Appendix 18-D

Predicted Metal Concentrations Associated with Fugitive Dust at Sites within the Air Quality Modelling Domain

Appendix 18-D. Predicted Metal Concentrations Associated with Fugitive Dust at Sites within the Air Quality Modelling Domain

Metal	E-1	E-2	E-3	S-2	S-1	S-3	W-2	W-1	W-3	NW-3	NW-2	NW-1	NE-3	NE-2	NE-1
Aluminum	6.20E-02	8.23E-02	8.11E-02	1.92E-04	1.90E-04	2.01E-04	2.15E-03	2.49E-03	2.42E-03	1.10E-03	1.17E-03	1.20E-03	1.07E-03	1.31E-03	1.56E-03
Antimony	4.14E-06	5.49E-06	5.41E-06	1.28E-08	1.27E-08	1.34E-08	1.44E-07	1.66E-07	1.61E-07	7.36E-08	7.82E-08	8.00E-08	7.11E-08	8.75E-08	1.04E-07
Arsenic	6.83E-05	9.07E-05	8.93E-05	2.11E-07	2.09E-07	2.21E-07	2.37E-06	2.74E-06	2.66E-06	1.22E-06	1.29E-06	1.32E-06	1.17E-06	1.45E-06	1.72E-06
Barium	1.56E-02	2.07E-02	2.03E-02	4.81E-05	4.76E-05	5.03E-05	5.40E-04	6.25E-04	6.06E-04	2.77E-04	2.94E-04	3.01E-04	2.67E-04	3.29E-04	3.91E-04
Bismuth	2.43E-06	3.23E-06	3.18E-06	7.51E-09	7.44E-09	7.85E-09	8.43E-08	9.75E-08	9.47E-08	4.32E-08	4.59E-08	4.70E-08	4.17E-08	5.14E-08	6.11E-08
Boron	1.76E-04	2.34E-04	2.30E-04	5.44E-07	5.39E-07	5.69E-07	6.11E-06	7.07E-06	6.86E-06	3.13E-06	3.33E-06	3.40E-06	3.02E-06	3.72E-06	4.43E-06
Cadmium	7.28E-06	9.67E-06	9.52E-06	2.25E-08	2.23E-08	2.36E-08	2.53E-07	2.92E-07	2.84E-07	1.30E-07	1.38E-07	1.41E-07	1.25E-07	1.54E-07	1.83E-07
Calcium	1.10E-01	1.46E-01	1.43E-01	3.39E-04	3.36E-04	3.55E-04	3.81E-03	4.41E-03	4.28E-03	1.95E-03	2.07E-03	2.12E-03	1.89E-03	2.32E-03	2.76E-03
Chromium	3.65E-04	4.85E-04	4.77E-04	1.13E-06	1.12E-06	1.18E-06	1.27E-05	1.47E-05	1.42E-05	6.49E-06	6.90E-06	7.06E-06	6.27E-06	7.72E-06	9.18E-06
Cobalt	7.08E-05	9.40E-05	9.25E-05	2.19E-07	2.17E-07	2.29E-07	2.46E-06	2.84E-06	2.76E-06	1.26E-06	1.34E-06	1.37E-06	1.22E-06	1.50E-06	1.78E-06
Copper	3.42E-04	4.54E-04	4.47E-04	1.06E-06	1.05E-06	1.10E-06	1.19E-05	1.37E-05	1.33E-05	6.08E-06	6.46E-06	6.61E-06	5.87E-06	7.23E-06	8.59E-06
Gallium	1.77E-05	2.35E-05	2.32E-05	5.48E-08	5.42E-08	5.73E-08	6.15E-07	7.12E-07	6.91E-07	3.15E-07	3.35E-07	3.43E-07	3.04E-07	3.75E-07	4.46E-07
Iron	1.14E-01	1.52E-01	1.49E-01	3.53E-04	3.50E-04	3.69E-04	3.96E-03	4.59E-03	4.45E-03	2.03E-03	2.16E-03	2.21E-03	1.96E-03	2.42E-03	2.87E-03
Lanthanum	5.05E-05	6.70E-05	6.60E-05	1.56E-07	1.54E-07	1.63E-07	1.75E-06	2.03E-06	1.97E-06	8.98E-07	9.54E-07	9.76E-07	8.67E-07	1.07E-06	1.27E-06
Lead	2.07E-04	2.74E-04	2.70E-04	6.38E-07	6.32E-07	6.68E-07	7.16E-06	8.29E-06	8.05E-06	3.67E-06	3.90E-06	3.99E-06	3.55E-06	4.37E-06	5.20E-06
Magnesium	4.23E-02	5.61E-02	5.53E-02	1.31E-04	1.29E-04	1.37E-04	1.47E-03	1.70E-03	1.65E-03	7.52E-04	7.99E-04	8.17E-04	7.26E-04	8.94E-04	1.06E-03
Manganese	1.36E-03	1.81E-03	1.78E-03	4.21E-06	4.17E-06	4.41E-06	4.73E-05	5.47E-05	5.31E-05	2.42E-05	2.58E-05	2.64E-05	2.34E-05	2.88E-05	3.43E-05
