



Noise and Vibration Management Plan

August 2024

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1 INTRODUCTION

1.1 Background

Austar Coal Mine Pty Ltd (Austar), a subsidiary of Yancoal Australia Limited (Yancoal), owns the Austar Coal Mine, a closed underground coal mine located approximately 10 kilometres (km) southwest of Cessnock in the Lower Hunter Valley in NSW (refer to **Figure 1**). The Austar Coal Mine incorporates the former Pelton, Ellalong, Cessnock No. 1 (Kalingo) and Bellbird South Collieries and includes coal extraction, handling, processing and rail and road transport facilities (refer to **Figure 1**).

Mining was approved under two major project approvals: Bellbird South (DA 29/95) and Stage 3 (PA 08_0111), along with numerous development approvals from Cessnock City Council. Bellbird South consent DA 29/95 expired on 14 February 2022¹ whilst the Stage 3 consent PA 08_0111 expires on 31 December 2030. Environment Protection Licence (EPL) 416 also applies to Austar. See Section 5.1 for further information on assessment criteria contained in each approval.

On 30 March 2020, the Austar Coal Mine transitioned to care and maintenance, with cessation of mining and coal processing activities. On 26 February 2021, a decision was made by the Yancoal board to transition the Austar Coal Mine from care and maintenance to closure. In October 2022, the mine was permanently sealed and access to underground workings is no longer possible. Ventilation and compressed air operations ceased, pumping from underground no longer occurs, the Reverse Osmosis Plant has been decommissioned.

Decommissioning and maintenance works are currently undertaken during day shift only Monday to Friday, which fall within the relevant noise guideline day period, from here on referred to as the ICNG² day period (see **Section 5.1.1**). Prestart meeting and caretaking activities occur during other hours. During this closure planning period, there is a small workforce of around 15-20 employees and contractors on site, with supplementary contractors used for various decommissioning and demolition projects.

This Noise and Vibration Management Plan (NVMP) will remain relevant during the FS, Early Works and development of the Executable Plan. A revised NVMP will be submitted prior to the commencement of closure execution works.

The Austar mining complex includes approximately 10,300 hectares (ha) of sub-surface mining leases and 923 ha of surface leases. It measures approximately 17 km across and 16 km long. As such, for the purposes of closure planning, Yancoal has divided the mining areas at Austar into discrete Closure Management Areas (CMAs), representing key surface areas of the mine site. The CMAs were assigned to principally align with the geographical surface disturbance areas and will be the main areas that may generate noise through decommissioning and rehabilitation processes.

The adopted CMAs are shown in **Figure 1** and are as follows:

¹ Under Schedule 2 Condition 5, DA 29/95 continues to apply in all respects other than to permit the carrying out of mining operations, until the rehabilitation of the site is complete.

² Interim Construction Noise Guideline (DECCW 2009)

- CMA 1 - Austar Pit Top Facilities - including administration buildings, the main access drift which was sealed in October 2022, coal conveyor bin, store, workshop and laydown facilities);
- CMA 2 - Pelton CHPP - including CHPP, administration areas, Reverse Osmosis plant, overland conveyor and a number of heritage listed buildings in various states of repair;
- CMA 3 - No. 1 shaft (sealed, was the second egress man winder);
- CMA 4 - No. 2 shaft (administrative buildings, laydown areas and mine dewatering via a pipe line which pumps to Kalingo and Austar Dams to CHPP);
- CMA 5 - Kalingo Infrastructure Area (KIA) (partially sealed ventilation shafts and decommissioned underground services);
- CMA 6 - Kitchener Surface Infrastructure Site (SIS) (temporarily sealed ventilation shafts and fan infrastructure, fully sealed services borehole/drop hole), along with water management dams, pipelines and powerlines; and
- CMA 7 – Aberdare Extended Emplacement Area (EEA) – coarse reject emplacement area;
- CMA 8 - Bellbird Areas 12 and 13); and
- CMA 9 – Other lands

This revision of the NVMP has been prepared to document noise and vibration management and monitoring activities whilst the site is in the closure planning stage (FS, Early Works and the development of the Executable Plan, see **Figure 2**). A revised plan will be required prior to Execution works. It is important to note that this timeline is indicative only. As knowledge gaps are filled, additional time may be required to ensure closure planning and execution is carried out to minimise rework and provide optimal rehabilitation outcomes.

1.2 Closure Status and Activities

Austar is currently undertaking technical studies and site investigations for mine closure along with a number of ‘Early Works’ projects to progress decommissioning and prepare for rehabilitation of the site.

Figure 2 outlines the closure project phases and indicative timelines.

Specific activities which may be undertaken on site during the closure planning and Early Works phase include:

- detailed site investigations including drilling and test pitting programs to inform technical studies such as contamination, geochemistry, geotechnics and capping and landform designs;
- removal and transport of saleable equipment from the site;
- decommissioning and removal of surface plant and equipment;
- demolition of non-heritage mine infrastructure;
- desilting and decommissioning of mine water dams, including erosion and sediment control;
- sealing and filling shafts and services boreholes;
- sealing and rehabilitation of historic exploration boreholes; and
- rehabilitation trials.

While specific closure execution requirements and activities have not yet been finalised, it is anticipated that major earthworks will be required. When specific activities are known, appropriate environmental management measures will be identified and implemented and management plans updated accordingly. Management plans will be submitted to DPHI for approval prior to commencement of closure execution activities not currently considered.

In addition to closure activities, standard maintenance activities will continue as per the operational and care and maintenance phase of the mine. This includes but is not limited to:

- road and infrastructure maintenance;
- water management i.e., erosion and sediment control, pumping and dam desilting;
- standard site inspections and light vehicle movements;
- land management activities including weed management, rehabilitation repair, fencing, and site security;
- plant maintenance;
- deliveries and waste management;
- environmental monitoring; and
- general administrative and maintenance tasks.

1.3 Purpose and Scope

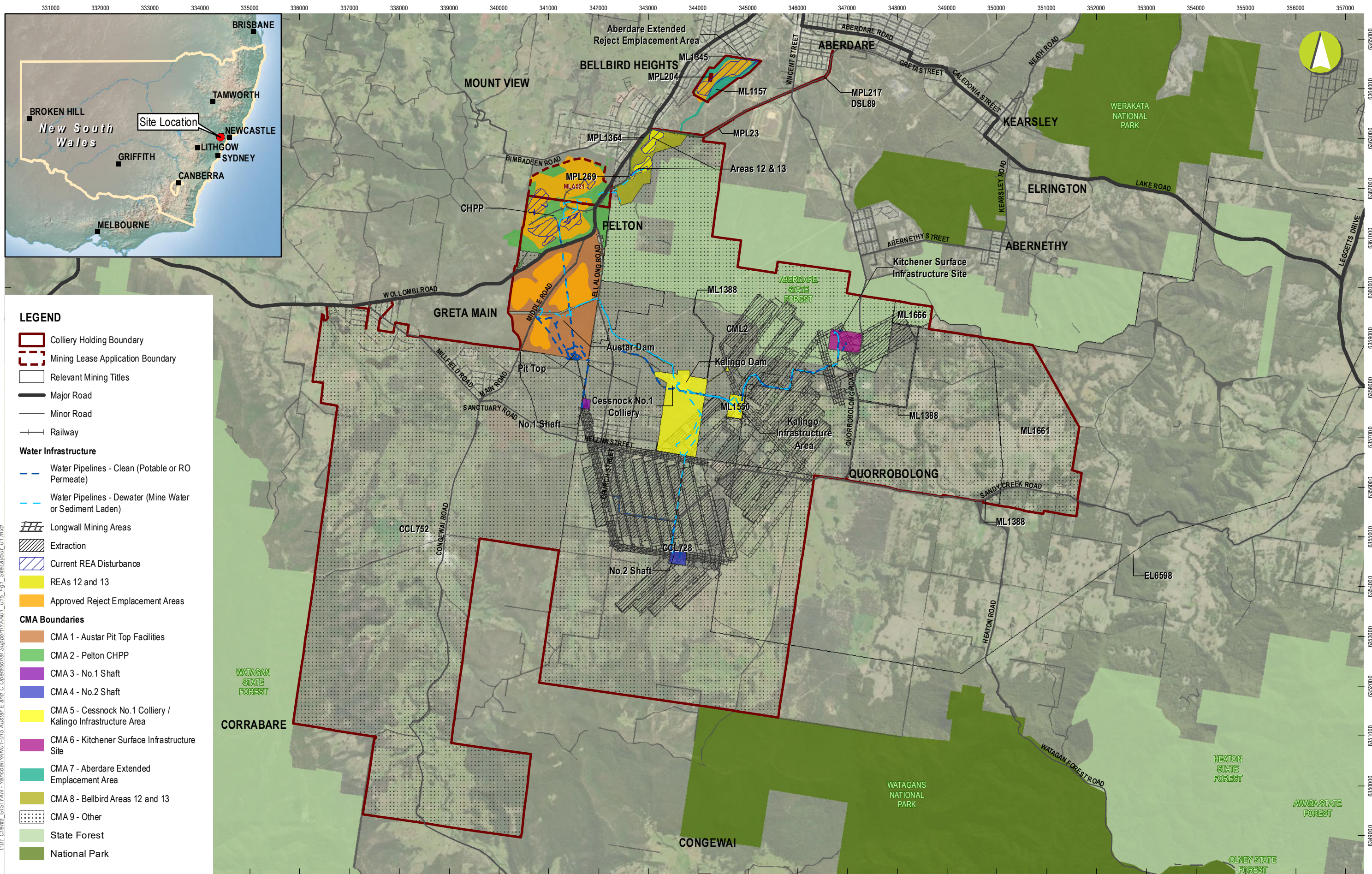
This NVMP outlines the management measures to be implemented during closure at the Austar Mine Complex to minimise the noise and vibration emissions toward the local community.

The purpose of this NVMP is to:

- Ensure that noise and vibration from Austar closure activities are managed;
- Maintain compliance with conditions of the consents and approvals and legislation relating to noise and vibration;
- Provide a protocol for monitoring and evaluation of noise levels at surrounding private residences and sensitive receivers;
- Manage project specific noise and vibration levels associated with maintenance, decommissioning, rehabilitation and closure activities;
- Describe how communication with the local community and regulators regarding Austar activities will be take place;
- Describe the process for responding to any incidents, complaints or non-compliances; and
- Describe the review, reporting and continual improvement process.

The NVMP has been prepared in accordance with the relevant conditions of PA 08_0111, DA 29/95 and Environment Protection Licence (EPL) 416 (refer to **Appendix A** for details of conditions).

This NVMP (Revision 4) covers the Early Works, Feasibility and Executable Plan Study phases of closure, as shown on **Figure 2**. Prior to the Execution Phase, the NVMP will be revised and updated to describe Execution Works and Post Execution Works and their associated noise impacts.



