Appendix V6-5F

Predicted Metal Concentrations Associated with Fugitive Dust during the Construction Phase at Soil Sites within the Human Health Local Study Area

TMAC RESOURCES

Appendix V6-5F. Predicted Metal Concentrations Associated with Fugitive Dust during the Construction Phase at Soil Sites within the Human Health Local Study Area

Soil Sample Sites	D06 (0-10)	D06 (10-20)	D10 (0-10)	D10 (10-20)	D20 (0-10)	D20 (10-20)	D21 (0-10)	D21 (10-20)	D29 (0-10)	D29 (10-20)	D32 (0-10)	D32 (10-20)	D38 (0-10)	D38 (10-20)	D43 (0-10)
Dust Deposition	**8.5**	**8.5**	**3.96**	**3.96**	**3.01**	**3.01**	**1.54**	**1.54**	**1.08**	**1.08**	**0.97**	**0.97**	**0.8**	**0.8**	**6.23**
Metal Dustfall Deposition															
Aluminum	2.45E-01	2.45E-01	1.15E-01	1.15E-01	8.72E-02	8.72E-02	4.47E-02	4.47E-02	3.13E-02	3.13E-02	2.81E-02	2.81E-02	2.31E-02	2.31E-02	1.81E-01
Antimony	8.46E-07	8.46E-07	3.96E-07	3.96E-07	3.01E-07	3.01E-07	1.54E-07	1.54E-07	1.08E-07	1.08E-07	9.69E-08	9.69E-08	7.97E-08	7.97E-08	6.23E-07
Arsenic	4.23E-06	4.23E-06	1.98E-06	1.98E-06	1.50E-06	1.50E-06	7.70E-07	7.70E-07	5.40E-07	5.40E-07	4.85E-07	4.85E-07	3.98E-07	3.98E-07	3.11E-06
Barium	2.54E-05	2.54E-05	1.19E-05	1.19E-05	9.02E-06	9.02E-06	4.62E-06	4.62E-06	3.24E-06	3.24E-06	2.91E-06	2.91E-06	2.39E-06	2.39E-06	1.87E-05
Beryllium	2.79E-06	2.79E-06	1.31E-06	1.31E-06	9.92E-07	9.92E-07	5.08E-07	5.08E-07	3.56E-07	3.56E-07	3.20E-07	3.20E-07	2.63E-07	2.63E-07	2.05E-06
Bismuth	8.46E-07	8.46E-07	3.96E-07	3.96E-07	3.01E-07	3.01E-07	1.54E-07	1.54E-07	1.08E-07	1.08E-07	9.69E-08	9.69E-08	7.97E-08	7.97E-08	6.23E-07
Cadmium	8.46E-07	8.46E-07	3.96E-07	3.96E-07	3.01E-07	3.01E-07	1.54E-07	1.54E-07	1.08E-07	1.08E-07	9.69E-08	9.69E-08	7.97E-08	7.97E-08	6.23E-07
Calcium	2.71E-01	2.71E-01	1.27E-01	1.27E-01	9.62E-02	9.62E-02	4.93E-02	4.93E-02	3.46E-02	3.46E-02	3.10E-02	3.10E-02	2.55E-02	2.55E-02	1.99E-01
Chromium	1.27E-03	1.27E-03	5.94E-04	5.94E-04	4.51E-04	4.51E-04	2.31E-04	2.31E-04	1.62E-04	1.62E-04	1.45E-04	1.45E-04	1.20E-04	1.20E-04	9.34E-04
Cobalt	2.96E-04	2.96E-04	1.39E-04	1.39E-04	1.05E-04	1.05E-04	5.39E-05	5.39E-05	3.78E-05	3.78E-05	3.39E-05	3.39E-05	2.79E-05	2.79E-05	2.18E-04
Copper	9.31E-04	9.31E-04	4.36E-04	4.36E-04	3.31E-04	3.31E-04	1.69E-04	1.69E-04	1.19E-04	1.19E-04	1.07E-04	1.07E-04	8.77E-05	8.77E-05	6.85E-04
Iron	4.15E-01	4.15E-01	1.94E-01	1.94E-01	1.47E-01	1.47E-01	7.55E-02	7.55E-02	5.29E-02	5.29E-02	4.75E-02	4.75E-02	3.90E-02	3.90E-02	3.05E-01
Lead	5.08E-06	5.08E-06	2.38E-06	2.38E-06	1.80E-06	1.80E-06	9.24E-07	9.24E-07	6.48E-07	6.48E-07	5.82E-07	5.82E-07	4.78E-07	4.78E-07	3.74E-06
Magnesium	1.95E-01	1.95E-01	9.11E-02	9.11E-02	6.91E-02	6.91E-02	3.54E-02	3.54E-02	2.48E-02	2.48E-02	2.23E-02	2.23E-02	1.83E-02	1.83E-02	1.43E-01
Manganese	7.87E-03	7.87E-03	3.69E-03	3.69E-03	2.80E-03	2.80E-03	1.43E-03	1.43E-03	1.00E-03	1.00E-03	9.01E-04	9.01E-04	7.41E-04	7.41E-04	5.79E-03
Mercury	8.46E-08	8.46E-08	3.96E-08	3.96E-08	3.01E-08	3.01E-08	1.54E-08	1.54E-08	1.08E-08	1.08E-08	9.69E-09	9.69E-09	7.97E-09	7.97E-09	6.23E-08
Molybdenum	4.23E-06	4.23E-06	1.98E-06	1.98E-06	1.50E-06	1.50E-06	7.70E-07	7.70E-07	5.40E-07	5.40E-07	4.85E-07	4.85E-07	3.98E-07	3.98E-07	3.11E-06
Nickel	6.09E-04	6.09E-04	2.85E-04	2.85E-04	2.16E-04	2.16E-04	1.11E-04	1.11E-04	7.78E-05	7.78E-05	6.98E-05	6.98E-05	5.74E-05	5.74E-05	4.48E-04
Phosphorus	1.86E-03	1.86E-03	8.72E-04	8.72E-04	6.61E-04	6.61E-04	3.39E-04	3.39E-04	2.38E-04	2.38E-04	2.13E-04	2.13E-04	1.75E-04	1.75E-04	1.37E-03
Potassium	8.46E-04	8.46E-04	3.96E-04	3.96E-04	3.01E-04	3.01E-04	1.54E-04	1.54E-04	1.08E-04	1.08E-04	9.69E-05	9.69E-05	7.97E-05	7.97E-05	6.23E-04
Selenium	4.23E-06	4.23E-06	1.98E-06	1.98E-06	1.50E-06	1.50E-06	7.70E-07	7.70E-07	5.40E-07	5.40E-07	4.85E-07	4.85E-07	3.98E-07	3.98E-07	3.11E-06
Silver	8.46E-07	8.46E-07	3.96E-07	3.96E-07	3.01E-07	3.01E-07	1.54E-07	1.54E-07	1.08E-07	1.08E-07	9.69E-08	9.69E-08	7.97E-08	7.97E-08	6.23E-07
Sodium	2.12E-03	2.12E-03	9.91E-04	9.91E-04	7.52E-04	7.52E-04	3.85E-04	3.85E-04	2.70E-04	2.70E-04	2.42E-04	2.42E-04	1.99E-04	1.99E-04	1.56E-03
Strontium	1.18E-04	1.18E-04	5.55E-05	5.55E-05	4.21E-05	4.21E-05	2.16E-05	2.16E-05	1.51E-05	1.51E-05	1.36E-05	1.36E-05	1.12E-05	1.12E-05	8.72E-05
Thallium	8.46E-07	8.46E-07	3.96E-07	3.96E-07	3.01E-07	3.01E-07	1.54E-07	1.54E-07	1.08E-07	1.08E-07	9.69E-08	9.69E-08	7.97E-08	7.97E-08	6.23E-07
Tin	1.69E-05	1.69E-05	7.93E-06	7.93E-06	6.01E-06	6.01E-06	3.08E-06	3.08E-06	2.16E-06	2.16E-06	1.94E-06	1.94E-06	1.59E-06	1.59E-06	1.25E-05
Titanium	1.86E-02	1.86E-02	8.72E-03	8.72E-03	6.61E-03	6.61E-03	3.39E-03	3.39E-03	2.38E-03	2.38E-03	2.13E-03	2.13E-03	1.75E-03	1.75E-03	1.37E-02
Uranium	8.46E-07	8.46E-07	3.96E-07	3.96E-07	3.01E-07	3.01E-07	1.54E-07	1.54E-07	1.08E-07	1.08E-07	9.69E-08	9.69E-08	7.97E-08	7.97E-08	6.23E-07
Vanadium	8.46E-04	8.46E-04	3.96E-04	3.96E-04	3.01E-04	3.01E-04	1.54E-04	1.54E-04	1.08E-04	1.08E-04	9.69E-05	9.69E-05	7.97E-05	7.97E-05	6.23E-04
Zinc	4.99E-04	4.99E-04	2.34E-04	2.34E-04	1.77E-04	1.77E-04	9.09E-05	9.09E-05	6.37E-05	6.37E-05	5.72E-05	5.72E-05	4.70E-05	4.70E-05	3.67E-04

Notes:

All concentrations are in g/m^2 /year.

