



GUIDELINES

APPLYING NIRV TO PROPOSED AND EXISTING INDUSTRY

Publication 1413 October 2011

Authorised and published by EPA Victoria, 200 Victoria Street, Carlton.

WHAT PUBLICATIONS COVER INDUSTRY NOISE IN VICTORIA?

Figure 1 illustrates the suite of publications setting or offering guidance on industry noise levels and limits in Victoria. In addition to this publication (the highlighted box in the figure), they are:

- *Noise from industry in regional Victoria* ('NIRV' – EPA publication 1411)
- *State Environment Protection Policy (Control of Noise from Commerce, Industry and Trade) No. N-1* ('SEPP N-1')
- *SEPP N-1 and NIRV explanatory notes* ('the explanatory notes' – EPA publication 1412).

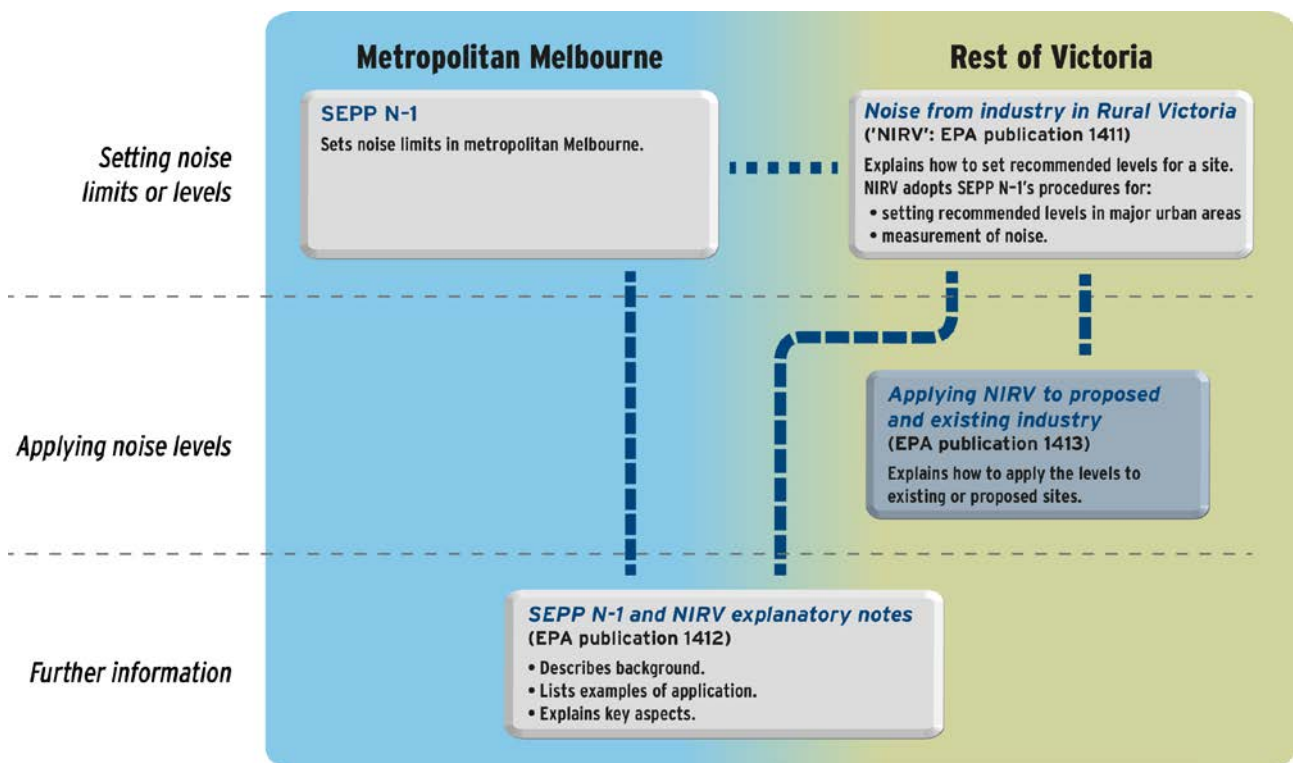


Figure 1: The publications covering noise levels and limits in Victoria

WHAT IS THIS DOCUMENT FOR?

This document is mainly a guide for regulators, including the Department of Primary Industries, and planning and responsible authorities under the *Planning and Environment Act 1987*. It also guides EPA's implementation of NIRV through compliance and approval decision making. Where this document refers to 'you,' it is addressing such regulators.

When applying NIRV you need to consult this guide as part of your decision making, such as when issuing statutory approvals or exercising compliance powers relating to the environment. This guide is also relevant to industries addressing noise in their applications or when responding to noise issues.

This guide has five sections:

- Section 1 (page 3): Context and purpose, outlining the role of this guide when applying NIRV, and the terms used in this guide
- Section 2 (pages 4-5): Approaches for applying the recommended levels, which provides the key points for regulators to consider
- Section 3 (pages 5-8): Applying the recommended levels in most situations, outlining advice for different approval and compliance scenarios
- Section 4 (pages 8-15): Managing circumstances where the recommended levels cannot be met
- Section 5 (page 16): Managing noise from multiple premises
- Section 6 (pages 16-17): Land-use planning and the recommended levels, with additional considerations for planning and responsible authorities managing land-use change and preventing conflict between different land uses.

How industry should use this document

Those concerned with operations and proposals for industry sites ('industry') can consult this document to understand how regulators will apply noise controls to their premises. To understand their obligations, industry can refer to the following sections of this document when responding to issues:

- Section 3.1, Table 1, when managing community concerns about noise. This section advises what noise levels apply, depending on the existing controls applied to the premises
- Section 3.2, Table 2, when proposing changes to operations at an existing premises.

Where the NIRV recommended levels apply, industry will typically use the NIRV guideline to determine the noise level obligations for their site. The regulator might also assist in this process.

There can be exceptions where the NIRV recommended levels cannot be met. NIRV and this document provide alternative approaches for these. If industry considers that their premises may not be able to meet the recommended levels, they should consult:

- Section 3.1, 'Applying the recommended levels in rural areas', on the kind of assessment needed to establish whether meeting the recommended levels may be impracticable
- Section 4.1, on the kinds of location-constrained sites where the alternative approach to noise management may be warranted, and how industry would do this
- Section 4.2, on how industry would assess and prepare a proposal where meeting the recommended levels may be impracticable

Key messages for industry are highlighted in the same style as this box

1 CONTEXT AND PURPOSE

NIRV replaces EPA's *Interim guidelines for control of noise from industry in country Victoria N3/89* (N3/89).

NIRV provides the methods to set recommended maximum noise levels ('recommended levels') for industry for noise-sensitive areas such as homes. NIRV's recommended levels provide a balance between protecting community wellbeing and amenity near industrial premises and supporting the social and economic value of industry in regional Victoria.