Austar Coal Mine

Site Layout

FIGURE 1

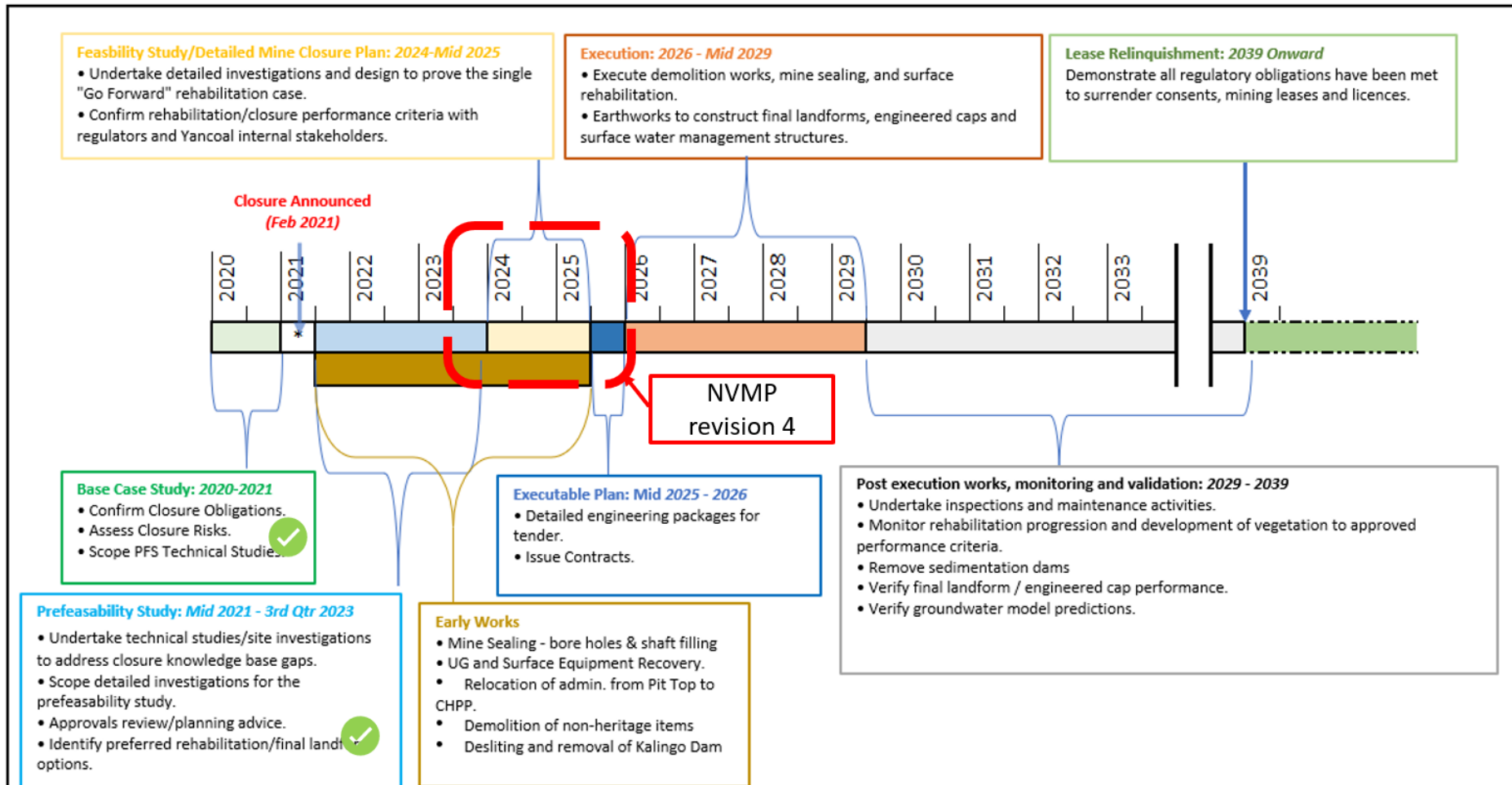


FIGURE 2 CONCEPTUAL MINE CLOSURE TIMELINE

2 CONSULTATION

2.1 Pre 2023 Consultation

In accordance with Schedule 4 Condition 3 of PA 08_0111, consultation with the NSW Environment Protection Authority (EPA) was undertaken during preparation of the original NVMP as well as for subsequent updates, as required.

Given the EPA's previous advice that they do not review management plans, Austar approached the EPA during preparation of the 2021 update to the NVMP (lodgment withdrawn) to confirm their current approach. Austar proposed that, if this remained their current process regarding reviewing management plans, Austar would submit the plan to DPE (now DPHI) and, once approved, a copy of the plan would be provided to the EPA. EPA concurred with this approach.

2.2 2023 Consultation

Evidence of prior consultation has been provided to DPHI and their management plan approval letter will be updated in **Appendix B**.

3 BASELINE DATA

3.1 Noise

Except for agricultural activities (poultry farms, vineyards) and construction activities associated with new developments, there are few other industrial noise sources near to Austar's surface infrastructure. A description of the noise environment surrounding each of the major surface infrastructure areas is provided below.

3.1.1 CMA 2 - Pelton CHPP

A mixture of limited rural-residential landholdings to the north and west, Pelton Village to the south, and the suburb of Bellbird to the northeast and east surround the CHPP. An approved quarry is located on land immediately west of the CHPP site along Wollombi Road which may contribute to daytime noise emissions when operating.

Pelton Colliery has operated in this area since 1916, and the Pelton CHPP has operated in this area since approximately 1960. As such, the CHPP operations may be considered a feature of the acoustic environment. When operational, measured noise levels at the CHPP were routinely in the order of EPL noise limits (LA90 37 to 43 dB). Despite higher noise levels in the area surrounding the CHPP, there were few complaints.

The CHPP (washery), raw and clean coal systems, trains and train loading infrastructure, stockpile dozers and reject trucks are not operational during closure planning. Rejects may require transportation during Early Works and rehabilitation phases of closure.

CHPP noise emissions during Early Works, Executable Plan development and Feasibility Study phases of closure are anticipated to be associated with water transfers, maintenance, campaign-based reject or material haulage and emplacement, removal or demolition of non heritage significant items around

the CHPP site and other early decommissioning activities. Activities will occur in the ICNG day period only (with the exception of pumping to manage stormwater runoff during and after rainfall events, which may occur 24 hours per day).

The acoustic environment surrounding CMA 2 is now typical of a rural-residential area, dominated by the natural environment, human activity and local or intermittent traffic flows.

Austar has been engaged in a continuous improvement program by entering into a voluntary noise Pollution Reduction Program (PRP) in consultation with the EPA in an effort to minimise noise levels from operations. Further information on the PRP is included in **Section 5.2**.

3.1.2 CMA 1 Austar Pit Top and CMA 3 No. 1 Shaft

The current Austar Pit Top and No. 1 Shaft were developed in the 1970's. The Pit Top is located near the village of Paxton, just north of the village of Ellalong. The village of Paxton is located to the west of the Pit Top, and No. 1 shaft is located on the north western edge of the village of Ellalong. The No. 1 Shaft was used for air intake and secondary access/egress from the mine. Background data collected during the Premises Noise Assessment (Global Acoustics, 2014), indicates that background noise levels in the vicinity of the Austar Pit Top and No. 1 Shaft are less than L_{A90} 30 dB.

In October 2022, Austar completed the partial sealing of the underground including the Austar drift at the Pit Top and the No. 1 Shaft.

Noise emissions during early works, executable plan development and Feasibility study phases at Pit Top and No. 1 Shaft are anticipated to be associated with water transfers, maintenance, equipment removal, desilting dams and drain cleaning, removal or demolition of buildings and other early decommissioning activities. These activities will occur in the ICNG day period only (with the exception of pumping after rainfall which may occur 24 hours a day).

3.1.3 CMA 6 Kitchener SIS

The Kitchener SIS is surrounded by the Werakata State Conservation Area (SCA) in all directions, with no private dwellings to the west. Beyond the boundary of the Werakata SCA to the south and east there are private rural properties. Background data collected for the Environmental Assessment for Stage 3 (Stage 3 EA) (Umwelt, 2008) indicated that levels in the vicinity of the SIS were generally less than L_{A90} 30 dB. To the north of the site, in Kitchener village, the long term day period background level was L_{A90} 33 dB. To the south and east of the site, the long term period evening background level was L_{A90} 32 dB.

The Kitchener SIS is the site of the Stage 3 No. 5 upcast ventilation shaft, No. 6 downcast shaft, services borehole, sediment retention dams and pumps, a substation, and associated services. Project Approval 08_0111 approved the construction of new Pit Top facilities including a men and materials shaft; however this was not constructed.

In March 2022, the No. 5 and No. 6 Shafts at the Kitchener SIS were temporarily sealed at the surface with engineered designed steel plates and the services borehole was fully sealed with grout. Permanent sealing of the ventilation shafts will be planned as part of ongoing closure planning and scheduling (subject to final land use).

During and after rainfall events, pumping will continue from Kitchener SIS 24 hours per day (until dams are emptied). Other noise emissions from this site during the period covered by Revision 4 of the NVMP include general pump and pipeline maintenance, electrical maintenance, decommissioning and removal of ventilation fan infrastructure, demolition of acoustic barriers and other minor infrastructure at this site.

3.1.4 CMA 5 Cessnock No. 1 Colliery and Kalingo Infrastructure Area (No. 3 and 4 Shafts)

The Kalingo Infrastructure Area (KIA) is surrounded by native forest to the north and west, and rural allotments to the east and south. The acoustic environment in the KIA area is typical of a rural area, with background levels (in the absence of KIA infrastructure) less than L_{A90} 30 dB. There have been no recorded exceedances of noise levels at the KIA in recent years. Recent decommissioning works at KIA were modelled prior to work commencing; results indicated that there could be minor exceedances to noise limits at nearby residences under enhancing meteorological conditions. Negotiated noise agreements were put in place with these landholders in accordance with DA29/95. No noise exceedances were recorded during the decommissioning works.

Austar partially sealed No. 3 and No. 4 Shafts in October 2022. The nitrogen plant was removed in November 2022.

The Cessnock No. 1 Colliery area includes the Kalingo Dam. Dam desilting operations are currently being undertaken during daytime hours. Pumping may also occur in response to rainfall events 24 hours per day.

During Early Works, the desilting of the Kalingo Dam will be completed, a clean water drain extended and the dam wall will be lowered to de-declare the dam. A sediment dam will be constructed and the dam footprint rehabilitated.

3.1.5 CMA 4 No. 2 Shaft

The No. 2 shaft area is surrounded by native forest to the east, and rural allotments to the north, west and south. The acoustic environment in the No. 2 shaft area is considered to be typical of a rural area, with background levels (in the absence of 2 shaft infrastructure) estimated to be less than L_{A90} 30 dB. There have been no recorded complaints in relation to noise in this area in recent years. Noise emissions during early works, executable plan development and Feasibility study phases at CMA 4 are anticipated to be associated with equipment removal, demolition of buildings and other early decommissioning activities. These activities will occur in the ICNG day period only.

3.1.6 CMA 7 – Aberdare Extended Emplacement Area & CMA 8 – Bellbird Areas 12 & 13

Cessnock and Bellbird Heights are located to the north and west of the Aberdare Extended Emplacement Area (EEA), with vacant rural land immediately to the south and east. The nearest residence is approximately 20 metres from the edge of the Aberdare EEA in the northern end. The suburb of Bellbird Heights and Bellbird are located west of the southern section of the Aberdare EEA and Bellbird Areas 12 and 13. Background data collected during the Premises Noise Assessment (Global Acoustics, 2014) in the suburb of Bellbird Heights indicate background noise levels in the vicinity of the Aberdare EEA are less than L_{A90} 30 dB during the night period, and higher during the day and evening periods. No complaints have been received to date due to operations at the Aberdare EEA or Bellbird areas 12 and 13.

3.1.7 CMA 9 – Other Austar owned lands

Other Austar owned lands are predominantly rural land with low background noise levels. Minimal operations will occur in these areas, and if there is a risk of noise impacts on neighbours, noise modelling and mitigation works will be undertaken.

3.2 Vibration

As the site is in closure, and no vibration impacts are occurring, vibration baseline data relevant to underground mining is no longer applicable. Closure activities are unlikely to generate vibration at the nearest sensitive receivers.

Operational vibration data is available in Annual Reviews on the Austar Coal website.

4 NOISE GENERATING ACTIVITIES DURING CLOSURE

During the period covered by this revision of the NVMP (i.e., prior to Execution earthworks), generally noise generation will be very minimal and not comparable to noise levels during operation. Noise generating activities occurring throughout the period will include road registerable vehicles and personnel carrying out inspections of all sites, water pumping after rainfall, and maintenance works.

There are a number of projects that will be undertaken during this time where noise may be audible in the community. These works will be of limited duration, and will be managed in accordance with this NVMP, particularly **Section 5.2**. Examples of projects that may generate noise during this period of closure are explained below.

4.1 Early Works Site Investigation Programs

Site investigations are being undertaken during the Feasibility Study to inform various studies undertaken as part of the overall site Future Landuse Study, including contamination, geotechnical, geochemical and groundwater studies.

Site Investigations will occur in every CMA, and may involve drilling, geophysical surveys, and the excavation of test pits. Examples of site investigation works equipment and vehicles include small, tracked dozers, excavators, drill rigs and light vehicles.

Site investigations have been modelled, and modelling has indicated minimal impacts, generally lower than the ICNG Noise affected level and generally lasting less than one day. All site investigations work will be conducted within ICNG day hours only.

4.2 Desilting of Dams

Desilting dams has been a part of operations at Austar and as closure progresses, this will continue. Generally, dam desilting is undertaken using an excavator and road registerable trucks to transport the sediment to East Pit. Dam desilting may occur in most of the CMA's, in particular Kitchener SIS, Kalingo Infrastructure Area, Austar Pit Top and CHPP. Desilting works are not expected to exceed operational noise limits at nearby receptors.

4.3 Decommissioning, Demolition and Removal of Infrastructure

Decommissioning of the site will include equipment removal and decommissioning of powerlines, pipelines and other infrastructure to allow for safe demolition. Demolition activities will occur at all CMA's, although the time and activities at each site will vary according to need.

