

MANGOOLA OPEN CUT

GLENCORE



Noise Management Plan

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1. Introduction

1.1 Overview of Approved Operations

Mangoola Coal Operations Pty Limited (Mangoola) operates an open cut coal mine located near Wybong, approximately 20 kilometres west of Muswellbrook and approximately 10 kilometres north of Denman in the Muswellbrook Local Government Area (refer to **Figure 1-1**). Mangoola operated Mangoola Coal Mine under Project Approval (PA) 06_0014 from the commencement of mining in September 2010 until April 2021.

In April 2021, Mangoola was granted Development Consent under Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) for State Significant Development (SSD) 8642 by the NSW Independent Planning Commission (IPC) for continued operations at the Mangoola Coal Mine. SSD 8642 enables the continuation of mining at Mangoola Coal Mine at up to 13.5 million tonnes per annum (Mtpa) of Run of Mine (ROM) coal through to 2030. The Project Boundary for Mangoola Coal Mine is presented in **Figure 1-1**.

In accordance with SSD 8642, operations permitted to be undertaken at Mangoola Coal Mine generally comprise:

- Open cut mining at up to 13.5 Mtpa ROM coal using truck and excavator mining methods through to 2030.
- Continued operations within the existing Mangoola Coal Mine including the use of existing infrastructure facilities.
- Mining operations in a mining area located north of Wybong Road, south of Ridgeland's Road and east of the 500 kilovolt (kV) Electricity Transmission Line (ETL).
- Usage of a haul road overpass over Big Flat Creek and Wybong Road.
- Establishment of an out-of-pit overburden emplacement area.
- Construction of a bridge over Wybong Creek on Yarraman Road.

Figure 1-2 illustrates the key features of the Mangoola operation as approved by SSD 8642.

Further detailed description of approved operations associated with SSD 8642 is provided in Chapter 3 of the **Mangoola Coal Continued Operations (MCCO) Project Environmental Impact Statement** (EIS) (EIS; Umwelt, 2019) along with other supporting material, as defined and listed in SSD 8642. The MCCO Project EIS was supported by a **Noise Impact Assessment** (NIA) (Global Acoustics 2019). The NIA findings and noise mitigation measures relevant to the preparation of this Noise Management Plan (NMP) have been incorporated into this document.

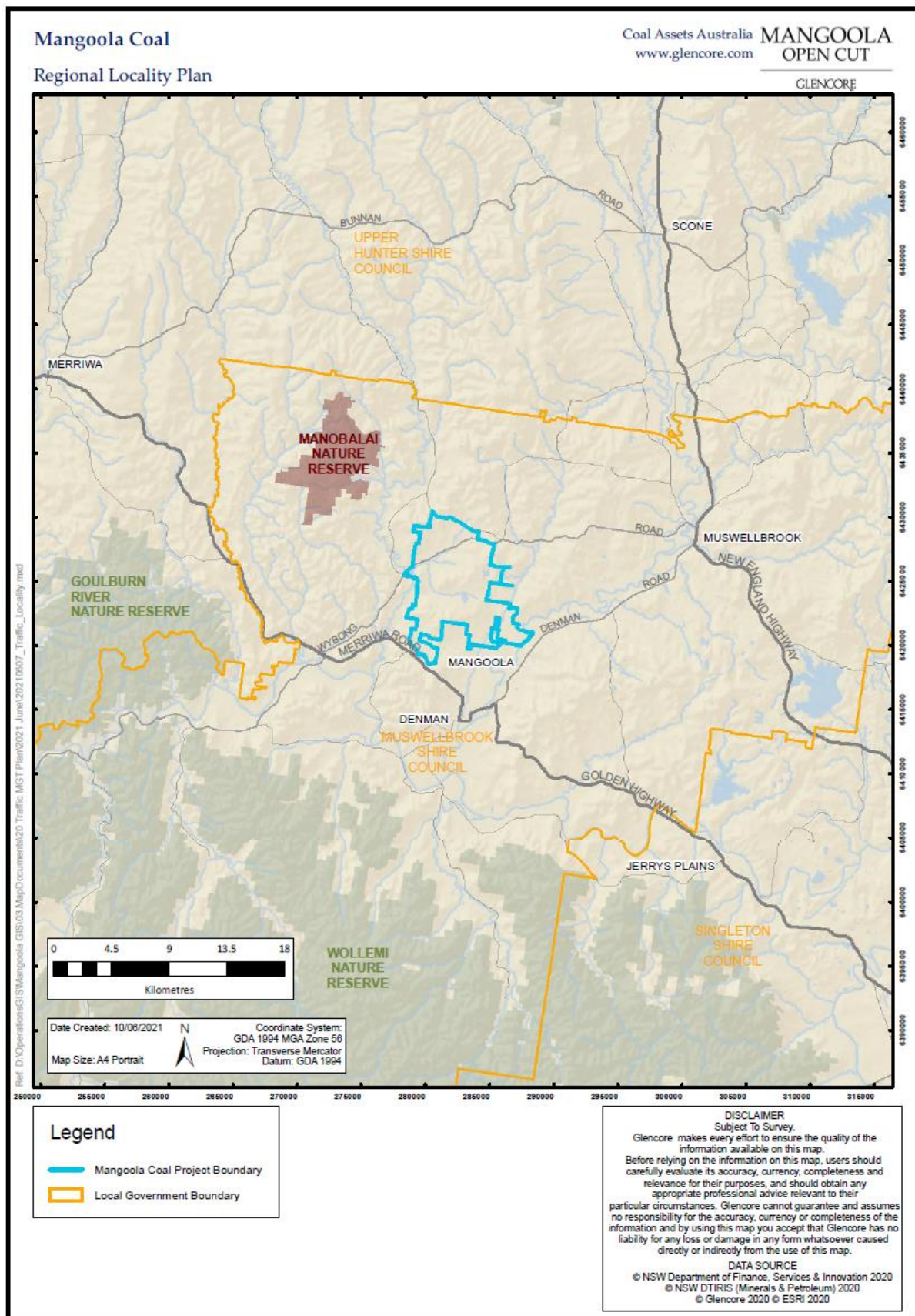


Figure 1-1 - Regional Context

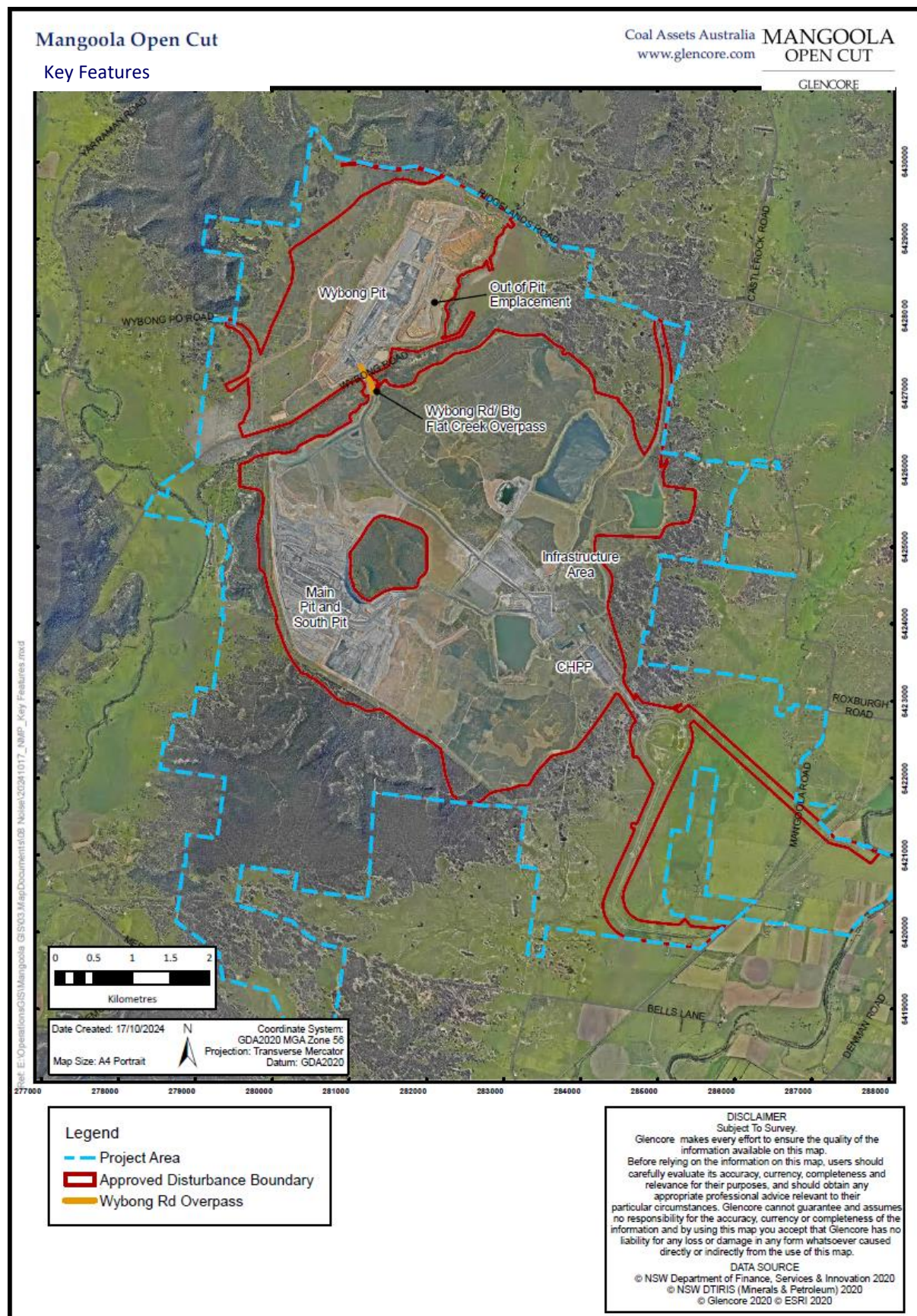


Figure 1-2 - Key Features of the Mangoola Operation

1.2 Purpose and Scope

This NMP has been prepared to address Condition B8 of SSD 8642 and is required to be prepared to the satisfaction of the Planning Secretary.

In accordance with Condition B8(a) of SSD 8642, this NMP has been prepared by Katie Teyhan, associate acoustical consultant, of EMM Consulting Pty Limited (EMM), who has been endorsed by the Planning Secretary as a suitably qualified and experienced person (see **Appendix A**).

Several technical terms are required for the discussion of noise. Relevant definitions and information are provided in **Appendix B**.

This NMP applies to all activities undertaken at Mangoola Coal Mine by Mangoola employees and contractors.

This NMP has been prepared to:

- comply with the relevant conditions of SSD 8642 (refer **Appendix C**) regarding noise including the management and monitoring of noise emissions from operations (including off-site road and rail traffic as well as all operations occurring on site);
- provide Mangoola employees and contractors with a description of their responsibilities, regarding noise management at Mangoola Coal Mine; and
- comply with relevant sections of Mangoola Open Cut's Environment Protection Licence (EPL) 12894.

1.3 Baseline data

The Mangoola locality has relatively low background noise levels, and a relatively variable terrain that affects noise propagation from mining operations.

Pre-mining ambient monitoring, and monitoring that has occurred during Christmas shut-down periods, at several locations surrounding Mangoola Coal Mine has shown the background noise level (L_{A90}) to be regularly below 30 dB. A more detailed description of the ambient noise environment is provided in the NIA (Global Acoustics 2019).

