MALABAR

MAXWELL UNDERGROUND MINE

NOISE AND BLASTING MANAGEMENT PLAN

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1 INTRODUCTION

1.1 Background

Maxwell Ventures (Management) Pty Ltd (Maxwell), a wholly owned subsidiary of Malabar Resources Limited (Malabar) owns and operates the Maxwell Underground Mine (the site). The site is located in the Upper Hunter Valley of New South Wales (NSW), east-southeast of Denman and south-southwest of Muswellbrook. The site is approved to extract a maximum of 8 million tonnes of run-of-mine coal per year over a period of 26 years. The site boundary is shown in **Figure 1**.

The site consists of the following areas:

- Underground area comprising the proposed area of underground mining operations and the mine entry area (MEA) to support underground mining and coal handling activities and provide for personnel and materials access;
- Maxwell Infrastructure (formerly Drayton mine) comprising previous open cut mining areas, existing coal handling and preparation plant, train load-out facilities and rail loop, Antiene rail spur and other infrastructure and services; and
- Transport and services corridor between the underground area and Maxwell Infrastructure comprising the proposed site access road, covered overland conveyor, power supply and other ancillary infrastructure and services.

The area within and surrounding the site, which has previously been known as Mt Arthur South, Saddlers Creek and Drayton South, has long been identified as having a significant in-situ coal resource. Prospecting for coal commenced in the late 1940s, with exploration intensifying during the 1960s and 1970s. Open cut coal extraction and mining activities commenced at Maxwell Infrastructure in 1983 and ceased in October 2016. The previous open cut mining area is currently in the rehabilitation phase of the mine operations.

The development consent for State Significant Development 9526 (SSD 9526) was granted on 22 December 2020 under clause 8A of the *State Environmental Planning Policy (State and Regional Development) 2011* and section 4.5(a) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The development consent was modified on 19 November 2021 (Maxwell MOD1) to allow for the repositioning of infrastructure primarily at the MEA and realignment of a section of the site access road.

The development consent was further modified (Maxwell MOD2) on 19 October 2022 to allow for the following:

- Re-orientation of the longwall panels in the Woodlands Hill, Arrowfield and Bowfield Seams resulting in a minor increase in the approved underground mining extent.
- Reduction in the width of some of the longwall panels in the Woodlands Hill Seam.
- Repositioning of the upcast ventilation shaft site and associated infrastructure.
- Other minor works and ancillary infrastructure components (e.g. access road and ancillary water management infrastructure for the repositioned ventilation shaft site).

Another modification was made to the development consent (Maxwell MOD3) on 22 September 2025 to allow for the transfer of tailings from Mt Arthur Coal (MAC) to the Maxwell UG Mine East Void, and tailings and coarse rejects from the Maxwell CHPP to the North Void.

The site also incorporates the development formerly authorised under the Maxwell Infrastructure Project Approval (PA) 06_0202. Development Consent DA 106-04-00 for the existing rail loop and Antiene Rail Spur was granted on 2 November 2000 under Section 76(A)9 and 80 of the EP&A Act. DA 106-04-00 was modified on 18 September 2023 (Antiene MOD1) to align with the approved operating life of the Maxwell Underground Mine (i.e. until 2047).

1.2 Purpose and Scope

The purpose of this Noise and Blasting Management Plan (NBMP) is to ensure that statutory requirements are met and to outline the controls to be implemented to manage noise and blasting at the

site. This NBMP has been prepared in accordance with Schedule 2, Condition B12 of Development Consent SSD 9526. This NBMP is one of a series of Environmental Management Plans that together form the Environmental Management System for the site.

This NBMP applies to all activities within the SSD 9526 development application area and the Antiene Rail Spur Development Consent DA 106-04-00 boundary.

In accordance with the Maxwell UG Project Environmental Impact Statement (Maxwell EIS), Maxwell may conduct blasting in the final voids at the Maxwell Infrastructure site (rehabilitation blasting). In accordance with the Maxwell EIS, this rehabilitation blasting would be conducted in accordance with a Rehabilitation Management Plan (formerly the Mining Operations Plan (MOP)), Mine Closure Plan and/or a Noise and Blast Management Plan. This NBMP would be updated prior to any rehabilitation blasting at which time consultation will be undertaken in accordance with Schedule 2, Condition B12(e)(i) of Development Consent SSD 9526.

Separately, Maxwell Solar Pty Ltd (a subsidiary of Malabar) holds Development Consent SSD 9820 for the Maxwell Solar Farm. The Maxwell Solar Farm is a 25 megawatt (MW) solar project located on a rehabilitated overburden emplacement area at the Maxwell Infrastructure. The Maxwell Solar Farm will be constructed and operated as a separate project and will be managed under a separate and distinct environmental management system developed in accordance with Development Consent SSD 9820. This NBMP does not apply to any development, activities or environmental impacts associated with the Maxwell Solar Farm.

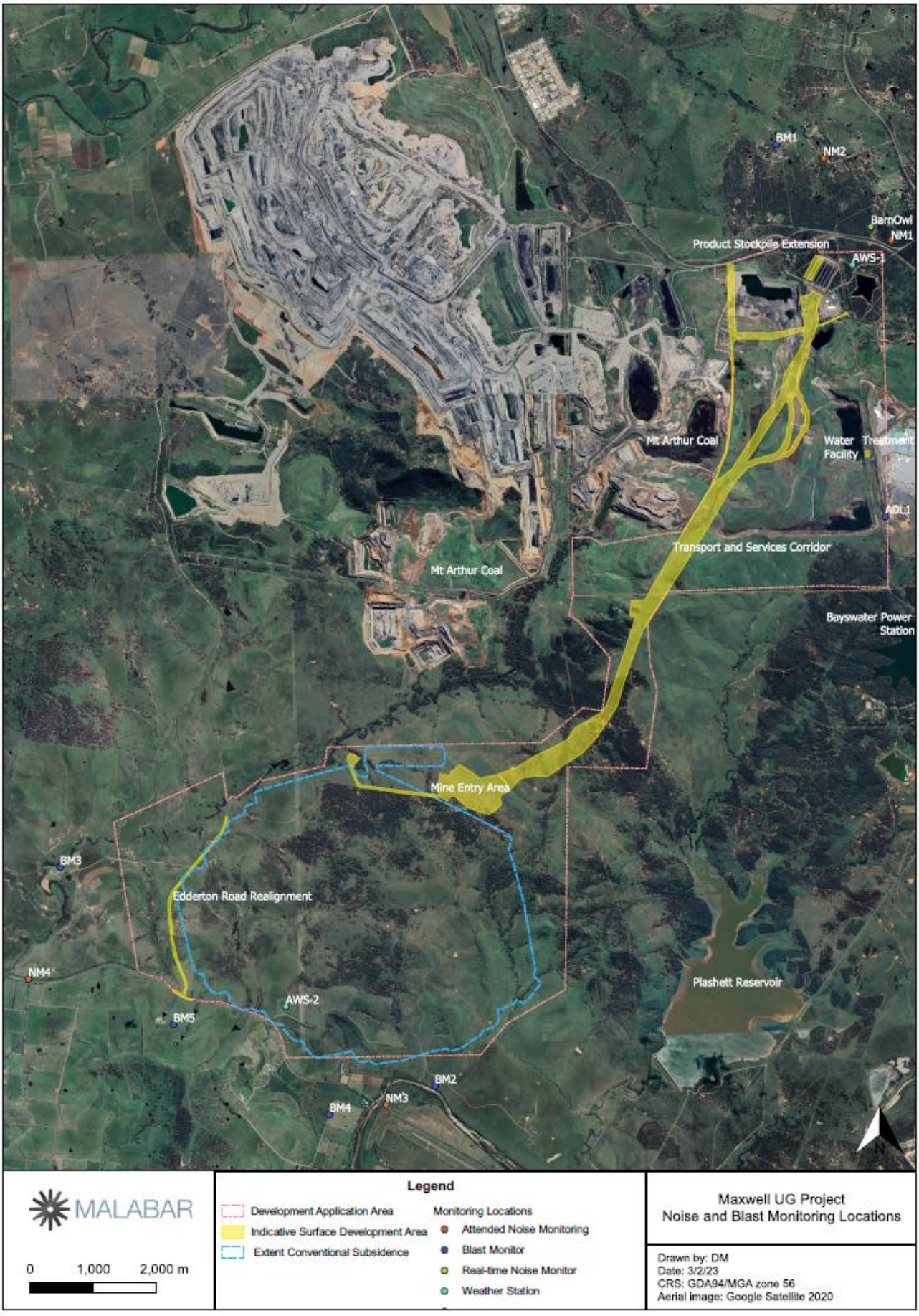

Figure 1. Noise and Blast Monitoring Locations

This NBMP was approved by the Planning Secretary on 10 February 2022. On 6 April 2022 Maxwell gave written notice to the then Department of Planning and Environment (DPE), now Department of Planning, Housing and Infrastructure (DPHI) of its intention to commence permitted construction in accordance with Condition A13(b), Schedule 2 of Development Consent SSD 9526. In accordance with Schedule 2, Condition B13 of Development Consent SSD 9526, Maxwell did not commence construction until this NBMP was approved by the Planning Secretary. In accordance with Schedule 2, Condition B14 of Development Consent SSD 9526, Maxwell is implementing this NBMP.

1.3 Objectives

The objectives of this NBMP are to:

- Detail all relevant statutory requirement;
- Define noise and blasting criteria;
- Identify potential noise and blasting impacts;
- Describe the noise and blasting management system and detail the controls to be implemented;
- Provide detail on how noise impacts are minimised during noise-enhancing meteorological conditions;
- Describe the noise and blasting monitoring program and how exceedances of criteria are established;
- Provide detail on public notification procedures prior to blasting;
- Detail the protocol for distinguishing noise emissions from neighbouring developments;
- Detail the procedure for reporting noise and blasting related exceedances and incidents to relevant stakeholders; and
- Manage complaints related to noise and blasting in a timely and effective manner.

2 PLANNING

2.1 Regulatory Requirements

This NBMP describes the management of noise and blasting to meet relevant statutory requirements within Development Consent SSD 9526, DA 106-04-00, Environment Protection Licence (EPL) 1323, Mining Lease 1531, Coal Lease (CL) 229 and CL395. The various conditions that relate to noise and blasting management and where they are addressed in this document are detailed in **Appendix 1**.

2.2 Maxwell EIS and Supporting Document Commitments

A noise impact assessment was undertaken for the Maxwell Underground Project Environmental Impact Statement (Maxwell EIS) (2019) and included assessment of noise impacts associated with construction activities, operational activities and road and rail transportation. It also included assessment of potential blasting activities. Commitments in the Maxwell EIS and supporting documents that relate to noise and blasting management, and where they are addressed in this document are detailed in **Appendix 2**.

2.3 Preparation and Consultation

Schedule 2, Condition B12(a) of Development Consent SSD 9526, requires that this plan be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary. Maxwell engaged Neil Gross (Associate Principal at RWDI Australia Pty Ltd) to assist with the preparation of this plan. A copy of the endorsement by the Planning Secretary is included in **Appendix 3**.

In accordance with Schedule 2, Part B, Condition B12(e)(i) of Development Consent SSD 9526, this plan was prepared in consultation with the Coolmore and Woodlands Thoroughbred Studs. Outcomes of the consultation are presented in **Appendix 4**.

In accordance with Schedule 2, Condition A8 of SSD 9526, the Mine is permitted to transport Run of Mine (ROM) coal from the MEA to the CHPP by truck for a period of 3 calendar years following the

commencement of first workings, unless an extension is granted by the Planning Secretary. On 20 September 2024, Maxwell requested an extension until 31 December 2026, to continue trucking ROM coal from the MEA to the CHPP due to delays being experienced with construction of the overland conveyor, primarily as a result of global supply chain challenges. On 14 October 2024, the Planning Secretary approved this request with the requirement to include additional proactive noise mitigation options into this NBMP during the extended period of trucking ROM Coal (see **Table 4**).

3 IMPLEMENTATION

3.1 Context

The site is adjacent to two groups of receivers:

- the northern receivers located within the Antiene and East Antiene residential areas near Thomas Mitchell Drive and New England Highway, north and north-east of the Maxwell Infrastructure area; and
- the southern receivers located near the Golden Highway and Hunter River, south and west of the proposed underground mining area.

All 146 identified receivers are shown on figures in **Appendix 5**. Noise modelling was undertaken as part of the noise impact assessment for the daytime, evening and night operating scenarios, based on years 1, 3 and 4 of operations. These years were selected to represent operations with the greatest potential for noise impacts on both the southern and northern receivers. The noise model is compatible with the *Noise Policy for Industry* (NPfI) (EPA 2017). Modelling simulated the site activities using noise source information (i.e. sound power levels and locations) and predicted corresponding potential noise levels at relevant receiver locations. This included consideration of noise enhancing meteorological conditions.

3.2 Noise Impacts

3.2.1 Operational Noise

The NPfI quantifies the significance of any potential noise exceedances. These significance categories are described in **Table 1** and are generally consistent with the significance categories described in the *Voluntary Land Acquisition and Mitigation Policy* (VLAMP) (DPIE 2018). The VLAMP describes mitigation for residual noise impacts from state significant mining developments through the application of voluntary mitigation and acquisition rights.

Table 1. Significance of residual noise impacts

If the predicted noise level minus the project noise trigger is:	And the total cumulative industrial noise is:	Then the significance of residual noise level is:
<= 2dBA	Not applicable	Negligible
>=3 but <=5 dBA	< recommended amenity noise level OR > recommended amenity noise level, but the increase in total cumulative industrial noise level resulting from the development is less than or equal to 1dB.	Marginal
>=3 but <=5 dBA	> recommended amenity noise level, but the increase in total cumulative industrial noise level resulting from the development is more than 1dB.	Moderate
>5 dBA	=< recommended amenity noise level	Moderate
>5 dBA	>recommended amenity noise level	Significant

Noise modelling indicated that noise contributions from the site at all privately-owned southern receivers including the Coolmore and Godolphin Woodlands Studs and Hollydene Estate Wines, were predicted to be indistinguishable from background noise.

With mitigation measures in place, “marginal” exceedances are predicted at northern receivers 403 and 411 during the daytime and night periods and at northern receivers 402 and 538 during the night period in Years 3 and 4. “Negligible” exceedances are predicted at northern receivers 390, 398, 400, 402, 411, 418, 419, 420, 421, 423, 424, 538 and 539 (refer to figures in **Appendix 5** for location of receivers). No exceedances are predicted at any southern receivers. As described in the VLAMP, “negligible” exceedances are not discernible by the average listener. The noise mitigation measures incorporated into the modelling included the selection of mobile plant and infrastructure items in consideration of good practice sound power levels and implementation of a pro-active noise management system. The pro-active noise management system included the suspension of a small number of mobile plant during noise-enhancing meteorological conditions.

The relatively limited number of receivers with exceedances indicates that, with the implementation of the proposed mitigation measures, operational noise from the site can be managed to the maximum extent possible, and no other measures would be of material benefit.

3.2.2 Low-Frequency Noise

A low-frequency noise assessment was undertaken as part of the noise impact assessment to ascertain whether any receivers should be subject to a modifying factor correction due to dominant low-frequency content, prior to comparing to the relevant site noise trigger levels. The NPfI provides a method for assessing low-frequency noise based on:

- overall ‘C’ weighted and ‘A’ weighted predicted or measured levels; and
- one-third octave predicted or measured levels in the range 10–160 Hz.

The C-weighted noise level minus A-weighted noise level assessment was conducted for a selection of receivers considered to be representative of various catchment areas surrounding the site. The assessment was based on the relevant night-time NPfI meteorological conditions resulting in the highest noise levels.

The assessment indicated that it is unlikely that any of the receivers surrounding the site would be subject to dominant low-frequency noise and as such no modifying factor correction for low-frequency noise was warranted for the site. If monitoring results during operations are found to contain dominant low-frequency content, appropriate modifying factors will be applied to measured noise levels in accordance with Fact Sheet C of the NPfI (EPA, 2017).

In accordance with Fact Sheet C of the NPfI (EPA, 2017), following measurement or assessment of source contribution C- and A-weighted $L_{eq,T}$ levels over same time period, the modifying correction is to be applied where the C minus A level is 15 decibels (dB) or more and:

- where any of the one-third octave noise levels in Table C2 of Fact Sheet C are exceeded by up to and including 5 dB and cannot be mitigated, a 2-dB(A) positive adjustment to measured/predicted A-weighted levels applies for the evening/night period.
- where any of the one-third octave noise levels in Table C2 of Fact Sheet C are exceeded by more than 5 dB and cannot be mitigated, a 5-dB(A) positive adjustment to measured/predicted A-weighted levels applies for the evening/night period and a 2-dB(A) positive adjustment applies for the daytime period.

3.2.3 Construction Noise

Year 1 considers construction works at the MEA (including construction of drifts and ventilation shafts), along the site access road, as well as initial underground mining operations and ongoing rehabilitation of the previously mined areas at the Maxwell Infrastructure. Year 3 considers daytime construction works associated with the upgrade of Maxwell Infrastructure and the new covered overland conveyor, as well as underground mining, ROM coal transport to Maxwell Infrastructure via trucks, and handling and processing of coal.

As perceived by receivers in the vicinity of the site, noise associated with these construction activities in Year 1 and 3, would largely be indistinguishable from operational mining and coal processing activities given similar plant would be deployed and construction activities would occur in areas adjacent to operational activities. For this reason, construction noise during Years 1 and 3 were assessed cumulatively with operational noise, with reference to the criteria for operational noise as per the NPfI.

Investigative modelling has indicated that daytime construction of the site access road in Year 1 would be more than 10 dB less than the predicted operational noise to the northern receivers beyond approximately 500 to 1,500 metres (m) from the northern-most end of the transport and services corridor, depending on the meteorological conditions present at the time. In other words, construction noise would typically be masked by the operational noise.

Similarly, daytime works associated with the construction activities along the covered overland conveyor in the Year 3 scenario would become inaudible to the northern receivers beyond approximately 350 to 1,000 m from the northern-most end of the transport and services corridor, depending on the meteorological conditions present at the time. Other construction activities (including initial construction before the site becomes operational) would be distinguishable from operational activities. For completeness, all construction activities, including those that would likely be indistinguishable from operational activities have also been assessed in accordance with the NSW Environment Protection Authority (EPA) Interim Construction Noise Guide (ICNG).

Results of the noise modelling indicated that construction noise levels would generally comply with all the noise management levels recommended in the ICNG. Should these works occur outside of the ICNG's recommended standard hours (i.e. on Sunday or after 1.00 pm on Saturday), construction noise is predicted to exceed the daytime 'Noise Affected' management level by 1 dB at the northern receiver 411. However, the exceedance was unlikely to occur as it assumed construction works associated with the site access road would take place at the northern-most end of the transport and services corridor outside standard hours and during noise-enhancing meteorological conditions. It should be noted that a "marginal" exceedance (3-5dBA) is already predicted at the northern receiver 411 due to operational noise emissions.

