



Appendix 11.1

POLICY AND GUIDANCE

11.1 Appendix 11.1 Legislation, policy and guidance

European legislation

- 11.1.1 The 2008 Ambient Air Quality Directive (2008/50/EC) set legally binding limits for pollutant concentrations. This directive was made law in England through the Air Quality (Standards) Regulations 2010. The Regulations were subsequently updated in 2016 (The Air Quality Standards (Amendment) Regulations 2016).

UK legislation and policy

Environment act

- 11.1.2 Part IV of the Environment Act 1995 places a duty on the Secretary of State for the Environment to develop, implement and maintain an Air Quality Strategy (AQS) with the aim of reducing atmospheric emissions and improving air quality. The latest AQS for England was published in 2023, and provides the framework for ensuring the air quality limit values are complied with based on a combination of international, national and local measures to reduce emissions and improve air quality. This includes the statutory duty, also under Part IV of the Environment Act 1995, for local authorities to undergo a process of Local Air Quality Management (LAQM). This requires local authorities to regularly and systematically review and assess air quality within their boundaries against a series of objectives and appraise development and transport plans against these assessments.
- 11.1.3 In areas where air quality objectives are not likely to be met by the relevant target date, local authorities are required to declare an Air Quality Management Area (AQMA) and develop an air quality action plan in pursuit of the air quality objectives. The national air quality objectives relevant to this assessment are detailed in Table 1.

Table 1 National Air Quality Objectives relevant to the assessment

Pollutant	Objective
For protection of human health	
Nitrogen dioxide (NO ₂)	200 µg/m ³ measured as a 1-hour mean, not to be exceeded more than 18 times a year
	40 µg/m ³ measured as an annual mean
Particulate Matter (PM ₁₀)	50 µg/m ³ measured as a 24-hour mean, not to be exceeded more than 35 times a year
	40 µg/m ³ measured as an annual mean
Particulate Matter (PM _{2.5})	20 µg/m ³ measured as an annual mean
For protection of vegetation and ecosystems	
Oxides of nitrogen (NO _x)	30 µg/m ³ measured as an annual mean
Ammonia (NH ₃)	Annual mean of 1 µg/m ³ for lichens and bryophytes, 3µg/m ³ for higher plants

- 11.1.4 The Environment Act was amended in 2021, requiring the government to set new targets for PM_{2.5}. The subsequent Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 set the following targets:

- Annual mean PM_{2.5} concentration of 10 µg/m³ by 2040
- At least a 35% reduction in population exposure of PM_{2.5} by the end of 2040.

11.1.5 The Environment Act 2021 requires the publication of an Environmental Improvement Plan every five years, with progress against the set targets reported on annually. The Environmental Improvement Plan 2023 sets the following interim target for PM_{2.5}:

- Annual mean PM_{2.5} concentration of 12 µg/m³ by 2028
- At least a 22% reduction in population exposure of PM_{2.5} by the end of 2028.

Critical Levels and Critical Loads

11.1.6 There are two categories of pollutants that are typically considered for their potential impact at designated ecological sites: pollutants that have an effect on vegetation/habitats in a gaseous form and those which have an impact through deposition.

11.1.7 For some gaseous pollutants, critical levels below which significant harmful effects are not thought to occur have been adopted by the European Union and the United Nations Economic Commission for Europe (UNECE) and are used as regulatory standards.

11.1.8 For the deposition of air pollutants critical loads, given as a range, for different habitats have been provided by UNECE and are detailed on the Air Pollution Information Service (APIS) website. APIS provides critical loads for nitrogen deposition (leading to eutrophication) and acid deposition (leading to acidification). Critical loads for nitrogen deposition are in units of kilogrammes of nitrogen per hectare per year (kg N/ha/year) and vary with habitat sensitivity.

11.1.9 The critical levels relevant to this assessment are detailed in Table 1 above. Site specific critical loads and critical levels for surrounding designated nature sites are detailed in the ES chapter.

IAQM Land-Use Planning & Development Control: Planning for Air Quality (2017)

11.1.10 This document from Environmental Protection UK (EPUK) and the Institute of Air Quality Management (IAQM) provides detail on the consideration of air quality within the land-use planning and development control processes. The guidance provides an approach to determining significance of air quality impacts, which takes account of the percentage change in concentrations relative to the relevant air quality objective. The guidance also provides a screening approach to determine whether emissions from road traffic generated by a development have the potential for significant air quality impacts. Screening criteria which are of relevance to this assessment are presented in Table 2.

