



# Noise Policy for Industry

## Frequently asked questions and answers

### What is the Noise Policy for Industry?

The *Noise Policy for Industry* ('the policy') updates the *NSW Industrial Noise Policy* published in 2000. It provides a framework and noise levels for the assessment and management of noise impacts from industrial developments such as mines, quarries and large industrial sites that are scheduled under the *Protection of the Environment Operations Act 1997* (POEO Act). Councils may also use the policy to assess and control noise from non-scheduled industrial sources that come under council control, and to assist in their land-use planning functions. The policy aims to ensure that the potential noise impacts from industrial developments are assessed in a consistent and transparent manner and minimised where reasonable and feasible.

### When should the policy be used and by whom?

The policy is to be used by proponents of industrial developments, acoustic practitioners and consent/approval authorities involved with planning, design, approval, construction, development and management of industrial premises. It must be used when required by the Department of Planning and Environment for an environmental assessment under the *Environmental Planning and Assessment Act 1979* (EP&A Act).

The NSW Environment Protection Authority (EPA) will use the policy to inform decision-making on premises that it regulates, such as mines, quarries and large industries listed in Schedule 1 of the POEO Act. The policy can be used as a guide in strategic planning processes (for example, development of local environmental plans or state environment planning policies) to reduce the potential for land-use conflicts between industrial and sensitive land uses, for example, homes.

### How does the policy work?

The policy drives a proponent towards meeting noise trigger levels by requiring them to consider all feasible and reasonable mitigation measures to reduce the predicted noise impacts. This process will identify the best noise level that can be achieved by the proponent and, where deemed acceptable, this level will be used by authorities to set appropriate statutory limits on consents and licences.

Noise criteria are set to avoid the noise being unacceptably annoying for most people most of the time, however, noise that meets the industrial noise requirements will be able to be heard when not masked by other noise such as wind or traffic.

### Is this a new policy?

No, the *Noise Policy for Industry* updates the *NSW Industrial Noise Policy* which has applied in NSW since 2000. After 16 years of operation, a review of the *NSW Industrial Noise Policy* against contemporary approaches, new scientific research, and lessons learnt during its implementation was needed.

### How will the policy be implemented?

The policy applies from the date of its release on the EPA website. The detailed implementation arrangements are available on the EPA's website.

## How does the policy affect existing licence holders?

The policy does not affect current environment protection licence limits. The policy will apply where modifications to existing licensed premises are proposed or when licences are being reviewed and noise is an issue. Further information on implementation can be found in the [Implementation and transitional arrangements for the Noise Policy for Industry \(2017\)](#).

## How does the policy relate to the *Protection of the Environment Operations Act 1997*?

The policy facilitates the assessment and management of industrial noise sources that are scheduled under the POEO Act.

## How can I access the policy?

The policy is available to download from the EPA website.

## What other documents are available on the website?

The policy is accompanied by:

- frequently asked questions and answers (this document)
- a simple guide to noise assessment, to help the community understand how noise assessment is carried out: *A guide to the Noise Policy for Industry*
- a response to submissions report which outlines the outcome of consultation: *Draft Industrial Noise Guideline: Response to submissions*.

## How was the policy developed?

The policy was developed taking into account:

- issues identified by the EPA and external users of the *NSW Industrial Noise Policy* since it was published in 2000
- a review of new research on the impact of industrial noise and practices elsewhere in Australia and overseas
- input provided by an interagency steering group comprising the EPA, NSW Health and the Department of Planning and Environment
- over 100 submissions received during consultation on the *Draft Industrial Noise Guideline*; a response to submissions is available on the EPA website.

## What changes were made as a result of the public consultation?

The differences between the *Draft Industrial Noise Guideline* and the *Noise Policy for Industry* are outlined in the *Draft Industrial Noise Guideline: Response to submissions* document. The major changes include retaining the document as a policy; a clearer outline of what activities the policy applies to; minor changes to how assessment and maximum noise levels are determined, and minor changes to how weather conditions are considered.

## What are the key differences between the updated *Noise Policy for Industry (2017)* and the *NSW Industrial Noise Policy (2000)*?

The key differences are:

- Changing the name of the document to *Noise Policy for Industry* to avoid confusion between versions.

