



a mining and metals company

Appin Mine Noise Management Plan

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1 Introduction

Appin Mine incorporates the underground mining operations, which extract coal from the Bulli Seam, and associated surface activities, including the West Cliff Coal Preparation Plant (WCCPP) and Coal Wash Emplacement Area (CWEA). Appin Mine is located approximately 25 kilometres (km) north-west of Wollongong in New South Wales (see Plan 1). Appin Mine is owned and operated by Endeavour Coal Pty Ltd, a subsidiary of Illawarra Coal Holdings Pty Ltd (ICHPL), which is a wholly owned subsidiary of Gear M Illawarra Met Coal Pty Ltd.

Appin Mine, Cordeaux Colliery and Dendrobium Mine (and associated facilities) are collectively operated by GM³.

ICHPL received Project Approval 08_0150 (the Project Approval) from the Planning Assessment Commission of NSW under delegation of the Minister for Planning and Infrastructure on 22 December 2011 for current and proposed mining of the Bulli Seam Operations (BSO) for the next 30 years, and production of up to 10.5 million tonnes per annum of run of mine (RoM) coal. This approval incorporates underground mining, transport and coal wash emplacement activities undertaken 24 hours a day, seven days per week.

This Noise Management Plan (NMP) has been prepared to detail the relevant noise impact assessment criteria, compliance procedures, and controls relating to the mining operations and associated activities. This plan has been prepared to satisfy Condition 5 of Schedule 4 of the Project Approval, as modified, for the Noise Management Plan.

1.1 Objectives

The objectives of the NMP are to:

- provide the framework for the responsible management of noise emissions associated with Appin Mine, including but not limited to the ventilation shafts;
- describe the control measures for the management of noise emissions;
- prevent adverse noise impacts on the amenity of local communities and the environment;
- describe compliance criteria and exceedance assessment protocols;
- describe the noise monitoring program;
- comply with the relevant requirements of the Project Approval;
- describe measures for the reduction of noise emissions; and
- comply with other relevant standards and requirements.

1.2 Scope

The scope of the NMP applies to all existing and future activities related to Appin Mine including operational, construction¹ and traffic noise at:

- Appin East, Appin West and Appin North Pit Top areas;
- Existing Ventilation Shafts 1 (downcast), 2 (upcast), 3 (downcast) and 6 (upcast);

¹ The AQMP specifically does not address the conditions in Schedule 4A of the Project Approval. These conditions are addressed in the AMVA Project Construction Environmental Management Plan.

- Appin Mine Ventilation and Access (AMVA) Project site (including Ventilation Shafts 7 (downcast) and 8 (upcast));²
- WCCPP; and
- CWEA.

Refer to Plan 1 for locations of the above.

Note: The NMP does not apply to occupational noise monitoring on site.

1.3 Environmental Management System

ICHPL has a comprehensive Environmental Management System (EMS) in place to minimise the impact of its operations on the local environment and community. The NMP is a component of the EMS which is certified to ISO 14001.

1.4 Consultation

Consultation has been undertaken as part of this review of the NMP with the Environment Protection Authority (EPA) and Wollondilly Shire Council (WSC). The comments from the consultation process have been incorporated into the current version of the NMP.

Appendix 3 outlines comments from the relevant government agencies following consultation and the ICHPL response.

Consultation with agencies as stated in Condition 5 of Schedule 4 of the Project Approval will only be undertaken where there is a material change to the NMP or if specifically requested by the Department. Administrative or descriptive changes do not constitute a material change.

2 Roles and Responsibilities

Roles and responsibilities associated with environmental management at Appin Mine are defined in the Environmental Management Strategy. Table 1 outlines the roles and responsibilities associated with the implementation and periodic review of the NMP.

Table 1: Roles and Responsibilities

Role	Responsibilities
Superintendent Environment	Implementation and periodic review of the NMP. Liaison with government regulators and ICHPL senior leadership team in relation to noise issues, including reporting.
Specialist Environment	Advise, coach and mentor operational personnel with respect to meeting the standards and requirements of the NMP. Monitor and review compliance against these requirements. Coordinate noise monitoring as required. Update and review noise monitoring data in EQulS.
Corporate Affairs Team	Meeting the commitments contained within the NMP for stakeholder engagement and landowner notifications.

² Construction at the Ventilation Shaft 7/8 site commenced in FY23 and is expected to be completed in FY26.

Role	Responsibilities
General Manager Sustainability and Approvals Manager Projects General Manager Appin Mine	Provide the necessary resources and systems to ensure that requirements of the NMP are met.
Maintenance Technicians Operations Personnel	Operate and maintain noise management controls and site equipment in a competent, efficient and reliable manner.
Noise consultant	Undertake noise monitoring in accordance with the NMP. Advise site Specialist Environment of any issues to enable rectification.

3 Legislation and Planning

3.1 Project Approval Conditions and Statement of Commitments

Potential noise and vibration impacts associated with Appin Mine were modelled during the preparation of the BSO Project Environmental Assessment (EA) 2009 and the Noise and Vibration Assessment (Appendix B of the Modification Report) for the AMVA Project. The EA and Modification Report were assessed and approved under the *Environmental Planning and Assessment Act 1979 (EP&A Act)* and associated Regulations.

All activities carried out at Appin Mine will be in accordance with the conditions of the Project Approval, in accordance with any written directions of the Planning Secretary and generally in accordance with the Environmental Assessment (EA), Statement of Commitments and Preferred Project Report.

Appendix 1 outlines the noise management requirements of the Project Approval and cross references where the requirements have been addressed within the NMP.

Appendix 2 summarises the requirements of the commitments in the EA and cross references where the requirements have been addressed within the NMP.

Documents as listed in Condition 2 of Schedule 2 will be made available on the GM³ website: [link](#).

3.2 Environment Protection Licence Requirements

Environment Protection Licence No. 2504 (EPL 2504) applies to Appin Mine and associated activities. A copy of the licence can be accessed at the EPA website: [link](#).

It is noted that there are no specific noise conditions in EPL 2504.

3.3 Relevant Legislation

Key regulatory and NMP obligations applicable to Appin Mine are managed via an obligations management database. The obligations are allocated to responsible personnel. This process is detailed in the Environmental Compliance/Conformance Assessment and Reporting Procedure.

Legislation applicable to noise management may include but is not limited to:

- *Protection of the Environment Operations Act 1997 (POEO Act); and*
- *EP&A Act.*

3.4 Guidelines and Standards

This NMP has been developed to be consistent with the principles of the following:

- ISO 14001:2015 Environmental Management Systems;
- GM³ Sustainability Policy.

Other relevant guidelines for noise management may include but are not limited to:

- NSW Industrial Noise Policy (2000);
- Noise Policy for Industry (2017);
- NSW Road Noise Policy (DECCW, 2011);
- Interim Construction Noise Guideline (DECC, 2009) (ICNG);
- Assessing Vibration: A Technical Guideline (DEC, 2006); and
- AS 1055:2018 Acoustics – Description and measurement of environmental noise.

4 Baseline Assessment

4.1 Project Approval

A baseline assessment was undertaken as part of the EA. An extensive review of the noise levels monitored around the operations is presented in Appendix I of the Bulli Seam Operations Project Environmental Assessment (Wilkinson Murray, July 2009).

The EA is available via the GM³ website: [link](#).

The Noise Impact Assessment, which formed part of the EA, identified that that existing noise levels at the nearest residences were typical of suburban and semi-rural areas. Short term attended monitoring at the times of deployment and retrieval of the loggers indicated no significant contribution from industrial sources, with the exception of the colliery cottages located on site at the Appin East Pit Top where operations at the pit top were audible. The colliery cottages are owned by ICHPL.

Table 2 outlines the Rating Background Levels (RBLs) from noise loggers at the nearest residential receivers.

Table 2: RBLs from noise loggers

Location and logger ID from EA (refer to Figure I3-1)	Day	Evening	Night
	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)
286 Douglas Park Drive (L01)	37.6	38.2	40.9
100 Ashwood Road (L02)	34.0	35.4	37.0
St Mary's Towers (L03)	37.5	39.2	39.8
Appin Mine Cottages (L04)	40.7	40.5	40.5
44-50 Church Street (L05)	37.1	40.5	36.5
Cataract Scout Park (L06)	32.0	33.0	29.0
Andoran Stud Estate, Darkes Forest Road (L07)	30.5	33.8	31.3

Note: Logger ID locality ID L07 is the nearest residential receiver to the inactive North Cliff site.

4.2 AMVA Project

Unattended noise monitoring was conducted in October and November 2020 to quantify the existing ambient noise levels at sensitive receivers. Noise monitoring was undertaken at several locations, identified in Table 3.

The noise monitoring locations were chosen to be representative of the nearest and most potentially affected sensitive receivers near the site.