2. Regulatory Requirements

2.1 Development Consent

Condition B8 of SSD 8642 provides the requirements related to the development of the NMP. The requirements are summarised in **Table 2.1** together with where these have been addressed in this document.

Additional requirements of SSD 8642 that relate to this NMP are provided in **Appendix C**.

Table 2.1 SSD 8642 – Noise Management Plan

Condition	Condition Details	NMP Section
Schedule 2 Condition B8	The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:	This Plan
	(a) be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;	Appendix A
	(b) describe the measures to be implemented to ensure: (i) compliance with the noise criteria and operating conditions of this consent; (ii) best practice management is being employed; and (iii) noise impacts of the development are minimised during noise-enhancing meteorological conditions;	Sections 4 and 6
	(c) describe the measures to minimise development related road traffic noise generated on public roads;	Sections 4 and 4.6.2
	(d) describe the noise management system in detail; and	This Plan
	(e) include a monitoring program that: (i) uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the development; (ii) monitors noise at locations representative of the most affected residences; (iii) includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time; (iv) adequately supports the noise management system; (v) includes protocol for distinguishing noise emissions of the development from any neighbouring developments; and (vi) includes a protocol for identifying any noise-related exceedance, incident or non-compliance and for notifying the Department and relevant stakeholders of any such event.	Section 6
Schedule 2 Condition B10	The Applicant must implement the Noise Management Plan as approved by the Planning Secretary.	Section 1.2

2.2 EIS Statement of Commitments

The MCCO Project EIS (Umwelt, 2019) considered the outcomes of the NIA (Global Acoustics 2019) and other EIS material as defined by SSD 8642, and the commitments from these documents are presented in **Table 2.2 - EIS Environmental Management and Monitoring Measures**

including reference to where each commitment has been addressed within this NMP.

Table 2.2 - EIS Environmental Management and Monitoring Measures

Commitments relating to noise	NMP Section
Mangoola will review and update the existing Noise Management Plan and then implement the updated plan for the MCCO Project. The Noise Management Plan will detail the monitoring and management controls to be implemented to manage noise impacts associated with the MCCO Project including ongoing implementation of the proactive and reactive management protocols in response to noise trigger levels defined in the plan.	This Plan
Mangoola commits to the implementation of the following project design and operational controls to assist in managing noise emissions from site: • haul route alignments within the mining area will maximise the available topographical shielding provided by the mine design, where practicable • an 8m high noise bund will be constructed where required on the haul road located on the southern side of Wybong Road connecting the proposed Wybong Road and Big Flat Creek overpass to the Approved Project Area to reduce noise emission primarily to the north and west • mobile equipment will be attenuated to sound power levels consistent with the existing fleet • mobile crushing plant and scrapers will only operate during the day period • mobile crushing plant will be located in shielded locations of the mining areas that provide a good level of shielding in the direction of the nearest receptors • significant noise generating fixed infrastructure in the CHPP will remain acoustically treated (clad) at current coverage levels • the existing 3.5m high barrier wall installed to section of the rail spur will be retained.	Section 4
Mangoola will implement both proactive and reactive noise control strategies informed by real-time noise and meteorological monitoring systems. Proactive noise management will involve the discussion and planning of activities in advance of potentially adverse conditions. Specifically, the proactive noise management approach will include: • implementation of a system to provide environmental personnel with a daily forecast of expected conditions in the vicinity of the operation, particularly with regard to the potential for noise enhancing meteorological conditions • discussion of the noise forecast at daily operational meetings • modifying the planned mining activities, as appropriate, to minimise or avoid the potential noise impacts including but not limited to: ○ various levels will be provided for overburden emplacement to allow shielded emplacement during noise enhancing meteorological conditions ○ dozers will be restricted to 1st gear operation if required during periods of noise enhancing meteorological conditions ○ drill pad preparation dozers will be shut down if required during periods of noise enhancing meteorological conditions.	Section 4
Mangoola will implement reasonable and feasible receiver based noise mitigation measures which may include measures such as double glazing, insulation or air-conditioning to residences located within the active noise management zone upon written request	Section 4
Mangoola will maintain the existing noise voluntary acquisition and active management rights for affected private land within the existing Mangoola Project Approval regardless of whether or not these rights are required by the current VLAMP due to the impacts of the Project.	Section 4

Commitments relating to noise	NMP Section
The real-time and attended noise compliance monitoring locations will be reviewed and revised as necessary prior to the commencement of the Project to provide adequate coverage of the Project area in order to validate EIS predictions and monitor compliance with relevant criteria. The revised noise monitoring program will be included in the update Noise Management Plan.	This plan.

2.3 Environment Protection Licence (EPL)

Mangoola operates in accordance with EPL 12894. In accordance with Condition D6 of SSD 8642 this NMP has been prepared to be consistent with the conditions of EPL 12894 for the Mangoola Coal Mine.

3. Roles and Responsibilities

The relevant roles and responsibilities associated with this NMP are outlined in **Table 3.1**.

Table 3.1 - Roles and Responsibilities

Role	Responsibility
Operations Manager	provide sufficient resources for the effective implementation of this NMP.
Maintenance Manager	ensure noise controls/attenuation measures are inspected and maintained for effective noise management.
Environment and Community Manager (ECM)	- identify potential noise impacts and implement actions to mitigate the identified risks; - coordinate and conduct training to ensure all relevant personnel are aware of noise management practices and mitigation measures; - coordinate incident investigation processes including associated reporting requirements in accordance with regulatory requirements and incident reporting procedures; - coordinate the implementation of corrective actions and evaluate their effectiveness; and - ensure all internal and external reporting requirements are met.
Environment and Community Coordinator (ECC)/ Environment and Community Officer (ECO)	- coordinate, advise and assist with the implementation of noise monitoring in accordance with the NMP; - maintain procedures to ensure potential noise impacts are identified; - coordinate monitoring surveys and develop proactive strategies to minimise noise impacts; - maintain monitoring equipment in accordance with the requirements of SSD 8642 and this plan; - maintain daily meteorological forecast model; - complete noise monitoring reports and make these reports available on the Mangoola website as per the requirements of the SSD 8642; - investigate and document findings from noise complaints; - provide advice regarding noise management in response to alarms from the real-time noise monitoring system; - provide input regarding the effectiveness of noise mitigation measures; and - complete reporting requirements for the Annual Review associated with this plan.
Department Managers	- ensure personnel undertake the relevant noise management training; - assist in the coordination of monitoring surveys and development of proactive strategies to minimise noise impacts; - ensure that personnel and contractors carry out work in accordance with this NMP; and - provide input regarding the effectiveness of noise mitigation measures.
All Employees and Contractors	comply with requirements of this NMP

4. Noise management and mitigation measures

4.1 Design and operational controls

Mangoola is committed to implementing and maintaining the following controls to minimise and manage noise generation from the Mangoola Coal Mine:

- noise impacts are, and have been, considered during the mine planning process;
- the CHPP, coal stockpiles and associated infrastructure are located near the eastern site boundary to maximise natural topographic shielding and reduce noise impacts on surrounding areas;
- significant noise generating fixed infrastructure in the CHPP are acoustically treated (enclosed);
- conveyors are enclosed/covered;
- noise bund to the south of the operation;
- the rail loop is positioned to maximise natural topographic noise shielding and implements a noise barrier on sections of the track;
- haul route alignments within the mining area will maximise the available topographical shielding provided by the mine design, where practicable;
- an 8m high haul road noise bund positioned strategically on the southern side of Wybong Road. This noise bund is designed to reduce noise emission primarily to the north and west;
- only use locomotives and rolling stock that are approved to operate on the NSW rail network in accordance with the noise limits in any relevant rolling stock operator's EPL and use reasonable endeavours to ensure that rolling stock is selected to minimise noise;
- use of primary mining equipment and mobile equipment with appropriate sound attenuation fitted;
- mobile crushing plant will be located in mining areas that provide acoustic shielding in the direction of the nearest receptors;
- mobile crushing plant will only operate during the day period;
- daily noise risk model based on forecast meteorological conditions allowing for any potential offsite noise impacts to be mitigated for the oncoming shifts;
- maintaining mining equipment in a proper and efficient manner;
- sound power level testing upon procurement of relevant plant and equipment and annual sound power level testing (of representative items of equipment) to ensure ongoing compliance with relevant sound power level specifications;
- where noise attenuation requires maintenance, or plant item is evidently in need of maintenance, this is reported to maintenance team actions put in place to remedy;
- operations are restricted on outer dump faces or elevated dumps in sensitive areas at night during noise-enhancing weather conditions;

- use of non-attenuated equipment (i.e hire equipment not required for construction) is restricted to daylight hours use, unless the Change Management detailed in **Section 4.4** indicates otherwise;
- trucks operating during the night period may be restricted to operational areas below the maximum elevation of the overburden emplacement areas;
- use of real-time offsite noise monitors that incorporate automatic alarms so that additional controls can be implemented by mining supervisors when offsite noise levels approach or exceed relevant noise trigger levels;
- use of silent horns on primary loading units;
- use of broadband reversing alarms on mine equipment, light vehicles and contract equipment/pit vehicles;
- rubber tyred dozers may be used on mine dumps at night at higher elevations;
- noise management training is conducted with relevant personnel to enforce the importance of noise management; and
- undertaking the process of change management when operations change, including mining in new areas or when mining equipment changes (refer to **Section 4.4**).

Mangoola also implements mine planning procedures that minimise the potential for adverse noise impacts. Where possible, machinery will be selectively located at lower elevations in the open cut pit during times when noise levels at the receivers are likely to be exacerbated by noise-enhancing weather conditions.

In accordance with Condition B99 of SSD 8642, and to reduce road traffic noise impacts associated with traffic to and from Mangoola Coal Mine, project-related traffic is restricted from using Reedy Creek Road, Mangoola Road, Roxburgh Road or Castlerock Road except in an emergency to avoid the loss of lives, property and/or to prevent environmental harm. This does not apply to any employees that reside on these roads, or the infrequent use of these roads for consultation, environmental monitoring, and inspection and maintenance of nearby infrastructure.

4.2 Proactive noise management

4.2.1 Meteorological forecasting

Mangoola currently distributes a meteorological forecast notification on a twice daily basis, via email to inform relevant personnel of the current and predicted meteorological conditions. The notification details the predicted rainfall, wind speed and direction, wind stability, temperature inversion and temperature for the following two days.

Daily meteorological forecasts are considered and discussed at the daily production meetings and/or during pre-start meetings. Mining Supervisors consider this information when planning activities for that shift. For example, when a strong temperature inversion is predicted, the Mining Supervisor would consider this in equipment placement, particularly on the night shift and beginning of day shift.

The mine planners also take into consideration localised meteorological patterns as part of mine design (e.g., designing alternative dumping locations for use under noise-enhancing meteorological conditions and at night).

4.2.2 Active management practices

Mangoola use a real-time noise monitoring network to actively manage noise at Mangoola Coal Mine and is described in **Section 6.2.3**. This system notifies relevant personnel when noise levels at surrounding sensitive receivers are approaching, or have reached, the pre-defined trigger noise levels.

4.3 Continual improvement and best practice management

Mangoola will maintain awareness of new technologies for noise mitigation through Glencore Coal Assets Australia participation in relevant industry groups. Mangoola will implement noise mitigation measures in line with industry best practice mine noise management where feasible and reasonable.

