What is a Noise Management Plan?

A Noise Management Plan (NMP) is a document that demonstrates how environmental noise pollution will be managed for a particular site and any developments on the site. A NMP details how a proposal will comply with the Environment Protection Act 1997 (the Act), Environment Protection Regulation 2005 (the Regulation) and other applicable standards and outlines measures to prevent, minimise or control noise impacts. The Act and Regulations are administered by the Environment Protection Authority (EPA).

If a NMP is required, it will need to be submitted as part of the development application for the site.

**Note:** The Environment Protection Act 1997 does not apply to noise made by a train, aircraft, a person’s body, an animal or a motor vehicle being driven on the roads. Therefore the EPA does not consider the impact of these noise sources when determining the compliance of a proposal.

Who should prepare a NMP?

NMPs must be prepared by a person suitably qualified in the assessment of environmental noise. The EPA considers full members of the Australian Acoustical Society, listed in the directory of Members Areas of Professional Practice under Environmental Noise, to be suitably qualified.

What should a NMP consider?

The EPA expects developers to introduce measures to attenuate (reduce) the noisiest use permitted by the lease, regardless of whether or not the proponent intends to use it.

Many factors need to be considered when preparing a NMP, with these factors differing with each proposal. It is necessary to consider the following when preparing a NMP:

- The permitted noise standard under the Regulation for the site – all noise emitted from the site must comply with the noise standard at any point within the vertical plane of the site boundary. Where a residential development is proposed in an area with a noise standard higher than zone G, the development must meet the ‘satisfactory’ recommended design sound levels for residential buildings of AS/NZS 2107. Commercial accommodation developments should meet AS/NZS 2107 for sleeping areas.
- The activities currently carried out within the area – this is particularly relevant when considering a residential development in an area other than zone G (as defined in the Regulation).
- The permitted uses under the lease for the site – the NMP must address noise from all permitted uses identified as being noisy, regardless of whether the noisy permitted use is utilised. If a noisy use is permitted the noise must be attenuated.
Noise sources – the NMP must include all sources of noise which may have an impact on the development and/or adjoining sites. The EPA has found noise from the following sources to be the subject of complaints: exhaust fans including both kitchen and underground car parks; garage roller doors; mechanical plant; and garbage collection among others. There are also noise sources associated with many proposals which, due to their occasional nature, are not normally included in acoustic modelling, such as public address systems, emergency warning systems, reversing beepers. These noise sources should be identified in the NMP, their likely impacts discussed and comment provided on the potential use of alternative systems that can minimise their impact. The NMP should also identify and discuss low frequency (particularly where amplified music is identified as a noise source), tonal, impulsive and intermittent noise sources and their associated mitigation measures.

The NMP should discuss both the protection of noise receivers from noise sources and the minimisation of noise generated at the noise source, and outline appropriate noise reduction measures. Where the proposal includes a mixed use site (i.e. residential and commercial), the NMP must address the impact of noise sources on other leaseholders within the same lease boundary, particularly residential dwellings.

Note: The ACT is divided into noise zones. Noise standards for these zones are set in the Environment Protection Regulation 2005. All noise emissions from a parcel of land must comply with the noise standards at any point within the vertical plane of the boundary. It can therefore be assumed that noise sources external to the parcel of land should not exceed the noise standards that apply to that land. The noise standards for the purposes of this document are taken to be expressed as $L_{A,10}$, where $T$ is 10 minutes (i.e. for a multi-unit dwelling located within the city centre, the maximum noise source external to the dwelling should be 60dBA).

What should a NMP contain?

At a minimum a NMP should contain:

- the name, qualification/experience of the person who prepared the report
- an adequate description of the project, including background history or relevant previous studies, scope of work, noise/vibration issues addressed, hours of operation
- a detailed site map that identified location of the noise sources, noise receiver locations (including existing and proposed residential areas), topographical data which may affect noise propagation, measurement or prediction locations and north point and scale
- relevant noise guidelines, policies or standards that have been applied, for example:
  - Environment Protection Regulation 2005
  - Noise Environment Protection Policy, Environment Protection Authority
  - Noise Measurement Manual, Environment Protection Authority
  - AS 2436 Guide to noise control on construction, demolition and maintenance sites
  - AS/NZS 2107:2000 Acoustics - Recommended design sound levels and reverberation times for building interiors
  - AS 2670.2 Evaluation of human exposure to while-body vibration - Continuous and shock induced vibration in buildings (1 - 80Hz).
- details of any noise monitoring undertaken
- noise predictions for the proposed activity including:
  - how noise levels for each activity or permitted use were determined
  - type of computer noise modelling software used
  - noise source locations and source heights
  - topography settings
  - meteorological conditions used
  - receiver locations
  - operating conditions of the building when predicting internal noise levels including a justification for those conditions (i.e. windows and doors open or closed).
- a comparison of noise predictions against noise criteria
- a discussion of proposed mitigation measures, the noise reduction likely and the feasibility and reasonableness of these measures
- how compliance can be determined practically.

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For more information

Contact the Environment Protection Authority by calling Canberra Connect on 13 22 81

Go to www.environment.act.gov.au for more information relating to noise

- Schedule 2 of the Environment Protection Regulation 2005
- Noise Environment Protection Policy