From the background noise levels (LA90) the RBLs were determined using the methodology recommended in the Noise Policy for Industry (NPfI). The existing ambient noise levels are presented in Table 3.

Some level of insect noise was noted at some locations during site visits and through aural analysis of the logger data. Accordingly, the minimum RBLs for the day, evening and night time assessment periods, which have been confirmed as not being affected by insect noise via aural analysis, will be used to represent existing background noise levels at sensitive receivers considered in this assessment. These RBL values are highlighted in Table 3 via bold text.

Table 3: Ambient Noise Monitoring Results – AMVA Project

Monitoring Location	Monitoring Period	Time Of Day	Noise Level (dBA)	
			RBL	L _{Aeq,period}
M1 – 345 Menangle Road, Menangle	19/10/2020 – 3/11/2020	Day	43	62
		Evening	41	62
		Night	39	56
	11/11/2020 – 3/11/2020	Day	40	64
		Evening	39	59
		Night	34	55
M2 – 15 Finns Road, Menangle	19/10/2020 – 3/11/2020	Day	41	65
		Evening	42	62
		Night	39	58

	11/11/2020 – 3/11/2020	Day	38	63
		Evening	43	60
		Night	39	59
M3 – 436 Menangle Road, Menangle	19/10/2020 – 3/11/2020	Day	42	64
		Evening	41	60
		Night	40	60
	11/11/2020 – 3/11/2020	Day	40	64
		Evening	42	59
		Night	40	55
M4 – 775 Moreton Park Road, Menangle	19/10/2020 – 3/11/2020	Day	48	65
		Evening	44	62
		Night	39	58

5 Noise Management and Mitigation

There are three main strategies for controlling noise as described in Section 3.4 of the NPfI:

- controlling noise at the source via Best Management Practice (BMP) and/or Best Available Technology Economically Achievable (BATEA);
- controlling transmission of noise by attenuating the noise between the source and receiver through the use of barriers and/or land-use controls; and
- controlling noise at the receiver, for example through double glazing windows, air conditioning or insulation.

Each of these has been considered in the site-specific noise management strategies outlined in the NMP.

The Project Approval requires all feasible and reasonable noise mitigation measures to be considered in order to minimise the construction, operational and road noise generated by Appin Mine. The following sub-sections provide details of the noise management measures that have been implemented across Appin Mine.

Noise management and mitigation measures will be maintained in a proper and efficient condition and operated in a proper and efficient manner as required.

5.1 Appin East Pit Top

Noise control measures currently in place at the Appin East Pit Top (incorporating coal handling and stockpile activities) include:

- engineering control systems on the surface coal bin to ensure that the bin contains a minimum of 10% coal by volume at all times to dampen the noise of coal filling the bin;
- concrete noise barrier at the coal truck loading point under the bin and acoustical skirting on the coal discharge chutes to coal trucks hoppers;
- cladding and doors on the conveyor drive-house;
- use of low tone reversing alarms on select mobile plant;
- use of suitable materials on the elevator conveyor rollers and winder haulage rope rollers to reduce rattling/vibration of roller sets; and

- heavy maintenance activities undertaken within enclosed workshops where practical.

No coal processing activities are undertaken at Appin East.

In addition to the above, surface activities may be modified where necessary to reduce potential for adverse noise impacts on the local residential community. Details of these modifications will be incorporated into future revisions of the NMP where implemented.

5.2 Appin West Pit Top

Noise measures currently in place at the Appin West Pit Top and mitigating site characteristics include:

- use of low tone reversing alarms on select mobile plant;
- limited heavy equipment movements; and
- relatively remote from residential receivers.

No coal handling and/or processing activities are undertaken at Appin West.

In addition to the above, surface activities may be modified where necessary to reduce potential for adverse noise impacts on the local residential community. Details of these modifications will be incorporated into future revisions of the NMP where implemented.

5.3 Ventilation Shaft No. 2 Site

Current noise reduction and mitigation measures for the existing fan installation include:

- routine fan impeller blade cleaning to prevent out-of-balance vibration and noise transmission;
- maintenance and cleaning of fan evase noise attenuators as required;
- routine fan installation inspections and scheduled noise surveys;
- doors on fan house buildings;
- securing of fan installation construction and cladding materials with potential to transmit noise and vibration;
- enclosed motor rooms;
- onsite spot checks of fan noise levels; and
- noise barrier/s.

If the existing fan installations require replacement or upgrade, best practice noise mitigation measures will be adopted for upgraded fan installations and related infrastructure.

5.4 Ventilation Shaft No. 6 Site

The Ventilation Shaft No. 6 site was designed and constructed as a low-noise emission site. Current noise reduction and mitigation measures for the installation include:

- enclosed compressors (compressor units are enclosed within a shield, and also housed within a building);
- fully insulated buildings; including doors, floors, roof etc.,

- fan design requirements included comprehensive noise performance criteria in equipment design, supply and commissioning contracts;
- use of earthen and vegetative barriers;
- discharge ducts have been installed with dampeners; and
- strategically located near noise-generating infrastructure, i.e. highway, railway.

If the existing fan installations require replacement or upgrade, best practice noise mitigation measures will be adopted for upgraded fan installations and related infrastructure.

Noise mitigation will be installed if mobile air compressors are required to be operated at the site.

5.5 Ventilation Shaft No. 7 and 8 Site (AMVA Project)

Noise reduction and mitigation measures for the construction period of the AMVA Project are detailed in the AMVA Project CEMP for construction³ activities.

In accordance with Condition 1 Schedule 4A of the Project Approval, noise generated by the pre-construction and surface construction activities (defined in the Project Approval) will be managed in accordance with the requirements of the Interim Construction Noise Guidelines (ICNG) (DECC, 2009). The real time noise monitoring protocol (outlined in the CEMP) is a key tool used by the AMVA team to inform, monitor and manage construction noise impacts.

Noise generated by shaft sinking and operational activities at the AMVA site will be managed to prevent exceedance of the noise impact assessment criteria set out in Table 2B of condition 2C of Schedule 4 of the Project Approval (replicated in Table 5) at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.

To mitigate noise impacts from shaft sinking activities, ICHPL has invested significant effort in designing and implementing noise mitigation measures into the construction of the shaft headframe buildings, such as:

- Double skin (2 x 0.55 mm Custom Orb steel sheet) internal and external cladding (i.e. four layers of cladding) with minimum 150 mm cavity with 100 mm of acoustic insulation inside the wall cavity.
- Heavy-duty collar and collar doors to contain the blast inside the shaft.
- Underground concrete encased shaft ventilation system will be blocked at the shaft and at the outlet to the environment during each night-time blast. The ventilation shaft is blocked by a series of acoustic doors separated by the fan room – effectively creating an airlock between the Vent Shaft and the environment.

The headframe buildings are expected to provide significant attenuation of noise levels from blasting and shaft sinking activities with the attenuation expected to exceed 30 dB.

Noise reduction and mitigation measures planned for the ventilation shafts during operations include:

- Discharge bends at 90 degrees from horizontal and outlets at eight (8) m height to meet noise level requirements.

³ As defined in the Definitions in the Project Approval.

- Ducts containing splitters, reactive dissipative and pure reactive discharge diffusers.
- Ducting to include lagging of the inlet ducting, discharge diffuser, fan casting and two stage silencer arrangement.
- Weatherproof enclosures for motor, fan and control equipment.

In accordance with Condition 5 (e) of Schedule 4 of the Project Approval, SoundIn (2024) investigated alternatives to the use and implementation of audible warning alarms at the AMVA Site.

While designs have not been finalised, they concluded that any winder alarm may be oriented and adjusted such that the sound power level would not cause sleep disturbance and comply with relevant criteria at receivers.

The AMVA Project noise assessment predicted noise levels from the winder/cage alarm would be well below the maximum noise trigger levels at all receivers and be unlikely to cause sleep disturbance impacts.

5.6 Appin North Pit Top

The activities at the Appin North Pit Top with the potential to generate local noise are limited to mine supplies and materials handling, workshop machinery maintenance and mine related traffic. There are no coal handling activities undertaken at this site.

The site is relatively remote from residential receivers with no noise related complaints received in relation to the activities undertaken at this site to date.

Noise mitigation and reduction measures will be addressed in a timely and responsible manner if required to minimise adverse noise impacts on the local community.

5.7 WCCPP and CWEA

The main activities undertaken at the WCCPP are coal processing, coal handling and stockpiling, coal products transport and receipt by road, mine ventilation, emplacement area construction and coal wash emplacement.

This site is relatively remote from residential receivers and has limited potential for adverse noise impacts on the local community. No noise related complaints have been received in relation to the activities undertaken at this site to date.