The predicted fugitive dust deposition rates used to estimate metal dustfall deposition are the maximum values from two different air quality model cases associated with existing infrastruture (Madrid Southerly Case), and proposed changes to infrastructure (Madrid Northerly Case). More details pertaining to these air quality model cases can be found in the Air Quality Modelling Report of this EIS.

Appendix V6-5F. Predicted Metal Concentrations Associated with Fugitive Dust during the Construction Phase at Soil Sites within the Human Health Local Study Area

Soil Sample Sites	D43 (10-20)	D54 (0-10)	D54 (10-20)	D57 (0-10)	D57 (10-20)	D59 (0-10)	D59 (10-20)	D61 (0-10)	D61 (10-20)	D70 (0-10)	D70 (10-20)	D72 (0-10)	D72 (10-20)	D76 (0-10)	D76 (10-20)
Dust Deposition	**6.23E+00**	**1.02E+00**	**1.02E+00**	**9.77E+00**	**9.77E+00**	**1.35E+00**	**1.35E+00**	**8.10E-01**	**8.10E-01**	**1.00E+00**	**1.00E+00**	**1.24E+01**	**1.24E+01**	**3.87E+00**	**3.87E+00**
Metal Dustfall Deposition															
Aluminum	1.81E-01	2.94E-02	2.94E-02	2.83E-01	2.83E-01	3.91E-02	3.91E-02	2.34E-02	2.34E-02	2.91E-02	2.91E-02	3.59E-01	3.59E-01	1.12E-01	1.12E-01
Antimony	6.23E-07	1.02E-07	1.02E-07	9.77E-07	9.77E-07	1.35E-07	1.35E-07	8.06E-08	8.06E-08	1.00E-07	1.00E-07	1.24E-06	1.24E-06	3.87E-07	3.87E-07
Arsenic	3.11E-06	5.08E-07	5.08E-07	4.89E-06	4.89E-06	6.75E-07	6.75E-07	4.03E-07	4.03E-07	5.02E-07	5.02E-07	6.18E-06	6.18E-06	1.93E-06	1.93E-06
Barium	1.87E-05	3.05E-06	3.05E-06	2.93E-05	2.93E-05	4.05E-06	4.05E-06	2.42E-06	2.42E-06	3.01E-06	3.01E-06	3.71E-05	3.71E-05	1.16E-05	1.16E-05
Beryllium	2.05E-06	3.35E-07	3.35E-07	3.23E-06	3.23E-06	4.45E-07	4.45E-07	2.66E-07	2.66E-07	3.31E-07	3.31E-07	4.08E-06	4.08E-06	1.28E-06	1.28E-06
Bismuth	6.23E-07	1.02E-07	1.02E-07	9.77E-07	9.77E-07	1.35E-07	1.35E-07	8.06E-08	8.06E-08	1.00E-07	1.00E-07	1.24E-06	1.24E-06	3.87E-07	3.87E-07
Cadmium	6.23E-07	1.02E-07	1.02E-07	9.77E-07	9.77E-07	1.35E-07	1.35E-07	8.06E-08	8.06E-08	1.00E-07	1.00E-07	1.24E-06	1.24E-06	3.87E-07	3.87E-07
Calcium	1.99E-01	3.25E-02	3.25E-02	3.13E-01	3.13E-01	4.32E-02	4.32E-02	2.58E-02	2.58E-02	3.21E-02	3.21E-02	3.96E-01	3.96E-01	1.24E-01	1.24E-01
Chromium	9.34E-04	1.52E-04	1.52E-04	1.47E-03	1.47E-03	2.02E-04	2.02E-04	1.21E-04	1.21E-04	1.51E-04	1.51E-04	1.85E-03	1.85E-03	5.80E-04	5.80E-04
Cobalt	2.18E-04	3.55E-05	3.55E-05	3.42E-04	3.42E-04	4.72E-05	4.72E-05	2.82E-05	2.82E-05	3.52E-05	3.52E-05	4.33E-04	4.33E-04	1.35E-04	1.35E-04
Copper	6.85E-04	1.12E-04	1.12E-04	1.08E-03	1.08E-03	1.48E-04	1.48E-04	8.86E-05	8.86E-05	1.10E-04	1.10E-04	1.36E-03	1.36E-03	4.25E-04	4.25E-04
Iron	3.05E-01	4.98E-02	4.98E-02	4.79E-01	4.79E-01	6.61E-02	6.61E-02	3.95E-02	3.95E-02	4.92E-02	4.92E-02	6.06E-01	6.06E-01	1.89E-01	1.89E-01
Lead	3.74E-06	6.09E-07	6.09E-07	5.86E-06	5.86E-06	8.10E-07	8.10E-07	4.83E-07	4.83E-07	6.03E-07	6.03E-07	7.42E-06	7.42E-06	2.32E-06	2.32E-06
Magnesium	1.43E-01	2.34E-02	2.34E-02	2.25E-01	2.25E-01	3.10E-02	3.10E-02	1.85E-02	1.85E-02	2.31E-02	2.31E-02	2.84E-01	2.84E-01	8.89E-02	8.89E-02
Manganese	5.79E-03	9.44E-04	9.44E-04	9.09E-03	9.09E-03	1.26E-03	1.26E-03	7.49E-04	7.49E-04	9.34E-04	9.34E-04	1.15E-02	1.15E-02	3.60E-03	3.60E-03
Mercury	6.23E-08	1.02E-08	1.02E-08	9.77E-08	9.77E-08	1.35E-08	1.35E-08	8.06E-09	8.06E-09	1.00E-08	1.00E-08	1.24E-07	1.24E-07	3.87E-08	3.87E-08
Molybdenum	3.11E-06	5.08E-07	5.08E-07	4.89E-06	4.89E-06	6.75E-07	6.75E-07	4.03E-07	4.03E-07	5.02E-07	5.02E-07	6.18E-06	6.18E-06	1.93E-06	1.93E-06
Nickel	4.48E-04	7.31E-05	7.31E-05	7.04E-04	7.04E-04	9.72E-05	9.72E-05	5.80E-05	5.80E-05	7.23E-05	7.23E-05	8.90E-04	8.90E-04	2.78E-04	2.78E-04
Phosphorus	1.37E-03	2.23E-04	2.23E-04	2.15E-03	2.15E-03	2.97E-04	2.97E-04	1.77E-04	1.77E-04	2.21E-04	2.21E-04	2.72E-03	2.72E-03	8.51E-04	8.51E-04
Potassium	6.23E-04	1.02E-04	1.02E-04	9.77E-04	9.77E-04	1.35E-04	1.35E-04	8.06E-05	8.06E-05	1.00E-04	1.00E-04	1.24E-03	1.24E-03	3.87E-04	3.87E-04
Selenium	3.11E-06	5.08E-07	5.08E-07	4.89E-06	4.89E-06	6.75E-07	6.75E-07	4.03E-07	4.03E-07	5.02E-07	5.02E-07	6.18E-06	6.18E-06	1.93E-06	1.93E-06
Silver	6.23E-07	1.02E-07	1.02E-07	9.77E-07	9.77E-07	1.35E-07	1.35E-07	8.06E-08	8.06E-08	1.00E-07	1.00E-07	1.24E-06	1.24E-06	3.87E-07	3.87E-07
Sodium	1.56E-03	2.54E-04	2.54E-04	2.44E-03	2.44E-03	3.37E-04	3.37E-04	2.01E-04	2.01E-04	2.51E-04	2.51E-04	3.09E-03	3.09E-03	9.67E-04	9.67E-04
Strontium	8.72E-05	1.42E-05	1.42E-05	1.37E-04	1.37E-04	1.89E-05	1.89E-05	1.13E-05	1.13E-05	1.41E-05	1.41E-05	1.73E-04	1.73E-04	5.41E-05	5.41E-05
Thallium	6.23E-07	1.02E-07	1.02E-07	9.77E-07	9.77E-07	1.35E-07	1.35E-07	8.06E-08	8.06E-08	1.00E-07	1.00E-07	1.24E-06	1.24E-06	3.87E-07	3.87E-07
Tin	1.25E-05	2.03E-06	2.03E-06	1.95E-05	1.95E-05	2.70E-06	2.70E-06	1.61E-06	1.61E-06	2.01E-06	2.01E-06	2.47E-05	2.47E-05	7.73E-06	7.73E-06
Titanium	1.37E-02	2.23E-03	2.23E-03	2.15E-02	2.15E-02	2.97E-03	2.97E-03	1.77E-03	1.77E-03	2.21E-03	2.21E-03	2.72E-02	2.72E-02	8.51E-03	8.51E-03
Uranium	6.23E-07	1.02E-07	1.02E-07	9.77E-07	9.77E-07	1.35E-07	1.35E-07	8.06E-08	8.06E-08	1.00E-07	1.00E-07	1.24E-06	1.24E-06	3.87E-07	3.87E-07
Vanadium	6.23E-04	1.02E-04	1.02E-04	9.77E-04	9.77E-04	1.35E-04	1.35E-04	8.06E-05	8.06E-05	1.00E-04	1.00E-04	1.24E-03	1.24E-03	3.87E-04	3.87E-04
Zinc	3.67E-04	5.99E-05	5.99E-05	5.77E-04	5.77E-04	7.96E-05	7.96E-05	4.75E-05	4.75E-05	5.93E-05	5.93E-05	7.29E-04	7.29E-04	2.28E-04	2.28E-04

