

Appendix 6A

Air quality - Relevant planning policy and technical guidance: further details

EU legislation

Directive 2008/50/EC on Ambient Air Quality and Cleaner Air for Europe¹

Directive 2008/50/EC (the 'Directive'), which came into force in June 2008, consolidates existing EU-wide air quality legislation (with the exception of *Directive 2004/107/EC*) and provides a new regulatory framework for PM_{2.5}.

The *Directive* sets limits or target levels for selected pollutants that are to be achieved by specific dates and details procedures EU Member States should take in assessing ambient air quality. The limit and target levels relate to concentrations in ambient air. At Article 2(1), the *Directive* defines ambient air as:

"...outdoor air in the troposphere, excluding workplaces as defined by Directive 89/654/EEC where provisions concerning health and safety at work apply and to which members of the public do not have regular access."

In accordance with Article 2(1), Annex III, Part A, paragraph 2 details locations where compliance with the limit values does not need to be assessed:

"Compliance with the limit values directed at the protection of human health shall not be assessed at the following locations:

- a) any locations situated within areas where members of the public do not have access and there is no fixed habitation;*
- b) in accordance with Article 2(1), on factory premises or at industrial installations to which all relevant provisions concerning health and safety at work apply; and*
- c) on the carriageway of roads; and on the central reservation of roads except where there is normally pedestrian access to the central reservation."*

UK legislation, policy, and guidance

The Environment Act 1995²

Part IV of the *Environment Act 1995* requires that Local Authorities periodically review air quality within their individual areas. This process of Local Air Quality Management (LAQM) is an integral part of delivering the Government's Air Quality Objectives (AQOs).

To carry out an air quality Review and Assessment under the LAQM process, the Government recommends a three-stage approach. This phased review process uses initial simple screening methods and progresses

¹ EUR-Lex Access to European Union law. *Cleaner air for Europe*. [online] Available at: <https://eur-lex.europa.eu/legal-content/EN/LSU/?uri=celex:32008L0050#:~:text=ACT-Directive%202008%2F50%2FEC%20of%20the%20European%20Parliament%20and%20of,and%20cleaner%20air%20for%20Europe.&text=WHAT%20DOES%20THE%20DIRECTIVE%20DO,environmental%20quality%20up%20to%202020>. [Accessed 23/11/2020]

² UK Government. *Environment Act 1995*. [online] Available at: <https://www.legislation.gov.uk/ukpga/1995/25/contents>. [Accessed 23/11/2020].

through to more detailed assessment methods of modelling and monitoring in areas identified to be at potential risk of exceeding the AQOs in the Regulations.

Review and assessments of local air quality aim to identify areas where national policies to reduce vehicle and industrial emissions are unlikely to result in air quality meeting the Government's AQOs by the required dates.

For the purposes of determining the focus of Review and Assessment, Local Authorities should have regard to those locations where members of the public are likely to be regularly present and are likely to be exposed over the averaging period of the objective.

Where the assessment indicates that some or all of the objectives may be potentially exceeded, the Local Authority has a duty to declare an AQMA. The declaration of an AQMA requires the Local Authority to implement an Air Quality Action Plan (AQAP), to reduce air pollution concentrations so that the required AQOs are met.

The Air Quality Standards Regulations 2010³

The Air Quality Standards Regulations 2010 (the 'Regulations') came into force on the 11 June 2010 and transpose *Directive 2008/50/EC* into UK legislation. The Directive's limit values are transposed into the Regulations with attainment dates in line with the Directive. These limit values are commonly referred to as Air Quality Standards (AQS).

These limit values are legally binding concentrations of pollutants in the atmosphere which can broadly be taken to achieve a certain level of environmental quality. The standards are based on the assessment of the effects of each pollutant on human health including the effects of sensitive groups or on ecosystems.