Demolition will include demolition of most non-heritage listed buildings and structures at each CMA, including footings, carparks and concrete slabs, and disposal to licenced waste facilities, or stockpiling of materials for use in rehabilitation activities and / or filling shafts. Minimal earthworks are included in demolition and will only be required to make the site safe or to reduce erosion and sediment risks. Final reshaping and earthworks at major infrastructure sites will occur once the next version of this NVMP has been approved.

Machinery to be used will be confirmed when the demolition contract is awarded, but will be typical of demolition activities and may include large excavators with cutting and concrete breaking tools, as well as trucks, dozers and loaders.

Demolition activities have been modelled using typical demolition machinery, with most of the demolition works predicted to be under the noise limits discussed in Section 5. The most significant modelled noise generation activity is the removal of the concrete slabs at CMA1 and CMA2.

Preliminary modelling will be refined once a demolition contractor has been selected and machinery to be used is finalised, as per the requirements outlined in Section 6.3. Notification to stakeholders who may be impacted by noise generating activities will be an important part of the demolition program and the ICNG will be used to plan the works to minimise impacts on sensitive receivers.

4.4 Sealing and or Filling Shafts and Services Boreholes

Mine ventilation shafts have been sealed at the base with grout at CMA3 and CMA5 and sealed at the surface at CMA6. During this revision of the NVMP, these shafts may be filled with inert material as per designs and sealing guidelines. Where possible sealing will use demolition materials and rail ballast to minimise the movement of vehicles importing materials. The work permit and modelling process outlined in Section 6.3 will be applied to these works.

5 STATUTORY REQUIREMENTS AND ADOPTED GUIDELINES

Relevant conditions from PA 08_0111 and DA 29/95, EPL 416 and PA 08_0111 Statement of Commitments and where these are addressed in this Plan are provided in **Appendix A**.

EPL 416 contains a pollution reduction program (PRP) relevant to noise. PRP U.1 relates to a Premises Noise Assessment for the operations and activities at the CHPP, which is no longer operational. PRP U.2 defines noise limits surrounding the CHPP that remain in force until the Premises Noise Assessment has been finalised. Due to mine closure, PRP U.1 was never finalised. During the period of this management plan, Austar may liaise with the EPA to remove these conditions from the EPL. Until the noise PRP is removed, Austar will continue to comply with the relevant conditions.

Under DA29/95 Schedule 2 Condition 5 (Limits of Approval), the consent lapsed on 14 February 2022, however the condition states that Austar is 'required to rehabilitate the site and carry out additional requirements. Consequently, this consent will continue to apply in all respects other than to permit

the carrying out of mining operations, until the rehabilitation of the site and those requirements and undertakings have been carried out to the required standard'. Noise impacts are addressed in project approvals DA29/95, PA 08_0111 and EPL 416 for activities at CMA 5- KIA, CMA 6 - Kitchener SIS and CMA 2 - CHPP, respectively. There are no relevant noise criteria documented in approvals for CMA 3 – No. 1 shaft, CMA 4 – No. 2 shaft, CMA 7 - Aberdare Extended Emplacement Area, CMA 8 - Bellbird Areas 12 and 13 and CMA 1 - Austar Pit Top.

During decommissioning, demolition and rehabilitation works in these areas, the noise profile will be different to that for operations, with the decommissioning of most noise sources (excluding some pumps) requiring only short periods of activity during the ICNG day period.

Austar proposes to adopt the ICNG noise management levels for the CMAs with no relevant noise criteria. The way each project will be assessed under the ICNG is discussed in **Section 7**.

5.1 Noise and Vibration Impact Assessment Criteria

Noise limits for the Austar Mine Complex are addressed in the approved and adopted noise criteria listed in **Table 1** for all CMA's. Noise monitoring locations are shown on **Figure 4**.

Activities at the CHPP, KIA and Kitchener SIS are specified in regulatory documents (development consents or EPL 416). At other CMA's the ICNG noise management levels have been adopted in the absence of any approved noise management instrument (refer **Section 5.1.1**).

It is noted that where there are applicable approvals in place, specified noise limits do not apply if the Proponent has a negotiated noise agreement in place with the relevant landowner/s to generate higher noise levels, and the Proponent has advised the Department and EPA in writing of the terms of this agreement.

5.1.1 Interim Construction Noise Guideline

Construction noise in NSW is typically regulated in accordance with the ICNG. As defined by the ICNG, construction works *"include the dismantling or demolition of, any building or structure, or any work in connection with any of these activities, that is done at or adjacent to the place where the building or structure is located. Construction works occur on a site for a limited period of time only"*.

It is noted that the ICNG states that it is not applicable to construction associated with mining and quarrying activities, which should be assessed in accordance with the no longer current Industrial Noise Policy (INP) (EPA, 2000). However, the INP and more recent Noise Policy for Industry (NPfi) (EPA, 2017) specifically exclude construction noise.

The EPA has prepared a Draft Construction Noise Guideline (DCNG), which at the time of writing is under review following a period of public consultation. Appendix A of the DCNG specifically addresses assessment of construction noise (including demolition) from mining and other extractive industries. While not yet a current guideline, Appendix A.3 of the DCNG considers noise from the rehabilitation and infill of disused mines as construction work. In such cases, the noise management levels and the recommended standard hours for construction work should apply. This approach has been adopted for closure activities at Austar as it represents best practice.³

³ It is noted that the noise criteria specified in the DCNG are consistent with those in the ICNG.

Demolition and closure activities in each CMA without approved limits (ie. CMA1, CMA3, CMA4, CMA7 and CMA8) will be assessed as construction tasks and evaluated against construction noise management levels presented in the ICNG. Where there are approved limits (CMA5 and CMA6), those limits will be adhered to. In the case of CMA2, where limits were imposed in EPL 416 for the operational CHPP, these limits will be complied with, however if the PRP is removed from the EPL, ICNG limits will be adopted as noise limits at this location.

Noise and Vibration Management Plan

TABLE 1 NOISE CRITERIA SUMMARY

Austar Mine Complex Area	Approved noise criteria instrument	Adopted or consented noise criteria	Monitoring point	Monitoring Description	Noise Criteria			
					ICNG management goal ⁴	L _{A90, 15 min} ⁵	LAeq,15minute (dB)	LAeq,15minute (dB)
					During recommended standard hours			outside recommended standard hours ⁶
CMA 1 – Pit Top	No approval instrument	ICNG	NM-1-1	Truro St Ellalong	45/75			35
			NM-1-2	Dunlop Drive, Paxton	45/75			35
CMA 2 – CHPP	EPL 416 (condition U2)	EPL 416 (condition U2) ⁷	NM C1	South of Bimbadeen Road, Mt View	45/75 ⁸	40		35
			NM C2	Pelton Village	45/75 ⁴	42		35
			NM C3	Bimbadeen Road, Mt View	45/75 ⁴	37		35
			Weather Station	Austar CHPP				
CMA 3 – No 1 shaft	No approval instrument	ICNG	NM-3-1	Hunter St Ellalong	45/75			35
			NM-3-2	Ellalong Rd Ellalong	45/75			35
CMA 4 – No 2 shaft	No approval instrument	ICNG	NM-4-1	Dry Creek Rd Ellalong	45/75			35
CMA 5 – Kalingo Infrastructure Area and	DA 29/95 MOD7 (schedule 3 condition 13)	DA 29/95 MOD7 (schedule 3 Condition 13) ⁹	NM K4	Nash Lane, Quorrobolong			35	35

⁴ ICNG Management Goals are noted in this table. For more information on the quantitative assessment of projects undertaken and resulting noise limits, please see Section 5.3.4 and Section 6

⁵ The noise limits apply at all times under wind speeds up to 3 metres per second (measured at 10 metres above ground level) and Pasquill stability class from A to F

⁶ 35dBA outside recommended hours is stipulated for CMA's 5 and 6 under their relevant consents, and nominated for all other sites following ICNG guidelines. As stipulated in the ICNG, hours are recommended, and not mandatory. The only works that will be conducted outside recommended hours will be emergency work – to prevent injury or loss of life, or to prevent environmental harm. I.e. Items being demolished must be left in a safe state at the end of each shift.

⁷ The noise limits apply at all times under wind speeds up to 3 metres per second (measured at 10 metres above ground level) and Pasquill stability class from A to F.

⁸ ICNG Noise limits will only apply at the CHPP if the EPL noise limits are varied or deleted.

⁹ Criteria apply for all privately owned residences. The noise emission limits identified in the above table apply under meteorological conditions of:

Noise and Vibration Management Plan

Austar Mine Complex Area	Approved noise criteria instrument	Adopted or consented noise criteria	Monitoring point	Monitoring Description	Noise Criteria			
					ICNG management goal ⁴	L _{A90, 15 min} ⁵	LAeq,15minute (dB)	LAeq,15minute (dB)
					During recommended standard hours			outside recommended standard hours ⁶
Cessnock No 1 Colliery								
CMA 6 – Kitchener Surface Infrastructure Site ¹⁰	PA 08_0111 MOD3	Schedule 4 Condition 2 ¹¹	NM K1	Pelton Road, Quorrobolong (south)	45/75			35
			NM K2	Coney Creek Lane, Quorrobolong (east)	45/75			35
			NM K3	Richmond Street, Kitchener	45/75			35
CMA 7 – Aberdare Extended Emplacement Area	No approved instrument	ICNG	NM-7-1,	Francis St West Cessnock	45/75			35
			NM-7-2	Pillar St Bellbird	45/75			35
CMA 8 – Bellbird Areas 12 and 13	No approved instrument	ICNG	NM-8-1	Off Wollombi Rd Bellbird (near pillars)	45/75			35
CMA 9 – Other lands	No approved instrument	ICNG			45/75			35

- Wind speeds of up to 3m/s at 10 metres above ground level; or
- Temperature inversion conditions of up to 3°C/100m, and wind speeds of up to 2m/s at 10 metres above ground level.

¹⁰ Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy

¹¹ PA08_0111, Schedule 4 condition 2 provides for operational noise, night time maximum noise and the use of the Interim Construction Noise Guideline. The construction noise guidelines are nominated as the most relevant guidelines for this revision of the NVMP as demolition is included in the definition of construction. The night time LA_{1(1min)} has also been excluded, as no planned night time works will be undertaken (with the exception of surface water pumping, which meets the 'outside recommended hours limits').

Demolition and closure activities in all CMA's will only be done during ICNG day period hours which are Monday to Friday 7 am to 6 pm, Saturday 8 am to 1 pm and no work on Sundays or public holidays (unless works cannot be safely stopped and started, or emergency repairs are required). Pumping stormwater using the existing water management system may occur 24 hours a day after rainfall events, however pumping activities meet the noise limits outside recommended standard hours (ie. are not generally audible at sensitive receptors).

5.1.2 CMA Specific Noise Criteria

5.1.2.1 CMA 6 - Kitchener SIS

Construction noise limits were derived using the ICNG for the construction of the KSIS and detailed in the Stage 3 EA. They were for near receiver locations to the KSIS and based on background noise monitoring done as part of the same assessment. Noise monitoring locations are shown on **Figure 4**.

Schedule 4, Condition 2 of PA08_0111 provides for the use of the ICNG for construction at KSIS, which is reflected in **Table 1**.

In accordance with the ICNG, construction noise management applies to demolition activities. Prior to demolition, noise modelling will be undertaken as described in Section 6.3 using the proposed demolition plant and equipment, and appropriate consultation and mitigation methods will be applied as required to meet the criteria presented in **Table 1** Error! Reference source not found. during closure.

Operational noise criteria is listed in the consent. Given that Austar is not in a current operational phase, and that general inspections and pumping comply with the outside recommended standard hours activities, in this revision of the NVMP, the operational limits (day/evening/night of 35 $L_{Aeq(15min)}$ and 45 $L_{A1(1 min)}$) are not documented in **Table 1**. These may be reintroduced in future versions of the NVMP.

5.1.2.2 CMA 2 - CHPP

Operational noise criteria for the CHPP are listed in **Table 1** and are referenced from the Pollution Reduction Program Condition U2 in EPL 416. These noise criteria predominantly relate to noise impacts from the operational CHPP (reflected in the unusual LA_{90} noise limit criteria, which is a measure of almost constant noise, rather than average noise), and so are generally no longer most appropriate to the site. It is expected that demolition and closure activities at the CHPP would meet the noise criteria in **Table 1**.

If condition U2 of EPL 416 is varied or deleted (as it relates to operations that are no longer occurring), Austar would adopt the ICNG process as best practice for demolition and decommissioning of the CHPP.

