Air Quality and Planning in Southampton

INFORMAL GUIDANCE

GREENCITY SOUTHAMPTON

SOUTHAMPTON CITY COUNCIL

Preface

This document provides informal guidance on air quality considerations in the planning process. While it is not formally adopted, this guidance should be referred to in order to understand expectations the council might have when assessing relevant developments in the city. Please note that this guidance is a live document and is subject to change.
If you have any feedback or queries on the content, please contact **airquality@southampton.gov.uk**.

This document aims to:

- Provide consistent guidance on why and how air quality should be considered in the planning process
- Clarify policy background and legal requirements to be considered, supporting the council's ability to meet and maintain compliance with air quality objectives
- Encourage developers in taking further steps to reduce emissions associated with their development beyond compliance.

We also encourage developers to contact The Local Planning Authority or the air quality inbox pre-application so that queries regarding air quality considerations can be answered.

Introduction

Poor air quality is the single largest environmental risk to health in the UK – contributing to the equivalent of 340,000 years of life lost every year while also damaging vulnerable ecosystems and local amenity value.

Nitrogen Dioxide (NO_2) is the key pollutant in UK cities, around two thirds of which is emitted from road transport in Southampton. Elevated concentrations of NO_2 in the city do not yet meet national air quality objectives. Concentrations of Particulate Matter (PM), while meeting objectives in the city, can also have a large impact on health and the environment, it is emitted from road transport as well as domestic and industrial combustion processes.

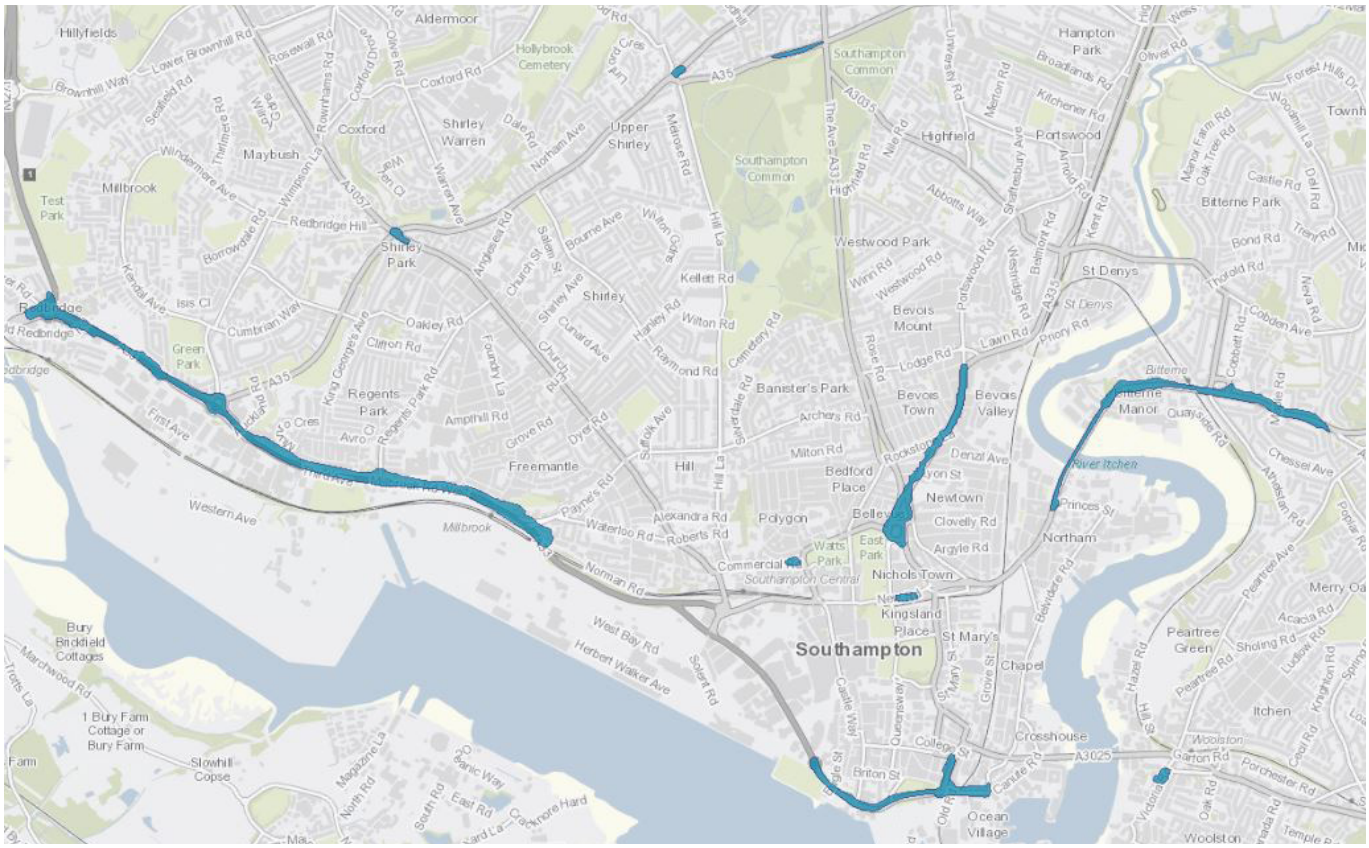
If insufficiently accounted for, developments have the potential to have a considerable negative impact on local air quality by introducing large quantities of traffic movements and/ or new combustion processes into sensitive areas, damaging human health and the environment.

