



Voluntary Land Acquisition and Mitigation Policy

DRAFT

*For State Significant
Mining, Petroleum and
Extractive Industry
Developments*

November 2017

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

November 2017 © Crown Copyright 2017 NSW Government

Disclaimer

While every reasonable effort has been made to ensure that this document is correct at the time of printing, the State of NSW, its agents and employees, disclaim any and all liability to any person in respect of anything or the consequences of anything done or omitted to be done in reliance or upon the whole or any part of this document.

Copyright notice

In keeping with the NSW Government's commitment to encourage the availability of information, you are welcome to reproduce the material that appears in 'Voluntary Land Acquisition and Mitigation Policy: For State Significant Mining, Petroleum and Extractive Industry Developments' for personal, in-house or non-commercial use without formal permission or charge. All other rights are reserved. If you wish to reproduce, alter, store or transmit material appearing in the 'Voluntary Land Acquisition and Mitigation Policy: For State Significant Mining, Petroleum and Extractive Industry Developments' for any other purpose, a request for formal permission should be directed to Resources and Industry Policy, NSW Department of Planning and Environment, GPO Box 39, Sydney NSW 2001.

Contents

Preliminary	4
Purpose	4
Application	4
Commencement	4
Regulatory responsibilities	4
Background	5
Policy - General	8
Negotiated agreements	8
Voluntary mitigation	10
Voluntary acquisition	12
Use of acquired land	14
Policy - Noise	16
Assessment criteria	16
Mitigation and acquisition criteria	16
Policy – Particulate matter	21
Assessment criteria	21
Mitigation and acquisition criteria	21
Definitions	25

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 Planning¹; and

¹The independent Planning Assessment Commission is responsible for the determination of development applications when those matters are delegated to it by the Minister, and the provision of independent expert advice to the Minister on a range of planning and development matters.

- 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).

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 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 $2.5\mu\text{m}$ ($\text{PM}_{2.5}$) are of particular concern.

Concerns about amenity often relate to visible dust and are usually associated with particles larger than $10\mu\text{m}$ in diameter (PM_{10}). 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 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 Government recognises such decisions can have social impacts and requires these impacts to be weighed carefully against the benefits of the development. The 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, 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, in accordance with the requirements of section 79C 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 some 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.

