

Policy SI 1 Improving air quality

- A Development Plans, through relevant strategic, site-specific and area-based policies, should seek opportunities to identify and deliver further improvements to air quality and should not reduce air quality benefits that result from the Mayor's or boroughs' activities to improve air quality.
- B To tackle poor air quality, protect health and meet legal obligations the following criteria should be addressed:
- 1) Development proposals should not:
 - a) lead to further deterioration of existing poor air quality
 - b) create any new areas that exceed air quality limits, or delay the date at which compliance will be achieved in areas that are currently in exceedance of legal limits
 - c) create unacceptable risk of high levels of exposure to poor air quality.
 - 2) In order to meet the requirements in Part 1, as a minimum:
 - a) development proposals must be at least Air Quality Neutral
 - b) development proposals should use design solutions to prevent or minimise increased exposure to existing air pollution and make provision to address local problems of air quality in preference to post-design or retro-fitted mitigation measures
 - c) major development proposals must be submitted with an Air Quality Assessment. Air quality assessments should show how the development will meet the requirements of B1
 - d) development proposals in Air Quality Focus Areas or that are likely to be used by large numbers of people particularly vulnerable to poor air quality, such as children or older people should demonstrate that design measures have been used to minimise exposure.
- C Masterplans and development briefs for large-scale development proposals subject to an Environmental Impact Assessment should consider how local air quality can be improved across the area of the proposal as part of an air quality positive approach. To achieve this a statement should be submitted demonstrating:

- 1) how proposals have considered ways to maximise benefits to local air quality, and
 - 2) what measures or design features will be put in place to reduce exposure to pollution, and how they will achieve this.
- D In order to reduce the impact on air quality during the construction and demolition phase development proposals must demonstrate how they plan to comply with the Non-Road Mobile Machinery Low Emission Zone and reduce emissions from the demolition and construction of buildings following best practice guidance.¹⁴⁷
- E Development proposals should ensure that where emissions need to be reduced to meet the requirements of Air Quality Neutral or to make the impact of development on local air quality acceptable, this is done on-site. Where it can be demonstrated that emissions cannot be further reduced by on-site measures, off-site measures to improve local air quality may be acceptable, provided that equivalent air quality benefits can be demonstrated within the area affected by the development.

¹⁴⁷ The Control of Dust and Emissions During Construction and Demolition Supplementary Planning Guidance, Mayor of London, 2014

- 9.1.1 **Poor air quality** is a major issue for London which is failing to meet requirements under legislation. Poor air quality has direct impacts on the health, quality of life and life expectancy of Londoners. The impacts tend to be most heavily felt in some of London's most deprived neighbourhoods, and by people who are most vulnerable to the impacts, such as children and older people. London's air quality should be significantly improved and exposure to poor air quality, especially for vulnerable people, should be reduced.
- 9.1.2 The Mayor is committed to **making air quality in London the best of any major world city**, which means not only achieving compliance with legal limits for Nitrogen Dioxide as soon as possible and maintaining compliance where it is already achieved, but also achieving World Health Organisation targets for other pollutants such as Particulate Matter.
- 9.1.3 The aim of this policy is to ensure that new developments are designed and built, as far as is possible, **to improve local air quality and reduce the extent to which the public are exposed to poor air quality**. This means that new developments, as a minimum, must not cause new exceedances of legal air



quality standards, or delay the date at which compliance will be achieved in areas that are currently in exceedance of legal limits.¹⁴⁸ Where limit values are already met, or are predicted to be met at the time of completion, new developments must endeavour to maintain the best ambient air quality compatible with sustainable development principles.