5.1.2.3 CMA 5 Kalingo Infrastructure Area

Noise criteria for the Kalingo Infrastructure Area are referenced from DA29/95, Schedule 3 Condition 13 and is shown in **Table 1**. The KIA has been largely decommissioned and some infrastructure removed. Decommissioning and demolition works will continue in this area. Prior to works occurring in the area, modelling will be undertaken, and reasonable and feasible noise mitigation methods would be considered and implemented where appropriate. Where the model indicates that the noise criteria

still cannot be met, negotiated noise agreements with nearby residents may be implemented to facilitate decommissioning and demolition works in this area.

5.1.2.4 Other CMA's

No noise limits are specified in Austar's relevant project approvals or EPL for activities in the following areas:

- CMA 1 - Austar Pit Top;
- CMA 3 - No.1 Shaft;
- CMA 4 - No.2 Shaft;
- CMA 7 - Aberdare Extended Emplacement Area; and
- CMA 8 - Bellbirds Areas 12 and 13.

While there are no noise criteria at these locations, Austar demolition and closure activities in each of these CMA's will be assessed as construction/demolition tasks and evaluated against construction noise management levels derived from the ICNG, as adopted in **Table 1**. Noise modelling and targeted attended noise monitoring will be undertaken for proposed closure activities to assess worst case levels at the nearest receivers and to determine required management and mitigation measures in accordance with the ICNG.

The methodology to determine noise criteria for construction activities within recommended standard hours has been reproduced from the ICNG below:

TABLE 2 ICNG QUANTITATIVE ASSESSMENT METHODOLOGY

Time of day	Management level L_{Aeq} (15 min) *	How to apply
Recommended standard hours: Monday to Friday 7 am to 6 pm Saturday 8 am to 1 pm No work on Sundays or public holidays	Noise affected RBL + 10 dB	The noise affected level represents the point above which there may be some community reaction to noise. <ul style="list-style-type: none"> Where the predicted or measured L_{Aeq} (15 min) is greater than the noise affected level, the proponent should apply all feasible and reasonable work practices to meet the noise affected level. The proponent should also inform all potentially impacted residents of the nature of works to be carried out, the expected noise levels and duration, as well as contact details.
	Highly noise affected 75 dB(A)	The highly noise affected level represents the point above which there may be strong community reaction to noise. <ul style="list-style-type: none"> Where noise is above this level, the relevant authority (consent, determining or regulatory) may require respite periods by restricting the hours that the very noisy activities can occur, taking into account: <ol style="list-style-type: none"> times identified by the community when they are less sensitive to noise (such as before and after school for works near schools, or mid-morning or mid-afternoon for works near residences) if the community is prepared to accept a longer period of construction in exchange for restrictions on construction times.

The NPfl establishes minimum rating background noise level (RBL) for the day period to be 35 dB(A). Adopting this minimum RBL results in a noise affected $L_{Aeq,15minute}$ criterion of 45 dB. If the predicted or measured $L_{Aeq,15minute}$ is greater than the noise affected criterion, all feasible and reasonable work practices should be applied to reduce noise impact.

A highly noise affected criterion of $L_{Aeq,15minute}$ 75 dB may only be considered once all feasible and reasonable work practices have been implemented.

Works undertaken at CMA 1 and CMA3 will also take into account Ellalong Public School, the only identified sensitive land use around Austar's infrastructure areas. The ICNG quantitative assessment method will be used to model the noise impacts at the school and to manage noise impacts if modelling indicates the school is within a noise affected area.

5.2 Vibration Criteria

Blast criteria is outlined in the PA 08_0111 Statement of Commitments, specifically for shaft development, which is not relevant during closure.

As mining has ceased and subsidence surveys have shown that no significant ongoing subsidence impacts are occurring, vibration criteria for underground operations are no longer applicable. Mine

Subsidence Engineering Consultants (2021) stated the following in a letter report regarding review of subsidence monitoring data:

The ongoing long-term residual subsidence effects (i.e., after the survey dated 10 February 2021) are expected to be very small and unlikely to result in adverse physical impacts to the natural environment. MSEC therefore considers that ground monitoring could be ceased as the ongoing subsidence effects are expected to be very small and similar to the order of natural ground movements and survey tolerance.

Should blasting be determined to be necessary in the future for closure execution activities, this NVMP will be updated to include vibration criteria.

6 NOISE AND VIBRATION MANAGEMENT

6.1 Noise Management Controls

To mitigate potential noise impacts from the Austar Mining Complex, a number of noise management controls have been, are currently, or will be implemented to mitigate and/or manage potential noise impacts from the site. These controls are detailed in **Table 3**.

TABLE 3 - NOISE CONTROLS

Mitigation ID	Mitigation Measure	Reference Document	When Required/Status
1	<p>Voluntary Pollution Reduction Program (PRP) - Premises Noise Assessment</p> <p>As part of the Stage 3 Environmental Assessment and detailed in the Statement of Commitments (Condition 1.15.4 of Appendix 3, PA 08_0111), Austar entered into a voluntary Noise PRP at the Pelton CHPP in consultation with the EPA. The PRP included a program to investigate and implement ways to continually improve performance over time while the CHPP was operating. Noise limits specified in the PRP were designed to limit noise from CHPP operations rather than closure, and Austar may engage with the EPA to discuss a variation to the PRP to better reflect noise management in closure.</p>	<p>EPL 416</p> <p>PA 08_0111 Statement of Commitments 1.15.4</p>	<p>Assessment, reporting and consultation with the EPA has been ongoing.</p> <p>With the transition to closure, the PRP conditions may vary, and the EPL (available on the Austar Coal website) should be consulted for the latest version of these conditions.</p>
2	<p>Unless otherwise agreed with the landowner, Austar Coal Mine will manage the construction phase of the Surface Infrastructure Site in accordance with the requirements of ICNG. Note: in PA08_0111, demolition is included in the definition of construction.</p>	<p>PA 08_0111 Statement of Commitments 1.8.2</p>	<p>Decommissioning and demolition works will be undertaken at the Surface infrastructure Site in accordance with the ICNG. Prior to decommissioning, demolition and rehabilitation works at</p>

Mitigation ID	Mitigation Measure	Reference Document	When Required/Status
			KSIS, modelling will occur to inform the ICNG process
3	<p>Kalingo Infrastructure Area (KIA, 3 Shaft)</p> <p>The ventilation fan and underground services have been decommissioned at KIA. Shafts have been sealed from underground workings at the base and an engineered cap has been installed at the surface. Service boreholes have been sealed and the nitrogen plant removed. Prior to further decommissioning and demolition works, noise modelling will be undertaken. All reasonable and feasible mitigation measures will be considered. Consultation will occur with neighbours, so they are aware of potential impacts and duration of noise impact.</p>	N/A	Modelling will occur prior to any decommissioning works. Consultation with near neighbours will be undertaken based on modelling results, whether consent limits will be met or not, and the consultation guidelines from the ICNG.
4	<p>Planned Early Works activities</p> <p>When early works such as decommissioning infrastructure or sealing shafts are planned, a predictive noise model will be used by a suitably qualified consultant to assess the noise generating potential of closure activities that are likely to approach the relevant noise criteria at the nearest noise sensitive receivers.</p> <p>Should modelling indicate that the closure activity has the potential to exceed the relevant criteria, or result in adverse noise impacts, then Austar will investigate and implement reasonable and feasible mitigation measures, or make changes to proposed plans, to maintain compliance with the relevant noise criteria and/or seek a negotiated</p>	N/A	Prior to executing closure activities with the potential to exceed the relevant criteria at the nearest noise sensitive receivers.

Mitigation ID	Mitigation Measure	Reference Document	When Required/Status
	agreement with impacted residents if relevant (the ICNG does not require these).		
5	Prior to undertaking works, Austar will notify potentially impacted receivers (as informed by the outcomes of noise modelling results) of the proposed activities, including estimated duration and timing of works, as well as any potential impacts and proposed management measures in accordance with the ICNG.	N/A	<p>Prior to executing closure activities with the potential to exceed the relevant criteria or result in adverse noise impacts at the nearest noise sensitive receivers.</p> <p>Prior to commencing work in a new location.</p>
6	Austar has committed to conduct demolition and other activities that may reach a noise affected level under the ICNG within Recommended Standard Hours	ICNG	All noise generating activities conducted will be modelled and if they are in the noise affected level, appropriate work practices and mitigation measures will be considered.

Any other opportunities for noise control during closure will be assessed as they are identified based on the results of activity specific modelling or attended monitoring. Where modelling indicates potential exceedances may occur, reasonable and feasible work practices and mitigation measures will be examined and applied to minimise noise impacts on near neighbours. Any additional works would be reported in the Annual Review.

6.2 ICNG Reasonable and Feasible work practices

In addition to the above mitigation measures, impacts of noise generating activities during closure will be assessed using the Prediction and Assessment of Impacts – quantitative method flowchart from the ICNG and shown as **Figure 3**.

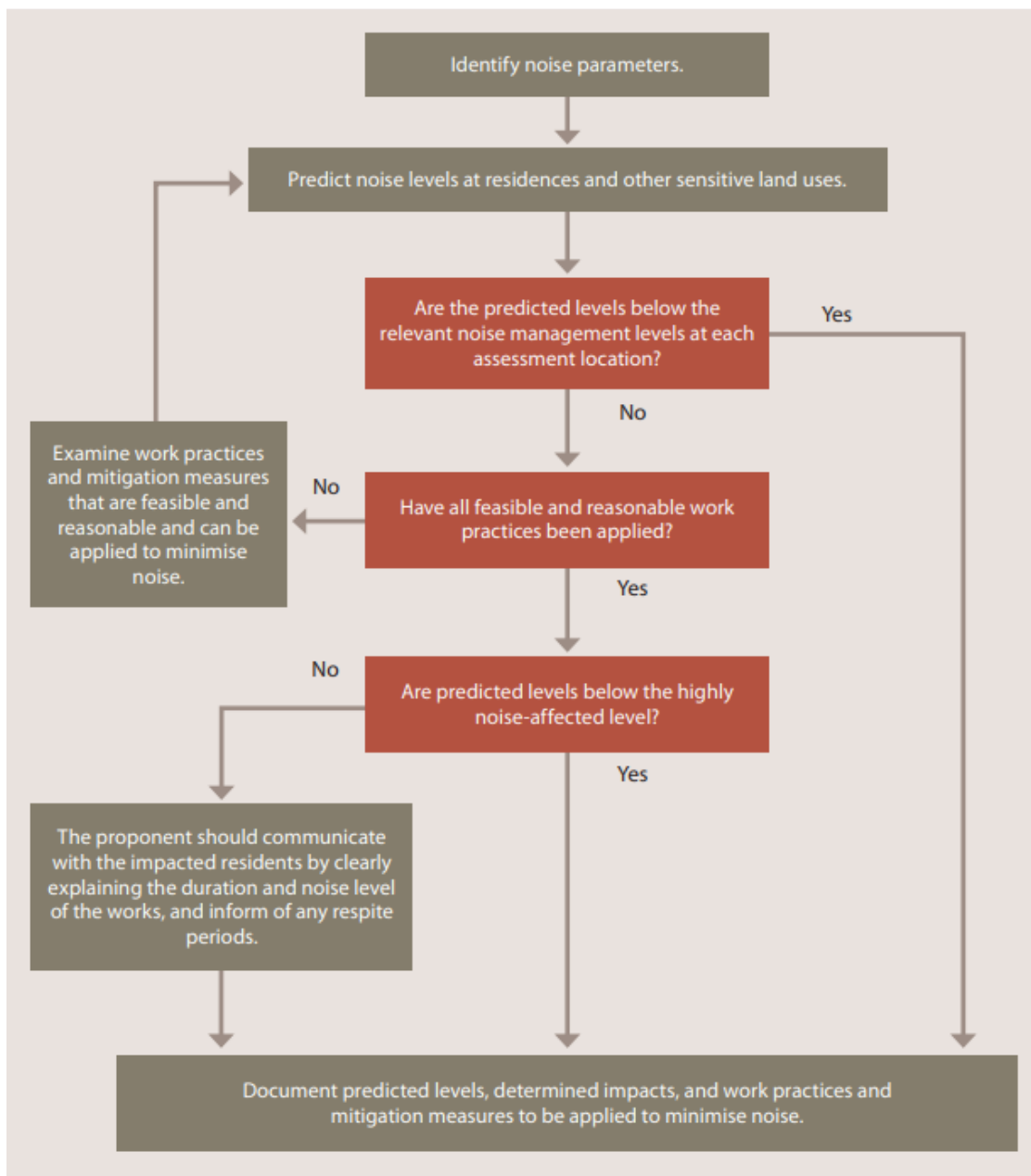


FIGURE 3 ICNG PREDICTION AND ASSESSMENT OF IMPACTS - QUANTITATIVE METHOD

6.3 Work Permits and Noise Modelling

Austar have engaged a noise specialist to assist in the assessment of noise impacts and mitigation measures during closure. The specialist has developed a noise model, that considers topography, nearest receptors, and the location and sound power levels of the equipment used in each project, and is updated regularly.