4.4 Change management

Mangoola will implement a change management process to assess the potential noise impacts associated with operational changes. The change management process will be implemented as a minimum, in the following instances:

- when a significant change is made to the number of equipment or type of equipment utilised on site, which may result in an increase to operational noise levels;
- when a proposed mine plan configuration / orientation or hours of operation is substantially different to that which has been assessed in the relevant environmental assessment; or
- prior to purchase or rental of equipment which through either size or volume of equipment has the potential to increase operational noise levels. Noise modelling may be required to confirm that the use of the equipment will not result in additional noise impacts on residential receivers.

The change management process is to consider the existing noise performance at the site and potential noise increases associated with the change. The review is to include, where considered necessary (i.e., significant change), modelling of the predicted noise emissions of the operation to confirm that compliance with the relevant statutory approval will be maintained following the proposed change.

4.5 Training

In accordance with SSD 8642 Condition A31, training is provided to relevant Mangoola employees and contractors in relation to the management of noise and obligations relevant to the activities they carry out in respect to the development. To ensure the effective implementation of this NMP, relevant supervisors and staff will be provided training to respond adequately to noise alarms and other noise related management as required.

Toolbox talks will be conducted to reinforce the importance of noise management and mitigation on an as needs basis. Training also includes site inductions for all relevant employees and contractors working at Mangoola Coal Mine.

4.6 Additional at-residence noise mitigation measures and acquisition

4.6.1 Operational noise

On 17 May 2021 Mangoola notified, within one month of the date of SSD 8642 (26 April 2021), all privately owned residences entitled under Condition C1 and C2 of SSD 8642 (Table 10 and Table 11 of SSD 8642) of their entitlement to receive additional noise mitigation measures following the commencement of development. Requests for additional noise mitigation measures will be handled as per the process described in Conditions C2 – C4 of SSD 8642 and summarised as follows.

Mangoola will implement, where additional noise mitigation is required, additional noise mitigation measures consistent with the measures outlined in the *Voluntary Land Acquisition and Mitigation Policy* (DPIE 2018). They must be reasonable and feasible, proportionate to the level of impact and directed towards reducing the noise impacts of the development such as double glazing, insulation and or air conditioning at any residence on the relevant land in consultation with the landowner.

If within 3 months of receiving this request from the landowner, Mangoola and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.

As per Condition C4 of SSD8642 Mangoola will continue to contribute to reasonable maintenance and recurrent operating costs associated with the noise mitigation measures installed at privately-owned residences, including those installed under previous approvals. Contributions will be consistent with existing agreements between Mangoola and the relevant landowner.

Tenanted properties owned by Mangoola are notified of potential noise impacts prior to entering into tenancy agreements and are advised of their rights within the terms of the agreement.

4.6.2 Road traffic noise

In accordance with Condition B6 of SSD 8642, upon receiving a written request from the owner of a residence listed in Table 2 of SSD 8642, Mangoola will implement noise mitigation measures such as double-glazing, insulation and/or air-conditioning at any residence on the subject land in consultation with the landowner. These additional mitigation measures must be feasible and reasonable, directed at mitigating the traffic noise impacts of the Project and must consider any existing mitigation installed under the original Mangoola Coal Project (PA 06_0014).

4.6.3 Acquisition upon Request

Should a written request for acquisition be received from the owner of any privately-owned land listed in SSD 8642 Condition C1 Table 10, the process will be followed as per C12-C19 of SSD 8642.

In accordance with C5 (a)(i) of SSD 8642 letters were sent to the owners of privately owned land listed in C1 Table 10 of SSD 8642 on the 17 May 2021.

5. Noise limits

5.1 Operational noise limits

Condition B1 of SSD 8642 provides the operational noise limits for Mangoola Coal Mine. These are reproduced in **Table 5.1**.

Table 5.1 Noise criteria (dB) from Table 1 of SSD 8642

Noise Location	Assessment	Day LAeq(15min) (Years 1 and 2)	Day LAeq(15min) (Year 3 onward)	Evening LAeq(15min)	Night LAeq(15min)	Night LA1(1min)
171, 176, 144		40	40	40	40	52
25, 128, 154, 193, 125A, 182B		40	40	38	38	52
261		42	40	38	38	52
54, 79, 114, 141, 151, 192, 206, 321, 125C, 182A, 241A, 241C, 190, 157		40	40	37	37	52
165, 177, 106B, 104, 166, 178, 251, 253, 260, 112B, 183C, 184A, 147, 112A, 112C, 240, 241B		40	40	36	36	52
134A		44	40	39	39	52
109A - F		43	40	39	39	52
263		42	40	39	39	52
164*		40	40	35	39	52
Other privately-owned residences [#]		40	40	35	35	52
Wybong Hall and Anglican Church		48	48	48	48	-

* A written agreement is in place with the owner/s of this residence in accordance with Condition B2 of SSD 8642. Hence, noise criteria do not apply here.

[#] This noise criteria does not apply to privately owned land subject to acquisition upon request on the basis of noise impacts in accordance with Condition C1 of SSD 8642.

Noise generated by the development must be monitored and measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NPfl (EPA 2017).

The noise limits provided in **Table 5.1** apply under standard and noise-enhancing meteorological conditions (as defined in the NPfl) determined by monitoring at the relevant weather station. In accordance with Condition L3.4 of EPL 12894 and consistent with Condition B1 of SSD 8642 the noise limits provided in **Table 5.1** apply under all meteorological conditions except for the following:

- wind speeds greater than 3m/s at 10m above ground level;
- stability category F temperature inversion conditions and wind speeds greater than 2m/s at 10m above ground level; or

- stability category G temperature inversion conditions.

In accordance with Fact Sheet D of the NPfI, for 'very noise enhancing meteorological conditions' the applicable noise limit is set at 5dB above those provided in **Table 5.1**.

In accordance with SSD 8642 Condition B2 noise limits in **Table 5.1** do not apply if Mangoola has an agreement with the owner/s of the relevant residence or land to exceed the noise criteria, and Mangoola has advised the Department in writing of the terms of this agreement.

6. Measurement and Evaluation

6.1 Meteorological monitoring

The meteorological data collected during attended noise monitoring and by the real-time noise monitoring units is supplemented by more detailed records from two automatic weather stations (AWS) (refer **Figure 6-1**). The Mangoola AWS comply with the requirements in the *Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales* (DEC 2007) and measure meteorological conditions as required by the NPfl (EPA 2017).

The data recorded by the Mangoola AWS relevant to the management of noise include:

- wind speed, wind direction and sigma-theta, at 10 m above ground level;
- temperature at 2 m and 10 m above the ground;
- humidity; and
- rainfall.

Meteorological data is available in real-time during attended noise monitoring.

6.2 Noise monitoring program

6.2.1 Overview

Mangoola has designed a noise monitoring program which consists of both attended and unattended, real-time noise monitoring to meet the requirements of SSD 8642 and EPL 12894. Noise monitoring locations are presented in **Figure 6-1** and summarised in **Table 6.1**.

As per Condition D16 of SSD 8642, noise monitoring may be undertaken at suitable representative monitoring locations instead of at privately-owned residences providing that these representative monitoring locations are set out in the NMP. The monitoring network; including noise monitoring locations and associated noise limits, has considered the location of private receivers and 'worst case all years' noise modelling results and findings of the NIA (Global Acoustics 2019).

Table 6.1 Mangoola Noise Monitoring Overview

Monitoring Location	EPL Monitoring Point	Type	Description
NM4	23	Attended	Yarraman Road south
NM8	26	Attended	Wybong Road south
NM10	27	Attended	Wybong Road north
NM13	29	Attended	Roxburgh Road
NM14	30	Attended	Mangoola Road south
NM15	22	Attended	Castlerock Road north
NM16	34	Attended	Bells Lane west
NC02	n/a	Unattended	96 Ridgелands Road
NC03	n/a	Unattended	741 Roxburgh Road
NC05	n/a	Unattended	22 Bells Lane
NC06	n/a	Unattended	Bells Lane West (Nipol Property)
NC10	n/a	Unattended	Wybong Post Office Road west
NM17	35	Attended	Cnr Golden Hwy + Rosemount Rd
NM18	36	Attended	Yarraman Rd, north of Wybong PO Rd (near 134A)
NM19	37	Attended	Yarraman Rd, near 165
NM20	38	Attended	Cnr Yarraman Rd + Ridgелands Rd
NM21	39	Attended	End of Mangoola driveway, near driveway to 144
NM22	40	Attended	Ridgелands Rd, south of 157
NC09	n/a	Unattended	West of site (near NM8, 176)
NC15	n/a	Unattended	599 Ridgелands Rd
NC14	n/a	Unattended	North of 144
NC13	n/a	Unattended	Ridgелands Rd, north of Yarraman

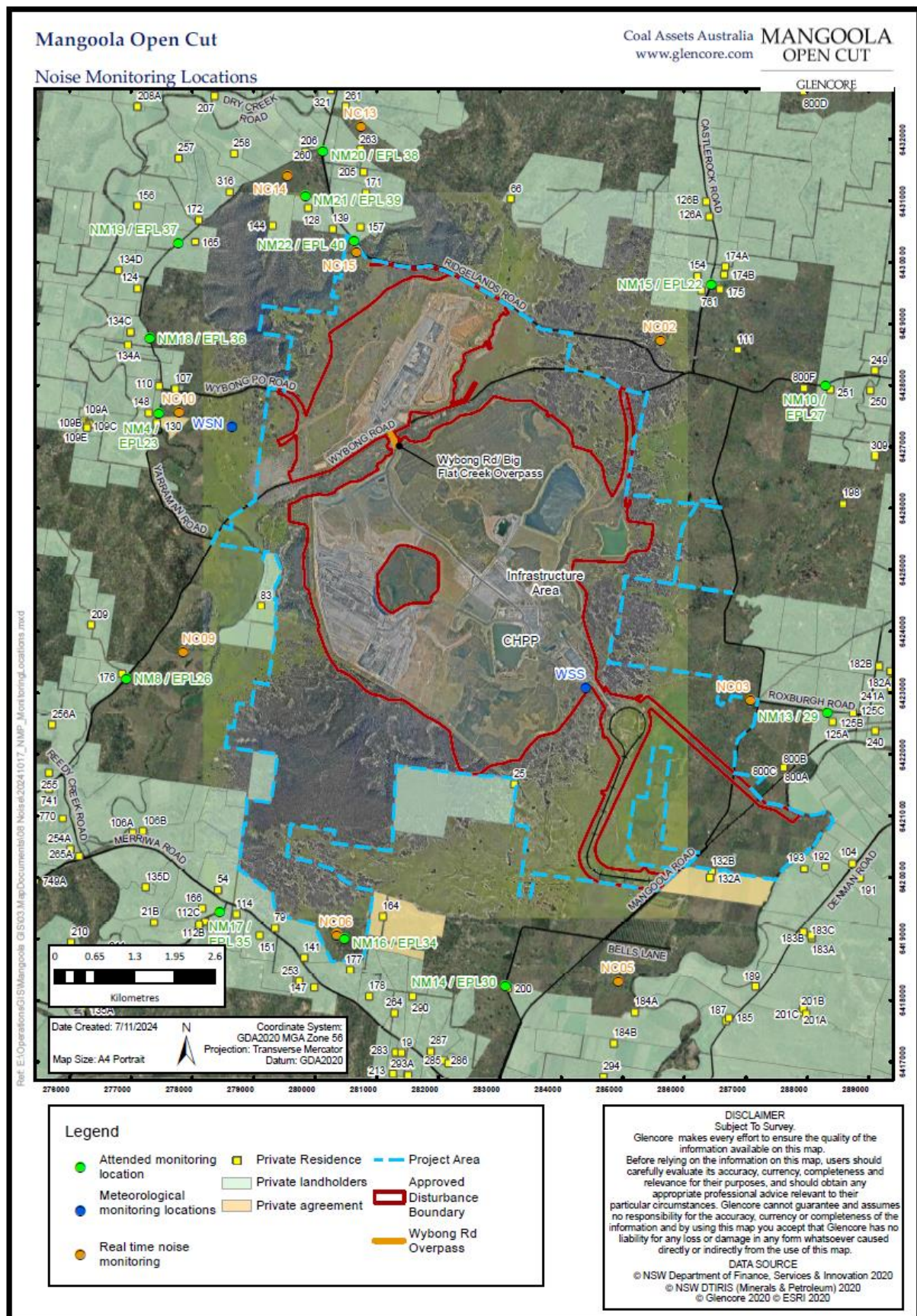


Figure 6-1 Noise and meteorological monitoring locations

6.2.2 Noise monitoring standards

Noise monitoring is undertaken in accordance with the following relevant standards and guidelines:

- *Noise Policy for Industry* (EPA 2017);
- Australian Standard AS 1055-2018 *Acoustics - Description and measurement of environmental noise*; and
- AS IEC 61672.1-2004 *Electroacoustics - Sound level meters – Specifications*.

