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Guidance

## Air quality

Provides guiding principles on how planning can take account of the impact of new development on air quality.

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Where plans are being prepared under the transitional arrangements set out in Annex 1 to the revised National Planning Policy Framework (<https://www.gov.uk/government/publications/national-planning-policy-framework--2>), the policies in the previous version of the framework published in 2012 (<http://webarchive.nationalarchives.gov.uk/20180608095821/https://www.gov.uk/government/publications/national-planning-policy-framework--2>) will continue to apply, as will any previous guidance which has been superseded since the new framework was published in July 2018. If you'd like an email alert when changes are made to planning guidance please subscribe (<https://www.gov.uk/topic/planning-development/planning-officer-guidance/email-signup>).

### Why should planning be concerned about air quality?

Action to manage and improve air quality is largely driven by EU legislation. The 2008 Ambient Air Quality Directive (<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:152:0001:0044:EN:PDF>) sets legally binding limits for concentrations in outdoor air of major air pollutants that impact public health such as particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) and nitrogen dioxide (NO<sub>2</sub>). As well as having direct effects, these pollutants can combine in the atmosphere to form ozone, a harmful air pollutant (and potent greenhouse gas) which can be transported great distances by weather systems.

Defra carries out an annual national assessment of air quality using modelling and monitoring to determine compliance with EU Limit Values (<http://ec.europa.eu/environment/air/quality/standards.htm>). It is important that the potential impact of new development on air quality is taken into account in planning where the national assessment indicates that relevant limits have been exceeded or are near the limit.

The local air quality management (LAQM) regime requires every district and unitary authority to regularly review and assess air quality in their area. These reviews identify whether national objectives have been, or will be, achieved at relevant locations, by an applicable date. Further guidance on LAQM (<https://www.gov.uk/government/publications/local-air-quality-management-technical-guidance-laqm-tg-09>)

If national objectives (<https://uk-air.defra.gov.uk/aqma/>) are not met, or at risk of not being met, the local authority concerned must declare an air quality management area (<https://uk-air.defra.gov.uk/aqma/>) and prepare an air quality action plan. This identifies measures that will be introduced in pursuit of the objectives and can have implications for planning.

Air quality can also affect biodiversity (<https://www.gov.uk/guidance/natural-environment>) and may therefore impact on our international obligations under the Habitats Directive ([http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index\\_en.htm](http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm)).

Odour and dust can also be a planning concern, for example, because of the effect on local amenity.

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## What is the role of Local Plans with regard to air quality?

Local Plans can affect air quality in a number of ways, including through what development is proposed and where, and the encouragement given to sustainable transport. Therefore in plan making, it is important to take into account air quality management areas (<https://uk-air.defra.gov.uk/aqma/>) and other areas where there could be specific requirements or limitations on new development because of air quality. Air quality is a consideration in Strategic Environmental Assessment and sustainability appraisal can be used to shape an appropriate strategy, including through establishing the 'baseline', appropriate objectives for the assessment of impact and proposed monitoring.

Drawing on the review of air quality carried out for the local air quality management regime, the Local Plan may need to consider:

- the potential cumulative impact of a number of smaller developments on air quality as well as the effect of more substantial developments;
- the impact of point sources of air pollution (pollution that originates from one place); and,
- ways in which new development would be appropriate in locations where air quality is or likely to be a concern and not give rise to unacceptable risks from pollution. This could be through, for example, identifying measures for offsetting the impact on air quality arising from new development including supporting measures in an air quality action plan or low emissions strategy where applicable.

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## Are air quality concerns relevant to neighbourhood planning?

Air quality concerns can be relevant to neighbourhood planning (<https://www.gov.uk/guidance/neighbourhood-planning--2>), and it is important to consider air quality when drawing up a neighbourhood plan or considering a neighbourhood development order. The local planning and environmental health departments will be able to advise whether air quality could be a concern.

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## What information is available about air quality?

In addition to the information on local air quality held by environmental health departments in local authorities, Defra also publishes information and there is a range of other potential sources which can be drawn on, depending on the development and its proposed location.

### Information published by Defra

- the UK Air Information Resource (UK-AIR) (<https://uk-air.defra.gov.uk/>), which contains information on historic and current air quality across the UK, including a GIS portal (<https://uk-air.defra.gov.uk/data/gis-mapping>) of Defra's national assessment against EU Limit Values and air quality management areas;
- air quality management area (<https://uk-air.defra.gov.uk/aqma/>) records and modelled background pollution concentrations (<https://uk-air.defra.gov.uk/aqma/>);
- the National Atmospheric Emissions Inventory (<http://naei.defra.gov.uk/>) for emissions of air pollution including maps at a 1km by 1km resolution for a wide range of pollutants;
- the Pollutant and Release Transfer Register (<https://www.gov.uk/guidance/uk-pollutant-release-and-transfer-register-prtr-data-sets>), which has links to emissions from installations permitted under the Environmental Permitting Regulations, which is useful for point sources.