3.2.4 Road and Rail Transportation Noise

Noise modelling indicated that the site will comply with relevant criteria in relation to road and rail transportation noise. Noise levels were modelled at the closest affected receiver location for years 6 and 13. Year 6 activity represents peak short-term operational and Year 13 represents longer-term operational activity. Road traffic noise levels resulting from cumulative traffic movements are predicted to comply with the relevant *NSW Road Noise Policy* (Department of Environment, Climate Change and Water 2011) criteria at all privately-owned receivers on the assessed section of Thomas Mitchell Drive for all years.

An assessment of potential noise impacts from rail traffic was conducted in accordance with the *Rail Infrastructure Noise Guideline* (RING) (EPA) 2013). As the sites' contribution to total rail traffic on the Main Northern Railway would be less than 5 per cent, an assessment against the RING's network rail line criteria is not warranted. Any site-related noise increase on the Main Northern Railway would be less than 0.5 dB (EPA 2013). The rail traffic noise assessment considered a maximum-case rail movement scenario that included the maximum potential cumulative rail movements for the site and MAC. No exceedances of the RING criteria for non-network rail lines were predicted at any privately-owned receivers due to the cumulative rail movements of the site and MAC when considering local noise-enhancing meteorology.

3.2.5 Cumulative Noise

Cumulative noise impacts resulting from concurrent operations of the site and MAC were assessed against the NPfI recommended amenity criteria. The assessment indicated that cumulative noise levels from the concurrent operations will comply with the recommended night-time amenity criterion at all privately-owned receivers.

3.3 Noise Management System

3.3.1 Noise Control Measures

The noise control measures to be implemented during the life of the mine are summarised in **Table 2**.

Table 2. Operational noise control measures

Noise Source	Control Measure
Mobile Plant	Mobile plant and infrastructure items are selected in consideration of good practice sound power levels, through Maxwell's contract management and procurement processes.
	The use of "low noise" attenuated mobile plant in selected areas to minimise noise impacts on the northern receivers.
	Periodic testing of sound power levels of mobile mining equipment in accordance with *International Standards Organisation (ISO) 6395 Earth-moving machinery – Determination of sound power level – Dynamic test conditions*.
	Regular maintenance of equipment to avoid deterioration of any noise attenuation components.
Infrastructure	The covered overland conveyor between the MEA and Maxwell Infrastructure area was designed to achieve a best practice sound power level (e.g. use of polyethylene idlers and enclosure/shielding).
	All existing conveyors at the CHPP that can be practically enclosed have been enclosed and cladding was added to the northern side of the CHPP (extending from ground level to the top of the conical section of both loading bins) under the preceding PA 06_0202.
	Upgrades to infrastructure at the Maxwell Infrastructure area will be limited to 7.00 am to 6.00 pm, Monday to Sunday (inclusive).
	Enclosure/acoustic shrouding and acoustic design for ventilation fans. Sound power levels are periodically tested to confirm fan is being suitably maintained.
Rail	Use of locomotives and rolling stock approved to operate on the NSW rail network in accordance with Environment protection Licences (EPLs) issued by the EPA.
	During the initial underground mining operations, the trucking of ROM coal, handling and processing of coal, and loading of coal onto trains is not required to occur at night-time so will occur during the daytime only.
All areas	Use of real-time monitoring and a forecasting system, incorporating noise and meteorological monitoring, with the purpose of anticipating upcoming periods of noise-enhancing meteorological conditions that may generate noise exceedances (pro-active noise management system).
	All employees and contractors undergo environmental training on noise control and awareness, including noise impact of vehicles accessing the site and appropriate driving behaviour. This training is part of the site wide induction and will take place before the commencement of work by any contractor or sub-contractor, whose work may create intrusive noise as part of their work. Refresher training in noise and blast management is also undertaken as required and in response to noise and blast complaints, incidents or non-compliances.
	Monitoring of emitted noise levels is undertaken to verify compliance with site noise trigger levels and to assess the need, if any, for additional noise attenuation measures.
	Monitoring results are assessed against the NPfI with respect to modifying factors (including for low-frequency noise). If noise generated by the site is found to contain annoying characteristics (such as dominant low-frequency content), the appropriate modifying factor would be applied to measured noise levels and assessed against the trigger levels.

3.3.2 Noise-Enhancing Meteorological Conditions

Certain meteorological conditions including temperature inversions and wind speed and direction may increase noise levels by focusing sound-wave propagation paths at a specific location for a short

duration. Noise-enhancing meteorological conditions were determined based on historic site meteorological data and are provided in **Table 3**.

Table 3. Noise enhancing meteorological conditions

Receivers	Assessment Period	NPfI Meteorological Condition	Description of Meteorological Parameters
Northern	Daytime	Noise-enhancing meteorological conditions	3 m/s wind in ESE, SE, SSE, W, WNW, NW & NNW directions; stability categories A-D
	Night-time	Noise-enhancing meteorological conditions	Stability category F; no wind component
Southern	Night-time	Noise-enhancing meteorological conditions	Stability category F; no wind component

Wilkinson Murray (2019) noted that night-time meteorological conditions involving temperature inversions with winds towards either the northern or southern receivers were infrequent. Nevertheless, any noise enhancing conditions including downwind propagation, temperature inversions or a combination of both will be managed using the pro-active noise management system, with modifications to operations to maintain compliance with relevant site operational noise criteria during all stages of the mine life.

With regards to EPL1323 monitoring, for those meteorological conditions not referred to in **Table 3**, the noise limits that apply are the noise limits in condition L3.1 of EPL1323 plus 5 dB. Meteorological data obtained from the meteorological weather station identified as AWS-1 and Stability Category shall be determined by the sigma theta method referred to in Fact Sheet D of the NPfI (NSW EPA, 2017).

3.3.3 Pro-Active Noise Management System

The pro-active noise management system involves the use of meteorological forecasting to assist with managing noise levels during upcoming periods of noise-enhancing meteorological conditions.

Real-time meteorological data will continue to be recorded at the AWS-1 (previously known as CHPP AWS) and AWS-2 and will be used to identify adverse weather conditions. Meteorological forecasts will be reviewed at the start of each shift to identify any upcoming periods of adverse weather conditions (e.g., based on wind speed, direction and atmospheric stability) that may cause elevated noise at receivers to the north (particularly receivers 390, 398, 400, 402, 403, 411, 418, 419, 420, 421, 423, 424, 538 and 539 as shown in **Appendix 5**). If favourable conditions are predicted, then typical operations would be conducted. If noise enhancing meteorological conditions are predicted, then Maxwell will adjust operations based on the management measures detailed in **Table 4**. If adverse weather conditions are predicted then the real-time noise data (as discussed in **Section 4.2.3**) will be closely monitored, and operations modified as required.

Table 4. Management measures for noise-enhancing meteorological conditions

Applicable Modelling Scenario	Pro-Active/Reactive Mitigation Measures	Approximate Noise Reduction at Key Receivers
Year 1 – Daytime	Suspension of all rehabilitation activities.	1 dB
Year 3 – Daytime	Suspension of operation of front-end loader at the Maxwell Infrastructure.	1 dB
Year 3 – Night-time	Suspension of operation of front-end loader at the Maxwell Infrastructure.	1 dB

Applicable Modelling Scenario	Pro-Active/Reactive Mitigation Measures	Approximate Noise Reduction at Key Receivers
Year 4 – Daytime	Suspension of operation of both dozers at the Maxwell Infrastructure ROM stockpile. During trucking of ROM Coal – whilst train loading • Reduction in truck numbers to a maximum of seven • Suspension of front-end loaders at Maxwell Infrastructure. During trucking of ROM Coal – when not train loading • Reduction of truck numbers to a maximum of ten	1-2 dB
Year 4 – Evening	Suspension of operation of both dozers at the Maxwell Infrastructure ROM stockpile.	1 dB
Year 4 – Night-time	Suspension of operation of both dozers at Maxwell Infrastructure ROM stockpile and cease reclaiming from new product stockpile during train loading process. During trucking of ROM Coal • Suspension of front-end loaders at Maxwell Infrastructure. • Reduction in truck numbers to a maximum of six	2-3 dB

3.3.4 Mitigation Upon Request

In accordance with Schedule 2, Condition D1 of Development Consent SSD 9526, upon receiving a written request for mitigation from the owner of any of the four properties predicted to experience "marginal" exceedances of the site noise criteria (i.e. receivers 402, 403, 411 and 538), Maxwell shall implement additional mitigation measures at or in the vicinity of the residence in consultation with the landowner. These measures shall be consistent with the measures outlined in the VLAMP and be reasonable and feasible, proportionate to the level of predicted impact and directed towards reducing the noise impacts of the site. Maxwell shall be responsible for the reasonable costs of ongoing maintenance of these additional mitigation measures until the cessation of mining operations. During 2024, Maxwell completed the installation of noise mitigation measures at receivers 402, 403 and 411.

In accordance with Schedule 2, Condition D2 of Development Consent SSD 9526, if within 3 months of receiving a request for mitigation from the owner, Maxwell 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.

In accordance with Schedule 2, Condition D3(a)(i) and (b) of Development Consent SSD 9526 within one month of the date of Development Consent SSD 9526, Maxwell notified in writing the owner of the residences on the land at receivers 402, 403, 411 and 538, that they are entitled to ask Maxwell to install additional mitigation measures at the residence.

In reference to Schedule 2, Condition D3(a)(ii) of Development Consent SSD 9526, Maxwell notes that there is no privately-owned land within 3 kilometres of the underground portal at the MEA. Schedule 2, Condition D3(c) of Development Consent SSD 9526 is addressed in the Air Quality and Greenhouse Gas Management Plan as this condition is relevant to dust emissions.

In accordance with DA 106-04-00 Section 5.3.1(e), in the event that a landowner or occupier considers that noise from the site at their dwelling is in excess of the noise limits in DA 106-04-00 (refer to **Table 6**, **Table 8**, and **Table 9** in **Section 4**). Maxwell shall upon the receipt of a written request, consult with the landowner or occupants affected to determine their concerns. If exceedances are demonstrated to result

from the coal transportation activity Maxwell shall modify the coal transportation activity in accordance with a “noise reduction plan”. This shall include:

- introduction of additional noise controls on site (rail noise measures are discussed in **Section 3.3.1**); or
- undertaking of noise control at the dwelling to achieve acceptable internal noise levels, with the agreement of the landowner; or
- entering into an agreement with MAC and the landowner or provide such other forms of benefit or amelioration as may be agreed between the parties, as providing acceptable amelioration/benefit for the noise levels experienced.

3.4 Blasting Impacts

As an underground mining operation, surface blasting will not occur as part of operational activities. Section 3.4.2 of the Maxwell EIS notes that blasting of material will be required during construction activities; including but not limited to the development of the coal surge stockpile area, construction of the site access road and construction of water storage dams (i.e. surface construction) and/or to gain access to the underground workings (i.e. construction of the drift and first workings). The requirement for surface construction blasting would be dictated by the geotechnical properties of the material being excavated.

Blasting below surface level will be required to develop access to the underground workings and would generate ground vibration of less than 0.5 millimetres per second (mm/s) at any residence on privately-owned land, including the nearest boundaries of the Coolmore and Godolphin properties.

Potential overpressure and ground vibration impacts associated with blasting for construction were assessed as part of the Maxwell EIS noise assessment. Blasting criteria in Development Consent SSD 9526 are discussed in **Section 4.4**.

The assessment found that the distance to achieve compliance with the 5 per cent exceedance blasting and vibration criteria in Development Consent SSD 9526 was 1.5 kilometres (km). The minimum separation distance between construction-related blasting (should it occur) and nearby sensitive receivers will be:

- approximately 4.5 km from the (closest) boundary fence of the Coolmore Stud;
- approximately 5 km from the (closest) boundary fence of the Godolphin Woodlands Stud; and
- approximately 3 km from Edderton Road.

Overpressure and ground vibration levels associated with construction blasting activities at the site are predicted to comply with the blasting criteria in Development Consent SSD 9526 at all privately-owned receivers.

No construction-related blasting is proposed within 500 metres of a public road. At its nearest point, the MEA is located approximately 3 km from Edderton Road. Ground vibration levels associated with construction blasting activities at the site are predicted to comply with the blasting criteria in Development Consent SSD 9526 for electricity transmission lines and public roads.

3.5 Blasting Management System

The construction blasting controls described in the following sections do not apply to single blast events that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blast misfires or blasts required to ensure the safety of the mine, its workers or the general public.

3.5.1 Construction Blasting Control Measures

Maxwell will seek to eliminate or minimise the need for construction blasting, with material preferentially removed with dozers and excavators. The requirement for blasting will be dictated by the geotechnical properties of the material being excavated.

Airblast overpressure and ground vibration levels associated with blasting are a function of the distance from the blast and the maximum instantaneous charge (MIC) of explosive used in the blast. Predictive curves for overpressure and ground vibration levels have been derived from measurements conducted at numerous sites, at distances varying between 2 and 7 km from a blast. Data has been used from over 7,600 records of blasts undertaken in the Hunter Valley to derive the relationships between scaled distance and overpressure or vibration (source: https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-9526%2120201102T000504.836%20GMT).

The majority of the MEA and transport and services corridor, where surface construction blasting may occur, are further from the boundary fences of the Coolmore and Woodlands horse studs than the existing extent of the Hunter Valley Operations (HVO) North open cut pit. Further, the MIC of blasts that may be required for construction is significantly less than the approved MIC used for operational blasting at the MAC and HVO North open cut pits. Accordingly, the predicted maximum overpressure and vibration associated with potential construction blasting at the Maxwell UG Mine are less than the overpressure and vibration that Maxwell understands would have occurred as a result of open cut mining activities at the MAC and HVO North open cut pits.

The following controls will be implemented where blasting is required:

- Any blasts required for construction activities will be limited to a MIC of no greater than 500 kg. This is substantially smaller than blasting in an open cut mining operation which would have a MIC of up to 2,000 kg to 4,000 kg.
- A suitably qualified person will be engaged to manage any blasting operations.
- All personnel involved in planning or undertaking blasting will be appropriately trained and qualified.
- The parameters required for any blasting activities will be designed with a high margin of conservatism to meet the applicable criteria at the nearest privately-owned receivers or any proximal infrastructure.
- Each blast will be designed to maximise the blast efficiency while minimising dust impacts, fume generation (including emissions from the premises), ground vibration, air blast overpressure and the potential for flyrock. This will be achieved through the implementation of the following controls:
    - Adequate height, quantity and type of stemming will be utilised in the blasting process to maximise confinement of explosives and minimise flyrock generation and airblast overpressure.
    - Geology that may affect the blast i.e. reactive ground, faults and any other geological considerations, will be considered during the planning process to minimise fume generation.
    - The type, quality and quantity of blast products (wet/dry products) will be selected based on the ground and weather conditions for each blast to minimise fume generation.
    - Blast initiation (i.e. timing) will be designed to minimise dust and fume emissions.
    - Actual and predicted weather conditions will be reviewed prior to each blast to minimise impacts due to dust and fume emissions.
    - Prior to blasting, the area immediately around the blast (i.e. exclusion zone) will be cleared of equipment and personnel. If applicable, livestock will also be removed from the exclusion zone.
    - Public notifications will be undertaken in accordance with **Section 3.5.4**.

3.5.2 Blasting Hours and Frequency

In accordance with Schedule 2, Condition B7 of Development Consent SSD 9526, Maxwell will only carry out blasting on the site between 9 am and 5 pm (Monday to Saturday inclusive). No blasting is allowed on Sundays, public holidays or any other time without the prior written approval of the Planning Secretary.

If Maxwell requests approval for blasting on Sundays, public holidays or any other time outside the hours of 9 am and 5 pm (Monday to Saturday inclusive) in accordance with Schedule 2, Condition B7 of Development Consent SSD 9526, Maxwell will notify the following:

- Any private landholder or occupier of any residence within 2 kilometres of the site who registers an interest in being notified about blasting activities;
- Coolmore and Godolphin Thoroughbred Studs; and
- the CCC.

Public notification of blasts is discussed further in **Section 3.5.4**.

In accordance with Schedule 2, Part B, Condition B8 of Development Consent SSD 9526, Maxwell will carry out a maximum of:

- 2 single blast events[a] a day; and
- 8 single blast events[a] a week, averaged over a calendar year.

Note: [a] A "single blast event" means a blast which involves either a single detonation or a number of individual blasts fired in quick succession in a discrete area of the development. Should an additional blast be required after a blast misfire, this additional blast and the blast misfire are counted as a single blast event.

3.5.3 Public Roads and Privately Owned Land

In accordance with Schedule 2, Condition B11 of Development Consent SSD 9526, Maxwell will not undertake blasting on the site within 500 metres of any public road or any land outside the site not owned by the Applicant, unless the blast generates ground vibration of 0.5 mm/s or less, or Maxwell has:

a) a written agreement with the relevant infrastructure owner or landowner to allow blasting to be carried out closer to the public road or land, and the Applicant has advised the Department in writing of the terms of this agreement; or
b) demonstrated, to the satisfaction of the Planning Secretary, that the blasting can be carried out closer to the public road or land without compromising the safety of people or livestock or damaging the road or other buildings and structures, and updated the Noise and Blast Management Plan required under condition B12 (e) Schedule 2 of Development Consent SSD 9526 to include specific mitigation measures to be implemented while blasting is being carried out within 500 m of the road or land.

At the time of writing this Plan, there are no written agreements in place with the relevant infrastructure owner or landowner to allow blasting to be carried out closer than 500m to a public road or land. If an agreement is put in place, Maxwell will advise the DPHI in writing of the terms of the agreement. Until such time, blast designs will be modified to generate a ground vibration of 0.5 mm/s or less.

3.5.4 Public Notification

Any private landholder or occupier of any residence, who registers an interest in being notified about blasting activities at the site, as well as Coolmore and Woodlands Thoroughbred Studs, will be notified of upcoming blast events via telephone, e-mail or as otherwise agreed between the parties.

An early notification will be provided approximately two days before a proposed blast and another notification will be provided on the day of the proposed blast. Maxwell will undertake its best endeavours to blast at the scheduled time however notes that blasting time may vary depending upon weather conditions. Proposed blast times will also be uploaded onto the Muswellbrook Shire Council Blasting Announcements webpage (https://muswellbrook.nsw.gov.au/index.php/blasting/blasting-announcements) to enable interested members of the public to get up-to-date information.

Maxwell maintains a 24-hour community hotline (1800 653 960) where external stakeholders can obtain information on blasting activities. The community hotline number is advertised in the local newspapers and available on the Malabar website. Information on the planned blast(s) will also be discussed at Community Consultative Committee (CCC) meetings and displayed on the Malabar website at https://malabarresources.com.au.

4 MEASUREMENT AND EVALUATION

In accordance with Schedule 2, Condition C2 of Development Consent SSD 9526, measurement and monitoring of compliance with noise and blasting performance measures and performance indicators in this plan are to be undertaken using generally accepted methods that are appropriate to the environment and circumstances in which the site is located. These methods are described in this section. In the event of a dispute over the appropriateness of proposed methods, the Planning Secretary will be the final arbiter.

4.1 Noise Criteria

4.1.1 Operational Noise Criteria

In accordance with Schedule 2, Condition B1 of Development Consent SSD 9526, Maxwell shall ensure that the noise generated by the site does not exceed the criteria listed in **Table 5** at any residence on privately-owned land. In accordance with Schedule 2, Condition B3 of Development Consent SSD 9526, the criteria do not apply if Maxwell has an agreement with the owner/s of the relevant residence or land to exceed the criteria and has advised the DPHI in writing of the terms of the agreement.