New developments may also introduce new receptors into areas of existing poor air quality, leading to unnecessary impacts to public health.

As such, air quality is a material consideration in determining planning applications.

Air Quality Management Areas

Southampton City Council (SCC) has established 10 Air Quality Management Areas (AQMAs) (Shown below) in the city where high concentrations of NO_2 persist near residential properties. These areas are where efforts to reduce emissions are focussed and where particular attention to air quality should be given in the development control process.



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Policy Context

Level	Name	Summary
International	1992/43/EC - Habitats Directive	Sets requirements for assessing and mitigating air quality impacts on designated habitats.
	2008/50/EC - Ambient Air Quality and Cleaner Air For Europe	Sets legally binding limits for ambient concentrations of key pollutants including particulate matter (PM) and nitrogen dioxide (NO_2).
National	Environmental Protection Act, 1990	Mandates requirements for assessing and mitigating for dust generated from construction and demolition activities.
	Clean Air Act, 1993	Regulates emissions of smoke from certain fuels and appliances in 'Smoke Control Areas'. Two smoke control areas have been declared in Southampton which cover most of the city.
	Environment Act, 1995	Requires local authorities in the UK to review air quality in their area and designate Air Quality Management Areas (AQMAs) where air quality targets are not likely to be met. AQMAs must be accompanied by an Air Quality Action Plan.
	Air Quality Standards Regulations, 2010	Transposed from 2008/50/EC. Sets national air quality objectives for average concentrations of key ambient pollutants at 'sensitive receptors' including residential properties and key pedestrian areas.
	National Planning Policy Framework, 2012	Sets out government's planning policies including air quality as a material consideration, detailed in sections 'promoting sustainable transport' and 'promoting healthy and safe communities'.
	The Town and Country Planning (Environmental Impact Assessment) Regulations, 2017	Transposed from 2011/92/EU. Sets out requirements and process of conducting Environmental Impact Assessments where compliance with limit values are likely to be exceeded as a result of a development.
Local	Local plan saved policy SDP 15 – Air Quality in The Local Plan Review	See below
	Core Strategy Policy section CS18	
	Community Infrastructure Levy	

Local Policy

Local plan saved policy SDP 15 – Air Quality in The Local Plan Review

Planning permission will be refused:

i) where the effect of the proposal would contribute significantly to the exceedance of the National Air Quality Strategy Standards;

or

ii) where the proposal would be materially affected by existing and continuous poor air quality.

Large potentially polluting developments will be required to assess their air quality impact by detailed air dispersion modelling and appropriate monitoring

Core Strategy Policy Section CS18

In relation to citywide transport the Council will continue to:

11. Require new developments to consider impact on air quality, particularly in Air Quality Management Areas (AQMAs) through the promotion of access by sustainable modes of travel.