Notes:

All concentrations are in g/m^2 /year.

The predicted fugitive dust deposition rates used to estimate metal dustfall deposition are the maximum values from two different air quality model cases associated with existing infrastruture (Madrid Southerly Case), and proposed changes to infrastructure (Madrid Northerly Case). More details pertaining to these air quality model cases can be found in the Air Quality Modelling Report of this EIS.

Appendix V6-5F. Predicted Metal Concentrations Associated with Fugitive Dust during the Construction Phase at Soil Sites within the Human Health Local Study Area

Soil Sample Sites	D108 (0-10)	D108 (10-20)	D109 (0-10)	D109 (10-20)	D96 (0-10)	D96 (10-20)	D99 (0-10)	D99 (10-20)	D82 (0-10)	D82 (10-20)	D88 (0-10)	D88 (10-20)	D65 (0-10)	D65 (10-20)	D119 (0-10)
Dust Deposition	**1.60E+00**	**1.60E+00**	**1.06E+00**	**1.06E+00**	**1.09E+01**	**1.09E+01**	**3.74E+00**	**3.74E+00**	**3.87E+00**	**3.87E+00**	**1.09E+01**	**1.09E+01**	**1.00E+00**	**1.00E+00**	**1.61E+00**
Metal Dustfall Deposition															
Aluminum	4.66E-02	4.66E-02	3.08E-02	3.08E-02	3.16E-01	3.16E-01	1.09E-01	1.09E-01	1.12E-01	1.12E-01	3.16E-01	3.16E-01	2.91E-02	2.91E-02	4.66E-02
Antimony	1.61E-07	1.61E-07	1.06E-07	1.06E-07	1.09E-06	1.09E-06	3.74E-07	3.74E-07	3.87E-07	3.87E-07	1.09E-06	1.09E-06	1.00E-07	1.00E-07	1.61E-07
Arsenic	8.04E-07	8.04E-07	5.31E-07	5.31E-07	5.44E-06	5.44E-06	1.87E-06	1.87E-06	1.93E-06	1.93E-06	5.44E-06	5.44E-06	5.02E-07	5.02E-07	8.04E-07
Barium	4.82E-06	4.82E-06	3.19E-06	3.19E-06	3.27E-05	3.27E-05	1.12E-05	1.12E-05	1.16E-05	1.16E-05	3.27E-05	3.27E-05	3.01E-06	3.01E-06	4.82E-06
Beryllium	5.30E-07	5.30E-07	3.51E-07	3.51E-07	3.59E-06	3.59E-06	1.24E-06	1.24E-06	1.28E-06	1.28E-06	3.59E-06	3.59E-06	3.31E-07	3.31E-07	5.30E-07
Bismuth	1.61E-07	1.61E-07	1.06E-07	1.06E-07	1.09E-06	1.09E-06	3.74E-07	3.74E-07	3.87E-07	3.87E-07	1.09E-06	1.09E-06	1.00E-07	1.00E-07	1.61E-07
Cadmium	1.61E-07	1.61E-07	1.06E-07	1.06E-07	1.09E-06	1.09E-06	3.74E-07	3.74E-07	3.87E-07	3.87E-07	1.09E-06	1.09E-06	1.00E-07	1.00E-07	1.61E-07
Calcium	5.14E-02	5.14E-02	3.40E-02	3.40E-02	3.48E-01	3.48E-01	1.20E-01	1.20E-01	1.24E-01	1.24E-01	3.48E-01	3.48E-01	3.21E-02	3.21E-02	5.14E-02
Chromium	2.41E-04	2.41E-04	1.59E-04	1.59E-04	1.63E-03	1.63E-03	5.61E-04	5.61E-04	5.80E-04	5.80E-04	1.63E-03	1.63E-03	1.51E-04	1.51E-04	2.41E-04
Cobalt	5.62E-05	5.62E-05	3.72E-05	3.72E-05	3.81E-04	3.81E-04	1.31E-04	1.31E-04	1.35E-04	1.35E-04	3.81E-04	3.81E-04	3.52E-05	3.52E-05	5.62E-05
Copper	1.77E-04	1.77E-04	1.17E-04	1.17E-04	1.20E-03	1.20E-03	4.12E-04	4.12E-04	4.25E-04	4.25E-04	1.20E-03	1.20E-03	1.10E-04	1.10E-04	1.77E-04
Iron	7.87E-02	7.87E-02	5.21E-02	5.21E-02	5.34E-01	5.34E-01	1.83E-01	1.83E-01	1.89E-01	1.89E-01	5.34E-01	5.34E-01	4.92E-02	4.92E-02	7.87E-02
Lead	9.64E-07	9.64E-07	6.38E-07	6.38E-07	6.53E-06	6.53E-06	2.25E-06	2.25E-06	2.32E-06	2.32E-06	6.53E-06	6.53E-06	6.03E-07	6.03E-07	9.64E-07
Magnesium	3.70E-02	3.70E-02	2.44E-02	2.44E-02	2.50E-01	2.50E-01	8.61E-02	8.61E-02	8.89E-02	8.89E-02	2.50E-01	2.50E-01	2.31E-02	2.31E-02	3.70E-02
Manganese	1.49E-03	1.49E-03	9.88E-04	9.88E-04	1.01E-02	1.01E-02	3.48E-03	3.48E-03	3.60E-03	3.60E-03	1.01E-02	1.01E-02	9.34E-04	9.34E-04	1.49E-03
Mercury	1.61E-08	1.61E-08	1.06E-08	1.06E-08	1.09E-07	1.09E-07	3.74E-08	3.74E-08	3.87E-08	3.87E-08	1.09E-07	1.09E-07	1.00E-08	1.00E-08	1.61E-08
Molybdenum	8.04E-07	8.04E-07	5.31E-07	5.31E-07	5.44E-06	5.44E-06	1.87E-06	1.87E-06	1.93E-06	1.93E-06	5.44E-06	5.44E-06	5.02E-07	5.02E-07	8.04E-07
Nickel	1.16E-04	1.16E-04	7.65E-05	7.65E-05	7.84E-04	7.84E-04	2.70E-04	2.70E-04	2.78E-04	2.78E-04	7.84E-04	7.84E-04	7.23E-05	7.23E-05	1.16E-04
Phosphorus	3.54E-04	3.54E-04	2.34E-04	2.34E-04	2.40E-03	2.40E-03	8.24E-04	8.24E-04	8.51E-04	8.51E-04	2.40E-03	2.40E-03	2.21E-04	2.21E-04	3.54E-04
Potassium	1.61E-04	1.61E-04	1.06E-04	1.06E-04	1.09E-03	1.09E-03	3.74E-04	3.74E-04	3.87E-04	3.87E-04	1.09E-03	1.09E-03	1.00E-04	1.00E-04	1.61E-04
Selenium	8.04E-07	8.04E-07	5.31E-07	5.31E-07	5.44E-06	5.44E-06	1.87E-06	1.87E-06	1.93E-06	1.93E-06	5.44E-06	5.44E-06	5.02E-07	5.02E-07	8.04E-07
Silver	1.61E-07	1.61E-07	1.06E-07	1.06E-07	1.09E-06	1.09E-06	3.74E-07	3.74E-07	3.87E-07	3.87E-07	1.09E-06	1.09E-06	1.00E-07	1.00E-07	1.61E-07
Sodium	4.02E-04	4.02E-04	2.66E-04	2.66E-04	2.72E-03	2.72E-03	9.36E-04	9.36E-04	9.67E-04	9.67E-04	2.72E-03	2.72E-03	2.51E-04	2.51E-04	4.02E-04
Strontium	2.25E-05	2.25E-05	1.49E-05	1.49E-05	1.52E-04	1.52E-04	5.24E-05	5.24E-05	5.41E-05	5.41E-05	1.52E-04	1.52E-04	1.41E-05	1.41E-05	2.25E-05
Thallium	1.61E-07	1.61E-07	1.06E-07	1.06E-07	1.09E-06	1.09E-06	3.74E-07	3.74E-07	3.87E-07	3.87E-07	1.09E-06	1.09E-06	1.00E-07	1.00E-07	1.61E-07
Tin	3.21E-06	3.21E-06	2.13E-06	2.13E-06	2.18E-05	2.18E-05	7.49E-06	7.49E-06	7.73E-06	7.73E-06	2.18E-05	2.18E-05	2.01E-06	2.01E-06	3.21E-06
Titanium	3.54E-03	3.54E-03	2.34E-03	2.34E-03	2.40E-02	2.40E-02	8.24E-03	8.24E-03	8.51E-03	8.51E-03	2.40E-02	2.40E-02	2.21E-03	2.21E-03	3.54E-03
Uranium	1.61E-07	1.61E-07	1.06E-07	1.06E-07	1.09E-06	1.09E-06	3.74E-07	3.74E-07	3.87E-07	3.87E-07	1.09E-06	1.09E-06	1.00E-07	1.00E-07	1.61E-07
Vanadium	1.61E-04	1.61E-04	1.06E-04	1.06E-04	1.09E-03	1.09E-03	3.74E-04	3.74E-04	3.87E-04	3.87E-04	1.09E-03	1.09E-03	1.00E-04	1.00E-04	1.61E-04
Zinc	9.48E-05	9.48E-05	6.27E-05	6.27E-05	6.42E-04	6.42E-04	2.21E-04	2.21E-04	2.28E-04	2.28E-04	6.42E-04	6.42E-04	5.93E-05	5.93E-05	9.48E-05

