	1.91E-09	7.33E-10	2.20E-10	1.54E-10	3.83E-10	2.19E-10
Benzo(a)fluorene	30777-18-5	3.35E-08	7.39E-11	7.50E-09	7.85E-10	2.03E-10	2.75E-10	8.38E-10	4.79E-10
Benzo(a)pyrene	50-32-8	5.38E-10	3.93E-10	1.66E-08	2.34E-09	7.31E-10	3.22E-10	6.07E-10	3.47E-10
Benzo(b)fluoranthene	205-99-2	1.33E-08	3.08E-11	6.31E-09	3.69E-10	8.84E-11	2.21E-10	7.46E-10	4.26E-10
Benzo(b)fluorene	243-17-4	4.19E-08	9.91E-11	1.35E-08	1.08E-09	3.26E-10	1.88E-10	5.19E-10	2.97E-10
Benzo(e)pyrene	192-97-20	1.28E-07	1.15E-08	4.43E-07	1.35E-07	4.32E-08	1.16E-08	1.34E-09	7.64E-10
Benzo(g,h,i)perylene	191-24-2	6.53E-08	1.69E-08	4.01E-07	2.00E-07	6.37E-08	1.78E-08	6.69E-09	3.82E-09
Benzo(k)fluoranthene	207-08-9	6.12E-10	1.38E-10	1.41E-08	9.66E-10	2.92E-10	2.38E-10	6.57E-10	3.76E-10
Chrysene	218-01-9	1.76E-09	1.47E-10	2.71E-09	1.21E-09	3.39E-10	4.63E-10	1.42E-09	8.12E-10
Dibenz(a,c)anthracene	215-58-7	2.71E-08	3.54E-09	6.17E-07	2.36E-08	7.50E-09	1.98E-09	7.49E-10	4.28E-10
Dibenz(a,h)anthracene	53-70-3	2.24E-10	1.45E-09	2.74E-08	1.62E-08	5.18E-09	1.41E-09	2.96E-10	1.69E-10
Fluoranthene	206-44-0	1.35E-08	2.75E-10	2.30E-08	4.24E-09	1.17E-09	2.63E-09	8.37E-09	4.78E-09
Fluorene	86-73-7	1.74E-09	3.82E-11	9.38E-10	6.19E-10	1.95E-10	3.47E-10	1.02E-09	5.82E-10
Indeno(1,2,3-cd)pyrene	193-39-5	1.41E-09	7.15E-10	1.21E-07	4.27E-09	1.30E-09	6.42E-10	1.34E-09	7.66E-10
Perylene	198-55-0	9.80E-09	9.23E-09	4.79E-08	1.09E-07	3.48E-08	9.24E-09	3.18E-10	1.82E-10
Phenanthrene	85-01-8	1.70E-08	3.29E-10	1.23E-08	5.35E-09	1.62E-09	3.17E-09	9.62E-09	5.50E-09
Pyrene	129-00-0	6.70E-08	1.21E-09	3.11E-08	2.12E-08	5.95E-09	1.38E-08	4.37E-08	2.50E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.65E-06	1.33E-07	3.23E-04	3.13E-06	6.16E-07	2.60E-06	9.17E-08	5.24E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	1.46E-09	3.83E-10	**2.96E-08**	3.65E-09	8.97E-10	1.88E-09	6.28E-11	3.59E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	4.69E-08	5.56E-10	2.74E-08	1.79E-07	3.77E-08	2.85E-08	4.87E-10	2.78E-10
Bromoform	75-25-2	1.81E-08	1.56E-08	6.49E-07	4.93E-06	1.04E-06	7.87E-07	1.34E-08	7.67E-09
Carbon Tetrachloride	56-23-5	1.01E-08	1.78E-10	1.21E-08	5.67E-08	1.19E-08	9.05E-09	1.54E-10	8.82E-11
Chloroform	67-66-3	2.39E-08	1.00E-10	2.85E-09	3.44E-08	7.24E-09	5.49E-09	9.37E-11	5.35E-11
Dichloromethane	75-09-2	1.53E-05	1.06E-08	1.77E-07	3.78E-06	7.97E-07	6.04E-07	1.03E-08	5.89E-09
O-Terphenyl	84-15-1	6.58E-08	9.71E-09	2.51E-06	1.77E-07	4.22E-08	7.33E-08	2.39E-09	1.36E-09
Trichlorofluoromethane (FREON 11)	75-69-4	8.90E-07	6.43E-08	3.09E-06	2.04E-05	4.30E-06	3.26E-06	5.56E-08	3.17E-08
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	4.36E-07	1.36E-09	2.16E-07	5.89E-08	1.31E-08	1.38E-08	4.16E-10	2.38E-10
1,2,4-Trichlorobenzene	120-82-1	7.60E-09	1.52E-10	4.20E-08	3.61E-08	7.63E-09	5.88E-09	1.02E-10	5.85E-11
1,2-Dichlorobenzene	95-50-1	3.24E-06	3.23E-09	3.22E-07	8.46E-07	1.79E-07	1.37E-07	2.37E-09	1.35E-09
Hexachlorobenzene	118-74-1	4.55E-08	5.78E-10	8.18E-07	5.85E-08	1.25E-08	1.09E-08	2.20E-10	1.26E-10
Pentachlorobenzene	608-93-5	1.19E-07	1.38E-08	1.54E-06	2.67E-07	6.87E-08	1.77E-07	5.77E-09	3.30E-09
Pentachlorophenol	87-86-5	4.98E-05	1.79E-08	3.77E-04	2.13E-07	6.78E-08	1.81E-08	6.83E-12	3.90E-12
Inorganics									
Antimony	7440-36-0	5.20E-05	1.16E-06	1.97E-03	9.72E-06	1.42E-06	1.92E-06	3.61E-08	2.06E-08
Arsenic	7440-38-2	1.37E-06	2.76E-07	7.57E-05	1.82E-06	7.86E-08	2.88E-07	5.88E-09	3.36E-09
Barium	7440-39-3	1.83E-05	1.23E-07	7.61E-05	9.72E-07	3.29E-06	1.80E-07	3.41E-09	1.95E-09
Beryllium	7440-41-7	1.64E-06	1.31E-07	5.78E-05	1.26E-06	1.37E-09	5.54E-07	1.79E-08	1.02E-08
Boron	7440-42-8	1.35E-02	5.52E-05	--	4.71E-04	1.55E-04	9.77E-05	1.69E-06	9.67E-07
Cadmium	7440-43-9	4.60E-04	5.25E-07	2.97E-02	5.51E-06	4.44E-07	1.63E-06	2.64E-05	6.21E-07
Chromium (Total)	7440-47-3	2.72E-06	3.91E-06	1.62E-03	2.42E-05	9.59E-06	3.18E-06	5.76E-08	3.29E-08
Chromium VI	18540-29-9	3.87E-07	5.57E-07	4.27E-05	3.44E-06	1.36E-06	4.52E-07	8.20E-09	4.68E-09
Cobalt	7440-48-4	2.56E-05	3.84E-05	2.08E-03	2.61E-04	7.76E-05	5.21E-05	1.28E-06	7.30E-07
Lead	7439-92-1	1.50E-03	7.30E-06	8.62E-03	7.72E-05	8.36E-05	2.99E-05	8.79E-07	5.02E-07
Mercury - Inorganic	7487-94-7	3.14E-04	2.03E-06	--	2.96E-05	1.28E-05	1.21E-07	4.98E-06	4.98E-06
Methyl Mercury	22967-92-6	4.33E-05	5.56E-08	2.06E-03	4.52E-07	2.50E-07	1.06E-09	4.03E-08	4.03E-08
Nickel	7440-02-0	6.27E-04	1.82E-04	4.84E-02	1.35E-03	3.11E-04	3.14E-04	8.11E-06	4.63E-06
Phosphorus	7723-14-0	8.23E-03	1.15E-03	--	9.94E-03	3.38E-03	2.96E-03	6.91E-05	3.95E-05
Selenium	7782-49-2	7.62E-07	3.39E-07	2.95E-04	2.01E-06	7.72E-06	1.21E-05	9.63E-07	9.63E-07
Silver	7440-22-4	3.97E-05	3.52E-06	1.07E-03	2.41E-05	2.41E-04	3.10E-06	3.81E-08	2.18E-08
Thallium	7440-28-0	1.52E-05	5.15E-04	--	3.63E-03	2.46E-04	8.95E-04	2.50E-05	1.43E-05
Tin	7440-31-5	2.48E-04	5.72E-04	1.44E-01	5.29E-03	1.45E-03	1.90E-03	5.66E-05	3.23E-05
Vanadium	7440-62-2	1.18E-05	1.11E-06	2.94E-04	1.07E-05	2.68E-06	4.98E-06	1.64E-07	9.38E-08
Zinc	7440-66-6	1.55E-01	8.91E-06	6.63E-01	8.41E-05	4.48E-05	2.24E-05	4.96E-05	4.96E-05

Calculated Exposure Point Concentrations for the Daycare Receptor Cluster

Normal Operations - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.59E-07	4.11E-10	--	3.44E-08	1.16E-10
Acenaphthylene	208-96-8	3.73E-08	2.30E-10	--	7.04E-09	2.23E-10
Anthracene	120-12-7	1.57E-07	1.54E-10	3.51E-11	1.53E-08	2.72E-12
Benz(a)anthracene	56-55-3	8.63E-08	7.63E-11	3.34E-09	1.70E-09	1.76E-10
Benzo(a)fluorene	30777-18-5	1.71E-07	5.96E-10	9.53E-10	5.00E-09	4.08E-10
Benzo(a)pyrene	50-32-8	1.53E-07	3.32E-10	1.05E-08	2.02E-09	1.58E-09
Benzo(b)fluoranthene	205-99-2	1.98E-07	9.50E-11	5.61E-10	2.22E-09	7.78E-11
Benzo(b)fluorene	243-17-4	1.18E-07	4.80E-10	6.52E-10	2.17E-09	1.07E-09
Benzo(e)pyrene	192-97-20	4.16E-07	3.21E-09	1.28E-09	3.05E-09	2.16E-07
Benzo(g,h,i)perylene	191-24-2	2.16E-06	2.58E-09	--	1.46E-08	3.28E-07
Benzo(k)fluoranthene	207-08-9	1.73E-07	2.24E-10	3.16E-09	1.99E-09	7.32E-10
Chrysene	218-01-9	3.20E-07	1.08E-10	4.16E-09	6.31E-09	2.44E-11
Dibenz(a,c)anthracene	215-58-7	2.72E-07	2.48E-09	1.09E-07	1.41E-09	2.89E-08
Dibenz(a,h)anthracene	53-70-3	9.54E-08	1.74E-10	4.93E-09	6.46E-10	2.61E-08
Fluoranthene	206-44-0	1.55E-06	4.59E-09	1.43E-09	7.76E-08	3.82E-10
Fluorene	86-73-7	1.58E-07	1.18E-09	--	2.30E-08	1.02E-11
Indeno(1,2,3-cd)pyrene	193-39-5	4.59E-07	6.15E-10	3.23E-08	2.72E-09	1.77E-10
Perylene	198-55-0	8.98E-08	5.39E-10	5.21E-11	8.49E-10	1.61E-07
Phenanthrene	85-01-8	1.60E-06	7.79E-09	4.08E-10	1.55E-07	1.79E-10
Pyrene	129-00-0	7.96E-06	7.81E-09	1.30E-09	4.54E-07	5.26E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	2.97E-05	1.26E-09	--	2.01E-07	1.50E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	3.48E-08	9.51E-13	1.44E-10	1.59E-10	3.28E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	9.10E-11	1.73E-08	--	1.27E-10	2.71E-12
Bromoform	75-25-2	2.54E-10	5.52E-07	--	4.19E-10	1.83E-13
Carbon Tetrachloride	56-23-5	1.82E-11	3.82E-09	--	1.69E-11	7.11E-13
Chloroform	67-66-3	4.08E-11	5.69E-09	--	1.10E-10	1.31E-12
Dichloromethane	75-09-2	7.31E-09	1.77E-06	--	5.01E-08	1.36E-10
O-Terphenyl	84-15-1	5.04E-07	1.51E-09	--	1.26E-08	7.11E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.88E-09	1.95E-06	--	2.62E-09	5.73E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	7.16E-08	6.84E-10	--	4.66E-09	1.80E-12
1,2,4-Trichlorobenzene	120-82-1	1.69E-09	6.65E-10	--	3.19E-10	4.70E-13
1,2-Dichlorobenzene	95-50-1	2.27E-08	2.68E-08	--	9.78E-09	3.01E-10
Hexachlorobenzene	118-74-1	3.07E-08	8.18E-10	--	1.03E-09	1.23E-11
Pentachlorobenzene	608-93-5	1.11E-06	2.08E-09	--	4.43E-08	4.28E-11
Pentachlorophenol	87-86-5	5.23E-07	6.71E-07	--	2.29E-08	1.63E-06
Inorganics						
Antimony	7440-36-0	4.22E-04	9.85E-06	1.96E-05	1.35E-05	--
Arsenic	7440-38-2	4.19E-05	1.51E-06	3.01E-06	2.65E-07	--
Barium	7440-39-3	2.97E-04	7.61E-06	1.51E-05	9.57E-06	--
Beryllium	7440-41-7	2.66E-04	5.78E-07	2.38E-06	6.86E-07	--
Boron	7440-42-8	1.64E-03	5.53E-04	1.09E-03	3.70E-03	--
Cadmium	7440-43-9	1.75E-03	2.47E-05	5.01E-05	2.19E-04	--
Chromium (Total)	7440-47-3	1.47E-04	8.12E-06	1.61E-05	7.19E-07	--
Chromium VI	18540-29-9	2.10E-05	1.15E-06	2.29E-06	1.02E-07	--
Cobalt	7440-48-4	8.92E-04	2.08E-05	4.15E-05	7.72E-06	--
Lead	7439-92-1	4.08E-02	8.23E-05	3.58E-04	5.54E-04	--
Mercury - Inorganic	7487-94-7	2.83E-03	7.67E-07	4.82E-06	4.10E-05	1.08E-05
Methyl Mercury	22967-92-6	1.07E-04	3.42E-09	1.36E-06	3.14E-06	3.04E-06
Nickel	7440-02-0	1.91E-02	3.10E-04	6.23E-04	1.78E-04	--
Phosphorus	7723-14-0	5.73E-04	1.66E-04	3.30E-04	2.01E-03	--
Selenium	7782-49-2	8.44E-06	1.73E-06	3.44E-06	1.65E-07	--
Silver	7440-22-4	9.68E-05	1.21E-05	2.40E-05	1.34E-05	--
Thallium	7440-28-0	9.29E-03	1.38E-04	2.79E-04	7.97E-06	--
Tin	7440-31-5	1.01E-02	4.82E-05	1.26E-04	9.12E-05	--
Vanadium	7440-62-2	9.62E-04	1.84E-06	8.32E-06	3.19E-06	--
Zinc	7440-66-6	4.19E-02	7.12E-04	1.43E-03	4.06E-03	--

Calculated Exposure Point Concentrations for the Daycare Receptor Cluster
Normal Operations - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	3.39E-08	4.42E-11	1.63E-10	1.36E-10	4.26E-11	6.69E-11	1.88E-10	1.08E-10
Acenaphthylene	208-96-8	2.37E-07	1.03E-11	1.15E-10	4.93E-11	1.35E-11	1.81E-11	4.80E-11	2.74E-11
Anthracene	120-12-7	2.37E-10	3.11E-11	2.44E-10	9.53E-11	2.82E-11	5.38E-11	1.63E-10	9.32E-11
Benz(a)anthracene	56-55-3	8.18E-11	1.15E-10	1.91E-09	2.06E-10	6.33E-11	3.28E-11	6.65E-11	3.80E-11
Benzo(a)fluorene	30777-18-5	5.76E-09	7.39E-11	7.50E-09	3.25E-10	9.22E-11	6.92E-11	1.59E-10	9.07E-11
Benzo(a)pyrene	50-32-8	9.25E-11	3.93E-10	1.66E-08	9.58E-10	3.01E-10	1.03E-10	1.06E-10	6.03E-11
Benzo(b)fluoranthene	205-99-2	2.29E-09	3.08E-11	6.31E-09	9.34E-11	2.45E-11	4.02E-11	1.29E-10	7.39E-11
Benzo(b)fluorene	243-17-4	7.21E-09	9.91E-11	1.35E-08	5.30E-10	1.61E-10	7.05E-11	9.97E-11	5.70E-11
Benzo(e)pyrene	192-97-20	2.21E-08	1.15E-08	4.43E-07	6.94E-08	2.22E-08	5.91E-09	2.33E-10	1.33E-10
Benzo(g,h,i)perylene	191-24-2	1.12E-08	1.69E-08	4.01E-07	1.02E-07	3.27E-08	8.92E-09	1.16E-09	6.64E-10
Benzo(k)fluoranthene	207-08-9	1.05E-10	1.38E-10	1.41E-08	4.02E-10	1.24E-10	6.11E-11	1.14E-10	6.49E-11
Chrysene	218-01-9	3.04E-10	1.47E-10	2.71E-09	2.42E-10	6.83E-11	8.14E-11	2.46E-10	1.40E-10
Dibenz(a,c)anthracene	215-58-7	4.67E-09	3.54E-09	6.17E-07	1.06E-08	3.37E-09	8.88E-10	1.35E-10	7.72E-11
Dibenz(a,h)anthracene	53-70-3	3.86E-11	1.45E-09	2.74E-08	8.25E-09	2.63E-09	7.07E-10	5.12E-11	2.93E-11
Fluoranthene	206-44-0	2.32E-09	2.75E-10	2.30E-08	9.58E-10	2.64E-10	4.71E-10	1.45E-09	8.31E-10
Fluorene	86-73-7	3.00E-10	3.82E-11	9.38E-10	1.56E-10	4.40E-11	6.64E-11	1.85E-10	1.06E-10
Indeno(1,2,3-cd)pyrene	193-39-5	2.43E-10	7.15E-10	1.21E-07	9.00E-10	2.77E-10	1.22E-10	2.33E-10	1.33E-10
Perylene	198-55-0	1.69E-09	9.23E-09	4.79E-08	5.60E-08	1.79E-08	4.74E-09	5.53E-11	3.16E-11
Phenanthrene	85-01-8	2.93E-09	3.29E-10	1.23E-08	1.16E-09	3.33E-10	5.70E-10	1.68E-09	9.60E-10
Pyrene	129-00-0	1.15E-08	1.21E-09	3.11E-08	3.90E-09	1.09E-09	2.39E-09	7.55E-09	4.32E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	2.84E-07	1.33E-07	3.23E-04	5.75E-07	1.18E-07	4.51E-07	1.58E-08	9.05E-09
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	3.58E-10	3.83E-10	**2.96E-08**	1.67E-09	4.67E-10	5.26E-10	1.54E-11	8.79E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	8.07E-09	5.56E-10	2.74E-08	1.69E-08	3.56E-09	2.70E-09	4.61E-11	2.64E-11
Bromoform	75-25-2	3.12E-09	1.56E-08	6.49E-07	4.65E-07	9.78E-08	7.41E-08	1.26E-09	7.22E-10
Carbon Tetrachloride	56-23-5	1.73E-09	1.78E-10	1.21E-08	5.41E-09	1.14E-09	8.63E-10	1.47E-11	8.42E-12
Chloroform	67-66-3	4.10E-09	1.00E-10	2.85E-09	3.04E-09	6.41E-10	4.86E-10	8.31E-12	4.75E-12
Dichloromethane	75-09-2	2.63E-06	1.06E-08	1.77E-07	3.21E-07	6.77E-08	5.14E-08	8.80E-10	5.03E-10
O-Terphenyl	84-15-1	1.13E-08	9.71E-09	2.51E-06	6.19E-08	1.67E-08	1.70E-08	4.45E-10	2.54E-10
Trichlorofluoromethane (FREON 11)	75-69-4	1.53E-07	6.43E-08	3.09E-06	1.93E-06	4.07E-07	3.08E-07	5.26E-09	3.01E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	7.50E-08	1.36E-09	2.16E-07	8.52E-09	2.05E-09	2.97E-09	8.17E-11	4.67E-11
1,2,4-Trichlorobenzene	120-82-1	1.31E-09	1.52E-10	4.20E-08	3.48E-09	7.48E-10	6.01E-10	1.10E-11	6.30E-12
1,2-Dichlorobenzene	95-50-1	5.57E-07	3.23E-09	3.22E-07	8.02E-08	1.72E-08	1.35E-08	2.41E-10	1.38E-10
Hexachlorobenzene	118-74-1	7.82E-09	5.78E-10	8.18E-07	7.17E-09	1.61E-09	1.71E-09	4.10E-11	2.35E-11
Pentachlorobenzene	608-93-5	2.05E-08	1.38E-08	1.54E-06	6.00E-08	1.50E-08	3.22E-08	1.01E-09	5.77E-10
Pentachlorophenol	87-86-5	8.56E-06	1.79E-08	3.77E-04	1.09E-07	3.47E-08	9.25E-09	2.14E-12	1.22E-12
Inorganics									
Antimony	7440-36-0	1.27E-05	1.16E-06	1.97E-03	2.93E-06	4.25E-07	5.21E-07	9.20E-09	5.25E-09
Arsenic	7440-38-2	3.35E-07	2.76E-07	7.57E-05	6.17E-07	2.63E-08	8.62E-08	1.56E-09	8.90E-10
Barium	7440-39-3	4.46E-06	1.23E-07	7.61E-05	3.02E-07	1.01E-06	4.99E-08	8.78E-10	5.01E-10
Beryllium	7440-41-7	3.99E-07	1.31E-07	5.78E-05	3.65E-07	4.09E-10	1.40E-07	4.40E-09	2.51E-09
Boron	7440-42-8	3.28E-03	5.52E-05	--	1.40E-04	4.52E-05	2.62E-05	4.30E-07	2.46E-07
Cadmium	7440-43-9	1.12E-04	5.25E-07	2.97E-02	1.52E-06	1.21E-07	4.19E-07	6.58E-06	1.55E-07
Chromium (Total)	7440-47-3	6.63E-07	3.91E-06	1.62E-03	8.44E-06	3.30E-06	1.01E-06	1.59E-08	9.08E-09
Chromium VI	18540-29-9	9.43E-08	5.57E-07	4.27E-05	1.20E-06	4.69E-07	1.44E-07	2.26E-09	1.29E-09
Cobalt	7440-48-4	6.25E-06	3.84E-05	2.08E-03	8.76E-05	2.58E-05	1.49E-05	3.28E-07	1.88E-07
Lead	7439-92-1	3.67E-04	7.30E-06	8.62E-03	2.14E-05	2.36E-05	7.51E-06	2.15E-07	1.23E-07
Mercury - Inorganic	7487-94-7	1.02E-04	2.03E-06	--	1.01E-05	4.48E-06	3.95E-08	1.61E-06	1.61E-06
Methyl Mercury	22967-92-6	1.06E-05	5.56E-08	2.06E-03	1.52E-07	8.85E-08	2.77E-10	9.84E-09	9.84E-09
Nickel	7440-02-0	1.53E-04	1.82E-04	4.84E-02	4.35E-04	1.01E-04	8.66E-05	2.05E-06	1.17E-06
Phosphorus	7723-14-0	2.01E-03	1.15E-03	--	2.94E-03	9.76E-04	7.69E-04	1.72E-05	9.84E-06
Selenium	7782-49-2	1.86E-07	3.39E-07	2.95E-04	7.13E-07	2.68E-06	4.38E-06	3.44E-07	3.44E-07
Silver	7440-22-4	9.68E-06	3.52E-06	1.07E-03	7.95E-06	7.78E-05	9.49E-07	1.08E-08	6.16E-09
Thallium	7440-28-0	3.72E-06	5.15E-04	--	1.21E-03	8.21E-05	2.48E-04	6.32E-06	3.61E-06
Tin	7440-31-5	6.04E-05	5.72E-04	1.44E-01	1.56E-03	4.33E-04	4.88E-04	1.40E-05	7.98E-06
Vanadium	7440-62-2	2.89E-06	1.11E-06	2.94E-04	3.11E-06	8.06E-07	1.26E-06	4.02E-08	2.30E-08
Zinc	7440-66-6	3.77E-02	8.91E-06	6.63E-01	2.42E-05	1.28E-05	5.86E-06	1.24E-05	1.24E-05

Calculated Exposure Point Concentrations for the Recreation User - Sport Receptor Cluster

Normal Operations - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	3.85E-07	4.11E-10	--	8.32E-08	1.73E-10
Acenaphthylene	208-96-8	9.02E-08	2.30E-10	--	1.70E-08	3.34E-10
Anthracene	120-12-7	3.80E-07	1.54E-10	7.91E-11	3.69E-08	4.06E-12
Benz(a)anthracene	56-55-3	2.09E-07	7.63E-11	7.54E-09	4.11E-09	2.63E-10
Benzo(a)fluorene	30777-18-5	4.13E-07	5.96E-10	2.15E-09	1.21E-08	6.09E-10
Benzo(a)pyrene	50-32-8	3.70E-07	3.32E-10	2.36E-08	4.88E-09	2.37E-09
Benzo(b)fluoranthene	205-99-2	4.80E-07	9.50E-11	1.27E-09	5.38E-09	1.16E-10
Benzo(b)fluorene	243-17-4	2.85E-07	4.80E-10	1.47E-09	5.24E-09	1.61E-09
Benzo(e)pyrene	192-97-20	1.01E-06	3.21E-09	2.88E-09	7.39E-09	3.23E-07
Benzo(g,h,i)perylene	191-24-2	5.22E-06	2.58E-09	--	3.54E-08	4.90E-07
Benzo(k)fluoranthene	207-08-9	4.20E-07	2.24E-10	7.14E-09	4.83E-09	1.09E-09
Chrysene	218-01-9	7.75E-07	1.08E-10	9.38E-09	1.53E-08	3.64E-11
Dibenz(a,c)anthracene	215-58-7	6.57E-07	2.48E-09	2.46E-07	3.41E-09	4.32E-08
Dibenz(a,h)anthracene	53-70-3	2.31E-07	1.74E-10	1.11E-08	1.56E-09	3.89E-08
Fluoranthene	206-44-0	3.76E-06	4.59E-09	3.23E-09	1.88E-07	5.71E-10
Fluorene	86-73-7	3.83E-07	1.18E-09	--	5.55E-08	1.53E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.11E-06	6.15E-10	7.29E-08	6.58E-09	2.64E-10
Perylene	198-55-0	2.17E-07	5.39E-10	1.17E-10	2.05E-09	2.40E-07
Phenanthrene	85-01-8	3.87E-06	7.79E-09	9.20E-10	3.75E-07	2.68E-10
Pyrene	129-00-0	1.93E-05	7.81E-09	2.93E-09	1.10E-06	7.86E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	7.19E-05	1.26E-09	--	4.87E-07	2.24E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	5.08E-08	9.51E-13	1.58E-10	2.31E-10	4.90E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	2.20E-10	1.73E-08	--	3.06E-10	4.04E-12
Bromoform	75-25-2	6.13E-10	5.52E-07	--	1.01E-09	2.73E-13
Carbon Tetrachloride	56-23-5	4.40E-11	3.82E-09	--	4.10E-11	1.06E-12
Chloroform	67-66-3	9.85E-11	5.69E-09	--	2.66E-10	1.95E-12
Dichloromethane	75-09-2	1.77E-08	1.77E-06	--	1.21E-07	2.03E-10
O-Terphenyl	84-15-1	1.22E-06	1.51E-09	--	3.04E-08	1.06E-09
Trichlorofluoromethane (FREON 11)	75-69-4	4.55E-09	1.95E-06	--	6.33E-09	8.56E-11
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.73E-07	6.84E-10	--	1.13E-08	2.69E-12
1,2,4-Trichlorobenzene	120-82-1	4.08E-09	6.65E-10	--	7.71E-10	7.03E-13
1,2-Dichlorobenzene	95-50-1	5.49E-08	2.68E-08	--	2.36E-08	4.49E-10
Hexachlorobenzene	118-74-1	7.43E-08	8.18E-10	--	2.49E-09	1.84E-11
Pentachlorobenzene	608-93-5	2.69E-06	2.08E-09	--	1.07E-07	6.40E-11
Pentachlorophenol	87-86-5	1.26E-06	6.71E-07	--	5.53E-08	2.43E-06
Inorganics						
Antimony	7440-36-0	6.15E-04	9.85E-06	2.15E-05	1.96E-05	--
Arsenic	7440-38-2	6.11E-05	1.51E-06	3.29E-06	3.86E-07	--
Barium	7440-39-3	4.33E-04	7.61E-06	1.66E-05	1.40E-05	--
Beryllium	7440-41-7	3.88E-04	5.78E-07	2.61E-06	1.00E-06	--
Boron	7440-42-8	2.39E-03	5.53E-04	1.20E-03	5.40E-03	--
Cadmium	7440-43-9	2.56E-03	2.47E-05	5.48E-05	3.19E-04	--
Chromium (Total)	7440-47-3	2.15E-04	8.12E-06	1.76E-05	1.05E-06	--
Chromium VI	18540-29-9	3.06E-05	1.15E-06	2.51E-06	1.49E-07	--
Cobalt	7440-48-4	1.30E-03	2.08E-05	4.54E-05	1.13E-05	--
Lead	7439-92-1	5.94E-02	8.23E-05	3.92E-04	8.08E-04	--
Mercury - Inorganic	7487-94-7	4.82E-03	7.67E-07	5.28E-06	6.98E-05	1.61E-05
Methyl Mercury	22967-92-6	1.56E-04	3.42E-09	1.49E-06	4.57E-06	4.55E-06
Nickel	7440-02-0	2.79E-02	3.10E-04	6.82E-04	2.60E-04	--
Phosphorus	7723-14-0	8.36E-04	1.66E-04	3.61E-04	2.92E-03	--
Selenium	7782-49-2	1.23E-05	1.73E-06	3.76E-06	2.40E-07	--
Silver	7440-22-4	1.41E-04	1.21E-05	2.62E-05	1.95E-05	--
Thallium	7440-28-0	1.35E-02	1.38E-04	3.05E-04	1.16E-05	--
Tin	7440-31-5	1.47E-02	4.82E-05	1.38E-04	1.33E-04	--
Vanadium	7440-62-2	1.40E-03	1.84E-06	9.11E-06	4.65E-06	--
Zinc	7440-66-6	6.11E-02	7.12E-04	1.56E-03	5.93E-03	--