NIRV is a non-statutory guideline. This approach is applied in regional Victoria because the unique characteristics of rural areas, such as generally low ambient sound levels and large, location-constrained, resource-based industries, mean that noise limits cannot always be achieved.

To accommodate these exceptional situations where recommended noise levels cannot be met, NIRV provides an alternative approach to delivering reasonable noise outcomes. This guide was developed to explain how to manage this alternative approach, and to provide steps for regulators to follow when applying NIRV to existing industry and industry proposals.

Under the alternative approach in section 4 of this guide, proposed projects that cannot meet the recommended levels only proceed if:

- they will apply best-practice noise mitigation
- they demonstrate that alternative locations were not available
- the approving authority decides that the proposal is of net benefit for the area.

Aside from these exceptional situations, NIRV's recommended levels should normally be applied to manage noise from the existing or proposed industry. Sections 2 and 3 help regulators to apply NIRV in most situations.

Terms used in these guidelines

Approval means an approval document, such as a planning permit, a Department of Primary Industries work authority, or an EPA works approval. The approval may contain requirements for noise control.

Approval body means a regulator exercising a statutory approval function, such as a planning or responsible authority issuing a planning permit, EPA issuing a works approval or DPI issuing a work authority.

Compliance tool means a statutory notice (such as an EPA pollution abatement notice) or other instrument used to apply noise control requirements to existing industry.

Existing use means industry premises that were operating before the publication of NIRV.

Explanatory notes means *SEPP N-1 and NIRV explanatory notes* (EPA publication 1412).

Industry has the same meaning as in NIRV. It covers a range of commerce, industry and trade premises. Reference to industry can also describe the proponent or operator of a specific industrial or commercial site.

Major urban area has the same meaning as in NIRV. Major urban areas are larger cities in the NIRV area (above 7000 population) and land at the urban fringe of Melbourne

Noise-sensitive areas has the same meaning as in SEPP N-1. The recommended levels apply in noise-sensitive areas (generally accommodation uses).

Planning authority has the same meaning as in the *Planning and Environment Act 1987*.

Proposal means an industry proposal, such as for a new use or works, or change to an existing use.

Recommended levels means the recommended maximum noise levels set following NIRV.

Regulator can refer to a range of government regulatory bodies that issue statutory approvals or have compliance powers relating to the environment, such as planning authorities, EPA or the Department of Primary Industries.

Rural area has the same meaning as in NIRV. Rural areas include small towns and rural locations.

SEPP N-1 means the *State environment protection policy (Control of noise from commerce, industry and trade) No. N-1*.

2 APPROACHES FOR APPLYING THE RECOMMENDED LEVELS

Key points for using this guide

These guidelines should be used in applying NIRV when:

- assessing applications for industrial premises
- resolving noise issues from industrial premises (including those existing before the publication of this guide)
- managing noise from existing sites undergoing review of their operations or controls.

NIRV and this supporting guide are not statutory documents, and do not change the obligations on industry to obtain relevant approvals for proposed operations or works. They support but do not change the obligations of approval bodies in the area of environmental assessment. To have legal effect, you would apply the recommended levels through approval or compliance tools such as a permit, notice or order. Whether assessing a proposal or investigating noise from existing industry, consider the following:

- Where there are noise limits or requirements in an existing approval, these legal controls normally take precedence over the recommended levels.
- You should not automatically transition existing sites over to the recommended levels, as you need to consider local noise impacts and the practicability of meeting changed levels.
- In most cases where there is not an existing limit applied to a site, you should adopt the recommended levels as the criteria for your approvals (for example, permit requirements) and compliance tools (such as a notice). You should not set noise levels in an approval or compliance tool that are higher than the relevant recommended levels, as they represent an appropriate, balanced outcome suitable to managing industry noise in most situations.
- In addition to meeting the recommended levels, industry should take reasonable opportunities to further reduce noise. You may need to explore these opportunities when managing approvals or resolving noise issues (See NIRV Parts 2.3 and 3)
- You need to be mindful of exceptions where meeting the recommended levels may not be reasonable or practicable for a site

Assessing industry proposals – advice for approval bodies

When industrial premises are proposed, you should ensure that the industry has:

- used NIRV to determine the recommended levels that apply
- confirmed that it can meet the recommended levels at specific current or anticipated noise-sensitive areas, by designing noise controls and carrying out works to meet these levels.

You need to be satisfied that the recommended levels can be met at specific current or anticipated noise-sensitive areas before you apply them as limits in an approval document. This includes assessing whether the proposal is suitable for that location. You should also refer to NIRV to validate the industry's assessment of what recommended levels apply.

NIRV Part 2.2 has obligations for where there are, or are likely to be, multiple premises in an area contributing to noise. You will need to consider this when setting the noise limits for the proposal. Industry may need to design noise control works to achieve noise levels lower than the recommended levels. See section 5 of this guide for more information.

For new uses or for an industry application to operate in different time periods, you will also need to consult Part 2.1 of NIRV, on considering the effects of noise on quiet rural areas.

There can be exceptions where meeting the recommended levels may not be reasonable or practicable for proposed industry. Section 4.2 of this guide sets out how to assess noise risks and make a decision on whether to approve the industry proposal.

Investigating noise and assessing compliance

When investigating a noise issue you can either request the industry to work out its recommended levels under NIRV, or follow the procedures yourself as part of assessing compliance. You or the industry will also need to measure noise to assess whether the noise meets the recommended levels. This relies on proper measurement of noise, following the measurement procedures in SEPP N-1.

If a site does not have noise limits set through an existing statutory document (such as a planning permit), you may use the recommended levels as a reference in noise investigations – for example, to help decide whether the noise is excessive, unreasonable or a nuisance when using the Public Health and Wellbeing Act or Environment Protection Act.

There can be exceptions where meeting the recommended levels may not be reasonable or practicable for a site. Sections 3.1 and 4.1 help you to consider this issue before applying the recommended levels through a notice.

Assisting industry to determine the recommended levels

NIRV's procedures for setting recommended levels are generally based on local land-use zoning near the industry and the noise-sensitive location(s) such as residents. To support industry, you may need to provide zoning maps and information on current and anticipated sensitive locations in the area, and any other likely future industries in the area.

3 APPLYING THE RECOMMENDED LEVELS IN MOST SITUATIONS

This section guides the application of recommended levels. There are sections for:

- existing uses that are not changing their site operations or equipment (compliance decisions)
- existing uses proposing changes to their site (approval decisions)
- new uses (approval decisions)
- additional considerations for mines, quarries and landfills (approval decisions)

Flowcharts for approval and compliance decisions can be found at the end of section 4.