Notes:

All concentrations are in g/m^2 /year.

The predicted fugitive dust deposition rates used to estimate metal dustfall deposition are the maximum values from two different air quality model cases associated with existing infrastruture (Madrid Southerly Case), and proposed changes to infrastructure (Madrid Northerly Case). More details pertaining to these air quality model cases can be found in the Air Quality Modelling Report of this EIS.

Appendix V6-5F. Predicted Metal Concentrations Associated with Fugitive Dust during the Construction Phase at Soil Sites within the Human Health Local Study Area

Soil Sample Sites	D119 (10-20)	D122 (0-10)	D122 (10-20)	D132 (0-10)	D132 (10-20)	8 (0-10)	8 (10-20)	13 (0-10)	13 (10-20)	14 (0-10)	14 (10-20)	18 (0-10)	18 (10-20)	21 (0-10)	21 (10-20)
Dust Deposition	**1.61E+00**	**1.91E+00**	**1.91E+00**	**8.90E-01**	**8.90E-01**	**7.50E+00**	**7.50E+00**	**2.07E+00**	**2.07E+00**	**2.05E+00**	**2.05E+00**	**2.48E+00**	**2.48E+00**	**2.54E+00**	**2.54E+00**
Metal Dustfall Deposition															
Aluminum	4.66E-02	5.55E-02	5.55E-02	2.59E-02	2.59E-02	2.16E-01	2.16E-01	6.00E-02	6.00E-02	5.95E-02	5.95E-02	7.19E-02	7.19E-02	7.38E-02	7.38E-02
Antimony	1.61E-07	1.91E-07	1.91E-07	8.94E-08	8.94E-08	7.47E-07	7.47E-07	2.07E-07	2.07E-07	2.05E-07	2.05E-07	2.48E-07	2.48E-07	2.54E-07	2.54E-07
Arsenic	8.04E-07	9.57E-07	9.57E-07	4.47E-07	4.47E-07	3.73E-06	3.73E-06	1.04E-06	1.04E-06	1.03E-06	1.03E-06	1.24E-06	1.24E-06	1.27E-06	1.27E-06
Barium	4.82E-06	5.74E-06	5.74E-06	2.68E-06	2.68E-06	2.24E-05	2.24E-05	6.21E-06	6.21E-06	6.16E-06	6.16E-06	7.44E-06	7.44E-06	7.63E-06	7.63E-06
Beryllium	5.30E-07	6.32E-07	6.32E-07	2.95E-07	2.95E-07	2.46E-06	2.46E-06	6.83E-07	6.83E-07	6.78E-07	6.78E-07	8.18E-07	8.18E-07	8.40E-07	8.40E-07
Bismuth	1.61E-07	1.91E-07	1.91E-07	8.94E-08	8.94E-08	7.47E-07	7.47E-07	2.07E-07	2.07E-07	2.05E-07	2.05E-07	2.48E-07	2.48E-07	2.54E-07	2.54E-07
Cadmium	1.61E-07	1.91E-07	1.91E-07	8.94E-08	8.94E-08	7.47E-07	7.47E-07	2.07E-07	2.07E-07	2.05E-07	2.05E-07	2.48E-07	2.48E-07	2.54E-07	2.54E-07
Calcium	5.14E-02	6.13E-02	6.13E-02	2.86E-02	2.86E-02	2.39E-01	2.39E-01	6.62E-02	6.62E-02	6.57E-02	6.57E-02	7.94E-02	7.94E-02	8.14E-02	8.14E-02
Chromium	2.41E-04	2.87E-04	2.87E-04	1.34E-04	1.34E-04	1.12E-03	1.12E-03	3.11E-04	3.11E-04	3.08E-04	3.08E-04	3.72E-04	3.72E-04	3.82E-04	3.82E-04
Cobalt	5.62E-05	6.70E-05	6.70E-05	3.13E-05	3.13E-05	2.61E-04	2.61E-04	7.25E-05	7.25E-05	7.19E-05	7.19E-05	8.68E-05	8.68E-05	8.91E-05	8.91E-05
Copper	1.77E-04	2.11E-04	2.11E-04	9.83E-05	9.83E-05	8.21E-04	8.21E-04	2.28E-04	2.28E-04	2.26E-04	2.26E-04	2.73E-04	2.73E-04	2.80E-04	2.80E-04
Iron	7.87E-02	9.38E-02	9.38E-02	4.38E-02	4.38E-02	3.66E-01	3.66E-01	1.01E-01	1.01E-01	1.01E-01	1.01E-01	1.22E-01	1.22E-01	1.25E-01	1.25E-01
Lead	9.64E-07	1.15E-06	1.15E-06	5.36E-07	5.36E-07	4.48E-06	4.48E-06	1.24E-06	1.24E-06	1.23E-06	1.23E-06	1.49E-06	1.49E-06	1.53E-06	1.53E-06
Magnesium	3.70E-02	4.40E-02	4.40E-02	2.06E-02	2.06E-02	1.72E-01	1.72E-01	4.76E-02	4.76E-02	4.72E-02	4.72E-02	5.70E-02	5.70E-02	5.85E-02	5.85E-02
