

M74. Would the policies for air quality and water infrastructure assist in creating a healthy city in accordance with Policy GG3 and provide an effective strategic context for the preparation of local plans and neighbourhood plans? Are the individual policies and detailed criteria justified and necessary and would they provide an effective basis for development management?

Creating a healthy City

Air quality

- 74.1 Air pollution has significant impacts on health, quality of life and life expectancy. Local air quality is affected by a number of factors; these include the weather, local emissions sources, proximity to roads, topography, microclimate and urban design as well as emissions sources from outside London. Legal limits are set in relation to concentrations that represent specific levels of a pollutant in a given area. The health effects of air pollution are related to exposure – how much time individuals spend in areas with high concentrations.
- 74.2 Policy SI1 is essential in meeting the requirements under GG3 Creating a Healthy City. GG3 sets out principles to ensure that the wider determinants of health are addressed in an integrated and co-ordinated way and that the potential impacts of development on the health and well-being of communities are assessed. In particular, GG3 DB says that those involved in planning must seek to improve London’s air quality, reduce public exposure to poor air quality and minimise inequalities in exposure. These are distinct requirements¹. SI1 A 1 (a) – (c) and SI1 A 3A explicitly addresses the first point by ensuring that developments do not cause new breaches of legal limits or delay other efforts to achieve them, as well as ensuring that they meet standards such as Air Quality Neutral and Air Quality Positive, which seek to reduce total pollutant emissions.
- 74.3 Clause A 2 of SI1 (in combination with Policies D1, D2 and D7) support reducing exposure to poor air quality through good design. Clause A 2 of SI1 also requires developers to pay particular attention to preventing or minimising exposure in Air Quality Focus Areas, which are defined as areas where there are both high levels of pollution and high human exposure, and at locations predominantly used by those who are particularly vulnerable to poor air quality.
- 74.4 To meet the aim of GG3 DB to improve air quality, as London grows there will be an even greater need to reduce emissions from all sources of pollution. For traffic emissions², this means reducing reliance on private cars, improving the availability of public transport and providing new transport infrastructure, such as charging infrastructure for zero emission vehicles. These aims are supported by Policies T1 to T7 and Table 10.1.

¹ NLP/CD/09: GLA, Table of Changes - Minor Suggested Changes to the Draft new London Plan, August 2018, Ref MSC.1.31

² In 2013, emissions from road transport comprised around 50 per cent of total NO_x and PM₁₀ emissions in London, NLP/SI/025a: Mayor of London, London Environment Strategy: Appendix 2 Evidence Base, May 2018

- 74.5 Taken together with Policy SI3, Policy SI1 seeks to reduce both the quantum and the impact of pollutant emissions from fixed sources, such as individual and district heating systems, which are the second largest source of oxides of Nitrogen in London, after road transport.

Water infrastructure

- 74.6 The Policy on Water Infrastructure (SI5) will assist in creating a healthy city in accordance with Policy GG3. GG3, part A refers to the need to ‘ensure that the wider determinants of health are addressed in an integrated and coordinated way’. The provision of clean drinking water and the protection of the water environment are two of these determinants and they are at the centre of Policy SI5. In the supporting text, paragraph 9.5.1 explicitly states that a severe drought could have ‘major implications for Londoners’ health and wellbeing’, and therefore, there is a significant focus on security of supply (part B) and water quality (part D). Water pollution can also have serious health implications. Part E of the Policy seeks to ensure adequate water treatment capacity and ensure that the potential for misconnections are eliminated, as this can be a significant cause of water pollution.³ There is also a close link between Policy SI5 and Good Growth Policy GG6 with regard to addressing efficiency and resilience.

