Voluntary Land Acquisition and Mitigation Policy For State Significant Mining, Petroleum and Extractive Industry Developments

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## Contents

**Preliminary**
- Purpose                          4  
- Application                      4  
- Commencement                     4  
- Regulatory responsibilities     4  
- Background                       5  

**Policy - General**
- Negotiated agreements           8  
- Voluntary mitigation             8  
- Voluntary acquisition            10  
- Use of acquired land             12  
- Management of cumulative impacts 16  

**Policy - Noise**
- Assessment criteria              17  
- Mitigation and acquisition criteria 17  

**Policy – Particulate matter**
- Assessment criteria              21  
- Mitigation and acquisition criteria 21  

**Definitions**                   26  

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Voluntary Land Acquisition and Mitigation Policy | September 2018
Preliminary

Purpose

This document describes the NSW Government’s policy for voluntary mitigation and land acquisition actions undertaken to address noise and dust (particulate matter) impacts from State significant mining, petroleum and extractive industry developments.

Application

Clause 12A of the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007 requires that consent authorities consider this policy when assessing and determining development applications and modification applications for mining, petroleum and extractive industry developments subject to the State significant development provisions of the Environmental Planning and Assessment Act 1979 (EP&A Act).

This policy only applies to privately owned land, with the exception of the section “Use of acquired land”.

Commencement

This policy commences from the date it is gazetted, and applies to:

- new applications;
- existing applications that were not yet determined when this policy commenced; and
- modification applications that involve increases to the approved dust or noise impacts of a development.

Regulatory responsibilities

There are two key regulators of noise and particulate matter impacts from State significant mining, petroleum and extractive industry developments in NSW:

- the Department of Planning and Environment (DPE) is responsible for assessing development applications and enforcing development consents for State significant developments under the EP&A Act on behalf of the Minister for Planning; and
- the Environment Protection Authority (EPA) is responsible for issuing and enforcing Environment Protection Licences under the Protection of the Environment Operations Act 1997 (POEO Act).

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1 The Independent Planning Commission is responsible for the determination of State significant development applications and the provision of independent expert advice to the Minister on a range of planning and development matters.
Background

NSW has a long history of mining and extractive industry activity. Mining is a major contributor to the NSW economy, providing direct employment for around 27,000 people, as well as 110,000 people indirectly. Mining is also the State’s largest export industry. In 2016-17, NSW mining exports generated $22.9 billion in revenue and contributed 50% of the State’s merchandise export revenue. The State received $1.6 billion in royalties in 2016-17 which are used to fund infrastructure and services.

The wealth generated by the minerals and extractive industries in NSW is derived from some 37 operating coal mines, 21 operating large metallic mineral mines, many smaller metallic and mineral mines, and numerous construction material operations.

However, mining, petroleum and extractive industry developments can have significant noise and dust impacts on surrounding communities, which may warrant comprehensive mitigation and management, including the application of voluntary land acquisition rights to landowners in some circumstances.

Noise impacts on the community

In assessing and approving developments, the NSW Government aims to protect health, preserve amenity and control intrusive noise.

Noise can interfere with daily activities including conversation, entertainment and studying and can result in increased annoyance and stress. Studies have shown that excessive noise can lead to sleep disturbance and other health impacts. As noise levels rise, health impacts can become more serious.

Dust impacts on the community

Particulate matter (PM) is the term used to describe airborne particles. Both long term (over years) and short term (hours or days) exposure to particulate matter has been linked to health problems. Particles smaller than 10 micrometres (μm) are associated with increased mortality and hospital admissions. Particles smaller than 2.5μm (PM2.5) are of particular concern.

Concerns about amenity often relate to visible dust and are usually associated with particles larger than 10μm in diameter (PM10). Amenity impacts include dust depositing on fabrics (e.g. washing) or on house roofs, and the transport of dust from roofs to water tanks during rain.

Policy rationale

The NSW Government has established a range of policies and guidelines to guide the assessment of the potential impacts of mining, petroleum and extractive industry developments in NSW. These policies and guidelines include assessment criteria to protect the amenity, health and safety of people. They typically require applicants to implement all reasonable and feasible avoidance and/or mitigation measures to minimise the impacts of a development.