As each early works project is planned, the planner will submit a work permit to the environment team, which will be assessed and could trigger noise modelling of the project (based on the location of works and the applicable noise criteria, the machinery and tools to be used and the length of time the works take). Work permits require the work planner to provide the location of works, and all machinery that will be used as part of the job. This information can be fed into the noise model to understand whether the job can be done as planned, or whether noise mitigation and/or consultation with neighbours is required as part of the work plan.

If modelled noise exceeds the noise affected level of 45 dBA at any sensitive receptor, Austar will apply reasonable and feasible work practices to the job and consider the work practices from the ICNG to minimise impacts on near neighbours.

Mitigation methods may include noise barriers or using quieter equipment where feasible. In accordance with the ICNG, if noise from Austar works may impact near neighbours (ie. Meet or exceed the noise affected level of 45dBA), consultation should be undertaken.

As works are commenced, attended noise monitoring will be undertaken to validate model predictions. Works and/or the model may be modified/updated if monitoring results vary significantly from those predicted.

No out of hours work is planned. If any became necessary due to extenuating circumstances (eg. Pump breakdown) it would be done in accordance with ICNG protocols.

6.4 Vibration Management Controls

As vibration impacts are not occurring, no vibration management controls are proposed. Should blasting be determined to be necessary in the future for closure execution activities, this NVMP will be updated to include vibration controls.

7 NOISE AND VIBRATION MONITORING

7.1 Attended Noise Monitoring

During the current stages of mine closure (including FS and Early Works, see **Figure 2**), there is minimal activity on site. Maintenance and decommissioning are only carried out during ICNG day period hours which are Monday to Friday 7 am to 6 pm, Saturday 8 am to 1 pm and no work on Sundays or public holidays (unless works cannot be safely stopped and started, or emergency repairs are required). Pumping stormwater using the existing water management system may occur 24 hours a day after rainfall events.

Limiting decommissioning and demolition works to ICNG day period hours is a significant change to activity at Austar and as such, the monitoring program presented in this NVMP has changed significantly from previous versions.

Attended monitoring is the methodology for determining compliance with noise limits; since it allows an accurate determination of the contribution by activities associated with the Austar Mine Complex, if any, to measured noise levels. It will be done in general accordance with Australian Standard AS1055 'Acoustics, Description and Measurement of Environmental Noise', relevant NSW EPA requirements, and this NVMP. Meteorological data from the Austar automatic weather station (AWS), located at the Austar CHPP and shown on **Figure 2** will be used to allow correlation of atmospheric parameters and measured noise levels.

Noise measurements will be evaluated for potential modifying factors in accordance with the NPfl where applicable. If applicable, modifying factor penalties will be reported and added to measured site-only L_{Aeq} . Low-frequency modifying factor penalties will only be applied to site-only L_{Aeq} if the site was the only contributing low-frequency noise source. Specific methodology for assessment of each modifying factor is outlined in Fact Sheet C of the NPfl.

7.1.1 Monitoring Frequency

As only day period activities are planned, continuing to monitor all established monitoring sites at night will not effectively measure noise generated from Austar. Monitoring will therefore only be done during the day period to target and assess closure activities occurring at Austar.

Day period attended noise monitoring will be done at least once every quarter, at locations surrounding the CMAs where works are being undertaken. If no works are being undertaken in a CMA during any quarter, it will not be monitored. However, monitoring will be done every quarter at locations around CMAs 2, 5 and 6 as required by their relevant approvals. Monitoring is required at CMA 2 under the EPL. If this condition is varied, noise monitoring may revert to being undertaken when works are occurring only.

Attended noise monitoring will be conducted for all works that have been modelled to ensure model accuracy and to further inform the model. Any works that have been modelled and will take 5 days or more will have at least one round of attended noise monitoring undertaken at the monitoring locations relevant for the CMA the work is undertaken in (refer to **Figure 4** and **Table 4**). Monitoring will be undertaken monthly for any projects that extend for one month or more.

7.1.2 Monitoring Locations

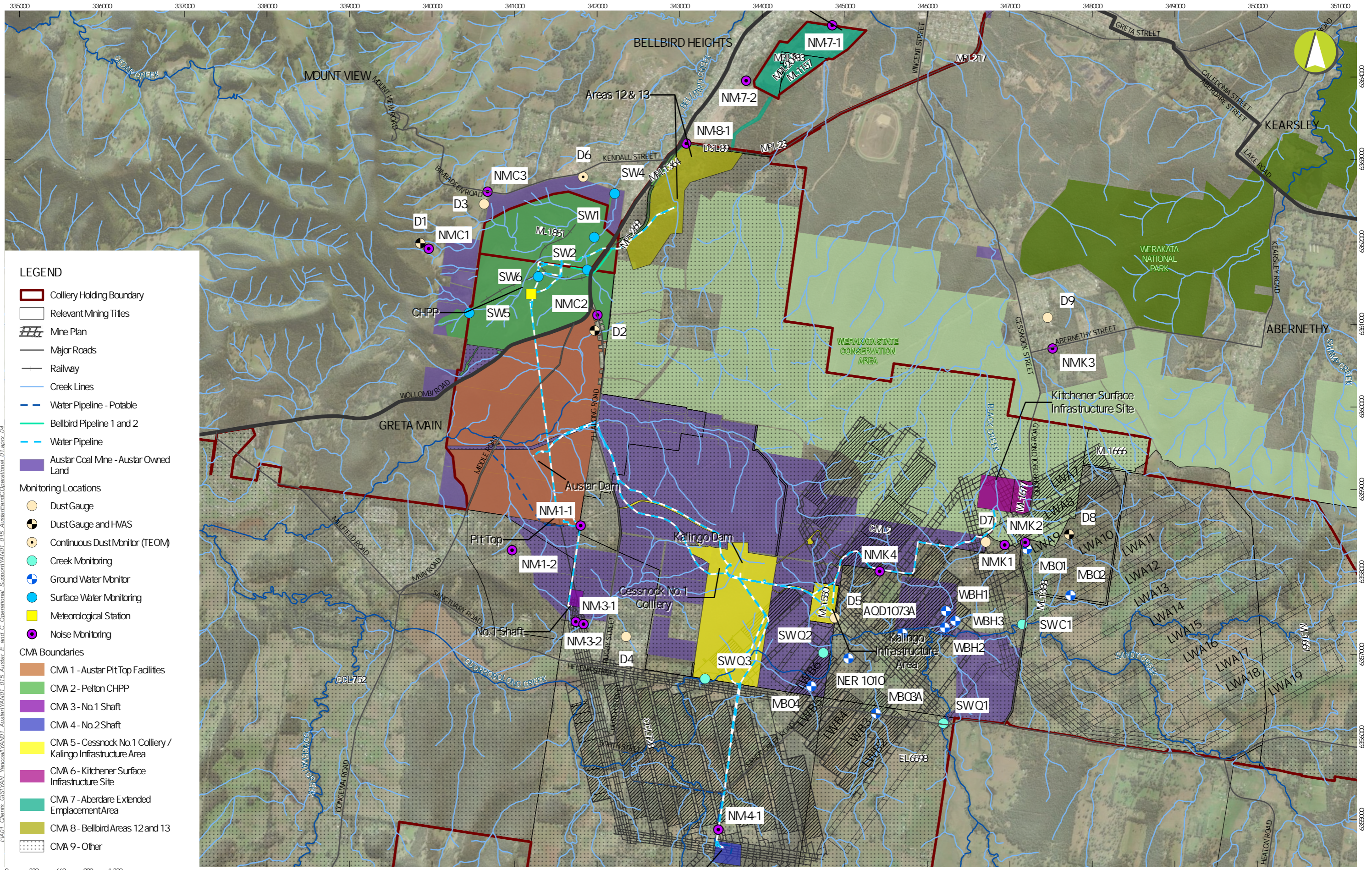
Noise monitoring locations, as shown in **Figure 4** and listed in **Table 4** have been selected as representative of residential receivers that are predicted to be potentially impacted by the Austar Mine Complex, and with consideration given to the privacy of residents (e.g. not monitoring immediately adjacent the dwelling). Locations have been selected to ensure coverage in terms of demonstrating compliance with the noise criteria within the consents and approvals and to the ICNG. It should be noted that **Figure 4** shows the actual monitoring position, not the location of residences.

TABLE 4 – NOISE MONITORING LOCATIONS

Work Area	Location Descriptor	Description	Coordinates (MGA 56)	
			Easting	Northing
CMA 1	NM-1-1	Truro St Ellalong	341800	6358563
	NM-1-2	Dunlop Drive, Paxton	340969	6358265
CMA 2	NM C1	South of Bimbadeen Road, Mt View	339959	6361918
	NM C2	Pelton Village	342003	6361115
	NM C3*	Bimbadeen Road, Mt View	340672	6362610
	Weather Station	Austar CHPP	341198	6361368
CMA 3	NM-3-1	Hunter St Ellalong	341741	6357398
	NM-3-2	Ellalong Rd Ellalong	341835	6357369
CMA 4	NM-4-1	Dry Creek Rd Ellalong	343468	6354879
CMA 5	NM K4	Nash Lane, Quorrobolong	345422	6358009
CMA 6	NM K1	Pelton Road, Quorrobolong (south)	346937	6358328
	NM K2	Coney Creek Lane, Quorrobolong (east)	347186	6358359
	NM K3	Richmond Street, Kitchener	347518	6360709
CMA 7	NM-7-1,	Francis St West Cessnock	344848	6364626
	NM-7-2	Pillar St Bellbird	343805	6363955
CMA 8	NM-8-1	Off Wollombi Rd Bellbird (near pillars)	343080	6363193

* Continuous Noise Monitor

Noise monitoring locations will be reviewed and where necessary modified because of monitoring results, changes to the site activities or changes in land ownership. Any proposed change would trigger a review of the approved NVMP.



- LEGEND**
- Colliery Holding Boundary
 - Relevant Mining Titles
 - Mine Plan
 - Major Roads
 - Railway
 - Creek Lines
 - Water Pipeline - Potable
 - Bellbird Pipeline 1 and 2
 - Water Pipeline
 - Austar Coal Mine - Austar Owned Land
- Monitoring Locations**
- Dust Gauge
 - Dust Gauge and HVAS
 - Continuous Dust Monitor (TEOM)
 - Creek Monitoring
 - Ground Water Monitor
 - Surface Water Monitoring
 - Meteorological Station
 - Noise Monitoring
- CMA Boundaries**
- CMA 1 - Austar Pit Top Facilities
 - CMA 2 - Pelton CHPP
 - CMA 3 - No.1 Shaft
 - CMA 4 - No.2 Shaft
 - CMA 5 - Cessnock No.1 Colliery / Kalingo Infrastructure Area
 - CMA 6 - Kitchener Surface Infrastructure Site
 - CMA 7 - Aberdare Extended Emplacement Area
 - CMA 8 - Bellbird Areas 12 and 13
 - CMA 9 - Other

0 330 660 990 1,320
Scale: 1:42,000

GDA2020 MGA Zone 56
5/04/2024

Austar Coal Mine

7.1.3 Methodology and Compliance Assessment

Attended noise monitoring will be done in accordance with the 'Noise Policy for Industry' (NPfI) (EPA, October 2017), the 'Approved methods for the measurement and analysis of environmental noise in NSW' (Approved Methods) (EPA, January 2022), the Interim Construction Noise Guideline (ICNG) (EPA, July 2009), and Australian Standard AS 1055 'Acoustics, Description and Measurement of Environmental Noise' (Standards Australia, 2018). The duration of each measurement will be 15 minutes.

All measurements are evaluated for potential modifying factors in accordance with the NPfI. Austar's noise levels (if any) must be quantified to permit comparison with relevant noise criteria in **Section 5.1**, including any modifying factors where relevant. Any potential exceedance of a criterion, due to Austar generated noise during regular attended monitoring is to be investigated. The person doing the monitoring is to contact the Environment & Community Manager or delegate immediately if results are approaching (i.e., within 5dBA) or exceeding limits.