Table 2 Indicative criteria for requiring an air quality assessment

The development will:	Indicative criteria to proceed to an air quality assessment
Cause a significant change in Light Duty Vehicle (LDV) traffic flows on local roads with relevant receptors.	A change of LDV flows of: <ul style="list-style-type: none"> - more than 100 annual average daily traffic (AADT) within or adjacent to an AQMA - more than 500 AADT elsewhere.

The development will:	Indicative criteria to proceed to an air quality assessment
Cause a significant change in Heavy Duty Vehicle (HDV) flows on local roads with relevant receptors.	A change of HDV flows of: <ul style="list-style-type: none"> - more than 25 AADT within or adjacent to an AQMA - more than 100 AADT elsewhere.

IAQM Guidance on Assessing Air Quality Impacts on Designated Nature Conservation Sites (2019)

11.1.11 This ecological guidance document¹ provides detail on how to assess the impact of air pollutants on ecologically sensitive habitats. The guidance provides a three-stage approach to assessing the impact of sources on designated sites and takes into consideration industrial and road sources.

Stage 1: Scoping

- Vulnerable sites that may be affected should be identified and the specific effects from the nearest source determined. The locations and boundaries of international and national; designated sites can be found online.¹
- Should a road be identified as a potential source, guidance should be taken from the Design Manual for Roads and Bridges (DMRB) and annual average daily traffic (AADT) flow thresholds of 1000 vehicles or 200 heavy duty vehicles (HDVs) should be considered.

If the site is found to not be specifically affected by the source, then no further assessment is required.

Stage 2: Quantification

- This stage involves calculating the change in pollutant concentrations due to an industrial, agricultural or road source. This is often determined by modelling the dispersion of the emissions.

Stage 3: Screening

- Once the impact has been quantified, the EA's 1% long-term air quality objective should be used as a precautionary screening criterion and where significant effects are found to be likely an ecologist should be consulted to determine possible adverse effects on the site.

IAQM Guidance on the assessment of dust from demolition and construction

11.1.12 This guidance was produced by the IAQM in order to assist in the assessment of air quality impacts associated with construction activities. The document provides a methodology for carrying out a risk assessment to determine the appropriate level of mitigation required to ensure that air quality effects would normally be not significant, taking into account the potential dust emissions generated by a development and the sensitivity of the surrounding area.

¹ Holman et al (2019). A guide to the assessment of air quality impacts on designated nature conservation sites – version 1.0, Institute of Air Quality Management, London.

National Planning Policy Framework

- 11.1.13 The National Planning Policy Framework (NPPF) underlines the importance of local authorities contributing towards improving and protecting the environment. The legislation points towards the need to focus on the enhancement of biodiversity, minimising waste and pollution, and mitigation/adaptation to climate change.
- 11.1.14 With particular regard to air quality management, Section 9 of the NPPF notes that the environmental impact of transport and traffic should be identified and assessed, whilst mitigating adverse effects to bring about net environmental gains. The guidance states that the planning system should actively manage patterns of growth, offering a choice of transport modes to reduce air pollution:
- 11.1.15 *'Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health.'*
- 11.1.16 Further to this, Section 15 of the NPPF notes that planning policies should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of AQMAs and Clean Air Zones (CAZ), 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. Additionally, the NPPF states that planning decisions should ensure that any new development in AQMAs and CAZs is consistent with the local air quality action plan.

Planning practice guidance

- 11.1.17 Planning Practice Guidance (PPG) provides guiding principles on how the planning process can take account of the impact of new development on air quality. Guidance outlines when air quality considerations could be relevant to the development management process. The PPG states:

'Whether air quality is relevant to a planning decision will depend on the proposed development and its location. Concerns could arise if the development is likely to have an adverse effect on air quality in areas where it is already known to be poor, particularly if it could affect the implementation of air quality strategies and action plans and/or breach legal obligations (including those relating to the conservation of habitats and species). Air quality may also be a material consideration if the proposed development would be particularly sensitive to poor air quality in its vicinity.'