Industry readers: Table 1 and Table 2 show what levels you can expect to apply to your existing premises. Section 3.1 describes how regulators should apply the recommended levels to existing industry. Section 3.4 may be relevant where proposing mine, quarry or landfill activities.

3.1 Existing uses – no changes to the site

This section applies when existing industry uses do not have any changes to their operations proposed. It is principally relevant to managing noise complaints. Your general approach should follow Table 1. You should also follow the advice for:

- setting timeframes for compliance
- applying the recommended levels in major urban areas
- applying the recommended levels in rural areas.

Table 1: Applying the recommended levels to existing uses with no proposed changes

Description of current circumstance	Applying recommended levels
There are noise limits or requirements in an existing approval (such as a permit or licence).	These legal controls take precedence over NIRV. Where the approval refers to meeting N3/89, or where an approval for an existing industry (operating before NIRV publication) refers to meeting the relevant EPA guidelines, then that should be taken as being required to meet the limits in N3/89. You should follow your normal procedures for applying these controls.
No noise limits or requirements in an existing approval and no change to the operations (activities, equipment or time period).	You should apply the recommended levels in NIRV when responding to community reports of excessive noise. See also the rest of the advice in this section.
No change to the operations, the site is addressing current non-compliance, and the recommended levels are higher than the currently applied noise levels.	The recommended levels should not be adopted as a means of 'resolving' current non-compliance with statutory requirements. However, there may be cases where you are deciding whether to vary the licence, permit or work plan to factor in proposed noise control actions. In doing so, you could have regard to the recommended levels, and the principles under section 4.1 of these guidelines.
Industry is a non-conforming existing use.	Consult Section 5 Planning principles of these guidelines.

Setting timeframes for compliance

You need to be reasonable when setting the time frames for compliance, and consider any expert acoustic advice. You may consider the following when setting time frames¹:

- the safety of persons and plant
- the availability of technology to achieve the required noise reduction
- the technical difficulty and complexity of abatement measures required to meet the recommended levels
- the magnitude of the noise intrusion, or potential intrusion, on the noise-sensitive areas and, in particular, the extent of sleep disturbance.

In setting the timeframes for noise control a staged reduction may sometimes be appropriate. You may require the industry to install some initial noise control measures, even though these works may not be sufficient to achieve the recommended levels. This approach has the benefit of reducing noise, and its impact on the community, in a shorter time frame. The design of these works should be consistent with, and not preclude, achieving the recommended levels at a later stage.

Applying the recommended levels in major urban areas

In NIRV major urban areas, the SEPP N-1 methods are applied to determine recommended levels. To ensure comparable treatment for industry in major urban areas to those in the SEPP N-1 area, you should apply NIRV's recommended levels strictly in these locations.

SEPP N-1 Part V provides for situations where it is not practical for an industry to immediately meet its noise limits. It also sets out an Environment Improvement Plan mechanism for some sites that cannot meet the limits (refer to the Explanatory Notes). Where relevant, these provisions should be used to guide compliance decisions under NIRV.

If you are assessing noise issues in a major urban area and consider that a project has unique reasons to do with rural infrastructure or resource based constraints that mean the levels cannot be met, consult with EPA.

Applying the recommended levels in rural areas

Industry readers: EPA expects industry to act on reports of excessive noise from their premises and reduce noise to a reasonable level. A regulator may need to formalise this requirement through a notice. The following text describes how regulators may provide an opportunity for industry to formally assess the noise from their site and whether there are significant constraints to meeting recommended levels, before a notice is served.

NIRV recognises that there are exceptions in rural areas where it may be impractical to meet the recommended levels. To consider whether meeting the recommended levels is reasonable and practicable before you apply them in a notice, you should:

- recognise that usually there will be a cost of achieving the recommended levels, but that it is part of an industry meeting its environmental obligations to not cause a nuisance
- not apply requirements that are unreasonable or impracticable for industry to achieve. Practicability should be considered in terms of what noise control measures are available, and the cost and difficulty of applying them.

Most compliance decisions would not generally need to involve an assessment of what is technically achievable, practicable or reasonable for a site to achieve. However, you should give the industry reasonable opportunities to raise concerns if they face significant constraints in meeting the levels. This can be achieved by advising industry of intended compliance requirements before taking compliance action.

If the industry has assessed that it may not be able to meet the recommended levels, they should engage an acoustic consultant or engineer to determine the contribution from different items of plant, and identify, evaluate and cost noise control measures to meet the recommended levels. Assess the conclusions of the acoustic expert's advice:

- Where the advice shows that it is practicable to meet the recommended levels, your compliance tool should require industry to meet the recommended levels.
- If the advice shows that meeting the recommended levels is impracticable, follow the process in section 4.1.

¹ Principles adopted from clause 17 of SEPP N-1.

3.2 Existing uses – proposed changes to the site

This section applies when changes are proposed to an existing use’s site or operations. Your approach should follow Table 2.

Table 2: Applying the recommended levels to existing uses with proposed changes

Description of proposed changes	Applying recommended levels and transition arrangements
No noise limits in the approval, and proposed change to operations (activities or equipment).	Apply the recommended levels. When setting the allowable noise from the proposed change, consider the total level of noise from both existing operations and the new works.
Proposed change to activities or equipment where: <ul style="list-style-type: none"> the recommended levels are lower than the levels referenced on the approval (including general reference to EPA guidelines or N3/89) the changes will impact upon the same noise-sensitive areas as currently exposed. 	Industry should design the new works or activities to not increase the noise from those in the existing approval. To achieve this, industry may need to control noise from existing parts of the premises unrelated to the proposed works. Where possible, the industry should take steps to reduce the noise to meet the recommended levels in the longer term. This might be applied through a site’s environmental management program or work plan.
Proposed change to activities or equipment where: <ul style="list-style-type: none"> the recommended levels are lower than the levels referenced on the approval the changes will impact upon new ‘noise-sensitive areas’ (e.g. different residences). 	Apply the recommended levels for noise-sensitive areas not previously exposed to the noise.
Proposed change to activities or equipment and the recommended levels are higher than the levels referenced on the approval.	Apply the recommended levels. When setting the allowable noise from the proposed change, consider the total level of noise from both existing operations and the new works. Where the approval for a mine was made through an EES – see section 3.4 of this guide.
Proposed changes to hours of work into a new period (e.g. new night operations) and no noise limits in the approval.	Apply the recommended levels for the new period.
Proposed changes to hours of work into a new period (e.g. new night operations) and existing noise limits apply in the approval.	Where industry intends to vary from the operating hours specified in an approval, apply the recommended levels for the new period. Where an approval includes or references noise limits but does not restrict the operating hours, the currently approved noise levels will continue to apply, as these approval requirements take precedence over the recommended levels.

