

Barnet Local Plan EIP – Note on Environmental Quality Considerations

Reason for producing this note

On Day 5 (Wednesday 5th October) at the hearing session's, consideration of Matter 5 - Climate Change, Environmental Considerations and Green Belt, Inspector Philpott requested provision of a Note covering the following:

- Consistency with para 185 NPPF (light) and para 186 and London Plan (air quality)
- Signpost the PPG on marginal abatement costs and link to 9.1.21 in London Plan
- Review London Plan requirements for Air Quality Assessments in relation to minor development and explain Council position.
- Proposed changes to air quality neutral, which is currently just for major development.
- Consistency between Table 17 and policy SI 2 London Plan
- Table 17 and overlap with Policy ECC02 and supporting text
- Remove or highlight in a different way construction elements of Table 17
- Interactions of Table 18 with ECC02 and changing name to include vibration
- Clarify approach to construction plans / demolition plans
- Clarify part (e) in terms of environmental quality
- Clarify approach to Notifiable Installations, make clear that the threat to environmental quality element is bespoke
- Clarify approach to wording of ECC02H (MM262) suggested by National Highways in terms of development near to the Strategic Road Network and drainage arrangements.

Background

Policy ECC02 Environmental Considerations seeks to provide policy on the following matters

- Light Pollution
- Marginal Abatement Cost
- Air Quality
- Odour
- Noise and Vibration
- Notifiable Installations

The amendments set out in the Considerations section of this note are recommended to improve consistency of Policy ECC02 and its supporting text and tables with the London Plan, NPPF and British Standards and clarity throughout the supporting text.

Following submission of the Barnet Local Plan in November 2021 the Council in June 2022 produced a table of proposed modifications (EXAM 4). This document was produced after consideration of the Reg 19 soundness representations received, together with subsequent

discussions with parties on the drafting of Statements of Common Ground. EXAM 4 includes proposed modifications to policies and supporting text pertaining to high quality design.

During the examination hearing session where Matter 5 was discussed, proposed modifications were considered, together with aspects of wording of policy and supporting text in the submission Plan. In light of that discussion, the Inspector has requested further clarification, explanation and justification of the matters detailed in this note; the Council now proposes a series of additional further modifications as set out below.

The following format has been used in this Note to denote further proposed modifications to the submission version of plan as revised by the proposed modifications listed in EXAM 4.

~~Strikethrough text~~ to indicate text proposed for removal.

Underlined text to indicate additional text.

Considerations

1. Consistency with para 185 NPPF (light) and para 186 and London Plan (air quality)

Light Pollution

Paragraph 185 (c) of the NPPF relates to the managing impacts of development from light pollution. In particular it requires planning policies to:

limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.

The proposed modification to the Plan, acknowledges the need to address the issue of light pollution from local amenity and nature conservation, however as a London Borough it would be difficult to identify an intrinsically dark landscape. According to the NPPG¹ “intrinsically dark landscapes are those entirely, or largely, uninterrupted by artificial light. National parks and nature reserves can serve as good examples, particularly where they support habitats for native nocturnal animals.” Even the outer areas of the Borough would struggle to meet this requirement due to the street lighting and the scattered dwellings.

The drafted modification MM261 currently reads:

To avoid adverse impacts from artificial light:

- i. Proposals that include flood lighting or external lighting must mitigate the potential impacts from such lighting, and will need to submit details demonstrating external lighting is appropriate for its purpose; and
- ii. Proposals must be designed to minimise the impact of light pollution on adjacent occupiers (including light spill from inside tall buildings) and natural habitats and biodiversity; including watercourses. Details of management of light spill from internal sources should be submitted with the application.

The proposed wording conforms with the main intent of the NPPF but currently requires avoidance of adverse impacts where the NPPF requires that light pollution be limited.

In order to ensure the policy is consistent with the wording in NPPF paragraph 185 (c).

¹ NPPG Paragraph: 001 Reference ID: 31-001-20191101

The Council proposes a further modification to MM261 and ECC02G :

To ~~avoid~~ limit adverse impacts from artificial light:

- i. Proposals that include flood lighting or external lighting must mitigate the potential impacts from such lighting, and will need to submit details demonstrating external lighting is appropriate for its purpose; and
- ii. Proposals must be designed to minimise the impact of light pollution on adjacent occupiers (including light spill from inside tall buildings) and natural habitats and biodiversity; including watercourses. Details of management of light spill from internal sources should be submitted with the application.