All acoustic instrumentation used for compliance monitoring at Mangoola Coal Mine has current NATA or manufacturer calibration certificates. Calibration and associated certificates will be maintained on site and records will be kept of any adjustments made to instruments.

6.2.3 Unattended, real-time noise monitoring

Mangoola has established a network of permanent and mobile real-time noise monitoring locations. The real-time monitoring locations are listed in **Table 6.1** and shown in **Figure 6-1**. Locations of the unattended noise monitoring units have been selected considering the location of the nearest private residences, local topography and results of mine noise predictions.

Real-time noise monitoring is used for proactive and reactive noise management of day-to-day operations at Mangoola Coal Mine, rather than a tool to monitor compliance.

The real-time monitors provide 24-hour continuous information on the ambient noise environment local to the monitoring site and generate quantitative data and audio recordings that can be used to determine the likely primary source of the noise and for comparison against noise impact assessment criteria.

Real time noise monitoring stations will be calibrated according to the manufacturer's calibration requirements for individual components including:

- Factory calibration of sound level meters at intervals not greater than 24 months; and
- Field calibration of sound level meters at intervals not greater than 3 months.

Mangoola also conducts a three yearly validation assessment of the real time noise monitoring network.

Each real time monitoring unit is programmed to send an SMS to the Environment and Community Department, Shift Supervisors and other key operational personnel if a trigger noise level is exceeded over a sustained period. Trigger levels are based on modelled noise levels and relevant noise limit at the nearest residences. Trigger noise levels are:

- Level 1 Alarm – Measured low-pass noise level (frequencies up to and including 630 Hz) is at a level that is predicted to generate a noise level 2 dB below the relevant noise criteria at the nearest residence to the real-time noise monitoring unit; and
- Level 2 Alarm – Measured low-pass noise level (frequencies up to and including 630 Hz) is at a level that is predicted to generate a noise level at or above the relevant noise criteria at the nearest residence to the real-time noise monitoring unit.

Following a Level 1 Alarm, a review of operations closest to the monitoring location will be conducted within a practical timeframe to determine if the measured noise is attributable to Mangoola Coal

Mine. The review will consider current meteorological conditions. Where appropriate, management and mitigation measures, as detailed in **Section 4**, will be undertaken.

Following a Level 2 Alarm, a review of current operations will be undertaken as soon as practicable. If the likely noise source(s) can be identified and are attributable to Mangoola Coal Mine, the relevant equipment and/or operations determined to be contributing to the measured noise impacts will either cease or be modified within a practicable timeframe (i.e., within 75 minutes).

In the event of three consecutive, valid, Level 2 Alarms from the same monitoring location, attended monitoring will be conducted as described in **Section 6** within the following 7 days by appropriately accredited and qualified acoustic consultants. Validity will be assessed with regards to Mangoola Coal Mine's contribution and meteorological conditions during the alarm period.

It is noted that the real-time units are programmed to record continuously, however this functionality may be impeded due to power supply or breakdown issues as well as vandalism or other factors outside of Mangoola's control.

Triggers for alarms and monitoring locations are reviewed, as required, to ensure they adequately detect mine noise and differentiate as much as possible between mine impact and extraneous influences (such as wind, insects etc.) to achieve greater confidence in the monitoring systems. Alarm investigations are reviewed on a regular basis to identify trends and where appropriate, investigate feasible measures to further reduce noise impacts.

6.2.4 Attended noise monitoring

The attended noise monitoring program is used to assess compliance against the noise limits described in **Section 5**.

Condition B1 of SSD 8642 requires that noise generated by the development must be monitored and measured in accordance with the relevant procedures and exemptions, including certain meteorological conditions, of the NPfI (EPA 2017).

For each 15-minute attended noise monitoring period, the following information is recorded:

- name of monitoring personnel;
- monitoring location;
- dates and times that monitoring began and ended at each location;
- height of the microphone above the ground and, if relevant, distances to building facades or property boundaries;
- quantitative meteorological data such as temperature, wind speed (including the measurement height above ground), wind direction and humidity;
- qualitative meteorological information such as cloud cover, fog and rainfall;
- instrument type and calibration details before and after the monitoring period;
- the L_{Aeq} (15 minute) noise level for the 15-minute period;
- statistical noise level descriptors over the 15-minute interval: L_{Amin} , L_{A90} , L_{A10} , L_{A1} and L_{Amax} ;

- L_{A1} , (1 minute) or L_{Amax} noise levels from site (to allow comparison with the relevant sleep disturbance criteria);
- notes identifying the noise sources that contribute to the maximum noise levels and the overall noise environment or for periods of time when a specific noise source is audible;
- an estimate of the noise contribution from operation of Mangoola Coal Mine and from other identifiable noise sources including, but not limited to, neighbouring mines (this is done by the operator matching audible sounds with the response of the analyser and/or via post-analysis of noise data);
- measurement of C-weighted and A-weighted noise levels to assess the potential for low frequency noise impacts in accordance with the NPfl (EPA 2017);
- measurements in one-third octave bands from 10 Hz to 12 kHz inclusive (or a broader range of bands) for the 15-minute interval to assess if any of the noise sources exhibit tonal characteristics or low frequency noise that may require application of modifying factors;
- data suitable for assessing the relative contribution of mine-generated noise to the overall noise being measured by using a low-pass (i.e., consideration of frequencies up to and including 630 Hz); and
- recommendations or comments where considered appropriate.

Attended noise monitoring is scheduled considering:

- the occurrence of regular operations at Mangoola Coal Mine rather than during scheduled down-time or maintenance; and
- forecast appropriate meteorological conditions.

6.2.4.1 Operational noise compliance monitoring

As per Condition B7 of SSD 8642, attended monitoring is conducted once per calendar month to demonstrate compliance with noise limits as presented in **Section 5**. Through previous consultation with the Department it has been determined that compliance with noise limits will be assessed by conducting monthly attended noise surveys at least two weeks apart during the night period only.

Monthly attended monitoring locations are listed in **Table 6.2** and shown on **Figure 6-1**. Monthly attended monitoring locations are representative of the nearest private receptors based on the results of the NIA (Global Acoustics 2019) and in accordance with Section 2.6 of the NPfl (EPA 2017). Thirteen attended monitoring locations have been adopted to represent the potentially exposed privately-owned residences consistent with the requirements of Condition D16 of SSD 8642. The relevant operational noise limits at each monitoring location have been determined based on modelled mine noise emission levels and the relevant night-time noise limit (as per Table 1 of SSD 8642) at the nearest residences.

Meteorological data is sourced from Mangoola Coal's Weather Station North (WSN) or Weather Station South (WSS) to determine which noise limits are applicable. The current (WSN) location of the weather stations shown in **Figure 6-1**. The weather station used is the most representative of the

monitoring location, or closest to the source that is considered to dominate received noise at the monitoring location. Stability categories relevant to each noise monitoring period are determined using the sigma-theta (ST) method as per Fact Sheet D of the NPfl (EPA 2017).

Table 6.2 - Monthly attended monitoring locations – night operations

Monitoring Location ID	Description	Easting (MGA)	Northing (MGA)	Representative residences	Applicable noise limit Stage 1	Applicable noise limit Stages 2 & 3
					$L_{Aeq15min} / L_{A1,1min}$ dB	$L_{Aeq15min} / L_{A1,1min}$ dB
NM4 / EPL 23	Yarraman Road, south of Wybong Post Office Road	277443	6427542	109A, 109B, 109C, 109D, 109E, 109F	37 / 45	41 / 54
NM8 / EPL 26	Wybong Road South	276918	6423236	176	38 / 45	40 / 52
NM10 / EPL 27	Wybong Road North	288289	6428004	251	35 / 45	35 / 51
NM13 / EPL 29	Roxburgh Road	288318	6422690	125A, 125C, 190, 240, 241A, 241B, 241C, 182A, 182B	35 / 45	38 / 50
NM14 / EPL 30	Mangoola Road South	283082	6418243	184A	35 / 45	37 / 53
NM15 / EPL 22	Castlerock Road	286189	6428618	154	36 / 45	34 / 48
NM16 / EPL 34	Bells Lane West	280467	6419004	79, 177, 178, 147, 253, 141, 151	35 / 45	37 / 52
NM17 / EPL 35	Rosemount Road	278438	6419444	54, 114, 166, 112A, 112B, 112C, 106B	n/a	36 / 51
NM18 / EPL 36	Yarraman Road, north of Wybong Post Office Road	277300	6428769	134A	n/a	39 / 52
NM19 / EPL 37	Yarraman Road	277764	6430320	165	n/a	35 / 51
NM20 / EPL 38	Corner of Ridglands Road and Yarraman Road	280115	6431811	206, 260, 261, 263, 321	n/a	38 / 51
NM21 / EPL 39	Entry to driveway of 144	279834	6431083	144, 128	n/a	40 / 49
NM22 / EPL 40	Driveway to Mangoola owned residence off Ridglands Road	280625	6430355	157, 171	n/a	46 / 58

6.3 Compliance assessment

If attended noise monitoring identifies that relevant noise limits have been exceeded, the person conducting the attended noise monitoring is required to follow the noise exceedance protocol presented in *Figure 6-2*.