Where possible, if an exceedance is identified, works will cease and the site supervisor and environment team will consider ways to reduce the noise impacts of the works, such as limiting the amount of machinery operating simultaneously, whether there may be different methods to achieve the same outcome, and whether works should cease until more appropriate weather conditions prevail.

This allows for the modification of activities and re-testing, which would take place once changes to works are made, generally within two hours, although given the variety of decommissioning activities to take place (ranging from hand-tool work to earthmoving) it is not possible to be specific about timing regarding remeasuring as controls may or may not be simple or quick to implement.

All relevant information pertaining to a potential exceedance is to be gathered as follows:

- locations and quantities of plant operating; and
- meteorological conditions at the time of monitoring.

Using the above data an assessment is to be made as to the validity of the potential exceedance.

Where a measured $L_{Aeq,15minute}$ is greater than the relevant criterion, and confirmed as being caused by Austar's closure activities, Austar will apply feasible and reasonable work practices to meet the noise affected level. Austar will also inform all identified potentially impacted residents of the nature of works to be carried out, the expected noise levels and duration, as well as contact details for relevant Austar personnel.

Where noise is above the ICNG highly affected level, respite periods may be required by restricting the hours that the very noisy activities can occur. These should consider times identified by the community when they are less sensitive to noise such as before and after school (for work near schools), or mid-morning or mid-afternoon (for work near residences). Consultation should also determine if the community is prepared to accept a longer period of construction in exchange for restrictions on construction times.

7.2 Continuous Unattended Noise Monitoring

Continuous unattended noise monitoring is required by PA 08_0111. Results from real time monitoring cannot be used to determine compliance, since the noise levels measured do not represent only noise from the mine, they represent noise from all sources.

The day period is very typically a complex noise environment. Many noise sources, natural and man-made, contribute to levels that would be measured. Primarily for this reason (although there are others), real-time monitoring data is almost never used, nor required to be used, as an operational noise management tool for rural areas.

The continuous noise monitor is located at monitoring location NM-C3 (see **Figure 4**) close to the CHPP. Data from it cannot be, and is not, used for management of noise during closure as all work is planned for the ICNG day period.

7.3 Vibration and Blast Monitoring

As the site is in closure, no vibration or blast monitoring is proposed at this stage. Should blasting be determined to be necessary in the future for closure execution activities, this NVMP will be updated to describe the blasting process and include monitoring requirements.

8 CONTINGENCY PLAN FOR UNPREDICTED IMPACTS

8.1 Noise

In the event of Austar becoming aware of unpredicted noise impacts, not already addressed in this NVMP, Austar will follow the process outline in **Section 7.1.3** and conduct an investigation using a similar process to that used for complaint management (**Section 10.1**).

If the results of the investigation indicate an exceedance of a relevant impact assessment criterion, Austar will follow the process for managing an exceedance in **Section 10**.

If attended noise monitoring indicates variations from modelled noise predictions, the model will be updated where appropriate, and further management measures from the ICNG may be implemented as required.

8.2 Vibration

As vibration impacts are not anticipated, no contingency plans are proposed.

9 CONTINUAL IMPROVEMENT

Austar will implement reasonable and feasible best practice noise mitigation measures appropriate for a closed site. The basis for continuous improvement of noise mitigation measures, as required by Schedule 7 Conditions 2 b) and 2 f) of PA 08_0111, will be through the ongoing monitoring of noise levels and the contingency response and adaptive management process outlined in **Section 8**.

10 COMPLAINTS, INCIDENTS AND REPORTING

10.1 Community Complaints and Independent Review

Community complaints are to be managed in accordance with the requirements of the approved Environmental Management Strategy.

A complaints register will be published on the Austar Coal Mine website, which will be updated monthly, and a summary of complaints will be provided in the Annual Review.

If a landowner of privately-owned land considers the site to be exceeding the impact assessment criteria, the independent review requirements in Schedule 5 Conditions 3 and 4 are to be followed.

10.2 Incident Reporting

Schedule 7 Condition 6 of PA 08_0111 and Schedule 5 Condition 4 of DA 29/95 specify the requirements for incident reporting. An incident is defined as a set of circumstances that causes or threatens to cause material harm to the environment, and/or breaches or exceeds the limits or performance measures/criteria in the approval.

There is inconsistency between the wording of the conditions, however the following protocol addresses the requirements of both conditions.

Austar will notify the Department and any other relevant agencies, of any incident associated with the mine complex as soon as practicable after Austar becomes aware of the incident.

Within 7 days of the date of the incident, Austar will provide a detailed report on the incident to the Department and any other relevant agencies. The report will include the following details:

- The date, time and nature of the exceedance/incident;
- Identify the cause (or likely cause) of the exceedance/incident;
- Describe what action has been taken to date; and
- Describe proposed measures to address the exceedance/incident.

Further investigation may be required beyond seven days depending on the nature of the incident.

The EPL should be referred to for notification requirements relating to incidents causing or threatening material harm to the environment.

Continuous (i.e., 100%) data capture cannot always be achieved due to equipment faults, power interruptions and general servicing. Missing data as a result of the following situations is not considered an incident that requires formal external reporting however Austar will inform DPHI when such events occur and result in more than 24 hours of data loss:

- Equipment breakdown;
- Power loss;
- Scheduled maintenance;
- Performance specification testing; and

- Vandalism.

10.3 Landowner Notification

The landowner notification and provision of information requirements outlined in Schedule 5 Conditions 1 and 2 of PA 08_0111 must be enacted when triggered by exceedances of relevant impact assessment criteria.

10.4 Information Dissemination

A summary of monitoring results will be presented at Austar Community Consultative Committee (CCC) meetings.

Information will also be made available on the Austar website in accordance with the requirements of Schedule 7 Condition 9 of PA 08_0111 and Schedule 5 Condition 12 of DA 29/95.

10.5 Annual Review

In accordance with Schedule 7 Condition 3 of PA 08_0111 and Schedule 5 Condition 5 of DA 29/95, Austar will prepare an Annual Review, including relevant noise monitoring results, for submission to the Department. The Annual Review will:

- describe the works that were carried out in the past year, and the works that are proposed to be carried out over the next year;
- include a comprehensive review of the monitoring results and complaints records of the mine complex over the past year, which includes a comparison of these results against the
 - the relevant statutory requirements, limits or performance measures/criteria;
 - requirements of any plan or program required under the project approvals;
 - the monitoring results of previous years; and
 - the relevant predictions in the EA and Extraction Plan;
- identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
- identify any trends in the monitoring data over the life of the mine complex;
- identify any discrepancies between the predicted and actual impacts of the mine complex, and analyse the potential cause of any significant discrepancies;
- describe what measure will be implemented over the next year to improve the environmental performance of the mine complex;
- report on the continuous improvement investigations and the implementation and effectiveness of these (Schedule 3, Condition 14 (c) of DA 29/95); and
-

10.6 EPL Noise Compliance Assessment Report

In accordance with Condition U2.4 in EPL 416, Austar will submit a noise compliance assessment report on a quarterly basis. The report must contain the results of noise compliance monitoring specified in Condition U2.3 of the EPL. This reporting requirement will cease if the PRP is removed from the EPL

due to the transition to closure. The EPL (available on the Austar Coal website) should be consulted for up-to-date requirements in relation to noise compliance reporting.

11 DOCUMENT REVIEW AND REVISION

Schedule 7 Condition 4 of PA 08_0111 and Schedule 5 Condition 8 of DA 29/95 specify the requirements for revision of strategies, plans and programs. There is inconsistency between the wording of the conditions, however, both require that within 3 months of:

- The submission of an Annual Review;
- The submission of an incident report;
- The submission of an audit report; or
- The approval of a modification to the conditions of consent;

Austar shall review the strategies, plans and programs required by the approval/consent to the satisfaction of Department.

DA 29/95 requires Austar to notify the Department in writing of any such review being undertaken.

Where a review leads to revision of a document, the revised document must be submitted to the Department for approval. The timing for submission of revised plans differs between the consents, being 4 weeks in PA 08_0111 and 6 weeks in DA 29/95. Given this, the 4-week requirement in PA 08_0111 will prevail.

While not required under the applicable consents, this document will also be reviewed prior to any substantial changes to work plans, or activities not covered in the scope of this document.

12 REFERENCES

Austar Coal Mine Pty Ltd (2024) *Austar Coal Mine Environmental Management Strategy ENV-001-02*

Environment Protection Authority (2000) *NSW Industrial Noise Policy*

Environment Protection Authority (2009) *Interim Construction Noise Guideline*

Environment Protection Authority (2017) *Noise Policy for Industry*

Mine Subsidence Engineering Consultants (2021) *Austar Coal Mine – Bellbird Mining Area – Review of Ground Monitoring Data*

Standards Australia (2018) *Australian Standard 1055-2018: ‘Acoustics, Description and Measurement of Environmental Noise’*

Umwelt (2008) *Austar Coal Mine Environmental Assessment, Proposed Stage 3 Extension to Underground Mining & Associated Infrastructure*

Appendix A:

Approval Requirements

PROJECT APPROVAL/DEVELOPMENT CONSENT REQUIREMENTS

Relevant conditions from PA 08_0111 and DA 29/95 and where these conditions are addressed in this Plan are listed in the tables below.

PROJECT APPROVAL CONDITIONS (PA 08_0111)

Schedule	Project Approval Conditions	Section of this Plan						
2	STRATEGIES, PLANS AND PROGRAMS							
2	12. With the approval of the Director-General, the Proponent may submit any strategies, plans or programs required by this approval on a progressive basis.	Noted						
2	13. With the approval of the Director-General, the Proponent may integrate any strategies, plans, programs, reviews, audits or committees required by this approval with any similar requirement under another development consent or approval relating to the Austar Mine Complex.	NVMP addresses PA 08_0111 and DA 29/95 conditions						
4	SPECIFIC ENVIRONMENTAL CONDITIONS – GENERAL NOISE							
4	<p>Noise Impact Assessment Criteria</p> <p>2. The Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria in:</p> <p style="margin-left: 40px;">(a) Table 2, for noise generated by the Surface Infrastructure Site; and</p> <p style="margin-left: 40px;">(b) Any relevant EPL, for noise generated by all other components of the project.</p> <p><i>Table 2: Noise impact assessment criteria – Surface Infrastructure Site, dB(A)</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Day/Evening/Night LAeq(15 minute)</th> <th style="text-align: center;">Night LA1(1 minute)</th> <th style="text-align: center;">Land</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">35</td> <td style="text-align: center;">45</td> <td style="text-align: center;">All privately owned land</td> </tr> </tbody> </table> <p><i>Notes:</i></p> <ul style="list-style-type: none"> • <i>The location of the Surface Infrastructure Site is shown in the figures in Appendix 2.</i> • <i>Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.</i> • <i>The noise limits in Table 2 do not apply if the Proponent has an agreement with the relevant owner/s of these residences/and to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.</i> • <i>The noise limits in Table 2 do not apply to construction of the Surface Infrastructure Site. Noise generated during</i> 	Day/Evening/Night LAeq(15 minute)	Night LA1(1 minute)	Land	35	45	All privately owned land	5.1
Day/Evening/Night LAeq(15 minute)	Night LA1(1 minute)	Land						
35	45	All privately owned land						