Where air quality is a relevant consideration the local planning authority may need to establish:

- *The 'baseline' local air quality, including what would happen to air quality in the absence of the development;*

- *Whether the proposed development could significantly change air quality during the construction and operational phases (and the consequences of this for public health and biodiversity); and*
- *Whether occupiers or users of the development could experience poor living conditions or health due to poor air quality.'*

11.1.18 The guidance also outlines the specific issues that may need to be considered when assessing air quality impacts. Relevant considerations include when a development would:

- *'Lead to changes (including any potential reductions) in vehicle-related emissions in the immediate vicinity of the proposed development or further afield. This could be through the provision of electric vehicle charging infrastructure; altering the level of traffic congestion; significantly changing traffic volumes, vehicle speeds or both; or significantly altering the traffic composition on local roads. Other matters to consider include whether the proposal involves the development of a bus station, coach or lorry park; could add to turnover in a large car park; or involve construction sites that would generate large Heavy Goods Vehicle flows over a period of a year or more;*
- *Introduce new point sources of air pollution. This could include furnaces which require prior notification to local authorities; biomass boilers or biomass-fuelled Combined Heat and Power plant; centralised boilers or plant burning other fuels within or close to an air quality management area or introduce relevant combustion within a [Smoke Control Area](#); or extraction systems (including chimneys) which require approval or permits under pollution control legislation;*
- *Expose people to harmful concentrations of air pollutants, including dust. This could be by building new homes, schools, workplaces or other development in places with poor air quality;*
- *Give rise to potentially unacceptable impacts (such as dust) during construction for nearby sensitive locations;*
- *Have a potential adverse effect on biodiversity, especially where it would affect sites designated for their biodiversity value.'*

11.1.19 Guidance also provides detail on how air quality impacts can be mitigated, stating that mitigation should be spatially specific, dependent on the proposed development, and proportionate to the likely impact. The following examples of mitigation are given:

- *'Maintaining adequate separation distances between sources of air pollution and receptors;*
- *Using green infrastructure, in particular trees, where this can create a barrier or maintain separation between sources of pollution and receptors;*
- *Appropriate means of filtration and ventilation;*
- *Including infrastructure to promote modes of transport with a low impact on air quality (such as electric vehicle charging points);*

- *Controlling dust and emissions from construction, operation and demolition; and*
- *Contributing funding to measures, including those identified in air quality action plans and low emission strategies, designed to offset the impact on air quality arising from new development.'*

Regional policy

Oxford-Cambridge Arc Spatial Framework (Consultation)

11.1.20 The Oxford-Cambridge Arc, which comprises the counties of Bedfordshire, Buckinghamshire, Cambridgeshire, Northamptonshire and Oxfordshire, has been designated as a national economic priority area. To support sustainable economic growth in this region, a Spatial Framework is being developed, which will set and coordinate new policy for development in the area. The consultation document for the vision of the Spatial Framework was published in 2021.

11.1.21 One of the key ambitions of the vision is to improve, protect and restore the natural environment. It plans to achieve this by developing policy to take an “integrated approach to water management and flood risk, cleaner air, sustainable land management, nature recovery, climate change mitigation and adaptation, in line with the government’s 25 Year Environment Plan, Net Zero ambitions and Clean Growth Strategy. It also pledges to develop policy to “support clean air outcomes, with clear links to housing and transport policies”.

11.1.22 With regards to transport and connectivity, the framework will aim to set “strategic climate resilience and air quality policies based on air quality modelling”.

Oxfordshire County Council Local Transport and Connectivity Plan (2022)

11.1.23 The latest iteration of the Oxfordshire Local Transport and Connectivity Plan was adopted in 2022, outlining the strategy for digital and transport connectivity up until 2050. It outlines a vision to deliver a net-zero transport system 2040, including a target to reduce car trips by a quarter by 2030. One of the over-arching transport goals is to improve public health, air quality, safety and individual wellbeing.

11.1.24 There are several policies within the Plan that are relevant to the Proposed Development that are of relevance to air quality considerations:

11.1.25 **Policy 8 Healthy Streets Approach**

- We will embed the Healthy Streets Approach and Design Check Tool into relevant guidance and decision making processes to improve the human experience of streets and encourage walking and cycling.

11.1.26 **Policy 12 Guidance for new development**

- We will embed the guidance for residential developments (Appendix 3) into relevant guidance and decision making processes and will work with District and City Councils so that they are reflected in local planning guidance and design codes.