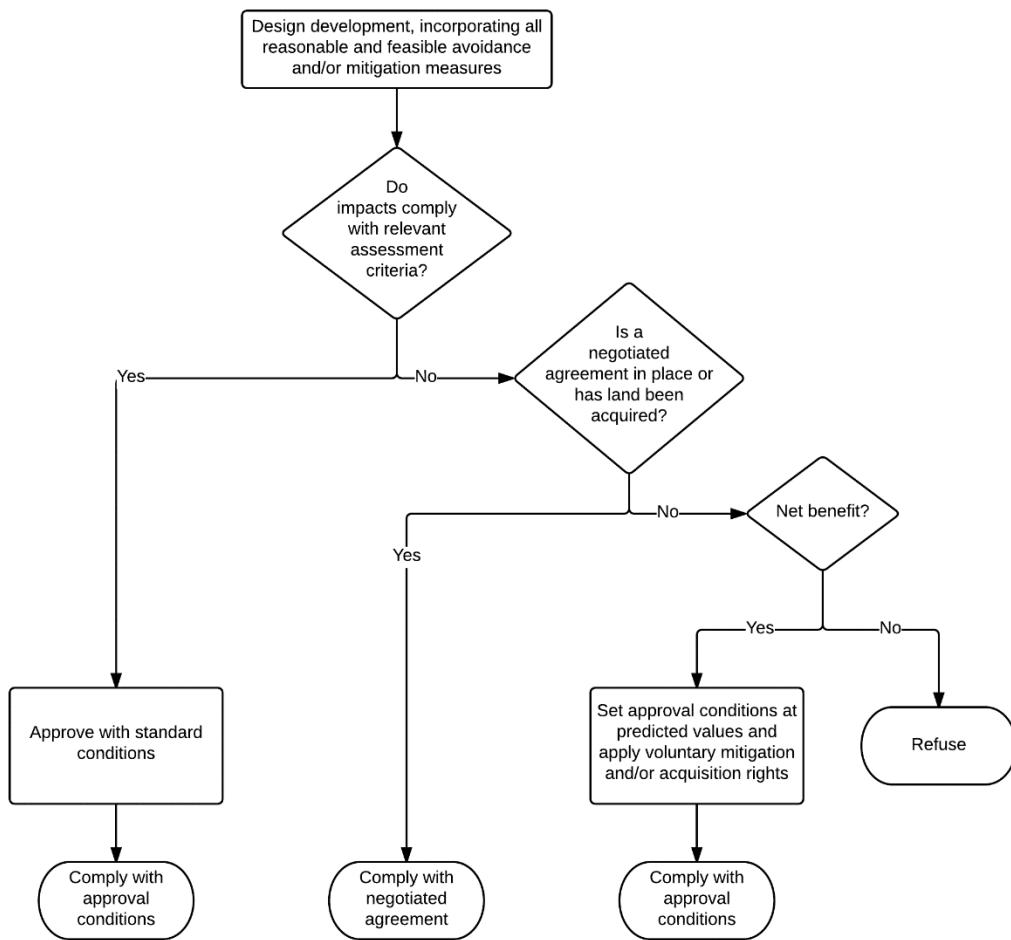


Figure 1 – General approach to decision-making during the assessment process

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.

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 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).

Applicants must ensure that landowners are properly informed of the implications of entering such agreements, and have 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 impacts³.

To ensure these agreements are effective, it is also important to ensure that they comply with certain minimum standards. Negotiated agreements must:

- be enforceable in a court of law;
- remain in force for at least the duration of any predicted exceedance of the relevant assessment criteria;
- provide for the transfer of obligations to any new owner of the mining development if the mining development is subsequently sold;
- provide for the transfer of obligations to any new landowner if the subject property is subsequently sold;
- clearly identify the scope of all impacts which are the subject of the agreement;
- provide for ongoing monitoring (if required);
- provide for a means of resolving disputes; and

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

- applicants may not constrain landowners from reporting breaches of approval conditions, particularly related to pollution impacts or safety issues, except for those issues specifically addressed by the agreement⁴.

The applicant should bear all reasonable costs associated with entering the agreement. This may include the costs associated with:

- providing expert advice about relevant matters (including legal advice) to landowners to enable them to make informed choices about whether to enter an agreement;
- drafting any agreement; and
- making any agreement.

