

## **Appendix 8.2**

### **Transport Infrastructure Ireland Significant Criteria**

## 8.2 Transport Infrastructure Ireland Significance Criteria

**Table A8.2.1: Definition of Impact Magnitude for Changes in Ambient Pollutant Concentrations**

Magnitude of Change	Annual Mean NO <sub>2</sub> / PM <sub>10</sub> $\mu\text{g}/\text{m}^3$	No. days with PM <sub>10</sub> concentration > 50 $\mu\text{g}/\text{m}^3$	Annual Mean PM <sub>2.5</sub> $\mu\text{g}/\text{m}^3$
Large	Increase / decrease $\geq 4$ $\mu\text{g}/\text{m}^3$	Increase / decrease >4 days	Increase / decrease $\geq 2.5$ $\mu\text{g}/\text{m}^3$
Medium	Increase / decrease 2 - <4 $\mu\text{g}/\text{m}^3$	Increase / decrease 3 or 4 days	Increase / decrease 1.25 - <2.5 $\mu\text{g}/\text{m}^3$
Small	Increase / decrease 0.4 - <2 $\mu\text{g}/\text{m}^3$	Increase / decrease 1 or 2 days	Increase / decrease 0.25 - <1.25 $\mu\text{g}/\text{m}^3$
Imperceptible	Increase / decrease <0.4 $\mu\text{g}/\text{m}^3$	Increase / decrease <1 day	Increase / decrease <0.25 $\mu\text{g}/\text{m}^3$

**Table A8.2.2: Air Quality Impact Significance Criteria For Annual Mean NO<sub>2</sub> and PM<sub>10</sub> and PM<sub>2.5</sub> Concentrations at a Receptor**

Absolute Concentration in Relation to Objective / Limit Value	Change in Concentration <sup>Note 1</sup>		
	Small	Medium	Large
Increase with Scheme			
Above Objective/Limit Value With Scheme ( $\geq 35$ 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
Decrease with Scheme			

Absolute Concentration in Relation to Objective / Limit Value	Change in Concentration <sup>Note 1</sup>		
	Small	Medium	Large
Above Objective/Limit Value With Scheme (≥35 days)	Slight Beneficial	Moderate Beneficial	Substantial Beneficial
Just Below Objective/Limit Value With Scheme (32 - <35 days)	Slight Beneficial	Moderate Beneficial	Moderate Beneficial
Below Objective/Limit Value With Scheme (26 - <32 days)	Negligible	Slight Beneficial	Slight Beneficial
Well Below Objective/Limit Value With Scheme (<26 days)	Negligible	Negligible	Slight Beneficial

<sup>Note 1</sup> Well Below Standard = <75% of limit value.

**Bridge**

Absolute Concentration in Relation to Objective / Limit Value	Change in Concentration <sup>Note 1</sup>		
	Small	Medium	Large
Increase with Scheme			
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
Decrease with Scheme			

<b>Absolute Concentration in Relation to Objective / Limit Value</b>	<b>Change in Concentration</b> <sup>Note 1</sup>		
	<b>Small</b>	<b>Medium</b>	<b>Large</b>
Above Objective/Limit Value With Scheme ( $\geq 35$ days)	Slight Beneficial	Moderate Beneficial	Substantial Beneficial
Just Below Objective/Limit Value With Scheme (32 - <35 days)	Slight Beneficial	Moderate Beneficial	Moderate Beneficial
Below Objective/Limit Value With Scheme (26 - <32 days)	Negligible	Slight Beneficial	Slight Beneficial
Well Below Objective/Limit Value With Scheme (<26 days)	Negligible	Negligible	Slight Beneficial