

Appendix 6-4 Detailed Cumulative Risk Impact Assessment Results for Human Health Risk

Table 1a Pollutant Concentrations at Exposure Points and Seafood (Scenario 1)

Pollutants	C/D Effluent Conc. (mg/L)	Ambient Seawater Conc. (mg/L)	Conc. at edge of ZID (mg/L) – 10%tile dilution factor	Conc. at edge of Mixing Zone (mg/L) – 10%tile dilution factor	Conc. at the Nearest Beach (mg/L) – 10%tile dilution factor	Bioconcentration Factor (water-to-fish) (L/kg)	Food Chain Multiplier (Trophic Level 4)	Conc. in Seafood (mg/kg)
Chlorination By-products (COCs)	Refer to Appendix 6-2							
Antimony	0.000804	0.00021	2.21E-04	2.15E-04	2.13E-04	40	1	8.85E-03
Arsenic	0.00149	0.00148	1.48E-03	1.48E-03	1.48E-03	114	1	1.69E-01
Barium	0.0255	0.00719	7.54E-03	7.35E-03	7.27E-03	633	1	4.77E+00
Chromium (III)	0.018	0.00043	7.62E-04	5.83E-04	5.11E-04	19	1	1.45E-02
Copper	0.0557	0.00225	3.26E-03	2.71E-03	2.50E-03	710	1.00	2.31E+00
Lead	0.00121	0.000723	7.32E-04	7.27E-04	7.25E-04	0.09	1.00	6.59E-05
Mercury	0.0000294	0.00000006	6.14E-07	3.15E-07	1.95E-07	3190	1.00	1.96E-03
Nickel	0.0285	0.00102	1.54E-03	1.26E-03	1.15E-03	78	1.00	1.20E-01
Selenium	0.0004	0.00005	5.66E-05	5.30E-05	5.16E-05	129	1.00	7.30E-03
Silver	0.00383	0.000058	1.29E-04	9.08E-05	7.54E-05	87.7	1.00	1.13E-02
Vanadium	0.0291	0.00215	2.66E-03	2.38E-03	2.27E-03	-	-	-
Zinc	0.0441	0.00354	4.31E-03	3.89E-03	3.73E-03	2060	1.00	8.87E+00
TCDD	1E-10	3.9E-11	4.02E-11	3.95E-11	3.93E-11	34400	27.00	3.73E-05
Toluene	0.012	0	2.26E-04	1.04E-04	5.53E-05	171	1.00	3.87E-02
Malathion	0.000031	0	5.85E-07	2.70E-07	1.43E-07	13.1	1.00	7.66E-06

Table 1b Pollutant Concentrations at Exposure Points and Seafood (Scenario 2)

Pollutants	C/D Effluent Conc. (mg/L)	Ambient Seawater Conc. (mg/L)	Conc. at edge of ZID (mg/L) – 10%tile dilution factor	Conc. at edge of Mixing Zone (mg/L) – 10%tile dilution factor	Conc. at the Nearest Beach (mg/L) – 10%tile dilution factor	Bioconcentration Factor (water-to-fish) (L/kg)	Food Chain Multiplier (Trophic Level 4)	Conc. in Seafood (mg/kg)
Chlorination By-products (COCs)	Refer to Appendix 6-2							
Antimony	0.000804	0.00021	2.21E-04	2.15E-04	2.13E-04	40	1	8.85E-03
Arsenic	0.00149	0.00148	1.48E-03	1.48E-03	1.48E-03	114	1	1.69E-01
Barium	0.0255	0.00719	7.54E-03	7.36E-03	7.28E-03	633	1	4.77E+00
Chromium (III)	0.018	0.00043	7.62E-04	5.90E-04	5.15E-04	19	1	1.45E-02
Copper	0.0557	0.00225	3.26E-03	2.74E-03	2.51E-03	710	1.00	2.31E+00
Lead	0.00121	0.000723	7.32E-04	7.27E-04	7.25E-04	0.09	1.00	6.59E-05
Mercury	0.0000294	0.00000006	6.14E-07	3.27E-07	2.02E-07	3190	1.00	1.96E-03
Nickel	0.0285	0.00102	1.54E-03	1.27E-03	1.15E-03	78	1.00	1.20E-01
Selenium	0.0004	0.00005	5.66E-05	5.32E-05	5.17E-05	129	1.00	7.30E-03
Silver	0.00383	0.000058	1.29E-04	9.23E-05	7.63E-05	87.7	1.00	1.13E-02
Vanadium	0.0291	0.00215	2.66E-03	2.40E-03	2.28E-03	-	-	-
Zinc	0.0441	0.00354	4.31E-03	3.91E-03	3.74E-03	2060	1.00	8.87E+00
TCDD	1E-10	3.9E-11	4.02E-11	3.96E-11	3.93E-11	34400	27.00	3.73E-05
Toluene	0.012	0	2.26E-04	1.09E-04	5.83E-05	171	1.00	3.87E-02
Malathion	0.000031	0	5.85E-07	2.82E-07	1.50E-07	13.1	1.00	7.66E-06

Table 1c Pollutant Concentrations at Exposure Points and Seafood (Scenario 3)

Pollutants	C/D Effluent Conc. (mg/L)	Ambient Seawater Conc. (mg/L)	Conc. at edge of ZID (mg/L) – 10%tile dilution factor	Conc. at edge of Mixing Zone (mg/L) – 10%tile dilution factor	Conc. at the Nearest Beach (mg/L) – 10%tile dilution factor	Bioconcentration Factor (water-to-fish) (L/kg)	Food Chain Multiplier (Trophic Level 4)	Conc. in Seafood (mg/kg)
Chlorination By-products (COCs)	Refer to Appendix 6-2							
Antimony	0.000804	0.00021	2.22E-04	2.18E-04	2.14E-04	40	1	8.88E-03
Arsenic	0.00149	0.00148	1.48E-03	1.48E-03	1.48E-03	114	1	1.69E-01
Barium	0.0255	0.00719	7.56E-03	7.44E-03	7.31E-03	633	1	4.79E+00
Chromium (III)	0.018	0.00043	7.89E-04	6.67E-04	5.49E-04	19	1	1.50E-02
Copper	0.0557	0.00225	3.34E-03	2.97E-03	2.61E-03	710	1.00	2.37E+00
Lead	0.00121	0.000723	7.33E-04	7.30E-04	7.26E-04	0.09	1.00	6.60E-05
Mercury	0.0000294	0.00000006	6.59E-07	4.56E-07	2.58E-07	3190	1.00	2.10E-03
Nickel	0.0285	0.00102	1.58E-03	1.39E-03	1.21E-03	78	1.00	1.23E-01
Selenium	0.0004	0.00005	5.71E-05	5.47E-05	5.24E-05	129	1.00	7.37E-03
Silver	0.00383	0.000058	1.35E-04	1.09E-04	8.35E-05	87.7	1.00	1.18E-02
Vanadium	0.0291	0.00215	2.70E-03	2.51E-03	2.33E-03	-	-	-
Zinc	0.0441	0.00354	4.37E-03	4.09E-03	3.81E-03	2060	1.00	9.00E+00
TCDD	1E-10	3.9E-11	4.02E-11	3.98E-11	3.94E-11	34400	27.00	3.74E-05
Toluene	0.012	0	2.45E-04	1.62E-04	8.11E-05	171	1.00	4.19E-02
Malathion	0.000031	0	6.33E-07	4.19E-07	2.09E-07	13.1	1.00	8.29E-06

Table 1d Pollutant Concentrations at Exposure Points and Seafood (Scenario 4)

Pollutants	C/D Effluent Conc. (mg/L)	Ambient Seawater Conc. (mg/L)	Conc. at edge of ZID (mg/L) – 10%tile dilution factor	Conc. at edge of Mixing Zone (mg/L) – 10%tile dilution factor	Conc. at the Nearest Beach (mg/L) – 10%tile dilution factor	Bioconcentration Factor (water-to-fish) (L/kg)	Food Chain Multiplier (Trophic Level 4)	Conc. in Seafood (mg/kg)
Chlorination By-products (COCs)	Refer to Appendix 6-2							
Antimony	0.000804	0.00021	2.23E-04	2.19E-04	2.15E-04	40	1	8.92E-03
Arsenic	0.00149	0.00148	1.48E-03	1.48E-03	1.48E-03	114	1	1.69E-01
Barium	0.0255	0.00719	7.59E-03	7.48E-03	7.34E-03	633	1	4.80E+00
Chromium (III)	0.018	0.00043	8.12E-04	7.05E-04	5.69E-04	19	1	1.54E-02
Copper	0.0557	0.00225	3.41E-03	3.09E-03	2.67E-03	710	1.00	2.42E+00
Lead	0.00121	0.000723	7.34E-04	7.31E-04	7.27E-04	0.09	1.00	6.60E-05
Mercury	0.0000294	0.00000006	6.98E-07	5.18E-07	2.93E-07	3190	1.00	2.23E-03
Nickel	0.0285	0.00102	1.62E-03	1.45E-03	1.24E-03	78	1.00	1.26E-01
Selenium	0.0004	0.00005	5.76E-05	5.55E-05	5.28E-05	129	1.00	7.43E-03
Silver	0.00383	0.000058	1.40E-04	1.17E-04	8.79E-05	87.7	1.00	1.23E-02
Vanadium	0.0291	0.00215	2.74E-03	2.57E-03	2.36E-03	-	-	-
Zinc	0.0441	0.00354	4.42E-03	4.17E-03	3.86E-03	2060	1.00	9.11E+00
TCDD	1E-10	3.9E-11	4.03E-11	4.00E-11	3.95E-11	34400	27.00	3.75E-05
Toluene	0.012	0	2.61E-04	1.88E-04	9.52E-05	171	1.00	4.46E-02
Malathion	0.000031	0	6.74E-07	4.84E-07	2.46E-07	13.1	1.00	8.83E-06

Table 1e Pollutant Concentrations at Exposure Points and Seafood (Scenario 5)

Pollutants	C/D Effluent Conc. (mg/L)	Ambient Seawater Conc. (mg/L)	Conc. at edge of ZID (mg/L) – 10%tile dilution factor	Conc. at edge of Mixing Zone (mg/L) – 10%tile dilution factor	Conc. at the Nearest Beach (mg/L) – 10%tile dilution factor	Bioconcentration Factor (water-to-fish) (L/kg)	Food Chain Multiplier (Trophic Level 4)	Conc. in Seafood (mg/kg)
Chlorination By-products (COCs)	Refer to Appendix 6-2							
Antimony	0.000631	0.00021	2.19E-04	2.17E-04	2.13E-04	40	1	8.77E-03
Barium	0.0245	0.00719	7.57E-03	7.46E-03	7.33E-03	633	1	4.79E+00
Chromium (III)	0.00838	0.00043	6.03E-04	5.54E-04	4.93E-04	19	1	1.15E-02
Copper	0.00998	0.00225	2.42E-03	2.37E-03	2.31E-03	710	1.00	1.72E+00
Nickel	0.0223	0.00102	1.48E-03	1.35E-03	1.19E-03	78	1.00	1.16E-01
Selenium	0.00014	0.00005	5.20E-05	5.14E-05	5.07E-05	129	1.00	6.70E-03
Silver	0.000378	0.000058	6.50E-05	6.30E-05	6.05E-05	87.7	1.00	5.70E-03
Vanadium	0.0305	0.00215	2.77E-03	2.59E-03	2.38E-03	-	-	-
Zinc	0.0118	0.00354	3.72E-03	3.67E-03	3.61E-03	2060	1.00	7.66E+00
TCDD	6.2E-11	3.9E-11	3.95E-11	3.94E-11	3.92E-11	34400	27.00	3.67E-05
Malathion	0.000015	0	3.26E-07	2.34E-07	1.19E-07	13.1	1.00	4.27E-06

Table 2a Exposure of Pollutants – Dropping from Ship at edge of ZID with Fishermen Diet (Scenario 1)

Pollutants	Conc. at edge of ZID (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.21E-04	8.85E-03	3.09E-09	2.53E-09	4.73E-09	2.07E-09	2.02E-09	2.20E-09	8.35E-10	8.35E-10	8.35E-10	5.99E-09	5.38E-09	7.77E-09
Arsenic	1.48E-03	1.69E-01	2.07E-08	1.69E-08	3.17E-08	1.38E-08	1.35E-08	1.47E-08	1.59E-08	1.59E-08	1.59E-08	5.04E-08	4.63E-08	6.23E-08
Barium	7.54E-03	4.77E+00	1.05E-07	8.60E-08	1.61E-07	7.04E-08	6.88E-08	7.48E-08	4.50E-07	4.50E-07	4.50E-07	6.26E-07	6.05E-07	6.86E-07
Chromium III	7.62E-04	1.45E-02	1.06E-08	8.69E-09	1.63E-08	7.11E-09	6.95E-09	7.56E-09	1.36E-09	1.36E-09	1.37E-09	1.91E-08	1.70E-08	2.52E-08
Copper	3.26E-03	2.31E+00	4.56E-08	3.72E-08	6.97E-08	3.04E-08	2.98E-08	3.24E-08	2.18E-07	2.18E-07	2.18E-07	2.94E-07	2.85E-07	3.20E-07
Lead	7.32E-04	6.59E-05	1.02E-08	8.36E-09	1.57E-08	6.84E-09	6.69E-09	7.27E-09	6.22E-12	6.22E-12	6.22E-12	1.71E-08	1.51E-08	2.29E-08
Mercury	6.14E-07	1.96E-03	8.58E-12	7.00E-12	1.31E-11	5.73E-12	5.60E-12	6.09E-12	1.85E-10	1.85E-10	1.85E-10	1.99E-10	1.97E-10	2.04E-10
Nickel	1.54E-03	1.20E-01	2.15E-08	1.76E-08	3.29E-08	1.44E-08	1.41E-08	1.53E-08	1.13E-08	1.13E-08	1.13E-08	4.72E-08	4.29E-08	5.95E-08
Selenium	5.66E-05	7.30E-03	7.92E-10	6.46E-10	1.21E-09	5.29E-10	5.17E-10	5.62E-10	6.89E-10	6.89E-10	6.89E-10	2.01E-09	1.85E-09	2.46E-09
Silver	1.29E-04	1.13E-02	1.81E-09	1.47E-09	2.76E-09	1.21E-09	1.18E-09	1.28E-09	1.07E-09	1.07E-09	1.07E-09	4.08E-09	3.72E-09	5.12E-09
Vanadium	2.66E-03	-	3.72E-08	3.03E-08	5.69E-08	2.48E-08	2.43E-08	2.64E-08	-	-	-	6.20E-08	5.46E-08	8.33E-08
Zinc	4.31E-03	8.87E+00	6.02E-08	4.91E-08	9.22E-08	4.02E-08	3.93E-08	4.28E-08	8.37E-07	8.36E-07	8.37E-07	9.37E-07	9.25E-07	9.72E-07
TCDD	4.02E-11	3.73E-05	5.61E-16	4.58E-16	8.59E-16	1.64E-12	1.60E-12	1.74E-12	3.52E-12	3.52E-12	3.52E-12	5.16E-12	5.12E-12	5.26E-12
Toluene	2.26E-04	3.87E-02	3.17E-09	2.58E-09	4.85E-09	5.18E-08	5.07E-08	5.51E-08	3.65E-09	3.65E-09	3.65E-09	5.87E-08	5.69E-08	6.36E-08
Malathion	5.85E-07	7.66E-06	8.18E-12	6.68E-12	1.25E-11	1.57E-11	1.54E-11	1.67E-11	7.23E-13	7.23E-13	7.23E-13	2.46E-11	2.28E-11	3.00E-11

Table 2b Exposure of Pollutants – Frequent Swimming at edge of Mixing Zone with Fishermen Diet (Scenario 1)

Pollutants	Conc. at edge of Mixing Zone (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.18E-04	8.85E-03	1.94E-07	1.58E-07	2.97E-07	1.30E-07	1.27E-07	1.38E-07	8.35E-10	8.35E-10	8.35E-10	3.24E-07	2.86E-07	4.36E-07
Arsenic	1.48E-03	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	1.59E-08	1.59E-08	1.59E-08	2.24E-06	1.98E-06	3.01E-06
Barium	7.44E-03	4.77E+00	6.63E-06	5.41E-06	1.01E-05	4.43E-06	4.33E-06	4.71E-06	4.50E-07	4.50E-07	4.50E-07	1.15E-05	1.02E-05	1.53E-05
Chromium III	6.67E-04	1.45E-02	5.25E-07	4.29E-07	8.04E-07	3.51E-07	3.43E-07	3.73E-07	1.36E-09	1.36E-09	1.37E-09	8.78E-07	7.74E-07	1.18E-06
Copper	2.97E-03	2.31E+00	2.45E-06	2.00E-06	3.75E-06	1.63E-06	1.60E-06	1.74E-06	2.18E-07	2.18E-07	2.18E-07	4.30E-06	3.82E-06	5.70E-06
Lead	7.30E-04	6.59E-05	6.56E-07	5.35E-07	1.00E-06	4.38E-07	4.28E-07	4.66E-07	6.22E-12	6.22E-12	6.22E-12	1.09E-06	9.64E-07	1.47E-06
Mercury	4.56E-07	1.96E-03	2.84E-10	2.32E-10	4.35E-10	1.90E-10	1.86E-10	2.02E-10	1.85E-10	1.85E-10	1.85E-10	6.59E-10	6.02E-10	8.21E-10
Nickel	1.39E-03	1.20E-01	1.14E-06	9.27E-07	1.74E-06	7.58E-07	7.41E-07	8.06E-07	1.13E-08	1.13E-08	1.13E-08	1.90E-06	1.68E-06	2.56E-06
Selenium	5.47E-05	7.30E-03	4.78E-08	3.90E-08	7.32E-08	3.19E-08	3.12E-08	3.40E-08	6.89E-10	6.89E-10	6.89E-10	8.05E-08	7.10E-08	1.08E-07
Silver	1.09E-04	1.13E-02	8.19E-08	6.68E-08	1.25E-07	5.47E-08	5.35E-08	5.81E-08	1.07E-09	1.07E-09	1.07E-09	1.38E-07	1.21E-07	1.85E-07
Vanadium	2.51E-03	-	2.15E-06	1.76E-06	3.29E-06	1.44E-06	1.40E-06	1.53E-06	-	-	-	3.59E-06	3.16E-06	4.82E-06
Zinc	4.09E-03	8.87E+00	3.51E-06	2.87E-06	5.37E-06	2.34E-06	2.29E-06	2.49E-06	8.37E-07	8.36E-07	8.37E-07	6.69E-06	5.99E-06	8.70E-06
TCDD	3.98E-11	3.73E-05	3.56E-14	2.91E-14	5.46E-14	1.44E-10	1.41E-10	1.53E-10	3.52E-12	3.52E-12	3.52E-12	1.48E-10	1.44E-10	1.57E-10
Toluene	1.62E-04	3.87E-02	9.41E-08	7.68E-08	1.44E-07	1.72E-06	1.69E-06	1.83E-06	3.65E-09	3.65E-09	3.65E-09	1.82E-06	1.77E-06	1.98E-06
Malathion	4.19E-07	7.66E-06	2.43E-10	1.98E-10	3.72E-10	6.48E-10	6.34E-10	6.90E-10	7.23E-13	7.23E-13	7.23E-13	8.92E-10	8.33E-10	1.06E-09

