

Appendix 7.2 Noise & Vibration Relevant Legislation, Policy, and Guidance

1. National Policy

1.1. National Planning Policy Framework

The National Planning Policy Framework (NPPF) sets out the Government's Planning Policy for England. The potential impacts of noise are addressed in the following paragraphs of the document:

Paragraph 187: "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 plan"

Paragraph 198: "Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:

a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life;

b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason"

Paragraph 198a includes a direct reference to the Noise Policy Statement for England (discussed below) for further information regarding the potentially adverse and significant adverse effects of noise.

1.2. Noise Policy Statement for England (2019)

The overarching Government policy on noise is set out in the Noise Policy Statement for England ('NPSE'). It seeks to clarify the underlying principles and aims in past and existing policy documents, legislation and guidance in relation to all forms of noise, except noise in the workplace.

It uses the established concepts of No Observed Effect Level ('NOEL') and Lowest Observed Adverse Effect Level ('LOAEL'). The NPSE extends these concepts by introducing Significant Observed Adverse Effect Level ('SOAEL'). This is the level above which significant adverse effects on health and quality of life occur.

The explanatory note to the NPSE states that it is not possible to identify a single objective value to define SOAEL for noise that is applicable to all sources of noise in all situations. It is likely to be different for different noise sources, for different receptors and at different times. The NPSE recognises that 'further research is required to increase understanding of what may constitute a significant adverse impact on health and quality of life from noise. However not having specific SOAEL values in the NPSE provides the necessary policy flexibility until further evidence and suitable guidance is available'. Consequently, the practitioner must determine the appropriate threshold values to be adopted for the sources and situations being assessed, based on the available evidence.

The NPSE's vision is to:

'Promote good health and a good quality of life through the effective management of noise within the context of Government policy on sustainable development.

This long-term vision is supported by the following aims:

Through the effective management and control of environmental, neighbour and neighbourhood noise within the context of Government policy on sustainable development:

Avoid significant adverse impacts on health and quality of life;

Mitigate and minimise adverse impacts on health and quality of life; and

Where possible, contribute to the improvement of health and quality of life."

Within the NPSE, the phrase '*within the context of Government policy on sustainable development*' is used. This means that noise must not be treated in isolation. Instead, when implementing the aims of the policy, consideration should be given to the economic and social benefit of the activity causing the noise as well as the other environmental effects of the development.

The second aim of the NPSE refers to noise impacts that lie somewhere between LOAEL and SOAEL. The NPSE asserts that, while this means that all reasonable steps should be taken to mitigate and minimise adverse effects, this does not mean that such adverse effects cannot occur.

1.3. Planning Practice Guidance for Noise (2019)

Further government guidance on the consideration of noise for planning has been published as the Planning Practice Guidance for Noise (PPG:N), last revised in July 2019. The PPG:N supports the NPPF by providing a range of advice and includes a noise exposure hierarchy table, and again makes reference to the NPSE.

The hierarchy table (reproduced in Appendix 5-B), provides descriptive (i.e., non-numerical) guidance on the potential effects of various degrees of noise exposure with reference to the effect levels referred to in the NPSE, i.e., where noise is above or below the NOEL, LOAEL and SOAEL, as well as featuring the additional effect level of No Observed Adverse Effect Level (NOAEL) and a description of unacceptable adverse effects that should be prevented. The table confirms that adverse effects (between LOAEL and SOAEL, where noise starts to cause small changes in behaviour or attitude) should be mitigated and reduced to a minimum. Increasing noise exposure will cause the SOAEL boundary to be crossed, with there being two levels of adverse effect above it:

- A significant observed adverse effect – noise causes a material change in behaviour, e.g., keeping windows closed or avoiding certain activities at certain times. The planning process should be used to avoid this effect occurring, for example through choice of sites and use of appropriate mitigation. It is undesirable for such exposure to be caused, but as mentioned in the footnote above, there are circumstances when such effects can occur. Decisions must take account of the economic and social benefit of the activity causing or affected by the noise caused; and
- An unacceptable adverse effect – noise exposure would cause extensive and sustained adverse changes in behaviour and / or health without the ability to mitigate the effects of the noise. Under these circumstances, the impacts on health and quality of life are such that regardless of the benefits of the activity causing the noise this situation must be prevented from occurring.

2. Local & Regional Policy

2.1. Manchester Core Strategy (2012)

"The Core Strategy Development Plan Document 2012 -2027 (the Core Strategy) was adopted by the City Council in July 2012. It is the key document in Manchester's Local Development Framework. The Core Strategy replaces significant elements of the Unitary Development Plan (UDP) as the document that sets out the long-term strategic planning policies for Manchester's future development."

There are no specific elements within the Core Strategy that relate specifically to demolition noise and vibration.

Manchester City Council document entitled "*Planning and Noise - Technical Guidance*" dated October 2022 references the following best-practice documents:

British Standard BS 5228: 2009 +A1 2014 Code of practice for noise and vibration control on Demolition and open sites

This British Standard is divided into two parts:

Part 1 provides basic information on the prediction and measurement of noise from Demolition sites and operations. Methods of assessment are included as well as review of relevant legislation. A database of noise levels for a wide range of equipment is also provided.

Annex E provides example guidance on the assessment of Demolition noise, which includes a method of assessment of noise during daytime, evening and night-time periods.

Part 2 deals with vibration from Demolition and open sites. The legislative background is provided, together with information on vibration control. A review of relevant vibration criteria is provided together with guidance on measuring vibration.

Annex B provides guidance on the effects of vibration levels on human receptors, as well as guide values for cosmetic damage to building structures. Vibration values have been presented as Peak Particle Velocity (PPV) parameters, measured in millimetres per second (mm/s).

BS 5228-2:2009:+A1:2014 indicates that Construction and Demolition activities (particularly piling which is excluded from this chapter which is limited to demolition related activities) generally only generate vibration impacts when they are located less than 20 metres from sensitive locations. The effect depends on the type of piling, ground conditions and receptor distance.

'Best Practicable Means' (BPM) should be adopted as a minimum in order to mitigate against Demolition phase noise effects.

3. Guidance

- BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on Demolition and open sites - Noise
- BS 5228-2:2009+A1:2014 Code of practice for noise and vibration control on Demolition and open sites – Vibration
- BS 7385-2:1993 Evaluation and measurement for vibration in buildings. Guide to damage levels from ground-borne vibration; and
- CALTRANS – Transportation and Demolition Induced Vibration Guidance Manual.