Connected Southampton Transport Strategy 2040 (Local Transport Plan 4)

Policy Z1 –Zero Emission City

Over the next twenty years we will look to continue to develop the Southampton EV Charging Network and promote the use of other clean fuels, continue to incentivise businesses to move towards a low then zero-emission vehicle fleet as technology allows, and explore the scope to implement a Zero Emission Zone for the City Centre.

Community Infrastructure Levy

The Community Infrastructure Levy (CIL) Charging Schedule for Southampton came into effect on 1 September 2013. The CIL is a standard, non-negotiable charge applicable to developments where there is a net increase of 100 square metre of floor space or the creation of one or more dwellings.

The money raised from the CIL will be used to fund a variety of infrastructure in the City. This includes strategic transport schemes, flood defences and open space.

The council are responsible for monitoring and managing air quality under direction from central government. Plans and strategies to date include:

- Air Quality Actions Plan – sets out early steps to achieve or maintain compliance in AQMAs.
- Local NO_2 Plan – series of measures to achieve compliance with annual NO_2 objectives in the shortest possible time.
- Clean Air Strategy 2019-25 – SCC's strategic approach to improving air quality in the city.
- Green City Plan– sets out SCC's vision and commitments for continual improvement in various environmental themes such as clean air as well as sustainable travel, energy and biodiversity.

Assessing air quality impacts

Developers are often required to undertake assessments to understand how air quality will need to be considered.

The level of assessment needed should be proportional to the nature and scale of the development, as well as how much of a concern existing air quality is in the area.

Screening the need for an Air Quality Assessments

Development control currently screen the need to consider an Air Quality Assessment (AQA) if they meet any of the following criteria:

- Development in or within 50m of an AQMA
- 'Major' developments, including:
  - New commercial development with 1000m^2 of floor space or more
  - Residential accommodation with 10 or more units
  - Developments which involve a change of use of 1000m^2 or more
  - New developments which involve a site area of 1 hectares or more
  - Developments which involve development of waste management facilities
- Developments within 200m of designated conservation sites

Developments which do not meet the above criteria are recommended to conduct an Air Quality Statement (AQS). The statement should set out why the impact of the development on air quality is not likely to be significant. This can consist of a qualitative analysis including the number of parking spaces at the site or the estimated annual average change in the number trips to the site in a day.

Air Quality Assessments

Air Quality Assessments (AQAs) involve detailed modelling of the contribution the proposed development will have on local concentrations of key pollutants in the area once it is developed and into the future.

The outcomes of an AQA determines how much of a consideration air quality is in the planning process, and in some cases its determination.

AQAs should be able to define:

- Whether the development will cause or contribute towards to an exceedance of national air quality objectives
- The magnitude of the change in local air quality as a result of the development
- The significance of the impact in local air quality as a result of the development
- Recommended mitigations.

We suggest that AQAs submitted should follow the structure below:

1. Relevant details of the proposal
2. Policy context for the assessment
3. Description of relevant air quality standards and objectives
4. The basis for determining significance of effects arising from impacts
5. Details of assessment methods
6. Identification of receptors
7. Description of baseline conditions
8. Assessment of impacts
   - Tabulated results model results for studied pollutants at each receptor
   - Should include calculated Process Contribution (PC) and Predicted Environmental Contribution (PEC) and how these compare to baseline values

9. Description of construction phase impacts

10. Description of cumulative impacts and effects

11. Mitigation measures required and suggested

12. Summary of significance and other results.

We recommend that the latest version of of the 'ADMS' model is used for this analysis. Model verification results should also be communicated including any adjustments made.

SCC operate a large air quality monitoring network consisting of diffusion tubes and automatic monitoring sites which should be used to identify baseline conditions. Please visit our monitoring and reporting page for more information.

Please refer to section 6 of IAQMs planning guidance for detail on how to conduct an assessment.

Environmental Impact Assessments

Developments which meet the thresholds for an Environmental Impact Assessment (known as 'schedules') must incorporate certain air quality considerations.

As with other environmental factors, air quality must go through a screening process – to identify if air quality needs to be assessed – and a scoping process, to identify which specific aspects of air quality must be taken forward for assessment.

A detailed impact analysis must then be carried out for the aspects identified, the results of which are then compiled into an Environmental Statement chapter for review by statutory consultees.