Mercury	1.19E-06	1.58E-06	1.55E-06	3.68E-09	3.64E-09	3.85E-09	4.13E-08	4.77E-08	4.63E-08	2.12E-08	2.25E-08	2.30E-08	2.04E-08	2.52E-08	2.99E-08
Molybdenum	3.13E-05	4.15E-05	4.09E-05	9.67E-08	9.57E-08	1.01E-07	1.08E-06	1.26E-06	1.22E-06	5.56E-07	5.91E-07	6.05E-07	5.37E-07	6.61E-07	7.87E-07
Nickel	2.81E-04	3.74E-04	3.68E-04	8.70E-07	8.61E-07	9.10E-07	9.76E-06	1.13E-05	1.10E-05	5.01E-06	5.32E-06	5.44E-06	4.83E-06	5.95E-06	7.08E-06
Phosphorus	7.12E-03	9.46E-03	9.31E-03	2.20E-05	2.18E-05	2.30E-05	2.47E-04	2.86E-04	2.78E-04	1.27E-04	1.35E-04	1.38E-04	1.22E-04	1.51E-04	1.79E-04
Potassium	1.80E-02	2.39E-02	2.35E-02	5.57E-05	5.51E-05	5.82E-05	6.25E-04	7.23E-04	7.02E-04	3.20E-04	3.40E-04	3.48E-04	3.09E-04	3.81E-04	4.53E-04
Scandium	3.55E-05	4.71E-05	4.64E-05	1.10E-07	1.09E-07	1.15E-07	1.23E-06	1.43E-06	1.38E-06	6.31E-07	6.71E-07	6.86E-07	6.10E-07	7.51E-07	8.93E-07
Selenium	1.74E-05	2.30E-05	2.27E-05	5.37E-08	5.31E-08	5.61E-08	6.02E-07	6.97E-07	6.76E-07	3.09E-07	3.28E-07	3.36E-07	2.98E-07	3.67E-07	4.37E-07
Silver	3.25E-06	4.31E-06	4.25E-06	1.00E-08	9.94E-09	1.05E-08	1.13E-07	1.30E-07	1.27E-07	5.78E-08	6.14E-08	6.28E-08	5.58E-08	6.87E-08	8.17E-08
Sodium	8.29E-03	1.10E-02	1.08E-02	2.56E-05	2.54E-05	2.68E-05	2.87E-04	3.33E-04	3.23E-04	1.47E-04	1.57E-04	1.60E-04	1.42E-04	1.75E-04	2.08E-04
Strontium	2.09E-03	2.77E-03	2.73E-03	6.46E-06	6.39E-06	6.75E-06	7.25E-05	8.39E-05	8.14E-05	3.71E-05	3.95E-05	4.04E-05	3.59E-05	4.42E-05	5.25E-05
Sulphur	2.39E-02	3.17E-02	3.12E-02	7.38E-05	7.31E-05	7.72E-05	8.28E-04	9.58E-04	9.30E-04	4.24E-04	4.51E-04	4.61E-04	4.10E-04	5.05E-04	6.00E-04
Tellurium	4.20E-07	5.58E-07	5.50E-07	1.30E-09	1.29E-09	1.36E-09	1.46E-08	1.69E-08	1.64E-08	7.48E-09	7.95E-09	8.13E-09	7.22E-09	8.89E-09	1.06E-08
Thallium	4.14E-07	5.50E-07	5.41E-07	1.28E-09	1.27E-09	1.34E-09	1.44E-08	1.66E-08	1.61E-08	7.36E-09	7.82E-09	8.00E-09	7.11E-09	8.75E-09	1.04E-08
Thorium	3.58E-05	4.76E-05	4.68E-05	1.11E-07	1.10E-07	1.16E-07	1.24E-06	1.44E-06	1.40E-06	6.37E-07	6.77E-07	6.92E-07	6.15E-07	7.58E-07	9.01E-07
Titanium	1.21E-04	1.61E-04	1.58E-04	3.74E-07	3.70E-07	3.91E-07	4.20E-06	4.86E-06	4.72E-06	2.15E-06	2.29E-06	2.34E-06	2.08E-06	2.56E-06	3.04E-06
Tungsten	8.83E-07	1.17E-06	1.15E-06	2.73E-09	2.70E-09	2.86E-09	3.06E-08	3.55E-08	3.44E-08	1.57E-08	1.67E-08	1.71E-08	1.52E-08	1.87E-08	2.22E-08
Uranium	1.17E-05	1.56E-05	1.53E-05	3.62E-08	3.59E-08	3.79E-08	4.07E-07	4.71E-07	4.57E-07	2.08E-07	2.22E-07	2.27E-07	2.01E-07	2.48E-07	2.95E-07
Vanadium	2.31E-04	3.06E-04	3.02E-04	7.13E-07	7.06E-07	7.46E-07	8.01E-06	9.27E-06	8.99E-06	4.10E-06	4.36E-06	4.46E-06	3.96E-06	4.88E-06	5.81E-06
Zinc	1.25E-03	1.67E-03	1.64E-03	3.88E-06	3.84E-06	4.06E-06	4.35E-05	5.04E-05	4.89E-05	2.23E-05	2.37E-05	2.43E-05	2.15E-05	2.65E-05	3.16E-05

Notes:

All concentrations arein g/m^3 /year.