Negotiated agreements can be flexible and innovative. Neither party should feel constrained in proposing content or objectives for the agreement (beyond the minimum standards outlined above). For example, landowners may wish to continue to own and farm their land, but live elsewhere.

There are several elements that might be reasonably expected to be considered for inclusion in the agreement:

- landowners may be reasonably requested to ‘not object’ to the project proceeding;
- landowners may be reasonably requested to accept noise and dust pollution impacts above the thresholds outlined in this Policy;
- applicants may be reasonably requested to nominate in the agreement the maximum impact that the landowner may be subjected to;
- applicants may be reasonably requested to include private mitigation and acquisition clauses in the agreement (beyond the scope of this policy), if the maximum impact is exceeded; and

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.

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 the land that is subject to a relevant negotiated agreement⁵; and
- grant mitigation or acquisition rights to a landowner that has agreed a relevant negotiated agreement, with the exception of the provisions contained under the heading “Use of acquired land”.

⁴ For example, a landowner should not be ‘gagged’ or prevented from reporting a pollution incident. However, the landowner may not reasonably report a breach of noise and air pollution criteria on their property that is within the limits of the 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. The standard process for obtaining these mitigation measures is summarised in Figure 2 below. 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 landowner⁶);
- reasonable and feasible; and
- directed towards reducing the impacts of the development.