Coal wash emplacement will continue in a northerly direction towards the Appin residential area over time. All other activities at site are undertaken at fixed localities. Noise mitigation and reduction measures will be addressed if required in a timely and responsible manner to minimise adverse noise impacts on the local community.

Current noise reduction measures utilised at the WCCPP include:

- main fan discharge noise attenuators;
- enclosed coal winding and discharge tower;
- enclosed motor rooms and pump houses;
- enclosed coal processing plant;
- enclosed or semi-enclosed conveyors;
- conventional materials handling equipment and vehicles; and
- coal transport (on public roads) by maintained and road registered vehicles.

5.8 Construction Activities

Noise mitigation and management strategies will be developed for construction activities which have the potential for adverse noise impacts.

The noise strategy will generally address:

- noise management measures;
- construction times and noise limits;
- other construction constraints and limitations;
- traffic management protocols where required; and
- responsibilities for noise monitoring and review.

These measures will be incorporated into the relevant CEMP for the project as required.

5.9 Gas Drainage Activities

Noise issues and criteria associated with gas drainage projects are managed under the Gas Drainage Management Plan and in accordance with the project specific approval conditions. Typical noise mitigation measures may include but not be limited to:

- orientating equipment so that the noisiest side faces away from sensitive receivers;
- using noise walls erected as close as possible to noisy equipment or drill rigs;
- using noise source controls, such as the use of residential class mufflers, to reduce noise from all plant and equipment including cranes, excavators and trucks;
- using spotters, closed circuit television monitors, “smart” reversing alarms, or “quacker” type reversing alarms in place of traditional reversing alarms in sensitive areas;
- selecting plant and equipment based on noise emission levels, including drill rigs;
- optimising the schedule of truck deliveries to daytime periods;
- using alternative construction methods to minimise noise levels; and
- providing alternative arrangements for temporarily affected residents, such as temporary relocation.

5.10 Traffic Noise

Current noise reduction and mitigation measures for road traffic noise include:

- heavy vehicle deliveries to be scheduled during daylight hours, where practicable;
- establishment of heavy vehicle movement times to reduce impact on community amenity (in accordance with the AMVA Drivers’ Code of Conduct (DCOC) and Port Kembla Coal Terminal DCOC);
- employee briefings and awareness communications as required on nuisance noise prevention;
- in vehicle monitoring of driver behaviour (in selected site and heavy vehicles);
- encouragement of car-pooling for site personnel (see Section 5.1.3 of Appin Mine Traffic Management Plan); and

- addressing other matters that may lead to adverse traffic noise impacts on the local community such as driver behaviour, road conditions, project scheduling, worker place-of-work transfer arrangements, which may include use of buses to transport large number of workers between sites etc.

A commercial agreement is in place with a road haulage company for coal haulage on public roads by truck to ensure the main haulage fleet operating on behalf of ICHPL attains and maintains best practices in both equipment and operations.

Relevant local government authorities and Transport for NSW (TfNSW) will be promptly notified as required regarding noticeable deterioration in road pavement that may increase noise generation.

Further information on traffic management is provided in the Appin Mine Traffic Management Plan.

5.11 Noise Reduction Program

In accordance with the commitments in the EA, ICHPL developed and implemented a noise reduction program to identify additional reasonable and feasible noise mitigation measures for consideration over the life of Appin Mine. The reasonable and feasible noise mitigation measures that have been implemented are outlined in Section 5.

The outcomes from the Noise Impact Assessment identified that existing noise levels at the nearest residences were typical of suburban and semi-rural areas. Short term attended monitoring at the times of deployment and retrieval of the loggers indicated no significant contribution from industrial sources, with the exception of the colliery cottages located on site at the Appin Pit Top whereby operations at the pit top were audible. The colliery cottages are owned by ICHPL.

The success of the noise mitigation and management measures will be assessed on an ongoing basis through the monitoring program (See Section 6).

Additional noise reduction and mitigation measures that may be adopted where impacts to the community have been identified and existing noise mitigation and management measures have been deemed to be ineffective, may include:

- machinery silencing with appropriate technological solutions;
- acoustic dampening and attenuation;
- noise barriers and screening;
- process modification; and
- activity timing adjustments.

The suitability and effectiveness of each of these options will be assessed on a site-specific basis.

6 Monitoring Program

6.1 Noise Impact Assessment Criteria

6.1.1 Operational Noise

The noise generated by Appin Mine is not to exceed the criteria in Condition 2 of Schedule 4 (Table 2) of the Project Approval at any residence on privately-owned land or on more than 25% of any privately owned land. The noise criteria are provided in Table 4.⁴

The noise generated by operational activities at the AMVA Project site is not to exceed the criteria in Condition 2C of Schedule 4 (Table 2B) of the Project Approval at any residence on privately-owned land or on more than 25% of any privately owned land. The noise criteria are provided in Table 5.

⁴ Condition 1 of Schedule 4 has been superseded by Condition 2 of Schedule 4 and therefore the criteria in Condition 1 have not been included in the NMP.

Table 4: Noise Criteria dB(A) – Appin Mine

Location		Day	Evening	Night	
Area	Receiver Number	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (1 min)
Appin West Receivers south- west of Appin West	1-7, 9-11, 13, 184, 188-189	39	39	35	49
Appin West receivers near Hume Highway	185-187, 190	35	35	35	53
All other Appin West Receivers	14, 26	45	45	35	53
	15-25, 27-48, 50-56	43	43	35	
Appin No. 3 Receivers	58, 67, 71, 72	41	41	41	49
	68, 74, 75	40	40	40	
	69, 70, 76	39	39	39	
	217, 218, 233, 279- 282	35	35	35	
Appin No. 1 and No. 2 Receivers	82, 91, 216	42	42	42	50
	83, 85	41	41	41	
	78, 84, 86-90, 199	40	40	40	
	212-215, 226, 228- 230, 232, 234, 235	35	35	35	
Appin Township	136, 137, 139, 142, 143	44	44	44	52
	135	43	43	43	
	Any other privately- owned property	42	42	42	
Douglas Park	All privately-owned property	45	45	39	49
All other privately-owned land (excluding receivers in Table 3)		35	35	35	45

Table 5: Noise Criteria dB(A) – AMVA Project⁵

Location	Day	Evening	Night	
	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (1 min)
All privately owned residences ⁶	43	43	39	54

The criteria in Table 4 and Table 5 do not apply if:

- there is a written agreement with the relevant landowner to exceed the criteria; and
- the Department has been advised in writing of the terms of this agreement.

6.1.2 Construction Noise

6.1.2.1 Appin East Mine Safety Gas Management Project

Condition 2A of Schedule 4 of the Project Approval requires that noise generated by construction activities relating to the Appin East Mine Safety Gas Management Project is managed in accordance with the requirements of the ICNG.

Construction of the Appin East Mine Safety Gas Management Project has been completed and this condition is no longer relevant.

6.1.2.2 Ventilation Shaft No. 6

Condition 2B of Schedule 4 of the Project Approval requires that the construction noise generated by the Appin Ventilation Shaft No. 6 project, does not exceed the noise impact assessment criteria set out in Table 2A at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.

Construction of Ventilation Shaft No. 6 has been completed and this condition is no longer relevant.

6.1.2.3 AMVA Project

In accordance with Condition 1 Schedule 4A of the Project Approval, noise generated by the pre-construction and surface construction activities (defined in the Project Approval) will be managed in accordance with the requirements of the Interim Construction Noise Guidelines (ICNG) (DECC, 2009). The real time noise monitoring protocol (outlined in the CEMP) is a key tool used by the AMVA team to inform, monitor and manage construction noise impacts.

6.2 Monitoring Program Overview

The operational noise monitoring program has been developed to comply with Condition 5(f) of Schedule 4 of the Project Approval. Noise monitoring will be carried out in accordance with requirements as listed in Section 3 and the Noise Monitoring Procedure.

⁵ Noise generated by the AMVA Project during the operational phase is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NPfI.

⁶ To identify the privately owned residences referred to in Table 5 (Table 2B of the Project Approval), refer to plan titled “Appin Mine Ventilation and Access Project – Sensitive Receivers” in Appendix 5 of the Project Approval.

The objectives of the noise monitoring program are to:

- measure noise levels experienced by nearby residential receivers;
- assess the effectiveness of the existing noise controls;
- measure project related noise levels;
- detect any adverse changes in operational noise; and
- acquire sufficient and reliable data to inform the assessment of compliance with noise criteria (as specified in Table 4 and Table 5 of the NMP).

The location of sensitive noise receivers in the vicinity of Appin Mine are shown in Appendix 5 of the Project Approval. Noise monitoring locations near Appin Mine used to determine compliance are shown in Plan 2, Plan 3, Plan 4 and Plan 5.

