Appendix 10E Predicted Cumulative Acute Health Risk

Representative HSR	Assessment Height (mAG)	Cumulative Maximum Hourly Average Concentration (ug/m^3)										
		Antimony (Sb)	Arsenic (As)	Beryllium (Be)	Cadmium (Cd)	Chromium (Cr(VI))	Cobalt (Co)	Copper (Cu)	Lead (Pb)	Manganese (Mn)	Mercury (Hg)	Nickel (Ni)
Acute Exposure Limit/ Reference Level		**1.50E+03**	**2.00E-01**	**1.50E-01**	**1.00E+02**	**5.00E-01**	**6.00E+01**	**1.00E+02**	**1.50E+02**	**3.00E+03**	**6.00E-01**	**2.00E-01**
Compliance (YES/NO)		**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**
BPS1	1.5	1.30E-01	3.87E-02	2.69E-04	1.60E-02	2.78E-02	1.30E-01	3.00E-01	1.76E-01	2.05E-01	1.15E-02	5.29E-02
BPS1	5	1.30E-01	3.88E-02	2.69E-04	1.60E-02	2.79E-02	1.30E-01	3.00E-01	1.76E-01	2.05E-01	1.15E-02	5.29E-02
BPS1	10	1.30E-01	3.89E-02	2.69E-04	1.60E-02	2.80E-02	1.30E-01	3.00E-01	1.76E-01	2.05E-01	1.15E-02	5.29E-02
LKT2	1.5	7.71E-02	5.57E-02	1.96E-04	1.19E-02	4.48E-02	7.71E-02	2.47E-01	1.23E-01	1.52E-01	7.44E-03	6.28E-02
LKT2	5	7.74E-02	5.58E-02	1.96E-04	1.20E-02	4.49E-02	7.74E-02	2.47E-01	1.23E-01	1.52E-01	7.46E-03	6.30E-02
LKT2	10	7.75E-02	5.57E-02	1.96E-04	1.19E-02	4.48E-02	7.75E-02	2.47E-01	1.23E-01	1.52E-01	7.45E-03	6.31E-02
LKT1	1.5	1.04E-01	4.78E-02	2.39E-04	1.32E-02	3.69E-02	1.04E-01	2.74E-01	1.50E-01	1.79E-01	8.74E-03	5.49E-02
TTC1	4	4.01E-01	4.49E-02	6.33E-04	3.15E-02	3.01E-02	4.01E-01	5.71E-01	4.47E-01	4.76E-01	2.70E-02	8.90E-02
TPO1	39	3.26E-01	3.82E-02	5.36E-04	2.64E-02	2.63E-02	3.26E-01	4.96E-01	3.72E-01	4.01E-01	2.19E-02	7.56E-02
TPO2	42	3.40E-01	7.60E-02	5.55E-04	2.74E-02	6.44E-02	3.40E-01	5.10E-01	3.86E-01	4.15E-01	2.29E-02	8.58E-02
WXO1	1.5	3.22E-01	5.53E-02	5.30E-04	2.62E-02	4.35E-02	3.22E-01	4.92E-01	3.68E-01	3.97E-01	2.17E-02	7.49E-02
HPN7	1.5	8.94E-02	3.85E-02	2.09E-04	1.40E-02	2.63E-02	8.94E-02	2.59E-01	1.35E-01	1.64E-01	9.50E-03	5.03E-02
HPN5	1.5	9.21E-02	3.99E-02	2.00E-04	1.50E-02	2.72E-02	9.21E-02	2.62E-01	1.38E-01	1.67E-01	1.05E-02	5.33E-02
HPN6	1.5	9.59E-02	3.95E-02	2.07E-04	1.50E-02	2.69E-02	9.59E-02	2.66E-01	1.42E-01	1.71E-01	1.05E-02	5.29E-02