The applicant must bear all reasonable costs associated with determining and providing the voluntary mitigation measures, including the ongoing maintenance of those 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;

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.

- installing the measures;
- operating 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.

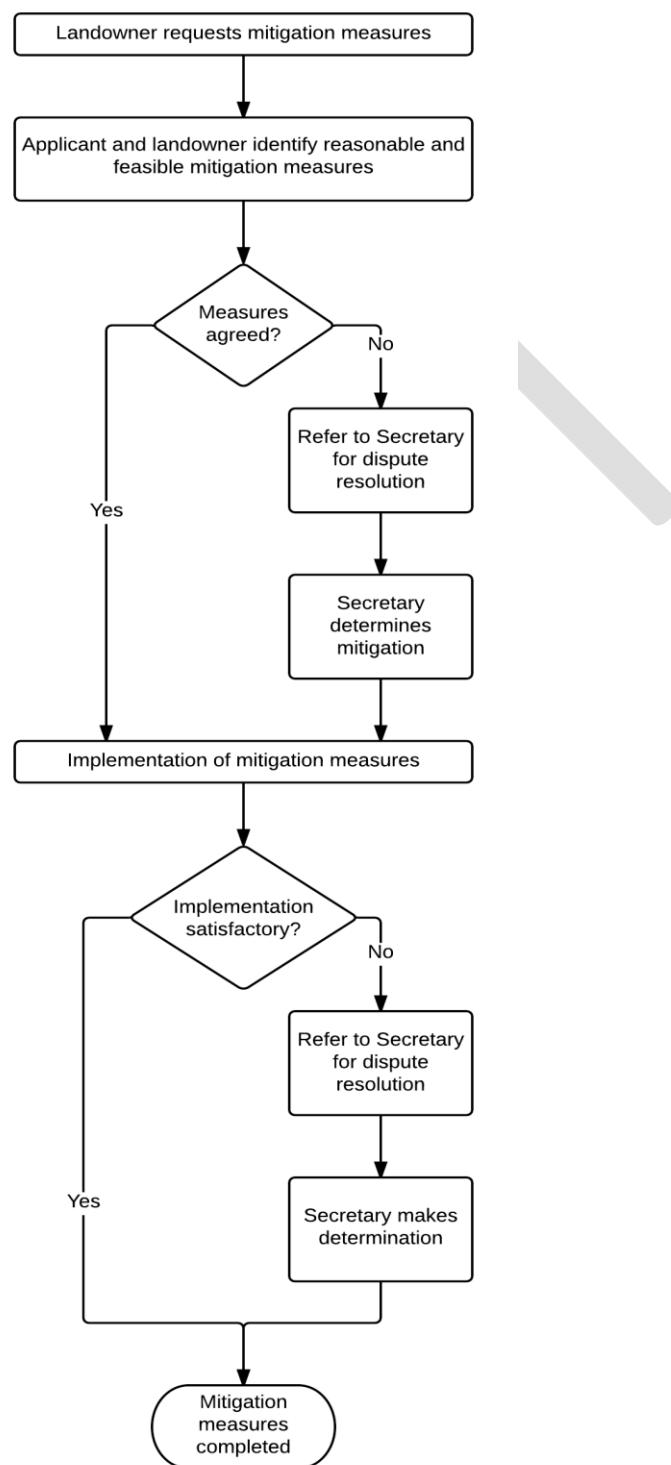


Figure 2 – Process for obtaining voluntary mitigation measures

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 exceedances 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 available⁷; 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 approval⁸. If consent is granted, the applicant must notify landowners granted acquisition rights in accordance with the conditions of the consent.

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. The standard process for voluntary land acquisition is summarised in Figure 3.

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.

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.

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 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 the 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, unless the Secretary agrees to an extension, the applicant's obligations to acquire the land shall cease.