At the time of writing this Plan, there are no agreements in place with the owner/s of the relevant residence or land to exceed the noise criteria in **Table 5**. If an agreement is put in place, Maxwell will advise DPHI in writing of the terms of the agreement.

Table 5. Operational noise criteria

Receiver Id	Day Leq(15 min) dB(A) (Years 1 to 3)	Day Leq(15 min) dB(A) (Year 4 onwards)	Evening Leq(15 min) dB(A)	Night Leq(15 min) dB(A)	Night Lmax dB(A)
390, 398, 402[a]	44	42	39	39	52
425, 427	40	40	37	37	52
399	42	40	37	37	52
400	41	40	36	36	52
403[a]	44	43	40	40	52
411[a]	45	43	41	41	52
418	44	42	39	39	52
419, 420, 539	42	40	38	38	52
421, 424	41	40	38	38	52
423	42	40	39	39	52
538[a]	42	41	38	38	52
All other privately-owned properties	40	40	35	35	52

Note: [a] Identified receivers are eligible for noise mitigation under Schedule 2, Part D, Condition D1 of SSD 9526.
Daytime: the period from 7.00 am to 6.00 pm Monday to Saturday, and 8 am to 6 pm on Sundays and Public Holidays.
Evening: the period from 6.00 pm to 10.00 pm.
Night: the period from 10.00 pm to 7.00 am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays.

Maxwell shall ensure that the noise levels from the Maxwell Rail Loop and Antiene Rail Spur do not exceed the criteria in **Table 6** at any privately owned residence.

Table 6. Rail Loop and Antiene Rail Spur development consent operational noise criteria

Location	Noise Limits in dB(A)		
	Day $L_{Aeq\ (15\ min)}$	Evening $L_{Aeq\ (15\ min)}$	Night $L_{Aeq\ (15\ min)}$
Any privately-owned residence	40	40	40

4.1.2 Noise Mitigation and Land Acquisition Criteria

In accordance with the VLAMP, mitigation rights are afforded to properties with predicted exceedances that are characterised as “marginal”, “moderate” or “significant” and acquisition rights are afforded to properties with predicted exceedances that are characterised as “significant”.

As discussed in **Section 3.2.1**, four “marginal” exceedances and ten “negligible” exceedances are predicted at northern receivers. No exceedances are predicted at southern receivers. The options for privately-owned residences for addressing noise levels where they may exceed the site noise criteria are presented in **Table 7**. There are no receivers in the Noise Affectation Zone.

Table 7. Noise impact assessment methodology

Noise Management Zone		Noise Affectation Zone
Negligible Residual Impact **1-2 dB above site noise criteria**	**Marginal Residual Impact** **3-5 dB above site noise criteria**	**Significant Residual Impact** **> 5 dB above site noise criteria**
No treatment/controls required.	Voluntary mitigation rights applicable. Architectural treatment required if requested (including ventilation and upgraded facade elements).	Voluntary mitigation rights applicable. Architectural treatment required if requested (including ventilation and upgraded façade elements). Voluntary land acquisition rights applicable.

4.2 Noise Monitoring

The noise monitoring program includes a combination of attended and real-time monitoring at locations representative of residential receivers. On-site monitoring to ensure mobile plant and fixed plant are operating in line with the assumed Sound Power Levels in the Maxwell EIS will be undertaken as required in response to complaints or exceedances of noise criteria.

4.2.1 Attended Noise Monitoring

To assess compliance with operational noise criteria (in **Table 5**), noise limits for the Maxwell rail loop and Antiene rail spur (in **Table 6**) and the Maxwell EIS predictions for noise (in **Section 3.2**), Maxwell undertake attended noise monitoring at the locations listed in **Table 10**.

Table 8. Summary of Attended Noise Monitoring Locations

Monitoring Location	Coordinates (GDA 94 Zone 56)	EPL1323 Monitoring ID	Comments
NM1	E306016, N6420858	Point 16	Site representative of northern receiver 411.
NM2	E304949, N6422155	Point 17	Site representative of northern receiver 403.
NM3	E298037, N6407215	Point 18	Site representative of southern receiver 227f.

Monitoring Location	Coordinates (GDA 94 Zone 56)	EPL1323 Monitoring ID	Comments
NM4	E292393, N6409199	N/A	Site representative of southern receiver 240d.

Note: N/A indicates monitoring not required under EPL.

Attended monitoring is carried out in accordance with the relevant requirements set out in the NPfI. During the attended noise monitoring, noise emissions from the mine site (including the Maxwell rail loop and Antiene rail spur) will be distinguished from noise emissions from other sources and will be reported as such. Measurement of the noise environment for compliance assessment is conducted by an acoustic consultant at the locations listed in **Table 10** and shown on **Figure 1**. The compliance assessment for the remaining residential sites is determined by the acoustic consultant using the noise model to extrapolate from the measured values.

For the EPL1323 monitoring sites only, the noise measurement equipment must be located at the most affected point at a location where there is no dwelling at the location or at the most affected point within an area described below:

- approximately on the property boundary, where any dwelling is situated 30 m or less from the property boundary closest to the Premises; or
- within 30 m of a dwelling façade, but not closer than 3 m, where any dwelling on the property is situated more than 30 m from the property boundary closest to the Premises; or, where applicable
- within approximately 50 m of the boundary of a National Park or Nature Reserve.

Monitoring results are assessed against the NPfI with respect to modifying factors (including for low frequency noise). If monitoring results are found to contain dominant low-frequency content, appropriate modifying factors will be applied to measured noise levels, in accordance with the NPfI, to account for additional annoyance at the receiver. Low frequency noise assessment is discussed further in **Section 3.2.2**.

Attended noise monitoring is performed monthly, and will be conducted for day, evening and night-time periods to assess the site against the limits set out in the Development Consent SSD 9526, DA 106-04-00 and EPL 1323. The noise monitoring consultant will plan to target noise monitoring to occur on nights where forecast meteorological conditions are expected to be within Development Consent SSD 9526 and EPL requirements for noise monitoring to minimise data exclusions due to adverse weather conditions. The timeframes for actions in the case of an exceedance are discussed in **Section 4.2.2**.

EPL1323 monitoring will occur over three consecutive operating days for a minimum of 1.5 hours during the day, 30 minutes during the evening and 1 hour during the night.

The attended noise monitoring locations are reviewed and, where necessary, modified over the life of operations according to monitoring results, physical changes in operations or following the acquisition of private property by Maxwell or neighbouring mining operations.

4.2.2 Exceedance Protocol

Attended noise monitoring is used to quantify and describe the acoustic environment around the site. The results of the attended noise monitoring are recorded, analysed and the estimated contribution from the mine is compared with the operational noise criteria defined in Development Consent SSD 9526 and DA 106-04-00 to assess compliance. If an attended noise monitoring result is identified as an exceedance of the operational noise criteria, the steps in **Table 11** are followed.

Table 9. Steps following a performance criteria exceedance

Step	Task
1	The acoustic technician will immediately contact the mine and advise the Supervisor that a noise monitoring reading has exceeded the noise criteria and is attributable to the mine operation. Where possible, the acoustic technician is to describe the cause and/or source of the noise to the Supervisor so that the operations can be modified where required.
2	The Supervisor will modify or cease the relevant operations causing the elevated noise levels as soon as reasonably practicable. The operational changes are to be actioned prior to a second compliance attended noise reading being taken. All actions taken in response to any exceedance shall be recorded by the Supervisor.
3	Within 75 minutes of the exceedance, a second 15-minute reading is to be taken by the acoustic technician at the same monitoring location.
4	If the second reading is under the criteria, the consultant will record the result as a pass and move to the next monitoring site.
5	If the second reading exceeds the criteria, attributable to the mine operation and is taken in valid meteorological conditions, the consultant will record that the site has failed and is deemed as a 'noise affected period' and considered a noise non-compliance at that site and move to the next monitoring site in accordance with the noise monitoring schedule. Note: An additional noise monitoring test is to be scheduled at the site within 1 week.
6	An environmental incident investigation will be performed to determine the causes for the non-compliance. Incident and non-compliance notification will be undertaken in accordance with **Section 4.7** of this NBMP. Maxwell will provide details of the exceedance to any affected landowner, tenant and the CCC in accordance with Schedule 2, Condition D5 of Development Consent SSD 9526. The affected landholder will be provided with a copy of the investigation which will include the results and any follow up actions.

An investigation into a noise event will be conducted with the use of the existing real time noise monitoring equipment located in the Antiene rural residential area together with the location of mine equipment considering factors such as other noise sources, topography, location and meteorological conditions. In the event the noise source is related to activities at the site, modifications to the sites' equipment or work area will be undertaken.

4.2.3 Real-Time Noise Monitoring

Real-time noise monitoring is undertaken for operational purposes only. Real-time noise monitoring currently involves the use of an existing BarnOwl directional noise monitoring system. One BarnOwl unit is located in the Antiene rural residential area as shown on **Figure 1** and is considered representative of the noise levels for northern receivers. The system carries out 24-hour directional noise monitoring, and records and maintains audio files. The system continually feeds the noise data back to a central repository on a real-time basis to allow the site to respond to high level noise events or community complaints.

Real-time noise monitoring is used as an operational tool to manage noise levels to the north of the site. This is done in accordance with the Maxwell Noise Trigger Action Response Plan (TARP). The Noise TARP has the following levels:

- **Business as usual**: Daily proactive assessment of noise risk and application of standard controls
- **Level 1:** Forecast of moderate or high daily noise risk
- **Level 2:** Noise alerts from the Barnowl noise monitor (via email and/or SMS) indicating exceedances of noise trigger levels

- **Level 3:** Monthly scheduled monitoring by a consultant that determines an exceedance of the noise limits in the Environment Protection Licence.
- **Level 4:** A complaint by a member of the community.

The trigger levels have been established in consultation with a noise specialist specific to the Maxwell UG Mine based on the distance from the nearest receiver. Triggers are filtered to be of a low frequency to more closely represent mine related noise (<1000hz). They are also configured to occur only from the direction of the site. It should be noted that there will be times when noise from the public roads and the rail may trigger the alarms. Listening to sound files from the Barnowl will enable noise from sources other than the Maxwell UG Mine to be discounted.

Trigger levels are provided in **Table 12**. Levels are set at 4dB above the criteria, which takes into account the additional distance of the closest residence from the rail line relative to the distance of the Barnowl from the rail line.

Table 12. Trigger levels for real-time noise monitoring

Day Leq (15 min) dB(A) (Years 1 to 3)	Day Leq (15 min) dB(A) (Year 4 onwards)	Evening Leq (15 min) dB(A)	Night Leq (15 min) dB(A)
48	46	44	44

If real-time noise monitoring results indicate that noise from the site exceeds the trigger levels, Maxwell personnel will be alerted and will investigate the source of the noise. If the noise is determined to be coming from the Maxwell UG Mine, Maxwell will modify and/or suspend operations as required to reduce noise emissions. Changes will be made in accordance with the TARP. The TARP will also include a process for recording and managing any required corrective actions.

4.2.4 Calibration of Real-Time Noise Monitoring Data

The intention over time is to use the BarnOwl in conjunction with weather data to inform the likelihood of exceedances at the residential receivers. Several aspects of the BarnOwl data and the attended data require further processing and analysis to validate the performance of BarnOwl compared with the attended monitoring. The following steps are necessary for the periods attended noise monitoring data is collected:

- The attended noise monitoring data needs to clearly identify overall noise levels and then estimate the contribution from the mine based on audibility and review of 1/3 octave data in the lower frequencies normally dominated by mine noise. Traffic noise from Thomas Mitchell Drive should also be estimated as part of the attended survey.
- The BarnOwl data (default period of five minutes) for the same period of attended noise monitoring requires analysis.
- Thomas Mitchell Drive is between the BarnOwl and the site, therefore, during most five-minute periods there is likely to be some contribution from traffic noise. This noise is included in the directional data relating to the mine and needs to be excluded. This may be achieved by determining the contribution of traffic noise from angles outside the direction of the mine where only traffic noise is likely to be present. This can be used to determine the traffic noise for each five-degree arc which can be subtracted from the directional noise level to provide a mine only level at the BarnOwl.
- From this mine-only level consideration of mine activities at the time, additional distance and prevailing meteorological conditions can be used to determine the expected difference between the BarnOwl and the attended results.

This process will be implemented each time monthly attended noise monitoring is conducted until the BarnOwl is deemed calibrated under the most relevant weather conditions, and development activities on site are completed. A suitably qualified and experienced person will develop a simple set of rules that will be able to be applied to the BarnOwl data (excluding traffic noise) to better estimate the noise levels

at residences. Once a suitably qualified and experienced person has developed the set of rules, Maxwell will implement the above process on an annual basis to ensure the BarnOwl remains calibrated.

4.3 Meteorological Monitoring

Meteorological monitoring is undertaken at AWS-1 and AWS-2 as shown on **Figure 1** and in accordance with SSD 9526 and EPL requirements. The meteorological monitoring provides the site with information to allow for the most appropriate response to changes in weather conditions. The meteorological stations are capable of measuring meteorological conditions in accordance with the NPfI. The following parameters are monitored at the meteorological stations:

- Wind Speed and Direction
- Temperature
- Relative humidity
- Precipitation
- Atmospheric pressure
- Solar radiation
- Sigma theta

In accordance with Schedule 2, Condition B29 of Development Consent SSD 9526, the AWS-1 and AWS-2 comply with the requirements in the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (Department of Environment and Conservation 2007) and are capable of measuring meteorological conditions in accordance with the NPfI.

4.4 Blasting Criteria

In accordance with Schedule 2, Condition B5 of Development Consent SSD 9526, Maxwell shall ensure that blasting on the site does not cause exceedances of the criteria listed in **Table 13** at the specified locations. The criteria do not apply if Maxwell has an agreement with the owner/s of the relevant residence or infrastructure to exceed the criteria and has advised the DPHI in writing of the terms of the agreement.

Table 13. Blasting criteria

Location	Airblast overpressure (dB(Lin Peak))	Ground vibration PPV (mm/s)	Allowable exceedance
Residence on privately-owned land[a]	120	10	0%
	115	5	5% of the total number of blasts over a calendar year
Electricity Transmission Lines	-	50	0%
Public Roads	-	100	0%
All other infrastructure, including the Liddell Ash Dam Wall	-	50	0%

Note: [a] includes any residence at the Coolmore or Woodlands Thoroughbred Studs or the Hollydene Estate.

Separate performance criteria and reporting requirements are detailed in the *ML 1531 Drayton-2 approval* for mining in the Notification Area for the Liddell Ash Dam. The *ML 1531 Drayton-2 approval* requires that ground vibration peak particle velocities do not exceed 50 mm/s at any point on the Liddell Ash Dam. Maxwell's current consents do not authorise mining in the Notification Area for the Liddell Ash Dam. This plan will be updated prior to any blasting of highwalls within final voids (for mine rehabilitation) within the Notification Area for the Liddell Ash Dam.

4.5 Blast Monitoring

Currently no permanent blast monitors are installed, as blasting ceased on site following the completion of open cut mining activities in October 2016. In the event surface construction blasting is conducted, temporary blast monitors will be set up at to measure and electronically record airblast overpressure and ground vibration at locations outlined in **Table 14** and shown on **Figure 1**. Construction blasts will be monitored in accordance with *AS 2187.2 – 2006 and ANZEC Guidelines*.

In accordance with Schedule 2, Condition B10(d) of Development Consent SSD 9526, Maxwell will carry out any additional blast monitoring, if required by a written direction issued by the Planning Secretary, to determine whether the development is complying with the relevant conditions of this consent.

Blast monitoring locations BM4 and BM5 have been determined in consultation with Coolmore and Woodlands Studs. Maxwell notes that as the monitoring equipment is temporary in nature, the location may be moved for each blast, to work in with the day-to-day operations at the studs.

Table 14. Summary of temporary blast monitoring locations

Monitoring Location	Type	Coordinates (GDA 94 Zone 56)	EPL Monitoring ID	Comments
BM1	Compliance	E304200, N6422371	Point 13	Located in north of the site.
BM2	Compliance	E298813, N6407512	Point 14	Located south of the site.
BM3	Compliance	E292895, N6410964	Point 15	Located west of the site.
BM4	Compliance	E297147, N6407064	N/A	Location to be discussed with Coolmore Stud.
BM5	Compliance	E294685, N6408481	N/A	Location to be discussed with Woodlands Stud.
ADL 1	Compliance	E305923, N6416500	N/A	Located on the Ash Dam Wall Levee.

Note: N/A indicates monitoring not required under EPL.

4.6 Cumulative Impacts

In accordance with Schedule 2, Condition B10(c) of Development Consent SSD 9526 Maxwell will make all reasonable and feasible endeavours to coordinate the timing of surface construction blasting activities with any nearby mines (including) MAC to minimise cumulative blasting impacts. This will involve reviewing the blast schedule of surrounding mines and timing surface construction blasts to avoid blasts at surrounding mines where practical. Maxwell will notify surrounding mines of Maxwell's scheduled surface construction blasts at least two days before and on the day of the blast. Notification of upcoming blasts events will be via telephone, e-mail or as otherwise agreed between the parties.

Maxwell's closest mining neighbour is MAC which shares an operational boundary to the west and the Antiene rail spur to the north. Maxwell meets with MAC on a regular basis. A joint CCC meeting with MAC is conducted every six months where noise monitoring results and community complaints specific to the rail spur are presented. In the event any exceedances of the criteria are recorded, the results of the investigation are presented to the CCC at this meeting. Maxwell meets with other nearby mining companies on a regular basis to discuss shared learnings from incidents and any new technology and or trials being undertaken. Maxwell also participates in the Upper Hunter Mining Dialogue which brings together nearby mines and the community to discuss various aspects of environmental management.

Cumulative noise impacts resulting from concurrent operation of the site and MAC were assessed for the Maxwell EIS. The methodology used for cumulative assessment involved noise predictions under

adverse meteorological conditions from the site and MAC for receivers potentially impacted by both sites (i.e. the northern receivers). This is considered to represent a worst-case assessment of the potential cumulative noise levels for key receivers. The assessment indicated that cumulative noise levels from the concurrent operation of the site and MAC would comply with the recommended night-time amenity criterion at all privately-owned receivers.

Maxwell will make all reasonable and feasible endeavours to coordinate noise management with nearby mines to minimise cumulative impacts. Maxwell will use real-time noise monitoring data during the analysis of elevated noise readings to assist to distinguish noise emissions from the neighbouring developments by determining the elevated noise source. Maxwell will also undertake off site inspections (where required) to determine the elevated noise source. In the event, that elevated noise levels are suspected to be coming from nearby mines or a community complaint is received about noise along a shared operational boundary with a nearby mine, Maxwell will notify the other mining company in a timely manner so that they can undertake their own investigation and action accordingly.

4.7 Incident and Non-Compliance Notification

An incident is defined in Development Consent SSD 9526 and DA 106-04-00 as an occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance.

