

TECHNICAL APPENDIX 8.1: AIR QUALITY POLICY

8.1.1 International Legislation and Policy

- 8.1.1.1 EU Directive 2008/50/EC¹ on ambient air quality and cleaner air for Europe (the 'CAFE directive') sets out the ambient air quality standards for nitrogen dioxide (NO₂) and particulate matter with a particle size of less than 10 micrometres (PM₁₀), to be achieved by 1 January 2010 and 2005 respectively. The Air Quality Standards Regulations 2010² implements the requirements of the Directive into UK legislation.
- 8.1.1.2 The Directive contains a series of limit values for the protection of human health and critical levels for the protection of vegetation.
- 8.1.1.3 In December 2015, the Department for Environment Food and Rural Affairs (Defra), on behalf of the UK Government, produced plans to improve air quality in the UK in order to meet the EU targets in the shortest possible time. The adequacy of these plans to bring about the necessary improvements in air quality to meet the relevant objectives within the shortest time possible has recently been successfully challenged within the High Court.
- 8.1.1.4 Subsequently, a plan³ for the reduction in roadside NO₂ concentrations has been released which will require Local Authorities to identify local actions to accelerate the improvement in air quality in their jurisdictions. It also includes the national measures including banning the sale of conventionally powered cars and light goods vehicles by 2040 and further investment in cleaner transport. A new Clean Air Strategy⁴ has been published, setting out how the UK will significantly reduce harmful air pollutant emissions by 2020 and 2030.
- 8.1.1.5 The update plan for the Central Scotland Area⁵ sets out a range of measures to reduce NO₂ concentrations and indicates that with these measures air quality in the area will be compliant by 2020.

8.1.2 Local Air Quality Management

National Legislation

- 8.1.2.1 The air quality objectives, as listed in The Air Quality (Scotland) Regulations 2000⁶ and The Air Quality (Scotland) Amendment Regulations 2002⁷, that are applicable to this assessment are detailed in Table TA8.1.1. The locations where relevant exposure exists for the different objective levels are shown in Table TA8.1.2.
- 8.1.2.2 The National Air Quality Objectives (NAQO) apply to external air where there is relevant exposure to the public over the associated averaging periods within each objective. Guidance

¹ Directive 2008/50/EC of the European Parliament and of the Council of 21 May 2008 on ambient air quality and cleaner air for Europe (2008), OJ I. 1521.

² The Air Quality Standards Regulations, 2010. SI 2010 No. 1001.

³ Department for Environment, Food and Rural Affairs (Defra), 2017. UK plan for tackling roadside nitrogen dioxide concentrations. Defra.

⁴ Department for Environment, Food and Rural Affairs (Defra), 2018. Clean Air Strategy. Defra.

⁵ Department for Environment, Food and Rural Affairs (Defra), December 2017, Air Quality Plan for tackling roadside nitrogen dioxide concentrations in Central Scotland Area (UK0037). Defra.

⁶ The Air Quality (Scotland) Regulations (2000), SI 2000 No. 97.

⁷ The Air Quality (Scotland) Amendment Regulations (2002), SI 2002 No. 297.

is provided within the Local Air Quality Management Technical Guidance 2016 (LAQM.TG (16))⁸ issued by Defra for Local Authorities, on where the NAQOs apply, as detailed in Table TA8.1.1. The objectives do not apply in workplace locations, to internal air or where people are unlikely to be regularly exposed (i.e. centre of roadways).

Pollutant	Concentration (µg/m ³)	Averaging Period	AQS Objective Exceedances Allowed
Nitrogen dioxide (NO ₂)	200	One hour mean	18
Nitrogen dioxide (NO ₂)	40	Annual mean	-
Particulate matter (PM ₁₀)	50	24 hour mean	7
Particulate matter (PM ₁₀)	18	Annual mean	-
Particulate matter (PM _{2.5})	10	Annual Mean	-

Averaging Period	Objectives Should Apply At:	Objectives Should Generally Not Apply At:
Annual Mean	All locations where members of the public might be regularly exposed.	Building façades of residential properties, schools, hospitals, libraries etc. Gardens of residential properties. Kerbside sites (as opposed to locations at the building façade), or any other location where public exposure is expected to be short term.
24 Hour Mean	All locations where the annual mean objective would apply. Gardens of residential properties.	Kerbside sites (as opposed to locations at the building façade), or any other location where public exposure is expected to be short term.
1 Hour Mean	All locations where the annual mean and 24 hour mean objectives apply. Kerbside Sites (e.g. pavements of busy shopping streets). Those parts of car parks, bus stations and railway stations etc. which are not fully enclosed, where the public might reasonably be expected to spend 1-hour or more. Any outdoor locations where the public might reasonably be expected to spend 1-hour or longer.	Kerbside sites where the public would not be expected to have regular access.

8.1.2.3 The Limit Values are mandatory whereas the NAQOs are policy objectives. Local Authorities are not required to achieve them but, have to work towards their achievement. In addition, the Limit Values apply in all locations except: where members of the public do not have access and there is no fixed habitation; on factory premises or at industrial installations; and on the carriageway/central reservation of roads except where there is normally pedestrian access.

⁸ Department for Environment, Food and Rural Affairs (Defra), February 2018. Local Air Quality Management Technical Guidance LAQM.TG(16).

8.1.3 Local Air Quality Management in West Lothian

- 8.1.3.1 Where a Local Authority's review and assessment of its air quality identifies that air quality is likely to exceed the NAQOs, it must designate these areas as Air Quality Management Areas (AQMA) and draw up an Air Quality Action Plan (AQAP) setting out measures to reduce pollutant concentrations with the aim of meeting the NAQOs.
- 8.1.3.2 West Lothian Council (WLC) has declared three AQMAs within its area for exceedances of the annual mean NO₂ and PM₁₀ objectives, with the main source considered to be road transport. The site is not located close to any of the AQMAs and the proposed development is unlikely to affect them significantly.

