

# APPENDIX 17.1

## AIR QUALITY STANDARDS

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The Air Quality Framework Directive (1996) established a framework under which the European Commission (EC) could set limit or target values for specified pollutants. The directive identified several pollutants for which limit or target values have been, or will be set in, subsequent 'daughter directives'. The framework and daughter directives were consolidated by Directive 2008/50/EC on Ambient Air Quality and Cleaner Air for Europe, which retains the existing air quality standards and introduces new objectives for fine particulates (PM<sub>2.5</sub>).

The air quality standards (AQSs) in Europe are set in EU directives, the Clean Air for Europe (CAFE) Directive was published in 2008. The CAFE directive was transposed into Irish legislation by the Air Quality Standards Regulations 2011.

The relevant standards for Europe to protect human health are summarised in Table A17.1.

**Table A17.1: Air quality standards relevant to the proposed development**

Substance	Averaging period	Exceedances allowed per year	Ground level concentration limit (µg/m <sup>3</sup> )
Nitrogen dioxide (NO <sub>2</sub> )	1 calendar year	-	40
	1 hour	18	200
Fine particles (PM <sub>10</sub> )	1 calendar year	-	40
	24 hours	35	50
Fine particles (PM <sub>2.5</sub> )	1 calendar year	-	Stage 1: 25 Stage 2: 20

Note: The Stage 1 limit value came into force on 1<sup>st</sup> January 2015, and the Stage 2 limit value came into force on 1<sup>st</sup> January 2020.

Local Air Quality Management Review and Assessment Technical Guidance published by the Department for Environment, Food and Rural Affairs (Defra) advises that an exceedance of the 1 hour mean NO<sub>2</sub> objective is unlikely to occur where the annual mean concentration is below 60µg/m<sup>3</sup>, where road transport is the main source of pollution. This concentration has been used to screen whether the hourly mean objective is likely to be achieved.

### Gothenburg Protocol

In 1999, Ireland signed the Gothenburg Protocol to the 1979 UN Convention on Long Range Transboundary Air Pollution. European Commission Directive 2001/81/EC and the National Emissions Ceiling Directive (NECD), prescribes the same emissions limits as the 1999 Gothenburg Protocol. A National Programme for the progressive reduction of emissions of four transboundary pollutants, nitrogen oxides (NO<sub>x</sub>), sulphur dioxide (SO<sub>2</sub>), volatile organic compounds (VOCs) and ammonia (NH<sub>3</sub>), has been in place since April 2005. The data available from the EU in 2010 indicated that Ireland complied with the emissions ceilings for SO<sub>2</sub>, VOCs and NH<sub>3</sub> but failed to

comply with the ceiling for NO<sub>x</sub>. COM (2013) 920 Final is the “proposal for a Directive on the reduction of national emissions of certain atmospheric pollutants and amending Directive 2003/35/EC”, which will apply the 2010 NECD limits until 2020 and establish some new national emission reduction commitments which will be applicable from 2020 and 2030 for SO<sub>2</sub>, NO<sub>x</sub>, non-methane volatile organic compounds (NMVOC), NH<sub>3</sub>, and methane (CH<sub>4</sub>). Irelands reduction targets are shown in Table A17.2.

**Table A17.2: The reduction targets for Ireland, shown as a percentage reduction from 2005 levels, for four transboundary pollutants (SO<sub>2</sub>, NO<sub>x</sub>, VOCs, NH<sub>3</sub>) and PM<sub>2.5</sub>**

Pollutant	Percentage reduction below 2005 level	
	2020-2029	2030
SO <sub>2</sub>	65%	85%
NO <sub>x</sub>	49%	69%
VOC	25%	32%
NH <sub>3</sub>	1%	5%
PM <sub>2.5</sub>	18%	41%

### Clean Air Strategy

The Ireland's first Clean Air Strategy was published in April 2023. This strategy identifies and promotes the integrated measures across government to reduce air pollution and promote cleaner ambient air. The strategy commits Ireland to achieving the new WHO (World Health Organisation) guidelines values for air quality by 2040, with progress to be measured against interim targets by 2026 and 2030.