1 An approval, including a work plan, may have N3/89 levels for one noise-sensitive area and NIRV-recommended levels for a newly exposed but spatially separate noise-sensitive area.

3.3 New uses

Industry readers: The following text describes the kind of noise assessment a regulator will look for in your proposal, including consideration of noise from other industry in the area.

See the advice under Section 2, ‘Assessing industry proposals’ of this guide, which addresses:

- how the proponent’s application should set out noise control works and management measures to meet the recommended levels
- considerations for noise from multiple premises
- considerations for noise in quiet rural areas

If you are satisfied that the proposal will meet the recommended levels, in most cases you would approve the noise parts of the proposal. The recommended levels are set according to specific receiver locations. If you adopt the recommended levels as noise limits in the approval, you need to specify the noise limits at defined receiver point(s) and for relevant time periods.

If the proposal will not be able to achieve the recommended levels, you should:

- in rural areas, use the process in section 4.2 of this guide
- in major urban areas, not approve the proposal. This is because the background sound levels, land-use planning and issues of practicability and cost are the same as for industry within the SEPP N-1 area.

If, in a major urban area, you consider that rural infrastructure or resource-based constraints mean the recommended levels cannot be met, consult with EPA on how to manage the proposal.

3.4 Additional considerations for mines, quarries and landfills

NIRV Part 4 has specific provisions for noise from mines, quarries and landfills, and there are specific legislative provisions for some mine variation proposals. You should consult the following when considering proposed variations to the noise from existing mine, quarry or landfill sites.

Mines approved under an environmental effects statement (EES)

If assessing proposed changes to activities or equipment for a mine approved under an EES, and the recommended levels are higher than the levels referenced on the approval document, you should follow s42A of the *Mineral Resource Sustainable Development Act 1990* (MRSDA).

The MRSDA triggers a planning permit or further assessment when a change causes a 'significant additional environmental impact.'

To decide whether the change from the proposal is a significant additional environment impact, you would consider whether the change (in noise level or character) would be perceptible to human hearing or would significantly change the local environment.

Following this assessment the approval might permit an increase in noise to a level that is not higher than the recommended levels.

Variations to the recommended levels for mines, quarries and landfills

NIRV Part 4 sets out variations to the 'day' period recommended levels applicable to some mine, quarry and landfill operations. These variations may apply to site rehabilitation, short projects and necessary, unshielded work.

The NIRV variations are a refinement of existing variations under N3/89 points 4 and 5, for 'day' noise from construction of industry.

If assessing a proposal for a variation to noise levels under NIRV Part 4, you need to be sure that the activities proposed qualify for a variation. You also need to assess what variation should be given. If applicable, you may apply these variations to:

- the recommended levels under NIRV (for example, when applying to a new industry or noise at new noise-sensitive areas)
- or
- the noise levels referenced in the approval document for an existing use, provided that this approval document also has allowances for additional levels of 'construction' noise (following N3/89).

4 MANAGING CIRCUMSTANCES WHERE THE LEVELS CANNOT BE MET

This section helps you to address noise for situations where the recommended levels cannot be met.

- Section 4.1 sets out a process for you to use when resolving noise issues at an existing use where meeting the recommended levels is impracticable.
- Section 4.2 sets out a process for you to use when assessing applications for a new use where the recommended levels cannot be met.

Figures 2 and 3 at the end of this section show flowcharts for approval and compliance decisions.

4.1 Existing uses – where meeting the recommended levels is impracticable

Industry readers: The following text describes the kind of premises that may warrant an alternative approach to meeting the recommended levels, and the steps industry should follow to ensure reasonable management of noise.

See also Figure 2.

NIRV provides for limited circumstances in which an industry may demonstrate that it is impracticable for it to meet the recommended levels, and an alternative approach to noise management is warranted. These circumstances would generally only apply to larger industries experiencing resource or other location-based constraints.

Apply best practice on site

Firstly, the industry needs to propose best-practice measures to reduce noise. Part 3 of NIRV describes the obligation for industry to take all reasonable opportunities to reduce noise. Section 4 of *SEPP N-1 and NIRV explanatory notes* provides further advice on best-practice noise control.

Examine off-site options

If the industry demonstrates that it would be unable to meet the recommended levels after applying all on-site measures offering a demonstrable reduction in noise, you may require a further assessment by industry to address the residual impacts, practicability and cost of additional noise control. This assessment would also consider the value of the operation to the community.

The extent of the assessment would depend on how much the noise exceeds the recommended levels and the severity of the impacts experienced by resident(s).

The assessment would look beyond on-site noise controls. The industry should assess the following pathways to reduce the noise or its impacts:

- noise control works such as barriers or soundproofing at the affected dwellings (note that soundproofing may reduce the impact on sensitive areas such as bedrooms, but will not address impacts on outdoor living areas)
- a long-term plan for noise reduction, implemented through future plant upgrades.

In exploring these pathways, the industry should engage with the broader community on the noise impacts and the potential measures to address the noise. EPA's publication *A planning process for community engagement* (publication 1145) may assist.

If all practicable noise control measures at the source, pathway of the noise and the receiver will not result in an acceptable outcome, then the industry will need to consider other options to reduce the impact. These might include long-term modifications to the operations carried out at the site, relocation of residents during short-term noisy operations or direct negotiations with affected residents to determine alternative options.

With an understanding of the practicability and community acceptance of potential noise-reduction measures, you will need to decide whether the residual impact is reasonable in the circumstances. After this decision, either:

- you would formalise the noise control works through a compliance tool (including long-term plans and other measures agreed with affected residents)

or

- the industry may need to cease operating at that site, or for specific time periods.

Factors to assist decision making

All relevant factors need to be considered, including:

- the noise levels to meet
- the degree of exceedance
- the time periods of exceedance
- how often the exceedance occurs
- the effect on amenity and wellbeing claimed by affected people
- the officer's assessment of those impacts
- the circumstances of the noise emission
- the cost and practicability of potential noise-mitigation measures
- community views on the noise impacts and the potential measures, accounting for all people impacted by the noise.

Relevant parts of this process can also be used as to resolve noise that is not addressed by the recommended levels, such as brief high-emission noises and intrusive low-frequency noise (see NIRV Part 2.3).

4.2 New uses – Where the recommended levels cannot be met

Industry readers: If an industrial use is proposed that cannot practicably meet the recommended levels, the proponent will need to follow the assessment and consultation steps. The industry will need to demonstrate whether the proposal is location constrained, and follow the advice under 'Applicant demonstrates measures to reduce noise as far as is practicable,' and 'Applicant addresses net benefit of the proposal, and addresses residual noise risks' in this section. See also Figure 3.