In some circumstances, it may not be possible to comply with these assessment criteria even with the implementation of all reasonable and feasible avoidance and/or mitigation measures. This can occur with large resource projects—such as large open cut mines—where the resources are at a fixed location.

However, it is important to recognise that:

- not all exceedances of the relevant assessment criteria equate to unacceptable impacts;
- a consent authority may decide that it is in the public interest to allow the development to proceed, even though there would be exceedances of the relevant assessment criteria, because of the broader social and/or economic benefits of the development; and
• some landowners may be prepared to accept higher impacts on their land, subject to entering suitable negotiated agreements with applicants, which may include the payment of compensation.

The NSW Government recognises such decisions can have social impacts and requires these impacts to be weighed carefully against the benefits of the development. The NSW Government has published guidance on how social impacts should be considered and assessed in the Social Impact Assessment Guideline for State significant mining, petroleum production and extractive industry development (DPE, 2017). By making the decision-making criteria explicit, this policy encourages:

• earlier and better consultation between applicants and affected landowners to find effective solutions to any potential exceedances of the relevant air or noise quality criteria;

• greater avoidance of impacts, either through design decisions or the early acquisition of land that could be significantly affected by a project; and

• innovative approaches to negotiated agreements that help mitigate impacts and are tailored to individual landowner circumstances.

**Approach to decision-making**

There are five essential steps in the application of this policy:

1. The applicant must clearly demonstrate that all viable project alternatives have been considered, and all reasonable and feasible avoidance and mitigation measures have been incorporated into the project design to minimise environmental and social impacts and comply with the relevant assessment criteria. Adequate consultation must have occurred with potentially affected community members to identify and respond to potential social and environmental impacts during the preparation of the environmental impact statement.

2. If the applicant cannot comply with the relevant assessment criteria, or the acquisition or mitigation criteria are likely to be exceeded, then the applicant should consider a negotiated agreement with the affected landowner, or acquisition of the affected land. If the applicant acquires the land, or enters a negotiated agreement with the landowner that addresses the relevant impacts, then that land is not subject to the assessment, mitigation or acquisition criteria set out in this policy, with the exception of the provisions contained under the heading “Use of acquired land”.

3. If the applicant has not acquired the land or entered a negotiated agreement with the landowner, then it is up to the consent authority to weigh up the relevant economic, social and environmental impacts of the development on that land, in accordance with the requirements of section 4.15 of the Environmental Planning & Assessment Act 1979 and to decide whether the development should be approved or not.

4. If the consent authority decides to approve the development, then appropriate conditions need to be imposed on the approval, including the application of voluntary mitigation and land acquisition rights to landowners as required².

5. The applicant must comply with the terms of any negotiated agreement and the conditions of approval.

These steps are outlined in Figure 1 below.

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² The application of voluntary acquisition rights through a development consent should be seen as a mitigation measure of last resort to ensure landowners have the option to avoid noise or particulate matter impacts without personally incurring financial costs.
Design development, incorporating all reasonable and feasible avoidance and/or mitigation measures

Do impacts comply with relevant assessment criteria?

- Yes
  - Approve with standard conditions
  - Comply with approval conditions

- No
  - Is a negotiated agreement in place or has land been acquired?
    - Yes
      - Net benefit?
        - Yes
          - Refuse
        - No
          - Set approval conditions at predicted values and apply voluntary mitigation and/or acquisition rights
    - No
      - Net benefit?
        - Yes
          - Refuse
        - No
          - Comply with approval conditions

Figure 1 – General approach to decision-making during the assessment process
Policy - General

This section explains the general concepts covered in this policy.

Negotiated agreements

Negotiated agreements are private contracts between applicants and landowners, and are the preferred mechanism for managing any exceedances of the relevant assessment criteria, as they:

- can be specifically tailored to the individual circumstances of the landowner;
- can be entered into at any stage of development – but usually prior to a development application being lodged; and
- provide for the implementation of a broader suite of measures, such as financial compensation for impacts, acoustic treatments to buildings and the provision of alternative accommodation (particularly when the exceedances would only occur over short periods).

