

Air Quality Assessments in New Development

New Forest District outside the National Park

Supplementary Planning Document

June 2022



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2. National Air Quality Context

2.1 Air pollution impacts on everyone's health and is a major public health concern with the young, elderly and those with chronic health conditions being particularly susceptible. The impacts on human health are well [documented](#) with up to 36,000 annual deaths in the UK attributed to long term exposure to man-made pollution with the science continuing to evolve.

2.2 In 2014 Public Health England published a report to estimate the number of deaths associated with the long term [exposure to particulate matter](#). New Forest District has the lowest reported figures compared to the other local authorities in Hampshire, (4.9% of deaths of people over 25 are attributed to long term exposure to particulate matter, Hampshire = 5.3%, England = 5.6%).

3. Air Quality in the New Forest District

3.1 In broad terms the air quality in the New Forest is generally good and is reflected in the air quality statistics reported by New Forest District Council¹ and Public Health England².

3.2 The Council has a duty to continually review and assess the air quality in its district following Government guidance under the Local Air Quality Management regime. The Council, in accordance with Government guidance, reports on local air quality on an annual basis in the Annual Status Report. This includes reporting on the monitoring undertaken across the district using automatic and passive monitoring sites.

The main concerns regarding impacts on local air quality in the New Forest are from:

- increases in vehicles on the local road network (nitrogen dioxide (NO₂) and particulate matter (PM))
- industrial developments (NO₂, PM and sulphur dioxide (SO₂))
- mineral extraction sites (NO₂ and PM)
- construction sites (PM)

3.3 Local air quality is assessed against air quality objectives set by Government for named pollutants and over noted assessment periods. If air quality objectives are being, or are likely to be breached, the Council has a duty to declare an Air Quality Management Area (AQMA) and produce an Action Plan to reduce pollutant concentrations in pursuit of the objective being breached.

3.4 There is currently one declared AQMA in Lyndhurst (outside the planning area covered by this SPD) for the likely exceedance of the nitrogen dioxide annual mean objective due to emissions from vehicles.

3.5 The latest report which includes the most recent and validated monitoring results can be found at: <https://www.newforest.gov.uk/airquality>

¹ [Air pollution - New Forest District Council](#)

² [Air Quality Library - Defra, UK](#)



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4. National Policy and Practice

National Planning Policy Framework

4.1 National planning policy is set by the National Planning Policy Framework (NPPF). The current NPPF places a general presumption in favour of sustainable development, stressing the importance of local development plans. Air quality is a material consideration in the planning process, in line with the following paragraphs of the NPPF:

174. Planning policies and decisions should contribute to and enhance the natural and local environment by [...]:

e) preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability. Development should, wherever possible, help to improve local environmental conditions such as air and water quality, taking into account relevant information such as river basin management plans;

186. Planning policies and decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, 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. Planning decisions should ensure that any new development in Air Quality Management Areas and Clean Air Zones is consistent with the local air quality action plan.

4.2 The following paragraphs recognise the impact of traffic on air quality and health and the benefits of sustainable transport modes:

104. Transport issues should be considered from the earliest stages of plan-making and development proposals, so that: [...]

d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; [...]

107. If setting local parking standards for residential and non-residential development, policies should take into account: [...]

e) the need to ensure an adequate provision of spaces for charging plug-in and other ultra-low emission vehicles.



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5. Planning Policy Guidance

5.1 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. Air quality may also be a material consideration if the proposed development would be particularly sensitive to poor air quality in its vicinity. It is important that applicants engage early on with the local planning and environmental health departments to establish the need and scope of any assessment to support an application.

5.2 The PPG sets out what specific issues may need to be considered when assessing air quality impacts. These include: changes in vehicle emissions; the introduction of new point sources of air pollution; exposure of people to harmful concentrations of air pollutants, for example, by introducing further development in places with poor air quality; potential adverse effects on biodiversity. It also sets out guidance on the approach to assessment.

5.3 The PPG advises that mitigation options will:

- Need to be specific to the location
- Depend on the proposed development
- Need to be proportionate to the likely impact.

5.4 Planning conditions and obligations can be used to secure mitigation where the relevant tests are met. Examples of mitigation include: maintaining adequate separation between sources of air pollution and receptors; using green infrastructure; appropriate means of filtration and ventilation; electric vehicle charging points; contributing funding to measures designed to offset the impact of air quality arising from new development.