Calculated Exposure Point Concentrations for the Recreation User - Sport Receptor Cluster
Normal Operations - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	8.19E-08	4.42E-11	1.63E-10	4.18E-10	1.22E-10	1.78E-10	4.86E-10	2.78E-10
Acenaphthylene	208-96-8	5.74E-07	1.03E-11	1.15E-10	1.80E-10	4.55E-11	5.42E-11	1.35E-10	7.70E-11
Anthracene	120-12-7	5.72E-10	3.11E-11	2.44E-10	2.56E-10	7.39E-11	1.35E-10	4.03E-10	2.30E-10
Benz(a)anthracene	56-55-3	1.98E-10	1.15E-10	1.91E-09	4.25E-10	1.28E-10	7.48E-11	1.63E-10	9.34E-11
Benzo(a)fluorene	30777-18-5	1.39E-08	7.39E-11	7.50E-09	7.86E-10	2.06E-10	1.81E-10	4.33E-10	2.47E-10
Benzo(a)pyrene	50-32-8	2.24E-10	3.93E-10	1.66E-08	1.73E-09	5.39E-10	2.01E-10	2.59E-10	1.48E-10
Benzo(b)fluoranthene	205-99-2	5.53E-09	3.08E-11	6.31E-09	2.16E-10	5.38E-11	9.92E-11	3.17E-10	1.81E-10
Benzo(b)fluorene	243-17-4	1.74E-08	9.91E-11	1.35E-08	9.83E-10	2.83E-10	1.54E-10	2.72E-10	1.56E-10
Benzo(e)pyrene	192-97-20	5.34E-08	1.15E-08	4.43E-07	1.04E-07	3.31E-08	8.90E-09	5.74E-10	3.28E-10
Benzo(g,h,i)perylene	191-24-2	2.72E-08	1.69E-08	4.01E-07	1.54E-07	4.89E-08	1.37E-08	2.82E-09	1.61E-09
Benzo(k)fluoranthene	207-08-9	2.55E-10	1.38E-10	1.41E-08	7.16E-10	2.17E-10	1.28E-10	2.76E-10	1.58E-10
Chrysene	218-01-9	7.35E-10	1.47E-10	2.71E-09	5.80E-10	1.61E-10	2.01E-10	6.01E-10	3.44E-10
Dibenz(a,c)anthracene	215-58-7	1.13E-08	3.54E-09	6.17E-07	1.78E-08	5.66E-09	1.50E-09	3.41E-10	1.95E-10
Dibenz(a,h)anthracene	53-70-3	9.35E-11	1.45E-09	2.74E-08	1.24E-08	3.97E-09	1.08E-09	1.25E-10	7.12E-11
Fluoranthene	206-44-0	5.62E-09	2.75E-10	2.30E-08	2.42E-09	6.46E-10	1.18E-09	3.61E-09	2.06E-09
Fluorene	86-73-7	7.26E-10	3.82E-11	9.38E-10	5.26E-10	1.38E-10	1.87E-10	4.96E-10	2.83E-10
Indeno(1,2,3-cd)pyrene	193-39-5	5.88E-10	7.15E-10	1.21E-07	2.03E-09	6.19E-10	2.88E-10	5.65E-10	3.23E-10
Perylene	198-55-0	4.08E-09	9.23E-09	4.79E-08	8.37E-08	2.67E-08	7.09E-09	1.35E-10	7.73E-11
Phenanthrene	85-01-8	7.09E-09	3.29E-10	1.23E-08	3.23E-09	8.92E-10	1.47E-09	4.25E-09	2.43E-09
Pyrene	129-00-0	2.79E-08	1.21E-09	3.11E-08	9.65E-09	2.68E-09	5.84E-09	1.84E-08	1.05E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	6.89E-07	1.33E-07	3.23E-04	1.39E-06	2.81E-07	1.09E-06	3.84E-08	2.19E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	5.22E-10	3.83E-10	**2.96E-08**	2.37E-09	6.58E-10	7.63E-10	2.24E-11	1.28E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	1.95E-08	5.56E-10	2.74E-08	1.62E-07	3.41E-08	2.58E-08	4.41E-10	2.52E-10
Bromoform	75-25-2	7.54E-09	1.56E-08	6.49E-07	4.46E-06	9.40E-07	7.12E-07	1.21E-08	6.94E-09
Carbon Tetrachloride	56-23-5	4.18E-09	1.78E-10	1.21E-08	5.13E-08	1.08E-08	8.18E-09	1.40E-10	7.98E-11
Chloroform	67-66-3	9.92E-09	1.00E-10	2.85E-09	3.11E-08	6.55E-09	4.96E-09	8.47E-11	4.84E-11
Dichloromethane	75-09-2	6.36E-06	1.06E-08	1.77E-07	3.42E-06	7.21E-07	5.46E-07	9.33E-09	5.33E-09
O-Terphenyl	84-15-1	2.74E-08	9.71E-09	2.51E-06	1.73E-07	4.22E-08	4.72E-08	1.23E-09	7.02E-10
Trichlorofluoromethane (FREON 11)	75-69-4	3.70E-07	6.43E-08	3.09E-06	1.85E-05	3.89E-06	2.95E-06	5.03E-08	2.87E-08
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	1.81E-07	1.36E-09	2.16E-07	5.33E-08	1.19E-08	1.25E-08	2.90E-10	1.66E-10
1,2,4-Trichlorobenzene	120-82-1	3.16E-09	1.52E-10	4.20E-08	3.26E-08	6.90E-09	5.32E-09	9.26E-11	5.29E-11
1,2-Dichlorobenzene	95-50-1	1.35E-06	3.23E-09	3.22E-07	7.66E-07	1.62E-07	1.24E-07	2.14E-09	1.22E-09
Hexachlorobenzene	118-74-1	1.89E-08	5.78E-10	8.18E-07	5.32E-08	1.14E-08	9.92E-09	1.99E-10	1.14E-10
Pentachlorobenzene	608-93-5	4.95E-08	1.38E-08	1.54E-06	2.42E-07	5.67E-08	9.47E-08	2.76E-09	1.57E-09
Pentachlorophenol	87-86-5	2.07E-05	1.79E-08	3.77E-04	1.63E-07	5.19E-08	1.38E-08	4.18E-12	2.39E-12
Inorganics									
Antimony	7440-36-0	1.85E-05	1.16E-06	1.97E-03	3.61E-06	5.22E-07	7.04E-07	1.32E-08	7.51E-09
Arsenic	7440-38-2	4.88E-07	2.76E-07	7.57E-05	6.94E-07	2.95E-08	1.09E-07	2.19E-09	1.25E-09
Barium	7440-39-3	6.50E-06	1.23E-07	7.61E-05	3.63E-07	1.22E-06	6.64E-08	1.25E-09	7.14E-10
Beryllium	7440-41-7	5.82E-07	1.31E-07	5.78E-05	4.61E-07	5.00E-10	1.99E-07	6.41E-09	3.66E-09
Boron	7440-42-8	4.79E-03	5.52E-05	--	1.74E-04	5.68E-05	3.57E-05	6.16E-07	3.52E-07
Cadmium	7440-43-9	1.64E-04	5.25E-07	2.97E-02	2.01E-06	1.61E-07	5.90E-07	9.51E-06	2.24E-07
Chromium (Total)	7440-47-3	9.67E-07	3.91E-06	1.62E-03	9.28E-06	3.61E-06	1.23E-06	2.20E-08	1.26E-08
Chromium VI	18540-29-9	1.38E-07	5.57E-07	4.27E-05	1.32E-06	5.14E-07	1.74E-07	3.13E-09	1.79E-09
Cobalt	7440-48-4	9.11E-06	3.84E-05	2.08E-03	9.93E-05	2.91E-05	1.94E-05	4.68E-07	2.67E-07
Lead	7439-92-1	5.35E-04	7.30E-06	8.62E-03	2.81E-05	3.03E-05	1.07E-05	3.14E-07	1.79E-07
Mercury - Inorganic	7487-94-7	1.73E-04	2.03E-06	--	1.61E-05	6.81E-06	6.70E-08	2.75E-06	2.75E-06
Methyl Mercury	22967-92-6	1.54E-05	5.56E-08	2.06E-03	1.91E-07	1.09E-07	3.92E-10	1.43E-08	1.43E-08
Nickel	7440-02-0	2.23E-04	1.82E-04	4.84E-02	5.07E-04	1.16E-04	1.16E-04	2.95E-06	1.68E-06
Phosphorus	7723-14-0	2.92E-03	1.15E-03	--	3.67E-03	1.23E-03	1.07E-03	2.49E-05	1.42E-05
Selenium	7782-49-2	2.71E-07	3.39E-07	2.95E-04	7.73E-07	2.91E-06	4.89E-06	4.32E-07	4.32E-07
Silver	7440-22-4	1.41E-05	3.52E-06	1.07E-03	9.12E-06	8.98E-05	1.18E-06	1.48E-08	8.44E-09
Thallium	7440-28-0	5.42E-06	5.15E-04	--	1.38E-03	9.22E-05	3.30E-04	9.07E-06	5.18E-06
Tin	7440-31-5	8.81E-05	5.72E-04	1.44E-01	1.95E-03	5.31E-04	6.87E-04	2.03E-05	1.16E-05
Vanadium	7440-62-2	4.21E-06	1.11E-06	2.94E-04	3.92E-06	9.80E-07	1.79E-06	5.87E-08	3.35E-08
Zinc	7440-66-6	5.50E-02	8.91E-06	6.63E-01	3.09E-05	1.63E-05	8.13E-06	1.79E-05	1.79E-05

Calculated Exposure Point Concentrations for the Additional Exposure Due to Swimming and Recreation User - Camping Rece

Normal Operations - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	3.18E-07	4.11E-10	--	6.87E-08	2.06E-10
Acenaphthylene	208-96-8	7.45E-08	2.30E-10	--	1.41E-08	3.97E-10
Anthracene	120-12-7	3.14E-07	1.54E-10	6.68E-11	3.05E-08	4.84E-12
Benz(a)anthracene	56-55-3	1.72E-07	7.63E-11	6.36E-09	3.40E-09	3.13E-10
Benzo(a)fluorene	30777-18-5	3.41E-07	5.96E-10	1.81E-09	9.99E-09	7.25E-10
Benzo(a)pyrene	50-32-8	3.05E-07	3.32E-10	1.99E-08	4.03E-09	2.82E-09
Benzo(b)fluoranthene	205-99-2	3.96E-07	9.50E-11	1.07E-09	4.44E-09	1.38E-10
Benzo(b)fluorene	243-17-4	2.36E-07	4.80E-10	1.24E-09	4.33E-09	1.91E-09
Benzo(e)pyrene	192-97-20	8.32E-07	3.21E-09	2.43E-09	6.10E-09	3.84E-07
Benzo(g,h,i)perylene	191-24-2	4.31E-06	2.58E-09	--	2.92E-08	5.83E-07
Benzo(k)fluoranthene	207-08-9	3.46E-07	2.24E-10	6.02E-09	3.98E-09	1.30E-09
Chrysene	218-01-9	6.40E-07	1.08E-10	7.92E-09	1.26E-08	4.34E-11
Dibenz(a,c)anthracene	215-58-7	5.43E-07	2.48E-09	2.08E-07	2.82E-09	5.14E-08
Dibenz(a,h)anthracene	53-70-3	1.90E-07	1.74E-10	9.38E-09	1.29E-09	4.63E-08
Fluoranthene	206-44-0	3.11E-06	4.59E-09	2.73E-09	1.55E-07	6.80E-10
Fluorene	86-73-7	3.16E-07	1.18E-09	--	4.59E-08	1.82E-11
Indeno(1,2,3-cd)pyrene	193-39-5	9.17E-07	6.15E-10	6.16E-08	5.44E-09	3.15E-10
Perylene	198-55-0	1.79E-07	5.39E-10	9.91E-11	1.70E-09	2.86E-07
Phenanthrene	85-01-8	3.20E-06	7.79E-09	7.76E-10	3.10E-07	3.19E-10
Pyrene	129-00-0	1.59E-05	7.81E-09	2.47E-09	9.06E-07	9.36E-10
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	5.92E-05	1.26E-09	--	4.02E-07	2.66E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	5.51E-08	9.51E-13	2.02E-10	2.51E-10	5.83E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	1.82E-10	1.73E-08	--	2.53E-10	4.81E-12
Bromoform	75-25-2	5.07E-10	5.52E-07	--	8.36E-10	3.25E-13
Carbon Tetrachloride	56-23-5	3.63E-11	3.82E-09	--	3.39E-11	1.26E-12
Chloroform	67-66-3	8.15E-11	5.69E-09	--	2.20E-10	2.32E-12
Dichloromethane	75-09-2	1.46E-08	1.77E-06	--	1.00E-07	2.42E-10
O-Terphenyl	84-15-1	1.01E-06	1.51E-09	--	2.51E-08	1.27E-09
Trichlorofluoromethane (FREON 11)	75-69-4	3.76E-09	1.95E-06	--	5.23E-09	1.02E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.43E-07	6.84E-10	--	9.31E-09	3.20E-12
1,2,4-Trichlorobenzene	120-82-1	3.37E-09	6.65E-10	--	6.37E-10	8.36E-13
1,2-Dichlorobenzene	95-50-1	4.53E-08	2.68E-08	--	1.95E-08	5.35E-10
Hexachlorobenzene	118-74-1	6.14E-08	8.18E-10	--	2.06E-09	2.19E-11
Pentachlorobenzene	608-93-5	2.22E-06	2.08E-09	--	8.85E-08	7.61E-11
Pentachlorophenol	87-86-5	1.05E-06	6.71E-07	--	4.57E-08	2.90E-06
Inorganics						
Antimony	7440-36-0	6.70E-04	9.85E-06	2.74E-05	2.14E-05	--
Arsenic	7440-38-2	6.65E-05	1.51E-06	4.20E-06	4.21E-07	--
Barium	7440-39-3	4.72E-04	7.61E-06	2.12E-05	1.52E-05	--
Beryllium	7440-41-7	4.22E-04	5.78E-07	3.33E-06	1.09E-06	--
Boron	7440-42-8	2.61E-03	5.53E-04	1.53E-03	5.88E-03	--
Cadmium	7440-43-9	2.78E-03	2.47E-05	7.00E-05	3.48E-04	--
Chromium (Total)	7440-47-3	2.34E-04	8.12E-06	2.25E-05	1.14E-06	--
Chromium VI	18540-29-9	3.33E-05	1.15E-06	3.20E-06	1.62E-07	--
Cobalt	7440-48-4	1.42E-03	2.08E-05	5.80E-05	1.23E-05	--
Lead	7439-92-1	6.46E-02	8.23E-05	5.00E-04	8.79E-04	--
Mercury - Inorganic	7487-94-7	4.55E-03	7.67E-07	6.74E-06	6.59E-05	1.92E-05
Methyl Mercury	22967-92-6	1.69E-04	3.42E-09	1.90E-06	4.97E-06	5.41E-06
Nickel	7440-02-0	3.03E-02	3.10E-04	8.72E-04	2.82E-04	--
Phosphorus	7723-14-0	9.10E-04	1.66E-04	4.61E-04	3.18E-03	--
Selenium	7782-49-2	1.34E-05	1.73E-06	4.80E-06	2.61E-07	--
Silver	7440-22-4	1.54E-04	1.21E-05	3.35E-05	2.12E-05	--
Thallium	7440-28-0	1.47E-02	1.38E-04	3.90E-04	1.26E-05	--
Tin	7440-31-5	1.60E-02	4.82E-05	1.76E-04	1.45E-04	--
Vanadium	7440-62-2	1.53E-03	1.84E-06	1.16E-05	5.06E-06	--
Zinc	7440-66-6	6.65E-02	7.12E-04	2.00E-03	6.45E-03	--

Calculated Exposure Point Concentrations for the Additional Exposure Due to Swimming and Recreation User - Camping Receptor Clusters
Normal Operations - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	6.77E-08	4.42E-11	1.63E-10	2.48E-10	8.07E-11	1.32E-10	3.75E-10	2.14E-10
Acenaphthylene	208-96-8	4.74E-07	1.03E-11	1.15E-10	7.08E-11	2.12E-11	3.23E-11	8.99E-11	5.14E-11
Anthracene	120-12-7	4.73E-10	3.11E-11	2.44E-10	1.83E-10	5.52E-11	1.07E-10	3.25E-10	1.86E-10
Benz(a)anthracene	56-55-3	1.64E-10	1.15E-10	1.91E-09	3.83E-10	1.18E-10	6.37E-11	1.32E-10	7.56E-11
Benzo(a)fluorene	30777-18-5	1.15E-08	7.39E-11	7.50E-09	5.19E-10	1.53E-10	1.22E-10	2.98E-10	1.70E-10
Benzo(a)pyrene	50-32-8	1.85E-10	3.93E-10	1.66E-08	1.75E-09	5.49E-10	1.92E-10	2.09E-10	1.19E-10
Benzo(b)fluoranthene	205-99-2	4.57E-09	3.08E-11	6.31E-09	1.75E-10	4.55E-11	8.02E-11	2.57E-10	1.47E-10
Benzo(b)fluorene	243-17-4	1.44E-08	9.91E-11	1.35E-08	9.00E-10	2.78E-10	1.24E-10	1.85E-10	1.06E-10
Benzo(e)pyrene	192-97-20	4.41E-08	1.15E-08	4.43E-07	1.23E-07	3.94E-08	1.05E-08	4.61E-10	2.64E-10
Benzo(g,h,i)perylene	191-24-2	2.25E-08	1.69E-08	4.01E-07	1.82E-07	5.81E-08	1.60E-08	2.30E-09	1.31E-09
Benzo(k)fluoranthene	207-08-9	2.11E-10	1.38E-10	1.41E-08	7.36E-10	2.26E-10	1.17E-10	2.26E-10	1.29E-10
Chrysene	218-01-9	6.07E-10	1.47E-10	2.71E-09	4.64E-10	1.31E-10	1.63E-10	4.90E-10	2.80E-10
Dibenz(a,c)anthracene	215-58-7	9.33E-09	3.54E-09	6.17E-07	1.91E-08	6.09E-09	1.61E-09	2.59E-10	1.48E-10
Dibenz(a,h)anthracene	53-70-3	7.72E-11	1.45E-09	2.74E-08	1.47E-08	4.69E-09	1.26E-09	1.02E-10	5.81E-11
Fluoranthene	206-44-0	4.64E-09	2.75E-10	2.30E-08	1.76E-09	4.92E-10	9.33E-10	2.89E-09	1.65E-09
Fluorene	86-73-7	6.00E-10	3.82E-11	9.38E-10	2.42E-10	7.38E-11	1.24E-10	3.57E-10	2.04E-10
Indeno(1,2,3-cd)pyrene	193-39-5	4.85E-10	7.15E-10	1.21E-07	1.71E-09	5.26E-10	2.39E-10	4.61E-10	2.64E-10
Perylene	198-55-0	3.37E-09	9.23E-09	4.79E-08	9.96E-08	3.18E-08	8.43E-09	1.10E-10	6.27E-11
Phenanthrene	85-01-8	5.86E-09	3.29E-10	1.23E-08	2.05E-09	6.11E-10	1.11E-09	3.34E-09	1.91E-09
Pyrene	129-00-0	2.30E-08	1.21E-09	3.11E-08	7.71E-09	2.17E-09	4.77E-09	1.51E-08	8.61E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	5.67E-07	1.33E-07	3.23E-04	1.15E-06	2.35E-07	9.00E-07	3.16E-08	1.80E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	5.67E-10	3.83E-10	**2.96E-08**	2.76E-09	7.75E-10	8.41E-10	2.43E-11	1.39E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	1.61E-08	5.56E-10	2.74E-08	1.16E-08	2.45E-09	1.86E-09	3.17E-11	1.81E-11
Bromoform	75-25-2	6.23E-09	1.56E-08	6.49E-07	3.19E-07	6.72E-08	5.09E-08	8.68E-10	4.96E-10
Carbon Tetrachloride	56-23-5	3.46E-09	1.78E-10	1.21E-08	3.72E-09	7.82E-10	5.93E-10	1.01E-11	5.78E-12
Chloroform	67-66-3	8.20E-09	1.00E-10	2.85E-09	2.09E-09	4.40E-10	3.34E-10	5.71E-12	3.26E-12
Dichloromethane	75-09-2	5.26E-06	1.06E-08	1.77E-07	2.21E-07	4.65E-08	3.53E-08	6.04E-10	3.45E-10
O-Terphenyl	84-15-1	2.26E-08	9.71E-09	2.51E-06	9.44E-08	2.65E-08	3.01E-08	8.41E-10	4.81E-10
Trichlorofluoromethane (FREON 11)	75-69-4	3.06E-07	6.43E-08	3.09E-06	1.33E-06	2.79E-07	2.12E-07	3.61E-09	2.06E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	1.50E-07	1.36E-09	2.16E-07	1.07E-08	2.79E-09	5.01E-09	1.49E-10	8.50E-11
1,2,4-Trichlorobenzene	120-82-1	2.61E-09	1.52E-10	4.20E-08	2.52E-09	5.43E-10	4.41E-10	8.73E-12	4.99E-12
1,2-Dichlorobenzene	95-50-1	1.11E-06	3.23E-09	3.22E-07	5.56E-08	1.19E-08	9.48E-09	1.71E-10	9.76E-11
Hexachlorobenzene	118-74-1	1.56E-08	5.78E-10	8.18E-07	6.08E-09	1.47E-09	2.14E-09	6.09E-11	3.48E-11
Pentachlorobenzene	608-93-5	4.09E-08	1.38E-08	1.54E-06	9.84E-08	2.55E-08	6.19E-08	2.00E-09	1.14E-09
Pentachlorophenol	87-86-5	1.71E-05	1.79E-08	3.77E-04	1.94E-07	6.18E-08	1.65E-08	4.32E-12	2.47E-12
Inorganics									
Antimony	7440-36-0	2.01E-05	1.16E-06	1.97E-03	4.36E-06	6.28E-07	8.06E-07	1.46E-08	8.34E-09
Arsenic	7440-38-2	5.32E-07	2.76E-07	7.57E-05	8.87E-07	3.76E-08	1.31E-07	2.47E-09	1.41E-09
Barium	7440-39-3	7.07E-06	1.23E-07	7.61E-05	4.45E-07	1.48E-06	7.68E-08	1.39E-09	7.96E-10
Beryllium	7440-41-7	6.33E-07	1.31E-07	5.78E-05	5.40E-07	5.97E-10	2.19E-07	6.96E-09	3.98E-09
Boron	7440-42-8	5.21E-03	5.52E-05	--	2.09E-04	6.74E-05	4.06E-05	6.83E-07	3.90E-07
Cadmium	7440-43-9	1.78E-04	5.25E-07	2.97E-02	2.31E-06	1.85E-07	6.57E-07	1.04E-05	2.46E-07
Chromium (Total)	7440-47-3	1.05E-06	3.91E-06	1.62E-03	1.20E-05	4.67E-06	1.51E-06	2.52E-08	1.44E-08
Chromium VI	18540-29-9	1.50E-07	5.57E-07	4.27E-05	1.71E-06	6.65E-07	2.15E-07	3.59E-09	2.05E-09
Cobalt	7440-48-4	9.91E-06	3.84E-05	2.08E-03	1.26E-04	3.70E-05	2.28E-05	5.21E-07	2.98E-07
Lead	7439-92-1	5.82E-04	7.30E-06	8.62E-03	3.23E-05	3.52E-05	1.18E-05	3.41E-07	1.95E-07
Mercury - Inorganic	7487-94-7	1.64E-04	2.03E-06	--	1.59E-05	6.95E-06	6.34E-08	2.60E-06	2.60E-06
Methyl Mercury	22967-92-6	1.67E-05	5.56E-08	2.06E-03	2.30E-07	1.33E-07	4.35E-10	1.56E-08	1.56E-08
Nickel	7440-02-0	2.43E-04	1.82E-04	4.84E-02	6.34E-04	1.45E-04	1.33E-04	3.26E-06	1.86E-06
Phosphorus	7723-14-0	3.18E-03	1.15E-03	--	4.40E-03	1.46E-03	1.20E-03	2.73E-05	1.56E-05
Selenium	7782-49-2	2.95E-07	3.39E-07	2.95E-04	1.01E-06	3.79E-06	6.39E-06	5.46E-07	5.46E-07
Silver	7440-22-4	1.54E-05	3.52E-06	1.07E-03	1.15E-05	1.12E-04	1.43E-06	1.71E-08	9.78E-09
Thallium	7440-28-0	5.90E-06	5.15E-04	--	1.74E-03	1.17E-04	3.81E-04	1.00E-05	5.73E-06
Tin	7440-31-5	9.58E-05	5.72E-04	1.44E-01	2.32E-03	6.36E-04	7.63E-04	2.21E-05	1.26E-05
Vanadium	7440-62-2	4.58E-06	1.11E-06	2.94E-04	4.59E-06	1.17E-06	1.97E-06	6.37E-08	3.64E-08
Zinc	7440-66-6	5.98E-02	8.91E-06	6.63E-01	3.64E-05	1.92E-05	9.14E-06	1.97E-05	1.97E-05

Calculated Exposure Point Concentrations for the Additional Exposure due to Hunting and Angling Cluster

Normal Operations - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	5.88E-07	4.11E-10	--	1.27E-07	2.37E-10
Acenaphthylene	208-96-8	1.38E-07	2.30E-10	--	2.60E-08	4.56E-10
Anthracene	120-12-7	5.80E-07	1.54E-10	1.16E-10	5.63E-08	5.55E-12
Benz(a)anthracene	56-55-3	3.19E-07	7.63E-11	1.10E-08	6.28E-09	3.59E-10
Benzo(a)fluorene	30777-18-5	6.31E-07	5.96E-10	3.14E-09	1.85E-08	8.33E-10
Benzo(a)pyrene	50-32-8	5.65E-07	3.32E-10	3.45E-08	7.45E-09	3.24E-09
Benzo(b)fluoranthene	205-99-2	7.33E-07	9.50E-11	1.85E-09	8.21E-09	1.59E-10
Benzo(b)fluorene	243-17-4	4.35E-07	4.80E-10	2.15E-09	8.01E-09	2.19E-09
Benzo(e)pyrene	192-97-20	1.54E-06	3.21E-09	4.21E-09	1.13E-08	4.41E-07
Benzo(g,h,i)perylene	191-24-2	7.97E-06	2.58E-09	--	5.40E-08	6.69E-07
Benzo(k)fluoranthene	207-08-9	6.41E-07	2.24E-10	1.04E-08	7.37E-09	1.49E-09
Chrysene	218-01-9	1.18E-06	1.08E-10	1.37E-08	2.33E-08	4.98E-11
Dibenz(a,c)anthracene	215-58-7	1.00E-06	2.48E-09	3.60E-07	5.21E-09	5.90E-08
Dibenz(a,h)anthracene	53-70-3	3.52E-07	1.74E-10	1.63E-08	2.39E-09	5.32E-08
Fluoranthene	206-44-0	5.74E-06	4.59E-09	4.73E-09	2.87E-07	7.81E-10
Fluorene	86-73-7	5.85E-07	1.18E-09	--	8.48E-08	2.09E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.70E-06	6.15E-10	1.07E-07	1.01E-08	3.61E-10
Perylene	198-55-0	3.32E-07	5.39E-10	1.72E-10	3.14E-09	3.29E-07
Phenanthrene	85-01-8	5.91E-06	7.79E-09	1.34E-09	5.73E-07	3.66E-10
Pyrene	129-00-0	2.94E-05	7.81E-09	4.28E-09	1.68E-06	1.07E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	1.10E-04	1.26E-09	--	7.44E-07	3.06E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	8.25E-08	9.51E-13	2.53E-10	3.76E-10	6.69E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	3.36E-10	1.73E-08	--	4.67E-10	5.53E-12
Bromoform	75-25-2	9.37E-10	5.52E-07	--	1.55E-09	3.73E-13
Carbon Tetrachloride	56-23-5	6.71E-11	3.82E-09	--	6.26E-11	1.45E-12
Chloroform	67-66-3	1.51E-10	5.69E-09	--	4.07E-10	2.67E-12
Dichloromethane	75-09-2	2.70E-08	1.77E-06	--	1.85E-07	2.78E-10
O-Terphenyl	84-15-1	1.86E-06	1.51E-09	--	4.65E-08	1.45E-09
Trichlorofluoromethane (FREON 11)	75-69-4	6.96E-09	1.95E-06	--	9.67E-09	1.17E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	2.64E-07	6.84E-10	--	1.72E-08	3.67E-12
1,2,4-Trichlorobenzene	120-82-1	6.23E-09	6.65E-10	--	1.18E-09	9.60E-13
1,2-Dichlorobenzene	95-50-1	8.38E-08	2.68E-08	--	3.61E-08	6.14E-10
Hexachlorobenzene	118-74-1	1.14E-07	8.18E-10	--	3.80E-09	2.51E-11
Pentachlorobenzene	608-93-5	4.11E-06	2.08E-09	--	1.64E-07	8.74E-11
Pentachlorophenol	87-86-5	1.93E-06	6.71E-07	--	8.44E-08	3.33E-06
Inorganics						
Antimony	7440-36-0	1.00E-03	9.85E-06	3.44E-05	3.19E-05	--
Arsenic	7440-38-2	9.93E-05	1.51E-06	5.28E-06	6.28E-07	--
Barium	7440-39-3	7.05E-04	7.61E-06	2.66E-05	2.27E-05	--
Beryllium	7440-41-7	6.31E-04	5.78E-07	4.18E-06	1.63E-06	--
Boron	7440-42-8	3.89E-03	5.53E-04	1.92E-03	8.78E-03	--
Cadmium	7440-43-9	4.16E-03	2.47E-05	8.79E-05	5.19E-04	--
Chromium (Total)	7440-47-3	3.49E-04	8.12E-06	2.83E-05	1.71E-06	--
Chromium VI	18540-29-9	4.97E-05	1.15E-06	4.02E-06	2.43E-07	--
Cobalt	7440-48-4	2.12E-03	2.08E-05	7.28E-05	1.83E-05	--
Lead	7439-92-1	9.66E-02	8.23E-05	6.28E-04	1.31E-03	--
Mercury - Inorganic	7487-94-7	6.50E-03	7.67E-07	8.47E-06	9.43E-05	2.20E-05
Methyl Mercury	22967-92-6	2.53E-04	3.42E-09	2.39E-06	7.43E-06	6.22E-06
Nickel	7440-02-0	4.53E-02	3.10E-04	1.09E-03	4.22E-04	--
Phosphorus	7723-14-0	1.36E-03	1.66E-04	5.78E-04	4.76E-03	--
Selenium	7782-49-2	2.00E-05	1.73E-06	6.03E-06	3.90E-07	--
Silver	7440-22-4	2.30E-04	1.21E-05	4.21E-05	3.17E-05	--
Thallium	7440-28-0	2.20E-02	1.38E-04	4.90E-04	1.89E-05	--
Tin	7440-31-5	2.39E-02	4.82E-05	2.21E-04	2.16E-04	--
Vanadium	7440-62-2	2.28E-03	1.84E-06	1.46E-05	7.56E-06	--
Zinc	7440-66-6	9.93E-02	7.12E-04	2.51E-03	9.64E-03	--

Calculated Exposure Point Concentrations for the Additional Exposure due to Hunting and Angling Cluster
Normal Operations - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.25E-07	4.42E-11	1.63E-10	4.49E-10	1.47E-10	2.42E-10	6.91E-10	3.95E-10
Acenaphthylene	208-96-8	8.76E-07	1.03E-11	1.15E-10	1.20E-10	3.68E-11	5.81E-11	1.64E-10	9.35E-11
Anthracene	120-12-7	8.74E-10	3.11E-11	2.44E-10	3.34E-10	1.01E-10	1.98E-10	6.01E-10	3.43E-10
Benz(a)anthracene	56-55-3	3.02E-10	1.15E-10	1.91E-09	5.50E-10	1.67E-10	1.05E-10	2.44E-10	1.40E-10
Benzo(a)fluorene	30777-18-5	2.13E-08	7.39E-11	7.50E-09	6.52E-10	1.89E-10	1.95E-10	5.46E-10	3.12E-10
Benzo(a)pyrene	50-32-8	3.42E-10	3.93E-10	1.66E-08	2.15E-09	6.76E-10	2.53E-10	3.87E-10	2.21E-10
Benzo(b)fluoranthene	205-99-2	8.44E-09	3.08E-11	6.31E-09	2.64E-10	6.55E-11	1.43E-10	4.75E-10	2.71E-10
Benzo(b)fluorene	243-17-4	2.66E-08	9.91E-11	1.35E-08	1.07E-09	3.28E-10	1.58E-10	3.40E-10	1.94E-10
Benzo(e)pyrene	192-97-20	8.16E-08	1.15E-08	4.43E-07	1.42E-07	4.53E-08	1.21E-08	8.53E-10	4.87E-10
Benzo(g,h,i)perylene	191-24-2	4.15E-08	1.69E-08	4.01E-07	2.09E-07	6.68E-08	1.84E-08	4.25E-09	2.43E-09
Benzo(k)fluoranthene	207-08-9	3.90E-10	1.38E-10	1.41E-08	8.99E-10	2.75E-10	1.73E-10	4.19E-10	2.39E-10
Chrysene	218-01-9	1.12E-09	1.47E-10	2.71E-09	8.07E-10	2.26E-10	2.97E-10	9.05E-10	5.17E-10
Dibenz(a,c)anthracene	215-58-7	1.72E-08	3.54E-09	6.17E-07	2.30E-08	7.32E-09	1.93E-09	4.79E-10	2.74E-10
Dibenz(a,h)anthracene	53-70-3	1.43E-10	1.45E-09	2.74E-08	1.69E-08	5.40E-09	1.46E-09	1.88E-10	1.08E-10
Fluoranthene	206-44-0	8.58E-09	2.75E-10	2.30E-08	2.93E-09	8.09E-10	1.70E-09	5.34E-09	3.05E-09
Fluorene	86-73-7	1.11E-09	3.82E-11	9.38E-10	4.24E-10	1.31E-10	2.25E-10	6.55E-10	3.74E-10
Indeno(1,2,3-cd)pyrene	193-39-5	8.98E-10	7.15E-10	1.21E-07	2.89E-09	8.86E-10	4.22E-10	8.53E-10	4.88E-10
Perylene	198-55-0	6.23E-09	9.23E-09	4.79E-08	1.14E-07	3.65E-08	9.68E-09	2.03E-10	1.16E-10
Phenanthrene	85-01-8	1.08E-08	3.29E-10	1.23E-08	3.61E-09	1.08E-09	2.04E-09	6.15E-09	3.52E-09
Pyrene	129-00-0	4.26E-08	1.21E-09	3.11E-08	1.38E-08	3.88E-09	8.80E-09	2.79E-08	1.59E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.05E-06	1.33E-07	3.23E-04	2.04E-06	4.06E-07	1.66E-06	5.85E-08	3.34E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	8.49E-10	3.83E-10	**2.96E-08**	3.29E-09	9.18E-10	1.16E-09	3.64E-11	2.08E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	2.98E-08	5.56E-10	2.74E-08	1.24E-08	2.61E-09	1.98E-09	3.39E-11	1.94E-11
Bromoform	75-25-2	1.15E-08	1.56E-08	6.49E-07	3.37E-07	7.10E-08	5.38E-08	9.18E-10	5.25E-10
Carbon Tetrachloride	56-23-5	6.39E-09	1.78E-10	1.21E-08	3.96E-09	8.34E-10	6.33E-10	1.08E-11	6.18E-12
Chloroform	67-66-3	1.52E-08	1.00E-10	2.85E-09	2.21E-09	4.68E-10	3.57E-10	6.13E-12	3.50E-12
Dichloromethane	75-09-2	9.72E-06	1.06E-08	1.77E-07	2.32E-07	4.91E-08	3.75E-08	6.46E-10	3.69E-10
O-Terphenyl	84-15-1	4.18E-08	9.71E-09	2.51E-06	1.19E-07	3.28E-08	5.02E-08	1.54E-09	8.81E-10
Trichlorofluoromethane (FREON 11)	75-69-4	5.65E-07	6.43E-08	3.09E-06	1.41E-06	2.96E-07	2.24E-07	3.83E-09	2.19E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	2.77E-07	1.36E-09	2.16E-07	1.58E-08	4.29E-09	8.62E-09	2.64E-10	1.51E-10
1,2,4-Trichlorobenzene	120-82-1	4.83E-09	1.52E-10	4.20E-08	2.87E-09	6.44E-10	5.83E-10	1.20E-11	6.88E-12
1,2-Dichlorobenzene	95-50-1	2.06E-06	3.23E-09	3.22E-07	6.34E-08	1.41E-08	1.21E-08	2.35E-10	1.34E-10
Hexachlorobenzene	118-74-1	2.89E-08	5.78E-10	8.18E-07	8.32E-09	1.99E-09	3.41E-09	1.04E-10	5.97E-11
Pentachlorobenzene	608-93-5	7.56E-08	1.38E-08	1.54E-06	1.71E-07	4.45E-08	1.13E-07	3.67E-09	2.10E-09
Pentachlorophenol	87-86-5	3.16E-05	1.79E-08	3.77E-04	2.23E-07	7.10E-08	1.89E-08	7.80E-12	4.46E-12
Inorganics									
Antimony	7440-36-0	3.00E-05	1.16E-06	1.97E-03	5.97E-06	8.58E-07	1.17E-06	2.18E-08	1.24E-08
Arsenic	7440-38-2	7.94E-07	2.76E-07	7.57E-05	1.16E-06	4.87E-08	1.83E-07	3.68E-09	2.10E-09
Barium	7440-39-3	1.06E-05	1.23E-07	7.61E-05	6.02E-07	2.00E-06	1.10E-07	2.08E-09	1.19E-09
Beryllium	7440-41-7	9.46E-07	1.31E-07	5.78E-05	7.42E-07	8.04E-10	3.23E-07	1.04E-08	5.95E-09
Boron	7440-42-8	7.79E-03	5.52E-05	--	2.88E-04	9.31E-05	5.89E-05	1.02E-06	5.82E-07
Cadmium	7440-43-9	2.66E-04	5.25E-07	2.97E-02	3.29E-06	2.63E-07	9.66E-07	1.56E-05	3.67E-07
Chromium (Total)	7440-47-3	1.57E-06	3.91E-06	1.62E-03	1.56E-05	5.98E-06	2.08E-06	3.75E-08	2.14E-08
Chromium VI	18540-29-9	2.24E-07	5.57E-07	4.27E-05	2.21E-06	8.51E-07	2.96E-07	5.34E-09	3.05E-09
Cobalt	7440-48-4	1.48E-05	3.84E-05	2.08E-03	1.66E-04	4.80E-05	3.25E-05	7.77E-07	4.44E-07
Lead	7439-92-1	8.69E-04	7.30E-06	8.62E-03	4.53E-05	4.89E-05	1.74E-05	5.10E-07	2.91E-07
Mercury - Inorganic	7487-94-7	2.34E-04	2.03E-06	--	2.15E-05	9.21E-06	9.02E-08	3.71E-06	3.71E-06
Methyl Mercury	22967-92-6	2.50E-05	5.56E-08	2.06E-03	2.84E-07	1.63E-07	6.26E-10	2.33E-08	2.33E-08
Nickel	7440-02-0	3.63E-04	1.82E-04	4.84E-02	8.44E-04	1.91E-04	1.92E-04	4.86E-06	2.78E-06
Phosphorus	7723-14-0	4.76E-03	1.15E-03	--	6.07E-03	2.02E-03	1.76E-03	4.08E-05	2.33E-05
Selenium	7782-49-2	4.40E-07	3.39E-07	2.95E-04	1.30E-06	4.83E-06	8.50E-06	8.06E-07	8.06E-07
Silver	7440-22-4	2.30E-05	3.52E-06	1.07E-03	1.52E-05	1.48E-04	2.00E-06	2.54E-08	1.45E-08
Thallium	7440-28-0	8.81E-06	5.15E-04	--	2.30E-03	1.52E-04	5.48E-04	1.50E-05	8.55E-06
Tin	7440-31-5	1.43E-04	5.72E-04	1.44E-01	3.18E-03	8.63E-04	1.12E-03	3.30E-05	1.89E-05
Vanadium	7440-62-2	6.84E-06	1.11E-06	2.94E-04	6.29E-06	1.57E-06	2.90E-06	9.53E-08	5.44E-08
Zinc	7440-66-6	8.94E-02	8.91E-06	6.63E-01	5.09E-05	2.67E-05	1.34E-05	2.95E-05	2.95E-05