2. Signpost the PPG on marginal abatement costs and link to 9.1.21 in London Plan

London Plan paragraph 9.1.21 states that 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 onsite measures it may be possible to make the development acceptable through additional mitigation or offsetting payments.

While Local Plan recognises the ability for proposals to make offset payments (using Government Guidance [EB_GI_45] to calculate) it does not stipulate that applicants should demonstrate that they have considered all relevant on site measures and the use of offsite payments through marginal abatement costs are a last resort. The Council acknowledges the merits of the following proposed modification to para 10.9.3 to clarify this:

Applications for major developments will need to include an air quality neutral assessment in accordance with the latest GLA air quality neutral guidance. This shall assess the emissions of the proposed development (buildings and transport) and either compare them to benchmarks or, in the absence of a suitable benchmark, against the previous use. If the benchmark is exceeded or there is an increase in emissions from the previous use then further onsite mitigation measures should be explored.~~or~~

Any abatement measures should be effective for the pollutant and the cost proportional to the size of the exceedance.

Where a development has explored all relevant onsite measures and it has proven it cannot achieve Air Quality Neutral standards onsite then a proportional Marginal Abatement Cost (MAC) will be necessary. The abatement measures may be on or off site. If offsite, a payment for the measures could be secured using a Section 106 agreement if the developer is not going to deliver them. The abatement measures should be effective for the pollutant and the cost be proportional to the size of the exceedance. If the abatement measures are insufficient or not possible then a MAC payment will be sought, this A MAC payment will be calculated using the current value or cost for each tonne of the pollutant above the benchmark using the GLA guidance and the DEFRA Air quality appraisal: damage cost guidance¹. This will be secured through a s106 obligation.

3. Review London Plan requirements for Air Quality Assessments in relation to minor development and explain Council position.

London Plan Policy S11 Improving Air Quality requires that “*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*”.

Barnet’s Local Plan Policy ECC02 Environmental Considerations requires minor developments to provide an Air Quality Assessment where the development is being proposed within areas of poor air quality or where development could potentially cause significant harm to air quality.

The requirement is therefore consistent with NPPF Paragraph 186 and Part A of Policy S11 of the London Plan as the proposed policy ECC02 supporting text clearly states that minor development only needs to provide Air Quality Assessments where the development is proposed in areas of poor air quality, information that can be gained from Barnet’s Annual Air Quality Status Report²; the London Area Emissions Inventory³ or the UK Emissions Interactive Map⁴. However the second criteria of “where the proposal could cause harm to the air quality” needs clarification. While a small/minor development would not necessarily have an impact on local air quality, there is still a need an assessment for an indication of exposure where air pollution is known to be a problem (satisfying London Plan Policy B1 (c)). Barnet still has the most Air Quality Focus Areas in London, and developments within these locations, near busy junctions, known traffic hotspots and busy high roads should be assessed for exposure, rather than just their impacts on local air quality.

Further to this in order to demonstrate that proposals meet the requirements listed in Part B of the London Plan Policy and the intent of NPPF para 186 a level of assessment and analysis would be needed.

The reason for requiring minor developments to submit an Air Quality Assessment is related to current practice, the number of Air Quality Focus Areas in Barnet and the need to ensure the future health of residents. Barnet already requires smaller developments on main roads such as A5 and A1000 to provide air mitigation details and as Policy GSS11 proposes further development on Major Thoroughfares it is recognised that the Council needs to continue to limit exposure of residents to air pollution regardless of the size of the development.

4. Proposed changes to air quality neutral, which is currently just for major development.

5. Consistency between Table 17 and policy SI 2 London Plan

In terms of air quality neutrality, the Council agrees that in light of London Plan Policy SI 1(B2)(a), Table 17 should be modified to require air quality neutrality for all development, rather than major development only.

Clarification on the scale of development is required to comply with London Plan Policy SI1 - Air Quality, therefore needs to be added to Table 17.

In relation to the connection between Table 17 and London Plan Policy SI 2 Minimising Greenhouse Gas Emissions the table should be updated to reflect the latest Mayoral guidance. In Energy Assessment Guidance 2020 (page 31) the Mayor acknowledges the link

² [Air quality monitoring | Barnet Council](#)

³ [Air Quality Data – London Datastore](#)

⁴ [UK Emissions Interactive Map \(beis.gov.uk\)](#)

between air quality and energy generation and expands on the 'Be Clean' requirement of the Energy Hierarchy as set out in London Plan Policy SI 2 and the Plan's supporting text.