6. Local Plan Policy Background

6.1 This Supplementary Planning Document to the Local Plan provides guidance to support Objective of Policy SO2 (Biodiversity and Environmental Quality) and Policy CCC1 (Safe and Healthy Communities) which aims to prevent pollution or hazards which prejudice the health or safety of communities. Where necessary to enable development to take place, appropriate mitigation measures will be required to prevent, control, mitigate or offset the impacts of development on community health and safety.

7. Development Management

Threshold, Assessment and Mitigation

7.1 The assessment of air quality for relevant planning applications should follow a three stage process;

1. Determining if the development proposal falls within one of the identified thresholds;
2. If it does, assessing and quantifying the impact on local air quality and finally
3. Determining if, applying mitigation measures, the proposal can be made acceptable

7.2 Pre-application discussions between developers and the local authority is encouraged to ensure an application is complete and meets the necessary requirements. Planning



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applications must contain sufficient detail to allow the impacts of development to be properly assessed.

7.3 Air quality is a material planning consideration. Consideration will be given to:

- the significance of the impact on (local) air quality;
- the current air quality in the area of the proposed development;
- the likely use of the development, (i.e. the length of time people are likely to be exposed at that location);

7.4 Most forms of development will have an impact on local air quality and therefore public health. To make development acceptable mitigation measures will need to be implemented by the applicant to reduce emissions to air. The mitigation measures implemented should be proportionate to the scale of the impact.

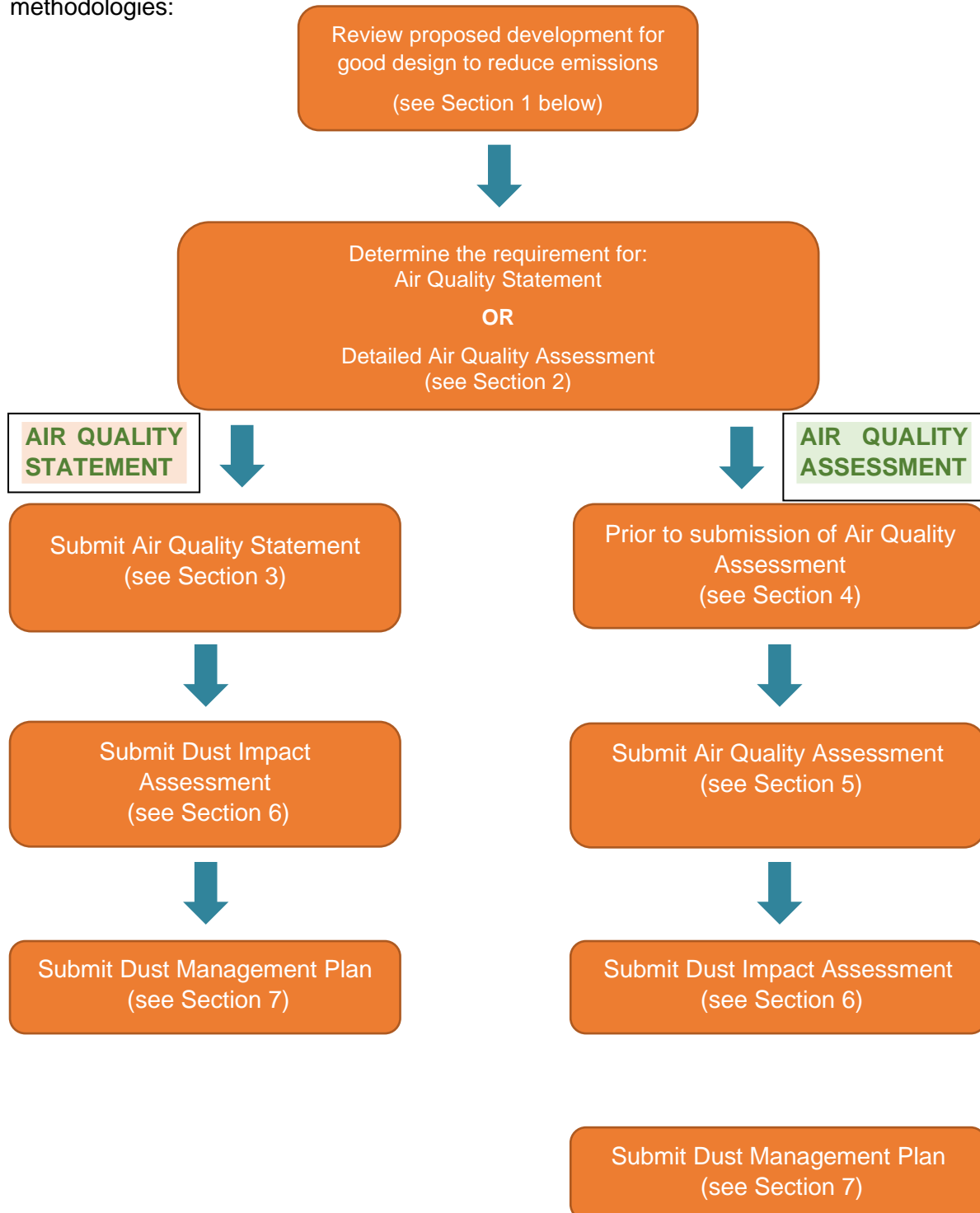
7.5 Impacts on air quality will be determined as 'significant' or 'not significant'.