Strategic context for local and neighbourhood plans

Air quality

- 74.7 Clause A of SI1 sets out the strategic context for the preparation of plans, as well as for planning decisions.
- 74.8 In order to support improvements in air quality and reduced exposure, local and neighbourhood plans will need to reflect the criteria set out in clauses A1 (a) to (d). A Minor Suggested Change has been proposed to the text of SI A1 to clarify this point (see annex). This change will also clarify how the requirements of Policies D1 (10) and D2 A (5) are expected to operate in practice.
- 74.9 Additional air quality considerations that may arise due to the type of existing or proposed development are explicitly addressed in policies SD4, D8, E5, E7, SI8 and SI17. Similarly, approaches to sustainable transportation and heat for new developments are also important for reducing pollutant emissions. Policies SI3, T1 to T7 and T9 set out a strategic approach for local and neighbourhood plans that supports improving air quality alongside wider climate change and transport goals.

³ The problem of misconnected drains is addressed further in the London Environment Strategy (Proposal 8.2.4 b, p 370)

Water infrastructure

- 74.10 Policy SI5 provides an effective strategic context for the preparation of Local Plans and Neighbourhood Plans. Parts B and D require Development Plans to promote water supply and water treatment infrastructure improvements respectively in a timely and sustainable way. This means that resource use should be minimised, and that infrastructure capacity should be considered early in the development plan process. The Mayor is working closely with the water companies to ensure additional infrastructure is delivered to accommodate London's growth. The draft Plan includes details about water supply options, which have been updated through the Minor Suggested Changes.⁴ However, as Thames Water had to produce a revised draft Water Resource Management Plan, which was published in Oct 2018, further changes to paragraphs 9.5.4 and 9.5.5 are necessary. These Further Suggested Changes are set out in Appendix 1. They suggest deleting detail that is still subject to change at this stage in the resource management planning process.
- 74.11 Partnership working and an integrated approach are two further important factors that characterise an effective approach to strategic water management across London, as is detailed in the supporting text.⁵ The need for an effective integrated approach to strategic water management across development plans and growth locations in London is emphasised further through Minor Suggested Changes.⁶ This can lead to efficiency improvements, including, for example, the establishment of local water reuse systems or integrated drainage networks and the delivery of better multifunctional green infrastructure⁷.

An effective basis for development management

Air quality

- 74.12 SI1 provides a clear and effective basis for development management and the detailed clauses are justified and effective. Clause A 3A requires Air Quality Assessments to be prepared for all major developments, thereby encouraging developers to think about air quality at the earliest opportunity to resolve air quality issues through alternative design solutions, in line with Policies D1 and D2.
- 74.13 The requirement not to create any new exceedances of legal limits or delay the achievement of compliance (SI1 A 1b) is clear and can readily be assessed in preparing a planning application.

⁴ NLP/CD/09: GLA, Table of Changes - Minor Suggested Changes to the Draft new London Plan, August 2018, Ref MSC.9.60, MSC.9.61 and MSC.9.63

⁵ Paragraphs 9.5.5, 9.5.8 and 9.5.12

⁶ NLP/CD/09: GLA, Table of Changes - Minor Suggested Changes to the Draft new London Plan, August 2018, Ref MSC.9.57

⁷ NLP/CD/09: GLA, Table of Changes - Minor Suggested Changes to the Draft new London Plan, August 2018, Ref MSC.9.64