As with all contracts, the final terms of any negotiated agreement are a matter for the parties to that agreement. The Department has no role in the negotiation, approval or review of negotiated agreements. However, if these agreements are to be used by an applicant in support of their development application, the Department expects that:

- both the applicant and landowner have conducted negotiations 'in good faith'.
- the negotiated agreement:
  - is enforceable in a court of law;
  - remains in force for at least the duration of any predicted exceedance of the relevant assessment criteria;
  - provides for the transfer of obligations to any new owner of the mining development if the mining development is subsequently sold;
  - provides for the transfer of obligations to any new landowner if the subject property is subsequently sold;
  - clearly identifies the scope of all impacts which are the subject of the agreement;
  - provides for ongoing monitoring (if required); and
  - provides for a means of resolving disputes.
- the applicant has taken reasonable steps to ensure that the landowner has been properly informed of the implications of entering the agreement, and has a good understanding of:
  - the scale and nature of the predicted impacts, through the provision of relevant air quality and noise impact predictions; and
the health risks, if any, of being exposed to such impacts.

- the applicant has not attempted to constrain the landowner from reporting a potential breach of the applicant’s conditions of consent.

- the applicant has borne all reasonable costs associated with entering the agreement. This may include the costs associated with:
  - expert advice about relevant matters (including legal advice) to enable the landowner to make informed choices about whether to enter the agreement;
  - drafting the agreement; and
  - making the agreement.

Negotiated agreements can be flexible and innovative—neither party should feel constrained in proposing terms or objectives for the agreement, provided that they are reasonable. However, there are several elements that might be considered for inclusion in the agreement:

- the landowner may be requested to ‘not object’ to the project proceeding;

- the landowner may be requested to accept noise and dust pollution impacts above the thresholds outlined in this policy;

- the applicant may be requested to nominate the maximum impact that the landowner may be subjected to; and

- the applicant may be requested to include private mitigation and acquisition clauses in the agreement (beyond the scope of this policy), which could be triggered if the agreed maximum impact is exceeded.

In determining a development application, consent authorities should give weight to any negotiated agreements where landowners have agreed to accept exceedances and should not:

- apply assessment criteria to land that is subject to a relevant negotiated agreement; or

- grant mitigation or acquisition rights to a landowner that has entered a relevant negotiated agreement, with the exception of the provisions contained under the heading “Use of acquired land”.

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3 For example, for particulate matter impacts, through the provision of the latest version of the NSW Health Fact Sheet - Mine Dust and You.

4 For example, a landowner should not be ‘gagged’ or prevented from reporting a pollution incident. However, the landowner could reasonably be constrained from reporting a noise or air pollution event on their property that is within the terms of their negotiated agreement.

5 A ‘relevant negotiated agreement’ is an agreement where the parties have agreed to terms on a certain exceedance. For example, if a negotiated agreement covers exceedances of air criteria, but not noise criteria, acquisition or mitigation rights could still be applied for noise exceedances.
Voluntary mitigation

Grant of voluntary mitigation rights

Voluntary mitigation rights should be applied to affected landowners when:

- the impacts of the development are predicted to exceed the relevant voluntary mitigation criteria, even with the implementation of all reasonable and feasible avoidance and/or mitigation measures at the source; and
- the consent authority is satisfied that the development is in the public interest and should be approved.

Because the application of voluntary mitigation rights is intended to protect human health and amenity, voluntary mitigation rights should not be applied to vacant land.

If the consent authority grants voluntary mitigation rights to a landowner, the consent conditions should specify:

- the scope of any mitigation rights;
- the period during which these rights are available; and
- the process for requesting and providing these rights, including any dispute resolution process.

If consent is granted, the applicant is expected to notify all landowners granted voluntary mitigation rights under the consent in a timely manner.

Voluntary mitigation process

Under the terms of any conditions of consent, mitigation works can only be carried out by applicants on private land when requested, in writing, by the landowner.

Mitigation measures must be:

- proportionate to the predicted impact;
- available for at least the duration of the predicted exceedance of the relevant voluntary mitigation criteria;
- agreed to by both the applicant and the landowner (or consistent with any ruling of the Secretary if there is a dispute between the applicant and landowner\(^6\));
- reasonable and feasible; and
- directed towards reducing the impacts of the development.