Table 2c Exposure of Pollutants – Frequent Swimming at the Nearest Beach with Fishermen Diet (Scenario 1)

Pollutants	Conc. at the Nearest Beach(mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.14E-04	8.85E-03	1.92E-07	1.57E-07	2.94E-07	1.28E-07	1.25E-07	1.36E-07	8.35E-10	8.35E-10	8.35E-10	3.21E-07	2.83E-07	4.31E-07
Arsenic	1.48E-03	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	1.59E-08	1.59E-08	1.59E-08	2.24E-06	1.98E-06	3.01E-06
Barium	7.31E-03	4.77E+00	6.56E-06	5.35E-06	1.00E-05	4.38E-06	4.28E-06	4.66E-06	4.50E-07	4.50E-07	4.50E-07	1.14E-05	1.01E-05	1.51E-05
Chromium III	5.49E-04	1.45E-02	4.61E-07	3.76E-07	7.05E-07	3.08E-07	3.01E-07	3.27E-07	1.36E-09	1.36E-09	1.37E-09	7.70E-07	6.78E-07	1.03E-06
Copper	2.61E-03	2.31E+00	2.25E-06	1.84E-06	3.45E-06	1.50E-06	1.47E-06	1.60E-06	2.18E-07	2.18E-07	2.18E-07	3.97E-06	3.53E-06	5.26E-06
Lead	7.26E-04	6.59E-05	6.54E-07	5.34E-07	1.00E-06	4.37E-07	4.27E-07	4.64E-07	6.22E-12	6.22E-12	6.22E-12	1.09E-06	9.61E-07	1.47E-06
Mercury	2.58E-07	1.96E-03	1.76E-10	1.44E-10	2.69E-10	1.18E-10	1.15E-10	1.25E-10	1.85E-10	1.85E-10	1.85E-10	4.78E-10	4.43E-10	5.79E-10
Nickel	1.21E-03	1.20E-01	1.03E-06	8.44E-07	1.58E-06	6.90E-07	6.75E-07	7.34E-07	1.13E-08	1.13E-08	1.13E-08	1.74E-06	1.53E-06	2.33E-06
Selenium	5.24E-05	7.30E-03	4.65E-08	3.80E-08	7.12E-08	3.11E-08	3.04E-08	3.31E-08	6.89E-10	6.89E-10	6.89E-10	7.83E-08	6.91E-08	1.05E-07
Silver	8.35E-05	1.13E-02	6.80E-08	5.55E-08	1.04E-07	4.54E-08	4.44E-08	4.83E-08	1.07E-09	1.07E-09	1.07E-09	1.14E-07	1.01E-07	1.53E-07
Vanadium	2.33E-03	-	2.05E-06	1.67E-06	3.14E-06	1.37E-06	1.34E-06	1.46E-06	-	-	-	3.42E-06	3.01E-06	4.60E-06
Zinc	3.81E-03	8.87E+00	3.36E-06	2.74E-06	5.14E-06	2.24E-06	2.19E-06	2.39E-06	8.37E-07	8.36E-07	8.37E-07	6.44E-06	5.77E-06	8.37E-06
TCDD	3.94E-11	3.73E-05	3.54E-14	2.89E-14	5.42E-14	1.43E-10	1.40E-10	1.52E-10	3.52E-12	3.52E-12	3.52E-12	1.47E-10	1.44E-10	1.56E-10
Toluene	8.11E-05	3.87E-02	4.99E-08	4.07E-08	7.63E-08	9.14E-07	8.94E-07	9.72E-07	3.65E-09	3.65E-09	3.65E-09	9.68E-07	9.38E-07	1.05E-06
Malathion	2.09E-07	7.66E-06	1.29E-10	1.05E-10	1.97E-10	3.44E-10	3.36E-10	3.65E-10	7.23E-13	7.23E-13	7.23E-13	4.73E-10	4.42E-10	5.63E-10

Table 2d Exposure of Pollutants – Dropping from Ship at edge of ZID with General Public Diet (Scenario 1)

Pollutants	Conc. at edge of ZID (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.21E-04	8.85E-03	3.09E-09	2.53E-09	4.73E-09	2.07E-09	2.02E-09	2.20E-09	4.12E-10	4.12E-10	4.12E-10	5.57E-09	4.96E-09	7.34E-09
Arsenic	1.48E-03	1.69E-01	2.07E-08	1.69E-08	3.17E-08	1.38E-08	1.35E-08	1.47E-08	7.85E-09	7.85E-09	7.86E-09	4.24E-08	3.83E-08	5.42E-08
Barium	7.54E-03	4.77E+00	1.05E-07	8.60E-08	1.61E-07	7.04E-08	6.88E-08	7.48E-08	2.22E-07	2.22E-07	2.22E-07	3.98E-07	3.77E-07	4.58E-07
Chromium III	7.62E-04	1.45E-02	1.06E-08	8.69E-09	1.63E-08	7.11E-09	6.95E-09	7.56E-09	6.73E-10	6.73E-10	6.74E-10	1.84E-08	1.63E-08	2.45E-08
Copper	3.26E-03	2.31E+00	4.56E-08	3.72E-08	6.97E-08	3.04E-08	2.98E-08	3.24E-08	1.08E-07	1.08E-07	1.08E-07	1.84E-07	1.75E-07	2.10E-07
Lead	7.32E-04	6.59E-05	1.02E-08	8.36E-09	1.57E-08	6.84E-09	6.69E-09	7.27E-09	3.07E-12	3.07E-12	3.07E-12	1.71E-08	1.50E-08	2.29E-08
Mercury	6.14E-07	1.96E-03	8.58E-12	7.00E-12	1.31E-11	5.73E-12	5.60E-12	6.09E-12	9.11E-11	9.11E-11	9.12E-11	1.05E-10	1.04E-10	1.10E-10
Nickel	1.54E-03	1.20E-01	2.15E-08	1.76E-08	3.29E-08	1.44E-08	1.41E-08	1.53E-08	5.58E-09	5.58E-09	5.59E-09	4.15E-08	3.72E-08	5.38E-08
Selenium	5.66E-05	7.30E-03	7.92E-10	6.46E-10	1.21E-09	5.29E-10	5.17E-10	5.62E-10	3.40E-10	3.40E-10	3.40E-10	1.66E-09	1.50E-09	2.11E-09
Silver	1.29E-04	1.13E-02	1.81E-09	1.47E-09	2.76E-09	1.21E-09	1.18E-09	1.28E-09	5.27E-10	5.27E-10	5.28E-10	3.54E-09	3.18E-09	4.58E-09
Vanadium	2.66E-03	-	3.72E-08	3.03E-08	5.69E-08	2.48E-08	2.43E-08	2.64E-08	-	-	-	6.20E-08	5.46E-08	8.33E-08
Zinc	4.31E-03	8.87E+00	6.02E-08	4.91E-08	9.22E-08	4.02E-08	3.93E-08	4.28E-08	4.13E-07	4.13E-07	4.13E-07	5.13E-07	5.01E-07	5.48E-07
TCDD	4.02E-11	3.73E-05	5.61E-16	4.58E-16	8.59E-16	1.64E-12	1.60E-12	1.74E-12	1.74E-12	1.74E-12	1.74E-12	3.37E-12	3.34E-12	3.48E-12
Toluene	2.26E-04	3.87E-02	3.17E-09	2.58E-09	4.85E-09	5.18E-08	5.07E-08	5.51E-08	1.80E-09	1.80E-09	1.80E-09	5.68E-08	5.51E-08	6.18E-08
Malathion	5.85E-07	7.66E-06	8.18E-12	6.68E-12	1.25E-11	1.57E-11	1.54E-11	1.67E-11	3.57E-13	3.57E-13	3.57E-13	2.43E-11	2.24E-11	2.96E-11

Table 2e Exposure of Pollutants – Frequent Swimming at edge of Mixing Zone with General Public Diet (Scenario 1)

Pollutants	Conc. at edge of Mixing Zone (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.18E-04	8.85E-03	1.94E-07	1.58E-07	2.97E-07	1.30E-07	1.27E-07	1.38E-07	4.12E-10	4.12E-10	4.12E-10	3.24E-07	2.85E-07	4.35E-07
Arsenic	1.48E-03	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	7.85E-09	7.85E-09	7.86E-09	2.23E-06	1.97E-06	3.00E-06
Barium	7.44E-03	4.77E+00	6.63E-06	5.41E-06	1.01E-05	4.43E-06	4.33E-06	4.71E-06	2.22E-07	2.22E-07	2.22E-07	1.13E-05	9.96E-06	1.51E-05
Chromium III	6.67E-04	1.45E-02	5.25E-07	4.29E-07	8.04E-07	3.51E-07	3.43E-07	3.73E-07	6.73E-10	6.73E-10	6.74E-10	8.77E-07	7.73E-07	1.18E-06
Copper	2.97E-03	2.31E+00	2.45E-06	2.00E-06	3.75E-06	1.63E-06	1.60E-06	1.74E-06	1.08E-07	1.08E-07	1.08E-07	4.19E-06	3.70E-06	5.59E-06
Lead	7.30E-04	6.59E-05	6.56E-07	5.35E-07	1.00E-06	4.38E-07	4.28E-07	4.66E-07	3.07E-12	3.07E-12	3.07E-12	1.09E-06	9.64E-07	1.47E-06
Mercury	4.56E-07	1.96E-03	2.84E-10	2.32E-10	4.35E-10	1.90E-10	1.86E-10	2.02E-10	9.11E-11	9.11E-11	9.12E-11	5.65E-10	5.09E-10	7.28E-10
Nickel	1.39E-03	1.20E-01	1.14E-06	9.27E-07	1.74E-06	7.58E-07	7.41E-07	8.06E-07	5.58E-09	5.58E-09	5.59E-09	1.90E-06	1.67E-06	2.55E-06
Selenium	5.47E-05	7.30E-03	4.78E-08	3.90E-08	7.32E-08	3.19E-08	3.12E-08	3.40E-08	3.40E-10	3.40E-10	3.40E-10	8.01E-08	7.06E-08	1.08E-07
Silver	1.09E-04	1.13E-02	8.19E-08	6.68E-08	1.25E-07	5.47E-08	5.35E-08	5.81E-08	5.27E-10	5.27E-10	5.28E-10	1.37E-07	1.21E-07	1.84E-07
Vanadium	2.51E-03	-	2.15E-06	1.76E-06	3.29E-06	1.44E-06	1.40E-06	1.53E-06	-	-	-	3.59E-06	3.16E-06	4.82E-06
Zinc	4.09E-03	8.87E+00	3.51E-06	2.87E-06	5.37E-06	2.34E-06	2.29E-06	2.49E-06	4.13E-07	4.13E-07	4.13E-07	6.27E-06	5.57E-06	8.28E-06
TCDD	3.98E-11	3.73E-05	3.56E-14	2.91E-14	5.46E-14	1.44E-10	1.41E-10	1.53E-10	1.74E-12	1.74E-12	1.74E-12	1.46E-10	1.43E-10	1.55E-10
Toluene	1.62E-04	3.87E-02	9.41E-08	7.68E-08	1.44E-07	1.72E-06	1.69E-06	1.83E-06	1.80E-09	1.80E-09	1.80E-09	1.82E-06	1.77E-06	1.98E-06
Malathion	4.19E-07	7.66E-06	2.43E-10	1.98E-10	3.72E-10	6.48E-10	6.34E-10	6.90E-10	3.57E-13	3.57E-13	3.57E-13	8.92E-10	8.33E-10	1.06E-09

Table 2f Exposure of Pollutants – Frequent Swimming at the Nearest Beach with General Public Diet (Scenario 1)

Pollutants	Conc. at the Nearest Beach(mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.14E-04	8.85E-03	1.92E-07	1.57E-07	2.94E-07	1.28E-07	1.25E-07	1.36E-07	4.12E-10	4.12E-10	4.12E-10	3.20E-07	2.82E-07	4.30E-07
Arsenic	1.48E-03	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	7.85E-09	7.85E-09	7.86E-09	2.23E-06	1.97E-06	3.00E-06
Barium	7.31E-03	4.77E+00	6.56E-06	5.35E-06	1.00E-05	4.38E-06	4.28E-06	4.66E-06	2.22E-07	2.22E-07	2.22E-07	1.12E-05	9.86E-06	1.49E-05
Chromium III	5.49E-04	1.45E-02	4.61E-07	3.76E-07	7.05E-07	3.08E-07	3.01E-07	3.27E-07	6.73E-10	6.73E-10	6.74E-10	7.69E-07	6.78E-07	1.03E-06
Copper	2.61E-03	2.31E+00	2.25E-06	1.84E-06	3.45E-06	1.50E-06	1.47E-06	1.60E-06	1.08E-07	1.08E-07	1.08E-07	3.86E-06	3.42E-06	5.15E-06
Lead	7.26E-04	6.59E-05	6.54E-07	5.34E-07	1.00E-06	4.37E-07	4.27E-07	4.64E-07	3.07E-12	3.07E-12	3.07E-12	1.09E-06	9.61E-07	1.47E-06
Mercury	2.58E-07	1.96E-03	1.76E-10	1.44E-10	2.69E-10	1.18E-10	1.15E-10	1.25E-10	9.11E-11	9.11E-11	9.12E-11	3.85E-10	3.50E-10	4.86E-10
Nickel	1.21E-03	1.20E-01	1.03E-06	8.44E-07	1.58E-06	6.90E-07	6.75E-07	7.34E-07	5.58E-09	5.58E-09	5.59E-09	1.73E-06	1.52E-06	2.32E-06
Selenium	5.24E-05	7.30E-03	4.65E-08	3.80E-08	7.12E-08	3.11E-08	3.04E-08	3.31E-08	3.40E-10	3.40E-10	3.40E-10	7.80E-08	6.87E-08	1.05E-07
Silver	8.35E-05	1.13E-02	6.80E-08	5.55E-08	1.04E-07	4.54E-08	4.44E-08	4.83E-08	5.27E-10	5.27E-10	5.28E-10	1.14E-07	1.00E-07	1.53E-07
Vanadium	2.33E-03	-	2.05E-06	1.67E-06	3.14E-06	1.37E-06	1.34E-06	1.46E-06	-	-	-	3.42E-06	3.01E-06	4.60E-06
Zinc	3.81E-03	8.87E+00	3.36E-06	2.74E-06	5.14E-06	2.24E-06	2.19E-06	2.39E-06	4.13E-07	4.13E-07	4.13E-07	6.02E-06	5.35E-06	7.94E-06
TCDD	3.94E-11	3.73E-05	3.54E-14	2.89E-14	5.42E-14	1.43E-10	1.40E-10	1.52E-10	1.74E-12	1.74E-12	1.74E-12	1.45E-10	1.42E-10	1.54E-10
Toluene	8.11E-05	3.87E-02	4.99E-08	4.07E-08	7.63E-08	9.14E-07	8.94E-07	9.72E-07	1.80E-09	1.80E-09	1.80E-09	9.66E-07	9.36E-07	1.05E-06
Malathion	2.09E-07	7.66E-06	1.29E-10	1.05E-10	1.97E-10	3.44E-10	3.36E-10	3.65E-10	3.57E-13	3.57E-13	3.57E-13	4.73E-10	4.42E-10	5.63E-10

Table 2g Exposure of Pollutants – Dropping from Ship at edge of ZID with Fishermen Diet (Scenario 2)

Pollutants	Conc. at edge of ZID (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.21E-04	8.85E-03	3.09E-09	2.53E-09	4.73E-09	2.07E-09	2.02E-09	2.20E-09	1.40E-09	1.40E-09	1.40E-09	6.56E-09	5.95E-09	8.33E-09
Arsenic	1.48E-03	1.69E-01	2.07E-08	1.69E-08	3.17E-08	1.38E-08	1.35E-08	1.47E-08	2.67E-08	2.67E-08	2.67E-08	6.12E-08	5.71E-08	7.31E-08
Barium	7.54E-03	4.77E+00	1.05E-07	8.60E-08	1.61E-07	7.04E-08	6.88E-08	7.48E-08	7.55E-07	7.55E-07	7.55E-07	9.30E-07	9.09E-07	9.91E-07
Chromium III	7.62E-04	1.45E-02	1.06E-08	8.69E-09	1.63E-08	7.11E-09	6.95E-09	7.56E-09	2.29E-09	2.29E-09	2.29E-09	2.00E-08	1.79E-08	2.62E-08
Copper	3.26E-03	2.31E+00	4.56E-08	3.72E-08	6.97E-08	3.04E-08	2.98E-08	3.24E-08	3.66E-07	3.66E-07	3.66E-07	4.42E-07	4.33E-07	4.68E-07
Lead	7.32E-04	6.59E-05	1.02E-08	8.36E-09	1.57E-08	6.84E-09	6.69E-09	7.27E-09	1.04E-11	1.04E-11	1.04E-11	1.71E-08	1.51E-08	2.30E-08
Mercury	6.14E-07	1.96E-03	8.58E-12	7.00E-12	1.31E-11	5.73E-12	5.60E-12	6.09E-12	3.10E-10	3.10E-10	3.10E-10	3.24E-10	3.22E-10	3.29E-10
Nickel	1.54E-03	1.20E-01	2.15E-08	1.76E-08	3.29E-08	1.44E-08	1.41E-08	1.53E-08	1.90E-08	1.90E-08	1.90E-08	5.49E-08	5.06E-08	6.72E-08
Selenium	5.66E-05	7.30E-03	7.92E-10	6.46E-10	1.21E-09	5.29E-10	5.17E-10	5.62E-10	1.16E-09	1.16E-09	1.16E-09	2.48E-09	2.32E-09	2.93E-09
Silver	1.29E-04	1.13E-02	1.81E-09	1.47E-09	2.76E-09	1.21E-09	1.18E-09	1.28E-09	1.79E-09	1.79E-09	1.79E-09	4.80E-09	4.45E-09	5.84E-09
Vanadium	2.66E-03	-	3.72E-08	3.03E-08	5.69E-08	2.48E-08	2.43E-08	2.64E-08	-	-	-	6.20E-08	5.46E-08	8.33E-08
Zinc	4.31E-03	8.87E+00	6.02E-08	4.91E-08	9.22E-08	4.02E-08	3.93E-08	4.28E-08	1.40E-06	1.40E-06	1.40E-06	1.50E-06	1.49E-06	1.54E-06
TCDD	4.02E-11	3.73E-05	5.61E-16	4.58E-16	8.59E-16	1.64E-12	1.60E-12	1.74E-12	5.90E-12	5.90E-12	5.90E-12	7.54E-12	7.50E-12	7.65E-12
Toluene	2.26E-04	3.87E-02	3.17E-09	2.58E-09	4.85E-09	5.18E-08	5.07E-08	5.51E-08	6.13E-09	6.12E-09	6.13E-09	6.11E-08	5.94E-08	6.61E-08
Malathion	5.85E-07	7.66E-06	8.18E-12	6.68E-12	1.25E-11	1.57E-11	1.54E-11	1.67E-11	1.21E-12	1.21E-12	1.21E-12	2.51E-11	2.33E-11	3.05E-11