- 9.1.4 Where this policy refers to 'existing poor air quality' this should be taken to include areas where legal limits for any pollutant, or World Health Organisation targets for Particulate Matter, are already exceeded and areas where current pollution levels are within 5 per cent of these limits.¹⁴⁹
- 9.1.5 For major developments, **a preliminary Air Quality Assessment** should be carried out before designing the development to inform the design process. The aim of a preliminary assessment is to assess:
- The most significant sources of pollution in the area
 - Constraints imposed on the site by poor air quality
 - Appropriate land uses for the site
 - Appropriate design measures that could be implemented to ensure that development reduces exposure and improves air quality.
- 9.1.6 **Further assessments** should then be carried out as the design evolves to ensure that impacts from emissions are prevented or minimised as far as possible, and to fully quantify the expected effect of any proposed mitigation measures, including the cumulative effect where other nearby developments are also underway or likely to come forward.
- 9.1.7 **Assessment of the impacts** of a scheme on local air pollution should include fixed plant, such as boiler and emergency generators, as well as expected transport-related sources. The impact assessment part of an Air Quality Assessment should always include all relevant pollutants. Industrial, waste and other working sites may need to include on-site vehicles and mobile machinery as well as fixed machinery and transport sources.
- 9.1.8 The impact assessment should provide decision makers with sufficient information to understand the **scale and geographic scope of any detrimental,**

¹⁴⁸ Air Quality Standards Regulations, 2010 (or subsequent revisions thereof), <http://www.legislation.gov.uk/ukxi/2010/1001/contents/made>

¹⁴⁹ Land-Use Planning & Development Control: Planning for Air Quality, Institution of Air Quality Management, 2017, <http://www.iaqm.co.uk/text/guidance/air-quality-planning-guidance.pdf>. This guidance indicates that even very small impacts on ambient air quality cannot be considered 'negligible' where existing levels are within 5% of limits.



or beneficial, impacts on air quality and enable them to exercise their professional judgement in deciding whether the impacts are acceptable, in line with best practice.

- 9.1.9 Meeting the **Air Quality Neutral benchmarks**,¹⁵⁰ although necessary to control the growth in London's regional emissions, will not always be sufficient to prevent unacceptable local impacts, as these may be affected by other factors, such as the location of the emissions source, the rate of emissions (as opposed to the annual quantum) and the layout of the development in relation to the surrounding area. As developments can still have significant local impacts that are not captured by Air Quality Neutral, for example by concentrating emissions, increasing exposure or preventing dispersion in particular locations, it is still important for these impacts to be assessed and mitigated.
- 9.1.10 For most **minor developments**, achieving Air Quality Neutral will be enough to demonstrate that they are in accordance with Part B1 of this policy. However, where characteristics of the development or local features raise concerns about air quality, or where there are additional requirements for assessment in local policy, a full Air Quality Assessment may be required. Additional measures may also be needed to address local impacts. Guidance on Air Quality Neutral will set out streamlined assessment procedures for minor developments.
- 9.1.11 An **air quality positive approach** is linked to other policies in the London Plan, such as Healthy Streets, energy masterplanning and green infrastructure. One of the keys to delivering this will be to draw existing good practice together in a holistic fashion, at an early stage in the process, to ensure that the development team can identify which options deliver the greatest improvement to air quality. Large schemes, subject to Environmental Impact Assessments, commonly have project and design teams representing a range of expertise, that can feed in to the development of a statement to set out how air quality can be improved across the proposed area of the development.
- 9.1.12 **Single-site schemes**, including referable schemes, are often constrained by pre-existing urban form and structure, transport and heat networks. These constraints may limit their ability to consider how to actively improve local air quality. By contrast, large schemes, particularly **masterplans**, usually have more flexibility to consider how new buildings, amenity and public spaces, transport and heat networks are deployed across the area and will therefore have greater opportunities to improve air quality and reduce exposure through the careful choice of design and infrastructure solutions. Delivery of an air quality positive

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approach will be project specific and will rely on the opportunities on site or in the surrounding area to improve air quality.