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

The voluntary acquisition process is summarised in Figure 3.

Valuation of land for voluntary acquisition

The valuation of land for acquisition will be specified in the conditions of the relevant development consent. This section summarises the standard conditions related to the voluntary land acquisition processes.

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:
 - existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and
 - 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;
- 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.

The current market value of the land should be calculated as if the land was unaffected by the development. However, the cost of installing any existing voluntary mitigation measures may be excluded from the acquisition price if the installation of these measures has increased the market value of the land.

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.

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 impacts⁹.
- 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 tenant¹⁰ decides to move to avoid the impacts of the development, pay the reasonable costs associated with that tenant moving to alternative accommodation.

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).

⁹ For example, for particulate matter impacts, through the provision of the latest version of the NSW Health Fact Sheet - *Mine Dust and You*.

¹⁰ 'Existing tenant' means a lawful tenant who occupied the land prior to the approval of the subject mining development.

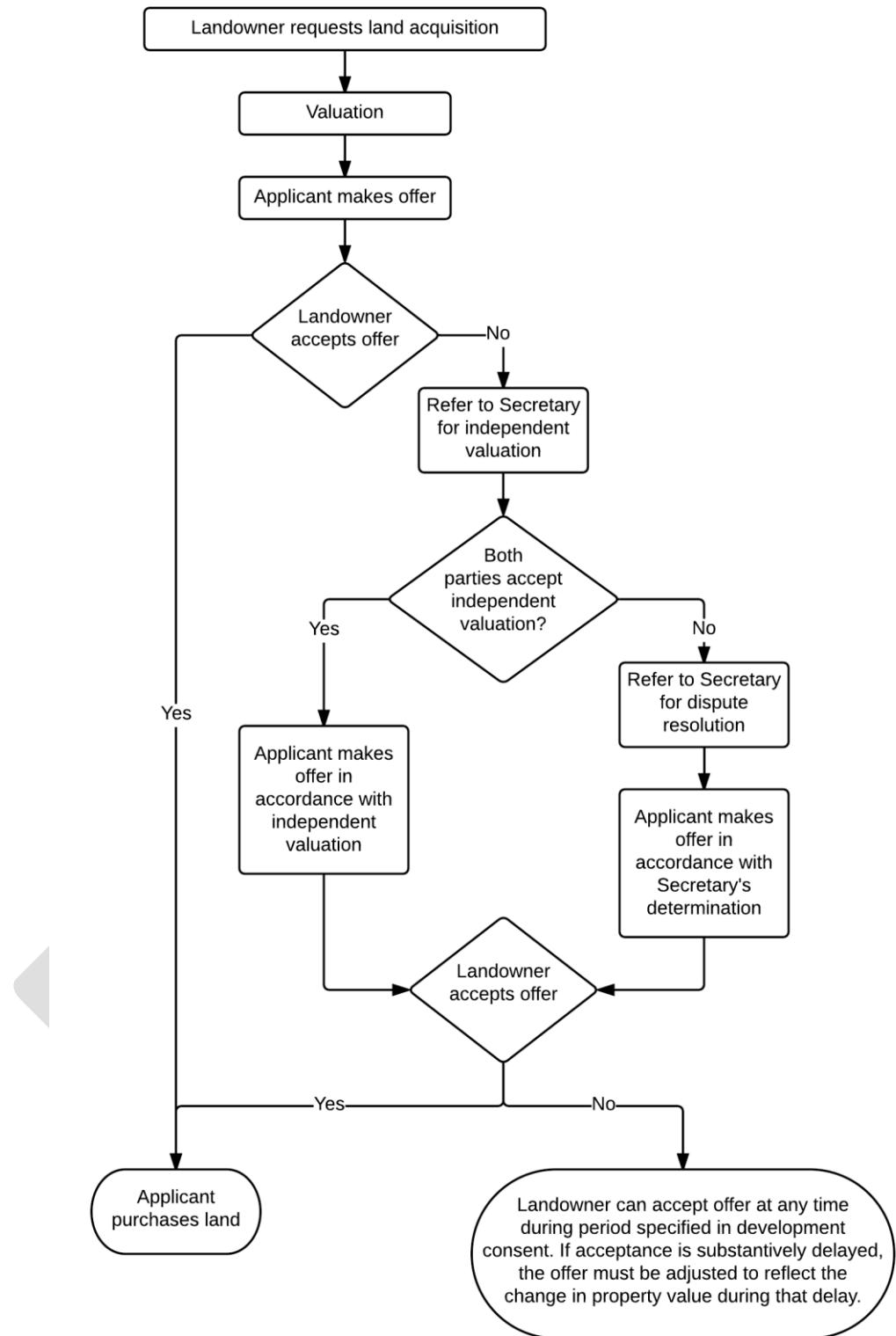


Figure 3 – Voluntary land acquisition process

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) (NPfI);
- *Rail Infrastructure Noise Guideline* (EPA 2013) (RING);
- *Road Noise Policy* (DECCW 2011) (RNP); and
- *Interim Construction Noise Guideline* (DECC 2009) (ICNG).

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 non-network rail lines (private rail lines), that is on or exclusively servicing industrial sites (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 impacts¹¹.

¹¹Noise issues for existing premises may be addressed through site-specific 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.