6.3 Assessment Criteria to Inform Compliance

Assessment criteria have been established for each monitoring location, as outlined in Table 6. The criteria enable an assessment of compliance to be made against the noise levels outlined in Table 4 and Table 5. The site-specific assessment criteria were developed using the following methodology:

- adoption of the relevant noise criteria as outlined in the Project Approval (refer to Table 4 and Table 5); and
- where relevant, adjusting the noise levels (to take into account monitoring location versus receivers) using the noise contours from the Noise Impact Assessment.

Compliance with noise criteria and consent conditions will be determined in accordance with the EPA Industrial Noise Policy (INP) Section 11⁷. In general this states that:

A development will be deemed to be in non-compliance with a noise consent or licence condition if the monitored noise level is more than 2 dB above the statutory noise limit specified in the consent or licence condition.

This section also confirms that a noise exceedance would have to be a sustained emission to be a breach of the Project Approval condition. Furthermore, this section also discusses the effects of non-standard weather effects which may increase noise levels:

in which case the development is not considered to be in noncompliance with its consent or licence condition.

⁷ Noise generated by operations at AE-NS4, AE-NS5, AW-NS4, AW-NS5 and VS6 Central are to be measured in accordance with the relevant procedures and exemptions of the INP and at sites associated with Vent Shaft 7/8 (during the operational phase) in accordance with the NPfl.

Table 6: Attended Noise Survey Points and Assessment Criteria

ID	Receivers	Assessment Criteria		Locality	Function
		L _{Aeq} (15 min)	L _{A1} (1 min)		
AE-NS4 ⁸	Appin township (Receiver 135)	43 (day, evening and night)	52 (night)	Located between Illawarra and Toggarai St North of Pit Top behind receiver 137	Noise levels from Appin East Pit Top
AE-NS5	Appin No. 1 and No. 2 receivers (Receiver 83 and 85)	41 (day, evening and night)	50 (night)	Northamptondale Road between No.2 Shaft site and power plant site and the nearest residential receivers to the South	Noise levels between Ventilation Shaft No. 2 and the nearest residential receivers
AW-NS5	All other Appin West receivers (Receiver 27 and 28)	43 (day and evening) 35 (night)	53 (night)	Between nearest residential receivers on Douglas Park Drive and the Appin West Pit Top	Noise levels at Appin West property boundary; noise levels between Appin West and nearest residential receivers on Douglas Park Drive
AW-NS4	Appin West receivers South-west of Appin West (Receivers 1, 2 and 3)	39 (day and evening) 35 (night)	49 (night)	Ashwood Road, South-west of Appin West Pit Top	Noise levels for Appin West receivers south-west of Appin West Receivers near Hume Highway
VS6 Central	Douglas Park Township	45 (day, evening) 39 (night)	49 (night)	Corner Duggan/ Hopson Street (at rear of property)	Noise Levels from Ventilation Shaft No. 6
M1	Sensitive receivers	43 (day, evening) 39 (night)	54 (night)	Corner of Finns and Menangle Road	Noise Levels from Ventilation Shaft No. 7/8
M2				297 Menangle Road	
M3				430 Menangle Road	

⁸ A supplementary noise monitoring location is associated with AE-NS4 due to road traffic noise from Appin Road dominating noise levels at this location. AE-NS4 Supplemental is located halfway along Illawarra Street between Colliery Road and Toggerai Street. The correction factor is -3dBA.

6.4 Monitoring Program

6.4.1 Continuous, real-time monitoring

Continuous, real-time monitoring will be conducted at various locations around Appin Mine as required (at least annually) to evaluate noise levels. The system will be deployed for a period long enough to provide a representative sample. Real-time monitoring may be used for investigations, noise complaint review or where changes have been made to plant and equipment or noise mitigation measures.

As the real-time noise monitoring unit is non-directional (and unattended), it cannot be directly used to determine compliance with noise criteria. It can, however, identify variations in noise levels which can be related to operational conditions and evaluate the effectiveness of noise mitigation measures.

Attended monitoring (Section 6.4.2) will be used to assess compliance against the criteria outlined in Table 4 and Table 5.⁹

6.4.2 Attended monitoring

Attended monitoring will be undertaken at a minimum frequency of six (6) monthly at the nominated monitoring locations (see Table 6) to confirm compliance. $L_{Aeq}(15 \text{ min})$ monitoring will be undertaken during the day, evening and night-time periods at each location and the results assessed against the criteria for that location in Table 6. Sleep disturbance events shall be evaluated for compliance during the night-time surveys by measuring $L_{A1}(1 \text{ min})$ at all locations.

Meteorological data will be used when evaluating noise data. The Campbelltown Bureau of Meteorology station is used which complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline.

Real-time measurement of temperature lapse rate will be undertaken at the WCCPP site as the vertical height differential required is provided by shaft tower infrastructure height at that locality and is sufficiently close to Appin to be representative of all sites. The direct line of sight distance between Appin East and WCCPP is approximately three (3) kilometres.

All noise measuring equipment should be field calibrated before and after each set of measurements with a calibrator with current NATA certification. All noise measuring equipment should be Type 1 that is in accordance with standard ASIEC61672 and have current NATA certification to ensure the accuracy and integrity of data recorded and used for noise assessments and compliance evaluation.

6.4.3 Supplementary monitoring

Where required, supplementary noise monitoring in the form of spot checks, surveys and audits will be undertaken to ensure the various Appin Mine activities (whether existing or new) do not generate unacceptable noise levels affecting the amenity of the nearby community or in exceedance of the noise criteria.

ICHPL will review low frequency noise by comparing 'C' and 'A' weighted noise levels for operations and equipment in accordance with EPA noise policy. Focus areas will include mine ventilation fan installations, large electric motor drive houses and engine rooms located on the surface. Where 'C' minus 'A' weighted differences exceed 15 dB, then in accordance with EPA's transitional arrangements for Industrial Noise Policy assessments

⁹ See Section 6.4.5 (AMVA Project).

following the introduction of the NPfl, further review will be undertaken of the “Z” weighted one-third octave bands between 10 Hz and 160 Hz to confirm if low frequency penalties are to be applied to the measured noise level. Where noise levels exceed criteria, then a review of feasible and reasonable mitigation measures, preferentially at the source and secondly at residential receiver, will be undertaken as required.

6.4.4 Traffic Noise Monitoring

Traffic noise monitoring will be undertaken if complaints are received in relation to road noise that can be attributed to Appin Mine activities and where there may be an ongoing impact.¹⁰ Attended noise monitoring will be undertaken in the vicinity of the complainant’s residence, or using a representative sample of residents along the affected length of road, to measure road noise, and the influence of road transport associated with Appin Mine. The attended monitoring may also be supplemented with real time monitoring.

Traffic related complaints will be addressed as detailed in Section 7.1.

6.4.5 AMVA Project

The construction of the AMVA Project is being managed in accordance with the AMVA Project CEMP. Specific noise monitoring protocols are included in this document which include both attended and real-time monitoring measures.

Attended noise monitoring is being undertaken as required in accordance with the relevant Australian Standards and EPA approved methods for sampling including:

- AS1055-1997 Acoustics – Description and Measurement of Environment Noise – General Procedures.
- AS IEC 61672.1 – 2004 – Electroacoustics – Sound Level Meters, Class 1 sound level meter and calibrator.

All acoustic instrumentation used for attended monitoring shall comply with the requirements of AS 1259.2-1990 – Sound Level Meters and will have current National Association of Testing Authorities (Australia) (NATA) or manufacturer calibration certificates.

Three (3) SiteHive monitors have been installed at the site to monitor noise levels during the construction period (see Plan 5). These locations are located in the direction of the receivers at the relevant site boundary.

The units are used to:

- identify variations in noise levels which can be related to construction;
- evaluate the effectiveness of noise mitigation measures;
- monitor noise generated at the AMVA site;
- make predictions to determine when impacts are approaching the prescribed NML or criteria; and
- manage construction activities on site to comply with noise criteria at receiver locations.

Daily reports are received from each monitoring station with noise levels over the day and alerts issued when trigger levels are reached.

¹⁰ Attended monitoring will not be undertaken where there is an isolated event that has been corrected.

Attended noise monitoring is undertaken quarterly at three (3) locations in the vicinity of the AMVA Project site (refer to Table 6).

Data from the monitoring program at the AMVA Project site will be used to investigate complaints or events.

A noise monitoring location for the operational period (post completion of construction) will be designated prior to the commencement of operations based on observations and assessment during the construction period.

Blast (vibration and airblast overpressure) monitoring is undertaken however it is not required to be included in the NMP as it will only be undertaken during the construction period. It is described in detail in the AMVA Project CEMP.