Manganese	1.49E-03	1.78E-03	1.78E-03	8.31E-04	8.31E-04	6.94E-03	6.94E-03	1.93E-03	1.93E-03	1.91E-03	1.91E-03	2.31E-03	2.31E-03	2.37E-03	2.37E-03
Mercury	1.61E-08	1.91E-08	1.91E-08	8.94E-09	8.94E-09	7.47E-08	7.47E-08	2.07E-08	2.07E-08	2.05E-08	2.05E-08	2.48E-08	2.48E-08	2.54E-08	2.54E-08
Molybdenum	8.04E-07	9.57E-07	9.57E-07	4.47E-07	4.47E-07	3.73E-06	3.73E-06	1.04E-06	1.04E-06	1.03E-06	1.03E-06	1.24E-06	1.24E-06	1.27E-06	1.27E-06
Nickel	1.16E-04	1.38E-04	1.38E-04	6.44E-05	6.44E-05	5.37E-04	5.37E-04	1.49E-04	1.49E-04	1.48E-04	1.48E-04	1.79E-04	1.79E-04	1.83E-04	1.83E-04
Phosphorus	3.54E-04	4.21E-04	4.21E-04	1.97E-04	1.97E-04	1.64E-03	1.64E-03	4.55E-04	4.55E-04	4.52E-04	4.52E-04	5.46E-04	5.46E-04	5.60E-04	5.60E-04
Potassium	1.61E-04	1.91E-04	1.91E-04	8.94E-05	8.94E-05	7.47E-04	7.47E-04	2.07E-04	2.07E-04	2.05E-04	2.05E-04	2.48E-04	2.48E-04	2.54E-04	2.54E-04
Selenium	8.04E-07	9.57E-07	9.57E-07	4.47E-07	4.47E-07	3.73E-06	3.73E-06	1.04E-06	1.04E-06	1.03E-06	1.03E-06	1.24E-06	1.24E-06	1.27E-06	1.27E-06
Silver	1.61E-07	1.91E-07	1.91E-07	8.94E-08	8.94E-08	7.47E-07	7.47E-07	2.07E-07	2.07E-07	2.05E-07	2.05E-07	2.48E-07	2.48E-07	2.54E-07	2.54E-07
Sodium	4.02E-04	4.79E-04	4.79E-04	2.24E-04	2.24E-04	1.87E-03	1.87E-03	5.18E-04	5.18E-04	5.13E-04	5.13E-04	6.20E-04	6.20E-04	6.36E-04	6.36E-04
Strontium	2.25E-05	2.68E-05	2.68E-05	1.25E-05	1.25E-05	1.05E-04	1.05E-04	2.90E-05	2.90E-05	2.87E-05	2.87E-05	3.47E-05	3.47E-05	3.56E-05	3.56E-05
Thallium	1.61E-07	1.91E-07	1.91E-07	8.94E-08	8.94E-08	7.47E-07	7.47E-07	2.07E-07	2.07E-07	2.05E-07	2.05E-07	2.48E-07	2.48E-07	2.54E-07	2.54E-07
Tin	3.21E-06	3.83E-06	3.83E-06	1.79E-06	1.79E-06	1.49E-05	1.49E-05	4.14E-06	4.14E-06	4.11E-06	4.11E-06	4.96E-06	4.96E-06	5.09E-06	5.09E-06
Titanium	3.54E-03	4.21E-03	4.21E-03	1.97E-03	1.97E-03	1.64E-02	1.64E-02	4.55E-03	4.55E-03	4.52E-03	4.52E-03	5.46E-03	5.46E-03	5.60E-03	5.60E-03
Uranium	1.61E-07	1.91E-07	1.91E-07	8.94E-08	8.94E-08	7.47E-07	7.47E-07	2.07E-07	2.07E-07	2.05E-07	2.05E-07	2.48E-07	2.48E-07	2.54E-07	2.54E-07
Vanadium	1.61E-04	1.91E-04	1.91E-04	8.94E-05	8.94E-05	7.47E-04	7.47E-04	2.07E-04	2.07E-04	2.05E-04	2.05E-04	2.48E-04	2.48E-04	2.54E-04	2.54E-04
Zinc	9.48E-05	1.13E-04	1.13E-04	5.27E-05	5.27E-05	4.40E-04	4.40E-04	1.22E-04	1.22E-04	1.21E-04	1.21E-04	1.46E-04	1.46E-04	1.50E-04	1.50E-04

Notes:

All concentrations are in g/m^2 /year.

The predicted fugitive dust deposition rates used to estimate metal dustfall deposition are the maximum values from two different air quality model cases associated with existing infrastruture (Madrid Southerly Case), and proposed changes to infrastructure (Madrid Northerly Case). More details pertaining to these air quality model cases can be found in the Air Quality Modelling Report of this EIS.

Appendix V6-5F. Predicted Metal Concentrations Associated with Fugitive Dust during the Construction Phase at Soil Sites within the Human Health Local Study Area