9.1.13 **Statements for large-scale development proposals**, prepared in response to Part C of this policy, should set out:

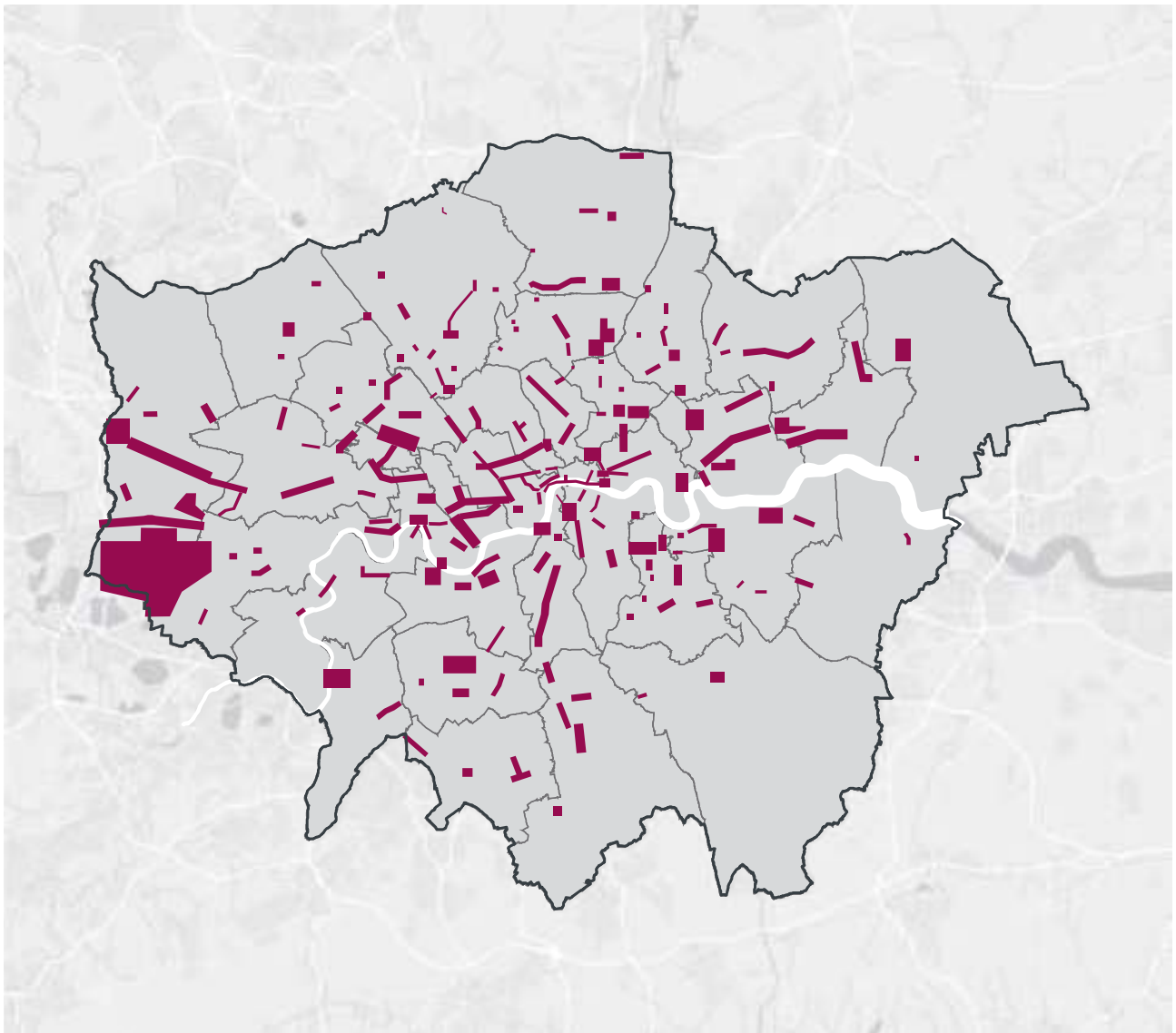
- How air quality is intended to be analysed and opportunities for its improvement identified as part of the design process.
- How air quality improvements have informed the design choices made about layout and distribution of buildings, amenity spaces and infrastructure.
- What steps will be taken to promote the uptake and use of sustainable and zero-emission modes of transport beyond minimum requirements. This may include specific measures in transport plans or delivery against Healthy Streets indicators.
- How air pollutant emissions from the buildings or associated energy centres can be reduced beyond the minimum requirements set out in Part B of this policy. This may include specific measures in heating masterplans or working with existing heat network providers to reduce or eliminate energy centre emissions.
- How specific measures that are identified to deliver air quality improvements will be evaluated and secured, including whether more detailed design specifications will be required so that the final development meets the desired performance.