Table 2h Exposure of Pollutants – Frequent Swimming at edge of Mixing Zone with Fishermen Diet (Scenario 2)

Pollutants	Conc. at edge of Mixing Zone (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.15E-04	8.85E-03	1.94E-07	1.59E-07	2.97E-07	1.30E-07	1.27E-07	1.38E-07	1.40E-09	1.40E-09	1.40E-09	3.25E-07	2.87E-07	4.37E-07
Arsenic	1.48E-03	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	2.67E-08	2.67E-08	2.67E-08	2.25E-06	1.99E-06	3.02E-06
Barium	7.36E-03	4.77E+00	6.63E-06	5.41E-06	1.02E-05	4.43E-06	4.33E-06	4.71E-06	7.55E-07	7.55E-07	7.55E-07	1.18E-05	1.05E-05	1.56E-05
Chromium III	5.90E-04	1.45E-02	5.32E-07	4.34E-07	8.14E-07	3.55E-07	3.47E-07	3.78E-07	2.29E-09	2.29E-09	2.29E-09	8.89E-07	7.84E-07	1.19E-06
Copper	2.74E-03	2.31E+00	2.47E-06	2.01E-06	3.78E-06	1.65E-06	1.61E-06	1.75E-06	3.66E-07	3.66E-07	3.66E-07	4.48E-06	3.99E-06	5.89E-06
Lead	7.27E-04	6.59E-05	6.56E-07	5.35E-07	1.00E-06	4.38E-07	4.28E-07	4.66E-07	1.04E-11	1.04E-11	1.04E-11	1.09E-06	9.64E-07	1.47E-06
Mercury	3.27E-07	1.96E-03	2.95E-10	2.40E-10	4.51E-10	1.97E-10	1.92E-10	2.09E-10	3.10E-10	3.10E-10	3.10E-10	8.01E-10	7.43E-10	9.70E-10
Nickel	1.27E-03	1.20E-01	1.14E-06	9.35E-07	1.75E-06	7.65E-07	7.48E-07	8.13E-07	1.90E-08	1.90E-08	1.90E-08	1.93E-06	1.70E-06	2.58E-06
Selenium	5.32E-05	7.30E-03	4.80E-08	3.91E-08	7.34E-08	3.20E-08	3.13E-08	3.41E-08	1.16E-09	1.16E-09	1.16E-09	8.11E-08	7.16E-08	1.09E-07
Silver	9.23E-05	1.13E-02	8.32E-08	6.79E-08	1.27E-07	5.56E-08	5.43E-08	5.91E-08	1.79E-09	1.79E-09	1.79E-09	1.41E-07	1.24E-07	1.88E-07
Vanadium	2.40E-03	-	2.16E-06	1.76E-06	3.31E-06	1.44E-06	1.41E-06	1.53E-06	-	-	-	3.60E-06	3.17E-06	4.84E-06
Zinc	3.91E-03	8.87E+00	3.52E-06	2.88E-06	5.39E-06	2.35E-06	2.30E-06	2.50E-06	1.40E-06	1.40E-06	1.40E-06	7.28E-06	6.58E-06	9.30E-06
TCDD	3.96E-11	3.73E-05	3.57E-14	2.91E-14	5.46E-14	1.44E-10	1.41E-10	1.53E-10	5.90E-12	5.90E-12	5.90E-12	1.50E-10	1.47E-10	1.59E-10
Toluene	1.09E-04	3.87E-02	9.84E-08	8.03E-08	1.51E-07	1.80E-06	1.76E-06	1.92E-06	6.13E-09	6.12E-09	6.13E-09	1.91E-06	1.85E-06	2.07E-06
Malathion	2.82E-07	7.66E-06	2.54E-10	2.07E-10	3.89E-10	6.78E-10	6.63E-10	7.21E-10	1.21E-12	1.21E-12	1.21E-12	9.33E-10	8.72E-10	1.11E-09

Table 2i Exposure of Pollutants – Frequent Swimming at the Nearest Beach with Fishermen Diet (Scenario 2)

Pollutants	Conc. at the Nearest Beach(mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	1.55E-01	8.85E-03	1.92E-07	1.57E-07	2.94E-07	1.28E-07	1.25E-07	1.36E-07	1.40E-09	1.40E-09	1.40E-09	3.22E-07	2.83E-07	4.32E-07
Arsenic	2.13E-04	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	2.67E-08	2.67E-08	2.67E-08	2.25E-06	1.99E-06	3.02E-06
Barium	1.48E-03	4.77E+00	6.56E-06	5.36E-06	1.00E-05	4.38E-06	4.29E-06	4.66E-06	7.55E-07	7.55E-07	7.55E-07	1.17E-05	1.04E-05	1.55E-05
Chromium III	7.28E-03	1.45E-02	4.65E-07	3.79E-07	7.11E-07	3.10E-07	3.03E-07	3.30E-07	2.29E-09	2.29E-09	2.29E-09	7.77E-07	6.85E-07	1.04E-06
Copper	5.15E-04	2.31E+00	2.26E-06	1.85E-06	3.46E-06	1.51E-06	1.48E-06	1.61E-06	3.66E-07	3.66E-07	3.66E-07	4.14E-06	3.69E-06	5.44E-06
Lead	2.51E-03	6.59E-05	6.54E-07	5.34E-07	1.00E-06	4.37E-07	4.27E-07	4.65E-07	1.04E-11	1.04E-11	1.04E-11	1.09E-06	9.61E-07	1.47E-06
Mercury	7.25E-04	1.96E-03	1.83E-10	1.49E-10	2.79E-10	1.22E-10	1.19E-10	1.30E-10	3.10E-10	3.10E-10	3.10E-10	6.14E-10	5.78E-10	7.19E-10
Nickel	2.02E-07	1.20E-01	1.04E-06	8.49E-07	1.59E-06	6.94E-07	6.79E-07	7.39E-07	1.90E-08	1.90E-08	1.90E-08	1.75E-06	1.55E-06	2.35E-06
Selenium	1.15E-03	7.30E-03	4.66E-08	3.81E-08	7.14E-08	3.11E-08	3.04E-08	3.31E-08	1.16E-09	1.16E-09	1.16E-09	7.89E-08	6.97E-08	1.06E-07
Silver	5.17E-05	1.13E-02	6.88E-08	5.62E-08	1.05E-07	4.59E-08	4.49E-08	4.89E-08	1.79E-09	1.79E-09	1.79E-09	1.17E-07	1.03E-07	1.56E-07
Vanadium	7.63E-05	-	2.06E-06	1.68E-06	3.15E-06	1.37E-06	1.34E-06	1.46E-06	-	-	-	3.43E-06	3.02E-06	4.61E-06
Zinc	2.28E-03	8.87E+00	3.37E-06	2.75E-06	5.16E-06	2.25E-06	2.20E-06	2.39E-06	1.40E-06	1.40E-06	1.40E-06	7.02E-06	6.35E-06	8.95E-06
TCDD	3.74E-03	3.73E-05	3.54E-14	2.89E-14	5.42E-14	1.43E-10	1.40E-10	1.52E-10	5.90E-12	5.90E-12	5.90E-12	1.49E-10	1.46E-10	1.58E-10
Toluene	3.93E-11	3.87E-02	5.25E-08	4.29E-08	8.04E-08	9.63E-07	9.42E-07	1.02E-06	6.13E-09	6.12E-09	6.13E-09	1.02E-06	9.91E-07	1.11E-06
Malathion	5.83E-05	7.66E-06	1.36E-10	1.11E-10	2.08E-10	3.62E-10	3.54E-10	3.85E-10	1.21E-12	1.21E-12	1.21E-12	4.99E-10	4.66E-10	5.94E-10

Table 2j Exposure of Pollutants – Dropping from Ship at edge of ZID with General Public Diet (Scenario 2)

Pollutants	Conc. at edge of ZID (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.21E-04	8.85E-03	3.09E-09	2.53E-09	4.73E-09	2.07E-09	2.02E-09	2.20E-09	6.91E-10	6.91E-10	6.91E-10	5.85E-09	5.24E-09	7.62E-09
Arsenic	1.48E-03	1.69E-01	2.07E-08	1.69E-08	3.17E-08	1.38E-08	1.35E-08	1.47E-08	1.32E-08	1.32E-08	1.32E-08	4.77E-08	4.36E-08	5.96E-08
Barium	7.54E-03	4.77E+00	1.05E-07	8.60E-08	1.61E-07	7.04E-08	6.88E-08	7.48E-08	3.72E-07	3.72E-07	3.73E-07	5.48E-07	5.27E-07	6.09E-07
Chromium III	7.62E-04	1.45E-02	1.06E-08	8.69E-09	1.63E-08	7.11E-09	6.95E-09	7.56E-09	1.13E-09	1.13E-09	1.13E-09	1.89E-08	1.68E-08	2.50E-08
Copper	3.26E-03	2.31E+00	4.56E-08	3.72E-08	6.97E-08	3.04E-08	2.98E-08	3.24E-08	1.81E-07	1.81E-07	1.81E-07	2.57E-07	2.48E-07	2.83E-07
Lead	7.32E-04	6.59E-05	1.02E-08	8.36E-09	1.57E-08	6.84E-09	6.69E-09	7.27E-09	5.14E-12	5.14E-12	5.15E-12	1.71E-08	1.51E-08	2.29E-08
Mercury	6.14E-07	1.96E-03	8.58E-12	7.00E-12	1.31E-11	5.73E-12	5.60E-12	6.09E-12	1.53E-10	1.53E-10	1.53E-10	1.67E-10	1.65E-10	1.72E-10
Nickel	1.54E-03	1.20E-01	2.15E-08	1.76E-08	3.29E-08	1.44E-08	1.41E-08	1.53E-08	9.37E-09	9.36E-09	9.37E-09	4.52E-08	4.10E-08	5.76E-08
Selenium	5.66E-05	7.30E-03	7.92E-10	6.46E-10	1.21E-09	5.29E-10	5.17E-10	5.62E-10	5.70E-10	5.70E-10	5.70E-10	1.89E-09	1.73E-09	2.34E-09
Silver	1.29E-04	1.13E-02	1.81E-09	1.47E-09	2.76E-09	1.21E-09	1.18E-09	1.28E-09	8.84E-10	8.84E-10	8.85E-10	3.90E-09	3.54E-09	4.93E-09
Vanadium	2.66E-03	-	3.72E-08	3.03E-08	5.69E-08	2.48E-08	2.43E-08	2.64E-08	-	-	-	6.20E-08	5.46E-08	8.33E-08
Zinc	4.31E-03	8.87E+00	6.02E-08	4.91E-08	9.22E-08	4.02E-08	3.93E-08	4.28E-08	6.92E-07	6.92E-07	6.93E-07	7.93E-07	7.81E-07	8.28E-07
TCDD	4.02E-11	3.73E-05	5.61E-16	4.58E-16	8.59E-16	1.64E-12	1.60E-12	1.74E-12	2.91E-12	2.91E-12	2.91E-12	4.55E-12	4.51E-12	4.65E-12
Toluene	2.26E-04	3.87E-02	3.17E-09	2.58E-09	4.85E-09	5.18E-08	5.07E-08	5.51E-08	3.02E-09	3.02E-09	3.02E-09	5.80E-08	5.63E-08	6.30E-08
Malathion	5.85E-07	7.66E-06	8.18E-12	6.68E-12	1.25E-11	1.57E-11	1.54E-11	1.67E-11	5.98E-13	5.98E-13	5.98E-13	2.45E-11	2.27E-11	2.99E-11

Table 2k Exposure of Pollutants – Frequent Swimming at edge of Mixing Zone with General Public Diet (Scenario 2)

Pollutants	Conc. at edge of Mixing Zone (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.15E-04	8.85E-03	1.94E-07	1.59E-07	2.97E-07	1.30E-07	1.27E-07	1.38E-07	6.91E-10	6.91E-10	6.91E-10	3.25E-07	2.86E-07	4.36E-07
Arsenic	1.48E-03	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	1.32E-08	1.32E-08	1.32E-08	2.24E-06	1.97E-06	3.00E-06
Barium	7.36E-03	4.77E+00	6.63E-06	5.41E-06	1.02E-05	4.43E-06	4.33E-06	4.71E-06	3.72E-07	3.72E-07	3.73E-07	1.14E-05	1.01E-05	1.52E-05
Chromium III	5.90E-04	1.45E-02	5.32E-07	4.34E-07	8.14E-07	3.55E-07	3.47E-07	3.78E-07	1.13E-09	1.13E-09	1.13E-09	8.88E-07	7.82E-07	1.19E-06
Copper	2.74E-03	2.31E+00	2.47E-06	2.01E-06	3.78E-06	1.65E-06	1.61E-06	1.75E-06	1.81E-07	1.81E-07	1.81E-07	4.29E-06	3.81E-06	5.71E-06
Lead	7.27E-04	6.59E-05	6.56E-07	5.35E-07	1.00E-06	4.38E-07	4.28E-07	4.66E-07	5.14E-12	5.14E-12	5.15E-12	1.09E-06	9.64E-07	1.47E-06
Mercury	3.27E-07	1.96E-03	2.95E-10	2.40E-10	4.51E-10	1.97E-10	1.92E-10	2.09E-10	1.53E-10	1.53E-10	1.53E-10	6.44E-10	5.86E-10	8.13E-10
Nickel	1.27E-03	1.20E-01	1.14E-06	9.35E-07	1.75E-06	7.65E-07	7.48E-07	8.13E-07	9.37E-09	9.36E-09	9.37E-09	1.92E-06	1.69E-06	2.58E-06
Selenium	5.32E-05	7.30E-03	4.80E-08	3.91E-08	7.34E-08	3.20E-08	3.13E-08	3.41E-08	5.70E-10	5.70E-10	5.70E-10	8.05E-08	7.10E-08	1.08E-07
Silver	9.23E-05	1.13E-02	8.32E-08	6.79E-08	1.27E-07	5.56E-08	5.43E-08	5.91E-08	8.84E-10	8.84E-10	8.85E-10	1.40E-07	1.23E-07	1.87E-07
Vanadium	2.40E-03	-	2.16E-06	1.76E-06	3.31E-06	1.44E-06	1.41E-06	1.53E-06	-	-	-	3.60E-06	3.17E-06	4.84E-06
Zinc	3.91E-03	8.87E+00	3.52E-06	2.88E-06	5.39E-06	2.35E-06	2.30E-06	2.50E-06	6.92E-07	6.92E-07	6.93E-07	6.57E-06	5.87E-06	8.59E-06
TCDD	3.96E-11	3.73E-05	3.57E-14	2.91E-14	5.46E-14	1.44E-10	1.41E-10	1.53E-10	2.91E-12	2.91E-12	2.91E-12	1.47E-10	1.44E-10	1.56E-10
Toluene	1.09E-04	3.87E-02	9.84E-08	8.03E-08	1.51E-07	1.80E-06	1.76E-06	1.92E-06	3.02E-09	3.02E-09	3.02E-09	1.90E-06	1.85E-06	2.07E-06
Malathion	2.82E-07	7.66E-06	2.54E-10	2.07E-10	3.89E-10	6.78E-10	6.63E-10	7.21E-10	5.98E-13	5.98E-13	5.98E-13	9.33E-10	8.71E-10	1.11E-09

Table 2l Exposure of Pollutants – Frequent Swimming at the Nearest Beach with General Public Diet (Scenario 2)

Pollutants	Conc. at the Nearest Beach(mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	1.55E-01	8.85E-03	1.92E-07	1.57E-07	2.94E-07	1.28E-07	1.25E-07	1.36E-07	6.91E-10	6.91E-10	6.91E-10	3.21E-07	2.83E-07	4.31E-07
Arsenic	2.13E-04	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	1.32E-08	1.32E-08	1.32E-08	2.24E-06	1.97E-06	3.00E-06
Barium	1.48E-03	4.77E+00	6.56E-06	5.36E-06	1.00E-05	4.38E-06	4.29E-06	4.66E-06	3.72E-07	3.72E-07	3.73E-07	1.13E-05	1.00E-05	1.51E-05
Chromium III	7.28E-03	1.45E-02	4.65E-07	3.79E-07	7.11E-07	3.10E-07	3.03E-07	3.30E-07	1.13E-09	1.13E-09	1.13E-09	7.76E-07	6.84E-07	1.04E-06
Copper	5.15E-04	2.31E+00	2.26E-06	1.85E-06	3.46E-06	1.51E-06	1.48E-06	1.61E-06	1.81E-07	1.81E-07	1.81E-07	3.95E-06	3.51E-06	5.25E-06
Lead	2.51E-03	6.59E-05	6.54E-07	5.34E-07	1.00E-06	4.37E-07	4.27E-07	4.65E-07	5.14E-12	5.14E-12	5.15E-12	1.09E-06	9.61E-07	1.47E-06
Mercury	7.25E-04	1.96E-03	1.83E-10	1.49E-10	2.79E-10	1.22E-10	1.19E-10	1.30E-10	1.53E-10	1.53E-10	1.53E-10	4.57E-10	4.21E-10	5.62E-10
Nickel	2.02E-07	1.20E-01	1.04E-06	8.49E-07	1.59E-06	6.94E-07	6.79E-07	7.39E-07	9.37E-09	9.36E-09	9.37E-09	1.74E-06	1.54E-06	2.34E-06
Selenium	1.15E-03	7.30E-03	4.66E-08	3.81E-08	7.14E-08	3.11E-08	3.04E-08	3.31E-08	5.70E-10	5.70E-10	5.70E-10	7.83E-08	6.91E-08	1.05E-07
Silver	5.17E-05	1.13E-02	6.88E-08	5.62E-08	1.05E-07	4.59E-08	4.49E-08	4.89E-08	8.84E-10	8.84E-10	8.85E-10	1.16E-07	1.02E-07	1.55E-07
Vanadium	7.63E-05	-	2.06E-06	1.68E-06	3.15E-06	1.37E-06	1.34E-06	1.46E-06	-	-	-	3.43E-06	3.02E-06	4.61E-06
Zinc	2.28E-03	8.87E+00	3.37E-06	2.75E-06	5.16E-06	2.25E-06	2.20E-06	2.39E-06	6.92E-07	6.92E-07	6.93E-07	6.31E-06	5.64E-06	8.24E-06
TCDD	3.74E-03	3.73E-05	3.54E-14	2.89E-14	5.42E-14	1.43E-10	1.40E-10	1.52E-10	2.91E-12	2.91E-12	2.91E-12	1.46E-10	1.43E-10	1.55E-10
Toluene	3.93E-11	3.87E-02	5.25E-08	4.29E-08	8.04E-08	9.63E-07	9.42E-07	1.02E-06	3.02E-09	3.02E-09	3.02E-09	1.02E-06	9.88E-07	1.11E-06
Malathion	5.83E-05	7.66E-06	1.36E-10	1.11E-10	2.08E-10	3.62E-10	3.54E-10	3.85E-10	5.98E-13	5.98E-13	5.98E-13	4.98E-10	4.65E-10	5.93E-10