Please visit the government's webpage on EIAs for more information on the process.

Exposure assessments

Where new residents, visitors or staff (referred to as 'receptors') are introduced into an area of existing poor air quality – particularly AQMAs – developers may be required to justify why the location and design of the development is appropriate, considering the need to reduce people's exposure to poor air quality.

If you think your development might be subject to such an assessment, please contact the Local Planning Authority pre-application so that the design and location of the proposal can be discussed to ensure that impacts are reduced.

Ecological air quality assessments

There are several designated habitats in Southampton including areas of Southampton Water and the River Itchen as well as parts of Southampton Common. If emissions from a development are likely to lead to significant impact on any of these sites, a Habitats Regulations Assessment (HRA) will need to be carried out as part of the submitted AQA or Environmental Statement.

Such assessments require the combined expertise of air quality specialists – to identify whether pollutant deposition will exceed critical levels – and an ecologist to identify how this contribution will impact the integrity of the site.

For detail on how to conduct such an assessment, please refer to the IAQM guidance for assessing impacts of air quality impacts on designated nature conservation sites.

Dust assessments

Construction and demolition of large developments can generate large quantities of dust which damages human health while causing nuisance and impact to local amenity.

Larger developments are often required to assess the impacts of dust and implement a series of dust abatement mitigation measures to achieve compliance.

For detail on how the account for dust impacts, please refer to the IAQM guidance for assessing impacts from demolition and construction.

Industrial emissions and permitting

Pollution from industrial processes is controlled by the environmental permitting regime and associated regulations. These provide a framework for the operators of polluting processes (or 'installations') to apply to the council or Environment Agency to obtain a permit to operate.

Installations are classified as follows:

- Part A(1) – Large, potentially highly polluting activities. Regulated by the Environment Agency
- Part A(2) – Medium. Regulated by The Council
- Part B – Smaller intensive activities, only relating to emissions to air. Regulated by The Council.

Permits include a set of conditions the operator must comply with. Installations are routinely inspected and breaches of conditions can result in enforcement action.

For more information on emissions from industrial processes and permitting please visit the government's website. (**gov.uk/topic/environmental-management/environmental-permits**)

Transport Assessments and Statements

Air quality considerations are often closely linked with traffic and transport factors associated with the development. As such, both are often needed to be considered in the development control process and should be considered in respect of each other in terms of the impacts associated with the development and mitigations required.

Transport assessments and statements are similar to the air quality equivalents in that they assess the potential transport impact of developments (and propose mitigations) to different degrees of detail.

For more information on these assessments, please visit **gov.uk/guidance/travel-plans-transport-assessments-and-statements**.

Mitigating air quality impacts

Mitigation measures not only provide a mechanism for developers to meet planning obligations, but also offer an opportunity for them to take meaningful steps in improving local air quality and public health.

Emissions from road vehicle movements associated with developments typically cause the greatest impact to air quality, as such, measures should focus on reducing emissions from associated movements – unless it involves other significant sources of emissions, including large industrial combustion processes.

The hierarchy below roughly sets out how measures should be prioritised when reducing impacts associated with traffic movements. Measures that lower or prevent polluting journeys have the greatest potential to improve air quality followed by those that provide or encourage clean technology in vehicles making necessary journeys. Lastly, measures that reduce the exposure of receptors to poor air quality should be considered, particularly if relevant to an exposure assessment.

A mitigation statement can be provided which states which measures will be implemented and what management plans will be used to ensure their success.

Conditions and Section 106 Agreements

Developments which require an AQA are likely to entail planning conditions for certain types of mitigations, particularly those located in the vicinity of AQMAs. Typical conditions are highlighted in yellow in the table below.

As with other considerations, mitigations for air quality impacts can be required by the Local Planning Authority through 'Section 106 Agreements', where planning permission would otherwise be refused on air quality grounds.