- The terms 'criterion' and 'project-specific noise level' are now referred to as 'project amenity/intrusiveness noise level' and 'project noise trigger level', respectively.
- The meaning of noise 'trigger levels' has been clarified. These are noise levels that, if exceeded, indicate the need to consider noise mitigation measures to reduce the predicted noise impacts to the extent that is practical. They are not mandatory criteria, nor do they mark the point at which noise levels become unacceptable.
- Improved clarity and better linkages with the planning system for development assessment, planning approval processes, and local and regional land-use planning.
- Introduction of the 'noise management precinct' concept, to promote approaches to manage impacts from multiple sources within one area.
- The minimum background noise level for the daytime period has been raised from 30 to 35 decibels (A-weighted; dB[A]), resulting in an increase in the minimum daytime intrusiveness noise level from 35 to 40 dB(A) to better reflect the science when assessing industrial noise impacts during this less sensitive time.
- A simpler way to determine the amenity noise level that applies to a project. This new approach does not depend on the measurement of existing industrial noise.
- Improved guidance on how to determine which residential receiver category applies for the assessment of amenity.
- Maximum noise level event assessment for sleep disturbance is now incorporated into the policy. This largely reflects current practice and has two screening trigger levels to better identify when a detailed assessment is needed.
- Temperature inversion conditions are described using stability category instead of temperature lapse rate.
- A method for setting an upper noise limit for statutory instruments such as environment protection licences and/or development consents is included for weather conditions that are more extreme than the weather conditions used in the noise assessment. This will ensure that noise limits do not only apply under a narrow range of weather conditions, thereby giving stakeholders a better understanding of expectations and obligations under all weather conditions.
- The methods for determining annoying characteristics of the noise source have been updated to reflect current science and standards. In particular, an additional assessment step has been added to the low-frequency noise assessment to more accurately identify if impacts are likely to occur.
- Updated and clearer guidance on feasible and reasonable mitigation and the acceptability of residual noise above the project noise trigger level is provided.

## **What are the main changes relating to industrial noise requirements?**

The policy introduces an important change that means that noise requirements will now apply under all weather conditions, rather than the limited conditions that applied under the *NSW Industrial Noise Policy* (2000).

In areas of very low background noise, the lowest level that a licence limit will be set at for daytime noise will be raised by 5 dB. This represents a 'just noticeable' change from the existing level of protection; however, it is well below the level at which more than 10% of an exposed community are likely to be highly annoyed. The level also remains below the World Health Organization recommended levels.

## How does the policy assess the potential for sleep disturbance?

The policy includes two screening trigger levels (a night-time level,  $L_{Aeq,15min}$ ; and a maximum level,  $L_{AFmax}$ ) that identify whether a detailed sleep-disturbance assessment is required. If either of these levels are exceeded, a detailed assessment of maximum noise level events will be required to determine the potential for sleep disturbance to occur. The screening levels are based on the latest research on sleep disturbance. The screening levels do not mark the point at which impacts are unacceptable.

## Are the noise trigger levels in the policy mandatory?

The noise trigger levels in the policy are not mandatory.

## Will I be able to hear the noise?

The noise trigger levels and licence requirements are not designed to ensure that noise is inaudible.

Noise is a part of all environments, and humans are particularly good at being able to hear noise from a particular source that is sometimes well below other noises in an area.

Defining noise criteria on the basis of inaudibility would not be practical or even possible in many cases, as noise can be heard over large distances and under different weather conditions. Noise criteria that were aimed at ensuring that noise was inaudible would be so restrictive that many industries, transport and everyday activities that we rely on would not be able to operate.

## What strategies can be used to reduce industrial noise?

Section 3.4 of the policy provides a comprehensive list of the types of strategies that can be used to reduce industrial noise.

There are three main mitigation strategies that can be used.

1. **Controlling noise at the noise source:** This includes measures that reduce noise from the industrial noise source through the use of better technology or better management practice; for example, the use of quieter equipment, source enclosures, or scheduling the use of noisy equipment to least-sensitive times.
2. **Controlling the transmission of noise:** This includes measures that reduce the noise transmitted from the source to the receiver; for example, noise barriers and appropriate land-use controls for the intervening land between source and receiver.
3. **Controlling noise at the receiver:** This includes measures that reduce the receipt of noise; for example, home insulation, upgraded glazing of windows or, in extreme cases, home acquisition.

## How does the policy deal with situations where project noise trigger levels cannot be met?

The policy provides a process to reach the lowest level of noise impact that is achievable in practice. The significance of the residual impacts (that is, noise levels above the project noise trigger level) is then considered by authorities when making a decision on the application and determining appropriate consent conditions where approval is granted. This may include obligations on proponents to undertake noise mitigation at receiver locations and setting achievable statutory noise limits.

For significant residual noise impacts, the final planning approval process would normally involve consultation and agreement between the approval body, the regulator, the proponent and the affected community. The policy describes residual noise impacts as negligible, marginal, moderate and significant.