APPENDIX E-9

Multi-Pathway Exposure Point Concentrations – Upset Operations
(Process Upset Case) – 400,000 tpy

Calculated Exposure Point Concentrations for the Bowmanville Subdivision Receptor Cluster
Process Upset - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	5.56E-07	1.15E-09	--	1.20E-07	3.82E-10
Acenaphthylene	208-96-8	1.30E-07	6.43E-10	--	2.46E-08	7.35E-10
Anthracene	120-12-7	5.49E-07	4.31E-10	1.21E-10	5.33E-08	8.94E-12
Benz(a)anthracene	56-55-3	3.02E-07	2.13E-10	1.16E-08	5.95E-09	5.78E-10
Benzo(a)fluorene	30777-18-5	5.97E-07	1.66E-09	3.30E-09	1.75E-08	1.34E-09
Benzo(a)pyrene	50-32-8	5.34E-07	9.26E-10	3.62E-08	7.05E-09	5.21E-09
Benzo(b)fluoranthene	205-99-2	6.94E-07	2.66E-10	1.94E-09	7.77E-09	2.56E-10
Benzo(b)fluorene	243-17-4	4.12E-07	1.34E-09	2.26E-09	7.57E-09	3.53E-09
Benzo(e)pyrene	192-97-20	1.45E-06	8.93E-09	4.42E-09	1.07E-08	7.10E-07
Benzo(g,h,i)perylene	191-24-2	7.54E-06	7.17E-09	--	5.11E-08	1.08E-06
Benzo(k)fluoranthene	207-08-9	6.07E-07	6.27E-10	1.10E-08	6.98E-09	2.41E-09
Chrysene	218-01-9	1.12E-06	3.03E-10	1.44E-08	2.21E-08	8.01E-11
Dibenz(a,c)anthracene	215-58-7	9.49E-07	6.93E-09	3.78E-07	4.93E-09	9.51E-08
Dibenz(a,h)anthracene	53-70-3	3.33E-07	4.88E-10	1.71E-08	2.26E-09	8.57E-08
Fluoranthene	206-44-0	5.43E-06	1.28E-08	4.97E-09	2.71E-07	1.26E-09
Fluorene	86-73-7	5.53E-07	3.30E-09	--	8.02E-08	3.36E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.60E-06	1.72E-09	1.12E-07	9.52E-09	5.81E-10
Perylene	198-55-0	3.14E-07	1.50E-09	1.80E-10	2.97E-09	5.29E-07
Phenanthrene	85-01-8	5.59E-06	2.18E-08	1.41E-09	5.42E-07	5.89E-10
Pyrene	129-00-0	2.79E-05	2.18E-08	4.49E-09	1.59E-06	1.73E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	1.04E-04	3.52E-09	--	7.05E-07	4.92E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	5.99E-08	1.44E-12	2.39E-10	2.73E-10	1.08E-10
VOCs						
1,1,1-Trichloroethane	71-55-6	3.18E-10	4.84E-08	--	4.42E-10	8.90E-12
Bromoform	75-25-2	8.86E-10	1.55E-06	--	1.46E-09	2.21E-13
Carbon Tetrachloride	56-23-5	6.35E-11	1.07E-08	--	5.92E-11	8.59E-13
Chloroform	67-66-3	1.42E-10	1.59E-08	--	3.85E-10	4.30E-12
Dichloromethane	75-09-2	2.55E-08	4.96E-06	--	1.75E-07	4.48E-10
O-Terphenyl	84-15-1	1.76E-06	4.23E-09	--	4.40E-08	2.34E-09
Trichlorofluoromethane (FREON 11)	75-69-4	6.58E-09	5.47E-06	--	9.15E-09	1.88E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	2.50E-07	1.92E-09	--	1.63E-08	5.91E-12
1,2,4-Trichlorobenzene	120-82-1	5.89E-09	1.86E-09	--	1.11E-09	1.55E-12
1,2-Dichlorobenzene	95-50-1	7.93E-08	7.51E-08	--	3.42E-08	9.88E-10
Hexachlorobenzene	118-74-1	1.07E-07	2.29E-09	--	3.60E-09	4.04E-11
Pentachlorobenzene	608-93-5	3.89E-06	5.82E-09	--	1.55E-07	1.41E-10
Pentachlorophenol	87-86-5	1.83E-06	1.87E-06	--	7.99E-08	5.36E-06
Inorganics						
Antimony	7440-36-0	7.26E-04	1.43E-05	3.25E-05	2.31E-05	--
Arsenic	7440-38-2	7.20E-05	2.20E-06	4.98E-06	4.56E-07	--
Barium	7440-39-3	5.11E-04	1.10E-05	2.51E-05	1.65E-05	--
Beryllium	7440-41-7	4.57E-04	8.38E-07	3.95E-06	1.18E-06	--
Boron	7440-42-8	2.82E-03	8.01E-04	1.81E-03	6.36E-03	--
Cadmium	7440-43-9	3.01E-03	3.59E-05	8.30E-05	3.77E-04	--
Chromium (Total)	7440-47-3	2.53E-04	1.18E-05	2.67E-05	1.24E-06	--
Chromium VI	18540-29-9	3.60E-05	1.67E-06	3.79E-06	1.76E-07	--
Cobalt	7440-48-4	1.53E-03	3.02E-05	6.87E-05	1.33E-05	--
Lead	7439-92-1	7.01E-02	1.19E-04	5.93E-04	9.53E-04	--
Mercury - Inorganic	7487-94-7	4.73E-03	1.11E-06	7.99E-06	6.86E-05	1.84E-05
Methyl Mercury	22967-92-6	1.83E-04	4.96E-09	2.25E-06	5.39E-06	5.18E-06
Nickel	7440-02-0	3.29E-02	4.50E-04	1.03E-03	3.06E-04	--
Phosphorus	7723-14-0	9.85E-04	2.41E-04	5.46E-04	3.45E-03	--
Selenium	7782-49-2	1.45E-05	2.51E-06	5.69E-06	2.83E-07	--
Silver	7440-22-4	1.66E-04	1.75E-05	3.97E-05	2.30E-05	--
Thallium	7440-28-0	1.60E-02	2.00E-04	4.62E-04	1.37E-05	--
Tin	7440-31-5	1.73E-02	6.98E-05	2.09E-04	1.57E-04	--
Vanadium	7440-62-2	1.65E-03	2.66E-06	1.38E-05	5.49E-06	--
Zinc	7440-66-6	7.20E-02	1.03E-03	2.36E-03	6.99E-03	--

Calculated Exposure Point Concentrations for the Bowmanville Subdivision Receptor Cluster
Process Upset - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.18E-07	1.24E-10	4.57E-10	4.86E-10	1.52E-10	2.39E-10	6.70E-10	3.83E-10
Acenaphthylene	208-96-8	8.29E-07	2.90E-11	3.22E-10	1.76E-10	4.79E-11	6.47E-11	1.71E-10	9.79E-11
Anthracene	120-12-7	8.27E-10	8.71E-11	6.84E-10	3.40E-10	1.01E-10	1.91E-10	5.74E-10	3.28E-10
Benz(a)anthracene	56-55-3	2.86E-10	3.22E-10	5.34E-09	7.05E-10	2.16E-10	1.15E-10	2.33E-10	1.33E-10
Benzo(a)fluorene	30777-18-5	2.01E-08	2.05E-10	2.10E-08	1.11E-09	3.13E-10	2.43E-10	5.66E-10	3.24E-10
Benzo(a)pyrene	50-32-8	3.23E-10	1.09E-09	4.62E-08	3.22E-09	1.01E-09	3.49E-10	3.69E-10	2.11E-10
Benzo(b)fluoranthene	205-99-2	7.99E-09	8.59E-11	1.77E-08	3.24E-10	8.42E-11	1.43E-10	4.53E-10	2.59E-10
Benzo(b)fluorene	243-17-4	2.52E-08	2.72E-10	3.77E-08	1.77E-09	5.35E-10	2.41E-10	3.56E-10	2.03E-10
Benzo(e)pyrene	192-97-20	7.72E-08	3.12E-08	1.23E-06	2.28E-07	7.28E-08	1.94E-08	8.17E-10	4.67E-10
Benzo(g,h,i)perylene	191-24-2	3.93E-08	4.60E-08	1.12E-06	3.37E-07	1.07E-07	2.94E-08	4.04E-09	2.31E-09
Benzo(k)fluoranthene	207-08-9	3.69E-10	3.82E-10	3.94E-08	1.35E-09	4.15E-10	2.11E-10	3.98E-10	2.27E-10
Chrysene	218-01-9	1.06E-09	4.12E-10	7.59E-09	8.47E-10	2.38E-10	2.89E-10	8.61E-10	4.92E-10
Dibenz(a,c)anthracene	215-58-7	1.63E-08	9.79E-09	1.73E-06	3.52E-08	1.12E-08	2.96E-09	4.67E-10	2.67E-10
Dibenz(a,h)anthracene	53-70-3	1.35E-10	3.96E-09	7.68E-08	2.72E-08	8.67E-09	2.33E-09	1.79E-10	1.02E-10
Fluoranthene	206-44-0	8.12E-09	7.69E-10	6.43E-08	3.37E-09	9.27E-10	1.68E-09	5.13E-09	2.93E-09
Fluorene	86-73-7	1.05E-09	1.07E-10	2.62E-09	5.56E-10	1.57E-10	2.37E-10	6.60E-10	3.77E-10
Indeno(1,2,3-cd)pyrene	193-39-5	8.49E-10	2.00E-09	3.39E-07	3.12E-09	9.58E-10	4.28E-10	8.11E-10	4.63E-10
Perylene	198-55-0	5.90E-09	2.51E-08	1.33E-07	1.84E-07	5.88E-08	1.56E-08	1.93E-10	1.11E-10
Phenanthrene	85-01-8	1.02E-08	9.19E-10	3.45E-08	4.11E-09	1.18E-09	2.03E-09	5.98E-09	3.42E-09
Pyrene	129-00-0	4.04E-08	3.40E-09	8.69E-08	1.39E-08	3.88E-09	8.42E-09	2.65E-08	1.51E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	9.95E-07	3.71E-07	9.03E-04	2.04E-06	4.17E-07	1.58E-06	5.55E-08	3.17E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	6.16E-10	7.35E-10	**4.47E-08**	4.21E-09	1.23E-09	1.02E-09	2.64E-11	1.51E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	2.82E-08	1.56E-09	7.67E-08	6.04E-08	1.27E-08	9.64E-09	1.65E-10	9.41E-11
Bromoform	75-25-2	1.09E-08	4.36E-08	1.82E-06	1.66E-06	3.49E-07	2.64E-07	4.51E-09	2.58E-09
Carbon Tetrachloride	56-23-5	6.04E-09	4.98E-10	3.39E-08	1.93E-08	4.07E-09	3.08E-09	5.26E-11	3.01E-11
Chloroform	67-66-3	1.43E-08	2.81E-10	7.98E-09	1.09E-08	2.29E-09	1.73E-09	2.97E-11	1.70E-11
Dichloromethane	75-09-2	9.19E-06	2.97E-08	4.96E-07	1.15E-06	2.42E-07	1.83E-07	3.14E-09	1.79E-09
O-Terphenyl	84-15-1	3.96E-08	2.68E-08	7.01E-06	2.13E-07	5.69E-08	5.99E-08	1.59E-09	9.07E-10
Trichlorofluoromethane (FREON 11)	75-69-4	5.35E-07	1.80E-07	8.67E-06	6.90E-06	1.45E-06	1.10E-06	1.88E-08	1.07E-08
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	2.62E-07	3.80E-09	6.06E-07	3.04E-08	7.32E-09	1.06E-08	2.92E-10	1.67E-10
1,2,4-Trichlorobenzene	120-82-1	4.57E-09	4.25E-10	1.17E-07	1.24E-08	2.67E-09	2.15E-09	3.93E-11	2.25E-11
1,2-Dichlorobenzene	95-50-1	1.95E-06	9.04E-09	9.02E-07	2.86E-07	6.12E-08	4.82E-08	8.60E-10	4.92E-10
Hexachlorobenzene	118-74-1	2.73E-08	1.61E-09	2.29E-06	2.55E-08	5.71E-09	6.10E-09	1.46E-10	8.37E-11
Pentachlorobenzene	608-93-5	7.15E-08	3.87E-08	4.31E-06	2.14E-07	5.35E-08	1.15E-07	3.61E-09	2.06E-09
Pentachlorophenol	87-86-5	2.99E-05	4.87E-08	1.05E-03	3.58E-07	1.14E-07	3.04E-08	7.65E-12	4.37E-12
Inorganics									
Antimony	7440-36-0	2.18E-05	1.67E-06	2.86E-03	4.95E-06	7.15E-07	8.88E-07	1.58E-08	9.03E-09
Arsenic	7440-38-2	5.76E-07	4.01E-07	1.10E-04	1.03E-06	4.39E-08	1.46E-07	2.68E-09	1.53E-09
Barium	7440-39-3	7.66E-06	1.79E-07	1.10E-04	5.08E-07	1.70E-06	8.50E-08	1.51E-09	8.62E-10
Beryllium	7440-41-7	6.86E-07	1.89E-07	8.38E-05	6.16E-07	6.87E-10	2.40E-07	7.56E-09	4.32E-09
Boron	7440-42-8	5.65E-03	8.00E-05	--	2.36E-04	7.62E-05	4.47E-05	7.40E-07	4.23E-07
Cadmium	7440-43-9	1.93E-04	7.61E-07	4.31E-02	2.58E-06	2.06E-07	7.18E-07	1.13E-05	2.66E-07
Chromium (Total)	7440-47-3	1.14E-06	5.68E-06	2.35E-03	1.41E-05	5.48E-06	1.71E-06	2.73E-08	1.56E-08
Chromium VI	18540-29-9	1.62E-07	8.07E-07	6.19E-05	2.00E-06	7.80E-07	2.43E-07	3.88E-09	2.22E-09
Cobalt	7440-48-4	1.07E-05	5.56E-05	3.02E-03	1.46E-04	4.31E-05	2.54E-05	5.65E-07	3.23E-07
Lead	7439-92-1	6.31E-04	1.06E-05	1.25E-02	3.63E-05	3.98E-05	1.29E-05	3.70E-07	2.12E-07
Mercury - Inorganic	7487-94-7	1.70E-04	2.93E-06	--	1.69E-05	7.49E-06	6.62E-08	2.70E-06	2.70E-06
Methyl Mercury	22967-92-6	1.82E-05	8.04E-08	2.99E-03	2.56E-07	1.48E-07	4.74E-10	1.69E-08	1.69E-08
Nickel	7440-02-0	2.63E-04	2.64E-04	7.02E-02	7.29E-04	1.68E-04	1.48E-04	3.53E-06	2.02E-06
Phosphorus	7723-14-0	3.45E-03	1.66E-03	--	4.97E-03	1.65E-03	1.32E-03	2.96E-05	1.69E-05
Selenium	7782-49-2	3.19E-07	4.92E-07	4.27E-04	1.19E-06	4.45E-06	7.34E-06	5.91E-07	5.91E-07
Silver	7440-22-4	1.66E-05	5.10E-06	1.55E-03	1.33E-05	1.30E-04	1.61E-06	1.85E-08	1.06E-08
Thallium	7440-28-0	6.39E-06	7.47E-04	--	2.02E-03	1.37E-04	4.22E-04	1.09E-05	6.21E-06
Tin	7440-31-5	1.04E-04	8.29E-04	2.10E-01	2.63E-03	7.27E-04	8.36E-04	2.40E-05	1.37E-05
Vanadium	7440-62-2	4.96E-06	1.61E-06	4.26E-04	5.24E-06	1.35E-06	2.15E-06	6.92E-08	3.95E-08
Zinc	7440-66-6	6.48E-02	1.29E-05	9.62E-01	4.09E-05	2.16E-05	1.00E-05	2.14E-05	2.14E-05

Calculated Exposure Point Concentrations for the Courtice Subdivision Receptor Cluster
Process Upset - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	4.17E-07	1.15E-09	--	9.00E-08	2.62E-10
Acenaphthylene	208-96-8	9.76E-08	6.43E-10	--	1.84E-08	5.05E-10
Anthracene	120-12-7	4.11E-07	4.31E-10	8.79E-11	3.99E-08	6.14E-12
Benz(a)anthracene	56-55-3	2.26E-07	2.13E-10	8.38E-09	4.45E-09	3.98E-10
Benzo(a)fluorene	30777-18-5	4.47E-07	1.66E-09	2.39E-09	1.31E-08	9.22E-10
Benzo(a)pyrene	50-32-8	4.00E-07	9.26E-10	2.62E-08	5.28E-09	3.58E-09
Benzo(b)fluoranthene	205-99-2	5.19E-07	2.66E-10	1.41E-09	5.82E-09	1.76E-10
Benzo(b)fluorene	243-17-4	3.09E-07	1.34E-09	1.63E-09	5.67E-09	2.43E-09
Benzo(e)pyrene	192-97-20	1.09E-06	8.93E-09	3.20E-09	8.00E-09	4.88E-07
Benzo(g,h,i)perylene	191-24-2	5.65E-06	7.17E-09	--	3.83E-08	7.40E-07
Benzo(k)fluoranthene	207-08-9	4.54E-07	6.27E-10	7.93E-09	5.22E-09	1.65E-09
Chrysene	218-01-9	8.39E-07	3.03E-10	1.04E-08	1.65E-08	5.51E-11
Dibenz(a,c)anthracene	215-58-7	7.11E-07	6.93E-09	2.74E-07	3.69E-09	6.53E-08
Dibenz(a,h)anthracene	53-70-3	2.50E-07	4.88E-10	1.24E-08	1.69E-09	5.89E-08
Fluoranthene	206-44-0	4.07E-06	1.28E-08	3.59E-09	2.03E-07	8.64E-10
Fluorene	86-73-7	4.15E-07	3.30E-09	--	6.01E-08	2.31E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.20E-06	1.72E-09	8.10E-08	7.12E-09	4.00E-10
Perylene	198-55-0	2.35E-07	1.50E-09	1.30E-10	2.22E-09	3.64E-07
Phenanthrene	85-01-8	4.19E-06	2.18E-08	1.02E-09	4.06E-07	4.05E-10
Pyrene	129-00-0	2.08E-05	2.18E-08	3.25E-09	1.19E-06	1.19E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	7.76E-05	3.52E-09	--	5.26E-07	3.38E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	4.29E-08	1.44E-12	1.66E-10	1.95E-10	7.40E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	2.38E-10	4.84E-08	--	3.31E-10	6.12E-12
Bromoform	75-25-2	6.64E-10	1.55E-06	--	1.10E-09	1.52E-13
Carbon Tetrachloride	56-23-5	4.76E-11	1.07E-08	--	4.44E-11	5.90E-13
Chloroform	67-66-3	1.07E-10	1.59E-08	--	2.88E-10	2.95E-12
Dichloromethane	75-09-2	1.91E-08	4.96E-06	--	1.31E-07	3.08E-10
O-Terphenyl	84-15-1	1.32E-06	4.23E-09	--	3.29E-08	1.61E-09
Trichlorofluoromethane (FREON 11)	75-69-4	4.93E-09	5.47E-06	--	6.85E-09	1.29E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.87E-07	1.92E-09	--	1.22E-08	4.06E-12
1,2,4-Trichlorobenzene	120-82-1	4.42E-09	1.86E-09	--	8.35E-10	1.06E-12
1,2-Dichlorobenzene	95-50-1	5.94E-08	7.51E-08	--	2.56E-08	6.79E-10
Hexachlorobenzene	118-74-1	8.05E-08	2.29E-09	--	2.70E-09	2.78E-11
Pentachlorobenzene	608-93-5	2.91E-06	5.82E-09	--	1.16E-07	9.67E-11
Pentachlorophenol	87-86-5	1.37E-06	1.87E-06	--	5.98E-08	3.68E-06
Inorganics						
Antimony	7440-36-0	5.21E-04	1.43E-05	2.25E-05	1.66E-05	--
Arsenic	7440-38-2	5.17E-05	2.20E-06	3.45E-06	3.27E-07	--
Barium	7440-39-3	3.67E-04	1.10E-05	1.74E-05	1.18E-05	--
Beryllium	7440-41-7	3.28E-04	8.38E-07	2.74E-06	8.47E-07	--
Boron	7440-42-8	2.03E-03	8.01E-04	1.26E-03	4.57E-03	--
Cadmium	7440-43-9	2.16E-03	3.59E-05	5.76E-05	2.70E-04	--
Chromium (Total)	7440-47-3	1.82E-04	1.18E-05	1.85E-05	8.88E-07	--
Chromium VI	18540-29-9	2.59E-05	1.67E-06	2.63E-06	1.26E-07	--
Cobalt	7440-48-4	1.10E-03	3.02E-05	4.76E-05	9.53E-06	--
Lead	7439-92-1	5.03E-02	1.19E-04	4.11E-04	6.84E-04	--
Mercury - Inorganic	7487-94-7	3.18E-03	1.11E-06	5.54E-06	4.61E-05	1.26E-05
Methyl Mercury	22967-92-6	1.32E-04	4.96E-09	1.56E-06	3.87E-06	3.56E-06
Nickel	7440-02-0	2.36E-02	4.50E-04	7.16E-04	2.20E-04	--
Phosphorus	7723-14-0	7.08E-04	2.41E-04	3.79E-04	2.48E-03	--
Selenium	7782-49-2	1.04E-05	2.51E-06	3.95E-06	2.03E-07	--
Silver	7440-22-4	1.20E-04	1.75E-05	2.76E-05	1.65E-05	--
Thallium	7440-28-0	1.15E-02	2.00E-04	3.21E-04	9.84E-06	--
Tin	7440-31-5	1.24E-02	6.98E-05	1.45E-04	1.12E-04	--
Vanadium	7440-62-2	1.19E-03	2.66E-06	9.56E-06	3.94E-06	--
Zinc	7440-66-6	5.17E-02	1.03E-03	1.64E-03	5.02E-03	--

Calculated Exposure Point Concentrations for the Courtice Subdivision Receptor Cluster
Process Upset - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	8.87E-08	1.24E-10	4.57E-10	3.25E-10	1.06E-10	1.73E-10	4.91E-10	2.81E-10
Acenaphthylene	208-96-8	6.21E-07	2.90E-11	3.22E-10	9.27E-11	2.77E-11	4.23E-11	1.18E-10	6.73E-11
Anthracene	120-12-7	6.19E-10	8.71E-11	6.84E-10	2.40E-10	7.23E-11	1.40E-10	4.26E-10	2.43E-10
Benz(a)anthracene	56-55-3	2.14E-10	3.22E-10	5.34E-09	4.99E-10	1.53E-10	8.31E-11	1.73E-10	9.90E-11
Benzo(a)fluorene	30777-18-5	1.51E-08	2.05E-10	2.10E-08	6.69E-10	1.96E-10	1.59E-10	3.90E-10	2.23E-10
Benzo(a)pyrene	50-32-8	2.42E-10	1.09E-09	4.62E-08	2.25E-09	7.07E-10	2.48E-10	2.74E-10	1.57E-10
Benzo(b)fluoranthene	205-99-2	5.98E-09	8.59E-11	1.77E-08	2.27E-10	5.91E-11	1.05E-10	3.37E-10	1.92E-10
Benzo(b)fluorene	243-17-4	1.89E-08	2.72E-10	3.77E-08	1.15E-09	3.54E-10	1.59E-10	2.43E-10	1.39E-10
Benzo(e)pyrene	192-97-20	5.78E-08	3.12E-08	1.23E-06	1.57E-07	5.01E-08	1.34E-08	6.05E-10	3.45E-10
Benzo(g,h,i)perylene	191-24-2	2.94E-08	4.60E-08	1.12E-06	2.32E-07	7.38E-08	2.03E-08	3.01E-09	1.72E-09
Benzo(k)fluoranthene	207-08-9	2.76E-10	3.82E-10	3.94E-08	9.46E-10	2.90E-10	1.52E-10	2.97E-10	1.69E-10
Chrysene	218-01-9	7.95E-10	4.12E-10	7.59E-09	6.09E-10	1.72E-10	2.13E-10	6.41E-10	3.66E-10
Dibenz(a,c)anthracene	215-58-7	1.22E-08	9.79E-09	1.73E-06	2.45E-08	7.81E-09	2.06E-09	3.39E-10	1.94E-10
Dibenz(a,h)anthracene	53-70-3	1.01E-10	3.96E-09	7.68E-08	1.87E-08	5.96E-09	1.60E-09	1.33E-10	7.62E-11
Fluoranthene	206-44-0	6.08E-09	7.69E-10	6.43E-08	2.29E-09	6.42E-10	1.22E-09	3.79E-09	2.17E-09
Fluorene	86-73-7	7.86E-10	1.07E-10	2.62E-09	3.17E-10	9.66E-11	1.62E-10	4.68E-10	2.67E-10
Indeno(1,2,3-cd)pyrene	193-39-5	6.36E-10	2.00E-09	3.39E-07	2.25E-09	6.91E-10	3.13E-10	6.04E-10	3.45E-10
Perylene	198-55-0	4.42E-09	2.51E-08	1.33E-07	1.27E-07	4.04E-08	1.07E-08	1.44E-10	8.21E-11
Phenanthrene	85-01-8	7.68E-09	9.19E-10	3.45E-08	2.68E-09	7.99E-10	1.46E-09	4.37E-09	2.50E-09
Pyrene	129-00-0	3.02E-08	3.40E-09	8.69E-08	1.01E-08	2.84E-09	6.25E-09	1.97E-08	1.13E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	7.43E-07	3.71E-07	9.03E-04	1.50E-06	3.07E-07	1.18E-06	4.14E-08	2.36E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	4.41E-10	7.35E-10	**4.47E-08**	2.92E-09	8.49E-10	7.19E-10	1.89E-11	1.08E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	2.11E-08	1.56E-09	7.67E-08	1.12E-08	2.36E-09	1.79E-09	3.07E-11	1.75E-11
Bromoform	75-25-2	8.17E-09	4.36E-08	1.82E-06	3.05E-07	6.41E-08	4.86E-08	8.29E-10	4.74E-10
Carbon Tetrachloride	56-23-5	4.53E-09	4.98E-10	3.39E-08	3.57E-09	7.53E-10	5.71E-10	9.77E-12	5.58E-12
Chloroform	67-66-3	1.07E-08	2.81E-10	7.98E-09	2.02E-09	4.27E-10	3.25E-10	5.59E-12	3.20E-12
Dichloromethane	75-09-2	6.89E-06	2.97E-08	4.96E-07	2.13E-07	4.51E-08	3.45E-08	5.94E-10	3.39E-10
O-Terphenyl	84-15-1	2.96E-08	2.68E-08	7.01E-06	1.22E-07	3.40E-08	3.93E-08	1.10E-09	6.30E-10
Trichlorofluoromethane (FREON 11)	75-69-4	4.01E-07	1.80E-07	8.67E-06	1.27E-06	2.67E-07	2.03E-07	3.46E-09	1.98E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	1.96E-07	3.80E-09	6.06E-07	1.41E-08	3.65E-09	6.56E-09	1.95E-10	1.11E-10
1,2,4-Trichlorobenzene	120-82-1	3.42E-09	4.25E-10	1.17E-07	2.69E-09	6.05E-10	5.51E-10	1.14E-11	6.54E-12
1,2-Dichlorobenzene	95-50-1	1.46E-06	9.04E-09	9.02E-07	5.85E-08	1.30E-08	1.12E-08	2.20E-10	1.26E-10
Hexachlorobenzene	118-74-1	2.05E-08	1.61E-09	2.29E-06	7.93E-09	1.92E-09	2.80E-09	7.97E-11	4.56E-11
Pentachlorobenzene	608-93-5	5.35E-08	3.87E-08	4.31E-06	1.29E-07	3.34E-08	8.11E-08	2.62E-09	1.50E-09
Pentachlorophenol	87-86-5	2.24E-05	4.87E-08	1.05E-03	2.46E-07	7.85E-08	2.09E-08	5.64E-12	3.22E-12
Inorganics									
Antimony	7440-36-0	1.56E-05	1.67E-06	2.86E-03	3.49E-06	5.04E-07	6.33E-07	1.14E-08	6.49E-09
Arsenic	7440-38-2	4.14E-07	4.01E-07	1.10E-04	7.20E-07	3.06E-08	1.04E-07	1.92E-09	1.10E-09
Barium	7440-39-3	5.50E-06	1.79E-07	1.10E-04	3.58E-07	1.19E-06	6.06E-08	1.08E-09	6.19E-10
Beryllium	7440-41-7	4.92E-07	1.89E-07	8.38E-05	4.32E-07	4.81E-10	1.71E-07	5.42E-09	3.10E-09
Boron	7440-42-8	4.06E-03	8.00E-05	--	1.67E-04	5.38E-05	3.19E-05	5.31E-07	3.04E-07
Cadmium	7440-43-9	1.38E-04	7.61E-07	4.31E-02	1.83E-06	1.46E-07	5.14E-07	8.12E-06	1.91E-07
Chromium (Total)	7440-47-3	8.19E-07	5.68E-06	2.35E-03	9.81E-06	3.82E-06	1.21E-06	1.96E-08	1.12E-08
Chromium VI	18540-29-9	1.16E-07	8.07E-07	6.19E-05	1.40E-06	5.43E-07	1.72E-07	2.79E-09	1.59E-09
Cobalt	7440-48-4	7.71E-06	5.56E-05	3.02E-03	1.02E-04	3.01E-05	1.80E-05	4.05E-07	2.32E-07
Lead	7439-92-1	4.52E-04	1.06E-05	1.25E-02	2.56E-05	2.80E-05	9.19E-06	2.65E-07	1.52E-07
Mercury - Inorganic	7487-94-7	1.14E-04	2.93E-06	--	1.14E-05	5.06E-06	4.44E-08	1.81E-06	1.81E-06
Methyl Mercury	22967-92-6	1.30E-05	8.04E-08	2.99E-03	1.79E-07	1.03E-07	3.38E-10	1.21E-08	1.21E-08
Nickel	7440-02-0	1.89E-04	2.64E-04	7.02E-02	5.11E-04	1.18E-04	1.05E-04	2.53E-06	1.45E-06
Phosphorus	7723-14-0	2.48E-03	1.66E-03	--	3.51E-03	1.17E-03	9.41E-04	2.13E-05	1.22E-05
Selenium	7782-49-2	2.29E-07	4.92E-07	4.27E-04	8.27E-07	3.10E-06	5.15E-06	4.24E-07	4.24E-07
Silver	7440-22-4	1.20E-05	5.10E-06	1.55E-03	9.31E-06	9.11E-05	1.14E-06	1.33E-08	7.61E-09
Thallium	7440-28-0	4.59E-06	7.47E-04	--	1.41E-03	9.55E-05	3.01E-04	7.80E-06	4.46E-06
Tin	7440-31-5	7.45E-05	8.29E-04	2.10E-01	1.85E-03	5.11E-04	5.97E-04	1.72E-05	9.83E-06
Vanadium	7440-62-2	3.56E-06	1.61E-06	4.26E-04	3.67E-06	9.45E-07	1.54E-06	4.96E-08	2.83E-08
Zinc	7440-66-6	4.65E-02	1.29E-05	9.62E-01	2.90E-05	1.53E-05	7.16E-06	1.54E-05	1.54E-05