The applicant must bear all reasonable costs associated with providing the voluntary mitigation measures. This may include, but is not limited to, the costs of:

- obtaining independent expert advice to determine the reasonable and feasible mitigation measures that should be implemented;
- installing the measures;

\(^6\) If, within three months of receiving a request from a landowner with mitigation rights, the applicant and the landowner cannot agree on the measures to be implemented, or the implementation of those measures, then either party may refer the matter to the Secretary for resolution.
• operating and maintaining the measures for at least the duration of the predicted exceedance of the relevant voluntary mitigation criteria; and

• any privately acquired dispute resolution or mediation service to aid negotiations.

The process for obtaining these mitigation measures is summarised in Figure 2 below.

Figure 2 – Process for obtaining voluntary mitigation measures
Voluntary acquisition

Grant of voluntary land acquisition rights

Voluntary land acquisition rights should be applied to affected landowners when:

- the impacts of the development are predicted to exceed the relevant voluntary land acquisition criteria, even with the implementation of all reasonable and feasible avoidance and/or mitigation measures; and
- the consent authority is satisfied that the development is in the public interest and should be approved.

Because the application of voluntary land acquisition rights is intended to protect human health and amenity, those rights should not be applied to vacant land other than in the circumstances specifically identified in this policy.

If a consent authority decides to grant voluntary land acquisition rights to a landowner, then:

- it may also decide to grant voluntary mitigation rights to the landowner to minimise the impacts of the development on the landowner prior to any acquisition;
- it should not apply specific limits in the conditions of consent to regulate any exceedences of the relevant criteria on that land as any such impacts will be controlled by the other limits in the conditions; and
- the conditions of the consent should specify:
  - the terms of any acquisition;
  - the period during which these rights are available\(^7\); and
  - the process for securing acquisition, including any dispute resolution.

Under these conditions, applicants will generally be required to acquire, on request, the relevant land where the assessment criteria are exceeded and any contiguous lots owned by the same landowner at the date of the approval\(^8\). If consent is granted, the applicant must notify landowners granted acquisition rights in accordance with the conditions of the consent.

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\(^7\) The period during which the voluntary land acquisition rights are available should be determined taking into account the periods during which the voluntary land acquisition criteria are predicted to be exceeded.

\(^8\) Non-contiguous lots owned by the same landowner may also be considered on a case by case basis, particularly if they are in close proximity and are operated as a single agricultural enterprise.
Voluntary land acquisition process

The terms of voluntary land acquisition rights should be specified in the conditions of the relevant development consent. This section summarises the standard conditions related to acquisition processes:

- Within three months of receiving a written request from a landowner with acquisition rights, the applicant must make a binding written offer to the landowner. At the end of this period, if the landowner and applicant cannot agree on the terms upon which the land is to be acquired (including the acquisition price), either party may refer the matter to the Secretary for resolution.

- Upon receiving such a request, the Secretary will request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:
  - consider submissions from both parties;
  - determine a fair and reasonable acquisition price, with regard to the matters laid out in the relevant consent conditions and summarised below; and
  - prepare a report setting out the reasons for the decision, which is to be provided to both parties.

- Within 14 days of receiving the independent valuer’s report, the applicant must make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer’s determination.

- If either party disputes the valuer’s determination, within 14 days of receiving the report, they may refer the matter back to the Secretary for review. Any such request must include a report that details the reasons for disputing the valuer’s findings. Following consultation with both parties and the valuer, the Secretary will determine a fair and reasonable acquisition price for the land, with regard to the matters laid out in the consent conditions and summarised below.

- Within 14 days of this determination, the applicant must make a binding written offer to the landowner to purchase the land at a price not less than the Secretary’s determination.

- If the landowner refuses to accept the applicant’s offer within six months of it being made, then the applicant’s obligations to acquire the land shall cease, unless the Secretary determines otherwise.

- The applicant must pay all reasonable costs associated with the land acquisition process.

The voluntary acquisition process is summarised in Figure 3.