HPN4	1.5	9.92E-02	3.99E-02	2.15E-04	1.47E-02	2.90E-02	9.92E-02	2.69E-01	1.45E-01	1.74E-01	1.03E-02	5.12E-02
NWR1	1.5	1.01E-01	3.91E-02	2.15E-04	1.53E-02	2.66E-02	1.01E-01	2.71E-01	1.47E-01	1.76E-01	1.08E-02	5.35E-02
SPN1	1.5	8.27E-02	3.44E-02	2.00E-04	1.34E-02	2.20E-02	8.27E-02	2.53E-01	1.29E-01	1.58E-01	8.87E-03	4.72E-02
HPN1	1.5	8.51E-02	3.54E-02	2.02E-04	1.38E-02	2.29E-02	8.51E-02	2.55E-01	1.31E-01	1.60E-01	9.31E-03	4.86E-02
HPN2	1.5	8.48E-02	3.67E-02	2.01E-04	1.40E-02	2.42E-02	8.48E-02	2.55E-01	1.31E-01	1.60E-01	9.53E-03	4.96E-02
HPN3	1.5	9.22E-02	3.73E-02	2.08E-04	1.42E-02	2.48E-02	9.22E-02	2.62E-01	1.38E-01	1.67E-01	9.75E-03	5.03E-02
NWR2	1.5	6.43E-02	3.58E-02	1.78E-04	1.16E-02	2.49E-02	6.43E-02	2.34E-01	1.10E-01	1.39E-01	7.13E-03	4.29E-02
NWR3	1.5	6.36E-02	3.57E-02	1.77E-04	1.15E-02	2.47E-02	6.36E-02	2.34E-01	1.10E-01	1.39E-01	6.97E-03	4.28E-02
NWR4	1.5	6.14E-02	3.55E-02	1.74E-04	1.12E-02	2.45E-02	6.14E-02	2.31E-01	1.07E-01	1.36E-01	6.67E-03	4.26E-02

Representative HSR	Assessment Height (mAG)	Cumulative Maximum Hourly Average Concentration (ug/m^3)										
		Thallium (Tl)	Vanadium (V)	Zinc (Zn)	PCBs	Dioxins and Furans	PAHs	Hydrochloric acid (HCl)	Hydrogen Fluoride (HF)	Ammonia (NH_3)	Selenium (Se)	TOC
Acute Exposure Limit/ Reference Level		**6.00E+01**	**3.00E+01**	**3.00E+02**	**1.30E+04**	**1.30E-01**	**6.00E+02**	**2.10E+03**	**2.40E+02**	**3.20E+03**	**6.00E+02**	**N/A**
Compliance (YES/NO)		**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**N/A**
BPS1	1.5	1.13E-02	1.81E-01	4.39E-01	1.27E-04	9.78E-08	4.94E-01	7.54E+00	1.06E+00	6.08E+00	3.27E-03	5.26E+00
BPS1	5	1.13E-02	1.81E-01	4.39E-01	1.27E-04	9.78E-08	4.94E-01	7.51E+00	1.05E+00	6.08E+00	3.27E-03	5.26E+00
BPS1	10	1.13E-02	1.81E-01	4.39E-01	1.27E-04	9.78E-08	4.94E-01	7.49E+00	1.06E+00	6.08E+00	3.27E-03	5.26E+00
LKT2	1.5	7.24E-03	1.28E-01	3.66E-01	6.86E-05	8.97E-08	4.87E-01	5.76E+00	6.53E-01	5.03E+00	2.69E-03	3.79E+00
LKT2	5	7.26E-03	1.28E-01	3.66E-01	6.90E-05	8.98E-08	4.87E-01	5.76E+00	6.55E-01	5.03E+00	2.69E-03	3.80E+00
LKT2	10	7.25E-03	1.28E-01	3.66E-01	6.91E-05	8.97E-08	4.87E-01	5.74E+00	6.54E-01	5.03E+00	2.69E-03	3.81E+00
