

Appendix 10.1 Table showing updated background and PEC values for assessment of short term impact by direct inhalation

Table 10.3 AERMOD Dispersion Model Predictions for Short Term Impact by Direct Inhalation – Air Quality Addendum 2019

Substance	Emission Concentration mg/m ³	Assessment Criterion µg/m ³	Criterion Averaging Period	PC µg/m ³	PC as % of assessment criterion	Background µg/m ³	PEC µg/m ³	PC as % of assessment criterion
2014 assessment								
SO ₂	50 (daily average)	125	24hr (99.18 %ile)	1.5	1.2			
SO ₂	200 (1/2hr 100%ile)	350	1hr (99.73 %ile)	53.3	15.2	0.34	54.0	15.4
SO ₂	50 (1/2hr 97%ile and daily average)	350	1hr (99.73 %ile)	13.3	3.8	0.34	14.0	4.0
SO ₂	200 (1/2hr 100%ile)	266	15min (99.90 %ile)	91.4	34.4	0.34	92.11	34.4
SO ₂	50 (1/2hr 97%ile and daily average)	266	15min (99.90 %ile)	22.9	8.6	0.34	23.5	8.8
NO, 35% as NO ₂	400 (1/2hr 100%ile)	200	1hr (99.79 %ile)	40.7	20.3	4.4	49.5	24.7
NO, 35% as NO ₂	200 (1/2hr 97%ile)	200	1hr (99.79 %ile)	20.3	10.2	4.4	29.1	14.6
2019 addendum – updated background and PEC values								
SO ₂	50 (daily average)	125	24hr (99.18 %ile)	1.5	1.2			

Substance	Emission Concentration mg/m³	Assessment Criterion µg/m³	Criterion Averaging Period	PC µg/m³	PC as % of assessment criterion	Background µg/m³	PEC µg/m³	PC as % of assessment criterion
SO ₂	200 (1/2hr 100%ile)	350	1hr (99.73 %ile)	53.3	15.2	0.19	53.68	15.3
SO ₂	50 (1/2hr 97%ile and daily average)	350	1hr (99.73 %ile)	13.3	3.8	0.19	13.68	3.9
SO ₂	200 (1/2hr 100%ile)	266	15min (99.90 %ile)	91.4	34.4	0.19	91.78	34.5
SO ₂	50 (1/2hr 97%ile and daily average)	266	15min (99.90 %ile)	22.9	8.6	0.19	23.28	8.75
NO, 35% as NO ₂	400 (1/2hr 100%ile)	200	1hr (99.79 %ile)	40.7	20.3	5.8	52.3	26.2
NO, 35% as NO ₂	200 (1/2hr 97%ile)	200	1hr (99.79 %ile)	20.3	10.2	5.8	31.9	16.0