8. ASSESSMENT OF AIR QUALITY

Figure 2 - Staged Approach

In order to ensure air quality is adequately and proportionately assessed in terms of the planning regime, a staged approach should be taken using relevant guidance and accepted methodologies:



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Staged Approach

Section 1 - Development Design

8.1 New Forest District is characterised by generally high environmental quality with towns and villages set within attractive countryside with significant visual, recreational, heritage and ecological value. The qualities of the area and the sensitivities of its landscapes and habitats demand commensurate care and attention to quality in new development.

8.2 Developers should seek ways in which the places and spaces that are created can be sustainable. As Policy ENV3 of the Local Plan sets out, the Council expects development to offer a high-quality living environment for current and future residents.

8.3 Whilst it is acknowledged the design of a proposed development has to consider a number of parameters such as landscaping, property design and layout, the design stage should also consider how emissions could be reduced. This could include the following mitigation measures:

- Minimising the number of vehicles on site
- Removing street canyons by design
- Minimising public exposure to pollutants, for example by siting outside space away from busy roads / industrial sites
- Installation of electric vehicle charging points or a production of an electric vehicle charging scheme
- Energy efficient properties, reducing the need for heating
- Easy connections to public transport, walking and cycling networks to encourage the use of alternatives to cars
- Green Infrastructure, landscaping and planting

Section 2 - Requirement for an Air Quality Statement or Assessment

Air Quality Statement OR Assessment?

8.4 New Forest District Council use air quality planning guidance (*Land-Use Planning & Development Control: Planning for Air Quality. January 2017*. Environmental Protection UK, Institute of Air Quality Management) to determine whether a detailed air quality assessment is needed as part of the planning application. An air quality assessment is a detailed assessment to predict the impact of a proposed development on local air quality.

8.5 If there is no requirement to provide an air quality assessment, then an air quality statement will be needed. An air quality statement will include a commitment to implement measures to reduce emissions from the proposed development.

8.6 Table 1 summarises the development criteria for an air quality statement or assessment in a stepped process.

As an example, if the proposed development is greater than 10 residential units there may be a requirement for an air quality assessment, however, if the proposed development does not generate more than 500 light duty vehicle movements a day and no other criteria are met, then an air quality statement rather than an air quality assessment will be required.



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The criteria presented in Table 1 are provided as guidance, there may be circumstances where an air quality assessment is needed due to local sensitivities outside the criteria.