In accordance with Schedule 2, Part E, Condition E9 of SSD 9526 and Schedule 2, Part B, Condition C5 of DA 106-04-00, Maxwell must notify the Department within 24 hours of becoming aware of an incident. The notification must be made via the NSW planning portal (Major Projects) and address details of the incident including:

(a) date, time and location;

(b) a brief description of what occurred and why it has been classified as an incident;

(c) a description of what immediate steps were taken in relation to the incident; and

(d) identifying a contact person for further communication regarding the incident.

The Applicant must provide the Department with a subsequent incident report in accordance with Appendix 7 (Incident Notification and Reporting Requirements).

Maxwell shall provide the DPHI with a subsequent incident report in accordance with Appendix 7 of Development Consent SSD-9526.

A *Pollution and Incident Response Management Plan* (PIRMP) is maintained in accordance with the requirements of the Part 5.7A of the *Protection of the Environment Operations Act 1997* and Chapter 7, Part 3A of the *Protection of the Environment Operations* (General) Regulation 2009. Any pollution incident that causes actual or potential material harm will be reported to the relevant agencies immediately after it is identified, as described in the PIRMP. A copy of the PIRMP is located on Malabar's website at https://malabarresources.com.au/corporate-governance/.

In accordance with Schedule 2, Condition E10 of Development Consent SSD 9526 and Schedule 2, Part C, Condition C6 of DA 106-04-00, Maxwell shall notify DPHI within seven days of becoming aware of a non-compliance. The notification shall be in writing via the Department's Major Projects Website and identify the development (including the development application number and name), set out the condition of Development Consent SSD 9526 that the site 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, and when, to address the non-compliance. A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.

In accordance with Schedule 2, Condition D5 of Development Consent SSD 9526, as soon as practicable, and no longer than seven days after obtaining monitoring results showing an exceedance of

any of the criteria in **Table 5**, Maxwell will provide the detail of the exceedance to affected landowners, tenants and the CCC.

4.8 Adaptive Management and Contingency Plan

In accordance with Schedule 2, Condition E4 of Development Consent SSD 9526 and Schedule 2, Part C, Condition C2 of DA 106-04-00, where any exceedance of performance measures has occurred, Maxwell shall, at the earliest opportunity:

- Take all reasonable and feasible steps to ensure that the exceedance ceases and does not recur;
- Consider all reasonable and feasible options for remediation (where relevant) and submit a report to DPHI describing those options and any preferred remediation measures or other course of action; and
- Implement reasonable remediation measures as directed by the Planning Secretary.

In accordance with Schedule 2, Condition E5 (f) of Development Consent SSD 9526, the following contingency plan is used to manage any unpredicted impacts and their consequences, and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible:

- Review the unpredicted impact with consideration of any relevant activities and monitoring data;
- Identify the most likely source of the unpredicted impact;
- Review the existing process and current noise controls; and
- Implement appropriate mitigation measures.

The above response to an exceedance is considered reactive management. Pro-active noise management is described in **Section 3.3.3** and involves the use of real-time monitoring and meteorological forecasting to assist with managing noise levels**.**

4.9 Complaints Handling

The site maintains a 24-hour community hotline (1800 653 960) for any issues or enquiries. In addition to the community hotline, the site can also be contacted by emailing info@malabarresources.com.au.

In accordance with Schedule 2 Condition B12€(iv) and Condition E5(h)(ii) of Development Consent SSD 9526, if a complaint or enquiry is received regarding noise or blasting, it is investigated as soon as reasonably practicable and managed in accordance with Maxwell's *Community Complaints and Enquiries Procedure*. Details such as complainant name, contact details, nature of concern, date, time and method of receival are recorded. While details of the enquiry vary depending on the nature and source of the enquiry, the following actions may result:

- Confirmation of whether the complainant would like the matter raised as a complaint or an enquiry.
- Identify further details which may assist in determining the cause of the complaint.
- Carry out an inspection of the site or conduct an assessment of monitoring results to identify the source.
- Identify if there is an exceedance or non-compliance with any consent or licence condition.
- Identify, where necessary and practical, methods to manage the source of the complaint and minimise the chance of a recurrence or the potential to generate further complaints.

All enquiries and/or complaints are recorded in an enquiries database. A summary of complaints is presented to the Community Consultative Committee and included in the Annual Review and EPL Annual Return. In accordance with Schedule 2 Condition E17(a) (x) a complaints register, updated monthly will be publicly available on Malabar's website at https://malabarresources.com.au/corporate-governance/.

If a landowner considers the development to be exceeding any relevant noise criterion in **Table 5**, they may ask the Planning Secretary in writing for an independent review of the impacts of the development 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 that decision, within 21 days of the request for a review.

If the Planning Secretary is satisfied that an independent review is warranted, within three months, or other timeframe agreed by the Planning Secretary and the landowner, of the Planning Secretary's decision, Maxwell shall:

- 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 criteria in Part B or Part C of Development Consent SSD 9526; and
    - if the development is not complying with the relevant criterion, identify measures that could be implemented to ensure compliance with the relevant criterion; 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.

4.10 Notifying the Community

The objective of stakeholder engagement is to provide transparent, consistent and inclusive stakeholder engagement and access to current and sufficient information about the Maxwell UG Mine, its activities, workforce and schedule to support impact management and monitoring. Stakeholder engagement activities include, but are not limited to:

- distributing construction notices to landholders within 2.5 km of project;
- liaison as agreed with landowners;
- conducting community information sessions commencing prior to construction and continuing during at least the first three years of operation to provide updates and address potential issues or concerns; and
- offering to meet regularly with representatives of the Coolmore Stud, Godolphin Woodlands Stud and Hollydene Estate Wines.

General project updates including a description of activities being undertaken on site will be included in the Maxwell external newsletter which will be distributed generally every six months for at least the first three years of operation. In addition to this, Maxwell will establish and operate a CCC in accordance with Schedule 2, Condition A20 of Development Consent SSD 9526, consistent with the *Community Consultative Committee Guideline: State Significant Projects (NSW Government, 2019)* or its latest equivalent version.

5 AUDIT, REVIEW AND IMPROVEMENT

5.1 Review Schedule

The suitability of this NBMP will be reviewed in accordance with Schedule 2, Condition E7 of Development Consent SSD 9526 and Schedule 2, Part C, Condition C3 of DA 106-04-00, that is within three months of:

- the submission of an incident notification under condition E9/C5;
- the submission of an Annual Review under condition E11;
- the submission of an Independent Environmental Audit under condition E13/C7;
- the approval of any modification of the conditions of Development Consent SSD 9526 or DA 106-04-00; or
- notification of a change in development phase under condition A13.

In accordance with Schedule 2, Part E, Condition E8 of SSD 9526 and Schedule 2, Part C, Condition C4 of DA 106-04-00, if necessary, to improve the environmental performance of the site, cater for a modification or comply with a direction, this plan will be revised. The revised plan will be submitted to DPHI for approval within six weeks of the review.

5.2 Reporting

In accordance with Schedule 2, Condition E11 of Development Consent SSD 9526, by the end of March in each year after the commencement of the development, or other timeframe agreed by the Planning Secretary, an Annual Review report will be submitted to DPHI. The Annual Review will include, but not be limited to, the following:

- A description of the development that was carried out in the previous calendar year and the development proposed to be carried out over the current calendar year.
- A comprehensive review of any noise and blast monitoring results and evaluation undertaken over the past year.
- A comprehensive review of any noise and blast complaint records over the past year, including a description of the manner in which complaints were addressed.
- A description of non-compliances which occurred in the previous calendar year and actions that were (or are being) taken to rectify the non-compliance and avoid reoccurrence.
- Identify any trends in any noise and blast monitoring data over the life of the development.
- Identify any discrepancies between the predicted and actual noise and blasting impacts of the site and analysis of the potential cause of any significant discrepancies.
- Where applicable, measures that will be implemented over the next reporting year to improve the environmental performance of the development with respect to noise and blasting management.

In accordance with Schedule 2, Condition E12 of Development Consent SSD 9526, copies of the Annual Review shall be submitted to MSC and made available to the CCC and any interested person upon request.

In accordance with Schedule 2, Condition E17(a) of Development Consent SSD 9526, the Annual review will be publicly available on the site's website at https://malabarresources.com.au/corporate-governance/.

5.3 Auditing

In accordance with Schedule 2, Part E, Condition E13 of Development Consent SSD 9526 and Schedule 2, Part C, Condition C7 of DA 106-04-00 within one year of commencement of development under SSD 9526 and within one year of approval of Antiene MOD1,and every three years after, unless the Planning Secretary directs otherwise, Maxwell will commission and pay the full cost of an Independent Environmental Audit of the development. The audit shall:

(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 licences 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 to 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.

In accordance with Schedule 2, Part E, Condition E14 of Development Consent SSD 9526 and Schedule 2, Part C, Condition C8 of DA 106-04-00, within three months of commencing an Independent Environmental Audit, or other timeframe agreed by the Planning Secretary. Maxwell shall 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 shall be implemented to the satisfaction of the Planning Secretary.

5.4 Access to Information

In accordance with Schedule 2, Part E, Condition E17 of Development Consent SSD 9526 and Schedule 2, Part C, Condition C11 of DA 106-04-00, before the commencement of construction and within 3 months of the approval of Antiene MOD1 until the completion of all rehabilitation required under SSD 9526, Maxwell will make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of SSD 9526 and DA 106-04-00) that are relevant to this plan publicly available on Malabar's website (https://malabarresources.com.au/corporate-governance/):

- this NBMP;
- the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged;
- minutes of CCC meetings;
- 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;
- 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;
- a summary of the current phase and progress of the development;
- contact details to enquire about the development or to make a complaint;
- a complaints register, updated monthly;
- the Annual Reviews of the development; and
- 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.

This information shall be kept up to date, to the satisfaction of the Planning Secretary

5.5 Records Management

All noise and blasting data is maintained in accordance with the Environmental Management Strategy and maintained on the premise for a period of at least five years.

5.6 Continuous Improvement

Feedback from the monitoring results and any complaints is used to assess impacts and determine where improvements or mitigation measures are required. These measures are reported on in the Annual Review.

5.7 Document Review History

A summary of the document history is outlined in **Table 15**.

Table 15. Document revision status

Issue	Issue Date	Review Team	Details of Change / Communication
1	Jul 2021	Robyn Skinner Neil Gross John Wassermann Rob Hayes Donna McLaughlin	Document prepared following approval of Development Consent SSD 9526 for the Maxwell UG Project.
1.1	Aug 2021	Robyn Skinner Donna McLaughlin	Document updated following review by DPIE.

Issue	Issue Date	Review Team	Details of Change / Communication
2	Feb 2022	Alex Newton Donna McLaughlin	Document updated following approval of Modification 1.
3	Aug 2022	Robyn Skinner	Document updated following AEMR submission (to meet Condition E7(b)) and Independent Environmental Audit submission (to meet Condition E7(c)) and notification of construction commencement ((to meet Condition E7(e)).
4	Feb 2023	Donna McLaughlin	Document updated following approval of Modification 2.
5	Dec 2023	Donna McLaughlin Alex Newton	Document updated following approval of Modification 1 of development consent DA 106-04-00 for the Drayton Rail Loop and Antiene Rail Spur.
6	Dec 2024	Donna McLaughlin Dominic Brown Alex Newton	Document updated under Schedule 2, Condition A8 of SSD 9526, following an extension request granted by the Planning Secretary to continue trucking ROM coal from the MEA to the CHPP until 31 December 2026. Also updated to clarify that the document does not apply to the Maxwell Solar Farm.
7	Dec 2025	Donna Tiananga Trescinda Brown Alex Newton	Administrative updates following submission of IEA report, and Modification 3. Revisions to trigger levels as described in Plan.
7.1	Mar 2026	Donna Tiananga Alex Newton	Document updated following review by DPHI.

6 INFORMATION, TRAINING AND INSTRUCTION

6.1 Competent Persons

Suitably qualified, competent and experienced persons shall be involved in the design, planning and implementation of this plan and related procedures.

6.2 Training

Noise and blast management training is provided to all employees and contractors through the site induction process. The site induction will include awareness of the potential for noise impact of vehicles accessing the site and reinforce appropriate driving behaviour. Refresher training in noise and blast management will also be undertaken as required and in response to noise and blast complaints, incidents or non-compliances. From time to time, workforce communication and toolbox talks allow for discussion of the objectives and requirements of this and any other relevant Management Plans.

To ensure the effective implementation of noise and blast management controls relevant personnel will undergo environmental training on noise control and awareness. This training will take place before the commencement of work by any contractor or sub-contractor, whose work may create intrusive noise as part of their work.

7 RESPONSIBILITIES

Responsibilities associated with this management plan are outlined **Table 16**.

Table 16. Responsibilities

Position	Responsibilities
General Manager	• Provide adequate resources for the implementation of this Plan.
Environment, Community and Approvals (EC&A) Manager	• Oversee the implementation of this Plan • Notify regulatory authorities and affected stakeholders of incidents in accordance with this Plan. • Coordinate periodic reviews of this Plan. • Ensure all personnel are trained in accordance with this Plan.
Environmental Coordinator	• Assist the ECA Manager as required in the implementation of this Plan. • Coordinate investigations of noise and blast related incidents or complaints. • Coordinate the implementation of the noise and blast monitoring program in accordance with this Plan. • Coordinate the management of records and reporting of noise and blast data. • Manage noise and blast related complaints in accordance with the complaints management procedure. • Provide training to all relevant personnel.
Supervisors	• Notify the Environmental Coordinator of any incidents and exceedances involving noise and blasting. • Implement noise and blasting management measures as defined in this Plan.
All Personnel	• Awareness of noise and blasting controls as part of site induction • Undertake works in accordance with the objectives and principles of this Plan • Report any incidents and exceedances involving noise and blasting.

8 DOCUMENT INFORMATION

8.1 References

Australian and New Zealand Environment Council (1990) Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration.

Department of Environment and Climate Change (2009) Interim Construction Noise Guideline.

Department of Environment, Climate Change and Water (2011) NSW Road Noise Policy.

Department of Environment and Conservation (2006) Assessing Vibration: a technical guideline.

Department of Environment and Conservation (2007) Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales.

Department of Planning and Environment (2018) Voluntary Land Acquisition and Mitigation Policy.

Environment Protection Authority (2013) Rail Infrastructure Noise Guideline.

Environment Protection Authority (2017) Noise Policy for Industry.

Maxwell Underground Mine. Noise Trigger Action Response Plan.

Wilkinson Murray (2019) Maxwell Project Noise Impact Assessment.

8.2 Definitions and Abbreviations

Term	Definition
Airblast Overpressure	An airborne shock wave resulting from detonation of explosives. An airblast may be caused by blasted material movement or the release of expanding gas into the air

Term	Definition
ANZEC	Australian and New Zealand Environment Council
Antiene MOD1	Drayton Rail Loop and Antiene Rail Spur (DA 106-04-00) Modification 1
AS	Australian Standard
CCC	Community Consultative Committee
CHPP	Coal Handling Preparation Plant
CL	Coal Lease
DA	Development Approval
Day	Defined as the period from 7am to 6pm Monday to Saturday and 8am to 6pm Sundays and Public Holidays.
dBA	Decibel (A-weighted)
dBC	Decibel (C-weighted)
dBL	Airblast recording of the blast measured in Decibels (linear)
DPE	NSW Department of Planning and Environment
DPHI	Department of Planning, Housing and Environment
DPIE	NSW Department of Planning, Industry and Environment (now NSW Department of Planning and Environment)
DSC	NSW Dam Safety Committee
EPA	NSW Environmental Protection Authority
EPL	Environment Protection Licence
Evening	Defined as the period of 6pm to 10pm.
ICNG	*Interim Construction Noise Guideline* (Department ofEnvironment and Climate Change 2009)
L_{Aeq}	Equivalent A-weighted continuous sound level measured in decibels
L_{Amax}	Maximum A-weighted sound level measured in decibels
L_{A1}	One percentile A-weighted sound level
L_{A10}	Tenth percentile A-weighted sound level
L_{A50}	Fiftieth percentile A-weighted sound level
L_{A90}	Ninetieth percentile A-weighted sound level
MAC	Mt Arthur Coal
ML	Mining Lease
Maxwell MOD1	Maxwell Underground Project (SSD 9526) Modification 1

Term	Definition
Maxwell MOD2	Maxwell Underground Project (SSD 9526) Modification 2
Maxwell MOD3	Maxwell Underground Project (SSD 9526) Modification 3
MSC	Muswellbrook Shire Council
Night	Defined as the period from 10pm to 7am Monday to Saturday and 10pm to 8am on Sundays and Public Holidays.
NBMP	Noise and Blasting Management Plan
NPfI	NSW Noise Policy for Industry
PA	Project Approval (Development Consent)
PPV	Peak particle velocity for blasting measured in mm/s
PIRMP	Pollution and Incident Response Management Plan
RING	*Rail Infrastructure Noise Guideline* (EPA 2013)
SSD	State Significant Development
Toolbox Talk	A forum where information is presented to the crews
VLAMP	Voluntary Land Acquisition and Mitigation Policy

9 APPENDIX 1 – REGULATORY REQUIREMENTS

State Significant Development Consent 9526

<table>
<tr><th>Clause</th><th>Requirement</th><th>Section of Plan</th></tr>
<tr><td>B1</td><td>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[a].
Table 1: Noise criteria dB(A)
<table>
<tr><th>Receiver Id</th><th>Day
Leq(15 min) dB(A)
(Years 1 to 3)</th><th>Day
Leq(15 min) dB(A)
(Year 4 onwards)</th><th>Evening
Leq(15 min) dB(A)</th><th colspan="2">Night
Leq(15 min) dB(A) | LMax dB(A)</th></tr>
<tr><td>390, 398, 402[b]</td><td>44</td><td>42</td><td>39</td><td>39</td><td>52</td></tr>
<tr><td>425, 427</td><td>40</td><td>40</td><td>37</td><td>37</td><td>52</td></tr>
<tr><td>399</td><td>42</td><td>40</td><td>37</td><td>37</td><td>52</td></tr>
<tr><td>400</td><td>41</td><td>40</td><td>36</td><td>36</td><td>52</td></tr>
<tr><td>403[b]</td><td>44</td><td>43</td><td>40</td><td>40</td><td>52</td></tr>
<tr><td>411[b]</td><td>45</td><td>43</td><td>41</td><td>41</td><td>52</td></tr>
<tr><td>418</td><td>44</td><td>42</td><td>39</td><td>39</td><td>52</td></tr>
<tr><td>419, 420, 539</td><td>42</td><td>40</td><td>38</td><td>38</td><td>52</td></tr>
<tr><td>421, 424</td><td>41</td><td>40</td><td>38</td><td>38</td><td>52</td></tr>
<tr><td>423</td><td>42</td><td>40</td><td>39</td><td>39</td><td>52</td></tr>
<tr><td>538[b]</td><td>42</td><td>41</td><td>38</td><td>38</td><td>52</td></tr>
<tr><td>All other privately-owned properties</td><td>40</td><td>40</td><td>35</td><td>35</td><td>52</td></tr>
</table>
[a] The Noise Assessment Locations referred to in Table 1 are shown in Appendix 3
[b] Identified receivers are eligible for noise mitigation under condition D1 of this Schedule</td><td>3.3</td></tr>
<tr><td>B2</td><td>Noise generated by the development must be monitored and measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Noise Policy for Industry (EPA, 2017). The noise enhancing meteorological conditions determined by monitoring at the meteorological station required under condition B26 and as defined in Part D of the Noise Policy for Industry (EPA, 2017) apply to the noise criteria in Table 1.</td><td>4.2.1</td></tr>
<tr><td>B3</td><td>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.</td><td>4.1.1</td></tr>
<tr><td>B4</td><td>The Applicant must:
(a) take all reasonable steps to minimise noise from the development, including low frequency noise and other audible characteristics, as well as road and rail noise associated with the development;
(b) make all reasonable and feasible endeavours to coordinate noise management with nearby mines (in particular, the Mt Arthur Coal Complex) to minimise cumulative noise impacts;
(c) operate a comprehensive noise management system using 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;
(d) take all reasonable steps to minimise the noise impacts of the development during noise-enhancing meteorological conditions;
(e) carry out regular attended noise monitoring (at least quarterly, unless otherwise agreed by the Planning Secretary) to determine whether the development is complying with the relevant conditions of this consent; and
(f) regularly assess the noise monitoring data and modify or stop operations on the site to ensure compliance with the relevant conditions of this consent.</td><td>3.3
4.6
3.3
3.3.2
4.2.1
3.3.3, 4.2.2</td></tr>
</table>