Calculated Exposure Point Concentrations for the Courtice Road Receptor Cluster
Process Upset - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.74E-06	1.15E-09	--	3.76E-07	6.36E-10
Acenaphthylene	208-96-8	4.08E-07	6.43E-10	--	7.70E-08	1.22E-09
Anthracene	120-12-7	1.72E-06	4.31E-10	3.50E-10	1.67E-07	1.49E-11
Benz(a)anthracene	56-55-3	9.44E-07	2.13E-10	3.33E-08	1.86E-08	9.64E-10
Benzo(a)fluorene	30777-18-5	1.87E-06	1.66E-09	9.51E-09	5.47E-08	2.24E-09
Benzo(a)pyrene	50-32-8	1.67E-06	9.26E-10	1.04E-07	2.21E-08	8.68E-09
Benzo(b)fluoranthene	205-99-2	2.17E-06	2.66E-10	5.60E-09	2.43E-08	4.27E-10
Benzo(b)fluorene	243-17-4	1.29E-06	1.34E-09	6.50E-09	2.37E-08	5.89E-09
Benzo(e)pyrene	192-97-20	4.55E-06	8.93E-09	1.27E-08	3.34E-08	1.18E-06
Benzo(g,h,i)perylene	191-24-2	2.36E-05	7.17E-09	--	1.60E-07	1.80E-06
Benzo(k)fluoranthene	207-08-9	1.90E-06	6.27E-10	3.16E-08	2.18E-08	4.01E-09
Chrysene	218-01-9	3.50E-06	3.03E-10	4.15E-08	6.90E-08	1.34E-10
Dibenz(a,c)anthracene	215-58-7	2.97E-06	6.93E-09	1.09E-06	1.54E-08	1.58E-07
Dibenz(a,h)anthracene	53-70-3	1.04E-06	4.88E-10	4.92E-08	7.07E-09	1.43E-07
Fluoranthene	206-44-0	1.70E-05	1.28E-08	1.43E-08	8.48E-07	2.10E-09
Fluorene	86-73-7	1.73E-06	3.30E-09	--	2.51E-07	5.60E-11
Indeno(1,2,3-cd)pyrene	193-39-5	5.02E-06	1.72E-09	3.23E-07	2.98E-08	9.69E-10
Perylene	198-55-0	9.82E-07	1.50E-09	5.19E-10	9.28E-09	8.82E-07
Phenanthrene	85-01-8	1.75E-05	2.18E-08	4.07E-09	1.70E-06	9.82E-10
Pyrene	129-00-0	8.71E-05	2.18E-08	1.30E-08	4.96E-06	2.89E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	3.25E-04	3.52E-09	--	2.20E-06	8.21E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	1.33E-07	1.44E-12	4.33E-10	6.07E-10	1.80E-10
VOCs						
1,1,1-Trichloroethane	71-55-6	9.95E-10	4.84E-08	--	1.38E-09	1.48E-11
Bromoform	75-25-2	2.77E-09	1.55E-06	--	4.58E-09	3.68E-13
Carbon Tetrachloride	56-23-5	1.99E-10	1.07E-08	--	1.85E-10	1.43E-12
Chloroform	67-66-3	4.46E-10	1.59E-08	--	1.20E-09	7.16E-12
Dichloromethane	75-09-2	7.99E-08	4.96E-06	--	5.48E-07	7.46E-10
O-Terphenyl	84-15-1	5.51E-06	4.23E-09	--	1.38E-07	3.90E-09
Trichlorofluoromethane (FREON 11)	75-69-4	2.06E-08	5.47E-06	--	2.86E-08	3.14E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	7.82E-07	1.92E-09	--	5.09E-08	9.86E-12
1,2,4-Trichlorobenzene	120-82-1	1.84E-08	1.86E-09	--	3.49E-09	2.58E-12
1,2-Dichlorobenzene	95-50-1	2.48E-07	7.51E-08	--	1.07E-07	1.65E-09
Hexachlorobenzene	118-74-1	3.36E-07	2.29E-09	--	1.13E-08	6.74E-11
Pentachlorobenzene	608-93-5	1.22E-05	5.82E-09	--	4.84E-07	2.35E-10
Pentachlorophenol	87-86-5	5.72E-06	1.87E-06	--	2.50E-07	8.93E-06
Inorganics						
Antimony	7440-36-0	1.62E-03	1.43E-05	5.89E-05	5.16E-05	--
Arsenic	7440-38-2	1.60E-04	2.20E-06	9.02E-06	1.02E-06	--
Barium	7440-39-3	1.14E-03	1.10E-05	4.54E-05	3.67E-05	--
Beryllium	7440-41-7	1.02E-03	8.38E-07	7.16E-06	2.63E-06	--
Boron	7440-42-8	6.29E-03	8.01E-04	3.29E-03	1.42E-02	--
Cadmium	7440-43-9	6.71E-03	3.59E-05	1.50E-04	8.39E-04	--
Chromium (Total)	7440-47-3	5.65E-04	1.18E-05	4.83E-05	2.76E-06	--
Chromium VI	18540-29-9	8.03E-05	1.67E-06	6.87E-06	3.92E-07	--
Cobalt	7440-48-4	3.42E-03	3.02E-05	1.24E-04	2.96E-05	--
Lead	7439-92-1	1.56E-01	1.19E-04	1.07E-03	2.12E-03	--
Mercury - Inorganic	7487-94-7	1.09E-02	1.11E-06	1.45E-05	1.58E-04	3.06E-05
Methyl Mercury	22967-92-6	4.08E-04	4.96E-09	4.08E-06	1.20E-05	8.64E-06
Nickel	7440-02-0	7.32E-02	4.50E-04	1.87E-03	6.82E-04	--
Phosphorus	7723-14-0	2.20E-03	2.41E-04	9.89E-04	7.68E-03	--
Selenium	7782-49-2	3.23E-05	2.51E-06	1.03E-05	6.31E-07	--
Silver	7440-22-4	3.71E-04	1.75E-05	7.20E-05	5.12E-05	--
Thallium	7440-28-0	3.56E-02	2.00E-04	8.38E-04	3.05E-05	--
Tin	7440-31-5	3.86E-02	6.98E-05	3.78E-04	3.49E-04	--
Vanadium	7440-62-2	3.68E-03	2.66E-06	2.50E-05	1.22E-05	--
Zinc	7440-66-6	1.61E-01	1.03E-03	4.29E-03	1.56E-02	--

Calculated Exposure Point Concentrations for the Courtice Road Receptor Cluster
Process Upset - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	3.70E-07	1.24E-10	4.57E-10	1.33E-09	4.36E-10	7.17E-10	2.05E-09	1.17E-09
Acenaphthylene	208-96-8	2.59E-06	2.90E-11	3.22E-10	3.57E-10	1.09E-10	1.72E-10	4.84E-10	2.77E-10
Anthracene	120-12-7	2.59E-09	8.71E-11	6.84E-10	9.89E-10	2.99E-10	5.85E-10	1.78E-09	1.02E-09
Benz(a)anthracene	56-55-3	8.95E-10	3.22E-10	5.34E-09	1.75E-09	5.32E-10	3.20E-10	7.23E-10	4.13E-10
Benzo(a)fluorene	30777-18-5	6.30E-08	2.05E-10	2.10E-08	2.07E-09	5.93E-10	5.98E-10	1.61E-09	9.23E-10
Benzo(a)pyrene	50-32-8	1.01E-09	1.09E-09	4.62E-08	6.88E-09	2.15E-09	8.26E-10	1.14E-09	6.54E-10
Benzo(b)fluoranthene	205-99-2	2.50E-08	8.59E-11	1.77E-08	8.26E-10	2.08E-10	4.28E-10	1.41E-09	8.03E-10
Benzo(b)fluorene	243-17-4	7.88E-08	2.72E-10	3.77E-08	3.07E-09	9.30E-10	5.18E-10	1.01E-09	5.75E-10
Benzo(e)pyrene	192-97-20	2.42E-07	3.12E-08	1.23E-06	3.81E-07	1.22E-07	3.28E-08	2.52E-09	1.44E-09
Benzo(g,h,i)perylene	191-24-2	1.23E-07	4.60E-08	1.12E-06	5.63E-07	1.79E-07	5.07E-08	1.26E-08	7.19E-09
Benzo(k)fluoranthene	207-08-9	1.15E-09	3.82E-10	3.94E-08	2.85E-09	8.60E-10	5.44E-10	1.24E-09	7.09E-10
Chrysene	218-01-9	3.32E-09	4.12E-10	7.59E-09	2.43E-09	6.83E-10	8.83E-10	2.68E-09	1.53E-09
Dibenz(a,c)anthracene	215-58-7	5.10E-08	9.79E-09	1.73E-06	6.92E-08	2.20E-08	5.82E-09	1.42E-09	8.10E-10
Dibenz(a,h)anthracene	53-70-3	4.22E-10	3.96E-09	7.68E-08	4.59E-08	1.46E-08	3.99E-09	5.57E-10	3.18E-10
Fluoranthene	206-44-0	2.54E-08	7.69E-10	6.43E-08	8.88E-09	2.47E-09	5.04E-09	1.58E-08	9.04E-09
Fluorene	86-73-7	3.28E-09	1.07E-10	2.62E-09	1.26E-09	3.88E-10	6.66E-10	1.94E-09	1.11E-09
Indeno(1,2,3-cd)pyrene	193-39-5	2.66E-09	2.00E-09	3.39E-07	8.81E-09	2.70E-09	1.27E-09	2.52E-09	1.44E-09
Perylene	198-55-0	1.84E-08	2.51E-08	1.33E-07	3.07E-07	9.81E-08	2.60E-08	6.00E-10	3.43E-10
Phenanthrene	85-01-8	3.21E-08	9.19E-10	3.45E-08	1.08E-08	3.23E-09	6.05E-09	1.82E-08	1.04E-08
Pyrene	129-00-0	1.26E-07	3.40E-09	8.69E-08	4.13E-08	1.16E-08	2.61E-08	8.25E-08	4.72E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	3.11E-06	3.71E-07	9.03E-04	6.11E-06	1.22E-06	4.92E-06	1.73E-07	9.89E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	1.37E-09	7.35E-10	**4.47E-08**	7.57E-09	2.16E-09	2.11E-09	5.88E-11	3.36E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	8.82E-08	1.56E-09	7.67E-08	1.83E-08	3.87E-09	2.96E-09	5.09E-11	2.91E-11
Bromoform	75-25-2	3.41E-08	4.36E-08	1.82E-06	4.85E-07	1.02E-07	7.75E-08	1.32E-09	7.56E-10
Carbon Tetrachloride	56-23-5	1.89E-08	4.98E-10	3.39E-08	5.80E-09	1.22E-09	9.32E-10	1.60E-11	9.14E-12
Chloroform	67-66-3	4.48E-08	2.81E-10	7.98E-09	3.49E-09	7.42E-10	5.71E-10	9.93E-12	5.67E-12
Dichloromethane	75-09-2	2.88E-05	2.97E-08	4.96E-07	3.84E-07	8.18E-08	6.31E-08	1.10E-09	6.30E-10
O-Terphenyl	84-15-1	1.24E-07	2.68E-08	7.01E-06	3.79E-07	1.02E-07	1.52E-07	4.56E-09	2.61E-09
Trichlorofluoromethane (FREON 11)	75-69-4	1.67E-06	1.80E-07	8.67E-06	2.04E-06	4.29E-07	3.25E-07	5.56E-09	3.18E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	8.20E-07	3.80E-09	6.06E-07	4.69E-08	1.27E-08	2.55E-08	7.82E-10	4.47E-10
1,2,4-Trichlorobenzene	120-82-1	1.43E-08	4.25E-10	1.17E-07	5.79E-09	1.38E-09	1.44E-09	3.31E-11	1.89E-11
1,2-Dichlorobenzene	95-50-1	6.09E-06	9.04E-09	9.02E-07	1.19E-07	2.81E-08	2.69E-08	5.79E-10	3.31E-10
Hexachlorobenzene	118-74-1	8.55E-08	1.61E-09	2.29E-06	2.24E-08	5.55E-09	1.01E-08	3.09E-10	1.77E-10
Pentachlorobenzene	608-93-5	2.24E-07	3.87E-08	4.31E-06	5.07E-07	1.32E-07	3.34E-07	1.09E-08	6.21E-09
Pentachlorophenol	87-86-5	9.35E-05	4.87E-08	1.05E-03	6.00E-07	1.91E-07	5.12E-08	2.31E-11	1.32E-11
Inorganics									
Antimony	7440-36-0	4.85E-05	1.67E-06	2.86E-03	9.91E-06	1.43E-06	1.90E-06	3.52E-08	2.01E-08
Arsenic	7440-38-2	1.28E-06	4.01E-07	1.10E-04	1.95E-06	8.23E-08	3.02E-07	5.95E-09	3.40E-09
Barium	7440-39-3	1.71E-05	1.79E-07	1.10E-04	1.00E-06	3.34E-06	1.80E-07	3.36E-09	1.92E-09
Beryllium	7440-41-7	1.53E-06	1.89E-07	8.38E-05	1.23E-06	1.34E-09	5.24E-07	1.68E-08	9.61E-09
Boron	7440-42-8	1.26E-02	8.00E-05	--	4.77E-04	1.54E-04	9.60E-05	1.65E-06	9.41E-07
Cadmium	7440-43-9	4.30E-04	7.61E-07	4.31E-02	5.40E-06	4.31E-07	1.57E-06	2.52E-05	5.93E-07
Chromium (Total)	7440-47-3	2.54E-06	5.68E-06	2.35E-03	2.63E-05	1.02E-05	3.45E-06	6.06E-08	3.46E-08
Chromium VI	18540-29-9	3.61E-07	8.07E-07	6.19E-05	3.74E-06	1.44E-06	4.91E-07	8.62E-09	4.93E-09
Cobalt	7440-48-4	2.39E-05	5.56E-05	3.02E-03	2.79E-04	8.11E-05	5.32E-05	1.26E-06	7.18E-07
Lead	7439-92-1	1.40E-03	1.06E-05	1.25E-02	7.46E-05	8.08E-05	2.82E-05	8.24E-07	4.71E-07
Mercury - Inorganic	7487-94-7	3.92E-04	2.93E-06	--	3.65E-05	1.57E-05	1.51E-07	6.22E-06	6.22E-06
Methyl Mercury	22967-92-6	4.04E-05	8.04E-08	2.99E-03	4.88E-07	2.77E-07	1.02E-09	3.77E-08	3.77E-08
Nickel	7440-02-0	5.86E-04	2.64E-04	7.02E-02	1.41E-03	3.21E-04	3.14E-04	7.86E-06	4.49E-06
Phosphorus	7723-14-0	7.68E-03	1.66E-03	--	1.00E-02	3.35E-03	2.86E-03	6.59E-05	3.77E-05
Selenium	7782-49-2	7.11E-07	4.92E-07	4.27E-04	2.20E-06	8.20E-06	1.42E-05	1.30E-06	1.30E-06
Silver	7440-22-4	3.71E-05	5.10E-06	1.55E-03	2.55E-05	2.49E-04	3.29E-06	4.11E-08	2.35E-08
Thallium	7440-28-0	1.42E-05	7.47E-04	--	3.86E-03	2.57E-04	8.96E-04	2.42E-05	1.38E-05
Tin	7440-31-5	2.31E-04	8.29E-04	2.10E-01	5.28E-03	1.44E-03	1.82E-03	5.34E-05	3.05E-05
Vanadium	7440-62-2	1.11E-05	1.61E-06	4.26E-04	1.04E-05	2.63E-06	4.70E-06	1.54E-07	8.79E-08
Zinc	7440-66-6	1.44E-01	1.29E-05	9.62E-01	8.39E-05	4.41E-05	2.17E-05	4.76E-05	4.76E-05

Calculated Exposure Point Concentrations for the Maple Grove Receptor Cluster
Process Upset - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	4.80E-07	1.15E-09	--	1.04E-07	3.21E-10
Acenaphthylene	208-96-8	1.12E-07	6.43E-10	--	2.12E-08	6.17E-10
Anthracene	120-12-7	4.74E-07	4.31E-10	1.04E-10	4.60E-08	7.51E-12
Benz(a)anthracene	56-55-3	2.60E-07	2.13E-10	9.89E-09	5.13E-09	4.86E-10
Benzo(a)fluorene	30777-18-5	5.15E-07	1.66E-09	2.82E-09	1.51E-08	1.13E-09
Benzo(a)pyrene	50-32-8	4.61E-07	9.26E-10	3.10E-08	6.09E-09	4.38E-09
Benzo(b)fluoranthene	205-99-2	5.99E-07	2.66E-10	1.66E-09	6.71E-09	2.15E-10
Benzo(b)fluorene	243-17-4	3.56E-07	1.34E-09	1.93E-09	6.54E-09	2.97E-09
Benzo(e)pyrene	192-97-20	1.26E-06	8.93E-09	3.78E-09	9.22E-09	5.97E-07
Benzo(g,h,i)perylene	191-24-2	6.51E-06	7.17E-09	--	4.41E-08	9.05E-07
Benzo(k)fluoranthene	207-08-9	5.23E-07	6.27E-10	9.36E-09	6.02E-09	2.02E-09
Chrysene	218-01-9	9.67E-07	3.03E-10	1.23E-08	1.90E-08	6.73E-11
Dibenz(a,c)anthracene	215-58-7	8.20E-07	6.93E-09	3.23E-07	4.26E-09	7.99E-08
Dibenz(a,h)anthracene	53-70-3	2.88E-07	4.88E-10	1.46E-08	1.95E-09	7.20E-08
Fluoranthene	206-44-0	4.69E-06	1.28E-08	4.24E-09	2.34E-07	1.06E-09
Fluorene	86-73-7	4.78E-07	3.30E-09	--	6.93E-08	2.82E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.38E-06	1.72E-09	9.56E-08	8.21E-09	4.89E-10
Perylene	198-55-0	2.71E-07	1.50E-09	1.54E-10	2.56E-09	4.45E-07
Phenanthrene	85-01-8	4.83E-06	2.18E-08	1.21E-09	4.68E-07	4.95E-10
Pyrene	129-00-0	2.40E-05	2.18E-08	3.84E-09	1.37E-06	1.45E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	8.96E-05	3.52E-09	--	6.07E-07	4.14E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	3.23E-08	1.44E-12	1.07E-10	1.47E-10	9.05E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	2.75E-10	4.84E-08	--	3.82E-10	7.48E-12
Bromoform	75-25-2	7.65E-10	1.55E-06	--	1.26E-09	1.86E-13
Carbon Tetrachloride	56-23-5	5.48E-11	1.07E-08	--	5.11E-11	7.22E-13
Chloroform	67-66-3	1.23E-10	1.59E-08	--	3.32E-10	3.61E-12
Dichloromethane	75-09-2	2.20E-08	4.96E-06	--	1.51E-07	3.76E-10
O-Terphenyl	84-15-1	1.52E-06	4.23E-09	--	3.80E-08	1.97E-09
Trichlorofluoromethane (FREON 11)	75-69-4	5.68E-09	5.47E-06	--	7.90E-09	1.58E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	2.16E-07	1.92E-09	--	1.41E-08	4.97E-12
1,2,4-Trichlorobenzene	120-82-1	5.09E-09	1.86E-09	--	9.62E-10	1.30E-12
1,2-Dichlorobenzene	95-50-1	6.85E-08	7.51E-08	--	2.95E-08	8.30E-10
Hexachlorobenzene	118-74-1	9.27E-08	2.29E-09	--	3.11E-09	3.40E-11
Pentachlorobenzene	608-93-5	3.36E-06	5.82E-09	--	1.34E-07	1.18E-10
Pentachlorophenol	87-86-5	1.58E-06	1.87E-06	--	6.89E-08	4.50E-06
Inorganics						
Antimony	7440-36-0	3.91E-04	1.43E-05	1.45E-05	1.25E-05	--
Arsenic	7440-38-2	3.88E-05	2.20E-06	2.22E-06	2.46E-07	--
Barium	7440-39-3	2.75E-04	1.10E-05	1.12E-05	8.87E-06	--
Beryllium	7440-41-7	2.47E-04	8.38E-07	1.76E-06	6.36E-07	--
Boron	7440-42-8	1.52E-03	8.01E-04	8.09E-04	3.43E-03	--
Cadmium	7440-43-9	1.62E-03	3.59E-05	3.70E-05	2.03E-04	--
Chromium (Total)	7440-47-3	1.37E-04	1.18E-05	1.19E-05	6.67E-07	--
Chromium VI	18540-29-9	1.94E-05	1.67E-06	1.69E-06	9.48E-08	--
Cobalt	7440-48-4	8.27E-04	3.02E-05	3.06E-05	7.16E-06	--
Lead	7439-92-1	3.78E-02	1.19E-04	2.64E-04	5.14E-04	--
Mercury - Inorganic	7487-94-7	3.50E-03	1.11E-06	3.56E-06	5.07E-05	1.54E-05
Methyl Mercury	22967-92-6	9.88E-05	4.96E-09	1.01E-06	2.91E-06	4.35E-06
Nickel	7440-02-0	1.77E-02	4.50E-04	4.61E-04	1.65E-04	--
Phosphorus	7723-14-0	5.31E-04	2.41E-04	2.43E-04	1.86E-03	--
Selenium	7782-49-2	7.83E-06	2.51E-06	2.54E-06	1.53E-07	--
Silver	7440-22-4	8.98E-05	1.75E-05	1.77E-05	1.24E-05	--
Thallium	7440-28-0	8.61E-03	2.00E-04	2.06E-04	7.39E-06	--
Tin	7440-31-5	9.33E-03	6.98E-05	9.30E-05	8.45E-05	--
Vanadium	7440-62-2	8.91E-04	2.66E-06	6.15E-06	2.96E-06	--
Zinc	7440-66-6	3.88E-02	1.03E-03	1.06E-03	3.77E-03	--

Calculated Exposure Point Concentrations for the Maple Grove Receptor Cluster
Process Upset - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.02E-07	1.24E-10	4.57E-10	3.75E-10	1.22E-10	1.99E-10	5.67E-10	3.24E-10
Acenaphthylene	208-96-8	7.16E-07	2.90E-11	3.22E-10	1.07E-10	3.21E-11	4.88E-11	1.36E-10	7.76E-11
Anthracene	120-12-7	7.14E-10	8.71E-11	6.84E-10	2.77E-10	8.35E-11	1.62E-10	4.91E-10	2.81E-10
Benz(a)anthracene	56-55-3	2.47E-10	3.22E-10	5.34E-09	5.94E-10	1.82E-10	9.74E-11	2.00E-10	1.14E-10
Benzo(a)fluorene	30777-18-5	1.74E-08	2.05E-10	2.10E-08	8.12E-10	2.38E-10	1.87E-10	4.53E-10	2.59E-10
Benzo(a)pyrene	50-32-8	2.79E-10	1.09E-09	4.62E-08	2.71E-09	8.53E-10	2.96E-10	3.16E-10	1.81E-10
Benzo(b)fluoranthene	205-99-2	6.90E-09	8.59E-11	1.77E-08	2.69E-10	7.02E-11	1.22E-10	3.88E-10	2.22E-10
Benzo(b)fluorene	243-17-4	2.18E-08	2.72E-10	3.77E-08	1.40E-09	4.33E-10	1.91E-10	2.83E-10	1.61E-10
Benzo(e)pyrene	192-97-20	6.66E-08	3.12E-08	1.23E-06	1.92E-07	6.12E-08	1.63E-08	6.98E-10	3.99E-10
Benzo(g,h,i)perylene	191-24-2	3.39E-08	4.60E-08	1.12E-06	2.83E-07	9.03E-08	2.48E-08	3.48E-09	1.99E-09
Benzo(k)fluoranthene	207-08-9	3.18E-10	3.82E-10	3.94E-08	1.14E-09	3.51E-10	1.80E-10	3.42E-10	1.96E-10
Chrysene	218-01-9	9.17E-10	4.12E-10	7.59E-09	7.14E-10	2.02E-10	2.47E-10	7.40E-10	4.23E-10
Dibenz(a,c)anthracene	215-58-7	1.41E-08	9.79E-09	1.73E-06	2.97E-08	9.46E-09	2.49E-09	3.94E-10	2.25E-10
Dibenz(a,h)anthracene	53-70-3	1.17E-10	3.96E-09	7.68E-08	2.28E-08	7.29E-09	1.96E-09	1.54E-10	8.79E-11
Fluoranthene	206-44-0	7.01E-09	7.69E-10	6.43E-08	2.69E-09	7.52E-10	1.41E-09	4.37E-09	2.50E-09
Fluorene	86-73-7	9.05E-10	1.07E-10	2.62E-09	3.71E-10	1.13E-10	1.87E-10	5.40E-10	3.09E-10
Indeno(1,2,3-cd)pyrene	193-39-5	7.33E-10	2.00E-09	3.39E-07	2.66E-09	8.17E-10	3.66E-10	6.98E-10	3.99E-10
Perylene	198-55-0	5.09E-09	2.51E-08	1.33E-07	1.55E-07	4.94E-08	1.31E-08	1.66E-10	9.48E-11
Phenanthrene	85-01-8	8.85E-09	9.19E-10	3.45E-08	3.13E-09	9.31E-10	1.69E-09	5.05E-09	2.88E-09
Pyrene	129-00-0	3.48E-08	3.40E-09	8.69E-08	1.17E-08	3.29E-09	7.22E-09	2.28E-08	1.30E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	8.58E-07	3.71E-07	9.03E-04	1.75E-06	3.57E-07	1.36E-06	4.78E-08	2.73E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	3.32E-10	7.35E-10	**4.47E-08**	3.07E-09	9.19E-10	6.16E-10	1.42E-11	8.13E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	2.43E-08	1.56E-09	7.67E-08	1.40E-08	2.94E-09	2.23E-09	3.82E-11	2.19E-11
Bromoform	75-25-2	9.41E-09	4.36E-08	1.82E-06	3.80E-07	8.00E-08	6.06E-08	1.03E-09	5.91E-10
Carbon Tetrachloride	56-23-5	5.22E-09	4.98E-10	3.39E-08	4.46E-09	9.39E-10	7.13E-10	1.22E-11	6.97E-12
Chloroform	67-66-3	1.24E-08	2.81E-10	7.98E-09	2.50E-09	5.27E-10	4.02E-10	6.91E-12	3.95E-12
Dichloromethane	75-09-2	7.94E-06	2.97E-08	4.96E-07	2.62E-07	5.54E-08	4.23E-08	7.28E-10	4.16E-10
O-Terphenyl	84-15-1	3.41E-08	2.68E-08	7.01E-06	1.48E-07	4.13E-08	4.61E-08	1.28E-09	7.30E-10
Trichlorofluoromethane (FREON 11)	75-69-4	4.62E-07	1.80E-07	8.67E-06	1.59E-06	3.34E-07	2.53E-07	4.32E-09	2.47E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	2.26E-07	3.80E-09	6.06E-07	1.59E-08	4.14E-09	7.51E-09	2.24E-10	1.28E-10
1,2,4-Trichlorobenzene	120-82-1	3.94E-09	4.25E-10	1.17E-07	3.24E-09	7.28E-10	6.58E-10	1.36E-11	7.75E-12
1,2-Dichlorobenzene	95-50-1	1.68E-06	9.04E-09	9.02E-07	7.15E-08	1.59E-08	1.36E-08	2.65E-10	1.51E-10
Hexachlorobenzene	118-74-1	2.36E-08	1.61E-09	2.29E-06	9.61E-09	2.32E-09	3.30E-09	9.29E-11	5.31E-11
Pentachlorobenzene	608-93-5	6.17E-08	3.87E-08	4.31E-06	1.50E-07	3.88E-08	9.37E-08	3.02E-09	1.72E-09
Pentachlorophenol	87-86-5	2.58E-05	4.87E-08	1.05E-03	3.01E-07	9.60E-08	2.55E-08	6.16E-12	3.52E-12
Inorganics									
Antimony	7440-36-0	1.17E-05	1.67E-06	2.86E-03	2.41E-06	3.47E-07	4.60E-07	8.49E-09	4.85E-09
Arsenic	7440-38-2	3.11E-07	4.01E-07	1.10E-04	4.76E-07	2.01E-08	7.30E-08	1.43E-09	8.18E-10
Barium	7440-39-3	4.13E-06	1.79E-07	1.10E-04	2.44E-07	8.13E-07	4.36E-08	8.09E-10	4.62E-10
Beryllium	7440-41-7	3.70E-07	1.89E-07	8.38E-05	3.00E-07	3.28E-10	1.27E-07	4.07E-09	2.33E-09
Boron	7440-42-8	3.05E-03	8.00E-05	--	1.16E-04	3.75E-05	2.32E-05	3.97E-07	2.27E-07
Cadmium	7440-43-9	1.04E-04	7.61E-07	4.31E-02	1.31E-06	1.05E-07	3.80E-07	6.09E-06	1.43E-07
Chromium (Total)	7440-47-3	6.15E-07	5.68E-06	2.35E-03	6.42E-06	2.48E-06	8.34E-07	1.46E-08	8.32E-09
Chromium VI	18540-29-9	8.75E-08	8.07E-07	6.19E-05	9.12E-07	3.53E-07	1.19E-07	2.07E-09	1.18E-09
Cobalt	7440-48-4	5.79E-06	5.56E-05	3.02E-03	6.80E-05	1.98E-05	1.29E-05	3.03E-07	1.73E-07
Lead	7439-92-1	3.40E-04	1.06E-05	1.25E-02	1.82E-05	1.97E-05	6.83E-06	1.99E-07	1.14E-07
Mercury - Inorganic	7487-94-7	1.26E-04	2.93E-06	--	1.16E-05	4.93E-06	4.85E-08	2.00E-06	2.00E-06
Methyl Mercury	22967-92-6	9.78E-06	8.04E-08	2.99E-03	1.37E-07	7.94E-08	2.56E-10	9.12E-09	9.12E-09
Nickel	7440-02-0	1.42E-04	2.64E-04	7.02E-02	3.44E-04	7.84E-05	7.59E-05	1.90E-06	1.08E-06
Phosphorus	7723-14-0	1.86E-03	1.66E-03	--	2.44E-03	8.14E-04	6.92E-04	1.59E-05	9.10E-06
Selenium	7782-49-2	1.72E-07	4.92E-07	4.27E-04	5.37E-07	2.01E-06	3.44E-06	3.08E-07	3.08E-07
Silver	7440-22-4	8.98E-06	5.10E-06	1.55E-03	6.22E-06	6.08E-05	7.96E-07	9.85E-09	5.63E-09
Thallium	7440-28-0	3.44E-06	7.47E-04	--	9.40E-04	6.28E-05	2.17E-04	5.84E-06	3.33E-06
Tin	7440-31-5	5.60E-05	8.29E-04	2.10E-01	1.28E-03	3.51E-04	4.41E-04	1.29E-05	7.38E-06
Vanadium	7440-62-2	2.67E-06	1.61E-06	4.26E-04	2.55E-06	6.43E-07	1.14E-06	3.72E-08	2.13E-08
Zinc	7440-66-6	3.50E-02	1.29E-05	9.62E-01	2.04E-05	1.07E-05	5.26E-06	1.15E-05	1.15E-05

Calculated Exposure Point Concentrations for the Oshawa Subdivision Receptor Cluster
Process Upset - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	6.97E-07	1.15E-09	--	1.51E-07	4.81E-10
Acenaphthylene	208-96-8	1.63E-07	6.43E-10	--	3.08E-08	9.26E-10
Anthracene	120-12-7	6.88E-07	4.31E-10	1.49E-10	6.68E-08	1.13E-11
Benz(a)anthracene	56-55-3	3.78E-07	2.13E-10	1.42E-08	7.45E-09	7.29E-10
Benzo(a)fluorene	30777-18-5	7.48E-07	1.66E-09	4.04E-09	2.19E-08	1.69E-09
Benzo(a)pyrene	50-32-8	6.69E-07	9.26E-10	4.44E-08	8.83E-09	6.56E-09
Benzo(b)fluoranthene	205-99-2	8.69E-07	2.66E-10	2.38E-09	9.73E-09	3.22E-10
Benzo(b)fluorene	243-17-4	5.16E-07	1.34E-09	2.76E-09	9.49E-09	4.45E-09
Benzo(e)pyrene	192-97-20	1.82E-06	8.93E-09	5.41E-09	1.34E-08	8.95E-07
Benzo(g,h,i)perylene	191-24-2	9.44E-06	7.17E-09	--	6.40E-08	1.36E-06
Benzo(k)fluoranthene	207-08-9	7.59E-07	6.27E-10	1.34E-08	8.73E-09	3.03E-09
Chrysene	218-01-9	1.40E-06	3.03E-10	1.76E-08	2.76E-08	1.01E-10
Dibenz(a,c)anthracene	215-58-7	1.19E-06	6.93E-09	4.63E-07	6.18E-09	1.20E-07
Dibenz(a,h)anthracene	53-70-3	4.17E-07	4.88E-10	2.09E-08	2.83E-09	1.08E-07
Fluoranthene	206-44-0	6.81E-06	1.28E-08	6.08E-09	3.40E-07	1.58E-09
Fluorene	86-73-7	6.93E-07	3.30E-09	--	1.01E-07	4.23E-11
Indeno(1,2,3-cd)pyrene	193-39-5	2.01E-06	1.72E-09	1.37E-07	1.19E-08	7.33E-10
Perylene	198-55-0	3.93E-07	1.50E-09	2.21E-10	3.72E-09	6.67E-07
Phenanthrene	85-01-8	7.01E-06	2.18E-08	1.73E-09	6.80E-07	7.42E-10
Pyrene	129-00-0	3.48E-05	2.18E-08	5.50E-09	1.99E-06	2.18E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	1.30E-04	3.52E-09	--	8.80E-07	6.21E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	5.67E-08	1.44E-12	2.03E-10	2.58E-10	1.36E-10
VOCs						
1,1,1-Trichloroethane	71-55-6	3.99E-10	4.84E-08	--	5.54E-10	1.12E-11
Bromoform	75-25-2	1.11E-09	1.55E-06	--	1.83E-09	2.78E-13
Carbon Tetrachloride	56-23-5	7.96E-11	1.07E-08	--	7.42E-11	1.08E-12
Chloroform	67-66-3	1.79E-10	1.59E-08	--	4.82E-10	5.41E-12
Dichloromethane	75-09-2	3.20E-08	4.96E-06	--	2.20E-07	5.64E-10
O-Terphenyl	84-15-1	2.21E-06	4.23E-09	--	5.51E-08	2.95E-09
Trichlorofluoromethane (FREON 11)	75-69-4	8.25E-09	5.47E-06	--	1.15E-08	2.37E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	3.13E-07	1.92E-09	--	2.04E-08	7.45E-12
1,2,4-Trichlorobenzene	120-82-1	7.39E-09	1.86E-09	--	1.40E-09	1.95E-12
1,2-Dichlorobenzene	95-50-1	9.94E-08	7.51E-08	--	4.28E-08	1.25E-09
Hexachlorobenzene	118-74-1	1.35E-07	2.29E-09	--	4.51E-09	5.09E-11
Pentachlorobenzene	608-93-5	4.87E-06	5.82E-09	--	1.94E-07	1.77E-10
Pentachlorophenol	87-86-5	2.29E-06	1.87E-06	--	1.00E-07	6.75E-06
Inorganics						
Antimony	7440-36-0	6.89E-04	1.43E-05	2.76E-05	2.20E-05	--
Arsenic	7440-38-2	6.84E-05	2.20E-06	4.24E-06	4.33E-07	--
Barium	7440-39-3	4.85E-04	1.10E-05	2.13E-05	1.56E-05	--
Beryllium	7440-41-7	4.34E-04	8.38E-07	3.36E-06	1.12E-06	--
Boron	7440-42-8	2.68E-03	8.01E-04	1.54E-03	6.05E-03	--
Cadmium	7440-43-9	2.86E-03	3.59E-05	7.06E-05	3.58E-04	--
Chromium (Total)	7440-47-3	2.41E-04	1.18E-05	2.27E-05	1.18E-06	--
Chromium VI	18540-29-9	3.42E-05	1.67E-06	3.23E-06	1.67E-07	--
Cobalt	7440-48-4	1.46E-03	3.02E-05	5.84E-05	1.26E-05	--
Lead	7439-92-1	6.65E-02	1.19E-04	5.04E-04	9.04E-04	--
Mercury - Inorganic	7487-94-7	5.20E-03	1.11E-06	6.80E-06	7.53E-05	2.31E-05
Methyl Mercury	22967-92-6	1.74E-04	4.96E-09	1.92E-06	5.12E-06	6.53E-06
Nickel	7440-02-0	3.12E-02	4.50E-04	8.79E-04	2.91E-04	--
Phosphorus	7723-14-0	9.36E-04	2.41E-04	4.64E-04	3.28E-03	--
Selenium	7782-49-2	1.38E-05	2.51E-06	4.84E-06	2.69E-07	--
Silver	7440-22-4	1.58E-04	1.75E-05	3.38E-05	2.18E-05	--
Thallium	7440-28-0	1.52E-02	2.00E-04	3.93E-04	1.30E-05	--
Tin	7440-31-5	1.64E-02	6.98E-05	1.77E-04	1.49E-04	--
Vanadium	7440-62-2	1.57E-03	2.66E-06	1.17E-05	5.21E-06	--
Zinc	7440-66-6	6.84E-02	1.03E-03	2.01E-03	6.64E-03	--