Table 2m Exposure of Pollutants – Dropping from Ship at edge of ZID with Fishermen Diet (Scenario 3)

Pollutants	Conc. at edge of ZID (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.22E-04	8.88E-03	3.11E-09	2.54E-09	4.75E-09	2.07E-09	2.03E-09	2.21E-09	7.51E-10	7.51E-10	7.51E-10	5.93E-09	5.31E-09	7.71E-09
Arsenic	1.48E-03	1.69E-01	2.07E-08	1.69E-08	3.17E-08	1.38E-08	1.35E-08	1.47E-08	1.43E-08	1.43E-08	1.43E-08	4.88E-08	4.47E-08	6.07E-08
Barium	7.56E-03	4.79E+00	1.06E-07	8.63E-08	1.62E-07	7.06E-08	6.91E-08	7.51E-08	4.05E-07	4.05E-07	4.05E-07	5.81E-07	5.60E-07	6.42E-07
Chromium III	7.89E-04	1.50E-02	1.10E-08	9.00E-09	1.69E-08	7.36E-09	7.20E-09	7.83E-09	1.27E-09	1.27E-09	1.27E-09	1.97E-08	1.75E-08	2.60E-08
Copper	3.34E-03	2.37E+00	4.67E-08	3.81E-08	7.15E-08	3.12E-08	3.05E-08	3.32E-08	2.00E-07	2.00E-07	2.01E-07	2.78E-07	2.69E-07	3.05E-07
Lead	7.33E-04	6.60E-05	1.02E-08	8.37E-09	1.57E-08	6.84E-09	6.69E-09	7.28E-09	5.57E-12	5.57E-12	5.58E-12	1.71E-08	1.51E-08	2.30E-08
Mercury	6.59E-07	2.10E-03	9.21E-12	7.52E-12	1.41E-11	6.15E-12	6.02E-12	6.54E-12	1.78E-10	1.78E-10	1.78E-10	1.93E-10	1.91E-10	1.98E-10
Nickel	1.58E-03	1.23E-01	2.21E-08	1.80E-08	3.38E-08	1.48E-08	1.44E-08	1.57E-08	1.04E-08	1.04E-08	1.04E-08	4.73E-08	4.29E-08	6.00E-08
Selenium	5.71E-05	7.37E-03	7.99E-10	6.52E-10	1.22E-09	5.34E-10	5.22E-10	5.68E-10	6.23E-10	6.23E-10	6.23E-10	1.96E-09	1.80E-09	2.41E-09
Silver	1.35E-04	1.18E-02	1.89E-09	1.54E-09	2.89E-09	1.26E-09	1.23E-09	1.34E-09	1.00E-09	1.00E-09	1.00E-09	4.15E-09	3.77E-09	5.23E-09
Vanadium	2.70E-03	-	3.78E-08	3.08E-08	5.78E-08	2.52E-08	2.47E-08	2.68E-08	-	-	-	6.30E-08	5.55E-08	8.46E-08
Zinc	4.37E-03	9.00E+00	6.11E-08	4.99E-08	9.35E-08	4.08E-08	3.99E-08	4.34E-08	7.60E-07	7.60E-07	7.61E-07	8.62E-07	8.50E-07	8.98E-07
TCDD	4.02E-11	3.74E-05	5.63E-16	4.59E-16	8.61E-16	1.64E-12	1.60E-12	1.74E-12	3.16E-12	3.16E-12	3.16E-12	4.80E-12	4.76E-12	4.91E-12
Toluene	2.45E-04	4.19E-02	3.42E-09	2.80E-09	5.24E-09	5.61E-08	5.48E-08	5.96E-08	3.54E-09	3.54E-09	3.54E-09	6.30E-08	6.12E-08	6.84E-08
Malathion	6.33E-07	8.29E-06	8.85E-12	7.22E-12	1.35E-11	1.70E-11	1.66E-11	1.81E-11	7.00E-13	7.00E-13	7.01E-13	2.66E-11	2.46E-11	3.23E-11

Table 2n Exposure of Pollutants – Frequent Swimming at edge of Mixing Zone with Fisherman Diet (Scenario 3)

Pollutants	Conc. at edge of Mixing Zone (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.18E-04	8.88E-03	1.97E-07	1.60E-07	3.01E-07	1.31E-07	1.28E-07	1.40E-07	7.51E-10	7.51E-10	7.51E-10	3.29E-07	2.90E-07	4.41E-07
Arsenic	1.48E-03	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	1.43E-08	1.43E-08	1.43E-08	2.24E-06	1.98E-06	3.00E-06
Barium	7.44E-03	4.79E+00	6.71E-06	5.47E-06	1.03E-05	4.48E-06	4.38E-06	4.76E-06	4.05E-07	4.05E-07	4.05E-07	1.16E-05	1.03E-05	1.54E-05
Chromium III	6.67E-04	1.50E-02	6.02E-07	4.91E-07	9.21E-07	4.02E-07	3.93E-07	4.27E-07	1.27E-09	1.27E-09	1.27E-09	1.00E-06	8.86E-07	1.35E-06
Copper	2.97E-03	2.37E+00	2.68E-06	2.19E-06	4.10E-06	1.79E-06	1.75E-06	1.90E-06	2.00E-07	2.00E-07	2.01E-07	4.67E-06	4.14E-06	6.21E-06
Lead	7.30E-04	6.60E-05	6.58E-07	5.37E-07	1.01E-06	4.39E-07	4.30E-07	4.67E-07	5.57E-12	5.57E-12	5.58E-12	1.10E-06	9.67E-07	1.47E-06
Mercury	4.56E-07	2.10E-03	4.12E-10	3.36E-10	6.30E-10	2.75E-10	2.69E-10	2.92E-10	1.78E-10	1.78E-10	1.78E-10	8.64E-10	7.82E-10	1.10E-09
Nickel	1.39E-03	1.23E-01	1.25E-06	1.02E-06	1.92E-06	8.38E-07	8.19E-07	8.91E-07	1.04E-08	1.04E-08	1.04E-08	2.10E-06	1.85E-06	2.82E-06
Selenium	5.47E-05	7.37E-03	4.93E-08	4.03E-08	7.55E-08	3.30E-08	3.22E-08	3.50E-08	6.23E-10	6.23E-10	6.23E-10	8.29E-08	7.31E-08	1.11E-07
Silver	1.09E-04	1.18E-02	9.83E-08	8.02E-08	1.50E-07	6.56E-08	6.42E-08	6.98E-08	1.00E-09	1.00E-09	1.00E-09	1.65E-07	1.45E-07	2.21E-07
Vanadium	2.51E-03	-	2.27E-06	1.85E-06	3.47E-06	1.51E-06	1.48E-06	1.61E-06	-	-	-	3.78E-06	3.33E-06	5.08E-06
Zinc	4.09E-03	9.00E+00	3.69E-06	3.01E-06	5.64E-06	2.46E-06	2.41E-06	2.62E-06	7.60E-07	7.60E-07	7.61E-07	6.91E-06	6.18E-06	9.02E-06
TCDD	3.98E-11	3.74E-05	3.59E-14	2.93E-14	5.50E-14	1.45E-10	1.42E-10	1.54E-10	3.16E-12	3.16E-12	3.16E-12	1.48E-10	1.45E-10	1.58E-10
Toluene	1.62E-04	4.19E-02	1.46E-07	1.19E-07	2.24E-07	2.68E-06	2.62E-06	2.85E-06	3.54E-09	3.54E-09	3.54E-09	2.83E-06	2.74E-06	3.08E-06
Malathion	4.19E-07	8.29E-06	3.78E-10	3.08E-10	5.78E-10	1.01E-09	9.85E-10	1.07E-09	7.00E-13	7.00E-13	7.01E-13	1.39E-09	1.29E-09	1.65E-09

Table 2o Exposure of Pollutants – Frequent Swimming at the Nearest Beach with Fisherman Diet (Scenario 3)

Pollutants	Conc. at the Nearest Beach(mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.14E-04	8.88E-03	1.93E-07	1.58E-07	2.95E-07	1.29E-07	1.26E-07	1.37E-07	7.51E-10	7.51E-10	7.51E-10	3.23E-07	2.84E-07	4.33E-07
Arsenic	1.48E-03	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	1.43E-08	1.43E-08	1.43E-08	2.24E-06	1.98E-06	3.00E-06
Barium	7.31E-03	4.79E+00	6.59E-06	5.38E-06	1.01E-05	4.40E-06	4.31E-06	4.68E-06	4.05E-07	4.05E-07	4.05E-07	1.14E-05	1.01E-05	1.52E-05
Chromium III	5.49E-04	1.50E-02	4.95E-07	4.04E-07	7.57E-07	3.30E-07	3.23E-07	3.51E-07	1.27E-09	1.27E-09	1.27E-09	8.26E-07	7.28E-07	1.11E-06
Copper	2.61E-03	2.37E+00	2.35E-06	1.92E-06	3.60E-06	1.57E-06	1.54E-06	1.67E-06	2.00E-07	2.00E-07	2.01E-07	4.13E-06	3.66E-06	5.48E-06
Lead	7.26E-04	6.60E-05	6.55E-07	5.35E-07	1.00E-06	4.37E-07	4.28E-07	4.65E-07	5.57E-12	5.57E-12	5.58E-12	1.09E-06	9.62E-07	1.47E-06
Mercury	2.58E-07	2.10E-03	2.33E-10	1.90E-10	3.56E-10	1.55E-10	1.52E-10	1.65E-10	1.78E-10	1.78E-10	1.78E-10	5.66E-10	5.20E-10	6.99E-10
Nickel	1.21E-03	1.23E-01	1.09E-06	8.87E-07	1.66E-06	7.26E-07	7.10E-07	7.72E-07	1.04E-08	1.04E-08	1.04E-08	1.82E-06	1.61E-06	2.45E-06
Selenium	5.24E-05	7.37E-03	4.72E-08	3.85E-08	7.23E-08	3.15E-08	3.08E-08	3.35E-08	6.23E-10	6.23E-10	6.23E-10	7.94E-08	7.00E-08	1.06E-07
Silver	8.35E-05	1.18E-02	7.53E-08	6.15E-08	1.15E-07	5.03E-08	4.92E-08	5.35E-08	1.00E-09	1.00E-09	1.00E-09	1.27E-07	1.12E-07	1.70E-07
Vanadium	2.33E-03	-	2.10E-06	1.72E-06	3.22E-06	1.40E-06	1.37E-06	1.49E-06	-	-	-	3.51E-06	3.09E-06	4.71E-06
Zinc	3.81E-03	9.00E+00	3.44E-06	2.81E-06	5.26E-06	2.30E-06	2.25E-06	2.44E-06	7.60E-07	7.60E-07	7.61E-07	6.50E-06	5.81E-06	8.47E-06
TCDD	3.94E-11	3.74E-05	3.55E-14	2.90E-14	5.44E-14	1.44E-10	1.40E-10	1.53E-10	3.16E-12	3.16E-12	3.16E-12	1.47E-10	1.44E-10	1.56E-10
Toluene	8.11E-05	4.19E-02	7.31E-08	5.97E-08	1.12E-07	1.34E-06	1.31E-06	1.43E-06	3.54E-09	3.54E-09	3.54E-09	1.42E-06	1.37E-06	1.54E-06
Malathion	2.09E-07	8.29E-06	1.89E-10	1.54E-10	2.89E-10	5.04E-10	4.93E-10	5.36E-10	7.00E-13	7.00E-13	7.01E-13	6.93E-10	6.48E-10	8.26E-10

Table 2p Exposure of Pollutants – Dropping from Ship at edge of ZID with General Public Diet (Scenario 3)

Pollutants	Conc. at edge of ZID (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.22E-04	8.88E-03	3.11E-09	2.54E-09	4.75E-09	2.07E-09	2.03E-09	2.21E-09	3.70E-10	3.70E-10	3.71E-10	5.55E-09	4.93E-09	7.33E-09
Arsenic	1.48E-03	1.69E-01	2.07E-08	1.69E-08	3.17E-08	1.38E-08	1.35E-08	1.47E-08	7.04E-09	7.03E-09	7.04E-09	4.16E-08	3.74E-08	5.34E-08
Barium	7.56E-03	4.79E+00	1.06E-07	8.63E-08	1.62E-07	7.06E-08	6.91E-08	7.51E-08	2.00E-07	2.00E-07	2.00E-07	3.76E-07	3.55E-07	4.37E-07
Chromium III	7.89E-04	1.50E-02	1.10E-08	9.00E-09	1.69E-08	7.36E-09	7.20E-09	7.83E-09	6.25E-10	6.25E-10	6.25E-10	1.90E-08	1.68E-08	2.53E-08
Copper	3.34E-03	2.37E+00	4.67E-08	3.81E-08	7.15E-08	3.12E-08	3.05E-08	3.32E-08	9.89E-08	9.89E-08	9.90E-08	1.77E-07	1.68E-07	2.04E-07
Lead	7.33E-04	6.60E-05	1.02E-08	8.37E-09	1.57E-08	6.84E-09	6.69E-09	7.28E-09	2.75E-12	2.75E-12	2.75E-12	1.71E-08	1.51E-08	2.30E-08
Mercury	6.59E-07	2.10E-03	9.21E-12	7.52E-12	1.41E-11	6.15E-12	6.02E-12	6.54E-12	8.76E-11	8.76E-11	8.77E-11	1.03E-10	1.01E-10	1.08E-10
Nickel	1.58E-03	1.23E-01	2.21E-08	1.80E-08	3.38E-08	1.48E-08	1.44E-08	1.57E-08	5.14E-09	5.14E-09	5.14E-09	4.20E-08	3.76E-08	5.47E-08
Selenium	5.71E-05	7.37E-03	7.99E-10	6.52E-10	1.22E-09	5.34E-10	5.22E-10	5.68E-10	3.07E-10	3.07E-10	3.08E-10	1.64E-09	1.48E-09	2.10E-09
Silver	1.35E-04	1.18E-02	1.89E-09	1.54E-09	2.89E-09	1.26E-09	1.23E-09	1.34E-09	4.94E-10	4.93E-10	4.94E-10	3.64E-09	3.27E-09	4.72E-09
Vanadium	2.70E-03	-	3.78E-08	3.08E-08	5.78E-08	2.52E-08	2.47E-08	2.68E-08	-	-	-	6.30E-08	5.55E-08	8.46E-08
Zinc	4.37E-03	9.00E+00	6.11E-08	4.99E-08	9.35E-08	4.08E-08	3.99E-08	4.34E-08	3.75E-07	3.75E-07	3.75E-07	4.77E-07	4.65E-07	5.12E-07
TCDD	4.02E-11	3.74E-05	5.63E-16	4.59E-16	8.61E-16	1.64E-12	1.60E-12	1.74E-12	1.56E-12	1.56E-12	1.56E-12	3.20E-12	3.16E-12	3.30E-12
Toluene	2.45E-04	4.19E-02	3.42E-09	2.80E-09	5.24E-09	5.61E-08	5.48E-08	5.96E-08	1.75E-09	1.75E-09	1.75E-09	6.12E-08	5.94E-08	6.66E-08
Malathion	6.33E-07	8.29E-06	8.85E-12	7.22E-12	1.35E-11	1.70E-11	1.66E-11	1.81E-11	3.46E-13	3.45E-13	3.46E-13	2.62E-11	2.42E-11	3.20E-11

Table 2q Exposure of Pollutants – Frequent Swimming at edge of Mixing Zone with General Public Diet (Scenario 3)