<table>
<tr><th>Clause</th><th>Requirement</th><th>Section of Plan</th></tr>
<tr><td>B5</td><td>The Applicant must ensure that blasting on the site does not cause exceedances of the criteria at the locations in Table 2.
Table 2: Blasting criteria
<table>
<tr><th>Location</th><th>Airblast overpressure (dB(Lin Peak))</th><th>Ground vibration (mm/s)</th><th>Allowable exceedance</th></tr>
<tr><td>Residence on privately-owned land[a]</td><td>120
115</td><td>10
5</td><td>0%
5% of the total number of blasts over a calendar year</td></tr>
<tr><td>Electricity Transmission Lines</td><td>-</td><td>50</td><td>0%</td></tr>
<tr><td>Public Roads</td><td>-</td><td>100</td><td>0%</td></tr>
<tr><td>All other infrastructure, including the Liddell Ash Dam Wall</td><td>-</td><td>50</td><td>0%</td></tr>
</table>
a includes any residence at the Coolmore or Woodlands Thoroughbred Studs or the Hollydene Estate</td><td>3.5.1</td></tr>
<tr><td>B6</td><td>The blasting criteria in Table 2 do not apply if the Applicant has an agreement with the owner/s of the relevant residence or infrastructure to exceed the blasting criteria, and the Applicant has advised the Department in writing of the terms of this agreement.</td><td>4.4</td></tr>
<tr><td>B7</td><td>The Applicant must only carry out blasting on the site between 9 am and 5 pm (Monday to Saturday inclusive). No blasting is allowed on Sundays, public holidays or any other time without the prior written approval of the Planning Secretary.</td><td>3.5.2</td></tr>
<tr><td>B8</td><td>The Applicant may carry out a maximum of:
(a) 2 single blast events[a] a day; and
(b) 8 single blast events[a] a week, averaged over a calendar year.</td><td>3.5.2</td></tr>
<tr><td>B9</td><td>Conditions B7 and B8 do not apply to single blast events[a] that generate ground vibration of 0.5 mm/s or less at any residence on privately-owned land, or to blast misfires or blasts required to ensure the safety of the mine, its workers or the general public.
[a] Within conditions B7 and B8, ‘single blast event’ means a blast which involves either a single detonation or a number of individual blasts fired in quick succession in a discrete area of the development. Should an additional blast be required after a blast misfire, this additional blast and the blast misfire are counted as a single blast event.</td><td>3.5</td></tr>
<tr><td>B10</td><td>The Applicant must:
(a) take all reasonable steps to:
(i) ensure the safety of people and livestock from the blasting impacts of the development;
(ii) protect public and private infrastructure and property in the vicinity of the site from blasting damage associated with the development; and
(iii) minimise blast-related dust and fume emissions;
(b) operate a suitable system to enable interested members of the public to get up-to-date information on the proposed blasting schedule on the site;
(c) make all reasonable and feasible endeavours to co-ordinate the timing of blasting at the site with any nearby mines (including Mt Arthur) to minimise cumulative blasting impacts;</td><td>3.5.1
3.5.4
4.6</td></tr>
</table>

Clause	Requirement	Section of Plan
	(d) carry out blast monitoring, if required by a written direction issued by the Planning Secretary , to determine whether the development is complying with the relevant conditions of this consent.	**4.5**
B11	The Applicant must not undertake blasting on the site within 500 metres of any public road or any land outside the site not owned by the Applicant, unless the blast generates ground vibration of 0.5 mm/s or less, or the Applicant has: (a) a written agreement with the relevant infrastructure owner or landowner to allow blasting to be carried out closer to the public road or land, and the Applicant has advised the Department in writing of the terms of this agreement; or (b) demonstrated, to the satisfaction of the Planning Secretary, that the blasting can be carried out closer to the public road or land without compromising the safety of people or livestock or damaging the road or other buildings and structures, and updated the Blast Management Plan required under condition B12(e) of this Schedule to include specific mitigation measures to be implemented while blasting is being carried out within 500 metres of the road or land.	**3.5.3**
B12	The Applicant must prepare a Noise and Blasting Management Plan for the development to the satisfaction of the Planning Secretary. This plan must: (a) be prepared by a suitably 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 in this consent; ii. best practice noise management is being employed; iii. noise impacts of the development are minimised during noise-enhancing meteorological conditions; (c) describe the noise management system in detail; and (d) include a noise 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 the nearest and/or 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; (e) include a Blast Management Plan that: i. is prepared in consultation with the Coolmore and Woodlands Thoroughbred Studs. ii. describes the blast management system and the measures that will be implemented to ensure compliance with the blasting criteria and operating conditions of this consent; iii. includes public notification procedures to enable members of the public, particularly surrounding residents and the Coolmore and Woodlands Thoroughbred Studs, to get up-to-date information on upcoming blasting events; and iv. includes a protocol for investigating and responding to blast-related complaints.	**This Plan** **2.3, Appendix 3** **3.3** **3.3** **3.3.2** **3.3** **4.2.1, 4.2.3** **4.2.1** **4.2.4** **4.2** **4.2.1** **4.7** **Appendix 4** **3.5** **3.5.4** **4.9**
B13	The Applicant must not commence construction until the Noise and Blasting Management Plan is approved by the Planning Secretary.	**1.2**
B14	The Applicant must implement the Noise and Blasting Management Plan as approved by the Planning Secretary	**1.2**

<table>
<tr><th>Clause</th><th>Requirement</th><th>Section of Plan</th></tr>
<tr><td>B26</td><td>Prior to the commencement of construction and for the life of the development, the Applicant must ensure that there is a suitable meteorological station operating in the vicinity of the site that:
(a) complies with the requirements in the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2007); and
(b) is capable of measuring meteorological conditions in accordance with the NSW Noise Policy for Industry (EPA, 2017), unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA.</td><td>4.3</td></tr>
<tr><td>C2</td><td>Measurement and monitoring of compliance with performance measures and performance indicators in this consent is to be undertaken using generally accepted methods that are appropriate to the environment and circumstances in which the feature or characteristic is located. These methods are to be fully described in the relevant management plans and monitoring programs. In the event of a dispute over the appropriateness of proposed methods, the Planning Secretary will be the final arbiter.</td><td>4, 4.2, 4.5</td></tr>
<tr><td>D1</td><td>Upon receiving a written request for mitigation from the owner of any residence on the privately-owned land [a] listed in 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, 2014). 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.
Table 11: Land subject to additional mitigation upon request
<table>
<tr><th>Mitigation Basis</th><th>Land</th></tr>
<tr><td>Noise</td><td>402, 403, 411 and 538</td></tr>
</table>
[a] The locations of the land referred to in Table 11 are shown in Figure 6 in Appendix 3.</td><td>3.3.4</td></tr>
<tr><td>D2</td><td>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.</td><td>3.3.4</td></tr>
<tr><td>D3</td><td>Within one month of the date of this consent, the Applicant must:
(a) notify in writing the owner of:
(i) the residences on the land listed in Table 11 that they are entitled to ask the Applicant to install additional mitigation measures at the residence; and
(ii) any privately-owned land within 3 kilometres of the underground portal at the MEA that they are entitled to ask the Applicant for an inspection to establish the baseline condition of any buildings or structures on their land, or to have a previous property inspection report updated;
(b) notify the tenants of any mine-owned land of their rights under this consent; and
(c) send a copy of the fact sheet entitled “Mine Dust and You” (NSW Health, 2017) to the owners and/or existing tenants of any land (including mine-owned land) where the predictions in the document/s listed in condition A2(c) identify that dust emissions generated by the development are likely to be greater than the relevant air quality criteria identified in condition B16 at any time during the life of the development.</td><td>3.3.4</td></tr>
<tr><td>D5</td><td>As soon as practicable and no longer than 7 days after obtaining monitoring results showing an exceedance of any noise 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.</td><td>4.7</td></tr>
</table>

Clause	Requirement	Section of Plan
D7	If a landowner considers the development to be exceeding any relevant air quality or noise 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.	**4.9**
D8	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	**4.9**
D9	If the Planning Secretary is satisfied that an independent review is warranted, within 3 months, or other timeframe agreed by the Planning Secretary and the landowner, of the Planning Secretary's decision, the Applicant must: (a) commission a suitably qualified, experienced and independent person, whose appointment has been approved 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 or PART C; 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 of the review.	**4.9**
E4	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.	**4.8** **4.8**
E5	Management plans required under this consent must be prepared in accordance with relevant guidelines, and include: (a) a summary of relevant background or 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 E5(c);	**1.1, 3.1** **2.1** **4.1, 4.4** **4.1, 4.4** **Appendix 2** **3** **4, 5.2**

Clause	Requirement	Section of Plan
	(f) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	**4.8**
	(g) a program to investigate and implement ways to improve the environmental performance of the development over time;	**5.6**
	(h) a protocol for managing and reporting any:	
	(i) incident, non-compliance or exceedance of any impact assessment criterion or performance criterion);	**4.7**
	(ii) complaint; or	**4.8**
	(iii) failure to comply with other statutory requirements;	**4.7**
	(i) public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and	**5.4**
	(j) a protocol for periodic review of the plan.	**5.1**
	Note: *The Planning Secretary may waive some of these requirements if they are unnecessary or unwarranted for particular management plans.*	
E6	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.	**Appendix 1**
E7	Within three months of: (a) the submission of an incident report under condition E9; (b) the submission of an Annual Review under condition E11; (c) the submission of an Independent Environmental Audit under condition E12; (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 condition A13; The suitability of existing strategies, plans and programs required under this consent must be reviewed by the Applicant.	**5.1**
E8	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, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review. Note: This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.:	**5.1**
E9	The Applicant must notify the Department within 24 hours of becoming aware of an incident. The notification must be made via the NSW planning portal (Major Projects) and address details of the incident including: (a) date, time and location; (b) a brief description of what occurred and why it has been classified as an incident; (c) a description of what immediate steps were taken in relation to the incident; and (d) identifying a contact person for further communication regarding the incident.	**4.7**

Clause	Requirement	Section of Plan
E9A	The Applicant must provide the Department with a subsequent incident report in accordance with Appendix 7 (Incident Notification and Reporting Requirements).	**4.7**
E10	Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing and must be submitted via the NSW Planning Portal (Department's Major Projects Website).The notification must identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply, the reasons for the non-compliance (if known), and what actions have been undertaken, or will be undertaken, and when, to address the non-compliance. . Note: A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.	**4.7**
E11	By the end of March in each year after the commencement of the 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 year, 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 management systems; and (ii) compliance with the performance measures, criteria and operating conditions of this consent; (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.	**5.2**
E12	Copies of the Annual Review must be submitted to Council and made available to the CCC and any interested person upon request.	**5.2**
E16	Noise 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 plan/s.	**4.2.1**

Clause	Requirement	Section of Plan
E17	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; (iv) all approved strategies, plans and programs required under the conditions of this consent; (v) the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged; (vi) minutes of CCC meetings; (vii) 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; (viii) 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; (ix) a summary of the current phase and progress of the development; (x) contact details to enquire about the development or to make a complaint; (xi) a complaints register, updated monthly; (xii) the Annual Reviews of the development; (xiii) 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; (xiv) any other matter required by the Planning Secretary; and (b) keep such information up to date, to the satisfaction of the Planning Secretary.	**5.4**

Development Consent DA 106-04-00

Clause	Requirement	Section of Plan
	Noise Criteria The applicant must ensure the noise generated by the Maxwell Rail Loop and Antiene Rail Spur does not exceed the criteria in Table 1 at any residence on privately-owned land. **Location** / **Noise Limits in dB(A)**: Day $L_{Aeq\ (15\ Min)}$ 40; Evening $L_{Aeq\ (15\ Min)}$ 40; Night $L_{Aeq\ (15\ Min)}$ 40 — Any privately-owned residence	
B1	**Noise Operating Conditions** The Applicant must: (a) Integrate the noise management and monitoring system for the Maxwell Rail Loop and Antiene Rail Spur with the Maxwell Project noise management and monitoring system; (b) implement best noise management practice, which includes implementing all reasonable and feasible noise mitigation measures to minimise rail noise; and **(c)** take all reasonable steps to minimise the noise impacts of the development in noise sensitive areas during the evening and night	**3.3, 4.1, 4.2** **3.3, 4.6, 4.8** **3.3, 4.8**
C2	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. 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.	**4.8**
C3	Within three months of: (a) the submission of an incident report under condition C5 or C6; (b) the submission of an Independent Environmental Audit under condition C7; (c) the approval of any modification of the conditions of this consent (unless the conditions require otherwise); the suitability of existing strategies, plans and programs required under this consent must be reviewed by the Applicant.	**5.1**
C4	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, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review. ***Note:*** *This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.*	**5.1**

Clause	Requirement	Section of Plan
C5	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 via 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	**4.7**
C6	Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non- compliance. The notification must be in writing via the Department's Major Projects Website and identify the development (including the development application number and name), set out the condition of this consent 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. ***Note:*** *A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance.*	**4.7**
C7	Within one year of approval of Mod 1, 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; (d) assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent, water licences 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 to improve the environmental performance of the development and any assessment, strategy, plan or program required under the abovementioned approvals and this consent; and be conducted and reported to the satisfaction of the Planning Secretary.	**5.3**
C8	Within three months of commencing an Independent Environmental Audit 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.	**5.3**
C11	Within 3 months of the approval of Mod 1, 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 listed 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) a summary of the current phase and progress of the development;	**5.4**

Clause	Requirement	Section of Plan
	(v) contact details to enquire about the development or to make a complaint; (vi) a complaints register, updated monthly following the receipt of any complaints; (vii) 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; (viii) any other matter required by the Planning Secretary; and (b) keep such information up to date, to the satisfaction of the Planning Secretary	

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<table>
<tr><th>Clause</th><th>Requirement</th><th>Section of Plan</th></tr>
<tr><td>L3.1</td><td>Noise generated at the premises that is measured at each noise monitoring point established under this licence must not exceed the noise levels specified in Column 4 of the table below for that point during the corresponding time periods specified in Column 1 when measured using the corresponding measurement parameters listed in Column 2.
Point 16
<table>
<tr><th>Time period</th><th>Measurement parameter</th><th>Measurement frequency</th><th>Noise level dB(A)</th></tr>
<tr><td>Day</td><td>Day-LAeq (15 minute)</td><td>Monthly</td><td>45</td></tr>
<tr><td>Evening</td><td>Evening-LAeq (15 minute)</td><td>Monthly</td><td>41</td></tr>
<tr><td>Night</td><td>Night-LAeq (15 minute)</td><td>Monthly</td><td>41</td></tr>
<tr><td>Night</td><td>LAmax</td><td>Monthly</td><td>52</td></tr>
</table>
Point 17
<table>
<tr><th>Time period</th><th>Measurement parameter</th><th>Measurement frequency</th><th>Noise level dB(A)</th></tr>
<tr><td>Day</td><td>Day-LAeq (15 minute)</td><td>Monthly</td><td>44</td></tr>
<tr><td>Evening</td><td>Evening-LAeq (15 minute)</td><td>Monthly</td><td>40</td></tr>
<tr><td>Night</td><td>Night-LAeq (15 minute)</td><td>Monthly</td><td>40</td></tr>
<tr><td>Night</td><td>LAmax</td><td>Monthly</td><td>52</td></tr>
</table>
Point 18
<table>
<tr><th>Time period</th><th>Measurement parameter</th><th>Measurement frequency</th><th>Noise level dB(A)</th></tr>
<tr><td>Day</td><td>Day-LAeq (15 minute)</td><td>Monthly</td><td>40</td></tr>
<tr><td>Evening</td><td>Evening-LAeq (15 minute)</td><td>Monthly</td><td>35</td></tr>
<tr><td>Night</td><td>Night-LAeq (15 minute)</td><td>Monthly</td><td>35</td></tr>
<tr><td>Night</td><td>LAmax</td><td>Monthly</td><td>52</td></tr>
</table></td><td>4.2</td></tr>
</table>

Clause	Requirement			Section of Plan
	16	Noise monitoring	Monitoring location NM1 (EPA Monitoring Location 16) at coordinates 306016, 6420858 (Easting, Northing) as shown on plan titled "Maxwell UG Project Noise Monitoring Locations V3" dated 28 July 2021. Representative of receiver 411 as outlined in "Maxwell Project Appendix I Noise Impact Assessment" dated 13 June 2019.	Figure 1
	17	Noise monitoring	Monitoring location NM2 (EPA Monitoring Location 17) at coordinates 304949, 6422155 (Easting, Northing) as shown on plan titled "Maxwell UG Project Noise Monitoring Locations V3" dated 28 July 2021. Representative of receiver 403 as outlined in "Maxwell Project Appendix I Noise Impact Assessment" dated 13 June 2019.	
	18	Noise monitoring	Monitoring location NM3 (EPA Monitoring Location 18) at coordinates 298037, 6407215 (Easting, Northing) as shown on plan titled "Maxwell UG Project Noise Monitoring Locations V3" dated 28 July 2021. Representative of receiver 227F as outlined in "Maxwell Project Appendix I Noise Impact Assessment" dated 13 June 2019	
L3.2	. For the purposes of condition L3.1: a) Day is defined as the period from 7 am to 6 pm Monday to Saturday and 8 am to 6 pm Sunday and Public Holidays; b) Evening is defined as the period 6 pm to 10 pm (all days); and c) Night is defined as the period from 10 pm to 7 am Monday to Saturday and 10 pm to 8 am Sunday and Public Holidays			**4.1.1**