6.4.6 Training and Competency

The monitoring will be undertaken by suitably trained and competent environmental staff or a noise consultant.

7 Complaints and Non-compliance Management

7.1 Complaints and Dispute Resolution

GM³ has a 24 hour, free community call line (1800 102 210) and email address (community@gm-3.com.au) which is displayed at Project and Mine Sites, and included in newsletters, letters and other correspondence. The call line is for all complaints and general enquiries regarding environmental or community issues associated with ICHPL's operations.

Community complaints and enquiries may also be received in person by any employee of ICHPL, with details to be immediately shared with the relevant operational personnel for investigation. All noise complaints received in relation to Appin Mine will be managed in accordance with the Handling Community Complaints, Enquiries and Disputes Procedure.

Upon receipt of a community complaint, preliminary investigations will commence as soon as practicable to determine the likely cause of the complaint. An initial acknowledgement will be provided to the complainant within 24 hours of the complaint being made, with a follow up response being provided as soon as practicable once a more detailed investigation is complete.

Supplementary noise monitoring surveys will also be undertaken as necessary and until satisfactory resolution of the issue.

Where project noise or vibration related issues are raised by an affected landowner or community member and the affected landowner or community member requests feedback in relation the issue raised, the landowner or community member will be provided with the investigation results and proposed course of corrective action.

A summary of all complaints received during the reporting year will be provided as part of the Annual Review. A log of complaints is also maintained on the GM³ website at: [link](#).

7.2 Events, Non-Compliance, Corrective Action and Preventative Action

Events, non-compliances, corrective actions and preventative actions are managed in accordance with the Reporting and Investigation Standard and Environmental Compliance/Conformance Assessment and Reporting Procedure. These procedures,

which relate to ICHPL operations, detail the processes to be utilised with respect to event and hazard reporting, investigation and corrective action identification. The key elements of the process include:

- identification of events, non-conformances and/or non-compliances:
- recording of the event, non-conformance and/or non-compliance in the event management system (G360);
- investigation/evaluation of the event, non-conformance and/or non-compliance to determine specific corrective and preventative actions;
- assigning corrective and preventative actions to responsible persons in G360; and
- review of corrective actions to ensure the status and effectiveness of the actions.

Incidents, exceedances and non-compliances with noise criteria will be reported to all relevant agencies as detailed in Section 8.

7.2.1 Protocol for Assessing Compliance

An exceedance of noise criteria will be confirmed if at the time of the exceedance:

- operational noise received by residential receivers exceeds the criteria identified in Table 6 (as applicable); and
- the exceedance is validated by analysis and assessment of monitoring data (as measured in accordance with the INP or NPfl as applicable); and
- RBL noise is not above the noise criteria; and
- the exceedance in noise criteria is not attributable to some other source (e.g. meteorological event); and
- no landholder agreement is in place to allow the exceedance; and
- the exceedance is determined to be a sustained emission¹¹; and
- no other noise criteria exemptions apply.

Should noise or vibration complaints be received, or exceedances of the project related noise criteria be identified, supplementary targeted noise monitoring may be necessary to inform the investigation of noise emissions, assessment of data, identification of causes and to inform the design of improved noise control measures required.

Where noise monitoring has recorded a noise criteria exceedance and the exceedance is confirmed as being Appin Mine operations related, the reason for the exceedance will be recorded.

Note that for the determination of compliance, the INP states in Section 11.1.3:

A development will be deemed to be in non-compliance with noise consent or licence condition if the monitored noise level is more than 2 dB above the statutory noise limit specified in the consent or licence condition.

Exceedances and non-compliances are reported as an event in G360.

¹¹ Not applicable to AMVA Project Construction activities and Ventilation Shaft 7/8 operation.

7.2.2 Adaptive Management

In accordance with Condition 3 of Schedule 6 of the Project Approval, where any exceedance of the criteria in Condition 2 of Schedule 4 has occurred and has been assessed to be non-compliant as detailed in Section 7.2.1, ICHPL is required to:

- a) take all reasonable and feasible steps to ensure the exceedance ceases and does not recur;
- b) consider all reasonable and feasible options for remediation and submit a report to the Department describing these options and any preferred remediation measures or other course of action; and
- c) implement remediation measures as directed by the Planning Secretary.

Monitoring results will be reviewed when received and as part of the Annual Review process to identify continual improvement opportunities. Improvement opportunities may also be identified during internal and external audits. These improvement opportunities will be discussed with relevant site personnel and raised through senior leadership team meetings as appropriate and where appropriate, will be documented in the Environment Improvement Plan or actions assigned in G360.

7.3 Entitlements of Noise Impacted Landowners and Residents

7.3.1 Operational Noise

In accordance with Condition 3 of Schedule 4 of the Project Approval, where noise criteria have been assessed to be non-compliant as detailed in Section 7.2.1 and upon receiving a written request from the landowner or resident (as listed as a receiver in Table 3 in the Project Approval), ICHPL will implement reasonable and feasible noise mitigation measures at the residence in consultation with the landowner.

Noise mitigation measures are available upon written request from the owner of any residence listed in Table 7.

Table 7: Land where noise mitigation measures are available on request

Receiver Number
57, 60, 63, 64, 66, 79, 80, 138, 140, 144, 165

If within three (3) months of receiving a written request from any entitled landowner or resident, ICHPL and the landowner or resident cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.

Within three (3) months of receiving a written request from a landowner with land acquisition rights, the acquisition procedures detailed in Conditions 4 and 5 of Schedule 5 of the Project Approval will apply.

7.3.2 Traffic Noise

In accordance with Condition 6 of Schedule 4 of the Project Approval, if road traffic noise generated by activities associated with Appin Mine (including employee vehicles) exceeds the NSW criteria for road traffic noise by more than 2 dB(A) on Douglas Park Drive or Macarthur Road at any residence on privately-owned land as assessed in Section 7.2.1, and upon receiving a written request from the landowner, ICHPL will implement reasonable and feasible noise mitigation measures at the residence in consultation with the landowner.

If within three (3) months of receiving a written request from any entitled landowner or resident, ICHPL and the landowner or resident cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.

7.4 Independent Review

If the owner of privately-owned lands considers that Appin Mine is exceeding the noise criteria in Condition 2 of Schedule 4, they are entitled to request, in writing, an Independent Review.

In accordance with Condition 2 and Condition 3 of Schedule 5 the Project Approval, ICHPL will comply with the requirements of the Planning Secretary and commission an Independent Review where the Planning Secretary is satisfied that an Independent Review is warranted.

8 Reporting and Review

8.1 Reporting

8.1.1 Annual Review

ICHPL will report on the performance of the NMP in the Annual Review.

The Annual Review will include:

- noise monitoring results and comparison to relevant statutory requirements, limits or performance measures/criteria, requirements of the NMP, monitoring results of previous years and relevant predictions in the EA;
- identification of trends in monitoring data over the life of the project;
- identification of any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies;
- identification of any non-compliance over the past financial year, and describe what actions were (or are being) taken to achieve compliance;
- detail of noise related complaints and management/mitigation measures undertaken;
- management/mitigation measures undertaken in the event of any confirmed exceedance of noise criteria;
- review of the performance of management/mitigation measures and the monitoring program, and
- a description of what measures will be implemented over the next financial year to improve the environmental performance of the project (if required).

The Annual Review is prepared in accordance with the requirement of Condition 4 of Schedule 6 of the Project Approval and is to be submitted to relevant agencies in September each year. Annual Reviews are made available to the general public via the GM³ website: [link](#).

8.1.2 Public Reporting of Results (via website)

A summary of the attended noise monitoring results, including details of exceedances and non-compliances (as determined in accordance with the protocol for assessing compliance as described in 7.2.1 of the NMP), will be provided on the GM³ website in the 14 day report at: [link](#).

8.2 Incident, Non-compliance and Exceedance Notifications

8.2.1 Notification of Incidents – Government Agencies

In accordance with Condition 7 of Schedule 6 of the Project Approval, the Planning Secretary is to be notified via the Major Projects portal within 24 hours after becoming aware of a noise related incident¹². In accordance with Condition 7AA of Schedule 6, a subsequent incident report is to be provided in accordance with the requirements set out in Appendix 7 within seven (7) days of the initial notification. Notification to the EPA will also be undertaken in accordance with the reporting requirements of the Pollution Incident Response Management Plan (if applicable) or via email/phone.

8.2.2 Notification of Non-compliances – Government Agencies

In accordance with Condition 7A of Schedule 6 of the Project Approval, the Planning Secretary must be notified in writing via the Major Projects portal within seven (7) days after becoming aware of a non-compliance¹³.

The EPA is also to be notified of the non-compliance (via email).