In some cases, rural infrastructure or resource-based constraints may make it impracticable for noise emissions to meet the recommended levels (typically in NIRV rural areas).

This may be an issue when a proposed industry or expansion of existing industry cannot be located away from residents, such as where its location is determined by a stone or mineral resource or utility infrastructure, and there are no alternative locations that would enable the project to go ahead.

NIRV provides for the following alternative application approach that applies best practice, incorporating community engagement, to address residual noise risks. Even though a site may face location constraints; it does not mean that it will automatically qualify for the alternative approach.

This process is primarily intended for NIRV rural areas.

Before deciding whether to approve the industry proposal, you should use the following process to satisfy yourself that the industry has:

- reduced noise as far as practicable
- demonstrated a net benefit for the proposal
- explored alternative outcomes with the community to address the noise risks
- proposed measures to address the residual noise risks.

You should not approve the proposal where it is shown that the noise impacts outweigh the economic and social benefits.

Applicant demonstrates measures to reduce noise as far as is practicable

The applicant will first present noise control measures to achieve the recommended levels. This includes best-practice measures – see section 4 of the Explanatory notes. Assessment would include considering the suitability and practicality of alternative sites as a means of controlling noise impact.

If the proposal would be unable to meet the recommended levels after applying all measures offering a demonstrable reduction in noise, then other options should be assessed.

The application would document the residual noise risks, including the degree to which the recommended levels would be exceeded, the frequency of exceedance, how many locations are exposed, and the time of day when exceedances would occur at each noise-sensitive area.

The application must also document all further possible measures to reduce the noise or its impact, with assessment of the noise reduction they offer and their effect on the viability of the project. This includes considering changing the duration of activities, limiting hours or avoiding noise during more sensitive periods, and reducing or substituting certain noisy activities.

Applicant addresses net benefit of the proposal, and addresses residual noise risks

If the applicant believes that the proposal should be progressed, its application should present all necessary information for parties to consider the net benefit or disbenefit of the project. The application should assess both the benefit to the affected community and the magnitude of impact, considering the amenity and wellbeing impacts.

The affected community should be involved in decisions through a community engagement process. This would involve affected parties and the broader community on the proposal, to identify the potential positive and negative impacts and the available management measures to address the residual noise risk.

A planning process for community engagement (EPA publication 1145) may assist in planning the engagement process. The relevant approval process may also set out community engagement expectations for the proponent and/or approval body.

The residual noise risk should be addressed in detail. This includes providing measures to appropriately address the risk.

Parties other than the applicant may need to be involved to apply alternative approaches to minimise the scale or severity of the exceeding noise. Relevant measures (beyond the adopted on-site noise control measures) to address the risk include, but are not limited to:

- the planning authority applying a planning overlay or other tool to limit residential encroachment, or require soundproofing for new dwellings

- the applicant seeking agreement with affected neighbours on off-site noise control options, such as soundproofing to dwelling(s) (note that this may reduce the impact on sensitive areas such as bedrooms, but will not reduce impacts on outdoor areas).

Decide whether or not to approve the proposal with its residual impacts

Assess the proposal and its impacts

At this stage, the proposal will have documented the residual noise risks with reference to the recommended levels. The proposal will also contain measures to address these risks.

In considering whether to approve a proposal, you should consider the acceptability of the residual impacts in the context of the environmental or amenity values of the area, the community acceptance of proposed mitigation measures, and the overall benefits, constraints and impacts of the project. The environmental or amenity values might include those expressed through the planning scheme – for example, local policy documents or the stated or inferred purposes of the zones.

Proposal considered acceptable

If the proposal demonstrates a net benefit and the measures developed by the proponent are considered acceptable by all affected parties, you may issue the approval. The measures will be the basis of approval conditions, rather than the NIRV-recommended levels. The measures and the resultant approval conditions are project-specific.

Considering residual impacts before approval

There may be cases where a desirable amenity outcome may not be achieved even after all the noise control and management options above have been considered.

If there are residual impacts that are not fully accepted by all parties, you need to decide whether the value of the operation outweighs the amenity impacts. If you decide that the proposal should proceed, you must specify appropriate noise outcomes in the approval documents.

If the proposal is approved with a known impact, the approval should also require the applicant to have an ongoing review and community engagement process. This will examine options for reducing noise as new noise control measures become available or other mitigation options become possible.

The planning authority may need to establish a process to inform future potential residents in the vicinity of the industry of the amenity risks to them. The planning authority should be mindful that planning statements alerting future residents of potential noise do not negate an individual's right to report noise concerns. The approval conditions for the industry should adequately account for risk of future residential development or land-use change.

Example: Risk management in a NIRV rural area

A mining company proposes an open-cut mine to extract a limited reserve of gold. A number of dwellings are close to the resource location. The five-year project will expose some houses to a year or more of noise. Initial noise modelling shows that the gold extraction operations will exceed the recommended levels for all times of the day.

Because the gold resource determines the location, and the economic and employment advantages to the proposal are strong, the approval body requires that the application (in this case for a mining work authority) fully address noise management options.

The applicant suggests a restriction on night-time work (after 10 pm), to limit the likelihood of noise exposure. The realities of the operation mean that mining work will, however need to continue into the evening (6 pm till 10 pm) to provide enough ore for the economic 24-hour operation of the processing plant located nearby, away from dwellings.

The acoustic consultant determines that careful placement of overburden repositories and use of the quietest available equipment will adequately reduce the noise level to achieve daytime compliance. But noise will still be excessive during evening hours.

All practicable steps have been taken to reduce the impact. At this stage, options for addressing the risk of the residual evening impact should be explored.

The applicant, as part of a community engagement process, talks to the neighbours where noise is predicted to exceed the recommended levels. The applicant agrees to provide building treatment to one dwelling and agrees with the occupier of another strongly affected dwelling to contribute to temporary rental expenses of alternative accommodation in the nearby town.

The approval body considers that the measures developed by the proponent in consultation with the affected neighbours are acceptable. It approves the proposal with conditions to comply with the recommended levels during the day period and to prohibit gold extraction operations in the night period. The approval document also includes the outcomes agreed through the community engagement process for the evening period operations.