<table>
<tr><th>Clause</th><th>Requirement</th><th>Section of Plan</th></tr>
<tr><td>L3.3</td><td>The noise limits set out in condition L3.1 apply under the following meteorological conditions:
<table>
<tr><th>Receiver</th><th>Assessment Period</th><th>NPfI Meteorological Condition</th><th>Description fo Meteorological Parameters</th></tr>
<tr><td>Northern</td><td>Daytime</td><td>Noise-enhancing</td><td>3 m/s wind in ESE, SE, SSE, W, WNW, NW & NNW directions; stability categories A-D</td></tr>
<tr><td>Northern</td><td>Daytime</td><td>Standard</td><td>0.5 m/s wind in source-to-receiver direction; stability categories A-D</td></tr>
<tr><td>Northern</td><td>Evening</td><td>Standard</td><td>0.5 m/s wind in source-to-receiver direction; stability categories A-D</td></tr>
<tr><td>Northern</td><td>Night</td><td>Noise-enhancing</td><td>Stability category F; no wind component</td></tr>
<tr><td>Northern</td><td>Night</td><td>Standard</td><td>0.5 m/s wind in source-to-receiver direction; stability categories A-D</td></tr>
<tr><td>Southern</td><td>Daytime</td><td>Standard</td><td>0.5 m/s wind in source-to-receiver direction; stability categories A-D</td></tr>
<tr><td>Southern</td><td>Evening</td><td>Standard</td><td>0.5 m/s wind in source-to-receiver direction; stability categories A-D</td></tr>
<tr><td>Southern</td><td>Night</td><td>Noise-enhancing</td><td>Stability category F; no wind component</td></tr>
<tr><td>Southern</td><td>Night</td><td>Standard</td><td>0.5 m/s wind in source-to-receiver direction; stability categories A-D</td></tr>
</table>
Wind in source-to-receiver direction was considered using the closest direction in a 16-direction compass to the source-to-receiver direction.</td><td>3.3.2</td></tr>
<tr><td>L3.4</td><td>For those meteorological conditions not referred to in condition L3.1, the noise limits that apply are the noise limits in condition L3.1 plus 5 dB.</td><td>3.3.2</td></tr>
<tr><td>L3.5</td><td>For the purposes of condition L3.3 to be determined from meteorological data obtained from the meteorological weather station identified as Maxwell Infrastructure CHPP AWS and
b) Stability Category shall be determined by the sigma theta method referred to in Fact Sheet D of the Noise Policy for Industry (NSW EPA, 2017).</td><td>3.3.2</td></tr>
<tr><td>L3.6</td><td>a) with the Leq(15 minute) noise limits in condition L3.1, the noise measurement equipment must be located:
i) approximately on the property boundary, where any dwelling is situated 30 m or less from the property boundary closes to the Premises; or
ii) within 30 m of a dwelling façade, but not closer than 3 m, where any dwelling on the property is situated more than 30 m from the property boundary closest to the Premises; or, where applicable
iii) within approximately 50 m of the boundary of a National Park or a Nature Reserve.
b) with the Leq(15 minute) noise limits in condition L3.1, the noise measurement equipment must be located:
i) at the most affected point at a location where there is no dwelling at the location; or
ii) at the most affected point within an area at a location prescribed by condition L3.6 a).</td><td>4.2.1</td></tr>
</table>

<table>
<tr><th>Clause</th><th>Requirement</th><th>Section of Plan</th></tr>
<tr><td>L3.7</td><td>A non-compliance of condition L3.1 will still occur where noise generated from the Premises is measured in excess of the noise limit at:
a) a location other than an area prescribed by conditions L3.6 a) and L3.6 b); and/or
b) a point other than the most affected point at a location.
Note: The reasonably most affected point is a point at a location or within an area at a location experiencing or expected to experience the highest sound pressure level from the Premises</td><td>4.2.1</td></tr>
<tr><td>L4.1</td><td>The airblast overpressure level from blasting operations in or on the premises must not exceed:
115 dB (Lin Peak) for more than 5% of the total number of blasts during each reporting period;
at either monitoring Point 13, 14 or 15 in Condition P1.4.
<table>
<tr><td>13</td><td>Air blast overpressure & ground vibration peak particle velocity monitoring</td><td>Monitoring location BM1 (EPA Monitoring Location 13) at coordinates 304200, 6422371 (Easting, Northing) as shown on plan titled "Maxwell UG Project Blast Monitoring Locations" dated 21 May 2021.</td></tr>
<tr><td>14</td><td>Air blast overpressure & ground vibration peak particle velocity monitoring</td><td>Monitoring location BM2 (EPA Monitoring Location 14) at coordinates 298813, 6407512 (Easting, Northing) as shown on plan titled "Maxwell UG Project Blast Monitoring Locations" dated 21 May 2021.</td></tr>
<tr><td>15</td><td>Air blast overpressure & ground vibration peak particle velocity monitoring</td><td>Monitoring location BM3 (EPA Monitoring Location 15) at coordinates 292895, 6410964 (Easting, Northing) as shown on plan titled "Maxwell UG Project Blast Monitoring Locations" dated 21 May 2021.</td></tr>
</table></td><td>4.4, 4.5</td></tr>
<tr><td>L4.2</td><td>The airblast overpressure level from blasting operations in or on the premises must not exceed:
120 dB (Lin Peak) at any time;
at either monitoring point 13, 14 or 15 in Condition P1.4.</td><td>4.4, 4.5</td></tr>
<tr><td>L4.3</td><td>The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:
5 mm/second for more than 5% of the total number of blasts during each reporting period;
at either monitoring point 13, 14 or 15 in Condition P1.4.</td><td>4.4, 4.5</td></tr>
<tr><td>L4.4</td><td>The ground vibration peak particle velocity from blasting operations carried out in or on the premises must not exceed:
10 mm/second at any time;
at either monitoring point 13, 14 or 15 in Condition P1.4.</td><td>4.4, 4.5</td></tr>
<tr><td>L4.5</td><td>Blasting in or on the Premises must only be carried out between 0900 hours and 1700 hours, Monday to Saturday (inclusive). Blasting in or on the Premises must not take place on Sundays or Public Holidays without the prior written approval of the EPA.</td><td>3.5.2</td></tr>
<tr><td>L4.6</td><td>Offensive blast fume must not be emitted from the premises.</td><td>3.5.1</td></tr>
<tr><td>M7.1</td><td>To determine compliance with conditions L4.1, L4.2, L4.3 and L4.4: a) Airblast overpressure and ground vibration levels must be measured and electronically recorded for monitoring points 13, 14 and 15 for the parameters specified in Column 1 of the table below; and b) The licensee must use the units of measure, sampling method, and sample at the frequency specified opposite in the other columns.
<table>
<tr><th>Parameter</th><th>Units of Measure</th><th>Frequency</th><th>Sampling Method</th></tr>
<tr><td>Airblast Overpressure</td><td>Decibels (Linear Peak)</td><td>All blasts</td><td>Australian Standard AS 2187.2-2006</td></tr>
<tr><td>Ground Vibration Peak Particle Velocity</td><td>millimetres/second</td><td>All blasts</td><td>Australian Standard AS 2187.2-2006</td></tr>
</table></td><td>4.5, 4.5</td></tr>
</table>

Clause	Requirement	Section of Plan
M9.1	Attended noise monitoring must: a) occur monthly in a reporting period b) occur during each day, evening and night period for a minimum of: i) 1.5 hours during the day ii) 30 minutes during the evening; and iii) 1 hour during the night, c) occur for three consecutive operating days or as otherwise specified by the EPA	**4.2.1**

Mining Leases

Condition	Details	Reference
ML1531 Condition 26 & CL 229 Condition 26	**Blasting** The lease holder shall monitor noise and vibration and institute controls, generally in accordance with the recommendations of Australian Standard AS-2187 1993 and ANZEC Guidelines	**4.5**
	a) Ground Vibration The lease holder shall design all blasts on the basis that the ground vibration peak particle velocity generated by any blasting within the subject area, shall not exceed the levels in or conditions of the EPA Licence for the mine, at any dwelling or occupied premises not owned by the lease holder, the holder of an authority under the Mining Act, or not subject to a valid agreement with the lease holder, with respect to the effects of blasting.	**3.5.1, 4.4**
	b) Blast Overpressure The lease holder shall design all blasts on the basis that the blast overpressure noise level generated by any blasting within the subject area, shall not exceed the levels in or conditions of the EPA Licence for the mine, at any dwelling or occupied premises not owned by the lease holder, the holder of an authority under the Mining Act, or not subject to a valid agreement with the lease holder, with respect to the effects of blasting.	**3.5.1, 4.4**
CL 395 Condition 11	**Blasting** a) Ground Vibration The lease holder must ensure that the ground vibration peak particle velocity generated by any blasting within the lease area does not exceed 10 mm/second and does not exceed 5 mm/second in more than 5% of the total number of blasts over a period of 12 months at any dwelling or occupied premises as the case may be, unless determined otherwise of the Department of Environment and Conservation.	**3.5.1, 4.4**
	b) Blast Overpressure The lease holder must ensure that the blast overpressure noise level generated by any blasting within the lease area does not exceed 120 dB (linear) and does not exceed 115 dB (linear) in more than 5% of the total number of blasts over a period of 12 months, at any dwelling or occupied premises, as the case may be, unless determined otherwise of the Department of Environment and Conservation.	**3.5.1, 4.4**
ML 1531 Condition 55	**Annexure A** **Methods of Operation (Prescribed Dams)** Notwithstanding a Mining Operations Plan, the lease holder must not mine within any part of the lease area which is within the notification area of the Liddell Ash Dam without the prior written approval of the Minister and subject to any condition he may stipulate	**Drayton-2 Approval 4.4**
	Drayton-2 Approval	

Condition	Details	Reference
Annexure D Condition 14.1	The Company shall ensure that peak particle velocities generated as a result of mining will not exceed 50 mm/s at any point on the Dam. A minimum requirement is that monitoring of blast vibration occurs at the point on the embankment crest nearest to the blast, and at a point on the downstream toe (at maximum height section).	Not relevant to this plan (refer to Section 4.4)
Annexure D Condition 14.2	The Company will develop and implement a program to monitor particle velocities generated by mining at sites on the dam and will inform the DSC of the details of this monitoring program as soon as possible.	Not relevant to this plan (refer to Section 4.4)
Annexure D Condition 14.3	Written reports on the results of the monitoring outlined in the above condition 14.2 shall be submitted to DSC at intervals specified in Annexure E (Monthly)	Not relevant to this plan (refer to Section 4.4)
Annexure D Condition 14.4	The DSC will be informed immediately if peak particle velocities, as a result of mining at any point on the dam, exceed 20 mm/s.	Not relevant to this plan (refer to Section 4.4)
Annexure D Condition 14.5	If peak particle velocities exceed the limits set in the above condition 14.4, then the DSC may require an inspection of the dam by a suitable dams engineer.	Not relevant to this plan (refer to Section 4.4)
Annexure D1 Condition 2.1	The Company shall undertake a safety inspection of the dam, to a standard acceptable to the Committee, after each blast.	Not relevant to this plan (refer to Section 4.4)
Annexure D1 Condition 2.2	The Company shall submit a report on the dam inspection results at intervals and in a format as specified in Annexure E (monthly).	Not relevant to this plan (refer to Section 4.4)

10 APPENDIX 2 – MAXWELL EIS AND SUPPORTING DOCUMENT COMMITMENTS

Source	Details	Reference
EIS Section 6.9.5 and 8.2.6	***Real-time Monitoring and Meteorological Forecasting System*** The noise management system for the Project would include a real-time noise and meteorological monitoring network, as well as a meteorological forecasting system. Real-time noise monitors would be installed in locations that would provide representative noise levels at privately-owned receivers most likely to experience noise impacts associated with the Project (e.g. to the north of the Maxwell Infrastructure). Locations for these monitors would be determined once operations commence and in consultation with the relevant government agencies and local landowners. Real-time meteorological data would be recorded at the Maxwell Infrastructure AWS (or a suitable replacement)	**3.3** **4.2.3** **4.3**
EIS Section 8.2.6	A meteorological forecasting system will also be implemented for the Project to anticipate upcoming periods of adverse weather conditions (e.g. based on wind speed, direction and atmospheric stability).	**3.3.3**
EIS Section 6.9.5 and 8.2.6	***Attended Noise Monitoring*** Attended noise monitoring would be undertaken regularly at locations representative of the most sensitive receivers to determine compliance of Project noise levels with relevant Development Consent criteria. Monitoring results would be assessed against the NPfI with respect to modifying factors (including for low frequency noise). If monitoring results are found to contain dominant low-frequency content, appropriate modifying factors would be applied to measured noise levels, in accordance with the NPfI, to account for additional annoyance at the receiver.	**4.2.1**
EIS Section 6.9.5 and 8.2.6	***Noise Management Plan*** A Noise Management Plan would be prepared for the Project, which would describe the noise management system for the Project, including details of: • applicable Development Consent noise and vibration criteria; • the noise mitigation measures for the Project; • attended noise monitoring locations; • real-time noise monitoring locations; • the predictive meteorological forecasting system; • the pro-active noise management system; • specified trigger levels for the implementation of additional mitigation measures; • protocols for the implementation of additional mitigation measures; and • complaint response protocols.	**4.1, 4.4** **3.3** **4.2.1, Figure 1** **4.2.3, Figure 1** **3.3.3** **3.3.3** **3.3.3** **3.3.3** **4.9**

Source	Details	Reference
EIS Section 6.9.5 and 8.2.6	***Noise Management Zone*** The privately-owned receivers where noise emissions are predicted to exceed the Project Noise Trigger Levels (i.e. with either negligible or marginal exceedances) would be classified as being within the Project's noise management zone. In addition to the mitigation measures described above, proposed management procedures for receivers in this zone would include: • response to any community issues of concern or complaints including discussions with relevant landowners; • refinement of on-site noise mitigation measures and mine operating procedures; and • implementation of feasible and reasonable acoustical mitigation at receivers with predicted marginal residual impacts, in accordance with the Voluntary Land Acquisition and Mitigation Policy.	**4.9** **4.8, 5.6** **3.3.4**
EIS Section 6.9.5 and 8.2.6	Maxwell would design the parameters required for any blasting activities (e.g. for construction, or at the Maxwell Infrastructure for closure activities) with a high margin of conservatism to meet the applicable criteria at the nearest sensitive receivers or any proximal infrastructure (e.g. Liddell Ash Dam).	**3.5.1**
EIS Section 6.9.6	***Pro-active Noise Management System*** A pro-active noise management system would be implemented to manage noise levels from the Project at nearby receivers (i.e. to reduce the likelihood that Project noise levels would exceed predicted operational noise levels at receiver locations). The meteorological forecasting system would be used in conjunction with the real-time noise monitoring system, and would provide an alert for Maxwell personnel to review the real-time data and manage surface operations as may be required.	**3.3.3**
EIS Section 6.9.6	The Noise Management Plan would provide details on the operation of the pro-active noise management system. It is anticipated that the process would involve a review of meteorological forecasting data by a nominated person prior to the commencement of each mining shift. If favourable conditions are predicted, then typical operations would be conducted. If unfavourable conditions are predicted, Maxwell would plan operational alternatives.	**3.3.3**
EIS Section 6.9.6	During operations, if noise from the Project exceeds specified trigger levels, Maxwell personnel would be alerted and additional mitigation measures would be implemented until noise levels reduce below the trigger levels. This would occur even if surface operations have already been modified. The trigger levels would be specified such that the equivalent noise level at the closest receivers would be below the permitted maximum operational noise levels.	**3.3.3**
EIS Section 6.15.4 and 8.2.6	The Project would use locomotives and rolling stock approved to operate on the NSW rail network in accordance with EPLs issued by the EPA.	**3.3.1**
EIS Section 6.15.4 and 8.2.6	Project employees would be made aware of the potential for noise impact through site-specific inductions and staff education programs to reinforce quiet driving styles/attitudes.	**6.2**
EIS Section 6.15.5	Project road and rail transport noise adaptive management measures would include response to any community issues of concern or complaints, including discussions with relevant landowners and liaison with rail operators regarding train operating procedures.	**4.8, 4.9**

Source	Details	Reference
Maxwell Project Submissions Report Section 6.1.4	Results of noise monitoring to be conducted for the Project would be assessed against the NPfI with respect to modifying factors (including for low-frequency noise). If monitoring results are found to contain dominant low-frequency content, appropriate modifying factors (i.e. penalties) would be applied to measured levels, in accordance with the NPfI, to account for additional annoyance at the receiver	**3.2.2, 4.2.1**
Letter to DPIE 1 June 2020	No construction-related blasting is proposed within 500 metres of a public road.	**3.5.3**

11 APPENDIX 3 – PLANNING SECRETARY ENDORSEMENT

Planning, Industry & Environment

Alex Newton
Environment Approvals Coordinator
Malabar Coal LTD
Thomas Mitchell Drive
Muswellbrook, NSW 2333

01/03/2021

Dear Mr Newton

Maxwell Underground (SSD-9526)
Noise and Blasting Management Plan

I refer to your request (SSD-9526-PA-7)) for the Planning Secretary's approval of suitably qualified persons to prepare the Noise and Blasting Management Plan for the Maxwell Underground (SSD-9526).

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 Neil Gross, Senior Technical Director/Associate Principal at RWDI and John Wasserman (Director at RWDI) to be appointed as a suitably qualified and experienced persons in the preparation of the Noise and Blasting Management Plan.

If you wish to discuss the matter further, please contact Charissa Pillay on 0299955944.

Yours sincerely

Matthew Sprott
Director
Resource Assessments (Coal & Quarries)

As nominee of the Planning Secretary

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12 APPENDIX 4 – CONSULTATION WITH THE COOLMORE AND WOODLANDS THOROUGHBRED STUDS

Meeting notes from a meeting held on 15 March 2021 between Maxwell and Coolmore and Woodlands Studs.

MALABAR
MAXWELL UNDERGROUND

Key Points of Discussion

Meeting:	Consultation for the Maxwell UG Project Noise and Blasting Management Plan (NBMP)
Time and date:	9.30am on Thursday 15th March 2021
Location:	Coolmore meeting room
Attendees:	Des Hernon (DH) - Coolmore
	Ross Cole (RC) - Godolphin
	Michael White (MW) – Mining Consultant engaged by the Coolmore and Godolphin
	James Johnson (JJ) – Malabar Resources
	Donna McLaughlin (DM) – Malabar Resources

Key Points:

JJ provided a general update on the Maxwell UG Project including project design and approximate timing. MW requested a project schedule, and JJ agreed to provide a simplified project schedule that outlined the timing for key construction and production activities. JJ advised that the cconstruction phase will begin in Q3 2021 and likely take 12 months.

DM went through the presentation overview document (attached).

RC and MW noted throughout the meeting that the preference from Colmore & Godolphin was for no blasting to occur, noting that Maxwell had indicated in the Project documentation that it would seek to eliminate or minimize blasting. Lots of work is going at Maxwell into developing/completing the Management Plans which require DPIE approval prior to commencement.

RC noted the Godolphin and Coolmore where most interested not in potential exceedances which whilst important did not reflect the representations made to them and the IPC/Government by Maxwell, which was that there would be indistinguishable noise contributions and no impacts from blasting. If blasting and noise impacts were allowed to go to the Consent limits this would not be the case, so Godolphin and Coolmore wished to focus on, and work with Maxwell to achieve the represented result of no impacts, rather than be focused on the limits of the conditions of consent. JJ accepted that position and noted that Maxwell would work towards that joint commitment.

MW questioned the wording in Section 4.5 of the NBMP as it appeared to indicate that Maxwell would only undertake monitoring if required by a written direction from the Planning Secretary. DM confirmed that blast monitoring was required by SSD 9526 and that Maxwell had intended to monitor every surface blast. DM committed to update the wording to better reflect this.