- 74.14 Clause SI1 A 1c is necessary to ensure that developments in areas that are currently compliant with legal limits, or that will be compliant before the development completes, do not make air quality worse or use wider improvements to air quality as ‘headroom’ into which to add unnecessary pollution. This is justified because there is clear evidence that reducing pollution further, even when legal limits are met, has significant health benefits. It also helps to achieve the aim of Policy GG3 DB to improve London’s air quality.
- 74.15 The clauses of SI1 clearly set out the minimum standards that development proposals will need to meet, and the information that needs to be provided to comply with the overarching aims of the Policy. For example, SI1 3A builds on current guidance on the Air Quality Neutral (AQN) standard, which sets out benchmarks for developments based on the area and use class. By meeting these benchmarks, a development can demonstrate that it does not unduly contribute to London’s emissions. However, meeting the AQN benchmarks is not sufficient to ensure that emission sources do not have unacceptable local impacts, nor do the benchmarks allow for an assessment to be made of how the development impacts on the pollution characteristics of an area, which is why a detailed Air Quality Assessment is also required for all major applications. Where emissions need to be reduced to make the development acceptable, SI1 A6 sets out the preferred order in which development proposals should attempt to meet this requirement. Emissions generated during construction and demolition, including from on-site machinery, are a substantial source of pollution in London. The provisions contained in Policy SI1 A4 have been successful in reducing emissions since guidance was introduced in 2015.⁸
- 74.16 Finally, Air Quality Positive (SI1 A 3) is intended to take advantage of the opportunities provided by the potential of large scale redevelopment to actively contribute to improving air quality. Through the Minor Suggested Changes⁹, clarification was made to the Air Quality Positive (AQP) approach so that it only applies to developments of sufficient scale to be subject to an Environmental Impact Assessment. Paragraph 9.1.3 is necessary in helping to identify how Air Quality Positive can be achieved.

Water infrastructure

- 74.17 Policy SI5 provides an effective basis for development management. Clause C focuses on different components of water efficiency, including smart metering, water saving and recycling measures, which are all essential in encouraging the sustainable use of water resources. Clause E provides a clear direction for development proposals to improve the water environment, adequately provide for wastewater infrastructure and eliminate misconnections. Overall, the components of this Policy provide a clear strategic framework for development management,

⁸ Control of Dust and Emissions from Demolition and Construction SPG

⁹ NLP/CD/09: GLA, [Table of Changes - Minor Suggested Changes to the Draft new London Plan](#), August 2018, Ref MSC.9.2

providing recognised and robust standards and setting out a clear basis for achieving them. These measures will also help to manage water as a resource more sustainably and reduce the need for additional water infrastructure provision.

In particular

a) Are the requirements in Policy SI1 clear and will they be effective in improving air quality whilst delivering the homes Londoners need in accordance with Policy GG4?

74.18 The requirements in Policy SI1 are clear and are effective in improving air quality whilst delivering much-needed housing.

74.19 Taken together, Policies SI1 and GG4 ensure that a design-led approach is taken to improving air quality and preventing or mitigating exposure to air pollution, ensuring that new homes are of good quality and meet high design standards. A design-led approach, advocated through SI A2 and GG4 C, should also ensure that expensive mitigation measures, as a result of retro-fitting solutions at the end of the process, can be avoided.

74.20 For all sites, Policy SI1, alongside other Policies such as D1, D2 and D7, provides certainty to applicants about what is expected in relation to reducing exposure to air pollution and to minimising impacts of poor air quality. By prioritising a design-led approach, the Policy will aid the development process so that homes and other development needs can be delivered whilst also addressing air quality issues.

74.21 Delivery of housing on small sites plays an important role in meeting the requirements of GG4. Policy H2 HA sets out that for sites to benefit from the presumption in favour of small housing developments must, where they are classified as major developments, meet Air Quality Neutral by using ultra-low NO_x boilers. Ultra-low NO_x boilers have emissions of less than 40 mg/kWh and are widely available at a similar price and performance to more polluting equivalents. This requirement is therefore considered proportionate and provides appropriate protection for local air quality without restricting the development of small housing sites.

b) Will Policy SI5 ensure adequate provision for water infrastructure and encourage a sustainable use of resources? Is the requirement to use the optional requirement of the Building Regulations justified?

Water infrastructure and use of resources

74.22 Policy SI5 will ensure an adequate provision of water infrastructure and sustainable use of resources as set out above in paragraphs 74.10, 74.11 and 74.17.

Optional requirement for building regulations.