Similarly to *Directive 2008/50/EC*, the *Regulations* define ambient air as:

"...outdoor air in the troposphere, excluding workplaces where members of the public do not have regular access."

with direction provided in Schedule 1, Part 1, Paragraph 2 as to where compliance with the AQS' does not need to be assessed:

"Compliance with the limit values directed at the protection of human health does not need to be assessed at the following locations:

- a) any location situated within areas where members of the public do not have access and there is no fixed habitation;*
- b) on factory premises or at industrial locations to which all relevant provisions concerning health and safety at work apply; and*
- c) on the carriageway of roads and on the central reservation of roads except where there is normally pedestrian access to the central reservation."*

The Air Quality Strategy for England, Scotland, Wales, and Northern Ireland⁴

The *2007 Air Quality Strategy for England, Scotland, Wales, and Northern Ireland* provides a framework for improving air quality at a national and local level and supersedes the previous strategy published in 2000. It

³ UK government. *The Air Quality Standards Regulations 2010*. [online] Available at: <https://www.legislation.gov.uk/uksi/2010/1001/made>. [Accessed 23/11/2020]

⁴ Department for Environment, Food & Rural Affairs. *The Air Quality Strategy for England, Scotland, Wales and Northern Ireland – Volume 1*. [online]. Available at: <https://www.gov.uk/government/publications/the-air-quality-strategy-for-england-scotland-wales-and-northern-ireland-volume-1>. [Accessed 23/11/2020]

imposes a number of obligations on local authorities to manage air quality but does not directly impose obligations on developers.

Central to the Air Quality Strategy are health-based criteria for certain air pollutants; these criteria are based on medical and scientific evidence on how and at what concentration each pollutant affects human health. The AQOs derived from these criteria are policy targets often expressed as a maximum ambient concentration not to be exceeded, either without exception or with a permitted number of exceedances, over a specified averaging period. At paragraph 22 of the *2007 Air Quality Strategy*, the point is made that the objectives are:

"...a statement of policy intentions or policy targets. As such, there is no legal requirement to meet these objectives except where they mirror any equivalent legally binding limit values in EU legislation."

*Clean Air Strategy 2019*⁵

The *Clean Air Strategy 2019* was issued by Defra to describe the government's approach to tackling air pollution in England. It runs parallel to the *Air Quality Strategy* but proposes that the LAQM regime may be overhauled in future. It increases the emphasis on ammonia and PM_{2.5} as pollutants of concern, including a commitment to halve the population living in areas with concentrations of fine particulate matter above World Health Organization (WHO) guideline levels (10 µg m⁻³) by 2025.

It also considers the contribution to be made by various sectors. Aviation is briefly discussed, but the *Clean Air Strategy* largely defers to *Aviation Strategy*.

*Aviation 2050*⁶

In 2018–2019, the government consulted on its draft aviation strategy, *Aviation 2050*, which addresses a wide range of aviation issues around the strategic case, implementation, burdens, and overall acceptability. In relation to air quality, the draft strategy proposes the following measures:

- improving the monitoring of air pollution, including ultrafine particles (UFP), in order to improve understanding of aviation's impact on local air quality;
- ensuring comprehensive information on aviation-related air quality issues is made available to better inform interested parties;
- requiring all major airports to develop air quality plans to manage emissions within local air quality targets;
- validation of air quality monitoring to ensure consistent and robust monitoring standards that enable the identification of long-term trends; and
- supporting industry in the development of cleaner fuels to reduce the air quality impacts of aviation fuels.

*Environment Bill*⁷

The *Environment Bill*, currently working its way through parliament, aims to set out an overarching framework for environmental law following the UK's departure from the European Union (EU). While specific legislation

⁵ Department for Environment, Food & Rural Affairs. *Clean Air Strategy 2019* [online]. Available at: <https://www.gov.uk/government/publications/clean-air-strategy-2019> . [Accessed 23/11/2020]

⁶ Department for Transport. *Aviation 2050 the future of UK aviation*. [online] Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/769695/aviation-2050-web.pdf . [Accessed 23/11/2020]

⁷ Department for Environment, Food & Rural Affairs. *Environment Bill 2020*. [online] Available at: <https://www.gov.uk/government/publications/environment-bill-2020> . [Accessed 23/11/2020]

remains in force after Brexit, the EU's *acquis* provided wider context, and some its provisions no longer apply, for example the role of the European Commission and European Court in enforcing and reviewing compliance.