Soil Sample Sites	22 (0-10)	22 (10-20)	23 (0-10)	23 (10-20)	29 (0-10)	29 (10-20)	11 (0-10)	11 (10-20)	16 (0-10)	16 (10-20)	REFA-01	REFA-02	REFA-03	REFB-01	REFB-02
Dust Deposition	**2.39E+00**	**2.39E+00**	**3.32E+00**	**3.32E+00**	**1.70E+00**	**1.70E+00**	**2.01E+00**	**2.01E+00**	**8.03E+00**	**8.03E+00**	**8.50E-01**	**8.50E-01**	**8.70E-01**	**7.80E-01**	**7.80E-01**
Metal Dustfall Deposition															
Aluminum	6.92E-02	6.92E-02	9.62E-02	9.62E-02	4.96E-02	4.96E-02	5.82E-02	5.82E-02	2.33E-01	2.33E-01	2.48E-02	2.48E-02	2.51E-02	2.27E-02	2.26E-02
Antimony	2.39E-07	2.39E-07	3.32E-07	3.32E-07	1.71E-07	1.71E-07	2.01E-07	2.01E-07	8.03E-07	8.03E-07	8.55E-08	8.54E-08	8.66E-08	7.81E-08	7.79E-08
Arsenic	1.19E-06	1.19E-06	1.66E-06	1.66E-06	8.56E-07	8.56E-07	1.00E-06	1.00E-06	4.01E-06	4.01E-06	4.27E-07	4.27E-07	4.33E-07	3.91E-07	3.90E-07
Barium	7.16E-06	7.16E-06	9.95E-06	9.95E-06	5.14E-06	5.14E-06	6.03E-06	6.03E-06	2.41E-05	2.41E-05	2.56E-06	2.56E-06	2.60E-06	2.34E-06	2.34E-06
Beryllium	7.87E-07	7.87E-07	1.09E-06	1.09E-06	5.65E-07	5.65E-07	6.63E-07	6.63E-07	2.65E-06	2.65E-06	2.82E-07	2.82E-07	2.86E-07	2.58E-07	2.57E-07
Bismuth	2.39E-07	2.39E-07	3.32E-07	3.32E-07	1.71E-07	1.71E-07	2.01E-07	2.01E-07	8.03E-07	8.03E-07	8.55E-08	8.54E-08	8.66E-08	7.81E-08	7.79E-08
Cadmium	2.39E-07	2.39E-07	3.32E-07	3.32E-07	1.71E-07	1.71E-07	2.01E-07	2.01E-07	8.03E-07	8.03E-07	8.55E-08	8.54E-08	8.66E-08	7.81E-08	7.79E-08
Calcium	7.64E-02	7.64E-02	1.06E-01	1.06E-01	5.48E-02	5.48E-02	6.43E-02	6.43E-02	2.57E-01	2.57E-01	2.74E-02	2.73E-02	2.77E-02	2.50E-02	2.49E-02
Chromium	3.58E-04	3.58E-04	4.97E-04	4.97E-04	2.57E-04	2.57E-04	3.01E-04	3.01E-04	1.20E-03	1.20E-03	1.28E-04	1.28E-04	1.30E-04	1.17E-04	1.17E-04
Cobalt	8.35E-05	8.35E-05	1.16E-04	1.16E-04	5.99E-05	5.99E-05	7.03E-05	7.03E-05	2.81E-04	2.81E-04	2.99E-05	2.99E-05	3.03E-05	2.73E-05	2.73E-05
Copper	2.62E-04	2.62E-04	3.65E-04	3.65E-04	1.88E-04	1.88E-04	2.21E-04	2.21E-04	8.83E-04	8.83E-04	9.40E-05	9.40E-05	9.52E-05	8.59E-05	8.57E-05
Iron	1.17E-01	1.17E-01	1.63E-01	1.63E-01	8.39E-02	8.39E-02	9.84E-02	9.84E-02	3.93E-01	3.93E-01	4.19E-02	4.19E-02	4.24E-02	3.83E-02	3.82E-02
Lead	1.43E-06	1.43E-06	1.99E-06	1.99E-06	1.03E-06	1.03E-06	1.21E-06	1.21E-06	4.82E-06	4.82E-06	5.13E-07	5.13E-07	5.19E-07	4.69E-07	4.68E-07
Magnesium	5.49E-02	5.49E-02	7.63E-02	7.63E-02	3.94E-02	3.94E-02	4.62E-02	4.62E-02	1.85E-01	1.85E-01	1.97E-02	1.96E-02	1.99E-02	1.80E-02	1.79E-02
Manganese	2.22E-03	2.22E-03	3.08E-03	3.08E-03	1.59E-03	1.59E-03	1.87E-03	1.87E-03	7.46E-03	7.46E-03	7.95E-04	7.94E-04	8.05E-04	7.26E-04	7.25E-04
Mercury	2.39E-08	2.39E-08	3.32E-08	3.32E-08	1.71E-08	1.71E-08	2.01E-08	2.01E-08	8.03E-08	8.03E-08	8.55E-09	8.54E-09	8.66E-09	7.81E-09	7.79E-09
Molybdenum	1.19E-06	1.19E-06	1.66E-06	1.66E-06	8.56E-07	8.56E-07	1.00E-06	1.00E-06	4.01E-06	4.01E-06	4.27E-07	4.27E-07	4.33E-07	3.91E-07	3.90E-07
Nickel	1.72E-04	1.72E-04	2.39E-04	2.39E-04	1.23E-04	1.23E-04	1.45E-04	1.45E-04	5.78E-04	5.78E-04	6.16E-05	6.15E-05	6.23E-05	5.62E-05	5.61E-05
Phosphorus	5.25E-04	5.25E-04	7.30E-04	7.30E-04	3.77E-04	3.77E-04	4.42E-04	4.42E-04	1.77E-03	1.77E-03	1.88E-04	1.88E-04	1.90E-04	1.72E-04	1.71E-04
Potassium	2.39E-04	2.39E-04	3.32E-04	3.32E-04	1.71E-04	1.71E-04	2.01E-04	2.01E-04	8.03E-04	8.03E-04	8.55E-05	8.54E-05	8.66E-05	7.81E-05	7.79E-05
Selenium	1.19E-06	1.19E-06	1.66E-06	1.66E-06	8.56E-07	8.56E-07	1.00E-06	1.00E-06	4.01E-06	4.01E-06	4.27E-07	4.27E-07	4.33E-07	3.91E-07	3.90E-07
Silver	2.39E-07	2.39E-07	3.32E-07	3.32E-07	1.71E-07	1.71E-07	2.01E-07	2.01E-07	8.03E-07	8.03E-07	8.55E-08	8.54E-08	8.66E-08	7.81E-08	7.79E-08
Sodium	5.97E-04	5.97E-04	8.29E-04	8.29E-04	4.28E-04	4.28E-04	5.02E-04	5.02E-04	2.01E-03	2.01E-03	2.14E-04	2.14E-04	2.16E-04	1.95E-04	1.95E-04
Strontium	3.34E-05	3.34E-05	4.64E-05	4.64E-05	2.40E-05	2.40E-05	2.81E-05	2.81E-05	1.12E-04	1.12E-04	1.20E-05	1.20E-05	1.21E-05	1.09E-05	1.09E-05
Thallium	2.39E-07	2.39E-07	3.32E-07	3.32E-07	1.71E-07	1.71E-07	2.01E-07	2.01E-07	8.03E-07	8.03E-07	8.55E-08	8.54E-08	8.66E-08	7.81E-08	7.79E-08
Tin	4.77E-06	4.77E-06	6.63E-06	6.63E-06	3.42E-06	3.42E-06	4.02E-06	4.02E-06	1.61E-05	1.61E-05	1.71E-06	1.71E-06	1.73E-06	1.56E-06	1.56E-06
Titanium	5.25E-03	5.25E-03	7.30E-03	7.30E-03	3.77E-03	3.77E-03	4.42E-03	4.42E-03	1.77E-02	1.77E-02	1.88E-03	1.88E-03	1.90E-03	1.72E-03	1.71E-03
Uranium	2.39E-07	2.39E-07	3.32E-07	3.32E-07	1.71E-07	1.71E-07	2.01E-07	2.01E-07	8.03E-07	8.03E-07	8.55E-08	8.54E-08	8.66E-08	7.81E-08	7.79E-08
Vanadium	2.39E-04	2.39E-04	3.32E-04	3.32E-04	1.71E-04	1.71E-04	2.01E-04	2.01E-04	8.03E-04	8.03E-04	8.55E-05	8.54E-05	8.66E-05	7.81E-05	7.79E-05
Zinc	1.41E-04	1.41E-04	1.96E-04	1.96E-04	1.01E-04	1.01E-04	1.19E-04	1.19E-04	4.74E-04	4.74E-04	5.04E-05	5.04E-05	5.11E-05	4.61E-05	4.60E-05

Notes:

All concentrations are in g/m^2 /year.

The predicted fugitive dust deposition rates used to estimate metal dustfall deposition are the maximum values from two different air quality model cases associated with existing infrastruture (Madrid Southerly Case), and proposed changes to infrastructure (Madrid Northerly Case). More details pertaining to these air quality model cases can be found in the Air Quality Modelling Report of this EIS.

Appendix V6-5F. Predicted Metal Concentrations Associated with Fugitive Dust during the Construction Phase at Soil Sites within the Human Health Local Study Area