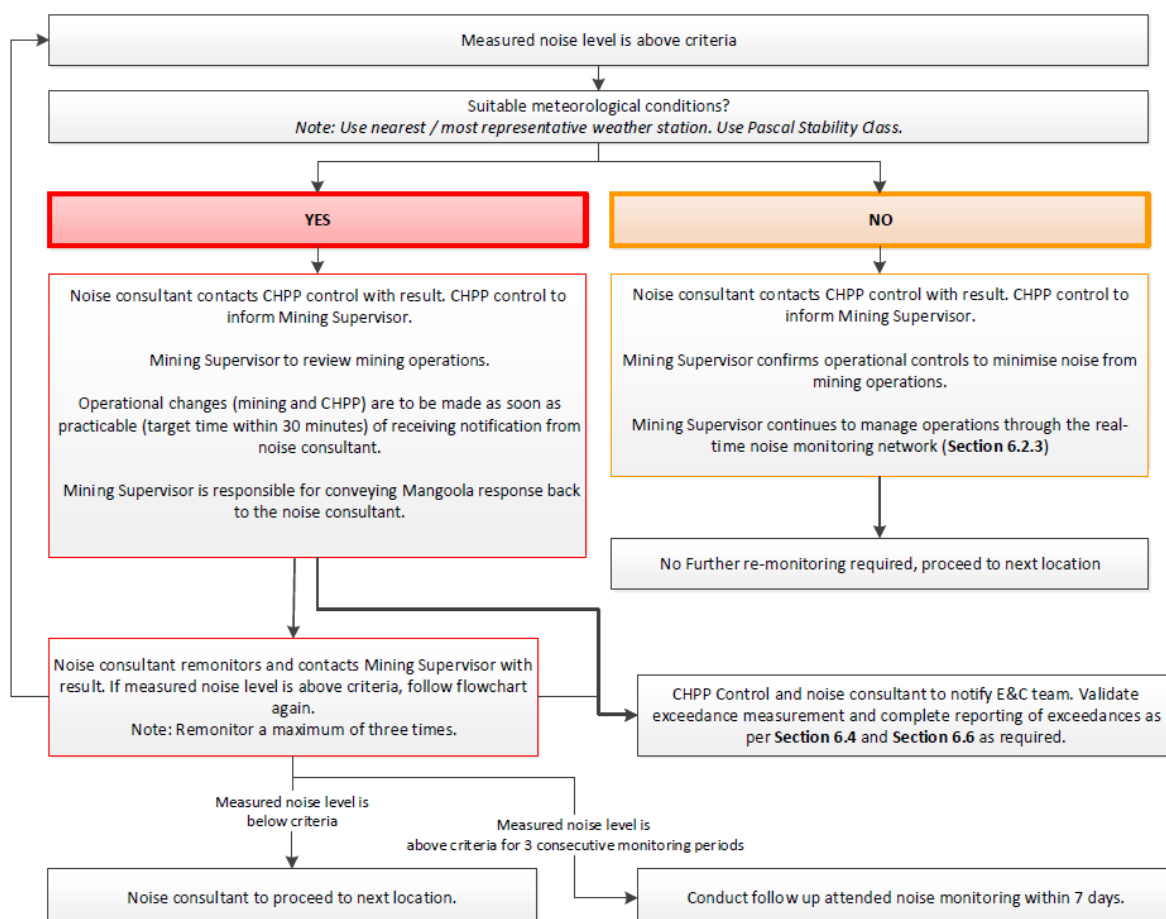


Figure 6-2 – Noise exceedance protocol

Regardless of the outcome of the noise re-monitoring (i.e., monitoring undertaken after the initial exceedance was determined) all non-compliances recorded during that night will be reported within seven days of becoming aware of the non-compliance in accordance with Condition D10 of SSD 8642 and as described in Table 6.3.

To address SSD 8642 Condition D4(a), an additional attended noise monitoring survey will be completed within one week if the exceedance of the noise limits could not be effectively reduced below the relevant noise limit at the time of noise monitoring.

6.4 Reporting and records

A summary of the statutory reporting requirements is provided in **Table 6.3**.

Table 6.3 - Reporting requirements

Condition	Reporting requirements	Timeframe
D9 of SSD 8642	Mangoola will immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing through the Department's Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.	Immediately <i>Note: An exceedance of the noise limits is classified as a non-compliance rather than an incident.</i>
D10 of SSD 8642	Notify the Department of a non-compliance in writing through the Department's Major Projects Website and identify the development (including the development application number and name), set out the condition of SSD 8642 that the development is non-compliant with, why it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance.	Within 7 days of becoming aware of the non-compliance
D11 of SSD 8642	Mangoola must submit an Annual Review report which provides a review of the environmental performance of the Mangoola Coal Mine. The noise component of the Annual Review will provide a comprehensive review of the monitoring results and complaints records over the previous calendar year including a comparison of these results against the noise limits, NMP requirements, monitoring results of previous years and relevant predictions presented in the NIA. The Annual Review will identify any noise non-compliance over the previous calendar year and describe what actions were (or are being) taken to rectify it and avoid reoccurrence. The Annual Review will evaluate and report on the effectiveness of the noise management system, compliance with the performance measures, criteria and operating conditions of SSD 8642. Any trends in the noise monitoring data over the life of the development will be identified along with any discrepancies between the predicted and actual impacts of the development; any significant discrepancies are to be analysed. The Annual Review report will also describe what measures will be implemented over the next calendar year to improve the environmental performance of the development.	By the end of March each year (or other timeframe agreed by the Planning Secretary)
D12 of SSD 8642	Annual Review report must be submitted to Council and made available to the CCC and any interested person upon request.	None specified
D13 and D14 of SSD 8642	Mangoola will commission and pay the full cost of an Independent Environmental Audit of the development. With relevance to this NMP, the audit must: - be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary; - be carried out in consultation with the relevant agencies and the CCC; - assess the environmental performance of the development and whether it is complying with the relevant requirements in SSD 8642 including any assessment, strategy, plan or program required under SSD 8642; - review the adequacy of any approved strategy, plan or program required under SSD 8642; - recommend appropriate measures or actions to improve the environmental performance of the development and any assessment, strategy, plan or program required under SSD 8642; and - be conducted and reported to the satisfaction of the Planning Secretary.	IEA to be commissioned within one year of commencement of development and every three years after. IEA report to be submitted to the Planning Secretary within 3 months of commencing the IEA.
D17 a(vi) and (vii) of SSD 8642	Before the commencement of construction until the completion of all rehabilitation required under this consent, the Applicant must:	Monthly reporting of results on website

Condition	Reporting requirements	Timeframe
	(a) make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of this consent) publicly available on its website: (vi) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent; (vii) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs;	
M1.1 – M1.3 of EPL 12894	All records required to be kept by this licence must be: a) in a legible form, or in a form that can readily be reduced to a legible form; b) kept for at least 4 years after the monitoring or event to which they relate took place; and c) produced in a legible form to any authorised officer of the EPA who asks to see them. The following records must be kept in respect of any samples required to be collected for the purposes of this licence: a) the date(s) on which the sample was taken; b) the time(s) at which the sample was collected; c) the point at which the sample was taken; and d) the name of the person who collected the sample.	Records are kept for at least 4 years after the monitoring or event to which they relate took place
R1.1 of EPL 12894	The licensee must complete and supply to the EPA an Annual Return in the approved form comprising: 1. a Statement of Compliance, 2. a Monitoring and Complaints Summary, 3. a Statement of Compliance - Licence Conditions	Annually
R4.1 of EPL 12894	Mangoola must report any exceedance of the noise limits to EPA by email to info@epa.nsw.gov.au	As soon as practicable after Mangoola becomes aware of the exceedance
R4.2 of EPL 12894	Mangoola must provide the EPA a report in writing that explains the cause of the exceedance and the actions taken to prevent future exceedances of noise limits.	Within seven days of notifying the EPA of a noise limit exceedance.
R4.3 of EPL 12894	An authorised officer of the EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by Mangoola at Condition R4.2.	Mangoola must provide such further details to the EPA within the time specified in the request
R5.3 of EPL 12894	A noise compliance assessment report must be submitted to the EPA with the Annual Return and must include: a) the contribution noise level from the premises as measured or determined at the monitoring location(s); and b) a description of the method used to determine or estimate the contribution noise level from the premises that is consistent with the Noise Policy for Industry (EPA 2017).	Annually

6.5 Independent review

In accordance with Condition C9 of SSD 8642, if a landowner considers that Mangoola Mine Coal is exceeding any relevant noise limits they may ask the Planning Secretary in writing for an independent review of the impacts on their residence or land.

If the Planning Secretary is not satisfied that an independent review is warranted, the Planning Secretary will notify the landowner in writing of that decision, and the reasons for it, within 21 days of the request for a review.

If the Planning Secretary is satisfied that an independent review is warranted, within 3 months of the Planning Secretary's decision, or other timeframe agreed by the Planning Secretary, Mangoola must:

- commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to:
 - consult with the landowner to determine their concerns;
 - conduct monitoring to determine whether the development is complying with the relevant noise limits; and
 - if the development is not complying with the relevant noise limits, identify measures that could be implemented to ensure compliance with the relevant noise limits; and
- give the Planning Secretary and landowner a copy of the independent review; and
- comply with any written requests made by the Planning Secretary to implement any findings of the review.

6.6 Corrective actions and notifications

Table 6.4 summarises the potential noise related issues that may arise and the appropriate corrective action to be taken.

Table 6.4 Corrective Actions and Notifications

Issue/Opportunity	Corrective Action and Notification requirements
Exceedance of noise limits provided in Condition B1 of SSD 8642 (i.e., non-compliance with noise limits)	Investigation of exceedance, implement noise mitigation measures for future operations. Report exceedance/non-compliance to the Department (within 7 days of becoming aware of the non-compliance), and affected landowners as required and include details in Annual Review. As required by Condition B8 (e) (vi) and Condition C7, Mangoola will provide the details of an exceedance to any affected landowners, tenants and the CCC as soon as practicable and within seven days of becoming aware of the exceedance. The relevant Supervisor will document and report to the Environment and Community Coordinator any actions implemented following the notification of any exceedance in accordance with the process outlined in Section 6.3.
Adaptive Management (SSD 8642 D4)	Mangoola must assess and manage development-related risks to ensure that there are no exceedances of the criteria and performance measures in this consent. Any exceedance of these criteria or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria or performance measures has occurred, the Applicant must, at the earliest opportunity: (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur; (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and (c) implement reasonable remediation measures as directed by the Planning Secretary.
Community complaints.	Investigation of complaint, implement noise mitigation measures where applicable and provide feedback to the complainant. Provide feedback to mine planning and production personnel. Assessment of impacts at the residence against noise impact assessment criteria and land acquisition criteria, if required.
Identification of improved technologies.	Mangoola will maintain awareness of new technologies for noise mitigation through GCAA participation in relevant industry groups. The feasibility of implementing any additional improved noise management technologies identified through participation in relevant industry groups will be reported within the Annual Review.

Issue/Opportunity	Corrective Action and Notification requirements
Vandalism	The real-time noise monitoring units are programmed to record continuously; however, this functionality may be impeded due to vandalism. The next business day after becoming aware of vandalism, Mangoola will engage the supplier to repair the unit and, when/if practicable a portable unit will be relocated to the monitoring location.
Unattended real-time noise monitoring network periodic review	Mangoola will complete a 3 yearly review and validation of the real-time noise monitoring network. If any issues are identified within the review, then these will be addressed using a risk-based approach.

6.7 Complaint management

A Community Response Line (1800 014 339) will be in operation 24 hours per day, seven days a week and will be regularly advertised in a local newspaper. Complaints will be recorded, investigated and managed in accordance with the Mangoola Coal Environmental Management System. If requested follow up communication with the complainant will be undertaken to explain the outcome of complaint investigations. A monthly summary of complaints will be uploaded to the website as per Condition D17 (a)(x) of SSD 8642.

6.8 Access to information

As required by Condition D17, the following documents and information will be made publicly available via Mangoola's website ([Mangoola Open Cut \(glencore.com.au\)](http://Mangoola Open Cut (glencore.com.au))):

- the approved noise management plan;
- minutes of the CCC meetings;
- regular reporting on the noise performance of the development as required by SSD 8642 and summarised in **Section 6.4**;
- a summary of noise monitoring results required by Condition B7 of SSD 8642 updated on at least a quarterly basis;
- contact details to enquire about the development or to make a complaint;
- complaints register, updated monthly; and
- Annual Reviews and audit reports (including responses to the recommendations in any audit report).