9.1.14 The GLA will produce **guidance** in order to assist developers and boroughs in identifying measures and best practice to inform the preparation of statements for developments taking an air quality positive approach.

9.1.15 Where the Air Quality Assessment or the air quality positive approach assumes that specific measures are put in place to improve air quality, prevent or mitigate air quality impacts, these should be secured through the **use of planning conditions or s106 agreements**. For instance, if ultra-low NOx boilers are assumed in the assessment, conditions should require the provision of details of the installed plant prior to the occupation of the building, or where larger plant is used for heating, post installation emissions tests should be required to ensure that the modelled emission parameters are achieved.

9.1.16 The GLA maintains and publishes an **inventory of emission sources** (the London Atmospheric Emissions Inventory or LAEI). This inventory is based on a detailed assessment of all current sources of pollution in London and can be used to help understand the existing environment at development sites.

- 9.1.17 **Air Quality Focus Areas** (AQFA) are locations that not only exceed the EU annual mean limit value for nitrogen dioxide (NO₂) but are also locations with high human exposure. AQFAs are not the only areas with poor air quality but they have been defined to identify areas where currently planned national, regional and local measures to reduce air pollution may not fully resolve poor air quality issues. There are currently 187 AQFAs across London (Figure 9.1). The list of Air Quality Focus Areas is updated from time to time as the London Atmospheric Inventory is reviewed and the latest list in the London Datastore should always be checked.
- 9.1.18 AQFAs are distinct from **Air Quality Management Areas**. Air Quality Management Areas (AQMAs) are declared by the London boroughs in response to modelled or measured existing exceedances of legal air quality limits. The analysis underpinning AQMAs is often more spatially detailed than London-wide modelling and may include the identification of additional air quality hot spots or other local issues.
- 9.1.19 All London boroughs have declared AQMAs covering some or all of their area. Boroughs are required to produce **Air Quality Action Plans** setting out the actions they are taking to improve local air quality; planning decisions should be in accordance with these action plans and developers should take any local requirements in Air Quality Action Plans into account.
- 9.1.20 AQFAs are defined based on GLA modelling forecasts that incorporate actions taken by the GLA and others as well as broader changes in emissions sources and are not intended to supplant the role of AQMAs in planning decisions. In practice **developers will need to consider both designations** where they overlap.
- 9.1.21 It may not always be possible in practice for developments to achieve Air Quality Neutral standards or to acceptably minimise impacts using on-site measures alone. If a development can demonstrate that it has exploited all relevant on-site measures it may be possible to make the development acceptable through **additional mitigation or offsetting payments**.
- 9.1.22 Where there have been significant **improvements to air quality** resulting in an area no longer exceeding air quality limits, Development Plans should not take advantage of this investment and worsen the local air quality back to a poor level. The sustainability appraisal for local plans should consider the effect of national, London-wide and local programmes to improve air quality to ensure that any potential conflicts are avoided.
- 9.1.23 **Further guidance** will be published on Air Quality Neutral and air quality positive approaches as well as guidance on how to reduce construction and demolition impacts.

Figure 9.1 - Air Quality Focus Areas**London's Air Quality Focus Areas**

● Air Quality Focus Area (AQFA)

Source: GLA
Environment

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