

APPENDIX 10C: AIR QUALITY SIGNIFICANCE CRITERIA

NOT PROTECTIVELY MARKED

NOT PROTECTIVELY MARKED

APPENDIX 10C: AIR QUALITY SIGNIFICANCE CRITERIA

Table 1: Definition of Impact Magnitude for Changes in Annual Mean NO₂ and PM₁₀ Concentration

Magnitude of Change	Annual Mean
Large	Increase/decrease > 4µg/m ³
Medium	Increase/decrease 2 - 4µg/m ³
Small	Increase/decrease 0.4 - 2µg/m ³
Imperceptible	Increase/decrease <0.4µg/m ³

Table 2: Air Quality Impact Descriptors for Changes to Annual Mean NO₂ and PM₁₀ at a Receptor

Absolute Concentration in Relation to Objective/Limit Value	Change in Concentration ^a		
	Small	Medium	Large
Above objective/limit value with scheme (>40µg/m ³)	Slight Adverse	Moderate Adverse	Substantial Adverse
Just below objective/limit value with scheme (36 - 40µg/m ³)	Slight Adverse	Moderate Adverse	Moderate Adverse
Below objective/limit value with scheme (30 - 36µg/m ³)	Negligible	Slight Adverse	Slight Adverse
Well below objective/limit value with scheme (<30µg/m ³)	Negligible	Negligible	Slight Adverse

^a An Imperceptible change would be described as 'negligible'.

Table 3: Definition of Impact Magnitude for Changes in Annual Mean PM_{2.5} Concentration

Magnitude of Change	Annual Mean
Large	Increase/decrease > 2.5µg/m ³
Medium	Increase/decrease 1.25 - 2.5µg/m ³
Small	Increase/decrease 0.25 - 1.25µg/m ³
Imperceptible	Increase/decrease <0.25µg/m ³

Table 4: Air Quality Impact Descriptors for Changes to Annual Mean PM_{2.5} at a Receptor

Absolute Concentration in Relation to Objective/Limit Value	Change in Concentration ^a		
	Small	Medium	Large
Above objective/limit value with scheme (>25µg/m ³)	Slight Adverse	Moderate Adverse	Substantial Adverse
Just below objective/limit value with scheme (22.5 - 25µg/m ³)	Slight Adverse	Moderate Adverse	Moderate Adverse
Below objective/limit value with scheme (18.75 - 22.5µg/m ³)	Negligible	Slight Adverse	Slight Adverse
Well below objective/limit value with scheme (<18.75µg/m ³)	Negligible	Negligible	Slight Adverse

^a An Imperceptible change would be described as 'negligible'.

Table 5: Definition of Impact Magnitude for Changes in Number of Days with PM₁₀ Concentration Greater than 50µg/m³

Magnitude of Change	Number of Days Above 50µg/m ³ ^a
Large	Increase/decrease > 4 days
Medium	Increase/decrease 2 - 4 days
Small	Increase/decrease 1 - 2 days
Imperceptible	Increase/decrease <1 day

^a Based on percentage of 35 days, rounded to the most appropriate whole number of days.

Table 6: Air Quality Impact Descriptors for Changes to Number of Days with PM₁₀ Concentration Greater than 50µg/m³ at a Receptor

Absolute Concentration in Relation to Objective/Limit Value	Change in Number of Days ^{a b}		
	Small	Medium	Large
Above objective/limit value with scheme (>35 days)	Slight Adverse	Moderate Adverse	Substantial Adverse
Just below objective/limit value with scheme (32 - 35 days)	Slight Adverse	Moderate Adverse	Moderate Adverse
Below objective/limit value with scheme (26 - 32 days)	Negligible	Slight Adverse	Slight Adverse
Well below objective/limit value with scheme (<26 days)	Negligible	Negligible	Slight Adverse

^a An Imperceptible change would be described as 'negligible'.

^b Based on percentage of 35 days, rounded to the most appropriate whole number of days.