Schedule	Project Approval Conditions	Section of this Plan
	<i>construction activities is to comply with the requirements of the Interim Construction Noise Guideline (DECCW 2009).</i>	
4	<p>Noise and Vibration Management</p> <p>The Proponent shall prepare and implement a Noise Management Plan for the mine complex, to the satisfaction of the Director-General. This plan must:</p> <p>(a) Be prepared in consultation with EPA, and be submitted to the Director-General for approval prior to the commencement of construction of the Surface Infrastructure Site (other than shaft construction referred to in condition 1 above);</p> <p>(b) Include, in addition to the standard requirements for management plans (see condition 2 of schedule 7):</p> <ul style="list-style-type: none"> • A noise monitoring program providing for a combination of continuous and supplementary attended monitoring measures; • A vibration monitoring program that is capable of recording ground vibrations on the surface emanating from underground mining activities; and • A detailed continual improvement program for investigating, implementing and reporting on all reasonable and feasible measures to reduce noise levels and vibration impacts generated by the mine complex. 	<p>This document</p> <p style="text-align: center;">2</p> <p style="text-align: center;">7</p> <p style="text-align: center;">7.3</p> <p style="text-align: center;">9</p>
5	NOTIFICATION OF LANDOWNERS	
5	If the results of the monitoring required in schedule 4 identify that impacts generated by the project are greater than the relevant impact assessment criteria, except where a negotiated agreement has been entered into in relation to that impact, then the Proponent shall, within 2 weeks of obtaining the monitoring results, notify the Director-General, the affected landowners and tenants (including tenants of mine owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the project is complying with the criteria in schedule 4.	10.3
5	If the results of monitoring required in schedule 4 identify that impacts generated by the project are greater than the relevant air quality impact assessment criteria in schedule 4, then the Proponent shall send the relevant landowners and tenants (including tenants of mine owned properties) a copy of the NSW Health fact sheet entitled "Mine Dust and You" (and associated updates) in conjunction with the notification required in condition 1.	10.3
5	INDEPENDENT REVIEW	
5	<p>3. If a landowner of privately-owned land considers the project to be exceeding the impact assessment criteria in schedule 4, then he/she may ask the Director-General in writing for an independent review of the impacts of the project on his/her land.</p> <p>If the Director-General is satisfied that an independent review is warranted, the Proponent shall within 2 months of the Director-General's decision:</p> <p>(a) consult with the landowner to determine his/her concerns;</p> <p>(b) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Director-General, to conduct monitoring on the land, to:</p>	10.1

Schedule	Project Approval Conditions	Section of this Plan
	<ul style="list-style-type: none"> · determine whether the project is complying with the relevant impact assessment criteria in schedule 4; and · identify the source(s) and scale of any impact on the land, and the project's contribution to this impact; and (c) give the Director-General and landowner a copy of the independent review. 	
5	<p>4. If the independent review determines that the project is complying with the relevant impact assessment criteria in schedule 4, then the Proponent may discontinue the independent review with the approval of the Director-General. If the independent review determines that the project is not complying with the relevant impact assessment criteria in schedule 4, then the Proponent shall:</p> <ul style="list-style-type: none"> (a) implement all reasonable and feasible measures, in consultation with the landowner, to ensure that the project complies with the relevant criteria, and conduct further monitoring to determine whether these measures ensure compliance; or (b) secure a written agreement with the landowner to allow exceedances of the relevant impact assessment criteria, to the satisfaction of the Director-General. If the further monitoring referred to under paragraph (a) above determines that the project is complying with the relevant impact assessment criteria, then the Proponent may discontinue the independent review with the approval of the Director-General. 	10.1
7	ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING	
7	Management Plan Requirements	
	2. The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include:	
7	(a) detailed baseline data;	3
7	(b) a description of: <ul style="list-style-type: none"> • the relevant statutory requirements (including any relevant approval, licence or lease conditions); • any relevant limits or performance measures/criteria; • the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the project or any management measures; 	0, Appendix A 5.1
7	(c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria;	6
7	(d) a program to monitor and report on the: <ul style="list-style-type: none"> • impacts and environmental performance of the project; • effectiveness of any management measures (see (c) above); 	7
7	(e) a contingency plan to manage any unpredicted impacts and their consequences;	8
7	(f) a program to investigate and implement ways to continually improve the environmental performance of the project over time;	9
7	(g) a protocol for managing and reporting any: <ul style="list-style-type: none"> • incidents; • complaints; • non-compliances with statutory requirements; and 	1010

Schedule	Project Approval Conditions	Section of this Plan
	<ul style="list-style-type: none"> • exceedances of the impact assessment criteria and/or performance criteria; and 	
7	(h) a protocol for periodic review of the plan.	11
7	<p>Annual Review</p> <p>3. Each year, the Proponent shall review the environmental performance of the mine complex to the satisfaction of the Director-General. This review must:</p> <p>(a) describe the works that were carried out in the past year, and the works that are proposed to be carried out over the next year;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the mine complex over the past year, which includes a comparison of these results against the</p> <ul style="list-style-type: none"> · the relevant statutory requirements, limits or performance measures/criteria; · the monitoring results of previous years; and · the relevant predictions in the EA and Extraction Plan; <p>(c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>(d) identify any trends in the monitoring data over the life of the mine complex;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the mine complex, and analyse the potential cause of any significant discrepancies; and</p> <p>(f) describe what measure will be implemented over the next year to improve the environmental performance of the mine complex.</p>	10.5
7	<p>Revision of Strategies, Plans and Programs</p> <p>4. Within 3 months of:</p> <p>(a) the submission of an annual review under Condition 3 above;</p> <p>(b) the submission of an incident report under Condition 6 below;</p> <p>(c) the submission of an audit report under Condition 7 below; or</p> <p>(d) any modification to the conditions of this approval, (unless the conditions require otherwise), the Proponent shall review the strategies, plans, and programs required under this approval, to the satisfaction of the Director-General. Where this review leads to revisions in any such document, then within 4 weeks of the review the revised document must be submitted for the approval of the Director-General.</p> <p>Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended to improve environmental performance of the project.</p>	11
7	<p>Incident Reporting</p> <p>6. The Proponent shall notify the Director-General and any other relevant agencies of any incident associated with the mine complex as soon as practicable after the Proponent becomes aware of the incident. Within 7 days of the date of the incident, the Proponent shall provide the Director-General and any relevant agencies with a detailed report on the incident.</p>	10.2

Schedule	Project Approval Conditions	Section of this Plan
7	<p>Access to Information</p> <p>9. From the end of 2009, the Proponent shall make the following information publicly available on its website:</p> <p>(a) a copy of all current statutory approvals for the mine complex;</p> <p>(b) a copy of the current environmental management strategy and associated plans and programs;</p> <p>(c) a summary of the monitoring results of the mine complex, which have been reported in accordance with the various plans and programs approved under the conditions of this approval;</p> <p>(d) complaints register, which is to be updated on a monthly basis;</p> <p>(e) a copy of the minutes of CCC meetings;</p> <p>(f) a copy of any Annual Reviews (over the last 5 years);</p> <p>(g) a copy of any Independent Environmental Audit, and the Proponent's response to the recommendations in any audit; and</p> <p>(h) any other matter required by the Director-General.</p>	10.4

DEVELOPMENT CONSENT CONDITIONS (DA 29/95)

Schedule	Approval Condition	Section of this Plan
2	<p>LIMITS ON APPROVAL</p> <p>5. This consent lapses on 14 February 2022</p> <p><i>Note: This condition does not affect the operation of section 95 of the EP&A Act. Under this consent, the Applicant is required to rehabilitate the site and carry out additional requirements. Consequently, this consent will continue to apply in all respects other than to permit the carrying out of mining operations, until the rehabilitation of the site and those requirements and undertakings have been carried out to the required standard.</i></p>	1.1
3	<p>SPECIFIC ENVIRONMENTAL CONDITIONS</p> <p>NOISE AND VIBRATION</p>	-
3	<p>13. Impact Assessment Criteria</p> <p>The Applicant must ensure that the noise generated by the Infrastructure Upgrade Area identified in Figure 1.3 of the April 2006 SEE does not exceed the noise impact assessment criteria in Table 2.</p> <p>Table 2: Noise Impact Assessment Criteria dB(A)</p>	5.1

Schedule	Approval Condition	Section of this Plan				
	<table border="1"> <tr> <td style="text-align: center;">Day/Evening/Night LAeq(15minute)</td> <td style="text-align: center;">Land</td> </tr> <tr> <td style="text-align: center;">35</td> <td style="text-align: center;">All privately owned land</td> </tr> </table> <p>Notes:</p> <p>b) Noise from the development is to be measured at the most affected point or within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary, to determine compliance with the LAeq(15minute) noise limits in the above table. Where it can be demonstrated that direct measurement of noise from the development is impractical, the Department and the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy must also be applied to the measured noise levels where applicable.</p> <p>c) The noise emission limits identified in the above table apply under meteorological conditions of:</p> <ul style="list-style-type: none"> • Wind speeds of up to 3m/s at 10 metres above ground level; or • Temperature inversion conditions of up to 3°C/100m, and wind speeds of up to 2m/s at 10 metres above ground level. <p>However, if the Applicant has a written negotiated noise agreement with any landowner of the land listed in Table 2, and a copy of this agreement has been forwarded to the Department and the EPA, then the Applicant may exceed the noise limits in Table 2 in accordance with the negotiated noise agreement.</p>	Day/Evening/Night LAeq(15minute)	Land	35	All privately owned land	
Day/Evening/Night LAeq(15minute)	Land					
35	All privately owned land					
3	<p>14. Continuous Improvement</p> <p>The Applicant must:</p> <p>(a) implement all reasonable and feasible noise mitigation measures;</p> <p>(b) investigate ways to reduce the noise generated by the development; and</p> <p>(c) report on these investigations and the implementation and effectiveness of these measured in the Annual Review (see condition 5 of Schedule 5), to the satisfaction of the Secretary.</p>	9				
3	<p>15. Noise Monitoring</p> <p>The Applicant must prepare a Noise Monitoring Program for the development to the satisfaction of the Secretary. This program must include quarterly attended noise monitoring and a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this consent.</p> <p>The Applicant must implement the approved program as approved from time to time by the Secretary.</p>	7				
3	<p>16. Vibration Monitoring</p>	7.3				

Schedule	Approval Condition	Section of this Plan
	<p>The Applicant must prepare a Vibration Monitoring Program for the development to the satisfaction of the Secretary. This program must be capable of recording ground vibrations on the surface emanating from underground mining activities.</p> <p>The Applicant must implement the approved program as approved from time to time by the Secretary.</p>	
5	ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING	
5	<p>Incident Reporting</p> <p>4. Within 7 days of detecting an exceedance of the limits/performance criteria in this consent, the Applicant must report the exceedance/incident to the Department (and any relevant agency). The report must:</p> <p>(a) describe the date, time, and nature of the exceedance/incident;</p> <p>(b) identify the cause (or likely cause) of the exceedance/incident;</p> <p>(c) describe what action has been taken to date; and</p> <p>(d) describe the proposed measures to address the exceedance/incident.</p>	10.2
5	<p>Regular Reporting</p> <p>4A. The Applicant must provide regular reporting on the environmental performance of the development on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this consent.</p>	10.4
5	<p>Annual Review</p> <p>5. By the end of September each year, unless the Secretary agrees otherwise, the Applicant must submit a review to the Department reviewing the environmental performance of the development to the satisfaction of the Secretary. This review must:</p> <p>(a) describe the development (including any rehabilitation) that was carried out in the previous year to 30 June, and the development that is proposed to be carried out over the current year to 30 June;</p> <p>(b) include a comprehensive review of the monitoring results and complaints records of the development over the previous year to 30 June, which includes a comparison of these results against the:</p> <ul style="list-style-type: none"> • relevant statutory requirements, limits or performance measures/criteria; • requirements of any plan or program required under this consent; • monitoring results of previous years; and • relevant predictions in the documents listed in condition 2 of Schedule 2; <p>(c) identify any non-compliance over the past year, and describe what actions were (or are being) taken to ensure compliance;</p> <p>(d) identify any trends in the monitoring data over the life of the development;</p> <p>(e) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</p>	10.5

Schedule	Approval Condition	Section of this Plan
	(f) describe what measures will be implemented over the next year to improve the environmental performance of the development.	
5	<p>Revision of Strategies, Plans and Programs</p> <p>8. Within 3 months of:</p> <p>(a) the submission of an incident report under condition 4 above;</p> <p>(b) the submission of an Annual Review under condition 5 above;</p> <p>(c) the submission of an audit report under condition 6 above; and</p> <p>(d) the approval of a modification to the conditions of this consent,</p> <p>the Applicant must review the strategies, plans and programs required under this consent, to the satisfaction of the Secretary. The applicant must notify the Department in writing of any such review being undertaken. Where this review leads to revisions in any such document, then within 6 weeks of the review the revised document must be submitted for the approval of the Secretary.</p> <p>Note: The purpose of this condition is to ensure that strategies, plans and programs are regularly updated to incorporate any measures recommended</p>	11
5	<p>Updating and Staging of Strategies, Plans or Programs</p> <p>8A. To ensure that strategies, plans or programs required under this consent are updated on a regular basis, and that they incorporate any appropriate additional measures to improve the environmental performance of the development, the Applicant may at any time submit revised strategies, plans or programs for the approval of the Secretary. With the agreement of the Secretary, the Applicant may also submit any strategy, plan or program required by this consent on a staged basis.</p> <p>With the agreement of the Secretary, the Applicant may prepare a revision of or a stage of a strategy, plan or program without undertaking consultation with all parties nominated under the applicable condition in this consent.</p> <p>While any strategy, plan or program may be submitted on a staged basis, the Applicant will need to ensure that the operations associated with the development are covered by suitable strategies, plans or programs at all times.</p> <p>If the submission of any strategy, plan or program is to be staged; then the relevant strategy, plan or program must clearly describe the specific stage/s of the development to which the strategy, plan or program applies; the relationship of this stage/s to any future stages; and the trigger for updating the strategy, plan or program.</p>	Noted
5	<p>Relationship with other consents</p> <p>8B. With the agreement of the Secretary, the Applicant may combine any strategy, plan, program, review, audit or committee required by this consent with any similar requirement under another development consent or approval relating to the Austar Mine Complex, including Project Approval 08_0111 for the Stage 3 mining area.</p>	NVMP addresses PA 08_0111 and DA 29/95 conditions
5	Evidence of Consultation	2