6. Table 17 and overlap with Policy ECC02 and supporting text

Odour

The matter of odour is mentioned in Table 17 but not in the supporting text of the chapter or the policy it is suggested that the suggested amendments are made to the text and policy to address this as odour is classed as a statutory nuisance by the Environment Protection Act 1990 and guidance issued by DEFRA.

[Nuisance smells: how councils deal with complaints - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

Additional paragraph in Section 10.9

Odour can also form a type of air pollution and could be considered to be a statutory nuisance where the odour is emanating from a business e.g. restaurant, or agricultural use. The Environment Health section of the Council seeks to manage odours across the Borough and businesses that emit odours such as restaurants will be required to install a flue, or other extraction systems, to direct smells away from local residents and other neighbouring occupiers, as far as reasonably as possible. Such flues should be located appropriately on the building and designed sensitively, especially if the premises are located in a listed building or in a Conservation Area.

Additional policy point to be added to ECC02 Environmental Considerations.

Odour emitting businesses, such as restaurants, should install flues or other extraction systems; these should be located and designed appropriately to take account of the local situation.

7. Remove or highlight in a different way construction elements of Table 17

8. Clarify approach to construction plans / demolition plans

Construction

In Barnet approximately 20 % of particulate emissions are from construction according to the London Atmospheric Emissions Inventory (LAEI 2019), so it is considered a significant contributor to air quality conditions within the Borough. Table 17 does not include information on Demolition and Construction Management Plans, while containing details on how nuisance from construction should be managed with no explanation provided in the supporting text, to rectify this Table 17 and paragraph 10.12.1 should be modified to ensure consistency.

Proposed Modifications - Table 17 Air quality requirements

	Development scale
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<p>Where development could potentially contribute to a worsening of local air quality an air quality assessment is required.</p>	<p>- Minor - <u>where the development is proposed in either areas of poor air quality or where there is a risk that development will fail to satisfy the requirements of London Plan Policy SI 1(B1).</u> - Major, Large scale with the potential to increase and/or change road traffic - Commercial or industrial use requiring environmental permittingⁱⁱ - Development proposing a Combined Heat and Power plant or biomass boiler</p>
<p>All development proposals must be at least air quality neutral. Developers are to design their schemes so that they meet the Air Quality Neutral emission benchmarks for Buildings and Transport as set out in Mayor of London Guidance. Large scale developments will need to adopt an air quality positive approach.</p>	<p>All development proposals major and large scale developments</p>
<p>Developers shall select plant that meets the standards for emissions from combined heat and power and biomass plants set out in <u>Mayor of London Energy Assessment Guidance, Appendix 7 of the Mayor of London's Sustainable Design and Construction SPG</u></p>	<p>Mixed user major and large scale development proposing a Combined Heat and Power Plant or biomass boiler</p>
<p>Proposals may be required to demonstrate how the development is designed to reduce people's exposure to air pollutants to acceptable levels through an air quality assessment.</p>	<p>Minor, Major, Large scale</p>
<p>Restaurants or other odour emitting premises will be required to locate flues appropriately to avoid nuisance to neighbouring occupiers.</p>	<p>All Class E(b), restaurants, takeaways and other odour emitting businesses and services.</p>
<p><u>Provide a Demolition and Construction Management Plan to include details on impacts of development and nuisance and how this will be mitigated.</u></p>	<p><u>Minor, Major, Large scale</u> <u>Some Householder applications may also need to provide a Plan dependent on the scale of works proposed and location of the property. -Please email Planning Enquires</u></p>
<p>Developers should comply with the minimum standards on construction dust management that are detailed in the Mayor of London's Control of Dust and Emissions During Construction and Demolition SPG providing <u>where necessary an Air Quality and (Dust) Risk Assessment and where necessary an Air Quality and Dust Management Plan</u></p>	<p>Minor, Major, Large scale</p>
<p>Non Road Mobile Machinery used on construction sites should meet Stage IIIA of EU Directive 97/68/EC and its subsequent amendments as a minimum. Details should be registered at www.nrmm.london/register</p>	<p>Minor, Major, Large scale</p>

9. Interactions of Table 18 with ECC02 and changing name to include vibration

Noise and Vibration

The NPPG (Paragraph: 005 Reference ID: 30-005-20190722) requires a development to determine whether noise will be a concern with the Noise Exposure Hierarchy table providing the Noise Risk Categories, however the Environmental Health Team utilise the British Standards when assessing Noise Assessment. The supporting text and Table 18 should be amended to clarify this. Amendments to the supporting should also be made to clarify the expectations of the Council in relation to Noise Assessments.