8.1.4 National Planning Policy

Scottish Planning Policy, 2012

- 8.1.4.1 The Scottish Planning Policy (SPP)⁹ provides advice on how the planning system should manage the process of encouraging and approving new development. Whilst the SPP suggests air quality effects are one of the aspects that need to be considered, it provides no specific advice.

Clean Air for Scotland, 2015

- 8.1.4.2 Cleaner Air for Scotland (CAFS)¹⁰ provides a cross agency strategy and policy map for identifying the challenges to improving air quality across Scotland. The CAFS includes the actions proposed to address the issues identified, the National Modelling Framework, the National Low Emission Framework and the Key Performance Indicators to be used to monitor progress.

8.1.5 Local Policy

West Lothian Local Development Plan, 2018

- 8.1.5.1 The West Lothian Local Development Plan¹¹ includes the following policy relating to air quality:
- "Policy EMG 4 – Where appropriate, developers will be required to provide additional information on the impact of their proposed development on air quality. Where a development is likely to affect air quality, developers should identify and provide details of potential mitigation measures and, where appropriate, should make provision for developer contributions or planning obligations to mitigate the development's individual or cumulative impacts upon air quality.*
- Development promoting behaviour change programmes in Linlithgow and Broxburn/Uphall to facilitate modal shift of shorter journeys to walking and cycling is supported in principle.*
- Development will not be supported where it is not possible to mitigate the adverse effects of that development on air quality effectively or where development proposals cause unacceptable air quality or dust impacts, or would result in sensitive uses, which give rise to air pollution concerns, being located within or close to uses with potential to generate such pollution.*

⁹ The Scottish Government, 2012, Scottish Planning Policy.

¹⁰ The Scottish Government, 2015. Cleaner Air for Scotland.

¹¹ West Lothian Council (WLC), 2018. West Lothian Local Development Plan 2018.

Where appropriate, planning conditions will be imposed which require air quality monitoring apparatus to be installed.”

- 8.1.5.2 In addition Policy DES 1 Design Principles, states that all development proposals should have no significant adverse effects on air quality.

8.1.6 West Lothian Supplementary Planning Guidance, Air Quality, 2017

- 8.1.6.1 The West Lothian Supplementary Planning Guidance Air Quality¹² provides information on how air quality assessments for proposed development should be carried out. In addition, it provides maps of the three AQMAs within the West Lothian area.

8.1.7 Additional Guidance

DMRB Volume 11 Section 3 and relevant Highways Agency Advice Notes

- 8.1.7.1 The Design Manual for Roads and Bridges (DMRB)¹³ produced by the UK’s Highway authorities provides a methodology for assessing impacts to air quality from road schemes. The methodology is supported by a number of Interim Advice Notes which have provided additional guidance. In particular IAN 174/13¹⁴ has been used in the assessment.

Scottish Transport Appraisal Guidance

- 8.1.7.2 The DMRB guidance was also supplemented by the specific guidance released by Transport Scotland and provided in the Scottish Transport Appraisal Guidance¹⁵.

Land-Use Planning and Development Control: Planning for Air Quality Guidance, 2017

- 8.1.7.3 Environmental Protection UK (EPUK), together with the Institute of Air Quality Management (IAQM) produced guidance in 2017¹⁶ on how air quality impacts should be assessed within the land-use planning and development control process. This guidance provides clear criteria to determine when a detailed air quality assessment is required and a methodology for assessing the significance of air quality effects.

Delivering Cleaner Air for Scotland: Development Planning & Development Management

- 8.1.7.1 Scottish Environmental Protection Agency (SEPA) has produced guidance¹⁷ on how air quality impacts should be assessed within the land-use planning and development control process.

¹² Ricardo Energy and Environment for West Lothian Council, 2017, Supplementary Planning Guidance Air Quality

¹³ Highways England, Transport Scotland, Welsh Government and Department for Infrastructure (Northern Ireland), 1992. Design Manual for Roads and Bridges (DMRB) (as amended August 2018) [online]. Available at: <http://www.standardsforhighways.co.uk/ha/standards/dmr/index.htm> (Accessed on 17/09/18).

¹⁴ Highways Agency, 2013. INTERIM ADVICE NOTE 174/13: Updated advice for evaluating significant local air quality effects for users of DMRB Volume 11, Section 3, Part 1 'Air Quality (HA207/07).

¹⁵ Transport Scotland, 2008. Scottish Transport Appraisal Guidance.

¹⁶ Institute of Air Quality Management (IAQM) and Environmental Protection UK (EPUK), 2017. Land-Use Planning & Development Control: Planning for Air Quality.

¹⁷ Scottish Environmental Protection Agency (SEPA), 2017, Delivering Cleaner Air for Scotland: Development Planning & Development Management

This guidance provides clear criteria to determine when a detailed air quality assessment is required and a methodology for assessing the significance of air quality effects.

Guidance on Assessment of Dust from Demolition and Construction, 2016

8.1.7.2 The IAQM has produced guidance¹⁸ to assist in the assessment of air quality impacts from demolition and construction activities. This guidance provides a consistent methodology for assessing the risks of dust impacts from demolition and construction activities and for identifying the correct level of mitigation which should be applied to avoid significant air quality effects.

¹⁸ Institute of Air Quality Management (IAQM), 2016. Guidance on the assessment of dust from demolition and construction.