Mangoola Open Cut will maintain a centralised location to record details of relevant external stakeholder communications.

A summary of attended noise monitoring results will also be presented at the Mangoola Community Consultative Committee (CCC) meetings. Performance monitoring, which includes an assessment of the effectiveness of controls and compliance with the relevant SSD 8642 conditions, may be discussed at CCC meetings where noise related complaints occur.

7. Review and Improvement

7.1 Periodic Review

The NMP will be subject to periodic review as per Conditions D7 and D8 of SSD 8642. The suitability of this NMP must be reviewed within three months of:

- The submission of an incident report;
- The submission of an Annual Review;
- The submission of an Independent Environmental Audit;
- The approval of any modification of the conditions of SSD 8642; or
- Notification of a change in development phase (as per Condition A13 of SSD 8642).

Review of the NMP is also required to either improve the environmental performance of the development or comply with a direction as per Condition A3 of SSD 8642. The NMP will also be reviewed to consider operational staging, validation of or improvements to the noise model, changes in technology or other relevant factors.

In accordance with Condition D8, the revised NMP must be submitted to the Planning Secretary for approval within six weeks of the review. A summary of the NMP review history is maintained as per **Section 8.3** of this NMP.

As required by Condition D6 of SSD 8642 this NMP may be required to be updated to ensure consistency with EPL 12894.

8. Document Information

Relevant legislation, standards and other reference information must be regularly reviewed and monitored for updates and should be included in the site management system. Related documents and reference information in this section provides the linkage and source to develop and maintain site compliance information.

8.1 Related Documents

Related documents, listed in **Table 8.1**, are internal documents directly related to or referenced from this document.

Table 8.1 – Related Documents

Document number	Title
MANOC-1276546935-5	<i>Environmental Management Strategy</i>

8.2 References

Noise Policy for Industry (NPfI) (EPA 2017)

Australian Standard AS 1055-2018 Acoustics - Description and measurement of environmental noise

AS IEC 61672.1-2004 Electroacoustics - Sound level meters – Specifications

Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (DEC 2007)

Global Acoustics 2019 Mangoola Coal Continued Operations Project Noise Impact Assessment completed for the Mangoola Coal Continued Operations Project Environmental Impact Statement

Umwelt 2019 Mangoola Coal Continued Operations Project Environmental Impact Statement

8.3 Document review history

Full details of the document history are recorded in the document control register, by version. A summary of the current change is provided in **Table 8.2**.

Table 8.2 – NMP document history

Version	Date	Prepared by	Amendment
V1	2007	Centennial/Umwelt	Initial development of document.
V2	May 2008	Mangoola Open Cut/ Umwelt	Version 2 submitted to DP&E and EPA.
V3	September 2008	Mangoola Open Cut/ Umwelt	Version 3 submitted for approval following receiving EPL.
V3	January 2009	DPIE	Approved Management Plan.
V4	August 2010	Mangoola Open Cut	Updates for Mining Operations and corrections to coordinates.
V5	June 2011	Mangoola/ Umwelt	Development of NMP to detail the noise management and monitoring activities associated with the construction and operational phase of the mine.
V9	June 2012	Mangoola Open Cut/ Umwelt	Updates to the NMP following review and comments by DP&E.
V10	June 2012	Mangoola Open Cut/ Umwelt	Updates to NMP following Project Approval modification.
V11	October 2012	Mangoola Open Cut/ Umwelt	Site updates to NMP. Finalised for submission to DPIE on 31 st Oct 2012.
V12	June 2013	Mangoola Open Cut/ Umwelt	Updated to reflect discussions with DP&E (e.g., monitoring requirements). Re-submitted 21/6/13.
V13	September 2013	Mangoola Open Cut/DPIE	Added reference to Condition 4, Schedule 1 of PA 06_0014 (attended monitoring). NMP approved 11 th September 2013.
V14	July 2014	EMGA Mitchell McLennan Pty Limited / Mangoola Open Cut	Updated to NMP following approval of Mod 6.
V15	October 2014	DPIE/EMGA Mitchell McLennan Pty Limited / Mangoola Open Cut	Updated Draft NMP to consider DP&E feedback. Approved 22 nd December 2014.
V16	March 2015	Mangoola Open Cut	Updated to reflect changes in monitoring locations.
V17	August 2016	Mangoola Open Cut	Updated following approval of Mod 7: Removal of traffic noise criteria

Version	Date	Prepared by	Amendment
			- Relocation of NC01 following acquisition of the property at 275 Wybong PO Road - Removal/Relocation of NC04 following purchase of receivers 132A and 132B by another mining company - Updated real time noise monitoring calibration Updated compliance assessment and exceedance response protocol
V18	December 2016	Mangoola Open Cut / EMM Consulting Pty Limited	Amended to reflect changes required by Department of Planning review.
V19	February 2017	Mangoola Open Cut/ EMM Consulting Pty Limited	Updated to reflect recent acquisition of receiver 121 by Mangoola Open Cut including replacement of NM11 with NM14.
V20	September 2017	Mangoola Open Cut	Update to reflect approved EPL variation dated 30 August 2017: - Update to figures - Update to new monitoring locations Update to attended noise monitoring frequency
V21	November 2017	Mangoola Open Cut	Amended to reflect changes required by Department of Planning review.
V22	August 2019	Mangoola Open Cut	Update to reflect approved EPL variation dated 2nd August 2019. As notified to DPIE on 6th September 2018 to reflect changes to receiver 164 in relation to Impact Mitigation and Compensation Agreement entered into. Amended to reflect change of ownership at received 175 from Privately-owned to other mine-owned land. Update to figure 2 – Noise Monitoring Locations. Updated training requirements.
V23	September 2021	EMM Consulting Pty Limited / Mangoola Coal Operations Pty Limited	Update to reflect conditions of SSD 8642. Trigger included in NMP to trigger implementation based on A13(a) of SSD 8642.
V23	November 2021	EMM Consulting Pty Limited / Mangoola Coal Operations Pty Limited	Final NMP prepared to address Conditions of SSD 8642 in response to feedback from DPIE.
V24	November 2024	Mangoola Open Cut	Full review of document including minor administrative changes/ amendments. Updated to remove reference to construction. Update to figures.

Appendix A - Authority Correspondence



Planning,
Industry &
Environment

Mr Nathan Lane
Environment and Community Coordinator
Mangoola Coal Operations Pty Ltd
PO Box 495
Muswellbrook NSW 2333

20/05/2021

Dear Mr Lane

**Mangoola Coal Continued Operations Project (SSD 8642)
Endorsement of Experts**

I refer to your request for the Planning Secretary's approval of suitably qualified persons to prepare Noise and Traffic Management Plans for the Mangoola Continued Operations Project as required under conditions B8 and B104 of SSD 8642 respectively.

The Department has reviewed the nominations and information you have provided and is satisfied that these experts are suitably qualified and experienced. Consequently, I can advise that the Planning Secretary approves the appointment of the following suitably qualified experts:

- Ms Katie Teyhan (Noise Management Plan); and
- Mr Mark Lucas (Traffic Management Plan).

Further to the above, the Department confirms that this endorsement extends to future reviews of the respective management plans. Noting that minor revisions which do not influence agreed management strategies (e.g. administrative changes) may be completed without input from the above experts.

If you wish to discuss the matter further, please contact Joe Fittell on 4908 6896.

Yours sincerely

A handwritten signature in black ink, appearing to read 'M Sprott'.

Matthew Sprott
Director
Resource Assessments (Coal & Quarries)

As nominee of the Planning Secretary

4 Parramatta Square, 12 Darcy Street, Parramatta 2150 | dpie.nsw.gov.au | 1

Appendix B - Glossary of acoustic terms

Table 8.3 **Glossary**

Term	Description
dB	Noise is measured in units called decibels (dB). There are several scales for describing noise, the most common being the 'A-weighted' scale. This attempts to closely approximate the frequency response of the human ear.
L _{A1}	The 'A-weighted' noise level which is exceeded 1% of the time.
L _{A1,1 minute}	The 'A-weighted' noise level exceeded for 1% of the specified time period of 1 minute.
L _{A10}	The 'A-weighted' noise level which is exceeded 10% of the time. It is approximately equivalent to the average of maximum noise level.
L _{A90}	Commonly referred to as the background noise level. The 'A-weighted' noise level exceeded 90% of the time.
L _{Aeq}	The energy average noise from a source. This is the equivalent continuous 'A-weighted' sound pressure level over a given period. The L _{Aeq,15 minute} descriptor refers to an L _{Aeq} noise level measured over a 15-minute period.
L _{Amin}	The minimum 'A-weighted' noise level received during a measuring interval.
L _{Amax}	The maximum root mean squared 'A-weighted' sound pressure level (or maximum noise level) received during a measuring interval.
L _{Ceq}	The equivalent continuous 'C-weighted' sound pressure level over a given period. The L _{Ceq,15 minute} descriptor refers to an L _{Ceq} noise level measured over a 15 minute period. C-weighting can be used to measure low frequency noise.
Day period	Monday – Saturday: 7 am to 6 pm, on Sundays and Public Holidays: 8 am to 6 pm.
Evening period	Monday – Saturday: 6 pm to 10 pm, on Sundays and Public Holidays: 6 pm to 10 pm.
Night period	Monday – Saturday: 10 pm to 7 am, on Sundays and Public Holidays: 10 pm to 8 am.
Temperature inversion	A meteorological condition where the atmospheric temperature increases with altitude.
Standard meteorological conditions	Day/evening/night: stability categories A–D with wind speed up to 0.5 m/s at 10 m above ground level
Noise-enhancing meteorological conditions	Daytime/evening: stability categories A–D with light winds (up to 3 m/s at 10 m above ground level). Night-time: stability categories A–D with light winds (up to 3 m/s at 10 m AGL) and/or stability category F with winds up to 2 m/s at 10 m above ground level.
Very noise-enhancing meteorological conditions	Meteorological conditions outside of the range of either standard or noise-enhancing meteorological conditions.

It is useful to have an appreciation of the decibel (dB), the unit of noise measurement. Table 8.4 gives an indication as to what an average person perceives about changes in noise levels in the environment. Examples of common noise levels are provided in Figure 8-1.