Calculated Exposure Point Concentrations for the Oshawa Subdivision Receptor Cluster
Process Upset - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.48E-07	1.24E-10	4.57E-10	5.44E-10	1.77E-10	2.89E-10	8.22E-10	4.70E-10
Acenaphthylene	208-96-8	1.04E-06	2.90E-11	3.22E-10	1.55E-10	4.65E-11	7.08E-11	1.97E-10	1.13E-10
Anthracene	120-12-7	1.04E-09	8.71E-11	6.84E-10	4.01E-10	1.21E-10	2.35E-10	7.13E-10	4.07E-10
Benz(a)anthracene	56-55-3	3.58E-10	3.22E-10	5.34E-09	8.65E-10	2.66E-10	1.41E-10	2.90E-10	1.66E-10
Benzo(a)fluorene	30777-18-5	2.52E-08	2.05E-10	2.10E-08	1.18E-09	3.48E-10	2.71E-10	6.52E-10	3.73E-10
Benzo(a)pyrene	50-32-8	4.05E-10	1.09E-09	4.62E-08	4.00E-09	1.26E-09	4.34E-10	4.58E-10	2.62E-10
Benzo(b)fluoranthene	205-99-2	1.00E-08	8.59E-11	1.77E-08	3.91E-10	1.02E-10	1.76E-10	5.63E-10	3.22E-10
Benzo(b)fluorene	243-17-4	3.16E-08	2.72E-10	3.77E-08	2.08E-09	6.43E-10	2.80E-10	4.06E-10	2.32E-10
Benzo(e)pyrene	192-97-20	9.67E-08	3.12E-08	1.23E-06	2.87E-07	9.18E-08	2.45E-08	1.01E-09	5.78E-10
Benzo(g,h,i)perylene	191-24-2	4.92E-08	4.60E-08	1.12E-06	4.24E-07	1.35E-07	3.71E-08	5.04E-09	2.88E-09
Benzo(k)fluoranthene	207-08-9	4.62E-10	3.82E-10	3.94E-08	1.68E-09	5.18E-10	2.63E-10	4.96E-10	2.84E-10
Chrysene	218-01-9	1.33E-09	4.12E-10	7.59E-09	1.03E-09	2.90E-10	3.58E-10	1.07E-09	6.13E-10
Dibenz(a,c)anthracene	215-58-7	2.04E-08	9.79E-09	1.73E-06	4.40E-08	1.40E-08	3.70E-09	5.68E-10	3.24E-10
Dibenz(a,h)anthracene	53-70-3	1.69E-10	3.96E-09	7.68E-08	3.42E-08	1.09E-08	2.93E-09	2.23E-10	1.27E-10
Fluoranthene	206-44-0	1.02E-08	7.69E-10	6.43E-08	3.89E-09	1.09E-09	2.05E-09	6.34E-09	3.62E-09
Fluorene	86-73-7	1.31E-09	1.07E-10	2.62E-09	5.32E-10	1.62E-10	2.71E-10	7.82E-10	4.47E-10
Indeno(1,2,3-cd)pyrene	193-39-5	1.06E-09	2.00E-09	3.39E-07	3.81E-09	1.17E-09	5.28E-10	1.01E-09	5.78E-10
Perylene	198-55-0	7.39E-09	2.51E-08	1.33E-07	2.32E-07	7.41E-08	1.96E-08	2.40E-10	1.37E-10
Phenanthrene	85-01-8	1.28E-08	9.19E-10	3.45E-08	4.51E-09	1.34E-09	2.44E-09	7.31E-09	4.18E-09
Pyrene	129-00-0	5.05E-08	3.40E-09	8.69E-08	1.70E-08	4.77E-09	1.05E-08	3.30E-08	1.89E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.24E-06	3.71E-07	9.03E-04	2.53E-06	5.19E-07	1.97E-06	6.92E-08	3.96E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	5.83E-10	7.35E-10	**4.47E-08**	4.82E-09	1.43E-09	1.03E-09	2.50E-11	1.43E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	3.53E-08	1.56E-09	7.67E-08	1.87E-08	3.95E-09	3.00E-09	5.13E-11	2.93E-11
Bromoform	75-25-2	1.37E-08	4.36E-08	1.82E-06	5.09E-07	1.07E-07	8.12E-08	1.39E-09	7.92E-10
Carbon Tetrachloride	56-23-5	7.57E-09	4.98E-10	3.39E-08	5.97E-09	1.26E-09	9.55E-10	1.63E-11	9.34E-12
Chloroform	67-66-3	1.80E-08	2.81E-10	7.98E-09	3.38E-09	7.14E-10	5.44E-10	9.36E-12	5.35E-12
Dichloromethane	75-09-2	1.15E-05	2.97E-08	4.96E-07	3.57E-07	7.55E-08	5.77E-08	9.94E-10	5.68E-10
O-Terphenyl	84-15-1	4.96E-08	2.68E-08	7.01E-06	2.14E-07	6.03E-08	6.66E-08	1.84E-09	1.05E-09
Trichlorofluoromethane (FREON 11)	75-69-4	6.70E-07	1.80E-07	8.67E-06	2.12E-06	4.47E-07	3.39E-07	5.79E-09	3.31E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	3.29E-07	3.80E-09	6.06E-07	2.36E-08	6.12E-09	1.10E-08	3.26E-10	1.86E-10
1,2,4-Trichlorobenzene	120-82-1	5.73E-09	4.25E-10	1.17E-07	4.50E-09	1.01E-09	9.22E-10	1.91E-11	1.09E-11
1,2-Dichlorobenzene	95-50-1	2.44E-06	9.04E-09	9.02E-07	9.78E-08	2.18E-08	1.88E-08	3.68E-10	2.10E-10
Hexachlorobenzene	118-74-1	3.43E-08	1.61E-09	2.29E-06	1.35E-08	3.27E-09	4.70E-09	1.33E-10	7.62E-11
Pentachlorobenzene	608-93-5	8.96E-08	3.87E-08	4.31E-06	2.16E-07	5.61E-08	1.36E-07	4.38E-09	2.50E-09
Pentachlorophenol	87-86-5	3.75E-05	4.87E-08	1.05E-03	4.51E-07	1.44E-07	3.83E-08	9.43E-12	5.39E-12
Inorganics									
Antimony	7440-36-0	2.07E-05	1.67E-06	2.86E-03	4.44E-06	6.40E-07	8.26E-07	1.50E-08	8.58E-09
Arsenic	7440-38-2	5.47E-07	4.01E-07	1.10E-04	8.99E-07	3.80E-08	1.33E-07	2.54E-09	1.45E-09
Barium	7440-39-3	7.28E-06	1.79E-07	1.10E-04	4.53E-07	1.51E-06	7.87E-08	1.43E-09	8.19E-10
Beryllium	7440-41-7	6.51E-07	1.89E-07	8.38E-05	5.50E-07	6.07E-10	2.25E-07	7.17E-09	4.10E-09
Boron	7440-42-8	5.37E-03	8.00E-05	--	2.13E-04	6.87E-05	4.16E-05	7.03E-07	4.02E-07
Cadmium	7440-43-9	1.83E-04	7.61E-07	4.31E-02	2.37E-06	1.89E-07	6.75E-07	1.07E-05	2.53E-07
Chromium (Total)	7440-47-3	1.08E-06	5.68E-06	2.35E-03	1.22E-05	4.72E-06	1.54E-06	2.60E-08	1.48E-08
Chromium VI	18540-29-9	1.54E-07	8.07E-07	6.19E-05	1.73E-06	6.72E-07	2.19E-07	3.69E-09	2.11E-09
Cobalt	7440-48-4	1.02E-05	5.56E-05	3.02E-03	1.28E-04	3.74E-05	2.33E-05	5.36E-07	3.06E-07
Lead	7439-92-1	5.99E-04	1.06E-05	1.25E-02	3.29E-05	3.59E-05	1.21E-05	3.51E-07	2.01E-07
Mercury - Inorganic	7487-94-7	1.87E-04	2.93E-06	--	1.78E-05	7.73E-06	7.23E-08	2.97E-06	2.97E-06
Methyl Mercury	22967-92-6	1.72E-05	8.04E-08	2.99E-03	2.42E-07	1.40E-07	4.50E-10	1.61E-08	1.61E-08
Nickel	7440-02-0	2.50E-04	2.64E-04	7.02E-02	6.43E-04	1.47E-04	1.37E-04	3.35E-06	1.92E-06
Phosphorus	7723-14-0	3.28E-03	1.66E-03	--	4.48E-03	1.49E-03	1.23E-03	2.81E-05	1.61E-05
Selenium	7782-49-2	3.03E-07	4.92E-07	4.27E-04	1.02E-06	3.82E-06	6.49E-06	5.62E-07	5.62E-07
Silver	7440-22-4	1.58E-05	5.10E-06	1.55E-03	1.17E-05	1.14E-04	1.46E-06	1.76E-08	1.01E-08
Thallium	7440-28-0	6.07E-06	7.47E-04	--	1.77E-03	1.19E-04	3.91E-04	1.03E-05	5.90E-06
Tin	7440-31-5	9.86E-05	8.29E-04	2.10E-01	2.36E-03	6.47E-04	7.83E-04	2.28E-05	1.30E-05
Vanadium	7440-62-2	4.71E-06	1.61E-06	4.26E-04	4.67E-06	1.19E-06	2.02E-06	6.56E-08	3.75E-08
Zinc	7440-66-6	6.16E-02	1.29E-05	9.62E-01	3.72E-05	1.96E-05	9.38E-06	2.03E-05	2.03E-05

Calculated Exposure Point Concentrations for the Port Darlington Receptor Cluster
Process Upset - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	3.15E-07	1.15E-09	--	6.81E-08	3.46E-10
Acenaphthylene	208-96-8	7.38E-08	6.43E-10	--	1.39E-08	6.65E-10
Anthracene	120-12-7	3.11E-07	4.31E-10	7.71E-11	3.02E-08	8.09E-12
Benz(a)anthracene	56-55-3	1.71E-07	2.13E-10	7.34E-09	3.37E-09	5.24E-10
Benzo(a)fluorene	30777-18-5	3.38E-07	1.66E-09	2.09E-09	9.90E-09	1.21E-09
Benzo(a)pyrene	50-32-8	3.02E-07	9.26E-10	2.30E-08	3.99E-09	4.72E-09
Benzo(b)fluoranthene	205-99-2	3.93E-07	2.66E-10	1.23E-09	4.40E-09	2.32E-10
Benzo(b)fluorene	243-17-4	2.33E-07	1.34E-09	1.43E-09	4.29E-09	3.20E-09
Benzo(e)pyrene	192-97-20	8.24E-07	8.93E-09	2.80E-09	6.05E-09	6.43E-07
Benzo(g,h,i)perylene	191-24-2	4.27E-06	7.17E-09	--	2.89E-08	9.76E-07
Benzo(k)fluoranthene	207-08-9	3.44E-07	6.27E-10	6.95E-09	3.95E-09	2.18E-09
Chrysene	218-01-9	6.34E-07	3.03E-10	9.14E-09	1.25E-08	7.26E-11
Dibenz(a,c)anthracene	215-58-7	5.38E-07	6.93E-09	2.40E-07	2.79E-09	8.61E-08
Dibenz(a,h)anthracene	53-70-3	1.89E-07	4.88E-10	1.08E-08	1.28E-09	7.76E-08
Fluoranthene	206-44-0	3.08E-06	1.28E-08	3.15E-09	1.54E-07	1.14E-09
Fluorene	86-73-7	3.13E-07	3.30E-09	--	4.54E-08	3.04E-11
Indeno(1,2,3-cd)pyrene	193-39-5	9.09E-07	1.72E-09	7.10E-08	5.39E-09	5.26E-10
Perylene	198-55-0	1.78E-07	1.50E-09	1.14E-10	1.68E-09	4.79E-07
Phenanthrene	85-01-8	3.17E-06	2.18E-08	8.96E-10	3.07E-07	5.33E-10
Pyrene	129-00-0	1.58E-05	2.18E-08	2.85E-09	8.99E-07	1.57E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	5.89E-05	3.52E-09	--	3.99E-07	4.46E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	2.04E-08	1.44E-12	7.85E-11	9.27E-11	9.76E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	1.80E-10	4.84E-08	--	2.50E-10	8.06E-12
Bromoform	75-25-2	5.02E-10	1.55E-06	--	8.28E-10	2.00E-13
Carbon Tetrachloride	56-23-5	3.60E-11	1.07E-08	--	3.35E-11	7.78E-13
Chloroform	67-66-3	8.06E-11	1.59E-08	--	2.18E-10	3.89E-12
Dichloromethane	75-09-2	1.45E-08	4.96E-06	--	9.92E-08	4.05E-10
O-Terphenyl	84-15-1	9.97E-07	4.23E-09	--	2.49E-08	2.12E-09
Trichlorofluoromethane (FREON 11)	75-69-4	3.73E-09	5.47E-06	--	5.18E-09	1.71E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.42E-07	1.92E-09	--	9.22E-09	5.35E-12
1,2,4-Trichlorobenzene	120-82-1	3.34E-09	1.86E-09	--	6.31E-10	1.40E-12
1,2-Dichlorobenzene	95-50-1	4.49E-08	7.51E-08	--	1.94E-08	8.95E-10
Hexachlorobenzene	118-74-1	6.08E-08	2.29E-09	--	2.04E-09	3.66E-11
Pentachlorobenzene	608-93-5	2.20E-06	5.82E-09	--	8.76E-08	1.27E-10
Pentachlorophenol	87-86-5	1.03E-06	1.87E-06	--	4.52E-08	4.85E-06
Inorganics						
Antimony	7440-36-0	2.47E-04	1.43E-05	1.07E-05	7.87E-06	--
Arsenic	7440-38-2	2.45E-05	2.20E-06	1.63E-06	1.55E-07	--
Barium	7440-39-3	1.74E-04	1.10E-05	8.23E-06	5.59E-06	--
Beryllium	7440-41-7	1.56E-04	8.38E-07	1.30E-06	4.01E-07	--
Boron	7440-42-8	9.60E-04	8.01E-04	5.96E-04	2.16E-03	--
Cadmium	7440-43-9	1.02E-03	3.59E-05	2.72E-05	1.28E-04	--
Chromium (Total)	7440-47-3	8.62E-05	1.18E-05	8.76E-06	4.20E-07	--
Chromium VI	18540-29-9	1.23E-05	1.67E-06	1.25E-06	5.98E-08	--
Cobalt	7440-48-4	5.22E-04	3.02E-05	2.26E-05	4.51E-06	--
Lead	7439-92-1	2.38E-02	1.19E-04	1.95E-04	3.24E-04	--
Mercury - Inorganic	7487-94-7	3.14E-03	1.11E-06	2.62E-06	4.55E-05	1.66E-05
Methyl Mercury	22967-92-6	6.24E-05	4.96E-09	7.40E-07	1.83E-06	4.69E-06
Nickel	7440-02-0	1.12E-02	4.50E-04	3.39E-04	1.04E-04	--
Phosphorus	7723-14-0	3.35E-04	2.41E-04	1.79E-04	1.17E-03	--
Selenium	7782-49-2	4.93E-06	2.51E-06	1.87E-06	9.62E-08	--
Silver	7440-22-4	5.66E-05	1.75E-05	1.30E-05	7.81E-06	--
Thallium	7440-28-0	5.43E-03	2.00E-04	1.52E-04	4.66E-06	--
Tin	7440-31-5	5.89E-03	6.98E-05	6.85E-05	5.33E-05	--
Vanadium	7440-62-2	5.62E-04	2.66E-06	4.53E-06	1.87E-06	--
Zinc	7440-66-6	2.45E-02	1.03E-03	7.77E-04	2.38E-03	--

Calculated Exposure Point Concentrations for the Port Darlington Receptor Cluster
Process Upset - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	6.70E-08	1.24E-10	4.57E-10	2.75E-10	8.62E-11	1.35E-10	3.79E-10	2.17E-10
Acenaphthylene	208-96-8	4.69E-07	2.90E-11	3.22E-10	1.00E-10	2.74E-11	3.67E-11	9.70E-11	5.54E-11
Anthracene	120-12-7	4.68E-10	8.71E-11	6.84E-10	1.94E-10	5.74E-11	1.08E-10	3.25E-10	1.86E-10
Benz(a)anthracene	56-55-3	1.62E-10	3.22E-10	5.34E-09	5.04E-10	1.56E-10	7.33E-11	1.32E-10	7.56E-11
Benzo(a)fluorene	30777-18-5	1.14E-08	2.05E-10	2.10E-08	8.23E-10	2.39E-10	1.54E-10	3.21E-10	1.83E-10
Benzo(a)pyrene	50-32-8	1.83E-10	1.09E-09	4.62E-08	2.56E-09	8.09E-10	2.59E-10	2.09E-10	1.19E-10
Benzo(b)fluoranthene	205-99-2	4.52E-09	8.59E-11	1.77E-08	2.19E-10	5.90E-11	8.37E-11	2.56E-10	1.46E-10
Benzo(b)fluorene	243-17-4	1.43E-08	2.72E-10	3.77E-08	1.48E-09	4.57E-10	1.77E-10	2.01E-10	1.15E-10
Benzo(e)pyrene	192-97-20	4.37E-08	3.12E-08	1.23E-06	2.06E-07	6.59E-08	1.75E-08	4.63E-10	2.64E-10
Benzo(g,h,i)perylene	191-24-2	2.23E-08	4.60E-08	1.12E-06	3.04E-07	9.72E-08	2.63E-08	2.29E-09	1.31E-09
Benzo(k)fluoranthene	207-08-9	2.09E-10	3.82E-10	3.94E-08	1.09E-09	3.38E-10	1.46E-10	2.25E-10	1.29E-10
Chrysene	218-01-9	6.01E-10	4.12E-10	7.59E-09	5.22E-10	1.49E-10	1.67E-10	4.88E-10	2.79E-10
Dibenz(a,c)anthracene	215-58-7	9.24E-09	9.79E-09	1.73E-06	2.95E-08	9.41E-09	2.47E-09	2.64E-10	1.51E-10
Dibenz(a,h)anthracene	53-70-3	7.65E-11	3.96E-09	7.68E-08	2.45E-08	7.81E-09	2.08E-09	1.01E-10	5.79E-11
Fluoranthene	206-44-0	4.60E-09	7.69E-10	6.43E-08	2.09E-09	5.82E-10	9.64E-10	2.91E-09	1.66E-09
Fluorene	86-73-7	5.94E-10	1.07E-10	2.62E-09	3.18E-10	8.99E-11	1.34E-10	3.74E-10	2.13E-10
Indeno(1,2,3-cd)pyrene	193-39-5	4.81E-10	2.00E-09	3.39E-07	2.01E-09	6.19E-10	2.60E-10	4.59E-10	2.62E-10
Perylene	198-55-0	3.34E-09	2.51E-08	1.33E-07	1.67E-07	5.32E-08	1.41E-08	1.10E-10	6.26E-11
Phenanthrene	85-01-8	5.80E-09	9.19E-10	3.45E-08	2.40E-09	6.91E-10	1.16E-09	3.38E-09	1.93E-09
Pyrene	129-00-0	2.29E-08	3.40E-09	8.69E-08	8.08E-09	2.27E-09	4.78E-09	1.50E-08	8.57E-09
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	5.64E-07	3.71E-07	9.03E-04	1.21E-06	2.53E-07	9.00E-07	3.14E-08	1.79E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	2.09E-10	7.35E-10	**4.47E-08**	3.02E-09	9.27E-10	4.80E-10	8.99E-12	5.14E-12
VOCs									
1,1,1-Trichloroethane	71-55-6	1.60E-08	1.56E-09	7.67E-08	3.42E-08	7.20E-09	5.46E-09	9.32E-11	5.33E-11
Bromoform	75-25-2	6.17E-09	4.36E-08	1.82E-06	9.38E-07	1.98E-07	1.50E-07	2.55E-09	1.46E-09
Carbon Tetrachloride	56-23-5	3.42E-09	4.98E-10	3.39E-08	1.09E-08	2.30E-09	1.74E-09	2.98E-11	1.70E-11
Chloroform	67-66-3	8.11E-09	2.81E-10	7.98E-09	6.15E-09	1.30E-09	9.83E-10	1.68E-11	9.60E-12
Dichloromethane	75-09-2	5.21E-06	2.97E-08	4.96E-07	6.49E-07	1.37E-07	1.04E-07	1.78E-09	1.02E-09
O-Terphenyl	84-15-1	2.24E-08	2.68E-08	7.01E-06	1.53E-07	4.25E-08	3.66E-08	8.98E-10	5.13E-10
Trichlorofluoromethane (FREON 11)	75-69-4	3.03E-07	1.80E-07	8.67E-06	3.90E-06	8.22E-07	6.23E-07	1.06E-08	6.07E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	1.48E-07	3.80E-09	6.06E-07	1.73E-08	4.17E-09	6.01E-09	1.65E-10	9.44E-11
1,2,4-Trichlorobenzene	120-82-1	2.59E-09	4.25E-10	1.17E-07	7.05E-09	1.52E-09	1.22E-09	2.23E-11	1.27E-11
1,2-Dichlorobenzene	95-50-1	1.10E-06	9.04E-09	9.02E-07	1.62E-07	3.47E-08	2.73E-08	4.87E-10	2.78E-10
Hexachlorobenzene	118-74-1	1.55E-08	1.61E-09	2.29E-06	1.50E-08	3.41E-09	3.50E-09	8.30E-11	4.74E-11
Pentachlorobenzene	608-93-5	4.05E-08	3.87E-08	4.31E-06	1.23E-07	3.09E-08	6.52E-08	2.04E-09	1.17E-09
Pentachlorophenol	87-86-5	1.69E-05	4.87E-08	1.05E-03	3.24E-07	1.03E-07	2.74E-08	4.33E-12	2.47E-12
Inorganics									
Antimony	7440-36-0	7.40E-06	1.67E-06	2.86E-03	1.65E-06	2.38E-07	3.00E-07	5.38E-09	3.07E-09
Arsenic	7440-38-2	1.96E-07	4.01E-07	1.10E-04	3.41E-07	1.45E-08	4.91E-08	9.10E-10	5.20E-10
Barium	7440-39-3	2.61E-06	1.79E-07	1.10E-04	1.69E-07	5.66E-07	2.87E-08	5.13E-10	2.93E-10
Beryllium	7440-41-7	2.33E-07	1.89E-07	8.38E-05	2.06E-07	2.29E-10	8.13E-08	2.57E-09	1.47E-09
Boron	7440-42-8	1.92E-03	8.00E-05	--	7.90E-05	2.55E-05	1.51E-05	2.52E-07	1.44E-07
Cadmium	7440-43-9	6.56E-05	7.61E-07	4.31E-02	8.67E-07	6.92E-08	2.43E-07	3.85E-06	9.05E-08
Chromium (Total)	7440-47-3	3.88E-07	5.68E-06	2.35E-03	4.65E-06	1.81E-06	5.71E-07	9.29E-09	5.31E-09
Chromium VI	18540-29-9	5.51E-08	8.07E-07	6.19E-05	6.61E-07	2.57E-07	8.12E-08	1.32E-09	7.55E-10
Cobalt	7440-48-4	3.65E-06	5.56E-05	3.02E-03	4.85E-05	1.42E-05	8.54E-06	1.92E-07	1.10E-07
Lead	7439-92-1	2.14E-04	1.06E-05	1.25E-02	1.22E-05	1.33E-05	4.37E-06	1.26E-07	7.20E-08
Mercury - Inorganic	7487-94-7	1.13E-04	2.93E-06	--	1.03E-05	4.38E-06	4.36E-08	1.79E-06	1.79E-06
Methyl Mercury	22967-92-6	6.17E-06	8.04E-08	2.99E-03	1.08E-07	6.45E-08	1.71E-10	5.75E-09	5.75E-09
Nickel	7440-02-0	8.94E-05	2.64E-04	7.02E-02	2.42E-04	5.57E-05	4.98E-05	1.20E-06	6.86E-07
Phosphorus	7723-14-0	1.17E-03	1.66E-03	--	1.66E-03	5.52E-04	4.46E-04	1.01E-05	5.75E-06
Selenium	7782-49-2	1.09E-07	4.92E-07	4.27E-04	3.91E-07	1.47E-06	2.44E-06	2.01E-07	2.01E-07
Silver	7440-22-4	5.66E-06	5.10E-06	1.55E-03	4.41E-06	4.31E-05	5.39E-07	6.30E-09	3.60E-09
Thallium	7440-28-0	2.17E-06	7.47E-04	--	6.68E-04	4.52E-05	1.42E-04	3.69E-06	2.11E-06
Tin	7440-31-5	3.53E-05	8.29E-04	2.10E-01	8.79E-04	2.42E-04	2.83E-04	8.16E-06	4.66E-06
Vanadium	7440-62-2	1.69E-06	1.61E-06	4.26E-04	1.75E-06	4.50E-07	7.29E-07	2.35E-08	1.34E-08
Zinc	7440-66-6	2.20E-02	1.29E-05	9.62E-01	1.37E-05	7.23E-06	3.39E-06	7.27E-06	7.27E-06

Calculated Exposure Point Concentrations for the Solina Receptor Cluster
Process Upset - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.08E-06	1.15E-09	--	2.32E-07	4.93E-10
Acenaphthylene	208-96-8	2.52E-07	6.43E-10	--	4.76E-08	9.48E-10
Anthracene	120-12-7	1.06E-06	4.31E-10	2.21E-10	1.03E-07	1.15E-11
Benz(a)anthracene	56-55-3	5.83E-07	2.13E-10	2.10E-08	1.15E-08	7.47E-10
Benzo(a)fluorene	30777-18-5	1.15E-06	1.66E-09	5.99E-09	3.38E-08	1.73E-09
Benzo(a)pyrene	50-32-8	1.03E-06	9.26E-10	6.58E-08	1.36E-08	6.72E-09
Benzo(b)fluoranthene	205-99-2	1.34E-06	2.66E-10	3.53E-09	1.50E-08	3.30E-10
Benzo(b)fluorene	243-17-4	7.97E-07	1.34E-09	4.10E-09	1.46E-08	4.56E-09
Benzo(e)pyrene	192-97-20	2.81E-06	8.93E-09	8.03E-09	2.06E-08	9.17E-07
Benzo(g,h,i)perylene	191-24-2	1.46E-05	7.17E-09	--	9.88E-08	1.39E-06
Benzo(k)fluoranthene	207-08-9	1.17E-06	6.27E-10	1.99E-08	1.35E-08	3.10E-09
Chrysene	218-01-9	2.17E-06	3.03E-10	2.62E-08	4.27E-08	1.03E-10
Dibenz(a,c)anthracene	215-58-7	1.84E-06	6.93E-09	6.86E-07	9.53E-09	1.23E-07
Dibenz(a,h)anthracene	53-70-3	6.44E-07	4.88E-10	3.10E-08	4.37E-09	1.11E-07
Fluoranthene	206-44-0	1.05E-05	1.28E-08	9.02E-09	5.24E-07	1.62E-09
Fluorene	86-73-7	1.07E-06	3.30E-09	--	1.55E-07	4.34E-11
Indeno(1,2,3-cd)pyrene	193-39-5	3.10E-06	1.72E-09	2.03E-07	1.84E-08	7.50E-10
Perylene	198-55-0	6.07E-07	1.50E-09	3.27E-10	5.74E-09	6.83E-07
Phenanthrene	85-01-8	1.08E-05	2.18E-08	2.56E-09	1.05E-06	7.60E-10
Pyrene	129-00-0	5.38E-05	2.18E-08	8.16E-09	3.07E-06	2.23E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	2.01E-04	3.52E-09	--	1.36E-06	6.36E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	7.62E-08	1.44E-12	2.42E-10	3.47E-10	1.39E-10
VOCs						
1,1,1-Trichloroethane	71-55-6	6.15E-10	4.84E-08	--	8.55E-10	1.15E-11
Bromoform	75-25-2	1.71E-09	1.55E-06	--	2.83E-09	2.85E-13
Carbon Tetrachloride	56-23-5	1.23E-10	1.07E-08	--	1.14E-10	1.11E-12
Chloroform	67-66-3	2.75E-10	1.59E-08	--	7.44E-10	5.54E-12
Dichloromethane	75-09-2	4.94E-08	4.96E-06	--	3.39E-07	5.78E-10
O-Terphenyl	84-15-1	3.40E-06	4.23E-09	--	8.50E-08	3.02E-09
Trichlorofluoromethane (FREON 11)	75-69-4	1.27E-08	5.47E-06	--	1.77E-08	2.43E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	4.84E-07	1.92E-09	--	3.15E-08	7.63E-12
1,2,4-Trichlorobenzene	120-82-1	1.14E-08	1.86E-09	--	2.15E-09	2.00E-12
1,2-Dichlorobenzene	95-50-1	1.53E-07	7.51E-08	--	6.61E-08	1.28E-09
Hexachlorobenzene	118-74-1	2.08E-07	2.29E-09	--	6.96E-09	5.21E-11
Pentachlorobenzene	608-93-5	7.52E-06	5.82E-09	--	2.99E-07	1.82E-10
Pentachlorophenol	87-86-5	3.53E-06	1.87E-06	--	1.54E-07	6.91E-06
Inorganics						
Antimony	7440-36-0	9.24E-04	1.43E-05	3.28E-05	2.95E-05	--
Arsenic	7440-38-2	9.16E-05	2.20E-06	5.04E-06	5.80E-07	--
Barium	7440-39-3	6.50E-04	1.10E-05	2.53E-05	2.09E-05	--
Beryllium	7440-41-7	5.82E-04	8.38E-07	3.99E-06	1.50E-06	--
Boron	7440-42-8	3.59E-03	8.01E-04	1.83E-03	8.10E-03	--
Cadmium	7440-43-9	3.84E-03	3.59E-05	8.39E-05	4.79E-04	--
Chromium (Total)	7440-47-3	3.23E-04	1.18E-05	2.70E-05	1.57E-06	--
Chromium VI	18540-29-9	4.59E-05	1.67E-06	3.84E-06	2.24E-07	--
Cobalt	7440-48-4	1.95E-03	3.02E-05	6.95E-05	1.69E-05	--
Lead	7439-92-1	8.91E-02	1.19E-04	5.99E-04	1.21E-03	--
Mercury - Inorganic	7487-94-7	6.96E-03	1.11E-06	8.08E-06	1.01E-04	2.37E-05
Methyl Mercury	22967-92-6	2.33E-04	4.96E-09	2.28E-06	6.86E-06	6.69E-06
Nickel	7440-02-0	4.18E-02	4.50E-04	1.04E-03	3.90E-04	--
Phosphorus	7723-14-0	1.25E-03	2.41E-04	5.52E-04	4.39E-03	--
Selenium	7782-49-2	1.85E-05	2.51E-06	5.75E-06	3.60E-07	--
Silver	7440-22-4	2.12E-04	1.75E-05	4.02E-05	2.92E-05	--
Thallium	7440-28-0	2.03E-02	2.00E-04	4.68E-04	1.74E-05	--
Tin	7440-31-5	2.20E-02	6.98E-05	2.11E-04	1.99E-04	--
Vanadium	7440-62-2	2.10E-03	2.66E-06	1.39E-05	6.98E-06	--
Zinc	7440-66-6	9.17E-02	1.03E-03	2.39E-03	8.89E-03	--