8.2.3 Notification of Noise Criteria Exceedances – Landowners

Where project noise related issues are raised by an affected landowner or community member and the affected landowner or community member requests feedback in relation the noise issue raised, the landowner or community member will be provided with the investigation results as requested.

Condition 1 of Schedule 5 of the Project Approval requires the notification of affected landowners if an exceedance is recorded. ICHPL will notify exceedances of noise impact assessment criteria (as stated in Section 6.3) where an exceedance has been confirmed as per the protocol in Section 7.2.1. Where an exceedance of criteria has been confirmed, the affected landowner(s) will be notified in writing of the exceedance as soon as practicable and no longer than seven (7) days following confirmation of the exceedance. Notifications of exceedances is to be undertaken prior to inclusion in the 14-day report.

Regular monitoring results will be provided to each affected landowner until compliance with criteria is achieved. The notifications will be sent out to the landowners as identified in Table 8.

¹² The definition of an incident in the Project Approval is “An occurrence or set of circumstances that causes or threatens to cause material harm to the environment, and as a consequence of that environmental harm, may cause harm to the health and safety of human beings, and which may or may not be or cause a non-compliance”.

¹³ A non-compliance that has been notified as an incident does not need to also be notified as a non-compliance.

Table 8: Landholder Notifications

Noise Monitoring Location		Receivers to be notified
ID	Description	
AE-NS4	Appin township	136, 137, 139, 142, 143, 135
AE-NS5	Appin No. 1 and No. 2 receivers	82, 91, 216, 83, 85, 78, 80, 79, 84, 86-90
AW-NS5	All other Appin West receivers	14, 15-25, 26, 27-48
AW-NS4	Appin West receivers South-west of Appin West	1-7, 9-11, 184, 188
VS6 Central	Douglas Park Township	Residents in Moreton Street and Duggan Street
VS 7/8	Sensitive Receivers	R2, R16, R3, R4, R5, R6, R7 ¹⁴

Additional targeted noise monitoring and analysis at the affected landowners' premises may be required to verify noise criteria exceedances attributable to Appin Mine.

The CCC and MAP will also be advised of exceedances of criteria at the next available meeting.

8.3 Review of NMP

In accordance with Condition 5 of Schedule 6 of the Project Approval, the NMP will be reviewed, and if necessary revised, within three (3) months, of:

- the submission of an annual review;
- the submission of an incident report;
- the submission of an Independent Environmental Audit report; and
- any modification to the conditions of the Project Approval (unless the conditions require otherwise); or
- a direction of the Planning Secretary under Condition 4 of Schedule 2.

Outcomes from each review will be documented in the Management Plan Review Log (unless the NMP is being updated as part of the review). The NMP will only be revised where a material change to site operations or environmental management has occurred, or in accordance with the review period on the NMP. Administrative or descriptive changes do not constitute a material change.

Where a review triggers a revision of the NMP, the NMP will be revised and submitted to the Planning Secretary for approval.

Once approved, the NMP will be uploaded to the GM³ website.

The approved NMP will be implemented.

¹⁴ Note that these notifications will be implemented following the commencement of operations, as noise limits apply to operational noise. Notifications will be undertaken during the construction phase as detailed in the AMVA Project CEMP.

8.4 Audits

8.4.1 Independent Environmental Audit

In accordance with Condition 9 of Schedule 6 of the Project Approval, an Independent Environmental Audit (IEA) shall be commissioned every three (3) years, that will include a review of the NMP. The report, together with the response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations, is required to be submitted to the Planning Secretary within six (6) weeks of completion of the audit, in accordance with Condition 10 of Schedule 6.

The IEA is also undertaken to comply with Condition 18 of EPBC Approval 2010/5350. A copy of the report is also submitted to the Commonwealth Department of Agriculture, Water and Climate Change, Energy the Environment and Water to satisfy Condition 18 (g).

IEAs have been conducted every three (3) years since 2013, with the last IEA being conducted in 2022, with the next IEA to be conducted in 2025. Recommendations from the IEA will be incorporated into the AQMP where appropriate.

The audit is to be conducted and carried out in accordance with the Department's Independent Audit Post Approval Requirements.

8.4.2 ISO 14001

As part of the ISO 14001 certification, ICHPL maintains an environmental auditing and governance program across all of its operational sites. The program, which includes the use of competent internal and accredited external auditors, is an integral part of maintaining certification under the ISO 14001 standard.

External surveillance audits are undertaken on an annual basis, with recertification audits undertaken every three (3) years.

Internal Governance Reviews of the NMP are nominally undertaken on an annual basis.

9 Summary of Commitments

Commitment	Section in NMP
ICHPL will provide personnel and resources to implement the NMP.	Section 2
ICHPL will comply with the conditions of the approval and relevant legislation.	Section 3
ICHPL will implement and maintain reasonable and feasible noise mitigation measures across all sites to comply with noise criteria and minimise the impact on the community.	Section 5
ICHPL will implement site specific noise mitigation measures for construction and gas drainage activities where required.	Section 5.8 and 5.9
ICHPL will implement noise mitigation measures for road traffic noise.	Section 5.10
ICHPL will notify RMS regarding noticeable deterioration in road pavement on roads utilised for coal haulage.	Section 5.10
ICHPL will implement additional noise mitigation measures where impacts to the community have been identified and existing noise mitigation and management measures have been deemed to be ineffective.	Section 5.11 and 7.2.2
ICHPL will implement the noise monitoring program.	Section 6.4
ICHPL will implement reasonable and feasible noise mitigation measures at residences where noise criteria are exceeded.	Section 7.3
ICHPL will commission an Independent Review where requested by the Secretary.	Section 7.4
ICHPL will report and investigate complaints, incidents and exceedances of limits as required, and identify and implement corrective actions.	Section 7.1 and 7.2
ICHPL will undertake reporting as required.	Section 8.1
ICHPL will provide notifications as required.	Section 8.2
ICHPL will review the NMP as required.	Section 8.3
ICHPL will undertake audits as required.	Section 8.4

10 Acronyms/Definitions

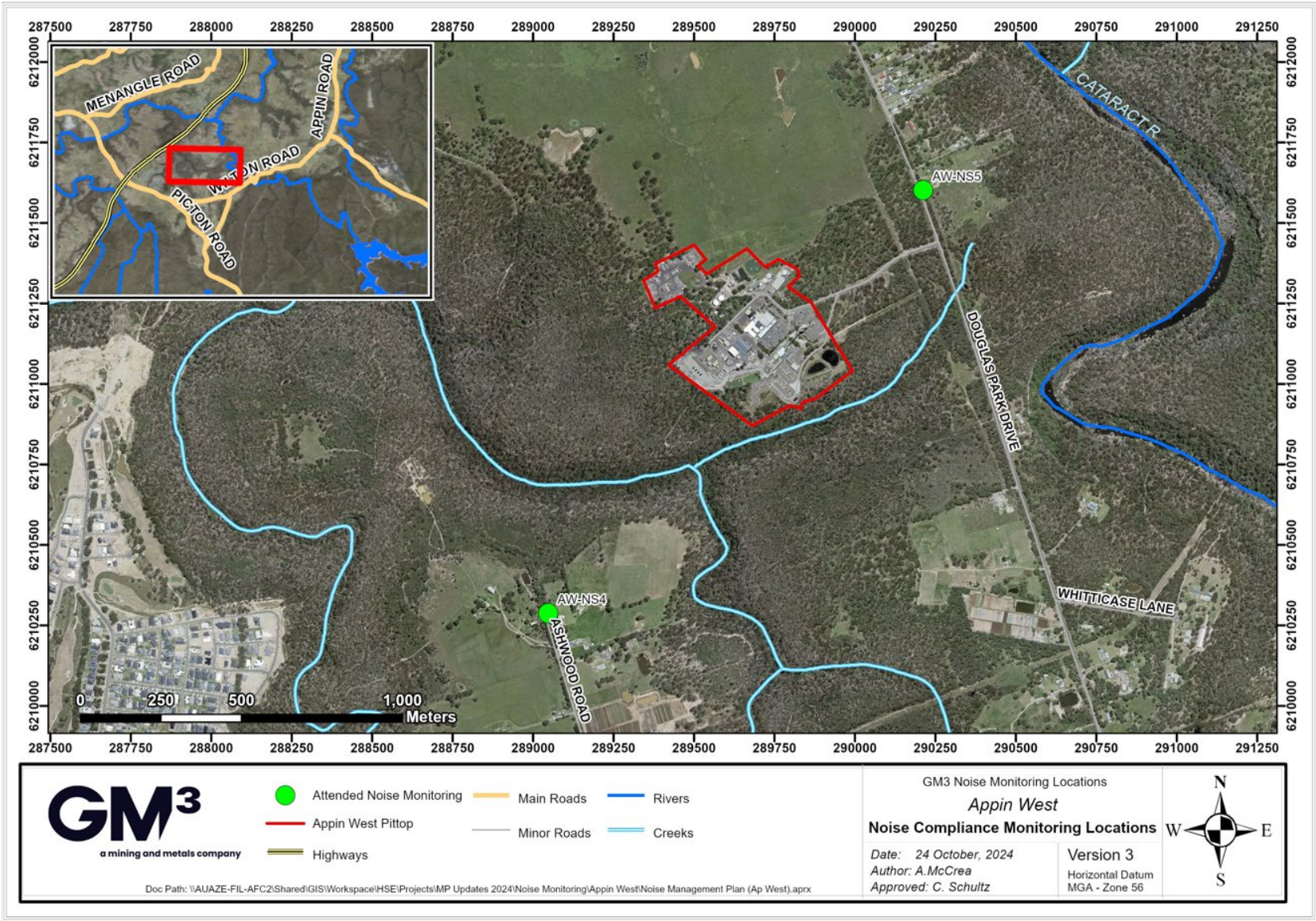
Term	Definition
AMVA	Appin Mine Ventilation and Access Project
BATEA	Best Available Technology Economically Achievable
BMP	Best Management Practice
BSO	Bulli Seam Operations
CCC	Community Consultative Committee
CEMP	Construction Environmental Management Plan
Construction	The demolition of buildings or works, carrying out of works and erection of buildings covered by this approval, including the construction of fans, evase(s), ancillary site infrastructure, mine access infrastructure (winder, headframe, etc) and shaft sinking activities at the AMVA Site, but not including AMVA Site early works
CWEA	Coal Wash Emplacement Area
Department	Department of Planning, Housing and Infrastructure (DPHI), previously • Department of Planning and Environment (DPE) • Department of Planning, Infrastructure and Environment (DPIE) • Department of Planning and Infrastructure (DoPI)
EA	Environmental Assessment
EMS	Environmental Management System
EPA	Environment Protection Authority
<i>EP&A Act</i>	<i>Environmental Planning and Assessment Act</i>
EPL	Environment Protection Licence
EQulS	Environmental Quality Information System
G360	Event reporting system
ICHPL	Illawarra Coal Holdings Pty Ltd
ICNG	Interim Construction Noise Guideline
IEA	Independent Environmental Audit
INP	Industrial Noise Policy