- 74.23 The requirement to use the optional requirement of the Building Regulations for water use in residential development is justified. All water companies that serve London are located in areas classified as seriously water stressed, as defined by the Environment Agency.¹⁰ This clearly demonstrates the need for the optional requirement to be applied across London.
- 74.24 The water consumption target of 105 litres or less per head per day reflects existing long-established London Plan policy that has been in place since the 2006/07 Alterations to the London Plan. The 2015 London Plan confirmed this target, in line with the Government's Housing Standards Review.
- 74.25 The Environment Agency also considers the standard 'essential to help manage London's increasing water-supply demand deficit, given the expectations of the timely delivery of new homes and jobs'¹¹. The removal or weakening of this standard would serve to place further stress on water resources.

¹⁰ NLP/SI/029: Environment Agency, Water Stressed Areas – Final Classification, 2013

¹¹ Representation on the draft London Plan, page 33.

Appendix 1: M74 Further Suggested Changes

The Mayor is suggesting the following further changes to Policy SI1 and SI5 and supporting text:

- **Bold blue** – new text
- **Blue strikethrough** – deleted original plan text
- **Purple strikethrough** – deleted minor suggested change text
- **Bold red** – Minor Suggested Changes new text
- **Red strikethrough** – Minor suggested changes deleted text

Change ref no	Policy/para /table/map	Further suggested change
M74.1	SI1	<p>London’s air quality should be significantly improved and exposure to poor air quality, especially for vulnerable people, should be reduced. A 1) DDevelopment plans and proposals should not:</p> <p>a) 1 lead to further deterioration of existing poor air quality</p> <p>b) 2 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</p> <p>c) 3 reduce air quality benefits that result from the Mayor’s or boroughs’ activities to improve air quality</p> <p>d) 4 create unacceptable risk of high levels of exposure to poor air quality.</p> <p>B 2) Ddevelopment 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. Particular care should be taken with developments that are 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.</p> <p>C 3) The development of large-scale redevelopment areas, such as Opportunity Areas and masterplans and development briefs for large-scale development proposals those subject to an Environmental Impact Assessment should propose methods of achieving an Air Quality Positive approach through the new development. All other developments should be at least Air Quality Neutral.</p> <p>D 3A) major development proposals must be at least air quality neutral and be submitted with an Air Quality Assessment.</p> <p>E 4) Ddevelopment 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 guidance¹¹⁵.</p>

		<p>5) Air Quality Assessments (AQAs) should be submitted with all major developments, unless they can demonstrate that transport and building emissions will be less than the previous or existing use.</p> <p>F 6) D development proposals should ensure that where emissions need to be reduced, this is done on-site. Where it can be demonstrated that on-site provision is impractical or inappropriate, off-site measures to improve local air quality may be acceptable, provided that equivalent air quality benefits can be demonstrated.</p>
M74.2	SI5 Paragraph 9.5.4	<p>Thames Water has set out through the water resource management planning process in its draft Water Resources Management Plan its preferred approach to Variations of the following four strategic water supply options to serve London and parts of the Wider South East. are under consideration through Thames Water's Water Resource Management Plan process and one or a combination of some of these are expected to be proposed to serve parts of the Wider South East including London. These include: It is considering a suite of options, including a potential new reservoir, effluent reuse, water transfers and new groundwater sources.</p> <ul style="list-style-type: none"> • direct river abstraction from the Thames linked to augmenting river flows using treated sewage works effluent in east and west London • treatment / re-use of effluent from sewage treatment works – likely within London • desalination – potentially within London • transfer of river water from the River Severn to the River Thames catchment • a new reservoir – likely to be near the Upper Thames in Oxfordshire.
M74.3	SI5 Paragraph 9.5.5	<p>The Mayor is reviewing has reviewed the available information on each of the supply options alongside evidence of their impacts on Londoners and Mayoral priorities. A strategic approach to water supply networks to ensure future water resilience and in particular the timely planning for a new strategic water resource to serve London and the Wider South East is important. In preparing its draft Water Resource Management Plans, Thames Water is exploring has explored coordinated supply options with the other water companies serving London and the South East of England working with through the Water Resource South East expert group. Water Resource East is undertaking has undertaken similar work in the East of England area. All this will involves partnership working with key stakeholders within London and beyond its boundaries.</p>