Calculated Exposure Point Concentrations for the Solina Receptor Cluster
Process Upset - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	2.29E-07	1.24E-10	4.57E-10	8.40E-10	2.73E-10	4.46E-10	1.27E-09	7.25E-10
Acenaphthylene	208-96-8	1.60E-06	2.90E-11	3.22E-10	2.39E-10	7.15E-11	1.09E-10	3.04E-10	1.74E-10
Anthracene	120-12-7	1.60E-09	8.71E-11	6.84E-10	6.19E-10	1.86E-10	3.63E-10	1.10E-09	6.29E-10
Benz(a)anthracene	56-55-3	5.53E-10	3.22E-10	5.34E-09	1.16E-09	3.53E-10	2.04E-10	4.48E-10	2.56E-10
Benzo(a)fluorene	30777-18-5	3.89E-08	2.05E-10	2.10E-08	1.48E-09	4.26E-10	3.91E-10	1.01E-09	5.79E-10
Benzo(a)pyrene	50-32-8	6.25E-10	1.09E-09	4.62E-08	4.81E-09	1.51E-09	5.57E-10	7.08E-10	4.05E-10
Benzo(b)fluoranthene	205-99-2	1.54E-08	8.59E-11	1.77E-08	5.42E-10	1.38E-10	2.67E-10	8.70E-10	4.97E-10
Benzo(b)fluorene	243-17-4	4.87E-08	2.72E-10	3.77E-08	2.30E-09	7.01E-10	3.57E-10	6.33E-10	3.62E-10
Benzo(e)pyrene	192-97-20	1.49E-07	3.12E-08	1.23E-06	2.95E-07	9.41E-08	2.52E-08	1.56E-09	8.94E-10
Benzo(g,h,i)perylene	191-24-2	7.60E-08	4.60E-08	1.12E-06	4.36E-07	1.39E-07	3.87E-08	7.79E-09	4.45E-09
Benzo(k)fluoranthene	207-08-9	7.13E-10	3.82E-10	3.94E-08	2.00E-09	6.09E-10	3.57E-10	7.67E-10	4.38E-10
Chrysene	218-01-9	2.05E-09	4.12E-10	7.59E-09	1.53E-09	4.31E-10	5.48E-10	1.66E-09	9.47E-10
Dibenz(a,c)anthracene	215-58-7	3.15E-08	9.79E-09	1.73E-06	5.00E-08	1.59E-08	4.20E-09	8.83E-10	5.05E-10
Dibenz(a,h)anthracene	53-70-3	2.61E-10	3.96E-09	7.68E-08	3.53E-08	1.13E-08	3.05E-09	3.45E-10	1.97E-10
Fluoranthene	206-44-0	1.57E-08	7.69E-10	6.43E-08	5.71E-09	1.59E-09	3.14E-09	9.80E-09	5.60E-09
Fluorene	86-73-7	2.03E-09	1.07E-10	2.62E-09	8.25E-10	2.50E-10	4.19E-10	1.21E-09	6.91E-10
Indeno(1,2,3-cd)pyrene	193-39-5	1.64E-09	2.00E-09	3.39E-07	5.59E-09	1.71E-09	7.94E-10	1.56E-09	8.93E-10
Perylene	198-55-0	1.14E-08	2.51E-08	1.33E-07	2.38E-07	7.59E-08	2.01E-08	3.72E-10	2.12E-10
Phenanthrene	85-01-8	1.98E-08	9.19E-10	3.45E-08	6.89E-09	2.05E-09	3.77E-09	1.13E-08	6.46E-09
Pyrene	129-00-0	7.80E-08	3.40E-09	8.69E-08	2.58E-08	7.23E-09	1.61E-08	5.10E-08	2.92E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.92E-06	3.71E-07	9.03E-04	3.82E-06	7.71E-07	3.04E-06	1.07E-07	6.11E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	7.83E-10	7.35E-10	**4.47E-08**	5.27E-09	1.54E-09	1.29E-09	3.36E-11	1.92E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	5.45E-08	1.56E-09	7.67E-08	3.12E-08	6.59E-09	5.00E-09	8.57E-11	4.90E-11
Bromoform	75-25-2	2.11E-08	4.36E-08	1.82E-06	8.51E-07	1.79E-07	1.36E-07	2.32E-09	1.32E-09
Carbon Tetrachloride	56-23-5	1.17E-08	4.98E-10	3.39E-08	9.99E-09	2.10E-09	1.60E-09	2.73E-11	1.56E-11
Chloroform	67-66-3	2.77E-08	2.81E-10	7.98E-09	5.59E-09	1.18E-09	9.00E-10	1.55E-11	8.84E-12
Dichloromethane	75-09-2	1.78E-05	2.97E-08	4.96E-07	5.86E-07	1.24E-07	9.47E-08	1.63E-09	9.32E-10
O-Terphenyl	84-15-1	7.65E-08	2.68E-08	7.01E-06	2.74E-07	7.44E-08	9.85E-08	2.86E-09	1.64E-09
Trichlorofluoromethane (FREON 11)	75-69-4	1.03E-06	1.80E-07	8.67E-06	3.55E-06	7.48E-07	5.67E-07	9.67E-09	5.53E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	5.07E-07	3.80E-09	6.06E-07	3.55E-08	9.23E-09	1.68E-08	5.01E-10	2.86E-10
1,2,4-Trichlorobenzene	120-82-1	8.83E-09	4.25E-10	1.17E-07	7.23E-09	1.62E-09	1.47E-09	3.04E-11	1.74E-11
1,2-Dichlorobenzene	95-50-1	3.76E-06	9.04E-09	9.02E-07	1.60E-07	3.55E-08	3.04E-08	5.93E-10	3.39E-10
Hexachlorobenzene	118-74-1	5.28E-08	1.61E-09	2.29E-06	2.05E-08	4.88E-09	7.30E-09	2.08E-10	1.19E-10
Pentachlorobenzene	608-93-5	1.38E-07	3.87E-08	4.31E-06	3.32E-07	8.59E-08	2.10E-07	6.76E-09	3.86E-09
Pentachlorophenol	87-86-5	5.78E-05	4.87E-08	1.05E-03	4.63E-07	1.48E-07	3.94E-08	1.38E-11	7.88E-12
Inorganics									
Antimony	7440-36-0	2.77E-05	1.67E-06	2.86E-03	5.58E-06	8.03E-07	1.08E-06	2.00E-08	1.14E-08
Arsenic	7440-38-2	7.33E-07	4.01E-07	1.10E-04	1.09E-06	4.60E-08	1.70E-07	3.38E-09	1.93E-09
Barium	7440-39-3	9.75E-06	1.79E-07	1.10E-04	5.64E-07	1.87E-06	1.02E-07	1.91E-09	1.09E-09
Beryllium	7440-41-7	8.73E-07	1.89E-07	8.38E-05	6.96E-07	7.56E-10	2.99E-07	9.61E-09	5.49E-09
Boron	7440-42-8	7.19E-03	8.00E-05	--	2.69E-04	8.69E-05	5.45E-05	9.38E-07	5.36E-07
Cadmium	7440-43-9	2.45E-04	7.61E-07	4.31E-02	3.06E-06	2.44E-07	8.93E-07	1.44E-05	3.38E-07
Chromium (Total)	7440-47-3	1.45E-06	5.68E-06	2.35E-03	1.47E-05	5.66E-06	1.93E-06	3.44E-08	1.96E-08
Chromium VI	18540-29-9	2.06E-07	8.07E-07	6.19E-05	2.08E-06	8.04E-07	2.75E-07	4.89E-09	2.79E-09
Cobalt	7440-48-4	1.37E-05	5.56E-05	3.02E-03	1.56E-04	4.53E-05	3.01E-05	7.15E-07	4.08E-07
Lead	7439-92-1	8.02E-04	1.06E-05	1.25E-02	4.23E-05	4.57E-05	1.61E-05	4.71E-07	2.69E-07
Mercury - Inorganic	7487-94-7	2.51E-04	2.93E-06	--	2.31E-05	9.84E-06	9.66E-08	3.98E-06	3.98E-06
Methyl Mercury	22967-92-6	2.31E-05	8.04E-08	2.99E-03	2.89E-07	1.65E-07	5.89E-10	2.15E-08	2.15E-08
Nickel	7440-02-0	3.35E-04	2.64E-04	7.02E-02	7.91E-04	1.80E-04	1.78E-04	4.48E-06	2.56E-06
Phosphorus	7723-14-0	4.39E-03	1.66E-03	--	5.66E-03	1.89E-03	1.63E-03	3.76E-05	2.15E-05
Selenium	7782-49-2	4.06E-07	4.92E-07	4.27E-04	1.22E-06	4.57E-06	7.91E-06	7.28E-07	7.28E-07
Silver	7440-22-4	2.12E-05	5.10E-06	1.55E-03	1.43E-05	1.39E-04	1.85E-06	2.33E-08	1.33E-08
Thallium	7440-28-0	8.13E-06	7.47E-04	--	2.16E-03	1.44E-04	5.07E-04	1.38E-05	7.87E-06
Tin	7440-31-5	1.32E-04	8.29E-04	2.10E-01	2.98E-03	8.10E-04	1.04E-03	3.05E-05	1.74E-05
Vanadium	7440-62-2	6.31E-06	1.61E-06	4.26E-04	5.90E-06	1.48E-06	2.68E-06	8.79E-08	5.02E-08
Zinc	7440-66-6	8.25E-02	1.29E-05	9.62E-01	4.74E-05	2.49E-05	1.24E-05	2.72E-05	2.72E-05

Calculated Exposure Point Concentrations for the Tooley Residential Receptor Cluster

Process Upset - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.92E-06	1.15E-09	--	4.15E-07	5.14E-10
Acenaphthylene	208-96-8	4.50E-07	6.43E-10	--	8.50E-08	9.90E-10
Anthracene	120-12-7	1.90E-06	4.31E-10	3.79E-10	1.84E-07	1.20E-11
Benz(a)anthracene	56-55-3	1.04E-06	2.13E-10	3.61E-08	2.05E-08	7.79E-10
Benzo(a)fluorene	30777-18-5	2.06E-06	1.66E-09	1.03E-08	6.04E-08	1.81E-09
Benzo(a)pyrene	50-32-8	1.84E-06	9.26E-10	1.13E-07	2.43E-08	7.02E-09
Benzo(b)fluoranthene	205-99-2	2.39E-06	2.66E-10	6.06E-09	2.68E-08	3.45E-10
Benzo(b)fluorene	243-17-4	1.42E-06	1.34E-09	7.04E-09	2.62E-08	4.76E-09
Benzo(e)pyrene	192-97-20	5.02E-06	8.93E-09	1.38E-08	3.69E-08	9.57E-07
Benzo(g,h,i)perylene	191-24-2	2.60E-05	7.17E-09	--	1.76E-07	1.45E-06
Benzo(k)fluoranthene	207-08-9	2.09E-06	6.27E-10	3.42E-08	2.40E-08	3.24E-09
Chrysene	218-01-9	3.86E-06	3.03E-10	4.49E-08	7.61E-08	1.08E-10
Dibenz(a,c)anthracene	215-58-7	3.28E-06	6.93E-09	1.18E-06	1.70E-08	1.28E-07
Dibenz(a,h)anthracene	53-70-3	1.15E-06	4.88E-10	5.32E-08	7.80E-09	1.15E-07
Fluoranthene	206-44-0	1.88E-05	1.28E-08	1.55E-08	9.36E-07	1.69E-09
Fluorene	86-73-7	1.91E-06	3.30E-09	--	2.77E-07	4.53E-11
Indeno(1,2,3-cd)pyrene	193-39-5	5.54E-06	1.72E-09	3.49E-07	3.28E-08	7.83E-10
Perylene	198-55-0	1.08E-06	1.50E-09	5.62E-10	1.02E-08	7.13E-07
Phenanthrene	85-01-8	1.93E-05	2.18E-08	4.40E-09	1.87E-06	7.94E-10
Pyrene	129-00-0	9.59E-05	2.18E-08	1.40E-08	5.47E-06	2.33E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	3.57E-04	3.52E-09	--	2.42E-06	6.63E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	1.40E-07	1.44E-12	4.35E-10	6.39E-10	1.45E-10
VOCs						
1,1,1-Trichloroethane	71-55-6	1.10E-09	4.84E-08	--	1.53E-09	1.20E-11
Bromoform	75-25-2	3.06E-09	1.55E-06	--	5.05E-09	2.97E-13
Carbon Tetrachloride	56-23-5	2.19E-10	1.07E-08	--	2.04E-10	1.16E-12
Chloroform	67-66-3	4.92E-10	1.59E-08	--	1.33E-09	5.79E-12
Dichloromethane	75-09-2	8.82E-08	4.96E-06	--	6.05E-07	6.03E-10
O-Terphenyl	84-15-1	6.08E-06	4.23E-09	--	1.52E-07	3.15E-09
Trichlorofluoromethane (FREON 11)	75-69-4	2.27E-08	5.47E-06	--	3.16E-08	2.54E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	8.64E-07	1.92E-09	--	5.62E-08	7.96E-12
1,2,4-Trichlorobenzene	120-82-1	2.04E-08	1.86E-09	--	3.85E-09	2.08E-12
1,2-Dichlorobenzene	95-50-1	2.74E-07	7.51E-08	--	1.18E-07	1.33E-09
Hexachlorobenzene	118-74-1	3.71E-07	2.29E-09	--	1.24E-08	5.44E-11
Pentachlorobenzene	608-93-5	1.34E-05	5.82E-09	--	5.34E-07	1.90E-10
Pentachlorophenol	87-86-5	6.31E-06	1.87E-06	--	2.76E-07	7.21E-06
Inorganics						
Antimony	7440-36-0	1.71E-03	1.43E-05	5.91E-05	5.45E-05	--
Arsenic	7440-38-2	1.69E-04	2.20E-06	9.06E-06	1.07E-06	--
Barium	7440-39-3	1.20E-03	1.10E-05	4.56E-05	3.87E-05	--
Beryllium	7440-41-7	1.07E-03	8.38E-07	7.19E-06	2.77E-06	--
Boron	7440-42-8	6.65E-03	8.01E-04	3.30E-03	1.50E-02	--
Cadmium	7440-43-9	7.09E-03	3.59E-05	1.51E-04	8.86E-04	--
Chromium (Total)	7440-47-3	5.97E-04	1.18E-05	4.85E-05	2.91E-06	--
Chromium VI	18540-29-9	8.48E-05	1.67E-06	6.90E-06	4.14E-07	--
Cobalt	7440-48-4	3.61E-03	3.02E-05	1.25E-04	3.12E-05	--
Lead	7439-92-1	1.65E-01	1.19E-04	1.08E-03	2.24E-03	--
Mercury - Inorganic	7487-94-7	1.11E-02	1.11E-06	1.45E-05	1.61E-04	2.47E-05
Methyl Mercury	22967-92-6	4.31E-04	4.96E-09	4.10E-06	1.27E-05	6.98E-06
Nickel	7440-02-0	7.73E-02	4.50E-04	1.88E-03	7.20E-04	--
Phosphorus	7723-14-0	2.32E-03	2.41E-04	9.93E-04	8.12E-03	--
Selenium	7782-49-2	3.42E-05	2.51E-06	1.04E-05	6.66E-07	--
Silver	7440-22-4	3.92E-04	1.75E-05	7.23E-05	5.41E-05	--
Thallium	7440-28-0	3.76E-02	2.00E-04	8.41E-04	3.22E-05	--
Tin	7440-31-5	4.07E-02	6.98E-05	3.80E-04	3.68E-04	--
Vanadium	7440-62-2	3.89E-03	2.66E-06	2.51E-05	1.29E-05	--
Zinc	7440-66-6	1.69E-01	1.03E-03	4.31E-03	1.64E-02	--

Calculated Exposure Point Concentrations for the Tooley Residential Receptor Cluster
Process Upset - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	4.09E-07	1.24E-10	4.57E-10	1.44E-09	4.76E-10	7.87E-10	2.25E-09	1.29E-09
Acenaphthylene	208-96-8	2.86E-06	2.90E-11	3.22E-10	3.46E-10	1.10E-10	1.82E-10	5.22E-10	2.98E-10
Anthracene	120-12-7	2.86E-09	8.71E-11	6.84E-10	1.07E-09	3.26E-10	6.43E-10	1.96E-09	1.12E-09
Benz(a)anthracene	56-55-3	9.87E-10	3.22E-10	5.34E-09	1.78E-09	5.42E-10	3.40E-10	7.96E-10	4.55E-10
Benzo(a)fluorene	30777-18-5	6.95E-08	2.05E-10	2.10E-08	1.85E-09	5.32E-10	6.11E-10	1.74E-09	9.94E-10
Benzo(a)pyrene	50-32-8	1.12E-09	1.09E-09	4.62E-08	6.54E-09	2.04E-09	8.23E-10	1.26E-09	7.19E-10
Benzo(b)fluoranthene	205-99-2	2.76E-08	8.59E-11	1.77E-08	8.56E-10	2.12E-10	4.67E-10	1.55E-09	8.85E-10
Benzo(b)fluorene	243-17-4	8.70E-08	2.72E-10	3.77E-08	2.56E-09	7.78E-10	4.93E-10	1.08E-09	6.16E-10
Benzo(e)pyrene	192-97-20	2.66E-07	3.12E-08	1.23E-06	3.08E-07	9.83E-08	2.67E-08	2.77E-09	1.58E-09
Benzo(g,h,i)perylene	191-24-2	1.36E-07	4.60E-08	1.12E-06	4.56E-07	1.45E-07	4.20E-08	1.39E-08	7.93E-09
Benzo(k)fluoranthene	207-08-9	1.27E-09	3.82E-10	3.94E-08	2.68E-09	8.02E-10	5.61E-10	1.36E-09	7.80E-10
Chrysene	218-01-9	3.66E-09	4.12E-10	7.59E-09	2.63E-09	7.37E-10	9.69E-10	2.95E-09	1.69E-09
Dibenz(a,c)anthracene	215-58-7	5.63E-08	9.79E-09	1.73E-06	6.27E-08	2.00E-08	5.28E-09	1.55E-09	8.88E-10
Dibenz(a,h)anthracene	53-70-3	4.66E-10	3.96E-09	7.68E-08	3.75E-08	1.19E-08	3.29E-09	6.13E-10	3.51E-10
Fluoranthene	206-44-0	2.80E-08	7.69E-10	6.43E-08	9.26E-09	2.58E-09	5.49E-09	1.74E-08	9.93E-09
Fluorene	86-73-7	3.62E-09	1.07E-10	2.62E-09	1.29E-09	4.08E-10	7.20E-10	2.11E-09	1.21E-09
Indeno(1,2,3-cd)pyrene	193-39-5	2.93E-09	2.00E-09	3.39E-07	9.46E-09	2.90E-09	1.38E-09	2.78E-09	1.59E-09
Perylene	198-55-0	2.03E-08	2.51E-08	1.33E-07	2.48E-07	7.92E-08	2.11E-08	6.61E-10	3.77E-10
Phenanthrene	85-01-8	3.54E-08	9.19E-10	3.45E-08	1.13E-08	3.42E-09	6.59E-09	2.00E-08	1.14E-08
Pyrene	129-00-0	1.39E-07	3.40E-09	8.69E-08	4.47E-08	1.25E-08	2.86E-08	9.08E-08	5.19E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	3.42E-06	3.71E-07	9.03E-04	6.63E-06	1.32E-06	5.40E-06	1.90E-07	1.09E-07
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	1.44E-09	7.35E-10	**4.47E-08**	6.76E-09	1.89E-09	2.12E-09	6.19E-11	3.54E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	9.74E-08	1.56E-09	7.67E-08	2.38E-08	5.02E-09	3.82E-09	6.58E-11	3.76E-11
Bromoform	75-25-2	3.76E-08	4.36E-08	1.82E-06	6.66E-07	1.40E-07	1.06E-07	1.82E-09	1.04E-09
Carbon Tetrachloride	56-23-5	2.09E-08	4.98E-10	3.39E-08	7.60E-09	1.60E-09	1.22E-09	2.09E-11	1.19E-11
Chloroform	67-66-3	4.95E-08	2.81E-10	7.98E-09	4.27E-09	9.06E-10	6.96E-10	1.21E-11	6.91E-12
Dichloromethane	75-09-2	3.18E-05	2.97E-08	4.96E-07	4.52E-07	9.61E-08	7.41E-08	1.29E-09	7.38E-10
O-Terphenyl	84-15-1	1.37E-07	2.68E-08	7.01E-06	3.41E-07	9.16E-08	1.59E-07	4.96E-09	2.83E-09
Trichlorofluoromethane (FREON 11)	75-69-4	1.85E-06	1.80E-07	8.67E-06	2.75E-06	5.79E-07	4.39E-07	7.50E-09	4.29E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	9.05E-07	3.80E-09	6.06E-07	5.17E-08	1.40E-08	2.82E-08	8.64E-10	4.93E-10
1,2,4-Trichlorobenzene	120-82-1	1.58E-08	4.25E-10	1.17E-07	6.04E-09	1.45E-09	1.54E-09	3.57E-11	2.04E-11
1,2-Dichlorobenzene	95-50-1	6.72E-06	9.04E-09	9.02E-07	1.29E-07	3.05E-08	2.94E-08	6.34E-10	3.62E-10
Hexachlorobenzene	118-74-1	9.44E-08	1.61E-09	2.29E-06	2.29E-08	5.65E-09	1.10E-08	3.39E-10	1.93E-10
Pentachlorobenzene	608-93-5	2.47E-07	3.87E-08	4.31E-06	5.51E-07	1.44E-07	3.68E-07	1.20E-08	6.84E-09
Pentachlorophenol	87-86-5	1.03E-04	4.87E-08	1.05E-03	4.81E-07	1.54E-07	4.09E-08	2.25E-11	1.29E-11
Inorganics									
Antimony	7440-36-0	5.12E-05	1.67E-06	2.86E-03	9.63E-06	1.41E-06	1.90E-06	3.56E-08	2.03E-08
Arsenic	7440-38-2	1.36E-06	4.01E-07	1.10E-04	1.81E-06	7.82E-08	2.85E-07	5.79E-09	3.31E-09
Barium	7440-39-3	1.80E-05	1.79E-07	1.10E-04	9.64E-07	3.27E-06	1.78E-07	3.36E-09	1.92E-09
Beryllium	7440-41-7	1.61E-06	1.89E-07	8.38E-05	1.25E-06	1.35E-09	5.47E-07	1.77E-08	1.01E-08
Boron	7440-42-8	1.33E-02	8.00E-05	--	4.67E-04	1.54E-04	9.65E-05	1.67E-06	9.54E-07
Cadmium	7440-43-9	4.54E-04	7.61E-07	4.31E-02	5.45E-06	4.39E-07	1.61E-06	2.60E-05	6.12E-07
Chromium (Total)	7440-47-3	2.68E-06	5.68E-06	2.35E-03	2.40E-05	9.54E-06	3.19E-06	5.76E-08	3.29E-08
Chromium VI	18540-29-9	3.82E-07	8.07E-07	6.19E-05	3.42E-06	1.36E-06	4.54E-07	8.20E-09	4.68E-09
Cobalt	7440-48-4	2.53E-05	5.56E-05	3.02E-03	2.60E-04	7.71E-05	5.16E-05	1.26E-06	7.19E-07
Lead	7439-92-1	1.48E-03	1.06E-05	1.25E-02	7.64E-05	8.28E-05	2.95E-05	8.67E-07	4.95E-07
Mercury - Inorganic	7487-94-7	4.00E-04	2.93E-06	--	3.68E-05	1.57E-05	1.54E-07	6.35E-06	6.35E-06
Methyl Mercury	22967-92-6	4.27E-05	8.04E-08	2.99E-03	4.84E-07	2.72E-07	1.07E-09	3.97E-08	3.97E-08
Nickel	7440-02-0	6.19E-04	2.64E-04	7.02E-02	1.34E-03	3.09E-04	3.11E-04	8.00E-06	4.57E-06
Phosphorus	7723-14-0	8.12E-03	1.66E-03	--	9.85E-03	3.35E-03	2.92E-03	6.82E-05	3.90E-05
Selenium	7782-49-2	7.52E-07	4.92E-07	4.27E-04	2.00E-06	7.68E-06	1.30E-05	1.24E-06	1.24E-06
Silver	7440-22-4	3.92E-05	5.10E-06	1.55E-03	2.39E-05	2.40E-04	3.07E-06	3.91E-08	2.23E-08
Thallium	7440-28-0	1.50E-05	7.47E-04	--	3.61E-03	2.45E-04	8.84E-04	2.46E-05	1.41E-05
Tin	7440-31-5	2.44E-04	8.29E-04	2.10E-01	5.24E-03	1.43E-03	1.88E-03	5.58E-05	3.19E-05
Vanadium	7440-62-2	1.17E-05	1.61E-06	4.26E-04	1.06E-05	2.66E-06	4.91E-06	1.62E-07	9.25E-08
Zinc	7440-66-6	1.53E-01	1.29E-05	9.62E-01	8.32E-05	4.43E-05	2.21E-05	4.89E-05	4.89E-05

Calculated Exposure Point Concentrations for the Farmer Receptor Cluster

Process Upset - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	2.59E-06	1.15E-09	--	5.60E-07	6.15E-10
Acenaphthylene	208-96-8	6.07E-07	6.43E-10	--	1.15E-07	1.18E-09
Anthracene	120-12-7	2.56E-06	4.31E-10	4.83E-10	2.48E-07	1.44E-11
Benz(a)anthracene	56-55-3	1.40E-06	2.13E-10	4.60E-08	2.77E-08	9.31E-10
Benzo(a)fluorene	30777-18-5	2.78E-06	1.66E-09	1.31E-08	8.14E-08	2.16E-09
Benzo(a)pyrene	50-32-8	2.49E-06	9.26E-10	1.44E-07	3.28E-08	8.39E-09
Benzo(b)fluoranthene	205-99-2	3.23E-06	2.66E-10	7.72E-09	3.62E-08	4.12E-10
Benzo(b)fluorene	243-17-4	1.92E-06	1.34E-09	8.97E-09	3.53E-08	5.69E-09
Benzo(e)pyrene	192-97-20	6.77E-06	8.93E-09	1.76E-08	4.97E-08	1.14E-06
Benzo(g,h,i)perylene	191-24-2	3.51E-05	7.17E-09	--	2.38E-07	1.73E-06
Benzo(k)fluoranthene	207-08-9	2.82E-06	6.27E-10	4.36E-08	3.24E-08	3.87E-09
Chrysene	218-01-9	5.21E-06	3.03E-10	5.72E-08	1.03E-07	1.29E-10
Dibenz(a,c)anthracene	215-58-7	4.42E-06	6.93E-09	1.50E-06	2.30E-08	1.53E-07
Dibenz(a,h)anthracene	53-70-3	1.55E-06	4.88E-10	6.78E-08	1.05E-08	1.38E-07
Fluoranthene	206-44-0	2.53E-05	1.28E-08	1.97E-08	1.26E-06	2.02E-09
Fluorene	86-73-7	2.58E-06	3.30E-09	--	3.74E-07	5.41E-11
Indeno(1,2,3-cd)pyrene	193-39-5	7.47E-06	1.72E-09	4.45E-07	4.43E-08	9.36E-10
Perylene	198-55-0	1.46E-06	1.50E-09	7.17E-10	1.38E-08	8.52E-07
Phenanthrene	85-01-8	2.61E-05	2.18E-08	5.61E-09	2.53E-06	9.49E-10
Pyrene	129-00-0	1.29E-04	2.18E-08	1.79E-08	7.38E-06	2.79E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	4.82E-04	3.52E-09	--	3.27E-06	7.93E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	2.06E-07	1.44E-12	6.33E-10	9.39E-10	1.73E-10
VOCs						
1,1,1-Trichloroethane	71-55-6	1.48E-09	4.84E-08	--	2.06E-09	1.43E-11
Bromoform	75-25-2	4.13E-09	1.55E-06	--	6.81E-09	3.55E-13
Carbon Tetrachloride	56-23-5	2.96E-10	1.07E-08	--	2.76E-10	1.38E-12
Chloroform	67-66-3	6.64E-10	1.59E-08	--	1.79E-09	6.92E-12
Dichloromethane	75-09-2	1.19E-07	4.96E-06	--	8.16E-07	7.21E-10
O-Terphenyl	84-15-1	8.20E-06	4.23E-09	--	2.05E-07	3.77E-09
Trichlorofluoromethane (FREON 11)	75-69-4	3.07E-08	5.47E-06	--	4.26E-08	3.03E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	1.17E-06	1.92E-09	--	7.59E-08	9.52E-12
1,2,4-Trichlorobenzene	120-82-1	2.75E-08	1.86E-09	--	5.19E-09	2.49E-12
1,2-Dichlorobenzene	95-50-1	3.70E-07	7.51E-08	--	1.59E-07	1.59E-09
Hexachlorobenzene	118-74-1	5.00E-07	2.29E-09	--	1.68E-08	6.51E-11
Pentachlorobenzene	608-93-5	1.81E-05	5.82E-09	--	7.21E-07	2.27E-10
Pentachlorophenol	87-86-5	8.52E-06	1.87E-06	--	3.72E-07	8.62E-06
Inorganics						
Antimony	7440-36-0	2.51E-03	1.43E-05	8.61E-05	8.01E-05	--
Arsenic	7440-38-2	2.49E-04	2.20E-06	1.32E-05	1.58E-06	--
Barium	7440-39-3	1.77E-03	1.10E-05	6.64E-05	5.69E-05	--
Beryllium	7440-41-7	1.58E-03	8.38E-07	1.05E-05	4.08E-06	--
Boron	7440-42-8	9.78E-03	8.01E-04	4.81E-03	2.20E-02	--
Cadmium	7440-43-9	1.04E-02	3.59E-05	2.20E-04	1.30E-03	--
Chromium (Total)	7440-47-3	8.77E-04	1.18E-05	7.07E-05	4.28E-06	--
Chromium VI	18540-29-9	1.25E-04	1.67E-06	1.01E-05	6.09E-07	--
Cobalt	7440-48-4	5.31E-03	3.02E-05	1.82E-04	4.59E-05	--
Lead	7439-92-1	2.42E-01	1.19E-04	1.57E-03	3.29E-03	--
Mercury - Inorganic	7487-94-7	1.26E-02	1.11E-06	2.12E-05	1.83E-04	2.96E-05
Methyl Mercury	22967-92-6	6.34E-04	4.96E-09	5.97E-06	1.86E-05	8.34E-06
Nickel	7440-02-0	1.14E-01	4.50E-04	2.74E-03	1.06E-03	--
Phosphorus	7723-14-0	3.41E-03	2.41E-04	1.45E-03	1.19E-02	--
Selenium	7782-49-2	5.02E-05	2.51E-06	1.51E-05	9.80E-07	--
Silver	7440-22-4	5.76E-04	1.75E-05	1.05E-04	7.95E-05	--
Thallium	7440-28-0	5.53E-02	2.00E-04	1.23E-03	4.74E-05	--
Tin	7440-31-5	5.99E-02	6.98E-05	5.53E-04	5.42E-04	--
Vanadium	7440-62-2	5.71E-03	2.66E-06	3.65E-05	1.90E-05	--
Zinc	7440-66-6	2.49E-01	1.03E-03	6.27E-03	2.42E-02	--

Calculated Exposure Point Concentrations for the Farmer Receptor Cluster
Process Upset - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	5.52E-07	1.24E-10	4.57E-10	1.95E-09	6.41E-10	1.06E-09	3.04E-09	1.74E-09
Acenaphthylene	208-96-8	3.86E-06	2.90E-11	3.22E-10	5.58E-10	1.48E-10	2.46E-10	7.04E-10	4.02E-10
Anthracene	120-12-7	3.85E-09	8.71E-11	6.84E-10	1.45E-09	4.38E-10	8.67E-10	2.64E-09	1.51E-09
Benz(a)anthracene	56-55-3	1.33E-09	3.22E-10	5.34E-09	2.05E-09	6.16E-10	4.30E-10	1.07E-09	6.13E-10
Benzo(a)fluorene	30777-18-5	9.38E-08	2.05E-10	2.10E-08	2.18E-09	5.59E-10	7.68E-10	2.35E-09	1.34E-09
Benzo(a)pyrene	50-32-8	1.51E-09	1.09E-09	4.62E-08	6.46E-09	2.02E-09	8.97E-10	1.70E-09	9.71E-10
Benzo(b)fluoranthene	205-99-2	3.72E-08	8.59E-11	1.77E-08	1.03E-09	2.47E-10	6.20E-10	2.09E-09	1.19E-09
Benzo(b)fluorene	243-17-4	1.17E-07	2.72E-10	3.77E-08	2.94E-09	8.91E-10	5.24E-10	1.45E-09	8.31E-10
Benzo(e)pyrene	192-97-20	3.59E-07	3.12E-08	1.23E-06	3.68E-07	1.17E-07	3.16E-08	3.74E-09	2.14E-09
Benzo(g,h,i)perylene	191-24-2	1.83E-07	4.60E-08	1.12E-06	5.44E-07	1.73E-07	4.86E-08	1.87E-08	1.07E-08
Benzo(k)fluoranthene	207-08-9	1.71E-09	3.82E-10	3.94E-08	2.66E-09	8.04E-10	6.64E-10	1.84E-09	1.05E-09
Chrysene	218-01-9	4.94E-09	4.12E-10	7.59E-09	3.40E-09	9.48E-10	1.30E-09	3.98E-09	2.27E-09
Dibenz(a,c)anthracene	215-58-7	7.60E-08	9.79E-09	1.73E-06	6.47E-08	2.06E-08	5.43E-09	2.10E-09	1.20E-09
Dibenz(a,h)anthracene	53-70-3	6.29E-10	3.96E-09	7.68E-08	4.42E-08	1.41E-08	3.83E-09	8.28E-10	4.73E-10
Fluoranthene	206-44-0	3.78E-08	7.69E-10	6.43E-08	1.19E-08	3.28E-09	7.36E-09	2.34E-08	1.34E-08
Fluorene	86-73-7	4.89E-09	1.07E-10	2.62E-09	1.73E-09	5.46E-10	9.71E-10	2.85E-09	1.63E-09
Indeno(1,2,3-cd)pyrene	193-39-5	3.95E-09	2.00E-09	3.39E-07	1.19E-08	3.65E-09	1.80E-09	3.75E-09	2.15E-09
Perylene	198-55-0	2.75E-08	2.51E-08	1.33E-07	2.97E-07	9.47E-08	2.51E-08	8.91E-10	5.09E-10
Phenanthrene	85-01-8	4.77E-08	9.19E-10	3.45E-08	1.50E-08	4.53E-09	8.86E-09	2.69E-08	1.54E-08
Pyrene	129-00-0	1.88E-07	3.40E-09	8.69E-08	5.94E-08	1.67E-08	3.85E-08	1.22E-07	7.00E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	4.61E-06	3.71E-07	9.03E-04	8.77E-06	1.72E-06	7.27E-06	2.57E-07	1.47E-07
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	2.12E-09	7.35E-10	**4.47E-08**	6.78E-09	1.94E-09	2.80E-09	9.10E-11	5.20E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	1.31E-07	1.56E-09	7.67E-08	5.01E-07	1.05E-07	7.99E-08	1.36E-09	7.79E-10
Bromoform	75-25-2	5.08E-08	4.36E-08	1.82E-06	1.38E-05	2.91E-06	2.20E-06	3.76E-08	2.15E-08
Carbon Tetrachloride	56-23-5	2.81E-08	4.98E-10	3.39E-08	1.59E-07	3.34E-08	2.53E-08	4.32E-10	2.47E-10
Chloroform	67-66-3	6.68E-08	2.81E-10	7.98E-09	9.63E-08	2.03E-08	1.54E-08	2.62E-10	1.50E-10
Dichloromethane	75-09-2	4.28E-05	2.97E-08	4.96E-07	1.06E-05	2.23E-06	1.69E-06	2.89E-08	1.65E-08
O-Terphenyl	84-15-1	1.84E-07	2.68E-08	7.01E-06	4.92E-07	1.17E-07	2.05E-07	6.69E-09	3.82E-09
Trichlorofluoromethane (FREON 11)	75-69-4	2.49E-06	1.80E-07	8.67E-06	5.72E-05	1.20E-05	9.12E-06	1.56E-07	8.89E-08
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	1.22E-06	3.80E-09	6.06E-07	1.65E-07	3.67E-08	3.87E-08	1.16E-09	6.66E-10
1,2,4-Trichlorobenzene	120-82-1	2.13E-08	4.25E-10	1.17E-07	1.01E-07	2.14E-08	1.65E-08	2.87E-10	1.64E-10
1,2-Dichlorobenzene	95-50-1	9.07E-06	9.04E-09	9.02E-07	2.37E-06	5.01E-07	3.83E-07	6.62E-09	3.79E-09
Hexachlorobenzene	118-74-1	1.27E-07	1.61E-09	2.29E-06	1.64E-07	3.50E-08	3.06E-08	6.17E-10	3.52E-10
Pentachlorobenzene	608-93-5	3.33E-07	3.87E-08	4.31E-06	7.47E-07	1.92E-07	4.96E-07	1.62E-08	9.23E-09
Pentachlorophenol	87-86-5	1.39E-04	4.87E-08	1.05E-03	5.79E-07	1.84E-07	4.93E-08	1.91E-11	1.09E-11
Inorganics									
Antimony	7440-36-0	7.53E-05	1.67E-06	2.86E-03	1.41E-05	2.06E-06	2.78E-06	5.23E-08	2.99E-08
Arsenic	7440-38-2	1.99E-06	4.01E-07	1.10E-04	2.64E-06	1.14E-07	4.17E-07	8.52E-09	4.87E-09
Barium	7440-39-3	2.65E-05	1.79E-07	1.10E-04	1.41E-06	4.77E-06	2.61E-07	4.94E-09	2.82E-09
Beryllium	7440-41-7	2.37E-06	1.89E-07	8.38E-05	1.82E-06	1.98E-09	8.04E-07	2.60E-08	1.49E-08
Boron	7440-42-8	1.96E-02	8.00E-05	--	6.83E-04	2.25E-04	1.42E-04	2.45E-06	1.40E-06
Cadmium	7440-43-9	6.67E-04	7.61E-07	4.31E-02	7.99E-06	6.44E-07	2.37E-06	3.83E-05	9.01E-07
Chromium (Total)	7440-47-3	3.95E-06	5.68E-06	2.35E-03	3.50E-05	1.39E-05	4.60E-06	8.36E-08	4.78E-08
Chromium VI	18540-29-9	5.61E-07	8.07E-07	6.19E-05	4.98E-06	1.98E-06	6.55E-07	1.19E-08	6.79E-09
Cobalt	7440-48-4	3.72E-05	5.56E-05	3.02E-03	3.79E-04	1.12E-04	7.56E-05	1.85E-06	1.06E-06
Lead	7439-92-1	2.18E-03	1.06E-05	1.25E-02	1.12E-04	1.21E-04	4.34E-05	1.27E-06	7.28E-07
Mercury - Inorganic	7487-94-7	4.55E-04	2.93E-06	--	4.29E-05	1.85E-05	1.75E-07	7.21E-06	7.21E-06
Methyl Mercury	22967-92-6	6.27E-05	8.04E-08	2.99E-03	6.54E-07	3.62E-07	1.54E-09	5.84E-08	5.84E-08
Nickel	7440-02-0	9.10E-04	2.64E-04	7.02E-02	1.95E-03	4.51E-04	4.56E-04	1.18E-05	6.72E-06
Phosphorus	7723-14-0	1.19E-02	1.66E-03	--	1.44E-02	4.91E-03	4.29E-03	1.00E-04	5.73E-05
Selenium	7782-49-2	1.11E-06	4.92E-07	4.27E-04	2.91E-06	1.12E-05	1.76E-05	1.40E-06	1.40E-06
Silver	7440-22-4	5.76E-05	5.10E-06	1.55E-03	3.49E-05	3.50E-04	4.50E-06	5.53E-08	3.16E-08
Thallium	7440-28-0	2.21E-05	7.47E-04	--	5.27E-03	3.57E-04	1.30E-03	3.62E-05	2.07E-05
Tin	7440-31-5	3.59E-04	8.29E-04	2.10E-01	7.67E-03	2.10E-03	2.76E-03	8.20E-05	4.69E-05
Vanadium	7440-62-2	1.71E-05	1.61E-06	4.26E-04	1.55E-05	3.88E-06	7.22E-06	2.38E-07	1.36E-07
Zinc	7440-66-6	2.24E-01	1.29E-05	9.62E-01	1.22E-04	6.49E-05	3.25E-05	7.19E-05	7.19E-05