Noise and Vibration Paragraph 10.12.1 proposed modifications

Building works can be hugely disruptive and cause nuisance in terms of, air quality noise and vibration. They also make a significant contribution to air pollution raising levels of fine particulate matter (PM10 and 2.5). Developers should therefore comply with the minimum standards on construction dust management that are detailed in the Mayor of London's Control of Dust and Emissions During Construction and Demolition SPG and Non Road Mobile Machinery (NRMM) used on construction sites should meet Stage IIIA of EU Directive 97/68/EC and its subsequent amendments as a minimum. Details should be registered on the NRMM Register at www.nrmm.london/register.

In addition, traffic management, storage and waste can also be problematic. Therefore, all developments should demonstrate compliance with the Considerate Constructors Scheme and Control of Asbestos Regulations.

Therefore, all sites with potential for any of these impacts are conditioned through a Demolition and Construction Management Plan to demonstrate compliance with current best practice guidance including, where necessary, an Air Quality (Dust) risk assessment and a resultant Air Quality and Dust Management Plan. These are referred to in the Mayor's Control of Dust and Emissions During Construction and Demolition SPG (July 2014).

Paragraph 10.9.8 Proposed Modifications

Persistent and intermittent noise and vibration from sources such as transport, ~~movements~~ commercial usage, mechanical plant and construction as well as people can undermine quality of life. The Council will take into account noise and vibration considerations when assessing development proposals. In accordance with the Agent of Change principle as set out in London Plan Policy D13, the Council will also take account of existing noise-generating use in a sensitive manner when new development, particularly residential, is proposed nearby. Agent of Change places responsibility for mitigating the impact of noise firmly on the design of the new development. This also applies to new noise generating development. Consistency with the Mayor's Ambient Noise Strategy as a reference source for understanding noise and identifying best practice will be an important material consideration.

The Council ~~will require Noise Impact Assessments for developments likely to generate or be exposed to significant noise.~~ complies with the National Planning Policy Framework, the Noise Policy Statement England and all the accompanying best practice guidance from government, industry and professional institutions for example, the Professional Planning Guidance on Planning and Noise (2017) and

British Standards such as BS: 8233 Guidance on sound insulation and noise reduction for buildings (2014). Noise assessments (for developments likely to generate or be exposed to significant noise and /or vibration) may be required before application, so all impacts are assessed in order to ensure that appropriate mitigation is designed in at an early stage, otherwise noise impact assessments can be conditioned. Such assessments should include how any identified risks and impacts will be minimised including specific details on how the intended measures will mitigate issues between source and receptor as described in Table 18.

A complete Noise Impact Assessment will be required for sensitive development that is likely to be exposed to significant noise and/or vibration, or a development that causes noise and/or vibration impacts. With regards to noise, a sensitive development would include all residential uses, including care homes and residential schools and certain non-residential uses where future occupants could be sensitive to noise and vibration such as schools and hospitals. In the latter case, the reports are not assessed by the Council.

Overheating and air quality requirements will be taken into account when determining internal noise levels where appropriate. Reference will be made to all professional and government guidance including the report: "Acoustics Ventilation and Overheating Residential Design Guide (2020). All reports are ~~advisable~~ preferable at application stage but can otherwise be conditioned. Table 18 below provides information on when noise assessments are required, further guidance on noise quality is provided in the Sustainable Design and Development Guidance SPD Council's suite of design guidance SPDs.

Table 18

Includes information relating to vibration which is not indicated by the title of the table
Recommend amending table title to include vibration. .