Soil Sample Sites	REFB-03	REFC-01	REFC-02	REFC-03	LSA-01	LSA-02	LSA-03	LSA-04	LSA-05	LSA-06	LSA-07A	LSA-07B	LSA-08	LSA-09A	LSA-09B
Dust Deposition	**0.78**	**0.8**	**0.84**	**0.85**	**6.5**	**1.4**	**1.49**	**3.9**	**0.8**	**0.85**	**0.79**	**0.79**	**0.8**	**1.91**	**1.91**
Metal Dustfall Deposition															
Aluminum	2.26E-02	2.31E-02	2.44E-02	2.47E-02	1.89E-01	4.05E-02	4.33E-02	1.14E-01	2.30E-02	2.46E-02	2.28E-02	2.28E-02	2.27E-02	5.55E-02	5.55E-02
Antimony	7.79E-08	7.98E-08	8.41E-08	8.52E-08	6.50E-07	1.40E-07	1.49E-07	3.95E-07	7.95E-08	8.48E-08	7.86E-08	7.86E-08	7.84E-08	1.91E-07	1.91E-07
Arsenic	3.90E-07	3.99E-07	4.21E-07	4.26E-07	3.25E-06	6.98E-07	7.46E-07	1.97E-06	3.97E-07	4.24E-07	3.93E-07	3.93E-07	3.92E-07	9.57E-07	9.57E-07
Barium	2.34E-06	2.39E-06	2.52E-06	2.56E-06	1.95E-05	4.19E-06	4.48E-06	1.18E-05	2.38E-06	2.54E-06	2.36E-06	2.36E-06	2.35E-06	5.74E-06	5.74E-06
Beryllium	2.57E-07	2.63E-07	2.78E-07	2.81E-07	2.15E-06	4.60E-07	4.92E-07	1.30E-06	2.62E-07	2.80E-07	2.59E-07	2.59E-07	2.59E-07	6.32E-07	6.32E-07
Bismuth	7.79E-08	7.98E-08	8.41E-08	8.52E-08	6.50E-07	1.40E-07	1.49E-07	3.95E-07	7.95E-08	8.48E-08	7.86E-08	7.86E-08	7.84E-08	1.91E-07	1.91E-07
Cadmium	7.79E-08	7.98E-08	8.41E-08	8.52E-08	6.50E-07	1.40E-07	1.49E-07	3.95E-07	7.95E-08	8.48E-08	7.86E-08	7.86E-08	7.84E-08	1.91E-07	1.91E-07
Calcium	2.49E-02	2.55E-02	2.69E-02	2.73E-02	2.08E-01	4.46E-02	4.77E-02	1.26E-01	2.54E-02	2.71E-02	2.51E-02	2.51E-02	2.51E-02	6.13E-02	6.13E-02
Chromium	1.17E-04	1.20E-04	1.26E-04	1.28E-04	9.75E-04	2.09E-04	2.24E-04	5.92E-04	1.19E-04	1.27E-04	1.18E-04	1.18E-04	1.18E-04	2.87E-04	2.87E-04
Cobalt	2.73E-05	2.79E-05	2.94E-05	2.98E-05	2.28E-04	4.88E-05	5.22E-05	1.38E-04	2.78E-05	2.97E-05	2.75E-05	2.75E-05	2.74E-05	6.70E-05	6.70E-05
Copper	8.57E-05	8.77E-05	9.25E-05	9.38E-05	7.15E-04	1.53E-04	1.64E-04	4.34E-04	8.74E-05	9.33E-05	8.64E-05	8.64E-05	8.62E-05	2.11E-04	2.11E-04
Iron	3.82E-02	3.91E-02	4.12E-02	4.18E-02	3.19E-01	6.84E-02	7.31E-02	1.93E-01	3.89E-02	4.16E-02	3.85E-02	3.85E-02	3.84E-02	9.38E-02	9.38E-02
Lead	4.68E-07	4.79E-07	5.05E-07	5.11E-07	3.90E-06	8.37E-07	8.95E-07	2.37E-06	4.77E-07	5.09E-07	4.71E-07	4.71E-07	4.70E-07	1.15E-06	1.15E-06
Magnesium	1.79E-02	1.83E-02	1.93E-02	1.96E-02	1.50E-01	3.21E-02	3.43E-02	9.08E-02	1.83E-02	1.95E-02	1.81E-02	1.81E-02	1.80E-02	4.40E-02	4.40E-02
Manganese	7.25E-04	7.42E-04	7.82E-04	7.93E-04	6.05E-03	1.30E-03	1.39E-03	3.67E-03	7.39E-04	7.89E-04	7.31E-04	7.31E-04	7.29E-04	1.78E-03	1.78E-03
Mercury	7.79E-09	7.98E-09	8.41E-09	8.52E-09	6.50E-08	1.40E-08	1.49E-08	3.95E-08	7.95E-09	8.48E-09	7.86E-09	7.86E-09	7.84E-09	1.91E-08	1.91E-08
Molybdenum	3.90E-07	3.99E-07	4.21E-07	4.26E-07	3.25E-06	6.98E-07	7.46E-07	1.97E-06	3.97E-07	4.24E-07	3.93E-07	3.93E-07	3.92E-07	9.57E-07	9.57E-07
Nickel	5.61E-05	5.74E-05	6.06E-05	6.14E-05	4.68E-04	1.00E-04	1.07E-04	2.84E-04	5.72E-05	6.11E-05	5.66E-05	5.66E-05	5.64E-05	1.38E-04	1.38E-04
Phosphorus	1.71E-04	1.75E-04	1.85E-04	1.88E-04	1.43E-03	3.07E-04	3.28E-04	8.68E-04	1.75E-04	1.87E-04	1.73E-04	1.73E-04	1.72E-04	4.21E-04	4.21E-04
Potassium	7.79E-05	7.98E-05	8.41E-05	8.52E-05	6.50E-04	1.40E-04	1.49E-04	3.95E-04	7.95E-05	8.48E-05	7.86E-05	7.86E-05	7.84E-05	1.91E-04	1.91E-04
Selenium	3.90E-07	3.99E-07	4.21E-07	4.26E-07	3.25E-06	6.98E-07	7.46E-07	1.97E-06	3.97E-07	4.24E-07	3.93E-07	3.93E-07	3.92E-07	9.57E-07	9.57E-07
Silver	7.79E-08	7.98E-08	8.41E-08	8.52E-08	6.50E-07	1.40E-07	1.49E-07	3.95E-07	7.95E-08	8.48E-08	7.86E-08	7.86E-08	7.84E-08	1.91E-07	1.91E-07
Sodium	1.95E-04	1.99E-04	2.10E-04	2.13E-04	1.63E-03	3.49E-04	3.73E-04	9.87E-04	1.99E-04	2.12E-04	1.96E-04	1.96E-04	1.96E-04	4.79E-04	4.79E-04
Strontium	1.09E-05	1.12E-05	1.18E-05	1.19E-05	9.10E-05	1.95E-05	2.09E-05	5.52E-05	1.11E-05	1.19E-05	1.10E-05	1.10E-05	1.10E-05	2.68E-05	2.68E-05
Thallium	7.79E-08	7.98E-08	8.41E-08	8.52E-08	6.50E-07	1.40E-07	1.49E-07	3.95E-07	7.95E-08	8.48E-08	7.86E-08	7.86E-08	7.84E-08	1.91E-07	1.91E-07
Tin	1.56E-06	1.60E-06	1.68E-06	1.70E-06	1.30E-05	2.79E-06	2.98E-06	7.89E-06	1.59E-06	1.70E-06	1.57E-06	1.57E-06	1.57E-06	3.83E-06	3.83E-06
Titanium	1.71E-03	1.75E-03	1.85E-03	1.88E-03	1.43E-02	3.07E-03	3.28E-03	8.68E-03	1.75E-03	1.87E-03	1.73E-03	1.73E-03	1.72E-03	4.21E-03	4.21E-03
Uranium	7.79E-08	7.98E-08	8.41E-08	8.52E-08	6.50E-07	1.40E-07	1.49E-07	3.95E-07	7.95E-08	8.48E-08	7.86E-08	7.86E-08	7.84E-08	1.91E-07	1.91E-07
Vanadium	7.79E-05	7.98E-05	8.41E-05	8.52E-05	6.50E-04	1.40E-04	1.49E-04	3.95E-04	7.95E-05	8.48E-05	7.86E-05	7.86E-05	7.84E-05	1.91E-04	1.91E-04
Zinc	4.60E-05	4.71E-05	4.96E-05	5.03E-05	3.84E-04	8.23E-05	8.80E-05	2.33E-04	4.69E-05	5.01E-05	4.64E-05	4.64E-05	4.63E-05	1.13E-04	1.13E-04

Notes:

All concentrations are in g/m^2 /year.

The predicted fugitive dust deposition rates used to estimate metal dustfall deposition are the maximum values from two different air quality model cases associated with existing infrastruture (Madrid Southerly Case), and proposed changes to infrastructure (Madrid Northerly Case). More details pertaining to these air quality model cases can be found in the Air Quality Modelling Report of this EIS.