Calculated Exposure Point Concentrations for the Daycare Receptor Cluster

Process Upset - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	4.46E-07	1.15E-09	--	9.63E-08	3.16E-10
Acenaphthylene	208-96-8	1.04E-07	6.43E-10	--	1.97E-08	6.08E-10
Anthracene	120-12-7	4.40E-07	4.31E-10	9.82E-11	4.27E-08	7.39E-12
Benz(a)anthracene	56-55-3	2.42E-07	2.13E-10	9.36E-09	4.76E-09	4.78E-10
Benzo(a)fluorene	30777-18-5	4.78E-07	1.66E-09	2.67E-09	1.40E-08	1.11E-09
Benzo(a)pyrene	50-32-8	4.28E-07	9.26E-10	2.93E-08	5.65E-09	4.31E-09
Benzo(b)fluoranthene	205-99-2	5.56E-07	2.66E-10	1.57E-09	6.22E-09	2.12E-10
Benzo(b)fluorene	243-17-4	3.30E-07	1.34E-09	1.83E-09	6.07E-09	2.92E-09
Benzo(e)pyrene	192-97-20	1.17E-06	8.93E-09	3.57E-09	8.55E-09	5.88E-07
Benzo(g,h,i)perylene	191-24-2	6.04E-06	7.17E-09	--	4.09E-08	8.91E-07
Benzo(k)fluoranthene	207-08-9	4.85E-07	6.27E-10	8.86E-09	5.58E-09	1.99E-09
Chrysene	218-01-9	8.97E-07	3.03E-10	1.16E-08	1.77E-08	6.63E-11
Dibenz(a,c)anthracene	215-58-7	7.61E-07	6.93E-09	3.06E-07	3.95E-09	7.86E-08
Dibenz(a,h)anthracene	53-70-3	2.67E-07	4.88E-10	1.38E-08	1.81E-09	7.08E-08
Fluoranthene	206-44-0	4.35E-06	1.28E-08	4.02E-09	2.17E-07	1.04E-09
Fluorene	86-73-7	4.43E-07	3.30E-09	--	6.43E-08	2.78E-11
Indeno(1,2,3-cd)pyrene	193-39-5	1.29E-06	1.72E-09	9.05E-08	7.62E-09	4.81E-10
Perylene	198-55-0	2.51E-07	1.50E-09	1.46E-10	2.38E-09	4.38E-07
Phenanthrene	85-01-8	4.48E-06	2.18E-08	1.14E-09	4.35E-07	4.87E-10
Pyrene	129-00-0	2.23E-05	2.18E-08	3.63E-09	1.27E-06	1.43E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	8.31E-05	3.52E-09	--	5.63E-07	4.07E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	5.05E-08	1.44E-12	2.09E-10	2.30E-10	8.91E-11
VOCs						
1,1,1-Trichloroethane	71-55-6	2.55E-10	4.84E-08	--	3.54E-10	7.36E-12
Bromoform	75-25-2	7.10E-10	1.55E-06	--	1.17E-09	1.83E-13
Carbon Tetrachloride	56-23-5	5.09E-11	1.07E-08	--	4.75E-11	7.11E-13
Chloroform	67-66-3	1.14E-10	1.59E-08	--	3.08E-10	3.55E-12
Dichloromethane	75-09-2	2.05E-08	4.96E-06	--	1.40E-07	3.70E-10
O-Terphenyl	84-15-1	1.41E-06	4.23E-09	--	3.52E-08	1.93E-09
Trichlorofluoromethane (FREON 11)	75-69-4	5.27E-09	5.47E-06	--	7.33E-09	1.56E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	2.00E-07	1.92E-09	--	1.30E-08	4.89E-12
1,2,4-Trichlorobenzene	120-82-1	4.72E-09	1.86E-09	--	8.93E-10	1.28E-12
1,2-Dichlorobenzene	95-50-1	6.35E-08	7.51E-08	--	2.74E-08	8.17E-10
Hexachlorobenzene	118-74-1	8.61E-08	2.29E-09	--	2.88E-09	3.34E-11
Pentachlorobenzene	608-93-5	3.11E-06	5.82E-09	--	1.24E-07	1.16E-10
Pentachlorophenol	87-86-5	1.46E-06	1.87E-06	--	6.40E-08	4.43E-06
Inorganics						
Antimony	7440-36-0	6.12E-04	1.43E-05	2.84E-05	1.95E-05	--
Arsenic	7440-38-2	6.07E-05	2.20E-06	4.36E-06	3.84E-07	--
Barium	7440-39-3	4.31E-04	1.10E-05	2.19E-05	1.39E-05	--
Beryllium	7440-41-7	3.86E-04	8.38E-07	3.46E-06	9.95E-07	--
Boron	7440-42-8	2.38E-03	8.01E-04	1.59E-03	5.37E-03	--
Cadmium	7440-43-9	2.54E-03	3.59E-05	7.26E-05	3.18E-04	--
Chromium (Total)	7440-47-3	2.14E-04	1.18E-05	2.33E-05	1.04E-06	--
Chromium VI	18540-29-9	3.04E-05	1.67E-06	3.32E-06	1.48E-07	--
Cobalt	7440-48-4	1.29E-03	3.02E-05	6.01E-05	1.12E-05	--
Lead	7439-92-1	5.91E-02	1.19E-04	5.19E-04	8.04E-04	--
Mercury - Inorganic	7487-94-7	4.10E-03	1.11E-06	6.99E-06	5.94E-05	1.52E-05
Methyl Mercury	22967-92-6	1.55E-04	4.96E-09	1.97E-06	4.55E-06	4.28E-06
Nickel	7440-02-0	2.77E-02	4.50E-04	9.04E-04	2.58E-04	--
Phosphorus	7723-14-0	8.31E-04	2.41E-04	4.78E-04	2.91E-03	--
Selenium	7782-49-2	1.22E-05	2.51E-06	4.98E-06	2.39E-07	--
Silver	7440-22-4	1.40E-04	1.75E-05	3.48E-05	1.94E-05	--
Thallium	7440-28-0	1.35E-02	2.00E-04	4.05E-04	1.16E-05	--
Tin	7440-31-5	1.46E-02	6.98E-05	1.83E-04	1.32E-04	--
Vanadium	7440-62-2	1.39E-03	2.66E-06	1.21E-05	4.63E-06	--
Zinc	7440-66-6	6.08E-02	1.03E-03	2.07E-03	5.89E-03	--

Calculated Exposure Point Concentrations for the Daycare Receptor Cluster
Process Upset - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	9.48E-08	1.24E-10	4.57E-10	3.81E-10	1.19E-10	1.87E-10	5.27E-10	3.01E-10
Acenaphthylene	208-96-8	6.64E-07	2.90E-11	3.22E-10	1.38E-10	3.76E-11	5.08E-11	1.34E-10	7.68E-11
Anthracene	120-12-7	6.63E-10	8.71E-11	6.84E-10	2.67E-10	7.91E-11	1.51E-10	4.56E-10	2.61E-10
Benz(a)anthracene	56-55-3	2.29E-10	3.22E-10	5.34E-09	5.72E-10	1.75E-10	9.14E-11	1.86E-10	1.06E-10
Benzo(a)fluorene	30777-18-5	1.61E-08	2.05E-10	2.10E-08	8.98E-10	2.54E-10	1.93E-10	4.44E-10	2.54E-10
Benzo(a)pyrene	50-32-8	2.59E-10	1.09E-09	4.62E-08	2.63E-09	8.28E-10	2.83E-10	2.96E-10	1.69E-10
Benzo(b)fluoranthene	205-99-2	6.40E-09	8.59E-11	1.77E-08	2.59E-10	6.78E-11	1.12E-10	3.62E-10	2.07E-10
Benzo(b)fluorene	243-17-4	2.02E-08	2.72E-10	3.77E-08	1.45E-09	4.40E-10	1.94E-10	2.79E-10	1.60E-10
Benzo(e)pyrene	192-97-20	6.18E-08	3.12E-08	1.23E-06	1.89E-07	6.02E-08	1.61E-08	6.52E-10	3.72E-10
Benzo(g,h,i)perylene	191-24-2	3.15E-08	4.60E-08	1.12E-06	2.78E-07	8.88E-08	2.43E-08	3.25E-09	1.86E-09
Benzo(k)fluoranthene	207-08-9	2.95E-10	3.82E-10	3.94E-08	1.10E-09	3.40E-10	1.69E-10	3.18E-10	1.82E-10
Chrysene	218-01-9	8.51E-10	4.12E-10	7.59E-09	6.77E-10	1.91E-10	2.28E-10	6.87E-10	3.93E-10
Dibenz(a,c)anthracene	215-58-7	1.31E-08	9.79E-09	1.73E-06	2.90E-08	9.23E-09	2.43E-09	3.78E-10	2.16E-10
Dibenz(a,h)anthracene	53-70-3	1.08E-10	3.96E-09	7.68E-08	2.24E-08	7.16E-09	1.92E-09	1.43E-10	8.19E-11
Fluoranthene	206-44-0	6.51E-09	7.69E-10	6.43E-08	2.67E-09	7.35E-10	1.32E-09	4.07E-09	2.33E-09
Fluorene	86-73-7	8.40E-10	1.07E-10	2.62E-09	4.36E-10	1.23E-10	1.86E-10	5.18E-10	2.96E-10
Indeno(1,2,3-cd)pyrene	193-39-5	6.80E-10	2.00E-09	3.39E-07	2.52E-09	7.74E-10	3.41E-10	6.51E-10	3.72E-10
Perylene	198-55-0	4.72E-09	2.51E-08	1.33E-07	1.52E-07	4.86E-08	1.29E-08	1.55E-10	8.84E-11
Phenanthrene	85-01-8	8.21E-09	9.19E-10	3.45E-08	3.24E-09	9.30E-10	1.60E-09	4.71E-09	2.69E-09
Pyrene	129-00-0	3.23E-08	3.40E-09	8.69E-08	1.09E-08	3.05E-09	6.69E-09	2.12E-08	1.21E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	7.96E-07	3.71E-07	9.03E-04	1.61E-06	3.29E-07	1.26E-06	4.43E-08	2.53E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	5.20E-10	7.35E-10	**4.47E-08**	3.52E-09	1.03E-09	8.54E-10	2.23E-11	1.27E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	2.26E-08	1.56E-09	7.67E-08	4.74E-08	9.98E-09	7.56E-09	1.29E-10	7.38E-11
Bromoform	75-25-2	8.74E-09	4.36E-08	1.82E-06	1.30E-06	2.74E-07	2.07E-07	3.54E-09	2.02E-09
Carbon Tetrachloride	56-23-5	4.84E-09	4.98E-10	3.39E-08	1.51E-08	3.19E-09	2.42E-09	4.13E-11	2.36E-11
Chloroform	67-66-3	1.15E-08	2.81E-10	7.98E-09	8.52E-09	1.79E-09	1.36E-09	2.33E-11	1.33E-11
Dichloromethane	75-09-2	7.37E-06	2.97E-08	4.96E-07	9.00E-07	1.90E-07	1.44E-07	2.46E-09	1.41E-09
O-Terphenyl	84-15-1	3.17E-08	2.68E-08	7.01E-06	1.71E-07	4.59E-08	4.73E-08	1.24E-09	7.11E-10
Trichlorofluoromethane (FREON 11)	75-69-4	4.28E-07	1.80E-07	8.67E-06	5.41E-06	1.14E-06	8.63E-07	1.47E-08	8.42E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	2.10E-07	3.80E-09	6.06E-07	2.39E-08	5.75E-09	8.32E-09	2.29E-10	1.31E-10
1,2,4-Trichlorobenzene	120-82-1	3.66E-09	4.25E-10	1.17E-07	9.75E-09	2.10E-09	1.68E-09	3.08E-11	1.76E-11
1,2-Dichlorobenzene	95-50-1	1.56E-06	9.04E-09	9.02E-07	2.25E-07	4.81E-08	3.78E-08	6.75E-10	3.86E-10
Hexachlorobenzene	118-74-1	2.19E-08	1.61E-09	2.29E-06	2.00E-08	4.50E-09	4.79E-09	1.15E-10	6.57E-11
Pentachlorobenzene	608-93-5	5.73E-08	3.87E-08	4.31E-06	1.68E-07	4.21E-08	9.02E-08	2.83E-09	1.62E-09
Pentachlorophenol	87-86-5	2.40E-05	4.87E-08	1.05E-03	2.96E-07	9.45E-08	2.51E-08	6.00E-12	3.43E-12
Inorganics									
Antimony	7440-36-0	1.84E-05	1.67E-06	2.86E-03	4.26E-06	6.16E-07	7.55E-07	1.33E-08	7.62E-09
Arsenic	7440-38-2	4.86E-07	4.01E-07	1.10E-04	8.95E-07	3.82E-08	1.25E-07	2.26E-09	1.29E-09
Barium	7440-39-3	6.46E-06	1.79E-07	1.10E-04	4.38E-07	1.47E-06	7.24E-08	1.27E-09	7.27E-10
Beryllium	7440-41-7	5.79E-07	1.89E-07	8.38E-05	5.30E-07	5.93E-10	2.03E-07	6.38E-09	3.64E-09
Boron	7440-42-8	4.76E-03	8.00E-05	--	2.03E-04	6.55E-05	3.79E-05	6.24E-07	3.57E-07
Cadmium	7440-43-9	1.63E-04	7.61E-07	4.31E-02	2.20E-06	1.76E-07	6.08E-07	9.54E-06	2.25E-07
Chromium (Total)	7440-47-3	9.62E-07	5.68E-06	2.35E-03	1.22E-05	4.78E-06	1.47E-06	2.30E-08	1.32E-08
Chromium VI	18540-29-9	1.37E-07	8.07E-07	6.19E-05	1.74E-06	6.80E-07	2.08E-07	3.28E-09	1.87E-09
Cobalt	7440-48-4	9.06E-06	5.56E-05	3.02E-03	1.27E-04	3.75E-05	2.16E-05	4.76E-07	2.72E-07
Lead	7439-92-1	5.32E-04	1.06E-05	1.25E-02	3.11E-05	3.42E-05	1.09E-05	3.12E-07	1.79E-07
Mercury - Inorganic	7487-94-7	1.48E-04	2.93E-06	--	1.47E-05	6.48E-06	5.73E-08	2.34E-06	2.34E-06
Methyl Mercury	22967-92-6	1.53E-05	8.04E-08	2.99E-03	2.20E-07	1.28E-07	4.01E-10	1.43E-08	1.43E-08
Nickel	7440-02-0	2.22E-04	2.64E-04	7.02E-02	6.31E-04	1.46E-04	1.26E-04	2.98E-06	1.70E-06
Phosphorus	7723-14-0	2.91E-03	1.66E-03	--	4.27E-03	1.42E-03	1.12E-03	2.50E-05	1.43E-05
Selenium	7782-49-2	2.69E-07	4.92E-07	4.27E-04	1.03E-06	3.89E-06	6.35E-06	4.99E-07	4.99E-07
Silver	7440-22-4	1.40E-05	5.10E-06	1.55E-03	1.15E-05	1.13E-04	1.38E-06	1.56E-08	8.93E-09
Thallium	7440-28-0	5.39E-06	7.47E-04	--	1.75E-03	1.19E-04	3.59E-04	9.16E-06	5.24E-06
Tin	7440-31-5	8.76E-05	8.29E-04	2.10E-01	2.26E-03	6.27E-04	7.08E-04	2.02E-05	1.16E-05
Vanadium	7440-62-2	4.18E-06	1.61E-06	4.26E-04	4.51E-06	1.17E-06	1.82E-06	5.83E-08	3.33E-08
Zinc	7440-66-6	5.47E-02	1.29E-05	9.62E-01	3.51E-05	1.85E-05	8.50E-06	1.80E-05	1.80E-05

Calculated Exposure Point Concentrations for the Recreation User - Sport Receptor Cluster

Process Upset - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.08E-06	1.15E-09	--	2.33E-07	4.72E-10
Acenaphthylene	208-96-8	2.52E-07	6.43E-10	--	4.77E-08	9.08E-10
Anthracene	120-12-7	1.06E-06	4.31E-10	2.22E-10	1.03E-07	1.10E-11
Benz(a)anthracene	56-55-3	5.85E-07	2.13E-10	2.11E-08	1.15E-08	7.15E-10
Benzo(a)fluorene	30777-18-5	1.16E-06	1.66E-09	6.02E-09	3.39E-08	1.66E-09
Benzo(a)pyrene	50-32-8	1.03E-06	9.26E-10	6.61E-08	1.37E-08	6.44E-09
Benzo(b)fluoranthene	205-99-2	1.34E-06	2.66E-10	3.54E-09	1.51E-08	3.16E-10
Benzo(b)fluorene	243-17-4	7.98E-07	1.34E-09	4.12E-09	1.47E-08	4.36E-09
Benzo(e)pyrene	192-97-20	2.82E-06	8.93E-09	8.06E-09	2.07E-08	8.78E-07
Benzo(g,h,i)perylene	191-24-2	1.46E-05	7.17E-09	--	9.90E-08	1.33E-06
Benzo(k)fluoranthene	207-08-9	1.18E-06	6.27E-10	2.00E-08	1.35E-08	2.97E-09
Chrysene	218-01-9	2.17E-06	3.03E-10	2.63E-08	4.28E-08	9.90E-11
Dibenz(a,c)anthracene	215-58-7	1.84E-06	6.93E-09	6.89E-07	9.55E-09	1.17E-07
Dibenz(a,h)anthracene	53-70-3	6.46E-07	4.88E-10	3.11E-08	4.38E-09	1.06E-07
Fluoranthene	206-44-0	1.05E-05	1.28E-08	9.06E-09	5.25E-07	1.55E-09
Fluorene	86-73-7	1.07E-06	3.30E-09	--	1.55E-07	4.15E-11
Indeno(1,2,3-cd)pyrene	193-39-5	3.11E-06	1.72E-09	2.04E-07	1.84E-08	7.18E-10
Perylene	198-55-0	6.08E-07	1.50E-09	3.29E-10	5.75E-09	6.54E-07
Phenanthrene	85-01-8	1.08E-05	2.18E-08	2.57E-09	1.05E-06	7.28E-10
Pyrene	129-00-0	5.40E-05	2.18E-08	8.20E-09	3.08E-06	2.14E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	2.01E-04	3.52E-09	--	1.36E-06	6.08E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	7.37E-08	1.44E-12	2.29E-10	3.35E-10	1.33E-10
VOCs						
1,1,1-Trichloroethane	71-55-6	6.16E-10	4.84E-08	--	8.57E-10	1.10E-11
Bromoform	75-25-2	1.72E-09	1.55E-06	--	2.83E-09	2.73E-13
Carbon Tetrachloride	56-23-5	1.23E-10	1.07E-08	--	1.15E-10	1.06E-12
Chloroform	67-66-3	2.76E-10	1.59E-08	--	7.45E-10	5.31E-12
Dichloromethane	75-09-2	4.95E-08	4.96E-06	--	3.39E-07	5.53E-10
O-Terphenyl	84-15-1	3.41E-06	4.23E-09	--	8.52E-08	2.89E-09
Trichlorofluoromethane (FREON 11)	75-69-4	1.27E-08	5.47E-06	--	1.77E-08	2.33E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	4.84E-07	1.92E-09	--	3.15E-08	7.30E-12
1,2,4-Trichlorobenzene	120-82-1	1.14E-08	1.86E-09	--	2.16E-09	1.91E-12
1,2-Dichlorobenzene	95-50-1	1.54E-07	7.51E-08	--	6.62E-08	1.22E-09
Hexachlorobenzene	118-74-1	2.08E-07	2.29E-09	--	6.97E-09	4.99E-11
Pentachlorobenzene	608-93-5	7.53E-06	5.82E-09	--	3.00E-07	1.74E-10
Pentachlorophenol	87-86-5	3.54E-06	1.87E-06	--	1.55E-07	6.62E-06
Inorganics						
Antimony	7440-36-0	8.92E-04	1.43E-05	3.11E-05	2.85E-05	--
Arsenic	7440-38-2	8.85E-05	2.20E-06	4.77E-06	5.60E-07	--
Barium	7440-39-3	6.28E-04	1.10E-05	2.40E-05	2.02E-05	--
Beryllium	7440-41-7	5.62E-04	8.38E-07	3.78E-06	1.45E-06	--
Boron	7440-42-8	3.47E-03	8.01E-04	1.74E-03	7.83E-03	--
Cadmium	7440-43-9	3.71E-03	3.59E-05	7.95E-05	4.63E-04	--
Chromium (Total)	7440-47-3	3.12E-04	1.18E-05	2.56E-05	1.52E-06	--
Chromium VI	18540-29-9	4.43E-05	1.67E-06	3.63E-06	2.16E-07	--
Cobalt	7440-48-4	1.89E-03	3.02E-05	6.58E-05	1.63E-05	--
Lead	7439-92-1	8.62E-02	1.19E-04	5.68E-04	1.17E-03	--
Mercury - Inorganic	7487-94-7	6.98E-03	1.11E-06	7.65E-06	1.01E-04	2.27E-05
Methyl Mercury	22967-92-6	2.25E-04	4.96E-09	2.16E-06	6.63E-06	6.40E-06
Nickel	7440-02-0	4.04E-02	4.50E-04	9.89E-04	3.76E-04	--
Phosphorus	7723-14-0	1.21E-03	2.41E-04	5.23E-04	4.24E-03	--
Selenium	7782-49-2	1.78E-05	2.51E-06	5.45E-06	3.48E-07	--
Silver	7440-22-4	2.05E-04	1.75E-05	3.81E-05	2.82E-05	--
Thallium	7440-28-0	1.96E-02	2.00E-04	4.43E-04	1.69E-05	--
Tin	7440-31-5	2.13E-02	6.98E-05	2.00E-04	1.93E-04	--
Vanadium	7440-62-2	2.03E-03	2.66E-06	1.32E-05	6.75E-06	--
Zinc	7440-66-6	8.86E-02	1.03E-03	2.27E-03	8.59E-03	--

Calculated Exposure Point Concentrations for the Recreation User - Sport Receptor Cluster
Process Upset - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	2.29E-07	1.24E-10	4.57E-10	1.17E-09	3.43E-10	4.99E-10	1.36E-09	7.77E-10
Acenaphthylene	208-96-8	1.61E-06	2.90E-11	3.22E-10	5.05E-10	1.27E-10	1.52E-10	3.77E-10	2.15E-10
Anthracene	120-12-7	1.60E-09	8.71E-11	6.84E-10	7.16E-10	2.07E-10	3.79E-10	1.13E-09	6.45E-10
Benz(a)anthracene	56-55-3	5.54E-10	3.22E-10	5.34E-09	1.18E-09	3.57E-10	2.09E-10	4.58E-10	2.62E-10
Benzo(a)fluorene	30777-18-5	3.90E-08	2.05E-10	2.10E-08	2.18E-09	5.69E-10	5.05E-10	1.21E-09	6.93E-10
Benzo(a)pyrene	50-32-8	6.26E-10	1.09E-09	4.62E-08	4.76E-09	1.49E-09	5.58E-10	7.25E-10	4.15E-10
Benzo(b)fluoranthene	205-99-2	1.55E-08	8.59E-11	1.77E-08	6.00E-10	1.50E-10	2.78E-10	8.89E-10	5.08E-10
Benzo(b)fluorene	243-17-4	4.88E-08	2.72E-10	3.77E-08	2.70E-09	7.76E-10	4.27E-10	7.63E-10	4.36E-10
Benzo(e)pyrene	192-97-20	1.50E-07	3.12E-08	1.23E-06	2.82E-07	9.01E-08	2.42E-08	1.61E-09	9.18E-10
Benzo(g,h,i)perylene	191-24-2	7.61E-08	4.60E-08	1.12E-06	4.17E-07	1.33E-07	3.72E-08	7.90E-09	4.51E-09
Benzo(k)fluoranthene	207-08-9	7.15E-10	3.82E-10	3.94E-08	1.97E-09	5.97E-10	3.56E-10	7.73E-10	4.42E-10
Chrysene	218-01-9	2.06E-09	4.12E-10	7.59E-09	1.62E-09	4.50E-10	5.63E-10	1.68E-09	9.62E-10
Dibenz(a,c)anthracene	215-58-7	3.16E-08	9.79E-09	1.73E-06	4.89E-08	1.55E-08	4.13E-09	9.55E-10	5.46E-10
Dibenz(a,h)anthracene	53-70-3	2.62E-10	3.96E-09	7.68E-08	3.39E-08	1.08E-08	2.93E-09	3.49E-10	1.99E-10
Fluoranthene	206-44-0	1.57E-08	7.69E-10	6.43E-08	6.75E-09	1.80E-09	3.31E-09	1.01E-08	5.77E-09
Fluorene	86-73-7	2.03E-09	1.07E-10	2.62E-09	1.47E-09	3.87E-10	5.23E-10	1.39E-09	7.93E-10
Indeno(1,2,3-cd)pyrene	193-39-5	1.65E-09	2.00E-09	3.39E-07	5.66E-09	1.73E-09	8.06E-10	1.58E-09	9.05E-10
Perylene	198-55-0	1.14E-08	2.51E-08	1.33E-07	2.28E-07	7.27E-08	1.93E-08	3.79E-10	2.17E-10
Phenanthrene	85-01-8	1.99E-08	9.19E-10	3.45E-08	9.02E-09	2.50E-09	4.12E-09	1.19E-08	6.80E-09
Pyrene	129-00-0	7.82E-08	3.40E-09	8.69E-08	2.70E-08	7.49E-09	1.64E-08	5.15E-08	2.94E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.93E-06	3.71E-07	9.03E-04	3.90E-06	7.85E-07	3.06E-06	1.08E-07	6.15E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	7.57E-10	7.35E-10	**4.47E-08**	5.07E-09	1.48E-09	1.24E-09	3.25E-11	1.86E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	5.46E-08	1.56E-09	7.67E-08	4.53E-07	9.54E-08	7.23E-08	1.23E-09	7.05E-10
Bromoform	75-25-2	2.11E-08	4.36E-08	1.82E-06	1.25E-05	2.63E-06	1.99E-06	3.40E-08	1.94E-08
Carbon Tetrachloride	56-23-5	1.17E-08	4.98E-10	3.39E-08	1.44E-07	3.02E-08	2.29E-08	3.91E-10	2.23E-10
Chloroform	67-66-3	2.78E-08	2.81E-10	7.98E-09	8.71E-08	1.83E-08	1.39E-08	2.37E-10	1.36E-10
Dichloromethane	75-09-2	1.78E-05	2.97E-08	4.96E-07	9.58E-06	2.02E-06	1.53E-06	2.61E-08	1.49E-08
O-Terphenyl	84-15-1	7.66E-08	2.68E-08	7.01E-06	4.80E-07	1.17E-07	1.32E-07	3.44E-09	1.97E-09
Trichlorofluoromethane (FREON 11)	75-69-4	1.04E-06	1.80E-07	8.67E-06	5.17E-05	1.09E-05	8.25E-06	1.41E-07	8.04E-08
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	5.08E-07	3.80E-09	6.06E-07	1.49E-07	3.32E-08	3.50E-08	8.11E-10	4.64E-10
1,2,4-Trichlorobenzene	120-82-1	8.85E-09	4.25E-10	1.17E-07	9.13E-08	1.93E-08	1.49E-08	2.59E-10	1.48E-10
1,2-Dichlorobenzene	95-50-1	3.77E-06	9.04E-09	9.02E-07	2.14E-06	4.53E-07	3.47E-07	5.99E-09	3.42E-09
Hexachlorobenzene	118-74-1	5.29E-08	1.61E-09	2.29E-06	1.49E-07	3.19E-08	2.78E-08	5.58E-10	3.19E-10
Pentachlorobenzene	608-93-5	1.38E-07	3.87E-08	4.31E-06	6.78E-07	1.59E-07	2.65E-07	7.71E-09	4.41E-09
Pentachlorophenol	87-86-5	5.79E-05	4.87E-08	1.05E-03	4.43E-07	1.41E-07	3.77E-08	1.17E-11	6.68E-12
Inorganics									
Antimony	7440-36-0	2.68E-05	1.67E-06	2.86E-03	5.23E-06	7.57E-07	1.02E-06	1.91E-08	1.09E-08
Arsenic	7440-38-2	7.08E-07	4.01E-07	1.10E-04	1.01E-06	4.27E-08	1.58E-07	3.18E-09	1.81E-09
Barium	7440-39-3	9.42E-06	1.79E-07	1.10E-04	5.26E-07	1.76E-06	9.63E-08	1.81E-09	1.04E-09
Beryllium	7440-41-7	8.44E-07	1.89E-07	8.38E-05	6.69E-07	7.25E-10	2.89E-07	9.29E-09	5.31E-09
Boron	7440-42-8	6.94E-03	8.00E-05	--	2.53E-04	8.23E-05	5.17E-05	8.93E-07	5.10E-07
Cadmium	7440-43-9	2.37E-04	7.61E-07	4.31E-02	2.91E-06	2.33E-07	8.55E-07	1.38E-05	3.24E-07
Chromium (Total)	7440-47-3	1.40E-06	5.68E-06	2.35E-03	1.35E-05	5.24E-06	1.78E-06	3.19E-08	1.82E-08
Chromium VI	18540-29-9	1.99E-07	8.07E-07	6.19E-05	1.91E-06	7.45E-07	2.53E-07	4.54E-09	2.59E-09
Cobalt	7440-48-4	1.32E-05	5.56E-05	3.02E-03	1.44E-04	4.21E-05	2.82E-05	6.78E-07	3.88E-07
Lead	7439-92-1	7.75E-04	1.06E-05	1.25E-02	4.07E-05	4.40E-05	1.56E-05	4.55E-07	2.60E-07
Mercury - Inorganic	7487-94-7	2.51E-04	2.93E-06	--	2.33E-05	9.86E-06	9.71E-08	3.99E-06	3.99E-06
Methyl Mercury	22967-92-6	2.23E-05	8.04E-08	2.99E-03	2.76E-07	1.57E-07	5.68E-10	2.08E-08	2.08E-08
Nickel	7440-02-0	3.23E-04	2.64E-04	7.02E-02	7.35E-04	1.68E-04	1.68E-04	4.27E-06	2.44E-06
Phosphorus	7723-14-0	4.24E-03	1.66E-03	--	5.33E-03	1.79E-03	1.55E-03	3.61E-05	2.06E-05
Selenium	7782-49-2	3.93E-07	4.92E-07	4.27E-04	1.12E-06	4.23E-06	7.09E-06	6.26E-07	6.26E-07
Silver	7440-22-4	2.05E-05	5.10E-06	1.55E-03	1.32E-05	1.30E-04	1.71E-06	2.14E-08	1.22E-08
Thallium	7440-28-0	7.86E-06	7.47E-04	--	2.00E-03	1.34E-04	4.79E-04	1.32E-05	7.52E-06
Tin	7440-31-5	1.28E-04	8.29E-04	2.10E-01	2.83E-03	7.69E-04	9.96E-04	2.94E-05	1.68E-05
Vanadium	7440-62-2	6.10E-06	1.61E-06	4.26E-04	5.68E-06	1.42E-06	2.59E-06	8.51E-08	4.86E-08
Zinc	7440-66-6	7.97E-02	1.29E-05	9.62E-01	4.48E-05	2.36E-05	1.18E-05	2.60E-05	2.60E-05