MAP	Menangle Advisory Panel
NMP	Noise Management Plan
NPfI	Noise Policy for Industry
PKCT	Port Kembla Coal Terminal
RMS	Roads and Maritime Services
WCCPP	West Cliff Coal Preparation Plant
WSC	Wollondilly Shire Council

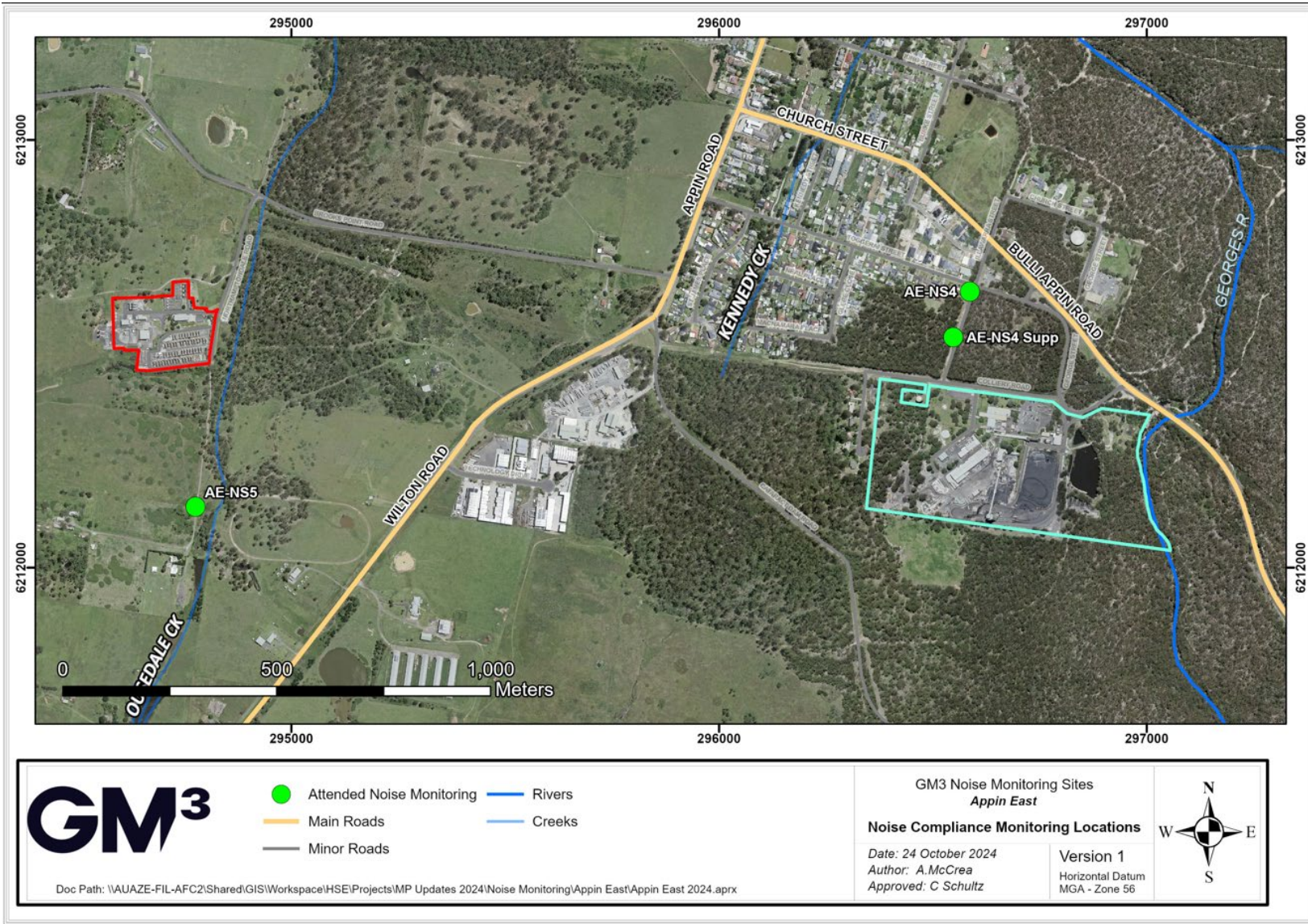
11 References

- NSW Industrial Noise Policy (2000)
- Noise Policy for Industry (2017)
- NSW Road Noise Policy (2011)
- Interim Construction Noise Guideline (2009)
- Project Approval 08_0150, as modified
- EPL 2504
- BSO Project Environmental Assessment
- BSO Noise Impact Assessment – Wilkinson Murray (July 2009)
- AMVA Modification Report (link)
- AMVA Project Construction Environmental Management Plan (CEMP) (APNMP0131)
- Gas Drainage Management Plan (APNMP0114)
- AMVA Drivers' Code of Conduct (APNSTD0313)
- Port Kembla Coal Terminal Drivers' Code of Conduct
- Appin Mine Traffic Management Plan (APNMP0128)
- Noise Monitoring Procedure (IMCP0336)
- Community Complaints Procedure (IMCP0112)
- Reporting and Investigation Standard (IMCSTD0069)
- Environmental Compliance/Conformance Assessment and Reporting Procedure (IMCP0186)
- ISO 14001:2015 Environmental Management Systems Standard