Table 1 - Air Quality Statement or Assessment

STEP 1	Air Quality Statement	Air Quality Assessment
Development type		
Residential		
Less than 10 residential units or site less than 0.5ha	✓	
More than 10 residential units or more than 0.5ha, plus: More than 10 parking spaces or Centralised energy facility or combustion process		✓
Other use classes		
Less than 1,000m ² of floor space or site less than 1ha	✓	
More than 1,000m ² of floor space or site more than 1ha, plus: More than 10 parking spaces or Centralised energy facility or combustion process		✓
STEP 2		
Specific Criteria		
Traffic numbers		
Developments which generate less than 500 annual average daily traffic flows (AADT) for light goods vehicles (including cars) for outside AQMA or less than 100 AADT in or adjacent to* an AQMA – these figures will be produced from a transport assessment and agreed by the highway authority	✓	
Developments which generate more than 500 annual average daily traffic flows (AADT) for light goods vehicles (including cars) for outside AQMA or 100 AADT in or adjacent to* an AQMA – these figures will be produced from a transport assessment and agreed by the highway authority		✓
Developments which generate less than 100 AADT for heavy duty vehicles for outside AQMA or less than 25 AADT in or adjacent to* an AQMA – these figures will be produced from a transport assessment and agreed by the highway authority	✓	
Developments which generate more than 100 AADT for heavy duty vehicles for outside AQMA or 25 AADT in or adjacent to* an AQMA – these figures will be produced from a transport assessment and agreed by the highway authority		✓
Other		
Developments with 25m of A35 (Totton – Redbridge Causeway)		✓
New bus stations		✓
New road junction close to relevant receptors such as housing or schools		✓
Developments within an AQMA		✓
New substantial combustion plant including biomass boilers and standby emergency generators		✓

Notes:* 'adjacent to' can also include a location where the majority of traffic from a proposed development is travelling through an AQMA even if the development is not physically adjacent to the AQMA. The determination of 'adjacent to' will be at the discretion of the Local Planning Authority.

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Section 3 – Air Quality Statement

Content of an Air Quality Statement

8.7 An air quality statement should include the following:

- why an air quality statement rather than an assessment is being submitted, with reference to relevant guidance
- statement confirming 3 mitigation measures to be implemented as part of the development from the list detailed in Appendix 1.

8.8 An Air Quality Statement will be submitted as part of the application.

Section 4 – Prior to submission of an Air Quality Assessment

8.9 It is strongly recommended that the applicant agrees the following points with the Local Planning Authority prior to submission of a planning application to reduce the need to request further information during the application process:

- **The requirement to undertake an air quality assessment** – if there is uncertainty of the potential impact of the proposed development
- **Details of assessment model.** This includes:
 - i. relevant air quality model.
 - I. This depends on what is being modelled for example road or industrial / point emissions.
 - ii. *emission data.*
 - I. If roads are being modelled the most up to date vehicle emission factor should be used
 - iii. *transport data (need to be agreement with HCC/LPA)*
 - iv. *meteorological data*
 - v. *pollutants being assessed*
 - vi. *baseline pollutant concentrations*
 - vii. *background pollutant concentrations*
 - viii. *choice of baseline year*
 - ix. *use of local monitoring data*
 - x. *verification of air quality model*
- **Agreement of extent of assessment** – whether the assessment includes the development alone, other locations and / or other local developments (cumulative impacts). It should be noted that a route / location of interest may be some distance from the development but is still considered relevant to the proposed development.
- **Cumulative Impact - the NPPF (paragraph 181)** recognises that a number of individual developments proposals within close proximity of each other require planning policies and decisions to consider the cumulative impact of them. Difficulties arise when developments are permitted sequentially, with each individually having only a relatively low polluting potential, but which cumulatively result in a significant worsening of air quality. This will occur where:



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- i. a single large site is divided into a series of units, such as an industrial estates
- ii. a major development is broken down into a series of smaller planning applications for administrative ease; and
- iii. there are cumulative air quality impacts from a series of unrelated developments in the same area

In criteria (i) and (ii) the cumulative impact will be addressed by the likelihood that a single developer will bring forward an outline application for the whole site which should include an air quality assessment as part of an Environmental Assessment. For major developments that are broken down into a series of smaller planning applications, the use of a Master or Parameter Plan that includes an air quality assessment will address the cumulative impact.

- **Agreement of the traffic figures, fleet composition and routes.** This will require agreement from the highway authority. If these traffic figures change, the air quality assessment may be inaccurate and may require to be re-assessed.

The traffic figures must be agreed with the relevant highway authority, in consultation with the LPA prior to submission of an air quality assessment.

Section 5 - Air Quality Assessment

Expectations

8.10 An air quality assessment is a detailed assessment which predicts the potential impact of the proposed development on local air quality. An air quality assessment will;

- follow current air quality / planning guidance;
- utilise current air quality assessment methodologies, which have ideally been agreed with the Local Planning Authority in advance of an application being submitted;
- effectively assess the significance of the potential impact of the proposed development on local air quality;
- use professional judgement; and,
- commit the applicant to implementing proportionate mitigation measures to minimise air quality emissions from the proposed development. The types of mitigation measures will be dependent on the outcome of the agreed air quality assessment.