11.1.27 **Policy 13 20-minute neighbourhoods**

- Work with our District and City Councils to ensure that regeneration schemes and new developments support application of the 20-minute neighbourhood model to create walkable, vibrant neighbourhoods.
- Work with our District and City Councils to apply the 20-minute neighbourhood concept in our market towns and rural areas.
- Seek to enable the sharing of facilities in smaller towns and villages by delivering policies to improve walking and cycling connectivity in rural areas.

11.1.28 Policy 18 Bus strategy

- Ensure that all new strategic development is designed for bus access and provides suitable funding for high quality services and infrastructure.

11.1.29 Policy 22 Multi-modal travel

- Consider multi-modal travel as a central option for transport planning and planning for new developments to achieve greater integration of the transport system.
- Work with stakeholders to ensure new railway stations are delivered with appropriate walking, cycling and public transport access.

11.1.30 Policy 23 Mobility hubs

- Encourage developers to design mobility hubs into development where appropriate.

11.1.31 Policy 28 Clean Air and Zero Emission Zones

- Investigate CAZ and ZEZ schemes for other parts of Oxfordshire where traffic emissions are contributing significantly to air pollution problems.

11.1.32 Policy 29 Zero emission vehicles

- Work in association with our district councils to integrate the Oxfordshire Electric Vehicle Infrastructure Strategy into the planning process, ensuring that new developments and infrastructure make appropriate future-proofed provision for EV charging infrastructure.
- Support the delivery of ZEV strategies developed by our District and City councils.

11.1.33 Policy 30 Green Infrastructure

- Embed the protection, maintenance and enhancement of Green Infrastructure (GI) into relevant guidance and decision-making processes in order to improve connectivity of the GI network, its environmental and community value.

11.1.34 Policy 31 Network management

- Balance the needs of all network users, whilst promoting and prioritising walking, cycling and public transport at every opportunity.

11.1.35 Policy 33 Parking management

- Ensure the parking requirements of all modes of transport are considered, in line with our transport user hierarchy.
- Work to embed our parking guidance (Appendix 5) into relevant guidance and decision making processes and progress the associated actions.

11.1.36 Policy 35 Demand management

- Investigate demand management measures, where appropriate, in order to discourage private car use, engaging with key stakeholders during the development of any schemes.

11.1.37 Policy 39 Car clubs

- Support the provision of zero emission shared cars and car clubs, in combination with other measures, to reduce the dominance of private motor vehicles and create a more balanced transport network. This will include working proactively to encourage zero emission shared cars and car clubs in rural areas, smaller towns and villages.

Oxfordshire County Council Air Quality Strategy 2023-2030

11.1.38 The OCC air quality strategy was published in 2023, outlining the objectives and vision to improve air quality in Oxfordshire. The strategy highlights three key areas:

- Reduce emissions of indoor and outdoor air pollution on road transport:
 - This is particularly focussed on road transport and implementing measures to reduce demand for private vehicle use and promote sustainable transport.
- Extend distance from pollution sources:
 - This focuses on reducing exposure, such as by implementing management plans to reduce traffic in residential areas.
- Protect those most at risk:
 - This focusses on communications and advice to reduce exposure for vulnerable groups, such as school children.

11.1.39 The strategy is supported by a road map, which details the specific measures that will be implemented across OCC to achieve the key objectives.

Local policy

Cherwell Local Plan 2011-2031

11.1.40 The Cherwell Local Plan outlines the strategic planning policies in Cherwell from 2011 to 2021. The plan was formally adopted in 2015 and then re-adopted in 2016. In 2020 the plan was reviewed as part of the regulation 10A policy, which requires local plans to be reviewed on a 5 year basis, and was approved in February 2023.

11.1.41 The Local Plan states that one of the key challenges to ensuring sustainable development in Cherwell is *'a need to consider the effects of development on air quality including in relation to Air Quality Management Areas (AQMAs) in Cherwell, and how development proposals can contribute towards improvements.'*

11.1.42 There are several local plan policies that relate to air quality:

11.1.43 **Policy BSC 8: Securing Health and Well-Being**

- Planning decisions can have an effect on travel to work, schools, noise and air quality, access to services, climate change and social networks which can all contribute to health and well-being. The local environment has a fundamental impact on the health and well-being of local people. By providing facilities such as local open space this allows for activities such as walking and cycling, promoting healthy lifestyles. The Council will work with the local community to provide safe and accessible environments and to identify the need for and provide local facilities.