### Other sources of information

- the Geostore Datashare (<http://www.geostore.com/environment-agency/>) published by the Environment Agency, which has information about pollution incidents and sites registered under the Environmental Permitting Regulations;
- information about the impact of air quality on habitats and species, (including critical loads and levels) such as that held by the Air Pollution Information System (<http://www.apis.ac.uk/>). This has been developed in partnership by the UK conservation agencies and regulatory agencies and the Centre for Ecology and Hydrology;
- the Sustainability Appraisal informing the local plan where air quality has been a concern;
- recent environmental statements that may include updated baseline assessments.

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## When could air quality be relevant to a planning decision?

Whether or not 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 generate air quality impact in an area where air quality is known to be poor. They could also arise where the development is likely to adversely impact upon the implementation of air quality strategies and action plans and/or, in particular, lead to a breach of EU legislation (including that applicable to wildlife). The steps a local planning authority might take in considering air quality are set out in this flow diagram.

When deciding whether air quality is relevant to a planning application, considerations could include whether the development would:

- Significantly affect traffic in the immediate vicinity of the proposed development site or further afield. This could be by generating or increasing traffic congestion; significantly changing traffic volumes, vehicle speed 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; adds to turnover in a large car park; or result in 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; or extraction systems (including chimneys) which require approval under pollution control legislation or biomass boilers or biomass-fuelled CHP plant; centralised boilers or CHP plant burning other fuels within or close to an air quality management area or introduce relevant combustion within a Smoke Control Area;
- Expose people to existing sources of air pollutants. This could be by building new homes, workplaces or other development in places with poor air quality.
- Give rise to potentially unacceptable impact (such as dust) during construction for nearby sensitive locations.
- Affect biodiversity. In particular, is it likely to result in deposition or concentration of pollutants that significantly affect a European-designated wildlife site, and is not directly connected with or necessary to the management of the site, or does it otherwise affect biodiversity, particularly designated wildlife sites.

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## Where to start if bringing forward a proposal where air quality could be a concern?

When there are concerns about air quality, the local planning authority may want to know about:

- the 'baseline' local air quality;
- whether the proposed development could significantly change air quality during the construction and operational phases; and/or
- whether there is likely to be a significant increase in the number of people exposed to a problem with air quality, such as when new residential properties are proposed in an area known to experience poor air quality.

Early engagement with the local planning and environmental health departments is therefore important including to establish the need and, where appropriate, scope of any assessment that will be needed to support the application.

For large and complex industrial processes, the Environment Agency should also be able to help by identifying:

- if an environmental permit is also required before the proposed development can start operating (they have published guidance for developments requiring planning permission and environmental permits);
- if they are aware of any significant air quality issues that may arise at the permitting stage (so there are 'no surprises'); and
- advising whether there are any special requirements that might affect the likelihood of getting planning permission (such as the height of chimneys).

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## How detailed does an air quality assessment need to be?

Assessments should be proportionate to the nature and scale of development proposed and the level of concern about air quality, and because of this are likely to be locationally specific. The scope and content of supporting information is therefore best discussed and agreed between the local planning authority and applicant before it is commissioned. Air quality is a consideration in Environmental Impact Assessment (<https://www.gov.uk/guidance/environmental-impact-assessment>), if one is required, and also in a Habitats Regulations Appropriate Assessment (<https://www.gov.uk/government/publications/guidance-on-competent-authority-coordination-under-the-habitats-regulations>).

The following could figure in assessments and be usefully agreed at the outset:

- a description of baseline conditions and how these could change;

- relevant air quality concerns;
- the assessment methods to be adopted and any requirements around verification of modelling air quality;
- sensitive locations;
- the basis for assessing impact and determining the significance of an impact;
- construction phase impact; and/or
- acceptable mitigation measures.

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## How can an impact on air quality be mitigated?

Mitigation options where necessary will be locationally specific, will depend on the proposed development and should be proportionate to the likely impact. It is important therefore that local planning authorities work with applicants to consider appropriate mitigation so as to ensure the new development is appropriate for its location and unacceptable risks are prevented. Planning conditions (<https://www.gov.uk/guidance/use-of-planning-conditions>) and obligations (<https://www.gov.uk/guidance/planning-obligations>) can be used to secure mitigation where the relevant tests are met.

Examples of mitigation include:

- the design and layout of development to increase separation distances from sources of air pollution;
- using green infrastructure, in particular trees, to absorb dust and other pollutants;
- means of ventilation;
- promoting infrastructure to promote modes of transport with low impact on air quality;
- 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.

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## How do considerations about air quality fit into the development management process?

### Flowchart

([https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/572684/air-quality.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/572684/air-quality.pdf))

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- Air emissions risk assessment for your environmental permit (<https://www.gov.uk/guidance/air-emissions-risk-assessment-for-your-environmental-permit>)
- Local air quality management: Technical guidance LAQM.TG(09) (<https://www.gov.uk/government/publications/local-air-quality-management-technical-guidance-laqm-tg-09>)
- Environmental permitting: air dispersion modelling reports (<https://www.gov.uk/guidance/environmental-permitting-air-dispersion-modelling-reports>)
- UK Pollutant Release and Transfer Register (PRTR) data sets (<https://www.gov.uk/guidance/uk-pollutant-release-and-transfer-register-prtr-data-sets>)

- Best available techniques: environmental permits (<https://www.gov.uk/guidance/best-available-techniques-environmental-permits>)

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