8.11 An air quality assessment is expected to include:

- **Details of the proposed development.**
- **Policy context for the assessment.** This should include local and national policies
- **Description of relevant air quality standards and objectives.**
- **Details of assessment methodologies** – as advised in Section 4.
- **Identify relevant receptors.** This is dependent on the emissions of concern and relevant air quality objectives.
- **Description of baseline conditions**
- **Use appropriate mathematical verification of the model in accordance with guidance**
- **Provide results of the model outputs for all pollutants of concern at all relevant receptors locations.** All modelled results should be presented as;



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- i. baseline pollutant concentrations (current air quality concentrations)
 - ii. pollutant concentrations without development (at development completion year)
 - iii. pollutant concentrations with development (at development completion year)
- and if appropriate;
- iv. pollutant concentrations with development plus identified cumulative impacts
 - v. appropriate sensitivity test
- **Provide robust determination of the significance of the likely impact of the proposed development at all relevant receptor locations.** This should follow relevant guidance and use professional judgement when required.
 - **Provide details on mitigation measures based on the determination of significance with regards to the impact on local air quality.**
 - **Summary of the Air Quality Assessment.**

8.12 The methodology to be used for the determination of pollution concentration change should meet the requirement of the Department for the Environment, Food and Rural Affairs (DEFRA) Technical Guidance Note LAQM TG (16) or any subsequent relevant guidance.

Appropriate Mitigation

8.13 For proposed developments requiring an **Air Quality Statement** there will be a requirement to include a minimum of 3 mitigation measures. A list of suggested mitigation measures is available in Appendix 1, other appropriate mitigation measures can be proposed by the developer

8.14 For proposed developments requiring an **Air Quality Assessment**, the level of required mitigation is dependent on the outcome of the assessment:

- A. Proposed developments determined to have a significant impact on local air quality – the applicant will be required to put in place mitigation measures which can demonstrate compliance with current air quality objectives. This may include an agreed reduction in emissions from the development site that is retained and maintained, and the installation of real time monitoring of pollutants to assess the impact on local air quality.
- B. Proposed developments determined to not have a significant impact will be required to include as a minimum 3 mitigation measures. A list of suggested mitigation measures is available in Appendix 1, other appropriate mitigation measures can be proposed by the developer.

Section 6 – Dust Impact Assessment

8.15 An air quality statement or assessment must also assess the potential impact from dust from the construction phase of the development on local relevant receptors.

Requirement for a Dust Impact Assessment

8.16 A dust impact assessment **is required** where there is a human receptor within:

- 350m of the site boundary, or
- 50m of the route(s) used by construction vehicles on the public highway, up to 500m from the site entrance(s).

8.17 The assessment of dust from construction sites (dust impact assessment) can be undertaken within the air quality statement or assessment, or as a separate assessment, but in



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either case should follow current relevant guidance (*Guidance on the assessment of dust from demolition and construction*. Institute of Air Quality Management. February 2014).

8.18 The significance of the impact of construction dust is determined as a human health and dust soiling (nuisance) impact, and should be assessed for the following construction phases:

- Demolition
- Earthworks
- Construction
- Track out

8.19 The dust impact assessment will identify the potential impact at each phase of construction work against each type of impact (human health and / or dust soiling). The outcome of which may recommend mitigation measures to reduce the predicted impact to an acceptable level.

8.20 The Council advise that only a dust impact assessment is submitted as part of the application process. A Dust Management Plan (see Section 7), if required, will be agreed as part of a Construction Environmental Management Plan (CEMP) planning condition.

Section 7 - Dust Management Plan

8.21 Should the Dust Impact Assessment identify the likelihood of a dust impact either to human health and/or from dust soiling at relevant receptors the applicant will be required to submit an appropriate Dust Management Plan.

Expectations

8.22 A Dust Management Plan will:

- follow current air quality/planning guidance;
- include the Dust Impact Assessment which identifies the locations of potential impact and specific works requiring mitigation;
- be site specific, taking into account site layout, machinery and equipment to be used on site, vehicle emissions and any occupiers of the site as development continues; and,
- commit the applicant by a planning condition to implement appropriate mitigation measures to minimise dust and particulate emissions from the development site. Appropriate mitigation measures are provided in the guidance and should be adopted where appropriate. This may include the need to monitor the dust from the construction site.