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9The Department recognises that this timeframe may seem challenging, particularly for regional landowners. However, to meet this requirement, the landowner or applicant must simply notify the Department, in writing and within 14 days of receiving the report, that they intend to dispute the valuer’s determination. This must include an outline of reasons for the dispute. A detailed report can be provided later, where necessary. The notice of dispute must be sent prior to the 14-day timeframe expiring. It need not be received by the Department within 14 days.
Figure 3 – Voluntary land acquisition process
Valuation of land for voluntary acquisition

The process for the valuation of land for acquisition will be specified in the conditions of the relevant development consent. This section summarises the relevant standard conditions:

- An offer price for the acquisition of land under this process must be based on:
  - the current market value of the landowner’s interest in the land at the date of a written request to acquire the land, as if the land was unaffected by the development, and with regard to:
    - the existing and permissible use of the land, in accordance with applicable planning instruments at the date of the written request; and
    - the presence of any improvements on the land and/or any approved building or structure which has been physically commenced at the date of the written request and is due to be completed after that date\(^{10}\);
  - the reasonable costs associated with:
    - relocating within the relevant local government area, or to any other local government area determined by the Secretary; and
    - obtaining legal advice and expert advice for determining the acquisition price of the land and the terms upon which it is to be acquired; and
  - reasonable compensation for any disturbance caused by the voluntary land acquisition process.

- Calculation of compensation for disturbance should consider the matters identified by section 55 of the Land Acquisition (Just Terms Compensation) Act 1991, which includes:
  - any special value of the land to the person on the date of its acquisition;
  - any loss attributable to severance;
  - any loss attributable to disturbance;
  - the disadvantage resulting from relocation; and
  - any increase or decrease in the value of any other land owned by the landowner, at the date of written request, which adjoins or is severed from the acquired land, but is not intended to be acquired.

Any maximum compensatory amount applied by the Land Acquisition (Just Terms Compensation) Act 1991, either for a land acquisition or a component thereof, does not apply to voluntary acquisition under this policy.

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\(^{10}\) In particular, the cost of installing any existing voluntary mitigation measures may be excluded from the acquisition price if the installation of these measures increased the market value of the land.
Use of acquired land

Land acquired by the applicant could have existing tenants or be leased to new tenants.

In circumstances where relevant mitigation or acquisition criteria are likely to be exceeded on land acquired by the applicant, the applicant must ensure that:

- existing, prospective and/or new tenants are properly informed of:
  - the scale and nature of the predicted impacts, through the provision of relevant air quality and noise impact predictions; and
  - the health risks, if any, of being exposed to such impacts;¹¹

- any tenant can terminate their lease agreement without penalty at any time during the development if the noise or particulate matter impacts are exceeding the relevant mitigation or acquisition criteria; and

- in the case where an existing tenant¹² decides to move to avoid the impacts of the development, the applicant pays the reasonable costs associated with that tenant moving to alternative accommodation.

Management of cumulative impacts

In areas with intensive mining development, there may be an overlap between the mitigation or acquisition zone of one mining company and another. In such circumstances, each mining company is responsible for managing the impacts of any mining development on its land in accordance with this policy and the conditions of the relevant development consent(s).

¹¹ For example, for particulate matter impacts, through the provision of the latest version of the NSW Health Fact Sheet: Mine Dust and You.

¹² ‘Existing tenant’ means a lawful tenant who occupied the land prior to the approval of the subject mining development.
Policy - Noise

This section explains how this policy applies to noise impacts.

Assessment criteria

Applicants are required to assess the impacts of the development in accordance with the:

- Noise Policy for Industry (EPA 2017) (NPI);
- Rail Infrastructure Noise Guideline (EPA 2013) (RING);
- Road Noise Policy (DECCW 2011) (RNP); and

These policies and guidelines seek to strike an appropriate balance between supporting the economic development of NSW and protecting the amenity and wellbeing of the community. They recommend standards for regulating the construction, operational, road and rail noise impacts of a development, and require applicants to implement all reasonable and feasible avoidance and mitigation measures.

These standards are generally conservative, and it does not automatically follow that exceedances of the relevant criteria will result in unacceptable impacts.