Environmental Statements

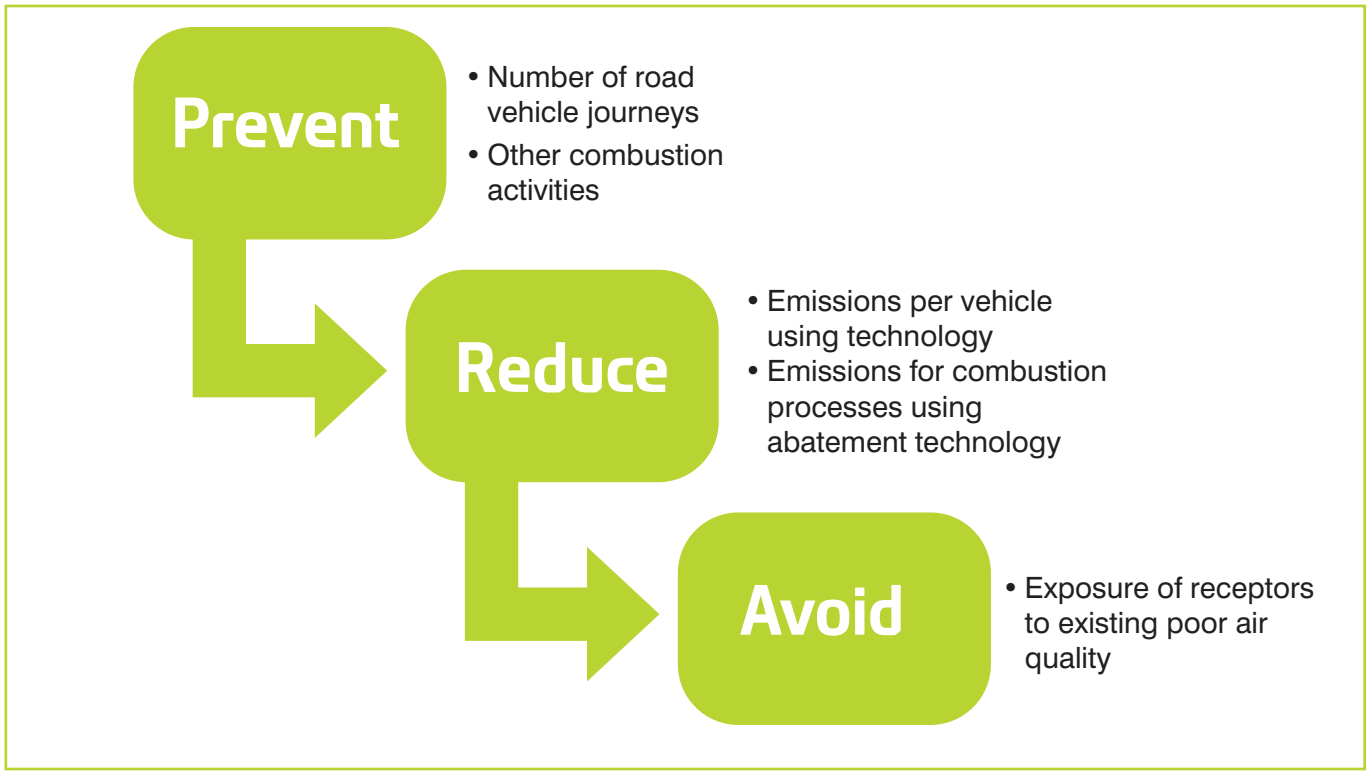
Where air quality is a consideration in an Environmental Impact Assessment, it must be included in an environmental statement chapter setting out mitigations which will be implemented and how they will ensure that any significant negative impact on air quality is minimised to acceptable levels.

Construction Environment Management Plan and Construction Traffic Management Plans

Air quality impacts from construction activities, notably dust generation, are sometimes required to be mitigated against as part of a Construction Environment Management Plan. Compliance with dust related requirements are often a key element of these.

Construction Traffic Management Plans often include elements to improve air quality relating to traffic movements associated with construction activities. These may include requiring construction vehicles servicing the site to meet a certain Euro standard and steps to reduce the number and length of journeys to the site, reducing emissions.

The table to follow sets out examples of key measures that developers can implement to mitigate the impact of the proposed development on air quality.