Appendix V6-5F. Predicted Metal Concentrations Associated with Fugitive Dust during the Construction Phase at Soil Sites within the Human Health Local Study Area

Soil Sample Sites	LSA-10	LSA-11	LSA-12	LSA-13A	LSA-13B	LSA-14	LSA-15	LSA-16	LSA-17	LSA-18	LSA-19	LSA-20	LSA-21
Dust Deposition	**0.82**	**0.81**	**0.89**	**4.7**	**4.7**	**2.2**	**1.13**	**2.9**	**6.5**	**0.94**	**1.24**	**3.01**	**4.78**
Metal Dustfall Deposition													
Aluminum	2.38E-02	2.34E-02	2.59E-02	1.36E-01	1.36E-01	6.44E-02	3.27E-02	8.39E-02	1.89E-01	2.72E-02	3.60E-02	8.72E-02	1.39E-01
Antimony	8.20E-08	8.08E-08	8.94E-08	4.68E-07	4.68E-07	2.22E-07	1.13E-07	2.89E-07	6.50E-07	9.38E-08	1.24E-07	3.01E-07	4.78E-07
Arsenic	4.10E-07	4.04E-07	4.47E-07	2.34E-06	2.34E-06	1.11E-06	5.63E-07	1.45E-06	3.25E-06	4.69E-07	6.21E-07	1.50E-06	2.39E-06
Barium	2.46E-06	2.42E-06	2.68E-06	1.41E-05	1.41E-05	6.66E-06	3.38E-06	8.68E-06	1.95E-05	2.81E-06	3.72E-06	9.02E-06	1.44E-05
Beryllium	2.71E-07	2.67E-07	2.95E-07	1.55E-06	1.55E-06	7.33E-07	3.72E-07	9.54E-07	2.15E-06	3.10E-07	4.10E-07	9.92E-07	1.58E-06
Bismuth	8.20E-08	8.08E-08	8.94E-08	4.68E-07	4.68E-07	2.22E-07	1.13E-07	2.89E-07	6.50E-07	9.38E-08	1.24E-07	3.01E-07	4.78E-07
Cadmium	8.20E-08	8.08E-08	8.94E-08	4.68E-07	4.68E-07	2.22E-07	1.13E-07	2.89E-07	6.50E-07	9.38E-08	1.24E-07	3.01E-07	4.78E-07
Calcium	2.63E-02	2.59E-02	2.86E-02	1.50E-01	1.50E-01	7.11E-02	3.60E-02	9.25E-02	2.08E-01	3.00E-02	3.97E-02	9.62E-02	1.53E-01
Chromium	1.23E-04	1.21E-04	1.34E-04	7.03E-04	7.03E-04	3.33E-04	1.69E-04	4.34E-04	9.75E-04	1.41E-04	1.86E-04	4.51E-04	7.18E-04
Cobalt	2.87E-05	2.83E-05	3.13E-05	1.64E-04	1.64E-04	7.77E-05	3.94E-05	1.01E-04	2.28E-04	3.28E-05	4.34E-05	1.05E-04	1.67E-04
Copper	9.02E-05	8.89E-05	9.83E-05	5.15E-04	5.15E-04	2.44E-04	1.24E-04	3.18E-04	7.15E-04	1.03E-04	1.37E-04	3.31E-04	5.26E-04
Iron	4.02E-02	3.96E-02	4.38E-02	2.30E-01	2.30E-01	1.09E-01	5.52E-02	1.42E-01	3.19E-01	4.60E-02	6.08E-02	1.47E-01	2.34E-01
Lead	4.92E-07	4.85E-07	5.36E-07	2.81E-06	2.81E-06	1.33E-06	6.76E-07	1.74E-06	3.90E-06	5.63E-07	7.45E-07	1.80E-06	2.87E-06
Magnesium	1.89E-02	1.86E-02	2.06E-02	1.08E-01	1.08E-01	5.11E-02	2.59E-02	6.65E-02	1.50E-01	2.16E-02	2.85E-02	6.91E-02	1.10E-01
Manganese	7.63E-04	7.52E-04	8.31E-04	4.36E-03	4.36E-03	2.07E-03	1.05E-03	2.69E-03	6.05E-03	8.73E-04	1.15E-03	2.80E-03	4.45E-03
Mercury	8.20E-09	8.08E-09	8.94E-09	4.68E-08	4.68E-08	2.22E-08	1.13E-08	2.89E-08	6.50E-08	9.38E-09	1.24E-08	3.01E-08	4.78E-08
Molybdenum	4.10E-07	4.04E-07	4.47E-07	2.34E-06	2.34E-06	1.11E-06	5.63E-07	1.45E-06	3.25E-06	4.69E-07	6.21E-07	1.50E-06	2.39E-06
Nickel	5.91E-05	5.82E-05	6.44E-05	3.37E-04	3.37E-04	1.60E-04	8.11E-05	2.08E-04	4.68E-04	6.76E-05	8.94E-05	2.16E-04	3.44E-04
Phosphorus	1.80E-04	1.78E-04	1.97E-04	1.03E-03	1.03E-03	4.89E-04	2.48E-04	6.36E-04	1.43E-03	2.06E-04	2.73E-04	6.61E-04	1.05E-03
Potassium	8.20E-05	8.08E-05	8.94E-05	4.68E-04	4.68E-04	2.22E-04	1.13E-04	2.89E-04	6.50E-04	9.38E-05	1.24E-04	3.01E-04	4.78E-04
Selenium	4.10E-07	4.04E-07	4.47E-07	2.34E-06	2.34E-06	1.11E-06	5.63E-07	1.45E-06	3.25E-06	4.69E-07	6.21E-07	1.50E-06	2.39E-06
Silver	8.20E-08	8.08E-08	8.94E-08	4.68E-07	4.68E-07	2.22E-07	1.13E-07	2.89E-07	6.50E-07	9.38E-08	1.24E-07	3.01E-07	4.78E-07
Sodium	2.05E-04	2.02E-04	2.24E-04	1.17E-03	1.17E-03	5.55E-04	2.82E-04	7.23E-04	1.63E-03	2.35E-04	3.10E-04	7.52E-04	1.20E-03
Strontium	1.15E-05	1.13E-05	1.25E-05	6.56E-05	6.56E-05	3.11E-05	1.58E-05	4.05E-05	9.10E-05	1.31E-05	1.74E-05	4.21E-05	6.70E-05
Thallium	8.20E-08	8.08E-08	8.94E-08	4.68E-07	4.68E-07	2.22E-07	1.13E-07	2.89E-07	6.50E-07	9.38E-08	1.24E-07	3.01E-07	4.78E-07
Tin	1.64E-06	1.62E-06	1.79E-06	9.37E-06	9.37E-06	4.44E-06	2.25E-06	5.78E-06	1.30E-05	1.88E-06	2.48E-06	6.01E-06	9.57E-06
Titanium	1.80E-03	1.78E-03	1.97E-03	1.03E-02	1.03E-02	4.89E-03	2.48E-03	6.36E-03	1.43E-02	2.06E-03	2.73E-03	6.61E-03	1.05E-02
Uranium	8.20E-08	8.08E-08	8.94E-08	4.68E-07	4.68E-07	2.22E-07	1.13E-07	2.89E-07	6.50E-07	9.38E-08	1.24E-07	3.01E-07	4.78E-07
Vanadium	8.20E-05	8.08E-05	8.94E-05	4.68E-04	4.68E-04	2.22E-04	1.13E-04	2.89E-04	6.50E-04	9.38E-05	1.24E-04	3.01E-04	4.78E-04
Zinc	4.84E-05	4.77E-05	5.27E-05	2.76E-04	2.76E-04	1.31E-04	6.64E-05	1.71E-04	3.84E-04	5.54E-05	7.32E-05	1.77E-04	2.82E-04

Notes:

All concentrations are in g/m^2 /year.

The predicted fugitive dust deposition rates used to estimate metal dustfall deposition are the maximum values from two different air quality model cases associated with existing infrastruture (Madrid Southerly Case), and proposed changes to infrastructure (Madrid Northerly Case). More details pertaining to these air quality model cases can be found in the Air Quality Modelling Report of this EIS.