Mitigation and acquisition criteria

A consent authority can apply voluntary mitigation and voluntary land acquisition rights to reduce:

- operational noise impacts of a development on privately owned land; and
- rail noise impacts of a development on privately owned land near a non-network rail line (private rail line), that is on, or exclusively servicing an industrial site (see Appendix 3 of the RING);

But not:

- construction noise impacts, as these impacts are shorter term and can be controlled;
- noise impacts on the public road or rail network; or
- modifications of existing developments with legacy noise issues, where the modification would have beneficial or negligible noise impacts.\(^3\)

\(^3\)Noise issues for existing premises may be addressed through sitespecific pollution reduction programs under the Protection of the Environment Operations Act 1997.
Process for decision-making on noise impacts

The decision-making process which should be applied by a consent authority under this policy is summarised in Figure 4 below.

Figure 4 – Decision-making process for noise impacts

14 The reference in Figure 4 to ‘net benefit’, means that if, after weighing up the positive and negative impacts of the project as a whole, the consent authority is of the opinion that on balance there is a net benefit to the project proceeding, voluntary acquisition and mitigation rights should be considered for any land that is predicted to experience significant impacts (as defined by Table 1). Where the consent authority determines that, on balance, there is not a net benefit to the project, the development application would be refused.
Table 1 (see following page) summarises the NSW Government’s interpretation of the significance of any potential exceedances of the relevant noise assessment criteria, and identifies potential treatments for those exceedances.

**Voluntary mitigation rights**

A consent authority should only apply voluntary mitigation rights where, even with the implementation of best practice management at the mine site:

- the noise generated by the development would meet the requirements in Table 1 (see following page), such that the impacts would be characterised as marginal, moderate or significant, at any residence on privately owned land; or
- the development would increase the total industrial noise level at any residence on privately owned land by more than 1dB(A) and noise levels at the residence are already above the recommended amenity noise levels in Table 2.2 of the Noise Policy for Industry; or
- the development includes a private rail line and the use of that private rail line would cause exceedances of the recommended acceptable levels in Table 6 of Appendix 3 of the RING by greater than or equal to 3dB(A) at any residence on privately owned land.

All noise levels must be calculated in accordance with the NPI or RING (as applicable).

The selection of mitigation measures should be guided by the potential treatments identified in Table 1 (see following page).

**Voluntary land acquisition rights**

A consent authority should only apply voluntary land acquisition rights where, even with the implementation of best practice management:

- the noise generated by the development would be characterised as significant, according to Table 1 (see following page), at any residence on privately owned land; or
- the noise generated by the development would contribute to exceedances of the acceptable noise levels plus 5dB in Table 2.2 of the NPI on more than 25% of any privately-owned land where there is an existing dwelling or where a dwelling could be built under existing planning controls; or
- the development includes a private rail line and the use of that private rail line would cause exceedances of the recommended maximum criteria in Table 6 of Appendix 3 of the RING at any residence on privately owned land.

All noise levels must be calculated in accordance with the NPI or RING (as applicable).

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15 Voluntary land acquisition rights should not be applied to address noise levels on vacant land other than to vacant land specifically meeting these criteria.
### Table 1 – Characterisation of noise impacts and potential treatments\(^{16}\)

<table>
<thead>
<tr>
<th>If the predicted noise level minus the project noise trigger level(^{7}) is:</th>
<th>And the total cumulative industrial noise level is:</th>
<th>Characterisation of impacts:</th>
<th>Potential treatment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>All time periods</td>
<td>Not applicable</td>
<td>Impacts are considered to be <strong>negligible</strong></td>
<td>The exceedances would not be discernable by the average listener and therefore would not warrant receiver based treatments or controls</td>
</tr>
<tr>
<td>0-2dB(A)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All time periods</td>
<td>• (\leq) recommended amenity noise level in Table 2.2 of the NPfI; or</td>
<td>Impacts are considered to be <strong>marginal</strong></td>
<td>Provide mechanical ventilation / comfort condition systems to enable windows to be closed without compromising internal air quality / amenity.</td>
</tr>
<tr>
<td>3-5dB(A)</td>
<td>• (&gt;) recommended amenity noise level in Table 2.2 of the NPfI, but the increase in total cumulative industrial noise level resulting from the development is (\leq)1dB</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All time periods</td>
<td>(&gt;) recommended amenity noise level in Table 2.2 of the NPfI, and the increase in total cumulative industrial noise level resulting from the development is (&gt;)1dB</td>
<td>Impacts are considered to be <strong>moderate</strong></td>
<td>As for marginal impacts but also upgraded façade elements like windows, doors or roof insulation, to further increase the ability of the building façade to reduce noise levels.</td>
</tr>
<tr>
<td>3-5dB(A)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day and evening</td>
<td>• (\leq) recommended amenity noise levels in Table 2.2 of the NPfI</td>
<td>Impacts are considered to be <strong>moderate</strong></td>
<td>As for marginal impacts but also upgraded façade elements like windows, doors or roof insulation, to further increase the ability of the building façade to reduce noise levels.</td>
</tr>
<tr>
<td>(&gt;5dB(A))</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day and evening</td>
<td>(&gt;) recommended amenity noise levels in Table 2.2 of the NPfI</td>
<td>Impacts are considered to be <strong>significant</strong></td>
<td>Provide mitigation as for moderate impacts and see voluntary land acquisition provisions above.</td>
</tr>
<tr>
<td>(&gt;5dB(A))</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Night</td>
<td>Not applicable</td>
<td>Impacts are considered to be <strong>significant</strong></td>
<td>Provide mitigation as for moderate impacts and see voluntary land acquisition provisions above.</td>
</tr>
<tr>
<td>(&gt;5dB(A))</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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\(^{16}\) Adapted from the Noise Policy for Industry (NPfI) (EPA 2017).