## What is a noise management precinct?

A noise management precinct is a new mechanism introduced in the policy that will allow noise impacts from multiple premises within a defined area to be managed as a single site. This mechanism, or noise management precinct tool, increases flexibility in how noise impacts are managed within an area without stifling future development.

The policy outlines principles and requirements for establishing and maintaining a noise management precinct. A noise management precinct would be binding on all parties within the defined area and formalised via development consent conditions, other planning instruments, regulation, environment protection licence requirements, covenants or a contract. The aim of the policy is to allow for the development of such approaches, as opposed to providing the detailed framework and responsibilities for such an approach.

## What are the benefits of the policy?

The benefits of the policy are threefold.

1. **To the environment and community:** The policy provides a process for community protection from noise through clear assessment of noise impacts that:
  - a. aims to limit the intrusiveness of a noise source as well as its effect on the long-term amenity of an area, taking into account the additional noise impacts caused by annoying characteristics of the noise source as well as weather effects
  - b. ensures that all feasible and reasonable mitigation measures are used to reduce noise impacts
  - c. determines the significance of any impacts that remain after all feasible and reasonable measures have been applied, which assists the decision-making process for approving and providing appropriate consent conditions for a project.
2. **To industry:** The policy provides certainty for project planning through simpler and clearer assessment requirements. It provides a more balanced approach to the assessment of daytime industrial noise and a clearer process for the setting of achievable statutory noise limits.
3. **To the government:** The policy provides a series of well-explained steps that make the policy easier to understand and apply. This facilitates clarity and consistency in implementing the policy.

## How is neighbourhood noise dealt with in the policy?

Neighbourhood noise is not dealt with by the policy; however, councils could use the assessment and management procedures in the policy as a guide for identifying and controlling noise impacts from smaller industrial facilities within residential neighbourhoods. The EPA's *Noise guide for local government* (2013) provides guidance on the day-to-day management of local noise problems, and is available on the EPA website.

## How is blasting dealt with in the policy?

The policy does not address noise and vibration impacts from blasting. Where development proposals are likely to involve blasting, for example, a mining or quarrying project, the EPA recommends assessment of blasting overpressure and ground vibration in accordance with the Australian and New Zealand Environment Council's *Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration* (1990).

This guideline is available on the EPA website.

## **How does the policy address noise impacts from expanding ports and other high-industry areas?**

The policy provides greater guidance on noise levels that will apply to new projects planned in areas near existing or proposed clusters of industry. It also introduces a new noise management precinct tool that can be used to manage noise from multiple premises within a site. These measures seek to ensure that noise impacts from expanding ports and high-industry areas are appropriately managed while allowing these areas to be fully utilised in a cost-effective and efficient manner.

## **Will developers need to engage a noise consultant to ensure they are doing the right thing according to the policy?**

The policy provides simpler guidance than its predecessor and is easier for proponents to understand and use. However, most proponents of large-scale industrial activity engage a noise consultant to collect and analyse data and contribute to the assessment report. It is anticipated that this arrangement will continue.

In the case of councils and proponents of non-scheduled premises, councils can continue to advise proponents on project requirements in the same manner as with the previous policy. This is because the general principles in the type of noise criteria used have not changed.

## **Why does the policy assign minimum background noise levels?**

The policy assigns minimum background levels for day, evening and night in areas where background noise levels are low. This is to ensure that requirements derived from noise assessment are not unreasonably below thresholds for health or amenity impact, based on World Health Organization recommendations and the latest dose-response literature.

## **Will the addition of an upper noise limit to account for extreme weather conditions make it harder for industry to comply with noise requirements?**

The policy requires that an upper noise limit must be met to ensure that a noise requirement applies at all times, not just during certain weather conditions. Modelling was commissioned by the EPA to assess the effect of the proposed changes. The modelling found that the changes relating to the meteorological conditions used in assessments and the introduction of noise requirements for all weather conditions could represent a tightening of requirements under some circumstances. However, this would only apply to industries that do not already consider noise enhancement from meteorological conditions.

## **Will the change that requires all noise emissions to be assessed over a 15-minute period make it harder for industry to comply?**

The adjustment that allows industrial noise to be assessed over a 15-minute period in all cases was changed following submissions on the exhibited *Draft Industrial Noise Guideline*. Analysis undertaken by the EPA indicates that this approach will satisfy the aim of the change, which was to simplify noise assessment and compliance processes without resulting in increased stringency.

Every effort has been made to ensure that the information in this document is accurate at the time of publication. However, as appropriate, readers should obtain independent advice before making any decision based on this information.

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