LKT1	1.5	8.54E-03	1.55E-01	4.09E-01	1.03E-04	9.23E-08	4.91E-01	6.72E+00	7.72E-01	4.92E+00	3.03E-03	3.86E+00
TTC1	4	2.68E-02	4.52E-01	8.03E-01	4.19E-04	1.29E-07	5.30E-01	1.07E+01	2.68E+00	2.01E+01	6.19E-03	1.34E+01
TPO1	39	2.17E-02	3.77E-01	7.06E-01	3.41E-04	1.19E-07	5.21E-01	8.70E+00	2.17E+00	1.89E+01	5.41E-03	1.09E+01
TPO2	42	2.27E-02	3.91E-01	7.25E-01	3.55E-04	1.21E-07	5.22E-01	1.89E+01	2.27E+00	1.96E+01	5.55E-03	1.13E+01
WXO1	1.5	2.15E-02	3.73E-01	7.00E-01	3.36E-04	1.18E-07	5.20E-01	1.26E+01	2.15E+00	1.68E+01	5.36E-03	1.07E+01
HPN7	1.5	9.29E-03	1.40E-01	3.79E-01	7.89E-05	9.38E-08	4.88E-01	8.22E+00	8.39E-01	6.46E+00	2.79E-03	4.20E+00
HPN5	1.5	1.03E-02	1.43E-01	3.70E-01	7.20E-05	9.59E-08	4.87E-01	8.64E+00	9.18E-01	9.15E+00	2.72E-03	4.59E+00
HPN6	1.5	1.03E-02	1.47E-01	3.77E-01	7.73E-05	9.59E-08	4.88E-01	8.54E+00	9.26E-01	8.50E+00	2.77E-03	4.64E+00
HPN4	1.5	1.00E-02	1.50E-01	3.85E-01	8.37E-05	9.53E-08	4.88E-01	7.72E+00	9.11E-01	9.15E+00	2.84E-03	4.56E+00
NWR1	1.5	1.06E-02	1.52E-01	3.85E-01	8.41E-05	9.65E-08	4.89E-01	8.44E+00	9.55E-01	9.07E+00	2.84E-03	4.78E+00
SPN1	1.5	8.67E-03	1.34E-01	3.70E-01	7.23E-05	9.26E-08	4.87E-01	7.08E+00	7.78E-01	8.53E+00	2.72E-03	3.88E+00
HPN1	1.5	9.11E-03	1.36E-01	3.72E-01	7.37E-05	9.35E-08	4.87E-01	7.36E+00	8.19E-01	8.72E+00	2.74E-03	4.08E+00
HPN2	1.5	9.33E-03	1.36E-01	3.71E-01	7.29E-05	9.39E-08	4.87E-01	7.78E+00	8.35E-01	8.31E+00	2.73E-03	4.15E+00
HPN3	1.5	9.55E-03	1.43E-01	3.78E-01	7.86E-05	9.43E-08	4.88E-01	7.96E+00	8.53E-01	8.70E+00	2.79E-03	4.25E+00
NWR2	1.5	6.92E-03	1.15E-01	3.48E-01	5.48E-05	8.91E-08	4.85E-01	5.69E+00	6.19E-01	6.70E+00	2.55E-03	3.09E+00
NWR3	1.5	6.77E-03	1.15E-01	3.47E-01	5.33E-05	8.88E-08	4.85E-01	5.55E+00	6.06E-01	6.55E+00	2.53E-03	3.02E+00
NWR4	1.5	6.46E-03	1.12E-01	3.44E-01	5.12E-05	8.82E-08	4.84E-01	5.27E+00	5.79E-01	6.32E+00	2.51E-03	2.89E+00

Notes:
[1] The exposure limit/ reference levels (ug/m3) adopted in the approved IWMF Phase 1 EIA report are as follows - Sb: 150, As: 3, Cd: 3, Cr (VI): 3, Co: 300, Cu: 100, Dioxins: no guideline, HCL: 2100, HF: 240, Pb: 15, Mn: 300, Hg: 0.6, Ni: 6, Tl: 30, V: 15. The above assessment result also complies with these criteria.