\(^{17}\) See section 2.1 of the NPfI for an explanation of project noise trigger levels.
Policy – Particulate matter

This section explains how the policy applies to particulate matter impacts.

Assessment criteria

Applicants are required to assess the impacts of the development in accordance with the Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA 2016) (Approved Methods). While exceedances of these criteria will increase the human health risks of a development, the consent authority may determine the additional risk to be acceptable, particularly when the broader social and economic benefits of the development are taken into consideration.

Mitigation and acquisition criteria

Process for decision-making on air quality impacts

The decision-making process which should be applied by a consent authority under this policy is summarised in Figure 5 below.
Assess development application against relevant particulate matter assessment criteria

Compliant?

Yes

No

Exceeds mitigation criteria (see Table 2)

Approve with standard conditions

Comply with approval conditions

No

Exceeds acquisition criteria (see Table 3)

Acquisition or negotiated agreement in place?

Yes

Net benefit?

No

Approve with voluntary mitigation and acquisition rights

Approve and implement agreement

Comply with negotiated agreement

No

Approve with voluntary mitigation rights

Comply with approval conditions

Refuse

Figure 5 – Decision-making process for particulate matter impacts

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The reference in Figure 5 to ‘net benefit’, means that if, after weighing up the positive and negative impacts of the project as a whole, the consent authority is of the opinion that on balance there is a net benefit to the project proceeding, voluntary acquisition and mitigation rights should be considered for any land that is predicted to experience significant impacts (as defined by Tables 2 and 3). Where the consent authority determines that, on balance, there is not a net benefit to the project, the development application would be refused.
**Voluntary mitigation rights**

A consent authority should only apply voluntary mitigation rights where, even with the implementation of best practice management, the development contributes to exceedances of the mitigation criteria set out in Table 2:

- at any residence on privately owned land; or
- at any workplace on privately owned land where the consequences of those exceedances in the opinion of the consent authority are unreasonably deleterious to worker health or the carrying out of business at that workplace, including consideration of the following factors:
  - the nature of the workplace;
  - the potential for exposure of workers to elevated levels of particulate matter;
  - the likely period of exposure; and
  - the health and safety measures already employed in that workplace.

Mitigation measures in these circumstances should be directed towards reducing the potential human health and amenity impacts of the development at a residence or at a workplace, and must be directly relevant to the mitigation of those impacts. These measures may include (for example):

