

Appendix 9.1 EPUK & IAQM Impact Descriptors for Operational Phase Impacts

Table A9.1.1 EPUK & IAQM Impact Descriptors

Long Term Average at Receptor in Assessment Year	% Change in Concentration Relative to Air Quality Standard (AQS)			
	1	2 - 5	6 - 10	>10
75% or less of AQS	Negligible	Negligible	Slight	Moderate
76%-94% of AQS	Negligible	Slight	Moderate	Moderate
95%-102% of AQS	Slight	Moderate	Moderate	Substantial
103%-109% of AQS	Moderate	Moderate	Substantial	Substantial
110% or more of AQS	Moderate	Substantial	Substantial	Substantial

Explanation

1. The EPUK & IAQM Impact Descriptors for Operational Phase Impacts Table is taken from Table 6.3 of the EPUK & IAQM, 2017, *Land-Use Planning & Development Control: Planning for Air Quality Guidance*.
2. The EPUK & IAQM guidance refers to Air Quality Assessment Levels (AQALs), which may be an air quality objective, EU limit or target value, or an Environment Agency 'Environmental Assessment Level (EAL)'. For clarity the AQS is used as the AQAL.
3. The Table is intended to be used by rounding the change in percentage pollutant concentration to whole numbers, which then makes it clearer which cell the impact falls within. The user is encouraged to treat the numbers with recognition of their likely accuracy and not assume a false level of precision. Changes of 0%, i.e. less than 0.5%, will be described as Negligible.
4. The Table is only designed to be used with annual mean concentrations.
5. Descriptors for individual receptors only; the overall significance is determined using professional judgement. For example, a 'moderate' adverse impact at one receptor may not mean that the overall impact has a significant effect. Other factors need to be considered.
6. When defining the concentration as a percentage of the AQAL/AQS, use the 'without scheme' concentration where there is a decrease in pollutant concentration and the 'with scheme;' concentration for an increase.
7. The total concentration categories reflect the degree of potential harm by reference to the AQAL/AQS value. At exposure less than 75% of this value, i.e. well below, the degree of harm is likely to be small. As the exposure approaches and exceeds the AQAL/AQS, the degree of harm increases. This change naturally becomes more important when the result is an exposure that is approximately equal to, or greater than the AQAL/AQS.

8. It is unwise to ascribe too much accuracy to incremental changes or background concentrations, and this is especially important when total concentrations are close to the AQAL/AQS. For a given year in the future, it is impossible to define the new total concentration without recognising the inherent uncertainty, which is why there is a category that has a range around the AQAL/AQS, rather than being exactly equal to it.