Pollutants	Conc. at edge of Mixing Zone (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.18E-04	8.88E-03	1.97E-07	1.60E-07	3.01E-07	1.31E-07	1.28E-07	1.40E-07	3.70E-10	3.70E-10	3.71E-10	3.28E-07	2.89E-07	4.41E-07
Arsenic	1.48E-03	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	7.04E-09	7.03E-09	7.04E-09	2.23E-06	1.97E-06	3.00E-06
Barium	7.44E-03	4.79E+00	6.71E-06	5.47E-06	1.03E-05	4.48E-06	4.38E-06	4.76E-06	2.00E-07	2.00E-07	2.00E-07	1.14E-05	1.01E-05	1.52E-05
Chromium III	6.67E-04	1.50E-02	6.02E-07	4.91E-07	9.21E-07	4.02E-07	3.93E-07	4.27E-07	6.25E-10	6.25E-10	6.25E-10	1.00E-06	8.85E-07	1.35E-06
Copper	2.97E-03	2.37E+00	2.68E-06	2.19E-06	4.10E-06	1.79E-06	1.75E-06	1.90E-06	9.89E-08	9.89E-08	9.90E-08	4.57E-06	4.04E-06	6.10E-06
Lead	7.30E-04	6.60E-05	6.58E-07	5.37E-07	1.01E-06	4.39E-07	4.30E-07	4.67E-07	2.75E-12	2.75E-12	2.75E-12	1.10E-06	9.67E-07	1.47E-06
Mercury	4.56E-07	2.10E-03	4.12E-10	3.36E-10	6.30E-10	2.75E-10	2.69E-10	2.92E-10	8.76E-11	8.76E-11	8.77E-11	7.74E-10	6.92E-10	1.01E-09
Nickel	1.39E-03	1.23E-01	1.25E-06	1.02E-06	1.92E-06	8.38E-07	8.19E-07	8.91E-07	5.14E-09	5.14E-09	5.14E-09	2.10E-06	1.85E-06	2.82E-06
Selenium	5.47E-05	7.37E-03	4.93E-08	4.03E-08	7.55E-08	3.30E-08	3.22E-08	3.50E-08	3.07E-10	3.07E-10	3.08E-10	8.26E-08	7.28E-08	1.11E-07
Silver	1.09E-04	1.18E-02	9.83E-08	8.02E-08	1.50E-07	6.56E-08	6.42E-08	6.98E-08	4.94E-10	4.93E-10	4.94E-10	1.64E-07	1.45E-07	2.21E-07
Vanadium	2.51E-03	-	2.27E-06	1.85E-06	3.47E-06	1.51E-06	1.48E-06	1.61E-06	-	-	-	3.78E-06	3.33E-06	5.08E-06
Zinc	4.09E-03	9.00E+00	3.69E-06	3.01E-06	5.64E-06	2.46E-06	2.41E-06	2.62E-06	3.75E-07	3.75E-07	3.75E-07	6.52E-06	5.79E-06	8.64E-06
TCDD	3.98E-11	3.74E-05	3.59E-14	2.93E-14	5.50E-14	1.45E-10	1.42E-10	1.54E-10	1.56E-12	1.56E-12	1.56E-12	1.47E-10	1.44E-10	1.56E-10
Toluene	1.62E-04	4.19E-02	1.46E-07	1.19E-07	2.24E-07	2.68E-06	2.62E-06	2.85E-06	1.75E-09	1.75E-09	1.75E-09	2.83E-06	2.74E-06	3.08E-06
Malathion	4.19E-07	8.29E-06	3.78E-10	3.08E-10	5.78E-10	1.01E-09	9.85E-10	1.07E-09	3.46E-13	3.45E-13	3.46E-13	1.39E-09	1.29E-09	1.65E-09

Table 2r Exposure of Pollutants – Frequent Swimming at the Nearest Beach with General Public Diet (Scenario 3)

Pollutants	Conc. at the Nearest Beach(mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.14E-04	8.88E-03	1.93E-07	1.58E-07	2.95E-07	1.29E-07	1.26E-07	1.37E-07	3.70E-10	3.70E-10	3.71E-10	3.22E-07	2.84E-07	4.33E-07
Arsenic	1.48E-03	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	7.04E-09	7.03E-09	7.04E-09	2.23E-06	1.97E-06	3.00E-06
Barium	7.31E-03	4.79E+00	6.59E-06	5.38E-06	1.01E-05	4.40E-06	4.31E-06	4.68E-06	2.00E-07	2.00E-07	2.00E-07	1.12E-05	9.89E-06	1.50E-05
Chromium III	5.49E-04	1.50E-02	4.95E-07	4.04E-07	7.57E-07	3.30E-07	3.23E-07	3.51E-07	6.25E-10	6.25E-10	6.25E-10	8.26E-07	7.28E-07	1.11E-06
Copper	2.61E-03	2.37E+00	2.35E-06	1.92E-06	3.60E-06	1.57E-06	1.54E-06	1.67E-06	9.89E-08	9.89E-08	9.90E-08	4.03E-06	3.56E-06	5.37E-06
Lead	7.26E-04	6.60E-05	6.55E-07	5.35E-07	1.00E-06	4.37E-07	4.28E-07	4.65E-07	2.75E-12	2.75E-12	2.75E-12	1.09E-06	9.62E-07	1.47E-06
Mercury	2.58E-07	2.10E-03	2.33E-10	1.90E-10	3.56E-10	1.55E-10	1.52E-10	1.65E-10	8.76E-11	8.76E-11	8.77E-11	4.76E-10	4.30E-10	6.09E-10
Nickel	1.21E-03	1.23E-01	1.09E-06	8.87E-07	1.66E-06	7.26E-07	7.10E-07	7.72E-07	5.14E-09	5.14E-09	5.14E-09	1.82E-06	1.60E-06	2.44E-06
Selenium	5.24E-05	7.37E-03	4.72E-08	3.85E-08	7.23E-08	3.15E-08	3.08E-08	3.35E-08	3.07E-10	3.07E-10	3.08E-10	7.91E-08	6.97E-08	1.06E-07
Silver	8.35E-05	1.18E-02	7.53E-08	6.15E-08	1.15E-07	5.03E-08	4.92E-08	5.35E-08	4.94E-10	4.93E-10	4.94E-10	1.26E-07	1.11E-07	1.69E-07
Vanadium	2.33E-03	-	2.10E-06	1.72E-06	3.22E-06	1.40E-06	1.37E-06	1.49E-06	-	-	-	3.51E-06	3.09E-06	4.71E-06
Zinc	3.81E-03	9.00E+00	3.44E-06	2.81E-06	5.26E-06	2.30E-06	2.25E-06	2.44E-06	3.75E-07	3.75E-07	3.75E-07	6.11E-06	5.43E-06	8.08E-06
TCDD	3.94E-11	3.74E-05	3.55E-14	2.90E-14	5.44E-14	1.44E-10	1.40E-10	1.53E-10	1.56E-12	1.56E-12	1.56E-12	1.45E-10	1.42E-10	1.54E-10
Toluene	8.11E-05	4.19E-02	7.31E-08	5.97E-08	1.12E-07	1.34E-06	1.31E-06	1.43E-06	1.75E-09	1.75E-09	1.75E-09	1.42E-06	1.37E-06	1.54E-06
Malathion	2.09E-07	8.29E-06	1.89E-10	1.54E-10	2.89E-10	5.04E-10	4.93E-10	5.36E-10	3.46E-13	3.45E-13	3.46E-13	6.93E-10	6.47E-10	8.25E-10

Table 2s Exposure of Pollutants – Dropping from Ship at edge of ZID with Fishermen Diet (Scenario 4)

Pollutants	Conc. at edge of ZID (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.23E-04	8.92E-03	3.12E-09	2.54E-09	4.77E-09	2.08E-09	2.04E-09	2.21E-09	1.52E-09	1.52E-09	1.52E-09	6.72E-09	6.10E-09	8.51E-09
Arsenic	1.48E-03	1.69E-01	2.07E-08	1.69E-08	3.17E-08	1.38E-08	1.35E-08	1.47E-08	2.88E-08	2.88E-08	2.88E-08	6.33E-08	5.92E-08	7.52E-08
Barium	7.59E-03	4.80E+00	1.06E-07	8.66E-08	1.62E-07	7.09E-08	6.93E-08	7.54E-08	8.20E-07	8.20E-07	8.21E-07	9.97E-07	9.76E-07	1.06E-06
Chromium III	8.12E-04	1.54E-02	1.14E-08	9.27E-09	1.74E-08	7.58E-09	7.42E-09	8.06E-09	2.64E-09	2.63E-09	2.64E-09	2.16E-08	1.93E-08	2.81E-08
Copper	3.41E-03	2.42E+00	4.77E-08	3.89E-08	7.30E-08	3.19E-08	3.12E-08	3.39E-08	4.14E-07	4.14E-07	4.14E-07	4.93E-07	4.84E-07	5.21E-07
Lead	7.34E-04	6.60E-05	1.03E-08	8.37E-09	1.57E-08	6.85E-09	6.70E-09	7.29E-09	1.13E-11	1.13E-11	1.13E-11	1.71E-08	1.51E-08	2.30E-08
Mercury	6.98E-07	2.23E-03	9.76E-12	7.97E-12	1.49E-11	6.52E-12	6.37E-12	6.93E-12	3.80E-10	3.80E-10	3.80E-10	3.97E-10	3.95E-10	4.02E-10
Nickel	1.62E-03	1.26E-01	2.26E-08	1.85E-08	3.46E-08	1.51E-08	1.48E-08	1.61E-08	2.15E-08	2.15E-08	2.16E-08	5.93E-08	5.48E-08	7.22E-08
Selenium	5.76E-05	7.43E-03	8.06E-10	6.58E-10	1.23E-09	5.38E-10	5.26E-10	5.72E-10	1.27E-09	1.27E-09	1.27E-09	2.61E-09	2.45E-09	3.08E-09
Silver	1.40E-04	1.23E-02	1.96E-09	1.60E-09	3.00E-09	1.31E-09	1.28E-09	1.39E-09	2.10E-09	2.10E-09	2.10E-09	5.36E-09	4.97E-09	6.49E-09
Vanadium	2.74E-03	-	3.83E-08	3.12E-08	5.86E-08	2.55E-08	2.50E-08	2.72E-08	-	-	-	6.38E-08	5.62E-08	8.57E-08
Zinc	4.42E-03	9.11E+00	6.18E-08	5.05E-08	9.46E-08	4.13E-08	4.04E-08	4.39E-08	1.56E-06	1.56E-06	1.56E-06	1.66E-06	1.65E-06	1.70E-06
TCDD	4.03E-11	3.75E-05	5.64E-16	4.60E-16	8.63E-16	1.64E-12	1.61E-12	1.75E-12	6.40E-12	6.40E-12	6.40E-12	8.04E-12	8.00E-12	8.15E-12
Toluene	2.61E-04	4.46E-02	3.65E-09	2.98E-09	5.58E-09	5.97E-08	5.84E-08	6.35E-08	7.62E-09	7.62E-09	7.62E-09	7.10E-08	6.90E-08	7.67E-08
Malathion	6.74E-07	8.83E-06	9.42E-12	7.69E-12	1.44E-11	1.81E-11	1.77E-11	1.93E-11	1.51E-12	1.51E-12	1.51E-12	2.91E-11	2.69E-11	3.52E-11

Table 2t Exposure of Pollutants – Frequent Swimming at edge of Mixing Zone with Fishermen Diet (Scenario 4)

Pollutants	Conc. at edge of Mixing Zone (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.19E-04	8.92E-03	1.98E-07	1.61E-07	3.03E-07	1.32E-07	1.29E-07	1.40E-07	1.52E-09	1.52E-09	1.52E-09	3.31E-07	2.92E-07	4.45E-07
Arsenic	1.48E-03	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	2.88E-08	2.88E-08	2.88E-08	2.25E-06	1.99E-06	3.02E-06
Barium	7.48E-03	4.80E+00	6.74E-06	5.50E-06	1.03E-05	4.50E-06	4.40E-06	4.79E-06	8.20E-07	8.20E-07	8.21E-07	1.21E-05	1.07E-05	1.59E-05
Chromium III	7.05E-04	1.54E-02	6.35E-07	5.19E-07	9.72E-07	4.24E-07	4.15E-07	4.51E-07	2.64E-09	2.63E-09	2.64E-09	1.06E-06	9.36E-07	1.43E-06
Copper	3.09E-03	2.42E+00	2.78E-06	2.27E-06	4.26E-06	1.86E-06	1.82E-06	1.98E-06	4.14E-07	4.14E-07	4.14E-07	5.05E-06	4.50E-06	6.65E-06
Lead	7.31E-04	6.60E-05	6.59E-07	5.38E-07	1.01E-06	4.40E-07	4.30E-07	4.68E-07	1.13E-11	1.13E-11	1.13E-11	1.10E-06	9.68E-07	1.48E-06
Mercury	5.18E-07	2.23E-03	4.67E-10	3.82E-10	7.16E-10	3.12E-10	3.05E-10	3.32E-10	3.80E-10	3.80E-10	3.80E-10	1.16E-09	1.07E-09	1.43E-09
Nickel	1.45E-03	1.26E-01	1.31E-06	1.07E-06	2.00E-06	8.73E-07	8.53E-07	9.28E-07	2.15E-08	2.15E-08	2.16E-08	2.20E-06	1.94E-06	2.95E-06
Selenium	5.55E-05	7.43E-03	5.00E-08	4.08E-08	7.66E-08	3.34E-08	3.27E-08	3.55E-08	1.27E-09	1.27E-09	1.27E-09	8.47E-08	7.48E-08	1.13E-07
Silver	1.17E-04	1.23E-02	1.05E-07	8.61E-08	1.61E-07	7.04E-08	6.89E-08	7.49E-08	2.10E-09	2.10E-09	2.10E-09	1.78E-07	1.57E-07	2.38E-07
Vanadium	2.57E-03	-	2.32E-06	1.89E-06	3.55E-06	1.55E-06	1.51E-06	1.65E-06	-	-	-	3.87E-06	3.41E-06	5.19E-06
Zinc	4.17E-03	9.11E+00	3.76E-06	3.07E-06	5.76E-06	2.51E-06	2.46E-06	2.67E-06	1.56E-06	1.56E-06	1.56E-06	7.83E-06	7.09E-06	9.99E-06
TCDD	4.00E-11	3.75E-05	3.60E-14	2.94E-14	5.51E-14	1.46E-10	1.42E-10	1.55E-10	6.40E-12	6.40E-12	6.40E-12	1.52E-10	1.49E-10	1.61E-10
Toluene	1.88E-04	4.46E-02	1.69E-07	1.38E-07	2.59E-07	3.10E-06	3.03E-06	3.30E-06	7.62E-09	7.62E-09	7.62E-09	3.28E-06	3.18E-06	3.56E-06
Malathion	4.84E-07	8.83E-06	4.37E-10	3.57E-10	6.69E-10	1.16E-09	1.14E-09	1.24E-09	1.51E-12	1.51E-12	1.51E-12	1.60E-09	1.50E-09	1.91E-09

Table 2u Exposure of Pollutants – Frequent Swimming at the Nearest Beach with Fishermen Diet (Scenario 4)

Pollutants	Conc. at the Nearest Beach(mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.15E-04	8.92E-03	1.94E-07	1.58E-07	2.96E-07	1.29E-07	1.26E-07	1.37E-07	1.52E-09	1.52E-09	1.52E-09	3.24E-07	2.86E-07	4.35E-07
Arsenic	1.48E-03	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	2.88E-08	2.88E-08	2.88E-08	2.25E-06	1.99E-06	3.02E-06
Barium	7.34E-03	4.80E+00	6.61E-06	5.40E-06	1.01E-05	4.42E-06	4.32E-06	4.70E-06	8.20E-07	8.20E-07	8.21E-07	1.19E-05	1.05E-05	1.56E-05
Chromium III	5.69E-04	1.54E-02	5.13E-07	4.19E-07	7.86E-07	3.43E-07	3.35E-07	3.65E-07	2.64E-09	2.63E-09	2.64E-09	8.59E-07	7.57E-07	1.15E-06
Copper	2.67E-03	2.42E+00	2.41E-06	1.97E-06	3.69E-06	1.61E-06	1.57E-06	1.71E-06	4.14E-07	4.14E-07	4.14E-07	4.44E-06	3.96E-06	5.82E-06
Lead	7.27E-04	6.60E-05	6.55E-07	5.35E-07	1.00E-06	4.38E-07	4.28E-07	4.65E-07	1.13E-11	1.13E-11	1.13E-11	1.09E-06	9.63E-07	1.47E-06
Mercury	2.93E-07	2.23E-03	2.64E-10	2.16E-10	4.04E-10	1.76E-10	1.72E-10	1.88E-10	3.80E-10	3.80E-10	3.80E-10	8.21E-10	7.68E-10	9.72E-10
Nickel	1.24E-03	1.26E-01	1.12E-06	9.11E-07	1.71E-06	7.45E-07	7.29E-07	7.93E-07	2.15E-08	2.15E-08	2.16E-08	1.88E-06	1.66E-06	2.52E-06
Selenium	5.28E-05	7.43E-03	4.76E-08	3.88E-08	7.28E-08	3.18E-08	3.11E-08	3.38E-08	1.27E-09	1.27E-09	1.27E-09	8.06E-08	7.12E-08	1.08E-07
Silver	8.79E-05	1.23E-02	7.93E-08	6.47E-08	1.21E-07	5.29E-08	5.18E-08	5.63E-08	2.10E-09	2.10E-09	2.10E-09	1.34E-07	1.19E-07	1.80E-07
Vanadium	2.36E-03	-	2.13E-06	1.74E-06	3.26E-06	1.42E-06	1.39E-06	1.51E-06	-	-	-	3.55E-06	3.13E-06	4.78E-06
Zinc	3.86E-03	9.11E+00	3.48E-06	2.84E-06	5.33E-06	2.33E-06	2.27E-06	2.47E-06	1.56E-06	1.56E-06	1.56E-06	7.36E-06	6.67E-06	9.36E-06
TCDD	3.95E-11	3.75E-05	3.56E-14	2.91E-14	5.45E-14	1.44E-10	1.41E-10	1.53E-10	6.40E-12	6.40E-12	6.40E-12	1.50E-10	1.47E-10	1.60E-10
Toluene	9.52E-05	4.46E-02	8.59E-08	7.01E-08	1.31E-07	1.57E-06	1.54E-06	1.67E-06	7.62E-09	7.62E-09	7.62E-09	1.67E-06	1.62E-06	1.81E-06
Malathion	2.46E-07	8.83E-06	2.22E-10	1.81E-10	3.40E-10	5.92E-10	5.79E-10	6.29E-10	1.51E-12	1.51E-12	1.51E-12	8.15E-10	7.61E-10	9.70E-10

Table 2v Exposure of Pollutants – Dropping from Ship at edge of ZID with General Public Diet (Scenario 4)