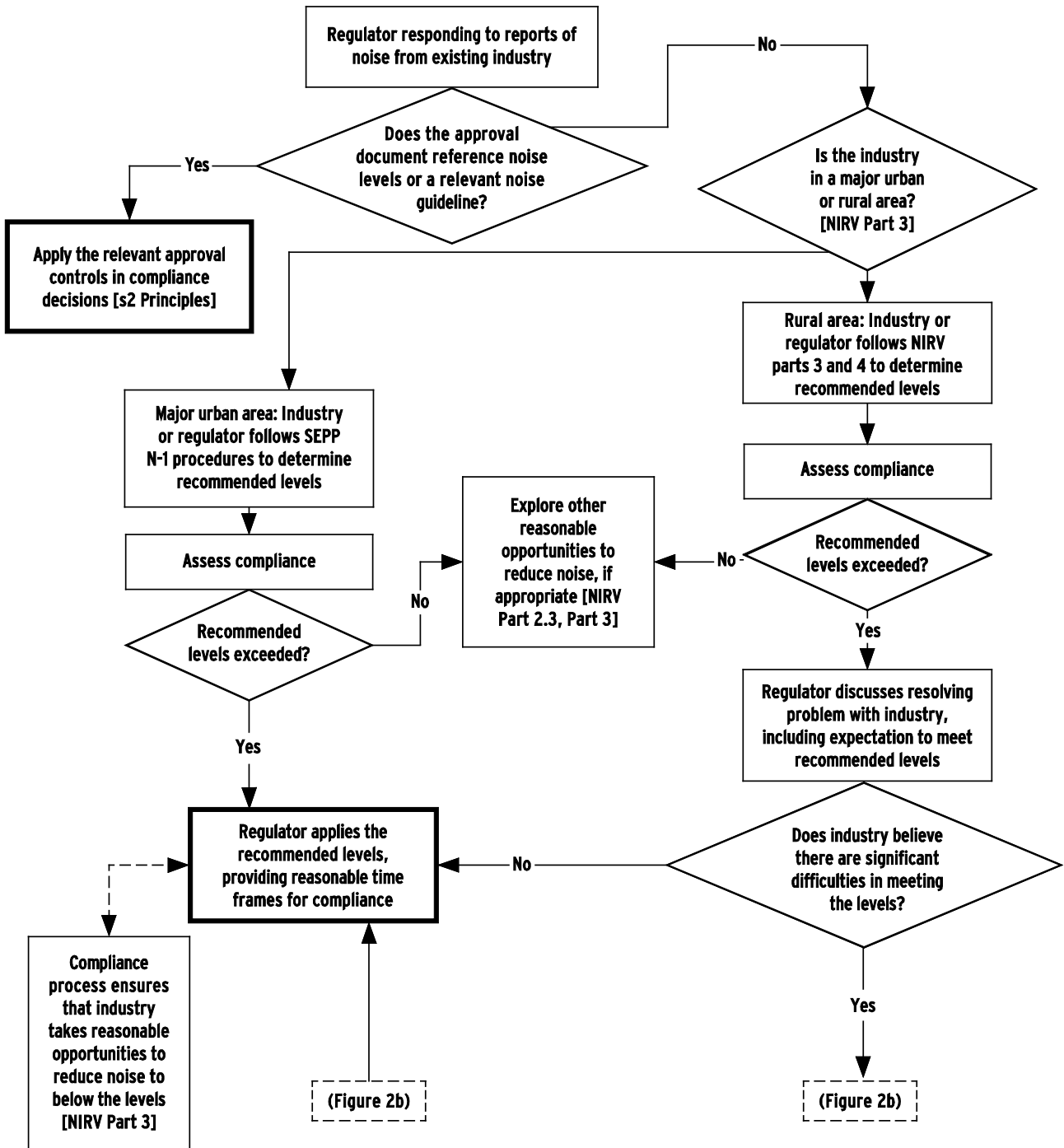


Figure 2a: Overview of compliance decisions for noise considered under NIRV.

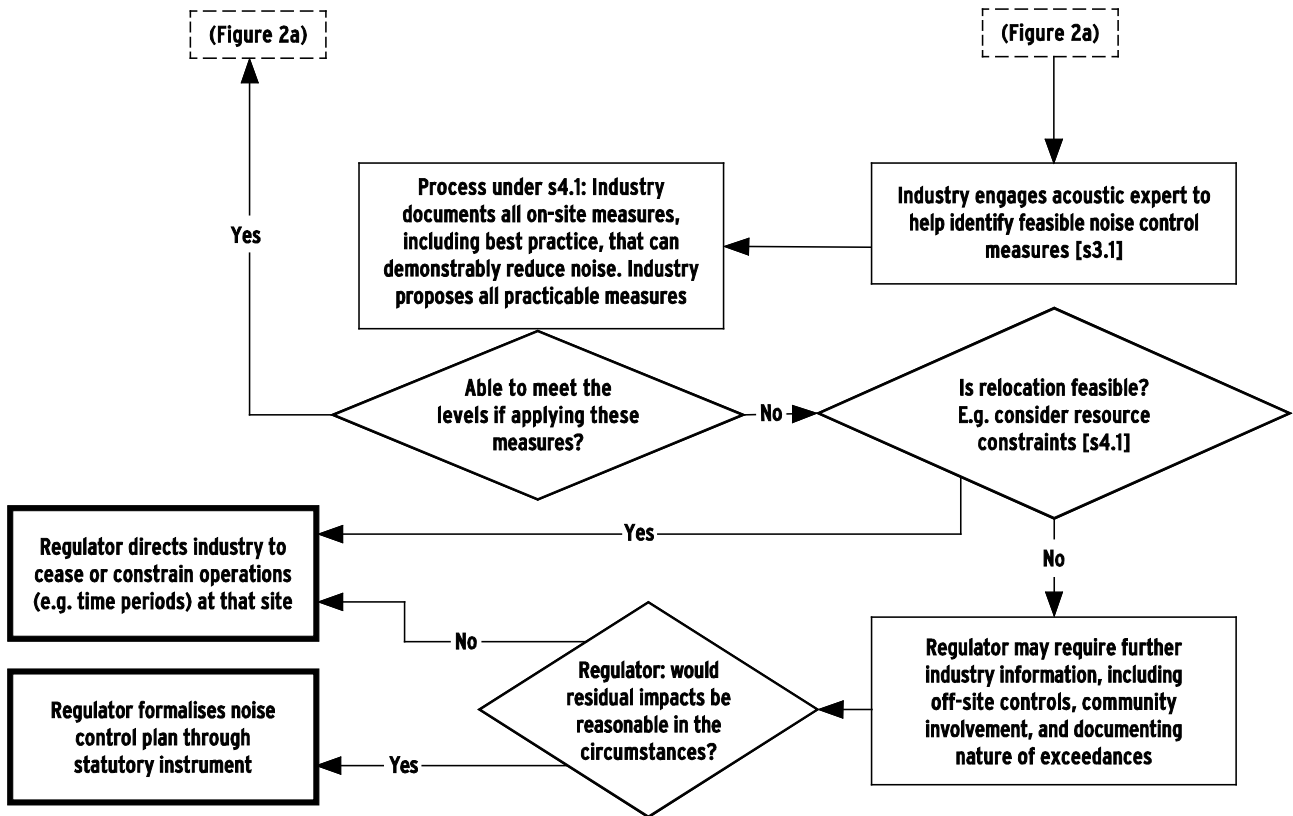


Figure 2b: Process where meeting the recommended levels may be impracticable.