Table 8.4 Perceived change in noise

Change in sound pressure level (dB)	Perceived change in noise in surrounding environment
up to 2	not perceptible
3	just perceptible
5	noticeable difference
10	twice (or half) as loud
15	large change
20	four times (or quarter) as loud

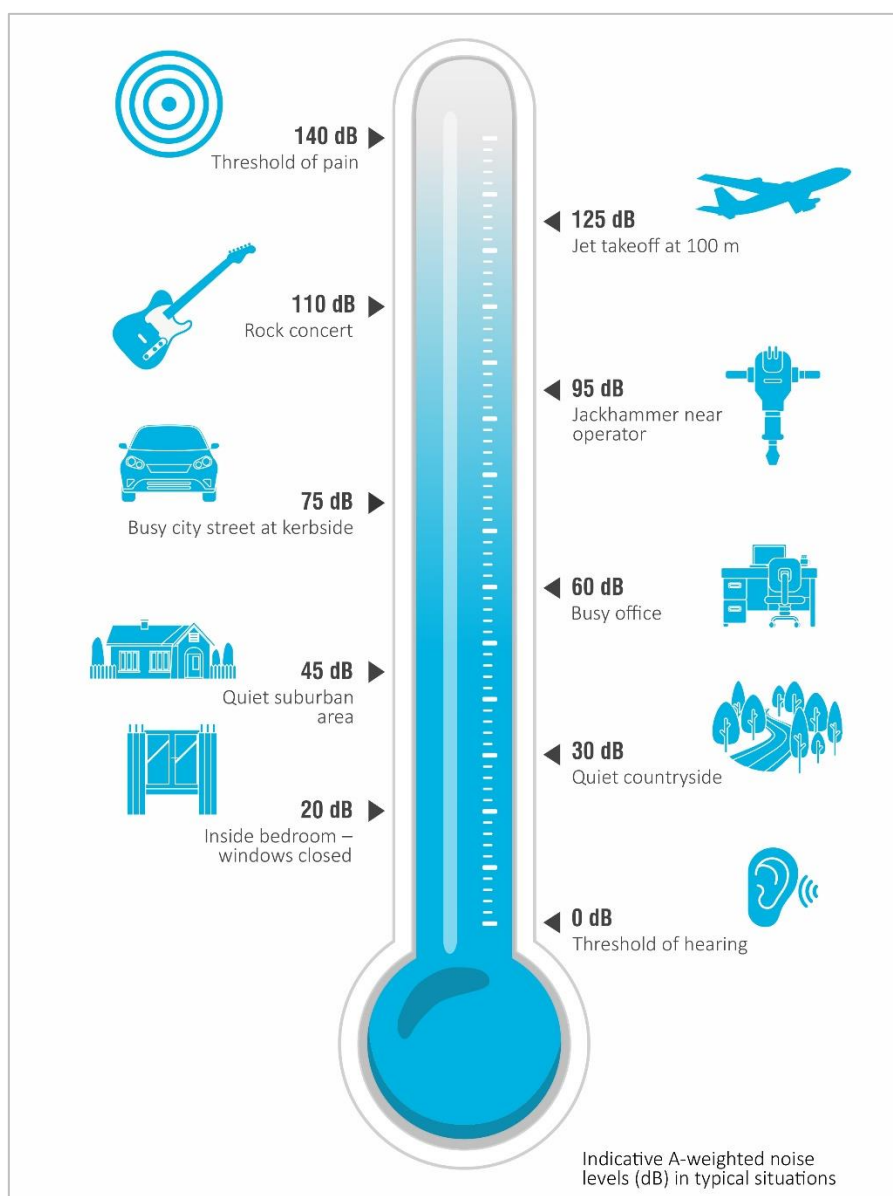


Figure 8-1 Common noise levels

Appendix C - Relevant SSD 8642 Conditions

Condition	Details	Relevant NMP Section
A3	Consistent with the requirements in this consent, the Planning Secretary may make written directions to the Applicant in relation to: (a) The content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this consent, including those that are required to be, and have been, approved by the Planning Secretary; and (b) The implementation of any actions or measures contained in any such document referred to in condition A3(a).	Section 7.1
A22	EVIDENCE OF CONSULTATION Where conditions of this consent require consultation with an identified party, the Applicant must: (a) consult with the relevant party prior to submitting the subject; and (b) provide details of the consultation undertaken to the Department, including: (i) the outcome of that consultation, matters resolved and unresolved; and (ii) details of any disagreement remaining between the party consulted and the Applicant and how the Applicant has addressed the matters not resolved.	Consultation not required for this NMP. NMP has been approved – refer to Appendix D.
A31	COMPLIANCE The Applicant must ensure that all of its employees, contractors (and their sub-contractors) are made aware of, and are instructed to comply with, the conditions of this consent relevant to activities they carry out in respect of the development.	Section 4.5
A32	APPLICABILITY OF GUIDELINES References in the conditions of this consent to any guideline, protocol, Australian Standard or policy are to such guidelines, protocols, Standards or policies in the form they are in as at the date of inclusion (or later update) in the condition.	Noted
A33	Notwithstanding Condition A32, consistent with the conditions of this consent and without altering any limits or criteria in this consent, the Planning Secretary may, in respect of ongoing monitoring and management obligations, agree to or require compliance with an updated or revised version of such a guideline, protocol, Standard or policy, or a replacement of them.	Noted

Condition	Details	Relevant NMP Section																																																																							
B1	NOISE Noise Criteria The Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 1 at any residence on privately owned land. Table 1: Noise Criteria dB(A) <table><tr><th rowspan="2">Noise Assessment Location*</th><th>Day LAeq (15 min) (Years 1 & 2)</th><th>Day LAeq (15 min) (Years 3 onward)</th><th>Evening LAeq (15 min)</th><th colspan="2">Night</th></tr><tr><th></th><th></th><th></th><th>LAeq (15 min)</th><th>LA1 (1 min)</th></tr><tr><td>171, 176, 144</td><td>40</td><td>40</td><td>40</td><td>40</td><td>52</td></tr><tr><td>25, 128, 154,193, 125A, 182B, 261</td><td>40</td><td>40</td><td>38</td><td>38</td><td>52</td></tr><tr><td>54, 79, 114, 141, 151, 192, 206, 321, 125C, 182A, 241A, 241C, 190, 157</td><td>42</td><td>40</td><td>38</td><td>38</td><td>52</td></tr><tr><td>165, 177, 106B, 104, 166, 178, 251, 253, 260, 112B, 183C, 184A, 147, 112A, 112C, 240, 241B</td><td>40</td><td>40</td><td>37</td><td>37</td><td>52</td></tr><tr><td>134A</td><td>40</td><td>40</td><td>36</td><td>36</td><td>52</td></tr><tr><td>109 A-F</td><td>44</td><td>40</td><td>39</td><td>39</td><td>52</td></tr><tr><td>263</td><td>42</td><td>40</td><td>32</td><td>39</td><td>52</td></tr><tr><td>164</td><td>40</td><td>40</td><td>35</td><td>39</td><td>52</td></tr><tr><td>Other privately-owned residences</td><td>40</td><td>40</td><td>35</td><td>35</td><td>52</td></tr><tr><td>Wybong Hall and Anglican Church</td><td>48</td><td>48</td><td>48</td><td>48</td><td>–</td></tr></table> <i>* The Noise Assessment Locations referred to in Table 1, are shown in Appendix 5</i>	Noise Assessment Location*	Day LAeq (15 min) (Years 1 & 2)	Day LAeq (15 min) (Years 3 onward)	Evening LAeq (15 min)	Night					LAeq (15 min)	LA1 (1 min)	171, 176, 144	40	40	40	40	52	25, 128, 154,193, 125A, 182B, 261	40	40	38	38	52	54, 79, 114, 141, 151, 192, 206, 321, 125C, 182A, 241A, 241C, 190, 157	42	40	38	38	52	165, 177, 106B, 104, 166, 178, 251, 253, 260, 112B, 183C, 184A, 147, 112A, 112C, 240, 241B	40	40	37	37	52	134A	40	40	36	36	52	109 A-F	44	40	39	39	52	263	42	40	32	39	52	164	40	40	35	39	52	Other privately-owned residences	40	40	35	35	52	Wybong Hall and Anglican Church	48	48	48	48	–	Section 5
Noise Assessment Location*	Day LAeq (15 min) (Years 1 & 2)		Day LAeq (15 min) (Years 3 onward)	Evening LAeq (15 min)	Night																																																																				
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Wybong Hall and Anglican Church	48	48	48	48	–																																																																				
B2.	Noise generated by the development must be monitored and measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the <i>NSW Noise Policy for Industry (EPA, 2017)</i>. The noise enhancing meteorological conditions determined by monitoring at the meteorological station required under condition B35 and as defined in Part D of the <i>Noise Policy for Industry (EPA, 2017)</i> apply to the noise in Table 1. The noise criteria in Table 1 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or land to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.	Section 6																																																																							
		The Applicant has a written agreement with the owner of 164, 130, 132A and 132B and the Department has been notified of this.																																																																							

Condition	Details	Relevant NMP Section				
B6	Road Traffic Noise Upon receiving a written request from the owner of a residence listed in Table 2, (except where a negotiated noise agreement is in place for road traffic noise), the Applicant must implement noise mitigation measures such as double glazing, insulation, and/or air conditioning at any residence on the land in consultation with the landowner to minimise the impacts of road traffic noise. These additional mitigation measures must be reasonable and feasible, directed at mitigating the traffic noise impacts of the Project and must consider any existing mitigation installed under the Mangoola Coal Project (PA 06_0014). If within 3 months of receiving this request from the landowner, the Applicant and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution. Table 2: Receivers subject to Road Noise Mitigation upon request <table><tr><th>Mitigation Basis</th><th>Receiver ID</th></tr><tr><td>Road Traffic Noise</td><td>R246*, R249 and R251</td></tr></table> <i>*Mitigation works have been implemented at this receiver under PA 06_0014</i>	Mitigation Basis	Receiver ID	Road Traffic Noise	R246*, R249 and R251	Section 4.6.2
Mitigation Basis	Receiver ID					
Road Traffic Noise	R246*, R249 and R251					
B7	Noise Operating Conditions The Applicant must: (a) take all reasonable steps to minimise noise and operational activities, including low frequency noise and other audible characteristics, as well as road and on-site rail noise associated with the development; (b) implement reasonable and feasible noise attenuation measures on all plant and equipment that will operate in noise sensitive areas; (c) take all reasonable steps to minimise the noise impacts in the development in noise sensitive areas during the evening and night; (d) operate a comprehensive noise management system that uses a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations, and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent; (e) take all reasonable steps to minimise the noise impacts of the development during noise-enhancing meteorological conditions; (f) only use locomotives and rolling stock that are approved to operate on the NSW rail network in accordance with the noise limits in any relevant rolling stock operator’s EPL and use reasonable endeavours to ensure that rolling stock is selected to minimise noise; (g) carry out regular attended noise monitoring (at least once a month, unless otherwise agreed by the Planning Secretary) to determine whether the development is complying with the relevant conditions of this consent; and (h) regularly assess the noise monitoring data and modify operations on the site to ensure compliance with the relevant conditions of this consent.	Section 4 and Section 6				

Condition	Details	Relevant NMP Section
B8	Noise Management Plan The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary. This plan must: (a) be prepared by a suitable qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary; (b) describe the measures to be implemented to ensure: (i) compliance with the noise criteria and operating conditions of this consent; (ii) best practice management is being employed; and (iii) noise impacts of the development are minimised during noise-enhancing meteorological conditions; (c) describe the measures to minimise development related road traffic noise generated on public roads; (d) describe the noise management system in detail; and (e) include a monitoring program that: (i) uses a combination of real-time and supplementary attended monitoring to evaluate to performance of the development; (ii) monitors noise at locations representative of the most affected residences; (iii) includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time; (iv) adequately supports the noise management system; (v) includes a protocol for distinguishing noise emissions of the development from any neighbouring developments; and (vi) includes a protocol for identifying any noise-related exceedance, incident or non-compliance and for notifying the Department and relevant stakeholders of any such event. The Applicant must not commence mining operations north of Wybong Road until the Noise Management Plan is approved by the Planning Secretary.	Appendix A Sections 4.1 - 4.5, Section 6 <i>Addressed in previous version (V23) of this NMP (Sections 6.3, 6.4, 6.6)</i>
B9	The Applicant must implement the Noise Management Plan as approved by the Planning Secretary.	
B10		Section 1.2
B35	METEOROLOGICAL MONITORING Prior to the commencement of constructions and for the life of the development, the Applicant must ensure that there is at least one suitable meteorological station in the vicinity of the site that: (a) complies with the requirements in the <i>Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales</i> (DEC 2007); and (b) is capable of measuring meteorological conditions in accordance with the <i>NSW Noise Policy for Industry</i> (EPA, 2017). unless a suitable alternative is approved by the Planning Secretary following consultations with the EPA.	Section 6.1