Schedule	Approval Condition	Section of this Plan
	<p>8C. Where consultation with any public authority is required by the conditions of this consent, the Applicant must:</p> <p>(a) consult with the relevant public authority prior to submitting the required document to the Secretary for approval;</p> <p>(b) submit evidence of this consultation as part of the relevant document;</p> <p>(c) describe how matters raised by the authority have been addressed and any matters not resolved; and</p> <p>(d) include details of any outstanding issues raised by the authority and an explanation of disagreement between any public authority and the Applicant.</p>	
5	<p>Access to Information</p> <p>12. The Applicant must:</p> <p>(a) make copies of the following publicly available on its website:</p> <ul style="list-style-type: none"> • the documents listed in condition 2 of Schedule 2; • all current statutory approvals for the development; • approved strategies, plans and programs required under the conditions of this consent; • a comprehensive summary of the monitoring results of the development, which have been reported in accordance with the various plans and programs approved under the conditions of this consent; • a summary of the progress of the development; • contact details to enquire about the development or to make a complaint; • a complaints register, which is to be updated on a monthly basis; • minutes of CCC meetings; • the last five annual reviews; • any independent environmental audit of the development, and the Applicant's response to the recommendations in any audit; • any other matter required by the Secretary; and <p>(b) keep this information up-to-date, to the satisfaction of the Secretary.</p>	10.4

EPL REQUIREMENTS

Relevant conditions from EPL 416 and where these conditions are addressed in this Plan are listed in the table below. With the transition to closure, the PRP conditions may vary, and the EPL (available on the Austar Coal website) should be consulted for the latest version of these conditions.

ENVIRONMENT PROTECTION LICENCE 416 (EPL 416)

Section	EPL Conditions	Section of this Plan
8	Pollution Studies and Reduction Programs	

Section	EPL Conditions	Section of this Plan				
U1	Coal Handling & Preparation Plant Noise Reduction					
U1.1	The licensee must conduct a noise assessment in accordance with the document 'NSW Industrial Noise Policy', (EPA, 2000) (INP) for the operations and activities carried out at the licensed premises and submit a report to the Manager, Hunter Region, by no later than 31 AUGUST 2014.	6.1				
U1.2	<p>The report referred to in condition U1.1 must include, but is not limited to the following:</p> <p>1. Project Specific Noise Levels for the nearest noise sensitive receiver location(s). The project specific noise levels may be sourced from recent documentation submitted in support of a project approval application, or determined specifically in response to this condition, provided that:</p> <ul style="list-style-type: none"> (a) The source of the project specific noise levels are stated; (b) The project specific noise levels have been derived in accordance with the INP; (c) Details are provided of how the project specific noise levels have been derived; (d) The nearest noise sensitive receiver locations chosen are representative of those potentially most affected by noise from the premises. 	6.1				
U1.2	<p>2. Predicted or measured noise level contributions for the noise sensitive receiver locations identified in U1.2.1 above as a result of all activities and operations carried out at the premises. These may be sourced from the recent documentation submitted in support of a project approval application, or determined specifically in response to this condition, provided that:</p> <ul style="list-style-type: none"> (a) The source of the project specific noise level(s) are stated; (b) Noise levels have been derived in accordance with the INP; (c) Details of how the noise levels have been predicted are provided. 	6.1				
U1.2	<p>3. Noise limits proposed for the location(s) identified in U1.2.1 above, derived with regard to the project specific noise levels and predicted noise level contributions from U1.2.1 and U1.2.2 above, that can be placed on the licence, for all activities and operations carried out at the premises.</p>	5.1				
U1.2	<p>4. Details of methods to be used to determine compliance with the limits in U1.2.3 above.</p> <ul style="list-style-type: none"> (a) A reference to the INP includes a reference to the INP Application Notes; and (b) Noise sensitive receiver locations do not include any locations owned by the licensee or another coal mine or where a negotiated agreement (as outlined in the INP) is in place between the landowner and any licence holder. 	5.1				
U2	Premises Noise Limits					
U2.1	<p>Noise generated from the premises must not exceed the noise limits below:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;">Receiver</th> <th style="width: 50%;">Noise Limit dB(A)L90</th> </tr> </thead> <tbody> <tr> <td style="height: 20px;"> </td> <td> </td> </tr> </tbody> </table>	Receiver	Noise Limit dB(A)L90			5.1
Receiver	Noise Limit dB(A)L90					

Section	EPL Conditions		Section of this Plan
	Pelton Village	43	
	Pyne Residence	40	
	O'Hearn Residence	37	
	Note: These noise limits apply until new noise limits, determined through the "Premises Noise Assessment" pollution reduction program, condition U1 of this licence, are applied to the licence.		
U2.2	The noise limits apply at all times under wind speeds up to 3 metres per second (measured at 10 metres above ground level) and Pasquill stability class from A to F.		5.1
U2.3	Noise from the premises is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of the dwelling where the dwelling is more than 30 metres from the boundary, to determine compliance with the noise limits in Condition U2.1 unless otherwise stated. Where it can be demonstrated that direct measurement of noise from the premises is impractical, the EPA may accept alternative means of determining compliance. See Chapter 11 of the NSW Industrial Noise Policy. The modification factors presented in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise level where applicable.		10.6
U2.4	A noise compliance assessment report must be submitted to the EPA's Regional Manager, Hunter on a quarterly basis. The report must contain the results of noise compliance monitoring specified in U2.3.		10.6

STATEMENT OF COMMITMENTS

A list of the Statement of Commitments from PA 08_0111 which are relevant to noise and vibration and where these commitments are addressed in this Plan are listed in the table below.

PROJECT APPROVAL STATEMENT OF COMMITMENTS (08_0111)

Appendix	Statement of Commitment	Section of this Plan
	Statement of Commitments – Austar Coal Mine Stage 3 EA As part of approval under Part 3A of the EP&A Act for the proposed Stage 3 Project, Austar Coal Mine will commit to the following controls:	
1.8	Noise and Blasting	
1.8.1	Unless otherwise agreed with the landowner, Austar Coal Mine will manage operations associated with the Stage 3 underground mining and Surface Infrastructure Site such that the noise emissions from these operations comply with the noise criteria included in Table	5.1

Appendix	Statement of Commitment	Section of this Plan																															
	1.1 at surrounding residences for the range of meteorological conditions modelled in the EA. Table 1.1 – Project Specific Noise Criteria <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 20%;">Location</th> <th style="width: 10%;">Period</th> <th style="width: 20%;">Intrusiveness Criteria LAeq(15minute)</th> <th style="width: 20%;">Amenity Criteria LAeq(15minute)</th> <th style="width: 20%;">Project Specific Noise Criteria LAeq(15minute)</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Kitchener Residences</td> <td>Day</td> <td>38 dBA</td> <td>50 dBA</td> <td>38 dBA</td> </tr> <tr> <td>Evening</td> <td>35 dBA</td> <td>45 dBA</td> <td>35 dBA</td> </tr> <tr> <td>Night</td> <td>35 dBA</td> <td>40 dBA*</td> <td>35 dBA</td> </tr> <tr> <td rowspan="3">Serradilla Residence, Kauter Residence, Penney and Linton Property</td> <td>Day</td> <td>37 dBA</td> <td>50 dBA</td> <td>37 dBA</td> </tr> <tr> <td>Evening</td> <td>37 dBA</td> <td>45 dBA</td> <td>37 dBA</td> </tr> <tr> <td>Night</td> <td>35 dBA</td> <td>40 dBA</td> <td>35 dBA</td> </tr> </tbody> </table>	Location	Period	Intrusiveness Criteria LAeq(15minute)	Amenity Criteria LAeq(15minute)	Project Specific Noise Criteria LAeq(15minute)	Kitchener Residences	Day	38 dBA	50 dBA	38 dBA	Evening	35 dBA	45 dBA	35 dBA	Night	35 dBA	40 dBA*	35 dBA	Serradilla Residence, Kauter Residence, Penney and Linton Property	Day	37 dBA	50 dBA	37 dBA	Evening	37 dBA	45 dBA	37 dBA	Night	35 dBA	40 dBA	35 dBA	
Location	Period	Intrusiveness Criteria LAeq(15minute)	Amenity Criteria LAeq(15minute)	Project Specific Noise Criteria LAeq(15minute)																													
Kitchener Residences	Day	38 dBA	50 dBA	38 dBA																													
	Evening	35 dBA	45 dBA	35 dBA																													
	Night	35 dBA	40 dBA*	35 dBA																													
Serradilla Residence, Kauter Residence, Penney and Linton Property	Day	37 dBA	50 dBA	37 dBA																													
	Evening	37 dBA	45 dBA	37 dBA																													
	Night	35 dBA	40 dBA	35 dBA																													
1.8.2	Unless otherwise agreed with the landowner, Austar Coal Mine will manage the construction phase of the Surface Infrastructure Site in accordance with the requirements of DECCW's Interim Construction Noise Guidelines (2009).	6.1																															
1.8.3	Acoustic bunding will be constructed to a height of 3.5 metres above ground level along the northern boundary adjacent to the car park and bathhouse.	6.1																															
1.8.4	The ventilation fan outlet will be directed to the west.	not relevant in closure																															
1.8.5	Man and materials winder and second egress winder motors will be enclosed.	not relevant in closure																															
1.8.6	Blasting will generally take place only once per day and will be undertaken between the hours of 9.00am to 5.00pm Monday to Saturday with no blasting on Sundays or Public Holidays.	not relevant in closure																															
1.8.7	Airblast overpressure from blasting associated with shaft development at the Surface Infrastructure Site when measured at residences not associated with the development will not exceed a maximum of 120 dBL Linear Peak at any time and will not exceed 115 dBL for more than 5% of blasts over a 12 month period.	not relevant in closure																															
1.8.8	Peak particle velocity from blasting associated with shaft development at the Surface Infrastructure Site when measured at residences not associated with the development will not exceed a maximum of 10 mm/s at any time and will not exceed 5 mm/s for more than 5% of blasts over a 12 month period.	not relevant in closure																															
1.15	Continuous Improvement of Existing Operations																																
1.15.3	Austar Coal Mine will continue to implement the voluntary Noise Pollution Reduction Program for Pelton CHPP in consultation with OEH.	6.1																															
1.15.4	Austar Coal Mine will commit to a Noise Management Plan that incorporates current noise monitoring, the voluntary Noise Pollution Reduction Program and associated noise management for Austar Mine Complex operations and will investigate reasonable and feasible noise mitigation strategies where appropriate.	This document																															

Appendix B:

Management Plan Approval

Julie McNaughton
Environment and Community Senior Advisor
Austar Coal Mine Pty Limited
Darling Park – Tower 2
Level 18, 201 Sussex Street
Sydney NSW 2000

23/08/2024

Subject: Austar Coal Mine Noise and Vibration Management Plan

Dear Ms McNaughton,

I refer to the Noise and Vibration Management Plan, including a Noise Monitoring Program, submitted to the NSW Department of Planning, Housing and Infrastructure (the Department) as required by Schedule 4, Condition 3 of MP08_0111 (as modified) and Schedule 3, Condition 15 of DA 29/95 (as modified). I also acknowledge your response to the Department's review comments and request for additional information.

The Department has carefully reviewed the document and is satisfied that it meets the requirements of the relevant conditions of consent. Accordingly, as nominee of the Planning Secretary, I approve the Noise and Vibration Management Plan (Revision 4.1 dated August 2024).

You are reminded that if there are any inconsistencies between the Noise and Vibration Management Plan and the conditions of approval, the conditions prevail.

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 Katie Weekes on (02) 4927 3223 or via email at katie.weekes@dpie.nsw.gov.au

Yours sincerely



Jessie Evans
Director
Energy and Resource Assessments

As nominee of the Planning Secretary