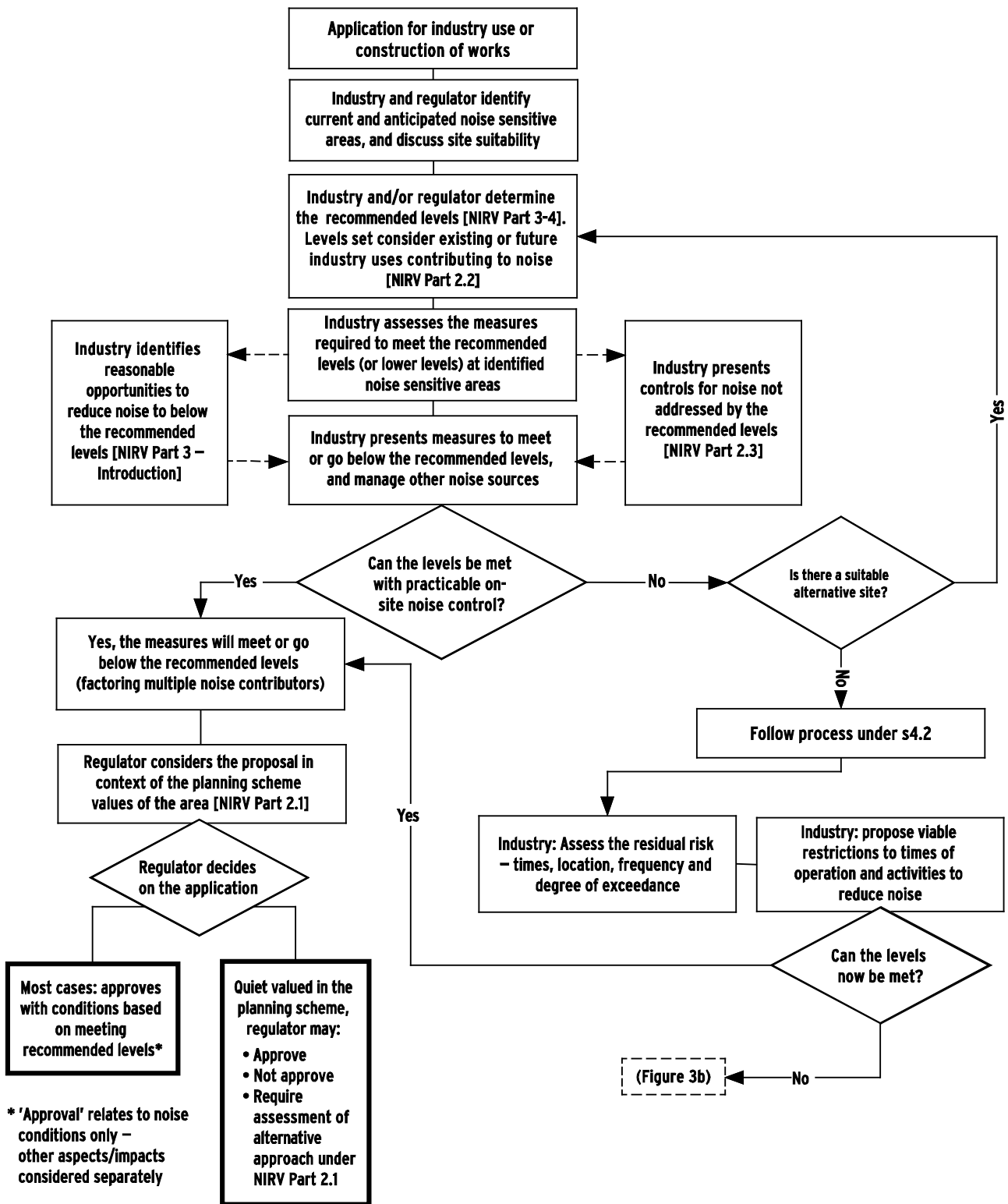
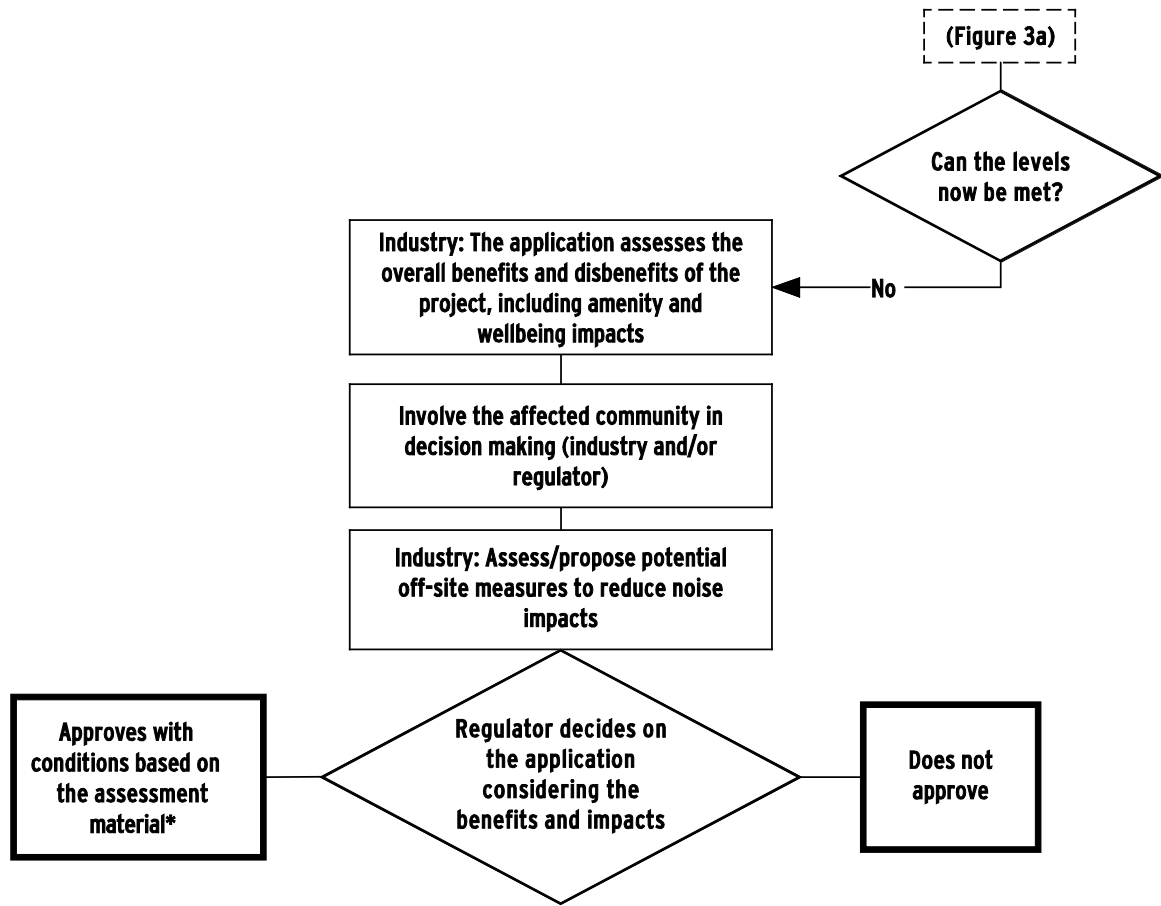


Figure 3a: Overview of approval decisions for noise assessable under NIRV.