Pollutants	Conc. at edge of ZID (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.23E-04	8.92E-03	3.12E-09	2.54E-09	4.77E-09	2.08E-09	2.04E-09	2.21E-09	7.51E-10	7.51E-10	7.52E-10	5.95E-09	5.33E-09	7.74E-09
Arsenic	1.48E-03	1.69E-01	2.07E-08	1.69E-08	3.17E-08	1.38E-08	1.35E-08	1.47E-08	1.42E-08	1.42E-08	1.42E-08	4.87E-08	4.46E-08	6.06E-08
Barium	7.59E-03	4.80E+00	1.06E-07	8.66E-08	1.62E-07	7.09E-08	6.93E-08	7.54E-08	4.05E-07	4.05E-07	4.05E-07	5.82E-07	5.61E-07	6.43E-07
Chromium III	8.12E-04	1.54E-02	1.14E-08	9.27E-09	1.74E-08	7.58E-09	7.42E-09	8.06E-09	1.30E-09	1.30E-09	1.30E-09	2.02E-08	1.80E-08	2.67E-08
Copper	3.41E-03	2.42E+00	4.77E-08	3.89E-08	7.30E-08	3.19E-08	3.12E-08	3.39E-08	2.04E-07	2.04E-07	2.04E-07	2.84E-07	2.74E-07	3.11E-07
Lead	7.34E-04	6.60E-05	1.03E-08	8.37E-09	1.57E-08	6.85E-09	6.70E-09	7.29E-09	5.56E-12	5.56E-12	5.57E-12	1.71E-08	1.51E-08	2.30E-08
Mercury	6.98E-07	2.23E-03	9.76E-12	7.97E-12	1.49E-11	6.52E-12	6.37E-12	6.93E-12	1.88E-10	1.88E-10	1.88E-10	2.04E-10	2.02E-10	2.10E-10
Nickel	1.62E-03	1.26E-01	2.26E-08	1.85E-08	3.46E-08	1.51E-08	1.48E-08	1.61E-08	1.06E-08	1.06E-08	1.06E-08	4.84E-08	4.39E-08	6.13E-08
Selenium	5.76E-05	7.43E-03	8.06E-10	6.58E-10	1.23E-09	5.38E-10	5.26E-10	5.72E-10	6.26E-10	6.26E-10	6.27E-10	1.97E-09	1.81E-09	2.43E-09
Silver	1.40E-04	1.23E-02	1.96E-09	1.60E-09	3.00E-09	1.31E-09	1.28E-09	1.39E-09	1.03E-09	1.03E-09	1.04E-09	4.30E-09	3.91E-09	5.42E-09
Vanadium	2.74E-03	-	3.83E-08	3.12E-08	5.86E-08	2.55E-08	2.50E-08	2.72E-08	-	-	-	6.38E-08	5.62E-08	8.57E-08
Zinc	4.42E-03	9.11E+00	6.18E-08	5.05E-08	9.46E-08	4.13E-08	4.04E-08	4.39E-08	7.68E-07	7.67E-07	7.68E-07	8.71E-07	8.58E-07	9.07E-07
TCDD	4.03E-11	3.75E-05	5.64E-16	4.60E-16	8.63E-16	1.64E-12	1.61E-12	1.75E-12	3.16E-12	3.16E-12	3.16E-12	4.80E-12	4.76E-12	4.91E-12
Toluene	2.61E-04	4.46E-02	3.65E-09	2.98E-09	5.58E-09	5.97E-08	5.84E-08	6.35E-08	3.76E-09	3.76E-09	3.76E-09	6.71E-08	6.52E-08	7.29E-08
Malathion	6.74E-07	8.83E-06	9.42E-12	7.69E-12	1.44E-11	1.81E-11	1.77E-11	1.93E-11	7.44E-13	7.44E-13	7.44E-13	2.83E-11	2.62E-11	3.44E-11

Table 2w Exposure of Pollutants – Frequent Swimming at edge of Mixing Zone with General Public Diet (Scenario 4)

Pollutants	Conc. at edge of Mixing Zone (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.19E-04	8.92E-03	1.98E-07	1.61E-07	3.03E-07	1.32E-07	1.29E-07	1.40E-07	7.51E-10	7.51E-10	7.52E-10	3.31E-07	2.91E-07	4.44E-07
Arsenic	1.48E-03	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	1.42E-08	1.42E-08	1.42E-08	2.24E-06	1.98E-06	3.00E-06
Barium	7.48E-03	4.80E+00	6.74E-06	5.50E-06	1.03E-05	4.50E-06	4.40E-06	4.79E-06	4.05E-07	4.05E-07	4.05E-07	1.16E-05	1.03E-05	1.55E-05
Chromium III	7.05E-04	1.54E-02	6.35E-07	5.19E-07	9.72E-07	4.24E-07	4.15E-07	4.51E-07	1.30E-09	1.30E-09	1.30E-09	1.06E-06	9.35E-07	1.42E-06
Copper	3.09E-03	2.42E+00	2.78E-06	2.27E-06	4.26E-06	1.86E-06	1.82E-06	1.98E-06	2.04E-07	2.04E-07	2.04E-07	4.84E-06	4.29E-06	6.44E-06
Lead	7.31E-04	6.60E-05	6.59E-07	5.38E-07	1.01E-06	4.40E-07	4.30E-07	4.68E-07	5.56E-12	5.56E-12	5.57E-12	1.10E-06	9.68E-07	1.48E-06
Mercury	5.18E-07	2.23E-03	4.67E-10	3.82E-10	7.16E-10	3.12E-10	3.05E-10	3.32E-10	1.88E-10	1.88E-10	1.88E-10	9.67E-10	8.74E-10	1.24E-09
Nickel	1.45E-03	1.26E-01	1.31E-06	1.07E-06	2.00E-06	8.73E-07	8.53E-07	9.28E-07	1.06E-08	1.06E-08	1.06E-08	2.19E-06	1.93E-06	2.94E-06
Selenium	5.55E-05	7.43E-03	5.00E-08	4.08E-08	7.66E-08	3.34E-08	3.27E-08	3.55E-08	6.26E-10	6.26E-10	6.27E-10	8.40E-08	7.41E-08	1.13E-07
Silver	1.17E-04	1.23E-02	1.05E-07	8.61E-08	1.61E-07	7.04E-08	6.89E-08	7.49E-08	1.03E-09	1.03E-09	1.04E-09	1.77E-07	1.56E-07	2.37E-07
Vanadium	2.57E-03	-	2.32E-06	1.89E-06	3.55E-06	1.55E-06	1.51E-06	1.65E-06	-	-	-	3.87E-06	3.41E-06	5.19E-06
Zinc	4.17E-03	9.11E+00	3.76E-06	3.07E-06	5.76E-06	2.51E-06	2.46E-06	2.67E-06	7.68E-07	7.67E-07	7.68E-07	7.04E-06	6.30E-06	9.20E-06
TCDD	4.00E-11	3.75E-05	3.60E-14	2.94E-14	5.51E-14	1.46E-10	1.42E-10	1.55E-10	3.16E-12	3.16E-12	3.16E-12	1.49E-10	1.46E-10	1.58E-10
Toluene	1.88E-04	4.46E-02	1.69E-07	1.38E-07	2.59E-07	3.10E-06	3.03E-06	3.30E-06	3.76E-09	3.76E-09	3.76E-09	3.27E-06	3.17E-06	3.56E-06
Malathion	4.84E-07	8.83E-06	4.37E-10	3.57E-10	6.69E-10	1.16E-09	1.14E-09	1.24E-09	7.44E-13	7.44E-13	7.44E-13	1.60E-09	1.50E-09	1.91E-09

Table 2x Exposure of Pollutants – Frequent Swimming at the Nearest Beach with General Public Diet (Scenario 4)

Pollutants	Conc. at the Nearest Beach(mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.15E-04	8.92E-03	1.94E-07	1.58E-07	2.96E-07	1.29E-07	1.26E-07	1.37E-07	7.51E-10	7.51E-10	7.52E-10	3.24E-07	2.85E-07	4.35E-07
Arsenic	1.48E-03	1.69E-01	1.33E-06	1.09E-06	2.04E-06	8.91E-07	8.72E-07	9.48E-07	1.42E-08	1.42E-08	1.42E-08	2.24E-06	1.98E-06	3.00E-06
Barium	7.34E-03	4.80E+00	6.61E-06	5.40E-06	1.01E-05	4.42E-06	4.32E-06	4.70E-06	4.05E-07	4.05E-07	4.05E-07	1.14E-05	1.01E-05	1.52E-05
Chromium III	5.69E-04	1.54E-02	5.13E-07	4.19E-07	7.86E-07	3.43E-07	3.35E-07	3.65E-07	1.30E-09	1.30E-09	1.30E-09	8.58E-07	7.56E-07	1.15E-06
Copper	2.67E-03	2.42E+00	2.41E-06	1.97E-06	3.69E-06	1.61E-06	1.57E-06	1.71E-06	2.04E-07	2.04E-07	2.04E-07	4.23E-06	3.75E-06	5.61E-06
Lead	7.27E-04	6.60E-05	6.55E-07	5.35E-07	1.00E-06	4.38E-07	4.28E-07	4.65E-07	5.56E-12	5.56E-12	5.57E-12	1.09E-06	9.63E-07	1.47E-06
Mercury	2.93E-07	2.23E-03	2.64E-10	2.16E-10	4.04E-10	1.76E-10	1.72E-10	1.88E-10	1.88E-10	1.88E-10	1.88E-10	6.28E-10	5.76E-10	7.79E-10
Nickel	1.24E-03	1.26E-01	1.12E-06	9.11E-07	1.71E-06	7.45E-07	7.29E-07	7.93E-07	1.06E-08	1.06E-08	1.06E-08	1.87E-06	1.65E-06	2.51E-06
Selenium	5.28E-05	7.43E-03	4.76E-08	3.88E-08	7.28E-08	3.18E-08	3.11E-08	3.38E-08	6.26E-10	6.26E-10	6.27E-10	8.00E-08	7.06E-08	1.07E-07
Silver	8.79E-05	1.23E-02	7.93E-08	6.47E-08	1.21E-07	5.29E-08	5.18E-08	5.63E-08	1.03E-09	1.03E-09	1.04E-09	1.33E-07	1.18E-07	1.79E-07
Vanadium	2.36E-03	-	2.13E-06	1.74E-06	3.26E-06	1.42E-06	1.39E-06	1.51E-06	-	-	-	3.55E-06	3.13E-06	4.78E-06
Zinc	3.86E-03	9.11E+00	3.48E-06	2.84E-06	5.33E-06	2.33E-06	2.27E-06	2.47E-06	7.68E-07	7.67E-07	7.68E-07	6.58E-06	5.88E-06	8.57E-06
TCDD	3.95E-11	3.75E-05	3.56E-14	2.91E-14	5.45E-14	1.44E-10	1.41E-10	1.53E-10	3.16E-12	3.16E-12	3.16E-12	1.47E-10	1.44E-10	1.56E-10
Toluene	9.52E-05	4.46E-02	8.59E-08	7.01E-08	1.31E-07	1.57E-06	1.54E-06	1.67E-06	3.76E-09	3.76E-09	3.76E-09	1.66E-06	1.61E-06	1.81E-06
Malathion	2.46E-07	8.83E-06	2.22E-10	1.81E-10	3.40E-10	5.92E-10	5.79E-10	6.29E-10	7.44E-13	7.44E-13	7.44E-13	8.14E-10	7.61E-10	9.70E-10

Table 2y Exposure of Pollutants – Dropping from Ship at edge of ZID with Fishermen Diet (Scenario 5)

Pollutants	Conc. at the edge of ZID (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.19E-04	8.77E-03	3.06E-09	2.50E-09	4.69E-09	2.05E-09	2.00E-09	2.18E-09	1.32E-09	1.50E-09	1.50E-09	6.44E-09	6.00E-09	8.37E-09
Barium	7.57E-03	4.79E+00	1.06E-07	8.64E-08	1.62E-07	7.07E-08	6.91E-08	7.51E-08	7.24E-07	8.18E-07	8.19E-07	9.00E-07	9.73E-07	1.06E-06
Chromium III	6.03E-04	1.15E-02	8.43E-09	6.88E-09	1.29E-08	5.63E-09	5.51E-09	5.99E-09	1.73E-09	1.96E-09	1.96E-09	1.58E-08	1.43E-08	2.08E-08
Copper	2.42E-03	1.72E+00	3.38E-08	2.76E-08	5.18E-08	2.26E-08	2.21E-08	2.40E-08	2.59E-07	2.93E-07	2.93E-07	3.16E-07	3.43E-07	3.69E-07
Nickel	1.48E-03	1.16E-01	2.07E-08	1.69E-08	3.17E-08	1.38E-08	1.35E-08	1.47E-08	1.75E-08	1.97E-08	1.98E-08	5.21E-08	5.02E-08	6.62E-08
Selenium	5.20E-05	6.70E-03	7.27E-10	5.93E-10	1.11E-09	4.85E-10	4.74E-10	5.16E-10	1.01E-09	1.14E-09	1.15E-09	2.22E-09	2.21E-09	2.77E-09
Silver	6.50E-05	5.70E-03	9.08E-10	7.42E-10	1.39E-09	6.07E-10	5.93E-10	6.45E-10	8.61E-10	9.73E-10	9.74E-10	2.38E-09	2.31E-09	3.01E-09
Vanadium	2.77E-03	-	3.87E-08	3.16E-08	5.92E-08	2.58E-08	2.53E-08	2.75E-08	-	-	-	6.45E-08	5.68E-08	8.67E-08
Zinc	3.72E-03	7.66E+00	5.20E-08	4.25E-08	7.96E-08	3.47E-08	3.40E-08	3.69E-08	1.16E-06	1.31E-06	1.31E-06	1.24E-06	1.39E-06	1.43E-06
TCDD	3.95E-11	3.67E-05	5.52E-16	4.51E-16	8.45E-16	1.61E-12	1.57E-12	1.71E-12	5.54E-12	6.27E-12	6.27E-12	7.16E-12	7.84E-12	7.98E-12
Malathion	3.26E-07	4.27E-06	4.56E-12	3.72E-12	6.98E-12	8.77E-12	8.58E-12	9.33E-12	6.46E-13	7.30E-13	7.30E-13	1.40E-11	1.30E-11	1.70E-11

Table 2z Exposure of Pollutants – Frequent Swimming at edge of Mixing Zone with Fishermen Diet (Scenario 5)

Pollutants	Conc. at the edge of Mixing Zone (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.17E-04	8.77E-03	1.95E-07	1.59E-07	2.99E-07	1.30E-07	1.28E-07	1.39E-07	1.32E-09	1.50E-09	1.50E-09	3.27E-07	2.88E-07	4.39E-07
Barium	7.46E-03	4.79E+00	6.73E-06	5.49E-06	1.03E-05	4.49E-06	4.39E-06	4.78E-06	7.24E-07	8.18E-07	8.19E-07	1.19E-05	1.07E-05	1.59E-05
Chromium III	5.54E-04	1.15E-02	5.00E-07	4.08E-07	7.65E-07	3.34E-07	3.26E-07	3.55E-07	1.73E-09	1.96E-09	1.96E-09	8.35E-07	7.36E-07	1.12E-06
Copper	2.37E-03	1.72E+00	2.14E-06	1.75E-06	3.27E-06	1.43E-06	1.40E-06	1.52E-06	2.59E-07	2.93E-07	2.93E-07	3.82E-06	3.43E-06	5.08E-06
Nickel	1.35E-03	1.16E-01	1.22E-06	9.96E-07	1.87E-06	8.14E-07	7.96E-07	8.66E-07	1.75E-08	1.97E-08	1.98E-08	2.05E-06	1.81E-06	2.75E-06
Selenium	5.14E-05	6.70E-03	4.64E-08	3.78E-08	7.09E-08	3.10E-08	3.03E-08	3.29E-08	1.01E-09	1.14E-09	1.15E-09	7.83E-08	6.93E-08	1.05E-07
Silver	6.30E-05	5.70E-03	5.68E-08	4.64E-08	8.69E-08	3.79E-08	3.71E-08	4.03E-08	8.61E-10	9.73E-10	9.74E-10	9.56E-08	8.44E-08	1.28E-07
Vanadium	2.59E-03	-	2.34E-06	1.91E-06	3.58E-06	1.56E-06	1.53E-06	1.66E-06	-	-	-	3.90E-06	3.44E-06	5.24E-06
Zinc	3.67E-03	7.66E+00	3.31E-06	2.70E-06	5.06E-06	2.21E-06	2.16E-06	2.35E-06	1.16E-06	1.31E-06	1.31E-06	6.68E-06	6.17E-06	8.72E-06
TCDD	3.94E-11	3.67E-05	3.55E-14	2.90E-14	5.43E-14	1.43E-10	1.40E-10	1.53E-10	5.54E-12	6.27E-12	6.27E-12	1.49E-10	1.47E-10	1.59E-10
Malathion	2.34E-07	4.27E-06	2.11E-10	1.73E-10	3.23E-10	5.64E-10	5.51E-10	6.00E-10	6.46E-13	7.30E-13	7.30E-13	7.76E-10	7.25E-10	9.24E-10

Table 2aa Exposure of Pollutants – Frequent Swimming at the Nearest Beach with Fishermen Diet (Scenario 5)

Pollutants	Conc. at the Nearest Beach (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.13E-04	8.77E-03	1.92E-07	1.57E-07	2.94E-07	1.28E-07	1.26E-07	1.37E-07	1.32E-09	1.50E-09	1.50E-09	3.22E-07	2.84E-07	4.33E-07
Barium	7.33E-03	4.79E+00	6.61E-06	5.39E-06	1.01E-05	4.41E-06	4.31E-06	4.69E-06	7.24E-07	8.18E-07	8.19E-07	1.17E-05	1.05E-05	1.56E-05
Chromium III	4.93E-04	1.15E-02	4.45E-07	3.63E-07	6.81E-07	2.97E-07	2.90E-07	3.16E-07	1.73E-09	1.96E-09	1.96E-09	7.43E-07	6.55E-07	9.98E-07
Copper	2.31E-03	1.72E+00	2.08E-06	1.70E-06	3.19E-06	1.39E-06	1.36E-06	1.48E-06	2.59E-07	2.93E-07	2.93E-07	3.74E-06	3.36E-06	4.96E-06
Nickel	1.19E-03	1.16E-01	1.07E-06	8.75E-07	1.64E-06	7.16E-07	7.00E-07	7.61E-07	1.75E-08	1.97E-08	1.98E-08	1.81E-06	1.59E-06	2.42E-06
Selenium	5.07E-05	6.70E-03	4.57E-08	3.73E-08	7.00E-08	3.05E-08	2.99E-08	3.25E-08	1.01E-09	1.14E-09	1.15E-09	7.73E-08	6.83E-08	1.04E-07
Silver	6.05E-05	5.70E-03	5.46E-08	4.46E-08	8.36E-08	3.65E-08	3.56E-08	3.88E-08	8.61E-10	9.73E-10	9.74E-10	9.19E-08	8.12E-08	1.23E-07
Vanadium	2.38E-03	-	2.14E-06	1.75E-06	3.28E-06	1.43E-06	1.40E-06	1.52E-06	-	-	-	3.57E-06	3.15E-06	4.80E-06
Zinc	3.61E-03	7.66E+00	3.25E-06	2.65E-06	4.98E-06	2.17E-06	2.12E-06	2.31E-06	1.16E-06	1.31E-06	1.31E-06	6.58E-06	6.09E-06	8.59E-06
TCDD	3.92E-11	3.67E-05	3.53E-14	2.88E-14	5.41E-14	1.43E-10	1.40E-10	1.52E-10	5.54E-12	6.27E-12	6.27E-12	1.48E-10	1.46E-10	1.58E-10
Malathion	1.19E-07	4.27E-06	1.07E-10	8.76E-11	1.64E-10	2.86E-10	2.80E-10	3.05E-10	6.46E-13	7.30E-13	7.30E-13	3.94E-10	3.68E-10	4.70E-10