MW questioned if an attended noise monitoring site could be positioned near the Godolphin stud. DM committed to review the attended noise monitoring locations and consider including a location at or near the Woodlands stud. DH indicated that the proposed attended noise monitoring site across the road from the Coolmore entrance would in Maxwell's view be representative. DH requested that BM2 be closer to the Coolmore front flats, either on Coolmore land or on Maxwell's adjacent land at that spot.

DH and RC noted that they would be open to having monitoring sites/equipment installed on their land. DM committed to review the blast monitoring locations and consider locations on land owned by Coolmore and Godolphin. DM suggested that she could also provide some further specifications for the equipment.

DM noted that landholders could request to be notified of a blast via phone, email or as otherwise agreed between both parties. DM also mentioned that any proposed blasts would be included on the MSC blasting announcement webpage. RC noted that it would be Godolphin's (and Coolmore's) preference to be notified in advance and directly. DM acknowledged this, and is to provide a proposal in that regard

MW asked if Maxwell would be willing to share the monitoring data outside and more directly than by publication on the Maxwell website. DM indicated that Maxwell would be willing to consider this and would include further details in the NBMP.

MW asked if underground blasting had been considered and assessed in the EIS. JJ explained that shot firing is used from time to time in underground mining and is significantly less (in size and impact) than surface blasting. JJ committed to take the question on notice and provide a response back to Coolmore and Godolphin.

At project start-up JJ advised that Maxwell will be constructing drifts (inclined access tunnels) to both the Whynot seam (2 drifts approx. 1300metres long) and 2 drifts to the Woodlands Hill seam (approx. 1000metres long).

JJ advised they had tenders out for this and at this stage construction could be either by using road header machinery or by blasting – a decision has not been made.

RC asked if Maxwell would capture the key points from today and circulate them to the attendees for review and comment. DM and JJ agreed to this.

RC noted that Godolphin would like to have a position on and attend the CCC meetings. DH indicated that this was also Coolmore's position RC suggested that MW may attend as a delegate for both Coolmore and Godolphin. DM noted that she would send a request to both Coolmore and Godolphin and they could respond and indicate that MW would be their delegate.

JJ advised that the CCC is a continuation of the existing CCC, and that the Independent Chair is Jennifer Leckie.

Actions:

Item	Description	Who
1	Provide a simplified project schedule with key dates to the horse studs	James Johnson
2	Review and update wording in section 4.5 of the NBMP to include monitoring of all surface blasts.	Donna McLaughlin
3	Review all monitoring locations and consider including a location at or near the Woodlands stud.	Donna McLaughlin
4	Provide the horse studs with further information on the design of the blast monitoring equipment.	Donna McLaughlin

Item	Description	Who
5	Review all monitoring locations and consider including monitoring on land owned by Coolmore and Godolphin.	Donna McLaughlin
6	Provide further details and proposals on how Maxwell proposes to share data with the horse studs, and reaching agreement on notice, and event programming to minimize potential impacts on operations.	Donna McLaughlin
7	Maxwell to advise how underground blasting was considered and assessed in the EIS.	James Johnson
8	Maxwell to capture the key points from the discussion and circulate them back to both horse studs for review and comment.	Donna McLaughlin
9	Maxwell to send a request to both horse studs asking them to confirm the acceptance to participate in the CCC.	Donna McLaughlin

Other:

JJ confirmed that Maxwell is willing to consult Coolmore and Godolphin in respect to the development of other Management Plans dealing with areas about which they have specific interest (for example but not limited to Water).

Noted:

These meeting points and any additional comments provided in the Draft NBMP would be included as part of App 4 to the Plan.

Written feedback on the Noise and Blasting Management Plan, provided by *Coolmore and Woodlands Studs on 12 May 2021.*

#	Summary provided by Coolmore and Woodlands	Comments provided by Coolmore and Woodlands	Maxwell Response
1	The NBMP does not include: -Management of blasting of high walls within final voids -Rehabilitation blasting -Blasting within 500m of Thomas Mitchell Drive -Management of noise and blasting associated with the realignment of Edderton Road. (Works) The NBMP will be updated prior to undertaking such Works.)	1. We understand that Maxwell will consult Coolmore & Godolphin if it proposes undertake any of these Works or seek a variation of the ground vibration criterion provided in Condition B11. Please confirm.	In accordance with the Maxwell Project Environmental Impact Statement (Project EIS), Maxwell may conduct blasting in the final voids (rehabilitation blasting) at the Maxwell Infrastructure site. This may involve blasting within 500 metres of Thomas Mitchell Drive. In accordance with the Project EIS, this rehabilitation blasting would be conducted in accordance with a Mining Operations Plan, Mine Closure Plan and/or a Noise and Blast Management Plan. Maxwell notes that this NBMP would be updated prior to any rehabilitation blasting at which time consultation will be undertaken in accordance with Schedule 2, Condition B12(e)(i) of Development Consent SSD 9526 (i.e. consultation with Coolmore and Woodlands). Section 1.2 has been amended to include this condition.
		2. Please provide estimates as far as they are predicted, for the timing of these Works.	Maxwell will continue to investigate beneficial uses for the voids in CL 229 and ML 1531. If, by the end of 2025, no clear resolution is reached with other mining and industrial facilities in the region, Maxwell would rehabilitate the South Void highwall and North Void low wall, unless otherwise agreed with the Resources Regulator. The North Void highwall requires decommissioning of the rail loop and CHPP and as such cannot be completed until after the 30 June 2047. The Edderton Road realignment will be undertaken prior to second workings in Arrowfield or Bowfield seams. Referring to the indicative schedule in Table 3-3 of Project EIS, ROM production from the Arrowfield Seam will commence at project Year 10. Maxwell notes that the actual timing and sequence of each activity presented in the indicative schedule may vary to take into account detailed designs, project capital phasing, current market conditions and contractor requirements.
		3 Please attach (at App 6) the evidence of Planning Secretary's approval to 'staging' of the NBMP. (Condition A24 permits the Planning Secretary to approve the staging of any plan required by the development consent).	Section 1.2 clarifies the scope of the NBMP. Maxwell understands that 'staging' of the NBMP is not required. No change required to the NBMP.
2	Noise modelling indicated that noise contributions from the site at all privately owned southern	We confirm our request for additional real time Mobile noise monitoring to the South, adjacent to	Maxwell has amended Table 10 in Section 4.2.1 to include an additional attended noise monitoring location (referred to as NM4). NM4 is considered representative of southern receiver 240d (i.e.

#	Summary provided by Coolmore and Woodlands	Comments provided by Coolmore and Woodlands	Maxwell Response
	receivers including Coolmore and Godolphin were predicted to be indistinguishable from background noise.	agreed points on/in Coolmore & Godolphin. We note that throughout the process Malabar has indicated that there will be no noise impacts on Coolmore & Godolphin.	Woodlands Stud). Site NM3 was already included and is considered representative of southern receiver 227f (i.e. Coolmore Stud). Compliance monitoring is proposed to be undertaken on a monthly basis. Noise modelling undertaken for the Project EIS indicated that noise contributions from the site at all privately-owned southern receivers including the Coolmore and Woodlands Studs and Hollydene Estate Wines, were predicted to be indistinguishable from background noise. Maxwell therefore considers that a real-time noise monitor in the south is not warranted. Maxwell notes that a real-time noise monitor is located to the north of the site where noise impacts are predicted to occur.
3	We note the concession that there are marginal exceedances of the Noise Policy for Industry (NPfI) predicted at identified northern receivers.	The NBMP concedes non-compliance with NPfI for identified northern receivers. Noted that the NBMP predicts that there will be no impacts on Coolmore and/or Godolphin.	No change required to the NBMP.
4	A low-frequency noise assessment was undertaken as part of the noise impact assessment. If monitoring results during operations are found to contain dominant low-frequency content, appropriate modifying factors will be applied to measured noise levels in accordance with Fact Sheet C of the NPfI.	Please have The NBMP indicate/specify what these 'modifying factors' are that will be applied. Please have these explained in lay terms given the complexities of Fact Sheet C in the NPfI. Noted that the DNMP predicts that there will be no impacts on Coolmore and/or Godolphin.	Section 3.2.2 has been updated to indicate what the modifying factors are and when they will be applied.
5	This section identifies the type of construction works from Year 1. Investigative modelling has indicated that daytime construction of the site access road in Year 1 would be more than 10 dB less than the predicted operational noise to the northern receivers beyond	There will be simultaneous Construction and Operational/extractive activities occurring on site, and it will not be possible for the community distinguish between equipment used for extracting processes and equipment used for construction activities.	No change required to the NBMP.

#	Summary provided by Coolmore and Woodlands	Comments provided by Coolmore and Woodlands	Maxwell Response
	approximately 500 to 1500 m from the northernmost end of the transport and services corridor, depending on the meteorological conditions present at the time. Construction noise would be typically masked by the operational noise. It also concluded that construction activities associated with the covered overland conveyor in Year 3 will become evident to the receivers beyond approximately 350 to 1000 m from the northernmost end of the transport and services corridor, depending on meteorological conditions. Results of the noise modelling indicated that construction noise levels will generally comply with all the noise management levels recommended in the Interim Construction Noise Guideline (Department of Environment and Climate Change 2009)	There is no adequate assessment of worst-case scenario with regards to adverse weather impacts, Construction operational activity. Please address this.	Noise modelling was undertaken for the Project EIS for the daytime and was based on years 1, 3 and 4 of operations. Construction activities were included in the assessed operational noise scenarios for years 1 and 3. Predicted noise levels at all receivers, with and without the proposed pro-active noise management measures, for Years 1 and 3 are presented in the Maxwell Project – Submissions Report. A review of predicted noise levels at all receivers, at Years 1 and 3 (i.e. considering operational and construction noise) with and without the proposed pro-active noise management measures indicates the implementation of the pro-active noise management measures reduces the number of predicted exceedances and reduces the magnitude of the exceedances at some receivers. No change required to the NBMP.
		It is stated that Construction noise will be indistinguishable from Operational Noise. Please confirm, as it follows form Section 3.2 that there will be no Construction noise impacts on Coolmore & Godolphin (as the noise will be indistinguishable from background noise). Please confirm.	Malabar confirms that, as perceived by receivers in the vicinity of the site, noise associated with construction activities in Year 1 and 3, is predicted to be largely indistinguishable from operational mining and coal processing activities given similar plant would be deployed and construction activities would occur in areas adjacent to operational activities. Malabar confirms that noise contributions from the Project at all privately-owned southern receivers are predicted to be indistinguishable from background noise. No change required to the NBMP.
		Please provide real time monitoring adjacent to/on Coolmore & Godolphin during Construction, as evidence/comfort.	Please refer to the response provided above for item 2.
6	The cumulative noise Impact assessment indicated that cumulative noise levels from the concurrent operations at Mount Arthur Coal and Maxwell will comply with the recommended night-time amenity criteria at all privately owned receivers. (All see also section 4.1.3, p 16).	Noted that the NBMP predicts that there will be no impacts on Coolmore and/or Godolphin.	No change required to the NBMP.
7	Table 2 sets out operational noise control measures for mobile	In our 15 March meeting [see “Key Points from Meeting notes] we requested additional	Please refer to the response provided above for item 2.

#	Summary provided by Coolmore and Woodlands	Comments provided by Coolmore and Woodlands	Maxwell Response
	plant, infrastructure, rail, and site areas.	noise monitoring sites, including consideration of same on property owned by Coolmore/Godolphin be considered, this is to include real-time monitoring in the South as well, and not just rely on attended monitoring. Once actual data is collected then the necessity for ongoing real-time measurement could be reviewed.	
8	Table 3 describes noise enhancing meteorological conditions and was determined based on historic site meteorological data. Malabar will manage noise enhancing weather conditions using a pro-active noise management system involving the use of real-time monitoring and meteorological forecasting to assist with managing noise levels. Table 4 sets out management measures to be implemented to address noise enhancing meteorological conditions.	See 7 above	Noted.
9	Blasting below surface level will be limited to a maximum instantaneous charge (MIC) of less than 15 kg and would generate ground vibration of less than 0.5 mm/s at any residence on privately owned land. No construction related blasting is proposed within 500 m of a public road. (See also Section 3.5.3, p14).	In our 15 March meeting [see "Key Points from Meeting notes] we requested additional information regarding Underground blasting for mining, as we don't recall that it was identified in the EIS, the Department's Assessment Report nor in the IPC's Statement of Reasons. We look forward to hearing from you.	Maxwell notes that Section 3.4.2 of the EIS notes that blasting of material may be required during construction activities; for example, to develop the coal surge stockpile area, site access road, access to the underground workings and/or water storage dams. It also notes that the requirement for blasting would be dictated by the geotechnical properties of the material being excavated. Schedule 2, Condition B9 of Development Consent SSD 9526 states that the restrictions on blasting timing and frequency do not apply to blasts that generate less than 0.5 mm/s or less at any residence on privately-owned land. This same criterion is also applied to blasting within 500 m of public roads/private property in Condition B11. Maxwell understands that underground blasting would remain well below 0.5 mm/s at any residences on privately-owned land. Section 3.4 has been updated to include this information.

#	Summary provided by Coolmore and Woodlands	Comments provided by Coolmore and Woodlands	Maxwell Response
10	Blasting for construction activities will be limited to an MIC of approximately 500 kg.	Delete word “approximately”, replace with ’no greater than’.	Maxwell notes that this wording is consistent with the wording contained within the Noise Impact Assessment of the Project EIS. However, Maxwell has replaced the word ‘approximately’ with ‘no greater than’ in Section 3.5.1.
		In our 15 March meeting [see “Key Points from Meeting notes] we noted that we relied on the representations that Malabar would seek to eliminate the need for Construction Blasting, so either there will be no blasting, or if unavoidable these will not be noticeable to Coolmore or Godolphin. Therefore, the starting point was no blasting with justification to be provided if that was not in Malabar’s view achievable. Please advise whether this is a commitment to be made more formally?	In accordance with the Project EIS, Maxwell commits that it would seek to eliminate or minimise the need for construction blasting, with material preferentially removed through the use of dozers and excavators only. The requirement for blasting would be dictated by the geotechnical properties of the material being excavated. This has been included in Section 3.5.1.
11	This repeats the permitted hours and frequency in Conditions B7 and B8 with blasting permitted only Monday to Saturday between 9am and 5pm.	We seek that Malabar include in the NBMP a requirement that it notify Coolmore & Godolphin, and the Community Consultative Committee (CCC) and those who have registered for notification in accordance with Section 3.54 of the NBMP, where Malabar is seeking, and when it obtains, the written approval of the Planning Secretary to carry out blasting on Sundays, public holidays or any other time outside of the permitted hours.	Section 3.5.2 has been updated to include this commitment.
12	Any private landholder or occupier of any residence within 2 km of the site who registers an interest in being notified about blasting activities will be notified by telephone, email or as otherwise agreed between the parties.	We note in our 15 March meeting Malabar agreed to ensure that Coolmore and Godolphin are to receive direct notification even where they are not an occupier of a residence within 2km of the Site, and also notify the CCC.	Section 3.5.4 has been updated to included ‘any private landholder or occupier of any residence’. The previous reference to a ‘residence within 2km of the site’ has been removed. Section 3.5.4 has been updated to provide further details regarding timing for the notification process.

#	Summary provided by Coolmore and Woodlands	Comments provided by Coolmore and Woodlands	Maxwell Response
	Proposed blast times will be uploaded onto the Muswellbrook Shire Council Blasting announcement webpage and displayed on Malabar's website.	We note that this would include Malabar including this in the NBMP along with a requirement to provide this information within an appropriate number of days before the blasts are proposed to be carried out.	
13	Malabar will cooperate with Mount Arthur Mine to limit cumulative noise contributions from the rail loop and rail spur.	Noted.	No change required to the NBMP.
14	Table 10 sets out a summary of attended noise monitoring locations. Attended noise monitoring will be performed every quarter and conducted for day, evening, and nighttime periods to assess the site against the limits set out in the development consent and Environment Protection licence 1323. Attended noise monitoring locations will be reviewed and where necessary modified over the life of operations of the project according to monitoring results and physical changes in operations.	Table 10 refers to two locations identified as "NM2". We assume that the southern receiver site is meant to be NM3? (We note that NM3 is shown on Figure 1 as a southern receiver site.)	Typographical error in Table 10 corrected. NM2 changed to NM3. Note that the NBMP now includes monthly attended noise monitoring and an additional noise monitoring location for southern receivers (NM4).
15	Table 11 sets out what is to occur if the attended noise monitoring results identify an exceedance of the operational noise criteria. If there is a first reading fail, a second reading will be taken. If a second reading results in a fail, the acoustic consultant is to record a noise non-compliance. Malabar will then perform an environmental incident investigation to determine the cause of the non-compliance. Affected landowners, DPIE and the EPA will be notified. An investigation into the	We request: portable real time monitoring in the South and	Please refer to the response provided above for item 2.
		in the event of an exceedance then operational changes are to be implemented as an immediate response to ensure compliance/no impact.	Table 11 has been updated to clarify that the supervisor will modify or cease the relevant operations causing the elevated noise levels in the event of an exceedance.
		There be an investigation required and reporting of findings (including to Coolmore & Godolphin) of the investigation, results of same and actions arising.	Table 11 has been amended to confirm that Maxwell will provide details of the exceedance to any affected landowner, tenant and the CCC in accordance with Schedule 2, Condition D5 of Development Consent SSD 9526. Maxwell notes that an Annual Review (which includes noise and blasting results and any non-compliances) will be made publicly available on the site's website

#	Summary provided by Coolmore and Woodlands	Comments provided by Coolmore and Woodlands	Maxwell Response
	noise event will also be conducted.		at https://malabarresources.com.au/sustainability/documentation. No change required to the NBMP.
16	BarnOwl real-time monitoring system will be used which carries out 24-hour directional noise monitoring records and maintains audiophiles. This section sets out a process for validating the performance of BarnOwl compared to attended monitoring.	see 7-8 above	Noted.
17	Meteorological Monitoring locations are shown as AWS-1 and AWS-2 on Figure 1. Condition B26	Please confirm that the site of AWS 2 is representative of conditions at Coolmore & Godolphin, and include sufficient information in the NBMP to show this, and to provide evidence of compliance with the requirements of B26. We confirm that both Coolmore and Godolphin are happy to consider housing AWS on their sites.	Maxwell considers that AWS-2 is representative of conditions to the south of the site. Maxwell notes that there is no requirement for AWS-2 to be representative of all privately owned receivers to the south of the site. Condition B26 requires that there is a suitable meteorological station operating in the vicinity of the site that: • Companies with eth requirements in the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (Department of Environment and Conservation 2007); and • Is capable of measuring meteorological conditions in accordance with the NSW Noise Policy for Industry (EPA, 2017), unless a suitable alternative is approved by the Planning Secretary following consultation with the EPA. Section 4.3 has been updated to note the AWS-1 and AWS-2 comply with the requirements in the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (Department of Environment and Conservation 2007) and are capable of measuring meteorological conditions in accordance with the NSW Noise Policy for Industry (EPA, 2017).
18	This reflects the criteria in Table 2 in Condition B5.	As discussed in the 15 April meeting, the starting point for Coolmore and Godolphin is not about exceedances of the Consent or other regulatory criteria, but rather the parties working together to ensure and monitor so as to achieve the stated aim of 'no	Maxwell does not support the need for more stringent blasting criteria. A justification is provided below. Wilkinson Murray (2019) undertook a comprehensive assessment of construction blasting as part of the Maxwell Project – Noise Impact Assessment (Appendix I to the Maxwell Project Environmental Impact Statement). Wilkinson Murray (2019) predicted that vibration and overpressure associated with potential construction blasts for the Project would not be noticeable at the Studs.