* 'Approval' relates to noise conditions only – other aspects/impacts considered separately

Figure 3b: Process for proposals that cannot meet the recommended levels with on-site controls.

5 MANAGING NOISE FROM MULTIPLE PREMISES

Just as for industry in the SEPP N-1 area, regulators and industry need to consider noise from multiple current or future industry in NIRV areas.

In NIRV rural areas, industry should design plant or operations so that their emissions are less than the recommended levels where there are:

- industrial premises in an Industrial 1 or Industrial 2 zone with at least two other allotments in the same zoned piece of land
- or
- industrial premises on an allotment greater than 10 ha in any zone where expansion is likely.

The noise emissions from an individual site should be no greater than the recommended level minus three decibels (for each period of the day). This 3 dB reduction from the recommended level is provided on the presumption of minimal growth in industrial uses in a rural industry location. It recognises that the outcome may result in levels slightly above the recommended levels if the area is developed in future. A lower level may be required where there is a high potential for industry development, to prevent additional noise 'creep' from multiple sources.

When setting noise levels for a proposal, if noise from multiple sources was assessed as an issue, then the practicability and initial costs of noise control should be considered, as well as those of future noise control.

The above guidance relates primarily to development of new industrial areas where there are no current noise contributors. If there are existing noise sources and a new proposed use would bring noise levels in the area above the recommended levels, the approval body will need to investigate what noise reductions are achievable from those existing sites to obtain a suitable outcome. See Section 3 for reducing noise from existing sites.

In major urban areas, a lower designed noise level may be warranted and specified by an approval body, given the likely larger number of industrial noise sources. The guidance procedure for the SEPP N-1 area in the explanatory notes may be used in major urban areas under NIRV.

When addressing noise from other sites, the practicability of noise control may also need to be considered, consistent with section 4.

6 LAND-USE PLANNING AND THE RECOMMENDED LEVELS

NIRV's recommended levels apply to industry premises emitting noise and are usually based on the land-use zones in which the noise emitter and noise receiver are located. The recommended levels that an industry needs to meet at noise-sensitive areas will change when land use or the zone changes. This might include:

- rezoning existing industrial land to a residential or other sensitive type
- rezoning residential land to an industrial or commercial type, such as to facilitate a new industrial development
- approving new residential uses near existing industry.

These kinds of land-use changes, particularly residential encroachment on existing industry, can generate compliance challenges for existing premises or unsatisfactory noise levels for residents. Planning authorities should be mindful of the following when managing land use change:

- The recommended levels should not be applied as general noise limits in a planning zone or scheme, as this would not provide for the appropriate assessment processes and discretions associated with applying the recommended levels.
- Rezoning land to allow residences or sensitive zones closer to existing industry carries a risk of loss of compliance for industry. Existing industry that meets the recommended levels may face increased compliance costs from having to meet the levels for new, closer noise-sensitive areas.
- Sometimes an industry's approval conditions will place a requirement to comply with a noise guideline or to meet specified noise levels:
 - i. If this is a general requirement that does not specify the locations where the levels have to be met, and closer noise-sensitive uses are permitted to encroach on that industry, the industry will have to meet the levels at a closer location. This can create additional compliance challenges.
 - ii. EPA encourages approval bodies to specify the level to meet at identified (current or anticipated) sensitive locations.
- Rezoning land from a rural or sensitive zone to a Special Use Zone or industrial zone (to facilitate future industrial activity) will increase the noise levels permitted in that area. The environmental change enabled from the rezoning should be considered as part of the rezoning decision.

- NIRV Part 1, 'Overview', recognises that land zoning will affect the level of protection provided to sensitive uses (NIRV, page 2). Where residential areas are adjacent to heavy industrial or business zones, residents may need to modify their arrangements² to promote sleep. This is consistent with outcomes under SEPP N-1 in similar land-use situations. Undesirable impacts can be avoided through land-use planning that separates industrial areas from residential uses – for example, by zoning for commercial or shopping areas between industrial and residential areas.
- Some industry uses may be obliged under an approval document or the planning scheme to maintain a 'buffer' of land around their site where sensitive land uses are restricted. For example, quarries have obligations under clause 14.03-2 of the Victoria Planning Provisions. Planning authorities should be mindful that, in many cases, 'buffers' are specified primarily for air quality issues (such as occasional dust or odour). Meeting the distances specified for air quality does not mean that recommended noise levels will necessarily be met, as recommended levels are set for specific noise-sensitive areas, and performance against the recommended levels is determined by the site operations and times of activities. This should be evaluated on a case-by-case basis.

In considering a planning scheme amendment or a decision to allow new, sensitive uses, the planning authority should avoid incompatible uses, loss of compliance for industry or unsatisfactory amenity for residents. The planning authority should consider whether the amendment may lead to any significant noise impacts on sensitive uses or zones, or impact on the viability of industry operations.

Non-conforming existing industry uses

In some cases, an existing industry may operate in an area (such as a residential zone) where it could not lawfully be under current planning scheme provisions. Such land uses are known as 'non-conforming' existing uses and specific rights apply to these uses under the planning scheme.

Section 31A(2B) of the EP Act relates to pollution abatement notices issued by EPA for noise. It recognises the principle of non-conforming uses and states that:

'If a premises emits noise and is used lawfully for a purpose for which a new use could not be established under a planning scheme under the Planning and Environment Act 1987, the Authority [EPA] may take that fact into account in deciding whether to issue a pollution abatement notice in respect of the noise emitted from that premises, or in deciding what is to be included in such a notice.'

In application, this may mean that EPA treats the land on which the non-conforming use operates as a 'deemed' industrial zone (or the zone originally applied at that location) for the purpose of setting noise levels, even if this does not accord with the actual land zoning.

² For example, closing a window, move sleeping areas to away from the noise, or soundproofing