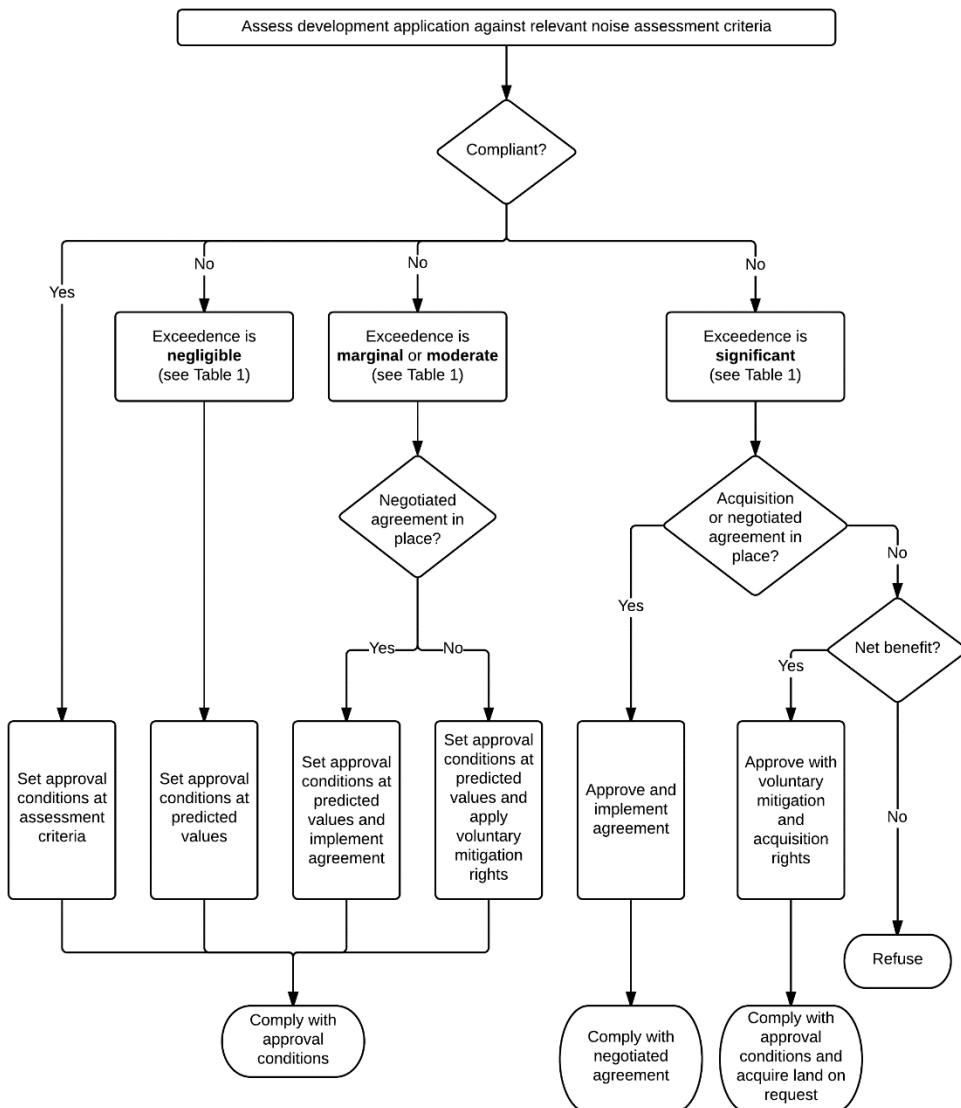


Figure 4 – Decision-making process for noise impacts

Table 1 below summarises the NSW Government's interpretation of the significance of any potential exceedances of the relevant noise assessment criteria, and identifies potential treatments for these exceedances.

Voluntary mitigation rights

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

- the noise generated by the development would meet the requirements outlined in either rows 3 or 4 of Table 1 below 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 NPfI; 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 NPfI or RING (as applicable).

The selection of mitigation measures should be guided by the potential treatments identified in Table 1 below.

Table 1 – Characterisation of noise impacts and potential treatments¹²

If the predicted noise level minus the PNTL ¹³ is:	And the total cumulative industrial noise level is:	Characterisation of impacts:	Potential treatment:
0-2dB(A)	Not applicable	Impacts are considered to be negligible	The exceedances would not be discernable by the average listener and therefore would not warrant receiver based treatments or controls
3-5dB(A)	< recommended amenity noise level in Table 2.2 of the NPfI ¹⁴	Impacts are considered to be marginal	Provide mechanical ventilation / comfort condition systems to enable windows to be closed without compromising internal air quality / amenity.
	> 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 ≤1dB	Impacts are considered to be marginal	
3-5dB(A)	> 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 >1dB	Impacts are considered to be moderate	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.
>5dB(A)	≤ recommended amenity noise levels in Table 2.2 of the NPfI		
>5dB(A)	> recommended amenity noise levels in Table 2.2 of the NPfI	Impacts are considered to be significant	Provide mitigation as for moderate impacts and see

¹² Adapted from the *Noise Policy for Industry*(EPA 2017).

¹³ PNTL = project noise trigger level, which is explained in section 2.1 of the NPfI

¹⁴ NPfI = *Noise Policy for Industry*(EPA 2017)

voluntary land acquisition
provisions below.

DRAFT

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 meet the requirements outlined in row five of Table 1 above 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 NPfI 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 controls¹⁵; 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 NPfI or RING (as applicable).

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.

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.

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.