Submission of Dust Management Plan

8.23 You may be required to submit of a Dust Management Plan as part of a CEMP condition should planning permission be granted. If you submit a Dust Management Plan as part of the application the Plan will not be reviewed or commented on.



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9. AIR QUALITY AND THE NATURAL ENVIRONMENT

9.1 Modelling of traffic emissions from cumulative traffic growth over the Local Plan period identified the potential for significant adverse effects on parts of the New Forest SPA and SAC and Ramsar from nitrogen deposition and ammonia, particularly near main road corridors through the New Forest in areas lacking screening woodlands.

9.2 The Habitat Regulations Assessment which accompanied the Local Plan Part 1 concluded that implementation of the Local Plan and New Forest National Park Local Plan alone will not have an adverse effect on the integrity of any European site. While there is no evidence of current negative effects from traffic related air pollution, uncertainty remains about whether in-combination traffic growth and related air pollution could adversely affect the integrity of New Forest SAC, SPA and Ramsar site during the Local Plan period up to 2036.

9.3 With this uncertainty in the data, the precautionary principle applies requiring a modest financial contribution from development for ongoing monitoring of the effects of traffic emissions on sensitive locations, to trigger management or mitigation measures and developer contributions to implement them if harmful effects are confirmed in the future.

9.4 The Council has instigated a monitoring regime to monitor the condition of sensitive vegetation within the New Forest SPA, SAC and RAMSAR sites, to assess whether or not nutrient nitrogen deposition, acid deposition and ammonia levels from traffic emissions are having an adverse effect on these designated European sites.

9.5 If air quality monitoring identifies that significant adverse effects are occurring or likely, legal agreements or other appropriate mechanisms will be put in place to ensure that homes subsequently permitted would be required to make reasonable and proportionate developer contributions for air quality management or mitigation.

9.6 The project is monitoring any adverse impacts on short habitats (wet and dry heaths) and tall habitats (woodland) at selected sites and the air quality levels at those same sites. This establishes a monitoring framework and evidence base for measuring any adverse impacts on the integrity of New Forest designated internationally protected sites.

10. RELEVANT GUIDANCE

10.1 Guidance for general air quality and planning and dust assessments:

<http://iaqm.co.uk/guidance/>

10.2 Technical guidance for air quality monitoring and modelling (LAQM technical guidance):

<https://laqm.defra.gov.uk/supporting-guidance.html>

CONTACT

For further advice on air quality assessments or the planning process please contact:

Environmental and Regulation Team - email: eandr@nfdc.gov.uk / telephone: 023 8028 5411

Policy and Plans Team - email: policyandplans@nfdc.gov.uk



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APPENDIX – SUGGESTED MITIGATION MEASURES

An Air Quality Statement OR an Air Quality Assessment with a determined insignificant impact on local air quality.

- Development designed to reduce site user's exposure to pollutants, such as:
 - No kerbside development
 - No openable windows on domestic properties adjacent to emission release points
 - Internal layout designed to reduce number of windows on elevations facing emission release points
 - No installation of solid fuel (wood or coal) domestic appliances or open fires to be provided at any property
 - Where provided, gas boilers shall meet the minimum standard of <math><40\text{mgNO}_x/\text{kWh}</math>
 - Preference should be given to domestic heating systems that utilise low carbon heating technologies
- Development includes cycling / walking infrastructure
- Modal shift -encourage or require travel by vehicles other than the car including measures to improve public transport and promote use
- Car Clubs
- Cycling Hubs and corridors, including hire of bikes and E Bikes
- Installation of an electric vehicle charge point at each property or implementation of an electric vehicle charging scheme
- Implementation of a travel plan for residential or commercial site users including documentation of public transport options
- Public transport provisions provided / supplemented
- Provision of a delivery strategy (commercial development)
- Directions and signage – advertise and encourage vehicular travel to locations using alternative routes subject to the capacity and convenience of those alternative routes
- Low emission vehicles - use of low emission vehicles
- Green Infrastructure – Green networks and infrastructure, planting trees within or adjacent to development, use of green roofs and walls, biodiversity net gain in developments
- Provide a fleet emission reduction strategy/low emission strategy, including low emission fuels and technologies, including ultra-low emission service vehicles.
- On larger scale development provide a range of facilities including retail and employment uses to reduce the need to travel