Area	Measure detail	AQ impact	AQ impact	Feasibility
Active Travel	Infrastructure	Segregated cycle paths, pedestrian facilities, wayfinding, raised tables and junctions etc.	H	M
		Links and improvements to existing infrastructure including the Southampton Cycle Network and footways		
		Public realm improvements		
		Secure cycle parking		
		Shower and changing facilities		
		New or improved junctions and crossings to prioritise walking and cycling crossings		
	Engagement	Workplace travel plans	M	H
		Communicating existing benefits and opportunities to staff/ residents		
Public transport	Contributions to services	Physical works along corridors – bus lanes, bus stops, real time information, bus priority measures	M	M
		New low or zero emission services		
		New and amended services for staff/ residents		
		Local interchanges and other sustainable travel facilities		
Mirco/ Shared-mobility	Car clubs	Promote existing car clubs	M	L
		Create car club for staff/ residents		
	Subsidising cleaner travel	Car clubs	M	L
		Public transport		
		Local mobility hubs		
		Shared Mobility – E-scooters or e-bikes – hire schemes		
Delivery freight	Delivery and Service Planning	Timing and routing of journeys to avoid congestion	H	M
		Encourage higher emission standard or low emission vehicles		
		Can include provision of last mile, zero emission delivery solutions		
	Fleet Emission Strategy	Plan to fast-track improvements in Euro standards and electric technology beyond background improvements	H	L
Construction and demolition	Construction Traffic Management Plan	Timing and routing of journeys to avoid congestion	M	M
		Requirement for certain emission standards in construction vehicles		
	Dust management	Adherence to regulations and guidance	M	M
		Included in Construction Environment Management Plan where necessary		
Building emissions	Emissions from industrial flues	Adherence to environmental permitting regulation and guidance	H	L
		Design including abatement technology and location of flue		
	Low emission boilers	Installing Low NOx boilers and abatement technology, or ideally electric boilers	M	H
	Solid fuel burning	Adhere to smoke control area requirements and ideally avoid installing devices	M	L
Abatement	Green Infrastructure	Green walls, sustainable urban drainage/planting, and hedges to create barrier between receptors and roads	L	H
	Mechanical ventilation	Locating intake vents to avoid busy roads and timing to avoid rush hours	L	M
	Design	Windows and doors to key living areas placed away from busy roads	L	H

Electric Vehicle charging

The table below indicates expectations for charge point provision by development type and number of parking spaces.

	CHARGER POWER TYPE			
Parking type	**Slow**	**Fast**	**Rapid**	**Provision**
Dwellings with shared parking				2% of total (at least one), designated
Workplace (>9 bays)				10% of total, designated
Long stay public accessible eg. hotels				5% of total, designated (at least one)
Short stay public accessible ie. supermarkets, leisure				5% of total, designated (at least one)

Preferred		Expected	

Where charge points are designated, a charge point management plan can be implemented which sets out how charge points can be fully utilised by electric vehicles.

Due to charging points and electric vehicles becoming a rapidly increasing policy priority for government, developers may wish to build in further capacity to account for future demand. This can include installing spare cable ducts when installing the initial points.

Travel plans

Travel plans are often recommended as an outcome of transport assessments and statements. The development of travel plans and these assessments should be an iterative process where both might influence each other.

Travel plans often encompass many of the sustainable travel measures covered in the mitigation table including initiatives to encourage walking, cycling, public transport and tele-communicating – reducing the demand for less sustainable modes of travel.

Mitigation statement

Developers are encouraged to clearly set out what mitigations they plan to implement in a 'mitigation statement'. This can be in a list format and may detail where each measure is detailed and the source of its implementation is provided eg. Transport plan, specific planning condition or voluntary.

Mitigation statements are sometimes expected as an element of planning conditions to demonstrate how mitigations will be implemented.

We encourage developers to engage with the Local Planning Authority, through the **airquality@southampton.gov.uk** email address at the earliest possible time, pre-application, to ensure that air quality is appropriately considered early in the planning process.

Other guidance

IAQM Air Quality Planning Guidance	Detail on the planning process and air quality and air quality assessments.
Air Quality National Planning Practice Guidance	Provides guidance on how planning can take account of the impact of new development on air quality.
Central government guidance	FAQ on air quality and planning.
IAQM guide to assessing AQ impacts on designated nature conservation sites	Detail of air quality impacts on ecology and how to assess them.
GOV.UK guidance on Travel Plans, Transport Assessments and Statements	Further information on related transport and traffic considerations.