Calculated Exposure Point Concentrations for the Additional Exposure Due to Swimming and Recreation User - Camping Rece

Process Upset - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	8.91E-07	1.15E-09	--	1.92E-07	5.61E-10
Acenaphthylene	208-96-8	2.09E-07	6.43E-10	--	3.94E-08	1.08E-09
Anthracene	120-12-7	8.79E-07	4.31E-10	1.87E-10	8.53E-08	1.31E-11
Benz(a)anthracene	56-55-3	4.83E-07	2.13E-10	1.78E-08	9.51E-09	8.51E-10
Benzo(a)fluorene	30777-18-5	9.55E-07	1.66E-09	5.08E-09	2.80E-08	1.97E-09
Benzo(a)pyrene	50-32-8	8.55E-07	9.26E-10	5.58E-08	1.13E-08	7.66E-09
Benzo(b)fluoranthene	205-99-2	1.11E-06	2.66E-10	2.99E-09	1.24E-08	3.76E-10
Benzo(b)fluorene	243-17-4	6.60E-07	1.34E-09	3.48E-09	1.21E-08	5.19E-09
Benzo(e)pyrene	192-97-20	2.33E-06	8.93E-09	6.80E-09	1.71E-08	1.04E-06
Benzo(g,h,i)perylene	191-24-2	1.21E-05	7.17E-09	--	8.18E-08	1.58E-06
Benzo(k)fluoranthene	207-08-9	9.69E-07	6.27E-10	1.69E-08	1.11E-08	3.54E-09
Chrysene	218-01-9	1.79E-06	3.03E-10	2.22E-08	3.53E-08	1.18E-10
Dibenz(a,c)anthracene	215-58-7	1.52E-06	6.93E-09	5.82E-07	7.89E-09	1.40E-07
Dibenz(a,h)anthracene	53-70-3	5.33E-07	4.88E-10	2.63E-08	3.62E-09	1.26E-07
Fluoranthene	206-44-0	8.70E-06	1.28E-08	7.65E-09	4.34E-07	1.85E-09
Fluorene	86-73-7	8.86E-07	3.30E-09	--	1.28E-07	4.94E-11
Indeno(1,2,3-cd)pyrene	193-39-5	2.57E-06	1.72E-09	1.72E-07	1.52E-08	8.55E-10
Perylene	198-55-0	5.02E-07	1.50E-09	2.78E-10	4.75E-09	7.78E-07
Phenanthrene	85-01-8	8.95E-06	2.18E-08	2.17E-09	8.69E-07	8.67E-10
Pyrene	129-00-0	4.45E-05	2.18E-08	6.92E-09	2.54E-06	2.55E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	1.66E-04	3.52E-09	--	1.12E-06	7.24E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	8.00E-08	1.44E-12	2.92E-10	3.64E-10	1.58E-10
VOCs						
1,1,1-Trichloroethane	71-55-6	5.09E-10	4.84E-08	--	7.08E-10	1.31E-11
Bromoform	75-25-2	1.42E-09	1.55E-06	--	2.34E-09	3.25E-13
Carbon Tetrachloride	56-23-5	1.02E-10	1.07E-08	--	9.48E-11	1.26E-12
Chloroform	67-66-3	2.28E-10	1.59E-08	--	6.16E-10	6.32E-12
Dichloromethane	75-09-2	4.09E-08	4.96E-06	--	2.81E-07	6.58E-10
O-Terphenyl	84-15-1	2.82E-06	4.23E-09	--	7.04E-08	3.44E-09
Trichlorofluoromethane (FREON 11)	75-69-4	1.05E-08	5.47E-06	--	1.46E-08	2.77E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	4.00E-07	1.92E-09	--	2.61E-08	8.69E-12
1,2,4-Trichlorobenzene	120-82-1	9.44E-09	1.86E-09	--	1.78E-09	2.27E-12
1,2-Dichlorobenzene	95-50-1	1.27E-07	7.51E-08	--	5.47E-08	1.45E-09
Hexachlorobenzene	118-74-1	1.72E-07	2.29E-09	--	5.76E-09	5.94E-11
Pentachlorobenzene	608-93-5	6.22E-06	5.82E-09	--	2.48E-07	2.07E-10
Pentachlorophenol	87-86-5	2.93E-06	1.87E-06	--	1.28E-07	7.88E-06
Inorganics						
Antimony	7440-36-0	9.71E-04	1.43E-05	3.98E-05	3.10E-05	--
Arsenic	7440-38-2	9.64E-05	2.20E-06	6.09E-06	6.10E-07	--
Barium	7440-39-3	6.84E-04	1.10E-05	3.07E-05	2.20E-05	--
Beryllium	7440-41-7	6.12E-04	8.38E-07	4.83E-06	1.58E-06	--
Boron	7440-42-8	3.78E-03	8.01E-04	2.22E-03	8.52E-03	--
Cadmium	7440-43-9	4.03E-03	3.59E-05	1.02E-04	5.04E-04	--
Chromium (Total)	7440-47-3	3.39E-04	1.18E-05	3.26E-05	1.66E-06	--
Chromium VI	18540-29-9	4.82E-05	1.67E-06	4.64E-06	2.35E-07	--
Cobalt	7440-48-4	2.05E-03	3.02E-05	8.41E-05	1.78E-05	--
Lead	7439-92-1	9.37E-02	1.19E-04	7.25E-04	1.27E-03	--
Mercury - Inorganic	7487-94-7	6.59E-03	1.11E-06	9.78E-06	9.56E-05	2.70E-05
Methyl Mercury	22967-92-6	2.45E-04	4.96E-09	2.76E-06	7.21E-06	7.62E-06
Nickel	7440-02-0	4.40E-02	4.50E-04	1.26E-03	4.10E-04	--
Phosphorus	7723-14-0	1.32E-03	2.41E-04	6.68E-04	4.62E-03	--
Selenium	7782-49-2	1.94E-05	2.51E-06	6.96E-06	3.79E-07	--
Silver	7440-22-4	2.23E-04	1.75E-05	4.86E-05	3.08E-05	--
Thallium	7440-28-0	2.14E-02	2.00E-04	5.66E-04	1.83E-05	--
Tin	7440-31-5	2.32E-02	6.98E-05	2.55E-04	2.10E-04	--
Vanadium	7440-62-2	2.21E-03	2.66E-06	1.69E-05	7.34E-06	--
Zinc	7440-66-6	9.64E-02	1.03E-03	2.90E-03	9.35E-03	--

Calculated Exposure Point Concentrations for the Additional Exposure Due to Swimming and Recreation User - Camping Receptor Clusters
Process Upset - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	1.90E-07	1.24E-10	4.57E-10	6.95E-10	2.26E-10	3.69E-10	1.05E-09	6.00E-10
Acenaphthylene	208-96-8	1.33E-06	2.90E-11	3.22E-10	1.98E-10	5.93E-11	9.04E-11	2.52E-10	1.44E-10
Anthracene	120-12-7	1.32E-09	8.71E-11	6.84E-10	5.12E-10	1.54E-10	3.00E-10	9.11E-10	5.20E-10
Benz(a)anthracene	56-55-3	4.58E-10	3.22E-10	5.34E-09	1.06E-09	3.26E-10	1.77E-10	3.70E-10	2.12E-10
Benzo(a)fluorene	30777-18-5	3.22E-08	2.05E-10	2.10E-08	1.43E-09	4.19E-10	3.39E-10	8.33E-10	4.76E-10
Benzo(a)pyrene	50-32-8	5.17E-10	1.09E-09	4.62E-08	4.80E-09	1.51E-09	5.30E-10	5.85E-10	3.35E-10
Benzo(b)fluoranthene	205-99-2	1.28E-08	8.59E-11	1.77E-08	4.85E-10	1.26E-10	2.24E-10	7.20E-10	4.11E-10
Benzo(b)fluorene	243-17-4	4.04E-08	2.72E-10	3.77E-08	2.46E-09	7.58E-10	3.41E-10	5.19E-10	2.97E-10
Benzo(e)pyrene	192-97-20	1.24E-07	3.12E-08	1.23E-06	3.36E-07	1.07E-07	2.86E-08	1.29E-09	7.38E-10
Benzo(g,h,i)perylene	191-24-2	6.29E-08	4.60E-08	1.12E-06	4.95E-07	1.58E-07	4.34E-08	6.44E-09	3.68E-09
Benzo(k)fluoranthene	207-08-9	5.90E-10	3.82E-10	3.94E-08	2.02E-09	6.20E-10	3.26E-10	6.34E-10	3.62E-10
Chrysene	218-01-9	1.70E-09	4.12E-10	7.59E-09	1.30E-09	3.66E-10	4.56E-10	1.37E-09	7.83E-10
Dibenz(a,c)anthracene	215-58-7	2.61E-08	9.79E-09	1.73E-06	5.23E-08	1.67E-08	4.40E-09	7.25E-10	4.14E-10
Dibenz(a,h)anthracene	53-70-3	2.16E-10	3.96E-09	7.68E-08	4.00E-08	1.28E-08	3.43E-09	2.85E-10	1.63E-10
Fluoranthene	206-44-0	1.30E-08	7.69E-10	6.43E-08	4.90E-09	1.37E-09	2.61E-09	8.10E-09	4.63E-09
Fluorene	86-73-7	1.68E-09	1.07E-10	2.62E-09	6.78E-10	2.06E-10	3.46E-10	9.99E-10	5.71E-10
Indeno(1,2,3-cd)pyrene	193-39-5	1.36E-09	2.00E-09	3.39E-07	4.79E-09	1.47E-09	6.69E-10	1.29E-09	7.38E-10
Perylene	198-55-0	9.44E-09	2.51E-08	1.33E-07	2.71E-07	8.65E-08	2.29E-08	3.07E-10	1.75E-10
Phenanthrene	85-01-8	1.64E-08	9.19E-10	3.45E-08	5.73E-09	1.71E-09	3.12E-09	9.34E-09	5.34E-09
Pyrene	129-00-0	6.45E-08	3.40E-09	8.69E-08	2.16E-08	6.06E-09	1.34E-08	4.22E-08	2.41E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	1.59E-06	3.71E-07	9.03E-04	3.22E-06	6.56E-07	2.52E-06	8.84E-08	5.05E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	8.22E-10	7.35E-10	**4.47E-08**	5.94E-09	1.74E-09	1.38E-09	3.53E-11	2.02E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	4.52E-08	1.56E-09	7.67E-08	3.25E-08	6.85E-09	5.19E-09	8.87E-11	5.07E-11
Bromoform	75-25-2	1.75E-08	4.36E-08	1.82E-06	8.93E-07	1.88E-07	1.42E-07	2.43E-09	1.39E-09
Carbon Tetrachloride	56-23-5	9.68E-09	4.98E-10	3.39E-08	1.04E-08	2.19E-09	1.66E-09	2.83E-11	1.62E-11
Chloroform	67-66-3	2.30E-08	2.81E-10	7.98E-09	5.85E-09	1.23E-09	9.35E-10	1.60E-11	9.14E-12
Dichloromethane	75-09-2	1.47E-05	2.97E-08	4.96E-07	6.18E-07	1.30E-07	9.89E-08	1.69E-09	9.67E-10
O-Terphenyl	84-15-1	6.33E-08	2.68E-08	7.01E-06	2.60E-07	7.28E-08	8.40E-08	2.36E-09	1.35E-09
Trichlorofluoromethane (FREON 11)	75-69-4	8.56E-07	1.80E-07	8.67E-06	3.72E-06	7.82E-07	5.93E-07	1.01E-08	5.78E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	4.20E-07	3.80E-09	6.06E-07	3.01E-08	7.80E-09	1.40E-08	4.16E-10	2.38E-10
1,2,4-Trichlorobenzene	120-82-1	7.32E-09	4.25E-10	1.17E-07	7.05E-09	1.52E-09	1.23E-09	2.44E-11	1.40E-11
1,2-Dichlorobenzene	95-50-1	3.12E-06	9.04E-09	9.02E-07	1.56E-07	3.34E-08	2.65E-08	4.78E-10	2.73E-10
Hexachlorobenzene	118-74-1	4.38E-08	1.61E-09	2.29E-06	1.70E-08	4.10E-09	5.99E-09	1.70E-10	9.74E-11
Pentachlorobenzene	608-93-5	1.14E-07	3.87E-08	4.31E-06	2.75E-07	7.15E-08	1.73E-07	5.59E-09	3.20E-09
Pentachlorophenol	87-86-5	4.79E-05	4.87E-08	1.05E-03	5.27E-07	1.68E-07	4.48E-08	1.21E-11	6.90E-12
Inorganics									
Antimony	7440-36-0	2.91E-05	1.67E-06	2.86E-03	6.32E-06	9.11E-07	1.17E-06	2.12E-08	1.21E-08
Arsenic	7440-38-2	7.71E-07	4.01E-07	1.10E-04	1.29E-06	5.45E-08	1.89E-07	3.58E-09	2.05E-09
Barium	7440-39-3	1.03E-05	1.79E-07	1.10E-04	6.45E-07	2.15E-06	1.11E-07	2.02E-09	1.15E-09
Beryllium	7440-41-7	9.18E-07	1.89E-07	8.38E-05	7.83E-07	8.66E-10	3.18E-07	1.01E-08	5.77E-09
Boron	7440-42-8	7.56E-03	8.00E-05	--	3.03E-04	9.78E-05	5.89E-05	9.91E-07	5.66E-07
Cadmium	7440-43-9	2.58E-04	7.61E-07	4.31E-02	3.35E-06	2.68E-07	9.53E-07	1.51E-05	3.56E-07
Chromium (Total)	7440-47-3	1.53E-06	5.68E-06	2.35E-03	1.75E-05	6.78E-06	2.19E-06	3.66E-08	2.09E-08
Chromium VI	18540-29-9	2.17E-07	8.07E-07	6.19E-05	2.48E-06	9.64E-07	3.12E-07	5.20E-09	2.97E-09
Cobalt	7440-48-4	1.44E-05	5.56E-05	3.02E-03	1.83E-04	5.36E-05	3.31E-05	7.56E-07	4.32E-07
Lead	7439-92-1	8.43E-04	1.06E-05	1.25E-02	4.68E-05	5.10E-05	1.71E-05	4.95E-07	2.83E-07
Mercury - Inorganic	7487-94-7	2.37E-04	2.93E-06	--	2.30E-05	1.01E-05	9.19E-08	3.76E-06	3.76E-06
Methyl Mercury	22967-92-6	2.43E-05	8.04E-08	2.99E-03	3.32E-07	1.92E-07	6.30E-10	2.26E-08	2.26E-08
Nickel	7440-02-0	3.52E-04	2.64E-04	7.02E-02	9.19E-04	2.10E-04	1.94E-04	4.72E-06	2.70E-06
Phosphorus	7723-14-0	4.62E-03	1.66E-03	--	6.38E-03	2.12E-03	1.74E-03	3.96E-05	2.27E-05
Selenium	7782-49-2	4.27E-07	4.92E-07	4.27E-04	1.47E-06	5.49E-06	9.26E-06	7.91E-07	7.91E-07
Silver	7440-22-4	2.23E-05	5.10E-06	1.55E-03	1.67E-05	1.63E-04	2.07E-06	2.48E-08	1.42E-08
Thallium	7440-28-0	8.55E-06	7.47E-04	--	2.53E-03	1.70E-04	5.53E-04	1.45E-05	8.31E-06
Tin	7440-31-5	1.39E-04	8.29E-04	2.10E-01	3.36E-03	9.23E-04	1.11E-03	3.21E-05	1.83E-05
Vanadium	7440-62-2	6.63E-06	1.61E-06	4.26E-04	6.65E-06	1.70E-06	2.85E-06	9.24E-08	5.28E-08
Zinc	7440-66-6	8.68E-02	1.29E-05	9.62E-01	5.28E-05	2.78E-05	1.33E-05	2.86E-05	2.86E-05

Calculated Exposure Point Concentrations for the Additional Exposure due to Hunting and Angling Cluster

Process Upset - 400,000 tpy

		Soil	Water	Aboveground Garden Produce (Weighted)		Garden Plant/Fruit
COPC	CAS-RN	Surface Soil Conc. (mg/Kg) Cs	Surface Water Conc. (mg/L) Csw	Plant (above ground produce) concentration due to direct (wet and dry) deposition Pd	(above ground) Concentration of COPC in produce due to root uptake Prag	Concentration of COPC in the plant/fruit resulting from air-to-plant transfer Pv
PAHs						
Acenaphthene	83-32-9	1.65E-06	1.15E-09	--	3.56E-07	6.44E-10
Acenaphthylene	208-96-8	3.86E-07	6.43E-10	--	7.28E-08	1.24E-09
Anthracene	120-12-7	1.62E-06	4.31E-10	3.24E-10	1.58E-07	1.51E-11
Benz(a)anthracene	56-55-3	8.93E-07	2.13E-10	3.09E-08	1.76E-08	9.77E-10
Benzo(a)fluorene	30777-18-5	1.77E-06	1.66E-09	8.80E-09	5.17E-08	2.26E-09
Benzo(a)pyrene	50-32-8	1.58E-06	9.26E-10	9.67E-08	2.09E-08	8.80E-09
Benzo(b)fluoranthene	205-99-2	2.05E-06	2.66E-10	5.18E-09	2.30E-08	4.32E-10
Benzo(b)fluorene	243-17-4	1.22E-06	1.34E-09	6.02E-09	2.24E-08	5.96E-09
Benzo(e)pyrene	192-97-20	4.31E-06	8.93E-09	1.18E-08	3.16E-08	1.20E-06
Benzo(g,h,i)perylene	191-24-2	2.23E-05	7.17E-09	--	1.51E-07	1.82E-06
Benzo(k)fluoranthene	207-08-9	1.79E-06	6.27E-10	2.92E-08	2.06E-08	4.06E-09
Chrysene	218-01-9	3.31E-06	3.03E-10	3.84E-08	6.53E-08	1.35E-10
Dibenz(a,c)anthracene	215-58-7	2.81E-06	6.93E-09	1.01E-06	1.46E-08	1.61E-07
Dibenz(a,h)anthracene	53-70-3	9.87E-07	4.88E-10	4.55E-08	6.69E-09	1.45E-07
Fluoranthene	206-44-0	1.61E-05	1.28E-08	1.32E-08	8.02E-07	2.12E-09
Fluorene	86-73-7	1.64E-06	3.30E-09	--	2.37E-07	5.67E-11
Indeno(1,2,3-cd)pyrene	193-39-5	4.75E-06	1.72E-09	2.99E-07	2.82E-08	9.82E-10
Perylene	198-55-0	9.29E-07	1.50E-09	4.81E-10	8.78E-09	8.94E-07
Phenanthrene	85-01-8	1.66E-05	2.18E-08	3.77E-09	1.61E-06	9.95E-10
Pyrene	129-00-0	8.24E-05	2.18E-08	1.20E-08	4.70E-06	2.92E-09
PCBs						
Aroclor 1254 (Total PCBs)	11097-69-1	3.07E-04	3.52E-09	--	2.08E-06	8.32E-09
Dioxins and Furans						
2,3,7,8-TCDD	1746-01-6	1.20E-07	1.44E-12	3.67E-10	5.44E-10	1.82E-10
VOCs						
1,1,1-Trichloroethane	71-55-6	9.42E-10	4.84E-08	--	1.31E-09	1.50E-11
Bromoform	75-25-2	2.62E-09	1.55E-06	--	4.33E-09	3.73E-13
Carbon Tetrachloride	56-23-5	1.88E-10	1.07E-08	--	1.75E-10	1.45E-12
Chloroform	67-66-3	4.22E-10	1.59E-08	--	1.14E-09	7.25E-12
Dichloromethane	75-09-2	7.56E-08	4.96E-06	--	5.19E-07	7.56E-10
O-Terphenyl	84-15-1	5.21E-06	4.23E-09	--	1.30E-07	3.95E-09
Trichlorofluoromethane (FREON 11)	75-69-4	1.95E-08	5.47E-06	--	2.71E-08	3.18E-10
Chlorinated Monocyclic Aromatics						
1,2,4,5-Tetrachlorobenzene	95-94-3	7.40E-07	1.92E-09	--	4.82E-08	9.98E-12
1,2,4-Trichlorobenzene	120-82-1	1.74E-08	1.86E-09	--	3.30E-09	2.61E-12
1,2-Dichlorobenzene	95-50-1	2.35E-07	7.51E-08	--	1.01E-07	1.67E-09
Hexachlorobenzene	118-74-1	3.18E-07	2.29E-09	--	1.06E-08	6.82E-11
Pentachlorobenzene	608-93-5	1.15E-05	5.82E-09	--	4.58E-07	2.38E-10
Pentachlorophenol	87-86-5	5.41E-06	1.87E-06	--	2.36E-07	9.04E-06
Inorganics						
Antimony	7440-36-0	1.45E-03	1.43E-05	4.99E-05	4.63E-05	--
Arsenic	7440-38-2	1.44E-04	2.20E-06	7.65E-06	9.11E-07	--
Barium	7440-39-3	1.02E-03	1.10E-05	3.85E-05	3.29E-05	--
Beryllium	7440-41-7	9.14E-04	8.38E-07	6.07E-06	2.36E-06	--
Boron	7440-42-8	5.65E-03	8.01E-04	2.79E-03	1.27E-02	--
Cadmium	7440-43-9	6.03E-03	3.59E-05	1.27E-04	7.53E-04	--
Chromium (Total)	7440-47-3	5.07E-04	1.18E-05	4.10E-05	2.47E-06	--
Chromium VI	18540-29-9	7.21E-05	1.67E-06	5.83E-06	3.52E-07	--
Cobalt	7440-48-4	3.07E-03	3.02E-05	1.06E-04	2.65E-05	--
Lead	7439-92-1	1.40E-01	1.19E-04	9.11E-04	1.90E-03	--
Mercury - Inorganic	7487-94-7	9.43E-03	1.11E-06	1.23E-05	1.37E-04	3.10E-05
Methyl Mercury	22967-92-6	3.67E-04	4.96E-09	3.46E-06	1.08E-05	8.75E-06
Nickel	7440-02-0	6.57E-02	4.50E-04	1.59E-03	6.12E-04	--
Phosphorus	7723-14-0	1.97E-03	2.41E-04	8.39E-04	6.90E-03	--
Selenium	7782-49-2	2.90E-05	2.51E-06	8.74E-06	5.66E-07	--
Silver	7440-22-4	3.33E-04	1.75E-05	6.10E-05	4.59E-05	--
Thallium	7440-28-0	3.19E-02	2.00E-04	7.10E-04	2.74E-05	--
Tin	7440-31-5	3.46E-02	6.98E-05	3.21E-04	3.13E-04	--
Vanadium	7440-62-2	3.31E-03	2.66E-06	2.12E-05	1.10E-05	--
Zinc	7440-66-6	1.44E-01	1.03E-03	3.63E-03	1.40E-02	--

Calculated Exposure Point Concentrations for the Additional Exposure due to Hunting and Angling Cluster
Process Upset - 400,000 tpy

		Belowground Produce	Food Ingestion						
COPC	CAS-RN	(belowground) Concentration of COPC in produce due to root uptake	Wild Game Conc. (mg/Kg)	Fish Tissue Conc. - Lake (mg/kg)	Beef Conc. (mg/Kg)	Milk Conc. (mg/L)	Pork Conc. (mg/Kg)	Poultry Conc. (mg/Kg)	Egg Conc. (mg/Kg)
		Prbg	Awg	Cfish-lake	Abeef	Amilk	Apork	Apoultry	Aegg
PAHs									
Acenaphthene	83-32-9	3.50E-07	1.24E-10	4.57E-10	1.26E-09	4.12E-10	6.78E-10	1.93E-09	1.11E-09
Acenaphthylene	208-96-8	2.45E-06	2.90E-11	3.22E-10	3.37E-10	1.03E-10	1.63E-10	4.58E-10	2.62E-10
Anthracene	120-12-7	2.45E-09	8.71E-11	6.84E-10	9.34E-10	2.82E-10	5.53E-10	1.68E-09	9.61E-10
Benz(a)anthracene	56-55-3	8.47E-10	3.22E-10	5.34E-09	1.53E-09	4.64E-10	2.92E-10	6.84E-10	3.91E-10
Benzo(a)fluorene	30777-18-5	5.96E-08	2.05E-10	2.10E-08	1.80E-09	5.20E-10	5.45E-10	1.53E-09	8.73E-10
Benzo(a)pyrene	50-32-8	9.57E-10	1.09E-09	4.62E-08	5.93E-09	1.86E-09	7.04E-10	1.08E-09	6.18E-10
Benzo(b)fluoranthene	205-99-2	2.36E-08	8.59E-11	1.77E-08	7.37E-10	1.82E-10	4.01E-10	1.33E-09	7.60E-10
Benzo(b)fluorene	243-17-4	7.46E-08	2.72E-10	3.77E-08	2.92E-09	8.95E-10	4.37E-10	9.52E-10	5.44E-10
Benzo(e)pyrene	192-97-20	2.29E-07	3.12E-08	1.23E-06	3.85E-07	1.23E-07	3.29E-08	2.39E-09	1.36E-09
Benzo(g,h,i)perylene	191-24-2	1.16E-07	4.60E-08	1.12E-06	5.69E-07	1.82E-07	5.02E-08	1.19E-08	6.81E-09
Benzo(k)fluoranthene	207-08-9	1.09E-09	3.82E-10	3.94E-08	2.47E-09	7.56E-10	4.81E-10	1.17E-09	6.70E-10
Chrysene	218-01-9	3.14E-09	4.12E-10	7.59E-09	2.26E-09	6.33E-10	8.32E-10	2.53E-09	1.45E-09
Dibenz(a,c)anthracene	215-58-7	4.83E-08	9.79E-09	1.73E-06	6.30E-08	2.01E-08	5.29E-09	1.34E-09	7.66E-10
Dibenz(a,h)anthracene	53-70-3	4.00E-10	3.96E-09	7.68E-08	4.61E-08	1.47E-08	3.97E-09	5.27E-10	3.01E-10
Fluoranthene	206-44-0	2.40E-08	7.69E-10	6.43E-08	8.17E-09	2.26E-09	4.75E-09	1.50E-08	8.55E-09
Fluorene	86-73-7	3.10E-09	1.07E-10	2.62E-09	1.19E-09	3.66E-10	6.30E-10	1.83E-09	1.05E-09
Indeno(1,2,3-cd)pyrene	193-39-5	2.51E-09	2.00E-09	3.39E-07	8.10E-09	2.48E-09	1.18E-09	2.39E-09	1.37E-09
Perylene	198-55-0	1.75E-08	2.51E-08	1.33E-07	3.11E-07	9.93E-08	2.63E-08	5.68E-10	3.24E-10
Phenanthrene	85-01-8	3.03E-08	9.19E-10	3.45E-08	1.01E-08	3.02E-09	5.72E-09	1.72E-08	9.85E-09
Pyrene	129-00-0	1.19E-07	3.40E-09	8.69E-08	3.87E-08	1.09E-08	2.46E-08	7.81E-08	4.46E-08
PCBs									
Aroclor 1254 (Total PCBs)	11097-69-1	2.94E-06	3.71E-07	9.03E-04	5.71E-06	1.14E-06	4.65E-06	1.64E-07	9.36E-08
Dioxins and Furans									
2,3,7,8-TCDD	1746-01-6	1.23E-09	7.35E-10	**4.47E-08**	7.00E-09	2.04E-09	1.81E-09	5.28E-11	3.02E-11
VOCs									
1,1,1-Trichloroethane	71-55-6	8.35E-08	1.56E-09	7.67E-08	3.47E-08	7.31E-09	5.55E-09	9.50E-11	5.43E-11
Bromoform	75-25-2	3.23E-08	4.36E-08	1.82E-06	9.44E-07	1.99E-07	1.51E-07	2.57E-09	1.47E-09
Carbon Tetrachloride	56-23-5	1.79E-08	4.98E-10	3.39E-08	1.11E-08	2.33E-09	1.77E-09	3.03E-11	1.73E-11
Chloroform	67-66-3	4.24E-08	2.81E-10	7.98E-09	6.20E-09	1.31E-09	9.98E-10	1.72E-11	9.81E-12
Dichloromethane	75-09-2	2.72E-05	2.97E-08	4.96E-07	6.51E-07	1.38E-07	1.05E-07	1.81E-09	1.03E-09
O-Terphenyl	84-15-1	1.17E-07	2.68E-08	7.01E-06	3.29E-07	9.04E-08	1.40E-07	4.32E-09	2.47E-09
Trichlorofluoromethane (FREON 11)	75-69-4	1.58E-06	1.80E-07	8.67E-06	3.94E-06	8.29E-07	6.29E-07	1.07E-08	6.13E-09
Chlorinated Monocyclic Aromatics									
1,2,4,5-Tetrachlorobenzene	95-94-3	7.76E-07	3.80E-09	6.06E-07	4.42E-08	1.20E-08	2.41E-08	7.40E-10	4.23E-10
1,2,4-Trichlorobenzene	120-82-1	1.35E-08	4.25E-10	1.17E-07	8.03E-09	1.80E-09	1.63E-09	3.37E-11	1.93E-11
1,2-Dichlorobenzene	95-50-1	5.76E-06	9.04E-09	9.02E-07	1.77E-07	3.94E-08	3.38E-08	6.58E-10	3.76E-10
Hexachlorobenzene	118-74-1	8.09E-08	1.61E-09	2.29E-06	2.32E-08	5.55E-09	9.53E-09	2.93E-10	1.67E-10
Pentachlorobenzene	608-93-5	2.12E-07	3.87E-08	4.31E-06	4.77E-07	1.25E-07	3.16E-07	1.03E-08	5.87E-09
Pentachlorophenol	87-86-5	8.85E-05	4.87E-08	1.05E-03	6.06E-07	1.93E-07	5.15E-08	2.18E-11	1.25E-11
Inorganics									
Antimony	7440-36-0	4.35E-05	1.67E-06	2.86E-03	8.66E-06	1.24E-06	1.69E-06	3.16E-08	1.80E-08
Arsenic	7440-38-2	1.15E-06	4.01E-07	1.10E-04	1.68E-06	7.06E-08	2.66E-07	5.34E-09	3.05E-09
Barium	7440-39-3	1.53E-05	1.79E-07	1.10E-04	8.74E-07	2.90E-06	1.60E-07	3.01E-09	1.72E-09
Beryllium	7440-41-7	1.37E-06	1.89E-07	8.38E-05	1.08E-06	1.17E-09	4.68E-07	1.51E-08	8.62E-09
Boron	7440-42-8	1.13E-02	8.00E-05	--	4.18E-04	1.35E-04	8.54E-05	1.48E-06	8.44E-07
Cadmium	7440-43-9	3.86E-04	7.61E-07	4.31E-02	4.77E-06	3.81E-07	1.40E-06	2.26E-05	5.32E-07
Chromium (Total)	7440-47-3	2.28E-06	5.68E-06	2.35E-03	2.26E-05	8.67E-06	3.02E-06	5.44E-08	3.11E-08
Chromium VI	18540-29-9	3.24E-07	8.07E-07	6.19E-05	3.21E-06	1.23E-06	4.30E-07	7.74E-09	4.42E-09
Cobalt	7440-48-4	2.15E-05	5.56E-05	3.02E-03	2.41E-04	6.96E-05	4.71E-05	1.13E-06	6.44E-07
Lead	7439-92-1	1.26E-03	1.06E-05	1.25E-02	6.57E-05	7.09E-05	2.52E-05	7.40E-07	4.23E-07
Mercury - Inorganic	7487-94-7	3.39E-04	2.93E-06	--	3.12E-05	1.33E-05	1.31E-07	5.39E-06	5.39E-06
Methyl Mercury	22967-92-6	3.63E-05	8.04E-08	2.99E-03	4.11E-07	2.34E-07	9.07E-10	3.38E-08	3.38E-08
Nickel	7440-02-0	5.26E-04	2.64E-04	7.02E-02	1.22E-03	2.77E-04	2.79E-04	7.05E-06	4.03E-06
Phosphorus	7723-14-0	6.90E-03	1.66E-03	--	8.80E-03	2.93E-03	2.55E-03	5.92E-05	3.38E-05
Selenium	7782-49-2	6.38E-07	4.92E-07	4.27E-04	1.88E-06	7.00E-06	1.23E-05	1.17E-06	1.17E-06
Silver	7440-22-4	3.33E-05	5.10E-06	1.55E-03	2.21E-05	2.15E-04	2.89E-06	3.69E-08	2.11E-08
Thallium	7440-28-0	1.28E-05	7.47E-04	--	3.33E-03	2.21E-04	7.95E-04	2.17E-05	1.24E-05
Tin	7440-31-5	2.08E-04	8.29E-04	2.10E-01	4.62E-03	1.25E-03	1.62E-03	4.79E-05	2.74E-05
Vanadium	7440-62-2	9.92E-06	1.61E-06	4.26E-04	9.12E-06	2.28E-06	4.20E-06	1.38E-07	7.89E-08
Zinc	7440-66-6	1.30E-01	1.29E-05	9.62E-01	7.38E-05	3.87E-05	1.94E-05	4.27E-05	4.27E-05