- air conditioning, including heating;
- insulation;
- first flush water systems;
- installation and regular replacement of water filters;
- cleaning of rainwater tanks;
- clothes dryers; and
- regular cleaning of any residence and its related amenities, such as barbeque areas and swimming pools.
**Table 2 – Particulate matter mitigation criteria**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging period</th>
<th>Mitigation criterion</th>
<th>Impact type</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{2.5}$</td>
<td>Annual</td>
<td>8 µg/m$^3$ *</td>
<td>Human health</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>24 hours</td>
<td>25 µg/m$^3$ **</td>
<td>Human health</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>Annual</td>
<td>25 µg/m$^3$ *</td>
<td>Human health</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>24 hours</td>
<td>50 µg/m$^3$ **</td>
<td>Human health</td>
</tr>
<tr>
<td>Total suspended particulates (TSP)</td>
<td>Annual</td>
<td>90 µg/m$^3$ *</td>
<td>Amenity</td>
</tr>
<tr>
<td>Deposited dust</td>
<td>Annual</td>
<td>2 g/m$^2$/month **</td>
<td>Amenity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 g/m$^2$/month *</td>
<td></td>
</tr>
</tbody>
</table>

* Cumulative impact (i.e. increase in concentrations due to the development plus background concentrations due to all other sources).

** Incremental impact (i.e. increase in concentrations due to the development alone), with zero allowable exceedences of the criteria over the life of the development.

**Voluntary land acquisition rights**

A consent authority should only apply voluntary acquisition rights where, even with the implementation of best practice management, the development is predicted to contribute to exceedances of the acquisition criteria set out in Table 3:

- at any residence on privately owned land; or

- at any workplace on privately owned land where the consequences of those exceedances in the opinion of the consent authority are unreasonably deleterious to worker health or the carrying out of business at that workplace, including consideration of the following factors:
  - the nature of the workplace;
  - the potential for exposure of workers to elevated levels of particulate matter;
  - the likely period of exposure; and
  - the health and safety measures already employed in that workplace; or

- on more than 25% of any privately-owned land where there is an existing dwelling or where a dwelling could be built under existing planning controls.

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19 Criteria are adapted from Approved Methods for the Modelling and Assessment of Air Pollutants in NSW EPA 2016.

20 Voluntary land acquisition rights should not be applied to address particulate matter levels on vacant land other than to vacant land specifically meeting these criteria.
All particulate matter levels must be calculated in accordance with Approved Methods.

**Table 3 – Particulate matter acquisition criteria**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Averaging period</th>
<th>Acquisition criterion</th>
<th>Impact type</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM$_{2.5}$</td>
<td>Annual</td>
<td>8 µg/m$^3$*</td>
<td>Human health</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>24 hours</td>
<td>25 µg/m$^3$**</td>
<td>Human health</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>Annual</td>
<td>25 µg/m$^3$*</td>
<td>Human health</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>24 hours</td>
<td>50 µg/m$^3$**</td>
<td>Human health</td>
</tr>
<tr>
<td>Total suspected</td>
<td>Annual</td>
<td>90 µg/m$^3$*</td>
<td>Amenity</td>
</tr>
<tr>
<td>particulates (TSP)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deposited dust</td>
<td>Annual</td>
<td>2 g/m$^2$/month**</td>
<td>Amenity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 g/m$^2$/month*</td>
<td></td>
</tr>
</tbody>
</table>

* Cumulative impact (i.e. increase in concentrations due to the development plus background concentrations due to all other sources).

** Incremental impact (i.e. increase in concentrations due to the development alone), with up to five allowable exceedances of the criteria over the life of the development.

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$^{21}$ Criteria are adapted from Approved Methods for the Modelling and Assessment of Air Pollutants in NSW EPA 2016.
Definitions

applicant means the person entitled to the benefit of the development consent that authorises a mining or extractive industry development.

feasible relates to engineering considerations and what is practical to build or implement.

land means the whole of a lot, including contiguous lots. In certain circumstances this may also include non-contiguous lots, as outlined in this policy.

negotiated agreement means an agreement involving the negotiation of a package of mitigation and/or compensatory benefits for landowners of affected land. The agreement is negotiated between the applicant and the landowner.

privately owned land means land that is not owned by a public agency or a mining, petroleum or extractive industry company (or its subsidiary).

reasonable relates to the application of judgment in arriving at a decision, taking into account: mitigation benefits, costs versus benefits provided and the nature and extent of potential improvements.

Secretary means the Secretary of the Department of Planning and Environment or any person authorised to act on their behalf.

workplace includes a lawfully operating office, industrial premises or intensive agricultural enterprise where employees are grouped together in a defined location, but does not include broad-acre agricultural land, heavy, hazardous or offensive industry or businesses intentionally located close to mining operations.