Condition	Details	Relevant NMP Section						
C1	ACQUISITION UPON REQUEST Upon receiving a written request for acquisition from the owner of the privately-owned land listed in Table 10, the Applicant must acquire the land in accordance with the procedures in conditions C12 to C19, inclusive. <i>Table 10: Land subject to acquisition upon request</i> <table><tr><th>Acquisition Basis</th><th>Land</th></tr><tr><td>Noise</td><td>R25, R66, R110, R130, R139, R148, R205</td></tr><tr><td>Noise and Air Quality</td><td>R83</td></tr></table>	Acquisition Basis	Land	Noise	R25, R66, R110, R130, R139, R148, R205	Noise and Air Quality	R83	Section 4.6.3
Acquisition Basis	Land							
Noise	R25, R66, R110, R130, R139, R148, R205							
Noise and Air Quality	R83							
C2	ADDITIONAL MITIGATION UPON REQUEST Upon receiving a written request for mitigation from the owner of any residence on the privately-owned land listed in Table 10 or Table 11, the Applicant must implement additional mitigation measures at or in the vicinity of the residence in consultation with the landowner. These measures must be consistent with the measures outlined in the Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Development (NSW Government, 2018). They must also be reasonable and feasible, proportionate to the level of predicted impact and directed towards reducing the noise and/or air quality impacts of the development. The Applicant must also be responsible for the reasonable, costs of ongoing maintenance of these additional mitigation measures until the cessation of mining operations. <i>Table 11: Land subject to additional mitigation upon request</i> <table><tr><th>Mitigation Basis</th><th>Land</th></tr><tr><td>Noise</td><td>R128, R144, R154, R171, R176, R193, R261, R263, R109A, R109B, R109C, R109D, R109E, R109F, R125A, R134A, R182B, R164, R177, R251, R174A, R174B</td></tr></table>	Mitigation Basis	Land	Noise	R128, R144, R154, R171, R176, R193, R261, R263, R109A, R109B, R109C, R109D, R109E, R109F, R125A, R134A, R182B, R164, R177, R251, R174A, R174B	Section 4.6.1		
Mitigation Basis	Land							
Noise	R128, R144, R154, R171, R176, R193, R261, R263, R109A, R109B, R109C, R109D, R109E, R109F, R125A, R134A, R182B, R164, R177, R251, R174A, R174B							
C3	If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.	Section 4.6.1						
C4	For the life of the development, the Applicant must continue to contribute to reasonable maintenance and recurrent operating costs associated with the noise mitigation measures installed at privately-owned residences under the Mangoola Coal Project and as described in the documents listed in condition A2(c). The contribution to ongoing maintenance and recurrent operating costs must be consistent with any existing agreement between the Applicant and the relevant landowner.	Section 4.6.1						
C7	NOTIFICATION OF EXCEEDANCES As soon as practicable and no longer than 7 days after obtaining monitoring results showing an exceedance of any noise, blasting or air quality criterion in PART B of this consent, the Applicant must provide the details of the exceedance to any affected landowners, tenants and the CCC.	Section 6.4						

Condition	Details	Relevant NMP Section
C9	INDEPENDENT REVIEW If a landowner considers the development to be exceeding any relevant noise, blasting or air quality criterion in PART B of this consent, they may ask the Planning Secretary in writing for an independent review of the impacts of the development on their residence or land.	Section 6.5
C10	If the Planning Secretary is not satisfied that an independent review is warranted, the Planning Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.	
C11	If the Planning Secretary is satisfied that an independent review is warranted, within 3 months of the Planning Secretary's decision, or other timeframe agreed by the Planning Secretary, the Applicant must: (a) commission a suitable qualified, experienced and independent person, whose appointment has been provided by the Planning Secretary, to: (i) consult with the landowner to determine their concerns; (ii) conduct monitoring to determine whether the development is complying with the relevant criteria in PART B of this consent; and (iii) if the development is not complying with the relevant criterion, identify measures that could be implemented to ensure compliance with the relevant criterion; and (b) give the Planning Secretary and landowner a copy of the independent review; and (c) comply with any written requests made by the Planning Secretary to implement any findings from the review.	
D4	Adaptive Management The Applicant must assess and manage development-related risks to ensure that there are no exceedances of the criteria and performance measures in this consent. Any exceedance of these criteria or performance measures constitutes a breach of this consent and may be subject to penalty or offence provisions under the EP&A Act or EP&A Regulation. Where any exceedance of these criteria or performance measures has occurred, the Applicant must, at the earliest opportunity: (a) take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur; (b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing those options and any preferred remediation measures or other course of action; and (c) implement reasonable remediation measures as directed by the Planning Secretary.	Section 6.6 and 6.3

Condition	Details	Relevant NMP Section
D5	Management Plan Requirements Management plans required under this consent must be prepared in accordance with relevant guidelines, and include: (a) summary of relevant background and baseline data; (b) details of: (i) the relevant statutory requirements (including any relevant approval, licence or lease conditions); (ii) any relevant limits or performance measures and criteria; and (iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures; (c) any relevant commitments or recommendations identified in the document/s listed in condition a2(c); (d) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria; (e) a program to monitor and report on the: (i) impacts and environmental performance of the development; and (ii) effectiveness of the management measures set out pursuant to condition D4(c); (f) a contingency plan to manage any unpredicted impacts and their consequences and the ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible; (g) a program to investigate and implement ways to improve the environmental performance of the development over time; (h) a protocol for managing and reporting any: (i) incident, non-compliance or exceedance of any impact assessment criterion or performance criterion; (ii) complaint; or (iii) failure to comply with other statutory requirements; (i) public sources of information and data to assist stakeholders in understanding impacts of the development; and (j) a protocol for periodic review of the plan. Note: The Planning Secretary may waive some of these requirements if they are unnecessary of unwarranted for particular management plans.:	The Plan Section 1.3 Section 5 Section 4 Section 4 Section 6 Section 6.3 Section 7 Sections 6.4 and 6.6 Section 6.7 Sections 6.6 Section 6.8 Section 7.1
D6	The Applicant must ensure that management plans prepared for the development are consistent with the conditions of this consent and any EPL issued for the site.	Section 2.3

Condition	Details	Relevant NMP Section
D7	REVISION OF STRATEGIES, PLANS AND PROGRAMS Within three months of: (a) the submission of an incident report under condition D9; (b) the submission of an Annual Review under condition D11; (c) the submission of an Independent Environmental Audit under condition D12; (d) the approval of any modification of the conditions of this consent (unless the conditions require otherwise); or (e) notification of a change in development phase under conditions A13; the suitability of existing strategies, plans and programs required under this consent must be review by the Applicant.	Section 7.1
D8	If necessary, to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under this consent must be revised., to the satisfaction of the Planning Secretary. Where revisions are required document must be submitted to the Planning Secretary for approval within six weeks of the review.	
D9	REPORTING AND AUDITING Incident Notification The Applicant must immediately notify the Department and any other relevant agencies immediately after it becomes aware of an incident. The notification must be in writing through the Department's Major Projects Website and identify the development (including the development application number and name) and set out the location and nature of the incident.	Section 6.4
D10	Non-Compliance Notification Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be writing through the Department's Major Projects Website and identify the development (including the development application number and name), set out in the condition of this consent that the development is non-compliant with, which it does not comply and the reasons for the non-compliance (if known) and what actions have been, or will be, undertaken to address the non-compliance. <i>Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.</i>	An exceedance of the noise limits is classified as a non-compliance rather than an incident. Section 6.4

Condition	Details	Relevant NMP Section
D11	ANNUAL REVIEW By the end of March each year after the commencement of development, or other timeframe agreed by the Planning Secretary, a report must be submitted to the Department reviewing the environmental performance of the development, to the satisfaction of the Planning Secretary. This review must: (a) describe the development (including any rehabilitation) that was carried out in the previous calendar, and the development that is proposed to be carried out over the current calendar year; (b) include a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, including a comparison of these results against the: (i) relevant statutory requirements, limits or performance measures/criteria; (ii) requirements of any plan or program required under this consent; (iii) monitoring results of previous years; and (iv) relevant predictions in the document/s listed in condition A2(c); (c) identify any non-compliance or incident which occurred in the previous calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence; (d) evaluate and report on: (i) the effectiveness of the noise and air quality and greenhouse gas management systems; (ii) compliance with the performance measures, criteria and operating conditions of this consent; and (iii) the status of translocated plants and vegetation quadrat data from orchid monitoring sites; (e) identify any trends in the monitoring data over the life of the development; (f) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies.; and (g) describe what measures will be implemented over the next calendar year to improve the environmental performance of the development.	Section 6.4
D12	Copies of the Annual Review must be submitted to Council and made available to the CCC and any interested person upon request.	Section 6.4

Condition	Details	Relevant NMP Section
D13	Independent Environmental Audit Within one year of commencement of development under this consent, and every three years after, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. The audit must: (a) be led by a suitably qualified, experienced and independent auditor whose appointment has been endorsed by the Planning Secretary; (b) be conducted by a suitably qualified, experienced and independent team of experts (including any expert in field/s specified by the Planning Secretary) whose appointment has been endorsed by the Planning Secretary; (c) be carried out in consultation with the relevant, agencies and the CCC; (d) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent, water licence\$ and mining leases for the development (including any assessment, strategy, plan or program required under these approvals); (e) review the adequacy of any approved strategy, plan or program required under the abovementioned approvals and this consent; (f) recommend appropriate measures or actions t<> improve the environmental performance of the development and any assessment, strategy, plan or program required under the abovementioned approvals and this consent; and (g) be conducted and reported to the satisfaction of the Planning Secretary.	Section 6.4
D14	Within three months of commencing an Independent Environmental Audit, or other timeframe agreed by the Planning Secretary, the Applicant must submit a copy of the audit report to the Planning Secretary, and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Planning Secretary.	Section 6.4
D16	Noise, blast and/or air quality monitoring under this consent may be undertaken at suitable representative monitoring locations instead of at privately-owned residences or other locations listed in Part B, providing that these representative monitoring locations are set out in the respective management plants.	Section 6.2.1

Condition	Details	Relevant NMP Section
D17	ACCESS TO INFORMATION Before the commencement of construction until the completion of all rehabilitation required under this consent, the Applicant must: (a) make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of this consent) publicly available on its website: (i) the documents referred to in condition A2(c) of this consent; (ii) all current statutory approvals for the development; (iii) all approved strategies, plans and programs required under the conditions of this consent; (iv) the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged; (v) minutes of CCC meetings; (vi) regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent; (vii) a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; (viii) a summary of the current phase and progress of the development; (ix) contact details to enquire about the development or to make a complaint; (x) a complaints register, updated monthly; (xi) the Annual Reviews of the development; (xii) audit reports prepared as part of any Independent Environmental Audit of the development and the Applicant's response to the recommendations in any audit report; (xiii) any other matter required by the Planning Secretary; and (b) keep such information up to date, to the satisfaction of the Planning Secretary.	Section 6.8

Appendix D - Planning Secretary Approval of NMP

To be inserted on approval by the Department.