11.1.44 **Policy ESD 10: Protection and Enhancement of Biodiversity and the Natural Environment**

- Air quality assessments will also be required for development proposals that would be likely to have a significantly adverse impact on biodiversity by generating an increase in air pollution.

11.1.45 **Policy ESD 1: Mitigating and Adapting to Climate Change**

- Delivering development that seeks to reduce the need to travel and which encourages sustainable travel options including walking, cycling and public transport to reduce dependence on private cars.
- Promoting the use of decentralised and renewable or low carbon energy where appropriate (see Policies ESD 4 Decentralised Energy Systems and ESD 5 Renewable Energy).

11.1.46 **Policy ESD 15: The Character of the Built and Historic Environment**

- Integrate and enhance green infrastructure and incorporate biodiversity enhancement features where possible (see Policy ESD 10: Protection and Enhancement of Biodiversity and the Natural Environment and Policy ESD 17 Green Infrastructure). Well designed landscape schemes should be an integral part of development proposals to support improvements to biodiversity, the micro climate, and air pollution and provide attractive places that improve people's health and sense of vitality.

11.1.47 **Policy ESD 17: Green Infrastructure**

- Ensuring that green infrastructure network considerations are integral to the planning of new development. Proposals should maximise the opportunity to maintain and extend green infrastructure links to form a multi-functional network of open space, providing opportunities for walking and cycling, and connecting the towns to the urban fringe and the wider countryside beyond.

- All strategic development sites (Section C: 'Policies for Cherwell's Places') will be required to incorporate green infrastructure provision and proposals should include details for future management and maintenance.

11.1.48 Policy SLE 4: Improved Transport and Connections

- All development where reasonable to do so, should facilitate the use of sustainable modes of transport to make the fullest possible use of public transport, walking and cycling. Encouragement will be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. Development which is not suitable for the roads that serve the development and which have a severe traffic impact will not be supported.

Cherwell Air Quality Action Plan

11.1.49 CDC published their air quality action plan (AQAP) in 2017, which outlines the councils plan for improving air quality in the district, remediating current air quality issues and prevent the need to declare new AQMAs. The AQAP outlines five priorities for air quality improvement in CDC:

- Priority 1 – Strengthening local policy to improve air quality and its role in protecting health;
- Priority 2 – Reducing NOx emissions from cars in all AQMAs;
- Priority 3 – Ensuring new developments encourage and facilitate low emission and alternative transport;
- Priority 4 – Ensuring transport infrastructure delivery takes account of air quality improvement potential within AQMAs;
- Priority 5 – Raising awareness of poor air quality and encouraging improvement actions by vehicle users and fleet managers.

11.1.50 The AQAP outlines measures that the CDC plan to implement. The measures relevant to the proposed development are presented in Table 3.

Table 3 CDC Air Quality Action Plan measures relevant to the Proposed Development

Measure No.	Measure	Implementation phase	Comment
G.1	Explore the Local Plan including Low Emission Vehicle uptake measures being incorporated into new developments	2017/18	Local Plan Part 2 will consider measures to encourage low emission vehicle takeup through development management policy
G.2	All major developments to include Emission statements and mitigation strategies within an appropriate air quality	2017/18	Emission statements and mitigation strategies will be required in air quality assessments. This will be included in development

Measure No.	Measure	Implementation phase	Comment
	assessment submitted at the application stage		management policies as part of Local Plan Part 2 development.
G.3	Damage cost calculations to be included in air quality assessments to show the financial impact of developments.	2017/18	Damage Cost calculations will be required in air quality assessments. This will be included in development management policies as part of Local Plan Part 2 development.
G.4	Travel plans submitted with development proposals will make reference to their contribution to an air quality mitigation strategy. Progress will be reported to OCC post development completion.	In place	Travel plans are coordinated and progress checked by OCC. Measures to address air quality specifically can be adopted through the development control process in partnership with CDC. These should be included in the Local Air Quality Management Annual Status Report.
G.5	Air Quality actions to be included in the Local Transport Plan	2016	LTP4 (2016 update) includes an annex on actions to address air quality. On-going measure development and updates to LTP4 should represent changes in air quality. Maintain close links between OCC and CDC.