Table 2ab Exposure of Pollutants – Dropping from Ship at edge of ZID with General Public Diet (Scenario 5)

Pollutants	Conc. at the edge of ZID (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.19E-04	8.77E-03	3.06E-09	2.50E-09	4.69E-09	2.05E-09	2.00E-09	2.18E-09	7.39E-10	7.39E-10	7.39E-10	5.85E-09	5.24E-09	7.61E-09
Barium	7.57E-03	4.79E+00	1.06E-07	8.64E-08	1.62E-07	7.07E-08	6.91E-08	7.51E-08	4.04E-07	4.04E-07	4.04E-07	5.80E-07	5.59E-07	6.41E-07
Chromium III	6.03E-04	1.15E-02	8.43E-09	6.88E-09	1.29E-08	5.63E-09	5.51E-09	5.99E-09	9.65E-10	9.65E-10	9.66E-10	1.50E-08	1.34E-08	1.99E-08
Copper	2.42E-03	1.72E+00	3.38E-08	2.76E-08	5.18E-08	2.26E-08	2.21E-08	2.40E-08	1.45E-07	1.45E-07	1.45E-07	2.01E-07	1.94E-07	2.21E-07
Nickel	1.48E-03	1.16E-01	2.07E-08	1.69E-08	3.17E-08	1.38E-08	1.35E-08	1.47E-08	9.75E-09	9.74E-09	9.75E-09	4.43E-08	4.02E-08	5.62E-08
Selenium	5.20E-05	6.70E-03	7.27E-10	5.93E-10	1.11E-09	4.85E-10	4.74E-10	5.16E-10	5.65E-10	5.65E-10	5.65E-10	1.78E-09	1.63E-09	2.19E-09
Silver	6.50E-05	5.70E-03	9.08E-10	7.42E-10	1.39E-09	6.07E-10	5.93E-10	6.45E-10	4.80E-10	4.80E-10	4.80E-10	1.99E-09	1.81E-09	2.52E-09
Vanadium	2.77E-03	-	3.87E-08	3.16E-08	5.92E-08	2.58E-08	2.53E-08	2.75E-08	-	-	-	6.45E-08	5.68E-08	8.67E-08
Zinc	3.72E-03	7.66E+00	5.20E-08	4.25E-08	7.96E-08	3.47E-08	3.40E-08	3.69E-08	6.46E-07	6.46E-07	6.46E-07	7.32E-07	7.22E-07	7.63E-07
TCDD	3.95E-11	3.67E-05	5.52E-16	4.51E-16	8.45E-16	1.61E-12	1.57E-12	1.71E-12	3.09E-12	3.09E-12	3.09E-12	4.70E-12	4.67E-12	4.81E-12
Malathion	3.26E-07	4.27E-06	4.56E-12	3.72E-12	6.98E-12	8.77E-12	8.58E-12	9.33E-12	3.60E-13	3.60E-13	3.60E-13	1.37E-11	1.27E-11	1.67E-11

Table 2ac Exposure of Pollutants – Frequent Swimming at edge of Mixing Zone with General Public Diet (Scenario 5)

Pollutants	Conc. at the edge of Mixing Zone (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.17E-04	8.77E-03	1.95E-07	1.59E-07	2.99E-07	1.30E-07	1.28E-07	1.39E-07	7.39E-10	7.39E-10	7.39E-10	3.26E-07	2.88E-07	4.38E-07
Barium	7.46E-03	4.79E+00	6.73E-06	5.49E-06	1.03E-05	4.49E-06	4.39E-06	4.78E-06	4.04E-07	4.04E-07	4.04E-07	1.16E-05	1.03E-05	1.55E-05
Chromium III	5.54E-04	1.15E-02	5.00E-07	4.08E-07	7.65E-07	3.34E-07	3.26E-07	3.55E-07	9.65E-10	9.65E-10	9.66E-10	8.34E-07	7.35E-07	1.12E-06
Copper	2.37E-03	1.72E+00	2.14E-06	1.75E-06	3.27E-06	1.43E-06	1.40E-06	1.52E-06	1.45E-07	1.45E-07	1.45E-07	3.71E-06	3.29E-06	4.93E-06
Nickel	1.35E-03	1.16E-01	1.22E-06	9.96E-07	1.87E-06	8.14E-07	7.96E-07	8.66E-07	9.75E-09	9.74E-09	9.75E-09	2.04E-06	1.80E-06	2.74E-06
Selenium	5.14E-05	6.70E-03	4.64E-08	3.78E-08	7.09E-08	3.10E-08	3.03E-08	3.29E-08	5.65E-10	5.65E-10	5.65E-10	7.79E-08	6.87E-08	1.04E-07
Silver	6.30E-05	5.70E-03	5.68E-08	4.64E-08	8.69E-08	3.79E-08	3.71E-08	4.03E-08	4.80E-10	4.80E-10	4.80E-10	9.52E-08	8.40E-08	1.28E-07
Vanadium	2.59E-03	-	2.34E-06	1.91E-06	3.58E-06	1.56E-06	1.53E-06	1.66E-06	-	-	-	3.90E-06	3.44E-06	5.24E-06
Zinc	3.67E-03	7.66E+00	3.31E-06	2.70E-06	5.06E-06	2.21E-06	2.16E-06	2.35E-06	6.46E-07	6.46E-07	6.46E-07	6.16E-06	5.51E-06	8.06E-06
TCDD	3.94E-11	3.67E-05	3.55E-14	2.90E-14	5.43E-14	1.43E-10	1.40E-10	1.53E-10	3.09E-12	3.09E-12	3.09E-12	1.47E-10	1.43E-10	1.56E-10
Malathion	2.34E-07	4.27E-06	2.11E-10	1.73E-10	3.23E-10	5.64E-10	5.51E-10	6.00E-10	3.60E-13	3.60E-13	3.60E-13	7.75E-10	7.24E-10	9.23E-10

Table 2ad Exposure of Pollutants – Frequent Swimming at the Nearest Beach with General Public Diet (Scenario 5)

Pollutants	Conc. at the Nearest Beach (mg/L)	Conc. in Seafood (mg/kg)	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Adult	Daily Exposure via Ingestion of Seawater (mg/kg-d) - Child	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Lifetime	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Adult	Daily Exposure via Dermal Contact of Seawater (mg/kg-d) - Child	Daily Exposure via Consumption of Seafood (mg/kg-d) - Lifetime	Daily Exposure via Consumption of Seafood (mg/kg-d) - Adult	Daily Exposure via Consumption of Seafood (mg/kg-d) - Child	Total Daily Exposure (mg/kg-d) – Lifetime	Total Daily Exposure (mg/kg-d) – Adult	Total Daily Exposure (mg/kg-d) – Child
Chlorination By-products (COCs)	Refer to Appendix 6-2													
Antimony	2.13E-04	8.77E-03	1.92E-07	1.57E-07	2.94E-07	1.28E-07	1.26E-07	1.37E-07	7.39E-10	7.39E-10	7.39E-10	3.22E-07	2.83E-07	4.32E-07
Barium	7.33E-03	4.79E+00	6.61E-06	5.39E-06	1.01E-05	4.41E-06	4.31E-06	4.69E-06	4.04E-07	4.04E-07	4.04E-07	1.14E-05	1.01E-05	1.52E-05
Chromium III	4.93E-04	1.15E-02	4.45E-07	3.63E-07	6.81E-07	2.97E-07	2.90E-07	3.16E-07	9.65E-10	9.65E-10	9.66E-10	7.42E-07	6.54E-07	9.97E-07
Copper	2.31E-03	1.72E+00	2.08E-06	1.70E-06	3.19E-06	1.39E-06	1.36E-06	1.48E-06	1.45E-07	1.45E-07	1.45E-07	3.62E-06	3.21E-06	4.81E-06
Nickel	1.19E-03	1.16E-01	1.07E-06	8.75E-07	1.64E-06	7.16E-07	7.00E-07	7.61E-07	9.75E-09	9.74E-09	9.75E-09	1.80E-06	1.58E-06	2.41E-06
Selenium	5.07E-05	6.70E-03	4.57E-08	3.73E-08	7.00E-08	3.05E-08	2.99E-08	3.25E-08	5.65E-10	5.65E-10	5.65E-10	7.68E-08	6.78E-08	1.03E-07
Silver	6.05E-05	5.70E-03	5.46E-08	4.46E-08	8.36E-08	3.65E-08	3.56E-08	3.88E-08	4.80E-10	4.80E-10	4.80E-10	9.15E-08	8.07E-08	1.23E-07
Vanadium	2.38E-03	-	2.14E-06	1.75E-06	3.28E-06	1.43E-06	1.40E-06	1.52E-06	-	-	-	3.57E-06	3.15E-06	4.80E-06
Zinc	3.61E-03	7.66E+00	3.25E-06	2.65E-06	4.98E-06	2.17E-06	2.12E-06	2.31E-06	6.46E-07	6.46E-07	6.46E-07	6.07E-06	5.42E-06	7.93E-06
TCDD	3.92E-11	3.67E-05	3.53E-14	2.88E-14	5.41E-14	1.43E-10	1.40E-10	1.52E-10	3.09E-12	3.09E-12	3.09E-12	1.46E-10	1.43E-10	1.55E-10
Malathion	1.19E-07	4.27E-06	1.07E-10	8.76E-11	1.64E-10	2.86E-10	2.80E-10	3.05E-10	3.60E-13	3.60E-13	3.60E-13	3.94E-10	3.68E-10	4.69E-10

Table 3a Human Health Cumulative Risk – Receptors with Fishermen Diet (Scenario 1)

Pollutants	Cancer Slope Factor (mg/kg-d) ⁻¹	Reference Dose (mg/kg-d)	Dropping from Ships at edge of ZID			Frequent Swimming at edge of Mixing Zone			Frequent Swimming at the Nearest Beach		
			Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)
Chlorination By-products (COCs)			5.88E-08	3.63E-05	4.25E-05	2.34E-06	1.52E-03	1.74E-03	1.24E-06	8.03E-04	9.22E-04
Antimony	-	0.0004	-	1.34E-05	1.94E-05	-	7.15E-04	1.09E-03	-	7.07E-04	1.08E-03
Arsenic	1.5	0.0003	7.57E-08	1.54E-04	2.08E-04	3.36E-06	6.59E-03	1.00E-02	3.36E-06	6.59E-03	1.00E-02
Barium	-	0.0003	-	2.02E-03	2.29E-03	-	3.40E-02	5.10E-02	-	3.36E-02	5.05E-02
Chromium III	-	1.5	-	1.13E-08	1.68E-08	-	5.16E-07	7.86E-07	-	4.52E-07	6.89E-07
Copper	-	-	-	-	-	-	-	-	-	-	-
Lead	-	0.0035	-	4.30E-06	6.56E-06	-	2.75E-04	4.20E-04	-	2.75E-04	4.19E-04
Mercury	-	0.00071	-	2.78E-07	2.87E-07	-	8.48E-07	1.16E-06	-	6.24E-07	8.16E-07
Nickel	-	0.005	-	8.59E-06	1.19E-05	-	3.36E-04	5.11E-04	-	3.06E-04	4.66E-04
Selenium	-	0.004	-	4.63E-07	6.16E-07	-	1.77E-05	2.70E-05	-	1.73E-05	2.62E-05
Silver	-	0.005	-	7.45E-07	1.02E-06	-	2.43E-05	3.69E-05	-	2.02E-05	3.07E-05
Vanadium	-	0.009	-	6.07E-06	9.26E-06	-	3.51E-04	5.35E-04	-	3.35E-04	5.11E-04
Zinc	-	0.3	-	3.08E-06	3.24E-06	-	2.00E-05	2.90E-05	-	1.92E-05	2.79E-05
TCDD	1.50E+05	1E-09	7.73E-07	5.12E-03	5.26E-03	2.21E-05	1.44E-01	1.57E-01	2.20E-05	1.44E-01	1.56E-01
Toluene	-	0.08	-	7.12E-07	7.96E-07	-	2.21E-05	2.48E-05	-	1.17E-05	1.32E-05
Malathion	-	0.02	-	1.14E-09	1.50E-09	-	4.17E-08	5.31E-08	-	2.21E-08	2.82E-08
Total			9.08E-07	7.36E-03	7.85E-03	2.78E-05	1.88E-01	2.22E-01	2.66E-05	1.86E-01	2.20E-01

Table 3b Human Health Cumulative Risk – Receptors with General Public Diet (Scenario 1)

Pollutants	Cancer Slope Factor (mg/kg-d) ⁻¹	Reference Dose (mg/kg-d)	Dropping from Ships at edge of ZID			Frequent Swimming at edge of Mixing Zone			Frequent Swimming at the Nearest Beach		
			Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)
Chlorination By-products (COCs)			5.81E-08	3.59E-05	4.21E-05	2.34E-06	1.51E-03	1.74E-03	1.24E-06	8.03E-04	9.22E-04
Antimony	-	0.0004	-	1.24E-05	1.84E-05	-	7.14E-04	1.09E-03	-	7.06E-04	1.08E-03
Arsenic	1.5	0.0003	6.36E-08	1.28E-04	1.81E-04	3.35E-06	6.56E-03	9.99E-03	3.35E-06	6.56E-03	9.99E-03
Barium	-	0.0003	-	1.26E-03	1.53E-03	-	3.32E-02	5.02E-02	-	3.29E-02	4.97E-02
Chromium III	-	1.5	-	1.09E-08	1.64E-08	-	5.15E-07	7.85E-07	-	4.52E-07	6.89E-07
Copper	-	-	-	-	-	-	-	-	-	-	-
Lead	-	0.0035	-	4.30E-06	6.56E-06	-	2.75E-04	4.20E-04	-	2.75E-04	4.19E-04
Mercury	-	0.00071	-	1.46E-07	1.55E-07	-	7.16E-07	1.03E-06	-	4.93E-07	6.84E-07
Nickel	-	0.005	-	7.44E-06	1.08E-05	-	3.35E-04	5.10E-04	-	3.05E-04	4.64E-04
Selenium	-	0.004	-	3.76E-07	5.28E-07	-	1.77E-05	2.69E-05	-	1.72E-05	2.62E-05
Silver	-	0.005	-	6.36E-07	9.15E-07	-	2.42E-05	3.68E-05	-	2.01E-05	3.06E-05
Vanadium	-	0.009	-	6.07E-06	9.26E-06	-	3.51E-04	5.35E-04	-	3.35E-04	5.11E-04
Zinc	-	0.3	-	1.67E-06	1.83E-06	-	1.86E-05	2.76E-05	-	1.78E-05	2.65E-05
TCDD	1.50E+05	1E-09	5.06E-07	3.34E-03	3.48E-03	2.19E-05	1.43E-01	1.55E-01	2.17E-05	1.42E-01	1.54E-01
Toluene	-	0.08	-	6.89E-07	7.72E-07	-	2.21E-05	2.48E-05	-	1.17E-05	1.31E-05
Malathion	-	0.02	-	1.12E-09	1.48E-09	-	4.16E-08	5.31E-08	-	2.21E-08	2.81E-08
Total			6.28E-07	4.79E-03	5.28E-03	2.76E-05	1.86E-01	2.20E-01	2.63E-05	1.84E-01	2.17E-01

Table 3c Human Health Cumulative Risk – Receptors with Fishermen Diet (Scenario 2)

Pollutants	Cancer Slope Factor (mg/kg-d) ⁻¹	Reference Dose (mg/kg-d)	Dropping from Ships at edge of ZID			Frequent Swimming at edge of Mixing Zone			Frequent Swimming at the Nearest Beach		
			Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)
Chlorination By-products (COCs)			5.97E-08	3.68E-05	4.30E-05	2.45E-06	1.58E-03	1.82E-03	1.31E-06	8.47E-04	9.34E-04
Antimony	-	0.0004	-	1.49E-05	2.08E-05	-	7.17E-04	1.09E-03	-	7.09E-04	1.08E-03
Arsenic	1.5	0.0003	9.18E-08	1.90E-04	2.44E-04	3.38E-06	6.63E-03	1.01E-02	3.38E-06	6.63E-03	1.01E-02
Barium	-	0.0003	-	3.03E-03	3.30E-03	-	3.50E-02	5.21E-02	-	3.47E-02	5.15E-02
Chromium III	-	1.5	-	1.20E-08	1.74E-08	-	5.22E-07	7.96E-07	-	4.57E-07	6.96E-07
Copper	-	-	-	-	-	-	-	-	-	-	-
Lead	-	0.0035	-	4.30E-06	6.56E-06	-	2.75E-04	4.20E-04	-	2.75E-04	4.19E-04
Mercury	-	0.00071	-	4.54E-07	4.64E-07	-	1.05E-06	1.37E-06	-	8.14E-07	1.01E-06
Nickel	-	0.005	-	1.01E-05	1.34E-05	-	3.40E-04	5.17E-04	-	3.09E-04	4.70E-04
Selenium	-	0.004	-	5.80E-07	7.32E-07	-	1.79E-05	2.72E-05	-	1.74E-05	2.64E-05
Silver	-	0.005	-	8.89E-07	1.17E-06	-	2.48E-05	3.77E-05	-	2.06E-05	3.12E-05
Vanadium	-	0.009	-	6.07E-06	9.26E-06	-	3.53E-04	5.38E-04	-	3.36E-04	5.12E-04
Zinc	-	0.3	-	4.97E-06	5.13E-06	-	2.19E-05	3.10E-05	-	2.12E-05	2.98E-05
TCDD	1.50E+05	1E-09	1.13E-06	7.50E-03	7.65E-03	2.25E-05	1.47E-01	1.59E-01	2.24E-05	1.46E-01	1.58E-01
Toluene	-	0.08	-	7.43E-07	8.26E-07	-	2.31E-05	2.59E-05	-	1.24E-05	1.39E-05
Malathion	-	0.02	-	1.16E-09	1.52E-09	-	4.36E-08	5.56E-08	-	2.33E-08	2.97E-08
Total			1.28E-06	1.08E-02	1.13E-02	2.83E-05	1.92E-01	2.26E-01	2.71E-05	1.90E-01	2.23E-01

Table 3d Human Health Cumulative Risk – Receptors with General Public Diet (Scenario 2)