**Proposed Modifications to Table 18 Noise and Vibration Standards
quality requirements**

	Development Scale
To help consider noise at a site at an early stage an initial noise risk assessment should assess the Noise Risk Category of the site to help provide an indication of the likely suitability of the site for new residential, development from a noise perspective.	Minor, Major, or Large scale developments
A Noise Impact Assessment is required for proposed residential development which is likely to be exposed to significant noise and/or vibration or cause a noise and/or vibration impact. For all noise-sensitive and noise creating developments the council will refer to the standards set out for internal and external noise levels in BS8233 (2014) and to the approach of BS4142:2014 (2019). <u>Such assessments should be provided at application stage for sites where the noise impact is high.</u>	Minor, Major, or Large scale developments
The adverse <u>risks and</u> impacts of noise should be minimised, using measures at source or between source and receptor (including choice and location of plant or method, layout, screening and sound absorption) in preference to sound insulation at the receptor, wherever possible.	All development
Any proposed <u>external</u> plant and machinery shall be operated so as to ensure that any noise generated is at least 5dB(A) below the background level, as measured from any point 1 m outside the window of any room of a neighbouring residential property. An extra 5dBA penalty is added if the noise has any characteristic features. Plant should also be installed to ensure that no perceptible noise or vibration is transmitted through the structure to adjoining premises.	All development with <u>external</u> plant and machinery or <u>activity</u> plant which potentially has an <u>external</u> noise impact

10. Clarify part (e) in terms of environmental quality

11. Clarify approach to Notifiable Installations, make clear that the threat to environmental quality element is bespoke

Paragraph 10.11.1 and Policy ECC02 (e) Notifiable Installations

Notifiable installations require specific mention due to their hazardous nature and threat to human and environmental health if they are not managed correctly. Policy ECC02 (e) specifically mentions the need to manage threats to environmental quality due to the levels of contamination gas holders not only contain within their structures, but also in the soil surrounding the structures. Ground contamination if not correctly remediated can cause issues for human health and impede the successful establishment of vegetation and biodiversity, leachates can also contaminate the water table and/ or nearby watercourses.

Recommendation paragraph 10.11.1 is amended to clarify this matter.

Notifiable Installations Proposed Amendments Paragraph 10.11.1

There is one Notifiable Installation within Barnet, the New Barnet (Gas) Holder Station. This facility is identified because of the large quantities of hazardous substances historically stored, used or transported onsite.

When decommissioning Gas Holders they have both above and below ground structures that need to be demolished and removed from site with care. Gas holders even when no longer in use can contain contaminated water; oil; organic material; and other hazardous waste all of which must be disposed of in accordance with Health and Safety Executive (HSE) and Environment Agency requirements. Even once demolished the soil can contain high levels of contaminants that can impact negatively on human health and environmental quality, such as leachates entering the water table and/or water courses and/or impacting on the ability of vegetation to successfully establish and biodiversity to flourish.

Due to the level of ground contamination that occurs on Gas Holder sites, any application should demonstrate that the soil has been remediated to a high standard and that it is now fit for human occupation and that it does not pose a significant threat to environmental quality. "Environmental quality" in this context means water quality and/ or the quality of vegetation and biodiversity.

A proposal for redevelopment of the New Barnet Holder Station (Site 21) is in the Schedule of Proposals (Annex 1). Where development is proposed near this installation, the Council will seek the advice of the ~~Health and Safety Executive~~ (HSE) on the potential risk to health and safety of people occupying the proposed development. Until safely remediated it ~~it~~ will be necessary to keep sensitive development, such as housing, schools or hospitals, at a safe distance from this Notifiable Installation.

12. Clarify approach to wording of ECC02H (MM262) suggested by National Highways in terms of development near to the Strategic Road Network and drainage arrangements.

National Highways made a number of requests for specific wording in relation to the Regulation 19 Draft Barnet Local Plan consultation National Highways. This included additional text to manage environmental impacts arising from development occurring on or near the Strategic Road Network. Modifications [EXAM4] MM260 and MM262 were proposed as a result of this response. After further reflection during the EIP the Council is of the view that these modifications should be withdrawn in the absence of further clarification and justification from National Highways. The Council has sought the views of National Highways on these matters with clarification provided through a revised Statement of Common Ground.

Conclusion

The amendments set out in the Considerations section of this note are recommended to improve consistency with the London Plan and NPPF and clarity throughout the supporting text and links to tables and Policies in respect of the:

- Light Pollution
- Marginal Abatement Cost
- Air Quality

- Odour
- Noise and Vibration
- Notifiable Installations

ⁱ [Air quality appraisal: damage cost guidance - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

ⁱⁱ Environmental Permitting is required for uses which could have an impact on the environment and human health. For example certain manufacturing or waste activities or uses which discharge into a river or underground water supply. Depending on the operation either the Environment Agency or Local authority provide the regulation. More guidance is available here:

<https://www.gov.uk/topic/environmental-management/environmental-permits> and the legislation is available here: <http://www.legislation.gov.uk/uksi/2010/675/contents/made>