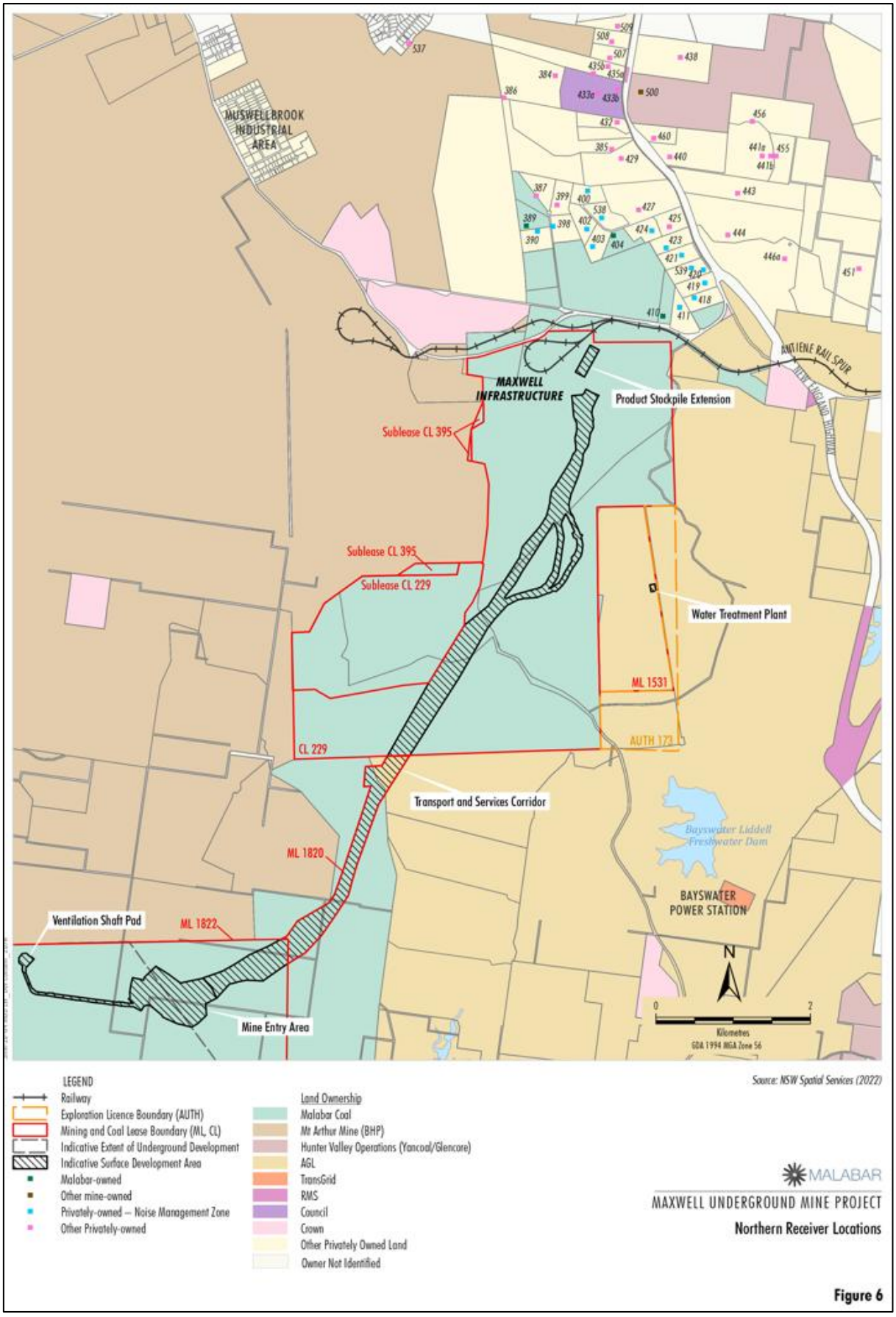
#	Summary provided by Coolmore and Woodlands	Comments provided by Coolmore and Woodlands	Maxwell Response
		impact' on Coolmore and Godolphin sites. Please advise whether more stringent criteria may be required in the NBMP, to meet the representation of no noise impacts at Coolmore and Godolphin sites.	Airblast overpressure and ground vibration levels associated with blasting are a function of the distance from the blast and the MIC of explosive used in the blast. Predictive curves for overpressure and ground vibration levels have been derived from measurements conducted at numerous sites, at distances varying between 2 and 7 km from a blast. Data has been used from over 7,600 records of blasts undertaken in the Hunter Valley to derive relationships between scaled distance and overpressure or vibration (Wilkinson Murray, 2019) The predicted blasting effects of the Project are provided in the table below, together with a comparison to other approved mines currently operating in the vicinity of the Studs. **Comparison of Approved and Predicted Blasting Effects** | Operation | Proximity to the Studs* | Maximum MIC | Overpressure at the Studs^ | Vibration at the Studs^ | | --- | --- | --- | --- | --- | | Hunter Valley Operations North | 4.5 km | 3,575 to 6,030 kg | 113.0 – 113.8 dBL | 2.1 to 3.0 mm/s | | Mt Arthur Coal Mine (North) | 10 km | 1,681 kg | 111.1 dBL | 0.4 mm/s | | Mt Arthur Coal Mine (South) | 6 km | | 111.5 dBL | 0.8 mm/s | | Maxwell Project (Mine Entry Area) | 4.5 km | 500 kg | 111.3 dBL | 0.5 mm/s | | Human annoyance criteria | N/A | N/A | 115 dB (95%ile) 120 dB (max) | 5 mm/s (95%ile) 10 mm/s (max) | * Based on closest proximity of blasting area (e.g. open cut extent or construction area) to boundary fence of the Studs. Refer Figure 1. ^ Assumes maximum MIC used for blast being undertaken at closest point to the boundary fence of the Studs. Source: Enclosure 1 (Wilkinson Murray, 2020). Maxwell notes that the IPC's Site Inspection Notes from its Godolphin Locality Tour state the following: *"Blasting noise and low frequency vibrations will potentially impact on the horses – blasting vibrations are different to thunder and lightning associated with storm events, where the horses can sense weather changes and behave accordingly to prepare themselves, rather than an unexpected blast. The Panel queried whether Mt Arthur or other existing mining operations had resulted in any issues and was told that this had not been a problem because those operations are further away than the proposed Maxwell development."* The majority of the Maxwell Project mine entry area and transport and services corridor, where construction blasting may occur, are further from the boundary fences of the Studs than the existing extent of the Hunter Valley Operations North open cut pit. Further, the MIC of blasts that may be required for construction is significantly less than the approved MIC used for operational blasting at the Mt Arthur Coal and Hunter Valley Operations North open cut pits. Accordingly, the predicted maximum overpressure and vibration associated with potential construction blasting at the Maxwell Project are less than the

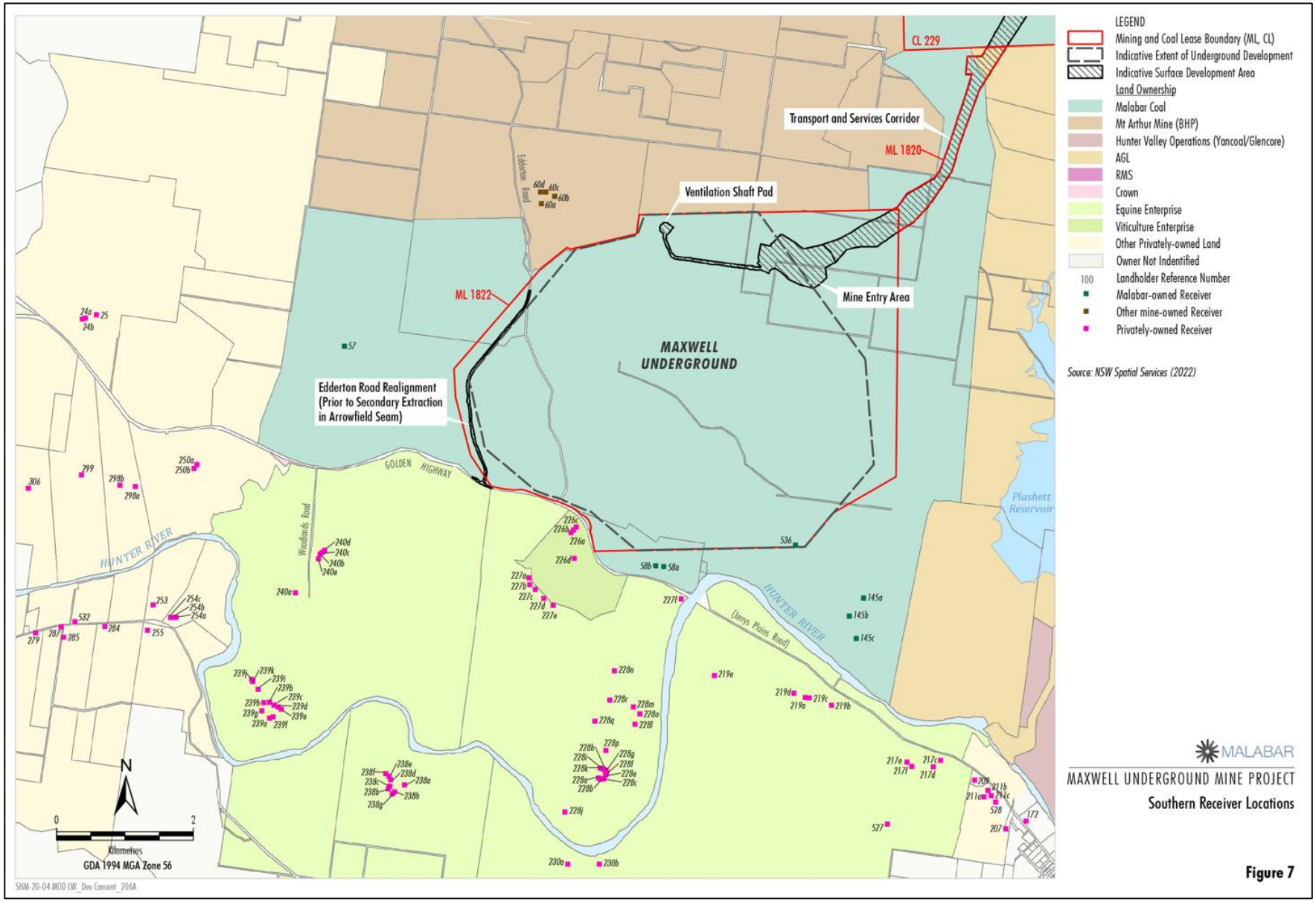
#	Summary provided by Coolmore and Woodlands	Comments provided by Coolmore and Woodlands	Maxwell Response
			overpressure and vibration that Maxwell understands would have occurred as a result of open cut mining activities at the Mt Arthur Coal and Hunter Valley Operations North open cut pits. The observation that blasting at Mt Arthur Coal Mine and other existing mining operations has not resulted in blasting impacts supports the findings of the Maxwell Project Environmental Impact Statement, which stated that "*vibration and overpressure associated with potential construction blasts for the Project would not be noticeable at the Coolmore and Godolphin Woodlands Studs*". No change required to the NBMP.
19	Currently no blast monitors are installed on the Site. Temporary blast monitors will be set up in locations set out in Table 13 and shown on Figure 1 if construction blasting is carried out. BM2 is a blast monitoring location to the south east of the site and identified in Table 13 as being the Coolmore horse stud.	See meeting notes. Noted that you have agreed that Malabar is to include blast monitoring, and additional site adjacent to or on Coolmore & Godolphin in the NBMP even if not directed by the Planning Secretary.	Maxwell have agreed to install temporary blast monitors on or adjacent to both the Coolmore and Godolphin properties. This has been included in Section 4.5. Blast monitoring locations BM4 and BM5 will be determined in consultation with Coolmore and Woodlands Studs.
20	Malabar will make reasonable endeavours to coordinate timing of blasting activities with nearby mines including Mount Arthur. This will involve reviewing the blast schedule of surrounding mines and timing blasts to avoid blasts at surrounding mines where practical. This section refers to a joint CCC with Mount Arthur and that the results of any investigation of noise complaints will be presented to the joint CCC.	Please provide in the NBMP that the results are to be presented to the Maxwell Mine CCC.	Section 4.6 has been updated to state that any exceedances of noise criteria specific to the rail spur will also be presented at the site CCC meeting.
21	This section refers to the obligations imposed on Malabar in Conditions E4 and Condition E5(f). Malabar also states that the conditions require reactive management to an exceedance and that it proposes proactive management as described in section 0.	It is not clear precisely what is the proactive management that is referred to here. Could this please be expanded upon in the NBMP. The reference to 'Section 0' is an error, please provide the correct reference to precisely identify the sections of the	Section 4.8 has been amended to clarify that pro-active noise management is described in Section 3.3.3 and involves the use of real-time monitoring and meteorological forecasting to assist with managing noise levels.

#	Summary provided by Coolmore and Woodlands	Comments provided by Coolmore and Woodlands	Maxwell Response
		NBMP that identify and describe the proactive management proposed.	
22	Malabar summarises its complaints handling procedure, including the right for an owner to request a review.	For preciseness please include the reference to these requirements in the NBMP. Note: There is no reference to Condition E17 in Appendix 1 of the NBMP and the only reference to Condition E17 is in relation to publishing the Annual Review on Malabar's website (see section 5.2, pp 22-23).	The reference to Schedule 2 Condition B12(e)(iv) and Condition E5(h)(ii) of Development Consent SSD 9526, which require a complaints protocol, has been included in Section 4.9. Condition E17 has been added to Appendix 1. Actions to meet Condition E17 are include in Section 5.2.
23	The suitability of the DNBMP will be reviewed in accordance with Condition E7.	Please refence E11 in the Appendix 1 "Regulatory Requirements".	Condition E11 is now included in Appendix 1.
24	This section refers to Malabar's obligations under Conditions E11, E12 and E17(a). In relation to the availability of the Annual Review Report Malabar has also committed to making a copy available to the CCC and any interested person upon request.	Please add a commitment in the NBMP to provide a copy to the CCC directly, without a request needing to be made by the CCC, on each occasion that the Annual Review Report is available.	Section 5.2 has been updated to clarify that a copy of the Annual Review shall be submitted to Muswellbrook Shire Council and the CCC.
25	All noise and blasting data will be maintained in accordance with the Environmental Management Strategy and contained on the premises for a period of at least four years.	The Environmental Planning and Assessment Act 1979, Section 9.42(3) requires that monitoring records are required to be held for 5 years. Should this be reflected here, rather than 4 years?	Section 5.5 has been updated to state that all noise and blasting data will be maintained in accordance with the Environmental Management Strategy and maintained on the premise for a period of at least five years.
26	Noise and blast management training will be provided to all employees and contractors through the site induction process and will take place before the commencement of work by any contractor or sub-contractor who's work may create intrusive noise as part of their work.	Please: • include a commitment to provide refresher training and not just a one-off induction training. • Include provision for additional refresher training where there have been non-compliances with noise criteria and blasting criteria or other noise or	Section 6.2 has been updated to include refresher training in noise and blast management to be undertaken as required and in response to noise and blast complaints, incidents or non-compliances.

#	Summary provided by Coolmore and Woodlands	Comments provided by Coolmore and Woodlands	Maxwell Response
		blasting related incidents.	
27	Identifies the relevant Conditions of the development consent and other approvals that relate to noise and blast management and refers to where those conditions are addressed in the NBMP.	Condition E11 (Annual Review) is addressed in Section 5.2, pp 22-23 of NBMP but not identified in Appendix 1.	Condition E11 is now included in Appendix 1.
		Conditions E12 (make available the Annual Review) and E16 (Access to Information) are not referred to in Appendix 1 and should also be addressed in the body of the NBMP. Please include and address these conditions.	Condition E12 and Condition E17 have been added to section 5.2 and referenced in Appendix 1.
28		The following conditions have not been referred to or addressed in the NBMP but should be: -Condition C2: the requirement that measurement and monitoring of compliance with performance measures and performance indicators in the development consent are to be undertaken using generally accepted methods and those methods are to be fully described in the relevant management plans. Please address these conditions in the NBMP.	Condition C2 has been included in Appendix 1 and addressed in Section 4 of the NBMP.

13 APPENDIX 5 – RECEIVER LOCATIONS




CL 229
Transport and Services Corridor
ML 1820
Ventilation Shaft Pad
ML 1822
Mine Entry Area
MAXWELL UNDERGROUND
Edderton Road Realignment (Prior to Secondary Extraction in Arrowfield Seam)
Edderton Road
GOLDEN HIGHWAY
Woodlands Road
HUNTER RIVER
Jerrys Plains Road
Plashett Reservoir
LEGEND
Mining and Coal Lease Boundary (ML, CL)
Indicative Extent of Underground Development
Indicative Surface Development Area
Land Ownership
Malabar Coal
Mt Arthur Mine (BHP)
Hunter Valley Operations (Yancoal/Glencore)
AGL
RMS
Crown
Equine Enterprise
Viticulture Enterprise
Other Privately-owned Land
Owner Not Indentified
100 Landholder Reference Number
Malabar-owned Receiver
Other mine-owned Receiver
Privately-owned Receiver
Source: NSW Spatial Services (2022)
N
0
2
Kilometres
GDA 1994 MGA Zone 56
SHM-20-04 MOD LW_Dev Consent_206A
MALABAR
MAXWELL UNDERGROUND MINE PROJECT
Southern Receiver Locations
Figure 7

14 APPENDIX 6 – REGULATORY APPROVAL

Department of Planning, Housing and Infrastructure

Our ref: SSD-9526

Donna Tiananga
Environment, Community and Approvals Manager
Maxwell Ventures (Management) Pty Ltd
Thomas Mitchell Drive
Muswellbrook, NSW, 2333

15/05/2026

Subject: Maxwell Underground Coal Mine – Noise and Vibration Management Plan

Dear Ms. Tiananga

I refer to your submission requesting review and approval of the revised Noise and Vibration Management Plan in accordance with Schedule 2, Condition B12 of the Development Consent for Maxwell Underground Coal Mine (SSD-9526). I also acknowledge your response to the Department's review comments and request for additional information.

I note the revised Noise and Vibration Management Plan has been prepared following submission of IEA and Modification 3.

The Department has carefully reviewed the document and is satisfied that it meets the requirements of the relevant conditions in the Development Consent.

Accordingly, as nominee of the Planning Secretary, I approve the revised Noise and Vibration Management Plan (Rev 7.1 dated March 2026).

Please ensure you make the document publicly available on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Wayne Jones on (02) 6575 3406.

Yours sincerely

Stephen O'Donoghue
Director
Resource Assessments

As nominee of the Planning Secretary

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