A key measure of the bill is the creation of the Office for Environmental Protection (OEP) to provide oversight and enforcement of environmental legislation, as well as examining new environmental policies and investigating complaints. Enforcement will be done through new kind of legal mechanism, called an 'environmental review', that can compel public authorities to take action if a court finds they have breached environmental law.

With regard to air quality specifically, amendments to reduce the limit value for annual mean PM_{2.5} from 25 µg m⁻³ to 10 µg m⁻³ were rejected by parliament. All legal limits therefore remain unchanged by the bill. However, the bill introduces a requirement on the Secretary of State to set a new target for PM_{2.5} by 2022.

*National Planning Policy Framework (NPPF)*⁸

The *NPPF* is a key part of the government's reforms to make the planning system less complex and more accessible. The framework acts as guidance for local planning authorities and decision-takers, both in drawing up plans and making decisions about planning applications.

Paragraph 181 of the *NPPF* states:

"Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement. So far as possible these opportunities should be considered at the plan-making stage, to ensure a strategic approach and limit the need for issues to be reconsidered when determining individual applications. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan."

Further detail in relation to air quality is contained in the air quality section of the planning practice guidance website.

Other guideline values

In the absence of statutory standards for the other prescribed substances that may be found in the emissions, there are several sources of applicable air quality guidelines.

*Air Quality Guidelines for Europe, the World Health Organization (WHO)*⁹

The aim of the *WHO Air Quality Guidelines* is to provide a basis for protecting public health from adverse effects of air pollutants and to eliminate or reduce exposure to those pollutants that are known or likely to be hazardous to human health or well-being. These guidelines are intended to provide guidance and information to international, national, and local authorities making risk management decisions, particularly in setting air quality standards. The 2005 update includes the guideline value of 10 µg m⁻³ for annual mean PM_{2.5}.

⁸ Ministry of Housing, Communities & Local Government. *National Planning Policy Framework*. [online] Available at: <https://www.gov.uk/government/publications/national-planning-policy-framework--2> . [Accessed 23/11/2020]

⁹ World Health Organization. *Air Quality Guidelines*. [online] Available at: https://www.euro.who.int/_data/assets/pdf_file/0005/74732/E71922.pdf [Accessed 23/11/2020]

Environment Agency assessment levels¹⁰

The *Environment Agency* (EA) guidance note "*Air emissions risk assessment for your environmental permit*" contains long- and short-term assessment levels for releases to air derived from a number of published UK and international sources.

As well as repeating the AQSs and AQOs, the guidance note includes an additional assessment level of relevance to this assessment, namely a target of $75 \mu\text{g m}^{-3}$ for the maximum daily mean oxides of nitrogen (NO_x) at ecological receptors. This is based on guidance from the WHO produced in 2000, which states:

"Experimental evidence exists that the CLE [critical level] decreases from around $200 \mu\text{g m}^{-3}$ to $75 \mu\text{g m}^{-3}$ when in combination with O_3 or SO_2 at or above their critical levels. In the knowledge that short-term episodes of elevated NO_x concentrations are generally combined with elevated concentrations of O_3 or SO_2 , $75 \mu\text{g m}^{-3}$ is proposed for the 24 h mean."

In general, current conditions in the UK are such that elevated concentrations of ozone (O_3) or sulphur dioxide (SO_2) are rare. In particular, SO_2 levels are much lower than they were in 2000 when the WHO guidance was written, UK emissions having fallen by 86% from 1.29 Mt to 0.17 Mt between 2000 and 2017. As such, it is considered that $200 \mu\text{g m}^{-3}$ is the more appropriate assessment level for daily mean NO_x . This has been accepted by regulators including Natural England (NE), the EA and Natural Resources Wales in relation to air quality assessments for other development applications.

¹⁰ Department for Environment, Food & Rural Affairs. *Air emissions risk assessment for your environmental permit*. [online] Available at: <https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit> . [Accessed 23/11/2020]