Pollutants	Cancer Slope Factor (mg/kg-d) ⁻¹	Reference Dose (mg/kg-d)	Dropping from Ships at edge of ZID			Frequent Swimming at edge of Mixing Zone			Frequent Swimming at the Nearest Beach		
			Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)
Chlorination By-products (COCs)			5.86E-08	3.62E-05	4.24E-05	2.45E-06	1.58E-03	1.82E-03	1.31E-06	8.46E-04	9.34E-04
Antimony	-	0.0004	-	1.31E-05	1.91E-05	-	7.15E-04	1.09E-03	-	7.07E-04	1.08E-03
Arsenic	1.5	0.0003	7.15E-08	1.45E-04	1.99E-04	3.35839E-06	6.58E-03	1.00E-02	3.36E-06	6.58E-03	1.00E-02
Barium	-	0.0003	-	1.76E-03	2.03E-03	-	3.37E-02	5.08E-02	-	3.34E-02	5.03E-02
Chromium III	-	1.5	-	1.12E-08	1.67E-08	-	5.22E-07	7.95E-07	-	4.56E-07	6.95E-07
Copper	-	-	-	-	-	-	-	-	-	-	-
Lead	-	0.0035	-	4.30E-06	6.56E-06	-	2.75E-04	4.20E-04	-	2.75E-04	4.19E-04
Mercury	-	0.00071	-	2.33E-07	2.42E-07	-	8.25E-07	1.15E-06	-	5.93E-07	7.91E-07
Nickel	-	0.005	-	8.20E-06	1.15E-05	-	3.38E-04	5.15E-04	-	3.08E-04	4.68E-04
Selenium	-	0.004	-	4.33E-07	5.86E-07	-	1.78E-05	2.70E-05	-	1.73E-05	2.63E-05
Silver	-	0.005	-	7.08E-07	9.86E-07	-	2.46E-05	3.75E-05	-	2.04E-05	3.10E-05
Vanadium	-	0.009	-	6.07E-06	9.26E-06	-	3.53E-04	5.38E-04	-	3.36E-04	5.12E-04
Zinc	-	0.3	-	2.60E-06	2.76E-06	-	1.96E-05	2.86E-05	-	1.88E-05	2.75E-05
TCDD	1.50E+05	1E-09	6.82E-07	4.51E-03	4.65E-03	2.20653E-05	1.44E-01	1.56E-01	2.19E-05	1.43E-01	1.55E-01
Toluene	-	0.08	-	7.04E-07	7.88E-07	-	2.31E-05	2.59E-05	-	1.23E-05	1.38E-05
Malathion	-	0.02	-	1.13E-09	1.49E-09	-	4.35E-08	5.55E-08	-	2.33E-08	2.97E-08
Total			8.12E-07	6.49E-03	6.98E-03	2.79E-05	1.88E-01	2.22E-01	2.66E-05	1.86E-01	2.19E-01

Table 3e Human Health Cumulative Risk – Receptors with Fishermen Diet (Scenario 3)

Pollutants	Cancer Slope Factor (mg/kg-d) ⁻¹	Reference Dose (mg/kg-d)	Dropping from Ships at edge of ZID			Frequent Swimming at edge of Mixing Zone			Frequent Swimming at the Nearest Beach		
			Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)
Chlorination By-products (COCs)			6.34E-08	3.92E-05	4.59E-05	3.64E-06	2.35E-03	2.70E-03	1.82E-06	1.13E-03	1.35E-03
Antimony	-	0.0004	-	1.33E-05	1.93E-05	-	7.24E-04	1.10E-03	-	7.11E-04	1.08E-03
Arsenic	1.5	0.0003	7.32E-08	1.49E-04	2.02E-04	3.36E-06	6.58E-03	1.00E-02	3.36E-06	6.58E-03	1.00E-02
Barium	-	0.0003	-	1.87E-03	2.14E-03	-	3.42E-02	5.14E-02	-	3.36E-02	5.06E-02
Chromium III	-	1.5	-	1.16E-08	1.73E-08	-	5.90E-07	9.00E-07	-	4.86E-07	7.40E-07
Copper	-	-	-	-	-	-	-	-	-	-	-
Lead	-	0.0035	-	4.30E-06	6.56E-06	-	2.76E-04	4.21E-04	-	2.75E-04	4.19E-04
Mercury	-	0.00071	-	2.69E-07	2.79E-07	-	1.10E-06	1.55E-06	-	7.32E-07	9.85E-07
Nickel	-	0.005	-	8.58E-06	1.20E-05	-	3.71E-04	5.64E-04	-	3.22E-04	4.89E-04
Selenium	-	0.004	-	4.49E-07	6.03E-07	-	1.83E-05	2.78E-05	-	1.75E-05	2.66E-05
Silver	-	0.005	-	7.55E-07	1.05E-06	-	2.91E-05	4.42E-05	-	2.23E-05	3.39E-05
Vanadium	-	0.009	-	6.16E-06	9.40E-06	-	3.70E-04	5.64E-04	-	3.43E-04	5.24E-04
Zinc	-	0.3	-	2.83E-06	2.99E-06	-	2.06E-05	3.01E-05	-	1.94E-05	2.82E-05
TCDD	1.50E+05	1E-09	7.20E-07	4.76E-03	4.91E-03	2.22E-05	1.45E-01	1.58E-01	2.20E-05	1.44E-01	1.56E-01
Toluene	-	0.08	-	7.65E-07	8.55E-07	-	3.43E-05	3.85E-05	-	1.72E-05	1.93E-05
Malathion	-	0.02	-	1.23E-09	1.62E-09	-	6.47E-08	8.25E-08	-	3.24E-08	4.13E-08
Total			8.57E-07	6.85E-03	7.35E-03	2.92E-05	1.90E-01	2.25E-01	2.72E-05	1.87E-01	2.21E-01

Table 3f Human Health Cumulative Risk – Receptors with General Public Diet (Scenario 3)

Pollutants	Cancer Slope Factor (mg/kg-d) ⁻¹	Reference Dose (mg/kg-d)	Dropping from Ships at edge of ZID			Frequent Swimming at edge of Mixing Zone			Frequent Swimming at the Nearest Beach		
			Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)
Chlorination By-products (COCs)			6.28E-08	3.88E-05	4.55E-05	3.63E-06	2.35E-03	2.70E-03	1.82E-06	1.13E-03	1.35E-03
Antimony	-	0.0004	-	1.23E-05	1.83E-05	-	7.23E-04	1.10E-03	-	7.10E-04	1.08E-03
Arsenic	1.5	0.0003	6.23E-08	1.25E-04	1.78E-04	3.35E-06	6.56E-03	9.99E-03	3.35E-06	6.56E-03	9.99E-03
Barium	-	0.0003	-	1.18E-03	1.46E-03	-	3.35E-02	5.08E-02	-	3.30E-02	4.99E-02
Chromium III	-	1.5	-	1.12E-08	1.69E-08	-	5.90E-07	8.99E-07	-	4.85E-07	7.40E-07
Copper	-	-	-	-	-	-	-	-	-	-	-
Lead	-	0.0035	-	4.30E-06	6.56E-06	-	2.76E-04	4.21E-04	-	2.75E-04	4.19E-04
Mercury	-	0.00071	-	1.42E-07	1.53E-07	-	9.75E-07	1.42E-06	-	6.05E-07	8.58E-07
Nickel	-	0.005	-	7.52E-06	1.09E-05	-	3.70E-04	5.63E-04	-	3.21E-04	4.88E-04
Selenium	-	0.004	-	3.70E-07	5.25E-07	-	1.82E-05	2.77E-05	-	1.74E-05	2.65E-05
Silver	-	0.005	-	6.53E-07	9.45E-07	-	2.90E-05	4.41E-05	-	2.22E-05	3.38E-05
Vanadium	-	0.009	-	6.16E-06	9.40E-06	-	3.70E-04	5.64E-04	-	3.43E-04	5.24E-04
Zinc	-	0.3	-	1.55E-06	1.71E-06	-	1.93E-05	2.88E-05	-	1.81E-05	2.69E-05
TCDD	1.50E+05	1E-09	4.80E-07	3.16E-03	3.30E-03	2.20E-05	1.44E-01	1.56E-01	2.18E-05	1.42E-01	1.54E-01
Toluene	-	0.08	-	7.42E-07	8.33E-07	-	3.43E-05	3.85E-05	-	1.72E-05	1.92E-05
Malathion	-	0.02	-	1.21E-09	1.60E-09	-	6.47E-08	8.25E-08	-	3.24E-08	4.13E-08
Total			6.05E-07	4.54E-03	5.03E-03	2.90E-05	1.88E-01	2.22E-01	2.70E-05	1.84E-01	2.18E-01

Table 3g Human Health Cumulative Risk – Receptors with Fishermen Diet (Scenario 4)

Pollutants	Cancer Slope Factor (mg/kg-d) ⁻¹	Reference Dose (mg/kg-d)	Dropping from Ships at edge of ZID			Frequent Swimming at edge of Mixing Zone			Frequent Swimming at the Nearest Beach		
			Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)
Chlorination By-products (COCs)			6.63E-08	4.10E-05	4.80E-05	4.20E-06	2.72E-03	3.12E-03	2.14E-06	1.38E-03	1.59E-03
Antimony	-	0.0004	-	1.53E-05	2.13E-05	-	7.30E-04	1.11E-03	-	7.15E-04	1.09E-03
Arsenic	1.5	0.0003	9.50E-08	1.97E-04	2.51E-04	3.38E-06	6.63E-03	1.01E-02	3.38E-06	6.63E-03	1.01E-02
Barium	-	0.0003	-	3.25E-03	3.53E-03	-	3.58E-02	5.31E-02	-	3.51E-02	5.21E-02
Chromium III	-	1.5	-	1.29E-08	1.87E-08	-	6.24E-07	9.51E-07	-	5.05E-07	7.69E-07
Copper	-	-	-	-	-	-	-	-	-	-	-
Lead	-	0.0035	-	4.31E-06	6.57E-06	-	2.77E-04	4.22E-04	-	2.75E-04	4.20E-04
Mercury	-	0.00071	-	5.56E-07	5.67E-07	-	1.50E-06	2.01E-06	-	1.08E-06	1.37E-06
Nickel	-	0.005	-	1.10E-05	1.44E-05	-	3.88E-04	5.90E-04	-	3.32E-04	5.05E-04
Selenium	-	0.004	-	6.13E-07	7.69E-07	-	1.87E-05	2.83E-05	-	1.78E-05	2.70E-05
Silver	-	0.005	-	9.95E-07	1.30E-06	-	3.14E-05	4.77E-05	-	2.37E-05	3.60E-05
Vanadium	-	0.009	-	6.25E-06	9.53E-06	-	3.79E-04	5.77E-04	-	3.48E-04	5.31E-04
Zinc	-	0.3	-	5.49E-06	5.65E-06	-	2.36E-05	3.33E-05	-	2.22E-05	3.12E-05
TCDD	1.50E+05	1E-09	1.21E-06	8.00E-03	8.15E-03	2.28E-05	1.49E-01	1.61E-01	2.25E-05	1.47E-01	1.60E-01
Toluene	-	0.08	-	8.63E-07	9.59E-07	-	3.97E-05	4.45E-05	-	2.02E-05	2.27E-05
Malathion	-	0.02	-	1.35E-09	1.76E-09	-	7.49E-08	9.55E-08	-	3.81E-08	4.85E-08
Total			1.37E-06	1.15E-02	1.20E-02	3.04E-05	1.96E-01	2.30E-01	2.81E-05	1.92E-01	2.26E-01

Table 3h Human Health Cumulative Risk – Receptors with General Public Diet (Scenario 4)

Pollutants	Cancer Slope Factor (mg/kg-d) ⁻¹	Reference Dose (mg/kg-d)	Dropping from Ships at edge of ZID			Frequent Swimming at edge of Mixing Zone			Frequent Swimming at the Nearest Beach		
			Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)
Chlorination By-products (COCs)			6.49E-08	4.02E-05	4.72E-05	4.20E-06	2.72E-03	3.12E-03	2.14E-06	1.38E-03	1.59E-03
Antimony	-	0.0004	-	1.33E-05	1.93E-05	-	7.28E-04	1.11E-03	-	7.13E-04	1.09E-03
Arsenic	1.5	0.0003	7.31E-08	1.49E-04	2.02E-04	3.36E-06	6.58E-03	1.00E-02	3.36E-06	6.58E-03	1.00E-02
Barium	-	0.0003	-	1.87E-03	2.14E-03	-	3.44E-02	5.17E-02	-	3.37E-02	5.08E-02
Chromium III	-	1.5	-	1.20E-08	1.78E-08	-	6.23E-07	9.50E-07	-	5.04E-07	7.68E-07
Copper	-	-	-	-	-	-	-	-	-	-	-
Lead	-	0.0035	-	4.31E-06	6.57E-06	-	2.77E-04	4.22E-04	-	2.75E-04	4.20E-04
Mercury	-	0.00071	-	2.84E-07	2.95E-07	-	1.23E-06	1.74E-06	-	8.11E-07	1.10E-06
Nickel	-	0.005	-	8.77E-06	1.23E-05	-	3.86E-04	5.88E-04	-	3.30E-04	5.02E-04
Selenium	-	0.004	-	4.52E-07	6.08E-07	-	1.85E-05	2.82E-05	-	1.76E-05	2.68E-05
Silver	-	0.005	-	7.82E-07	1.08E-06	-	3.12E-05	4.75E-05	-	2.35E-05	3.57E-05
Vanadium	-	0.009	-	6.25E-06	9.53E-06	-	3.79E-04	5.77E-04	-	3.48E-04	5.31E-04
Zinc	-	0.3	-	2.86E-06	3.02E-06	-	2.10E-05	3.07E-05	-	1.96E-05	2.86E-05
TCDD	1.50E+05	1E-09	7.20E-07	4.76E-03	4.91E-03	2.23E-05	1.46E-01	1.58E-01	2.21E-05	1.44E-01	1.56E-01
Toluene	-	0.08	-	8.14E-07	9.11E-07	-	3.97E-05	4.45E-05	-	2.02E-05	2.26E-05
Malathion	-	0.02	-	1.31E-09	1.72E-09	-	7.48E-08	9.54E-08	-	3.80E-08	4.85E-08
Total			8.58E-07	6.86E-03	7.35E-03	2.99E-05	1.91E-01	2.26E-01	2.76E-05	1.87E-01	2.21E-01

Table 3i Human Health Cumulative Risk – Receptors with Fishermen Diet (Scenario 5)

Pollutants	Cancer Slope Factor (mg/kg-d) ⁻¹	Reference Dose (mg/kg-d)	Dropping from Ships at edge of ZID			Frequent Swimming at edge of Mixing Zone			Frequent Swimming at the Nearest Beach		
			Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)
Chlorination By-products (COCs)			6.83E-08	3.10E-05	3.48E-05	4.20E-06	1.86E-03	2.07E-03	2.14E-06	9.43E-04	1.05E-03
Antimony	-	0.0004	-	1.50E-05	2.09E-05	-	7.21E-04	1.10E-03	-	7.10E-04	1.08E-03
Barium	-	0.0003	-	3.24E-03	3.52E-03	-	3.57E-02	5.30E-02	-	3.51E-02	5.21E-02
Chromium III	-	1.5	-	9.56E-09	1.39E-08	-	4.91E-07	7.48E-07	-	4.37E-07	6.66E-07
Copper	-	-	-	-	-	-	-	-	-	-	-
Nickel	-	0.005	-	1.00E-05	1.32E-05	-	3.62E-04	5.51E-04	-	3.19E-04	4.84E-04
Selenium	-	0.004	-	5.53E-07	6.93E-07	-	1.73E-05	2.63E-05	-	1.71E-05	2.59E-05
Silver	-	0.005	-	4.62E-07	6.02E-07	-	1.69E-05	2.57E-05	-	1.62E-05	2.47E-05
Vanadium	-	0.009	-	6.32E-06	9.63E-06	-	3.82E-04	5.82E-04	-	3.50E-04	5.33E-04
Zinc	-	0.3	-	4.62E-06	4.75E-06	-	2.06E-05	2.91E-05	-	2.03E-05	2.86E-05
TCDD	1.50E+05	1E-09	1.07E-06	7.84E-03	7.98E-03	2.24E-05	1.47E-01	1.59E-01	2.23E-05	1.46E-01	1.58E-01
Malathion	-	0.02	-	6.51E-10	8.52E-10	-	3.62E-08	4.62E-08	-	1.84E-08	2.35E-08
Total			1.14E-06	1.12E-02	1.16E-02	2.66E-05	1.86E-01	2.16E-01	2.44E-05	1.83E-01	2.14E-01

Table 3j Human Health Cumulative Risk – Receptors with General Public Diet (Scenario 5)

Pollutants	Cancer Slope Factor (mg/kg-d) ⁻¹	Reference Dose (mg/kg-d)	Dropping from Ships at edge of ZID			Frequent Swimming at edge of Mixing Zone			Frequent Swimming at the Nearest Beach		
			Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)	Lifetime Incremental Cancer Risk	Hazard Quotient (adult)	Hazard Quotient (child)
Chlorination By-products (COCs)			6.72E-08	3.02E-05	3.40E-05	4.20E-06	1.85E-03	2.07E-03	2.13E-06	9.42E-04	1.05E-03
Antimony	-	0.0004	-	1.31E-05	1.90E-05	-	7.19E-04	1.10E-03	-	7.09E-04	1.08E-03
Barium	-	0.0003	-	1.86E-03	2.14E-03	-	3.43E-02	5.16E-02	-	3.37E-02	5.07E-02
Chromium III	-	1.5	-	8.90E-09	1.32E-08	-	4.90E-07	7.47E-07	-	4.36E-07	6.65E-07
Copper	-	-	-	-	-	-	-	-	-	-	-
Nickel	-	0.005	-	8.04E-06	1.12E-05	-	3.60E-04	5.49E-04	-	3.17E-04	4.82E-04
Selenium	-	0.004	-	4.08E-07	5.48E-07	-	1.72E-05	2.61E-05	-	1.69E-05	2.58E-05
Silver	-	0.005	-	3.63E-07	5.03E-07	-	1.68E-05	2.56E-05	-	1.61E-05	2.46E-05
Vanadium	-	0.009	-	6.32E-06	9.63E-06	-	3.82E-04	5.82E-04	-	3.50E-04	5.33E-04
Zinc	-	0.3	-	2.41E-06	2.54E-06	-	1.84E-05	2.69E-05	-	1.81E-05	2.64E-05
TCDD	1.50E+05	1E-09	7.05E-07	4.67E-03	4.81E-03	2.20E-05	1.43E-01	1.56E-01	2.19E-05	1.43E-01	1.55E-01
Malathion	-	0.02	-	6.33E-10	8.33E-10	-	3.62E-08	4.62E-08	-	1.84E-08	2.35E-08
Total			7.72E-07	6.59E-03	7.02E-03	2.62E-05	1.81E-01	2.12E-01	2.40E-05	1.79E-01	2.09E-01