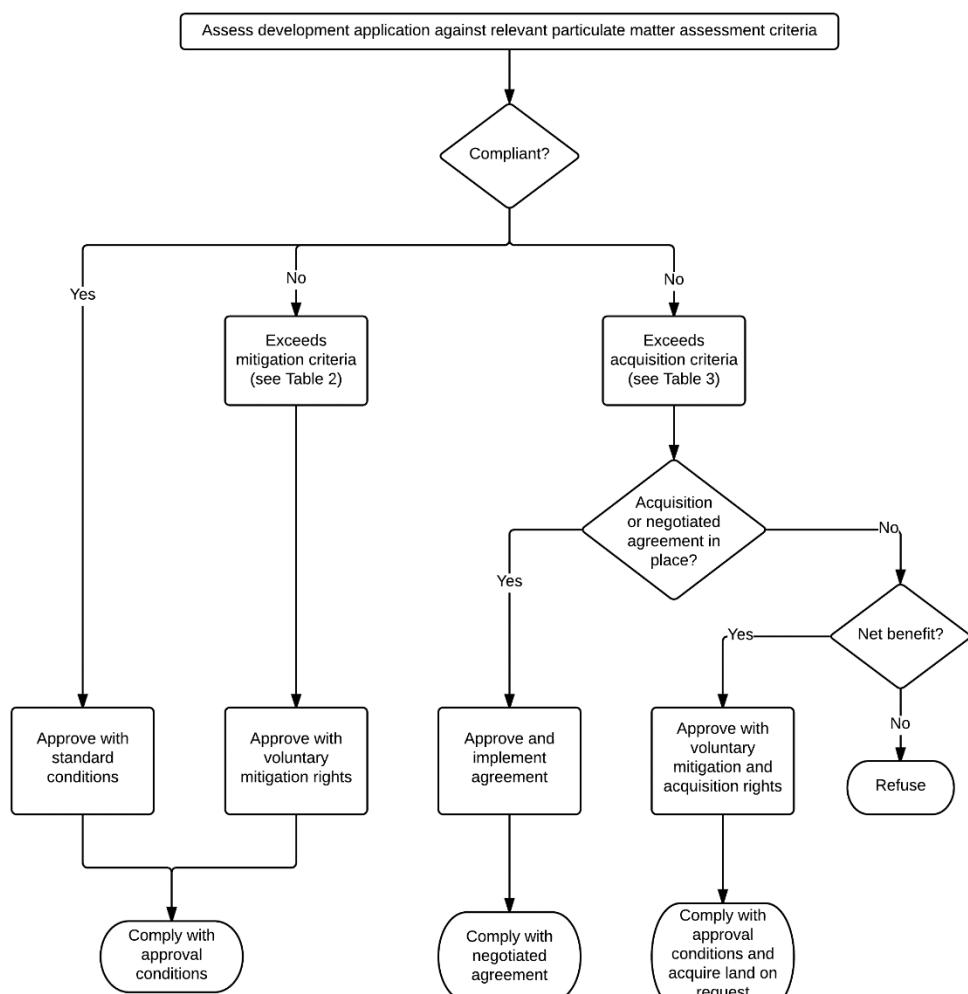


Figure 5 – Decision-making process for particulate matter impacts

Table 2 – Particulate matter mitigation criteria¹⁶

Pollutant	Averaging Period	Mitigation Criterion	Impact Type
PM _{2.5}	Annual	8 µg/m ³ *	Human health
PM _{2.5}	24 hours	25 µg/m ³ **	Human health
PM ₁₀	Annual	25 µg/m ³ *	Human health
PM ₁₀	24 hours	50 µg/m ³ **	Human health
Total suspended particulates (TSP)	Annual	90 µg/m ³ *	Amenity
Deposited dust	Annual	2 g/m ² /month**	Amenity
		4 g/m ² /month*	

* 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 exceedances 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 mitigation 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 controls¹⁷.

All particulate matter levels must be calculated in accordance with Approved Methods.

¹⁶ Criteria are adapted from *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW*(EPA 2016).

¹⁷ 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.

Table 3 – Particulate matter acquisition criteria¹⁸

Pollutant	Averaging Period	Acquisition Criterion	Impact Type
PM _{2.5}	Annual	8 µg/m ³ *	Human health
PM _{2.5}	24 hours	25 µg/m ³ **	Human health
PM ₁₀	Annual	25 µg/m ³ *	Human health
PM ₁₀	24 hours	50 µg/m ³ **	Human health
Total suspected particulates (TSP)	Annual	90 µg/m ³ *	Amenity
Deposited dust	Annual	2 g/m ² /month** 4 g/m ² /month*	Amenity

* 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.

¹⁸ 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 owned by the same landowner.
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.