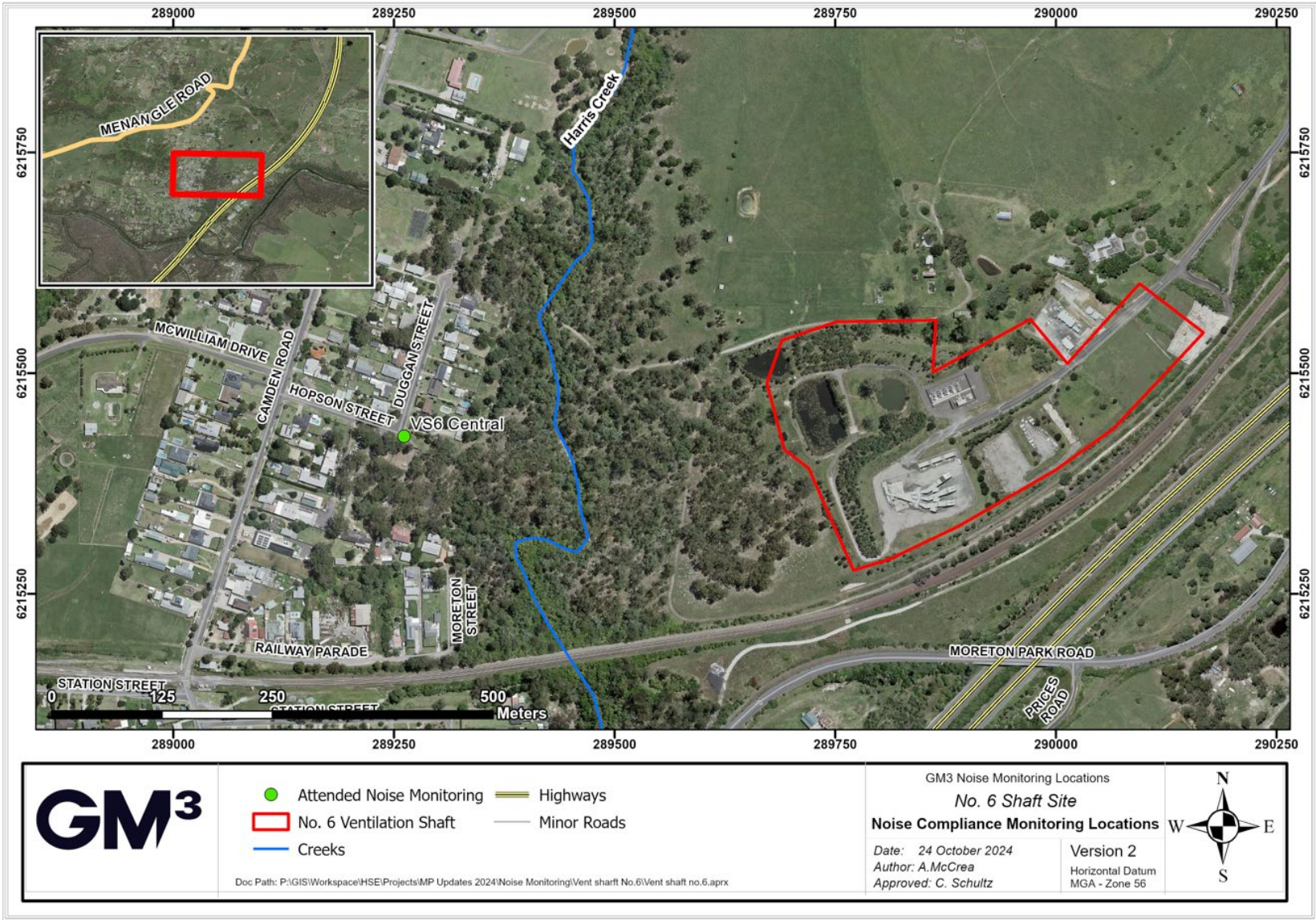
Plan 2: Appin West Attended Noise Monitoring Sites



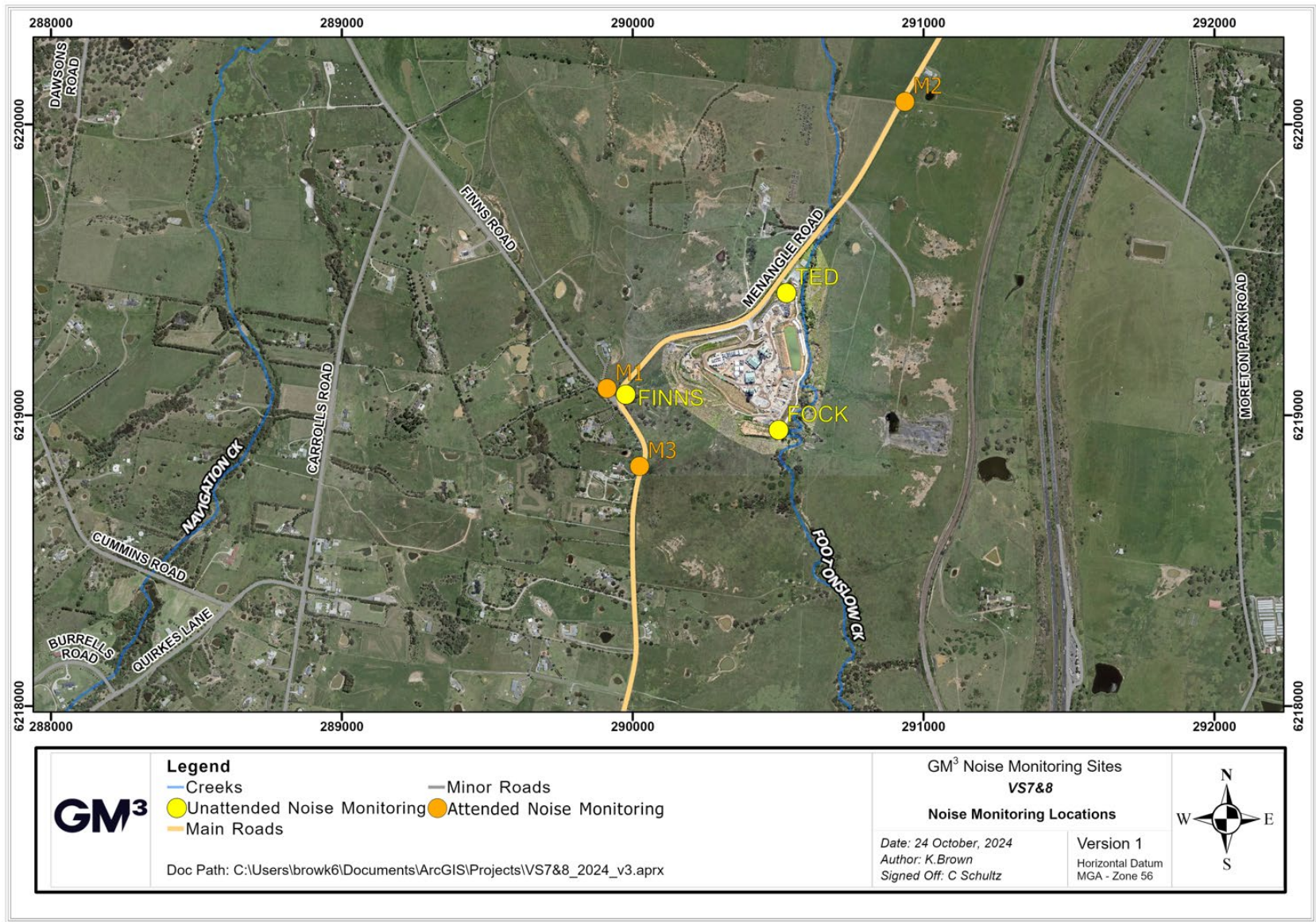
Plan 3: Appin East Attended Noise Monitoring Sites



Plan 4: Ventilation Shaft 6 Attended Noise Monitoring Sites



Plan 5: AMVA Project Noise Monitoring Sites



13 Appendices

Appendix 1: Project Approval Conditions: Noise Management

Condition	Requirement	Section
Condition 1 of Schedule 2	Obligation to minimise harm to the environment In addition to meeting the specific performance criteria established under this approval, the Proponent shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the project.	Section 5
Condition 2 of Schedule 2	Terms of Approval The Proponent must carry out the project: (a) generally in accordance with the EA, Statement of Commitments and PPR; (b) in accordance with the conditions of this approval; and (c) in accordance with any written directions of the Planning Secretary.	Section 3.1
Condition 4 of Schedule 2	Consistent with the requirements of this approval, the Planning Secretary may make written directions to the Proponent in relation to: (a) the content of any strategy, study, system, plan, program, review, audit, notification, report or correspondence submitted under or otherwise made in relation to this approval, including those that are required to be, and have been, approved by the Planning Secretary; and (b) the implementation of any actions or measures contained in any such document referred to in condition 4(a).	Section 3.1
Condition 12 of Schedule 2	Operation of Plant and Equipment The Proponent shall ensure that all plant and equipment used at the site is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Section 5
Condition 2 of Schedule 4	From the end of December 2014, the Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 2 at any residence on privately-owned land or on more than 25 percent of any privately-owned land.	Section 6.1 and 6.3

	Table 2: Noise Criteria dB(A) <table><tr><th colspan="2">Location</th><th>Day</th><th>Evening</th><th colspan="2">Night</th></tr><tr><th>Area</th><th>Receiver Number</th><th>L_{Aeq} (15 min)</th><th>L_{Aeq} (15 min)</th><th>L_{Aeq} (15 min)</th><th>L_{A1} (1 min)</th></tr><tr><td>Appin West Receivers south-west of Appin West</td><td>1-7, 9-11, 13, 184, 188- 189</td><td>39</td><td>39</td><td>35</td><td>49</td></tr><tr><td>Appin West receivers near Hume Highway</td><td>185-187, 190</td><td>35</td><td>35</td><td>35</td><td>53</td></tr><tr><td rowspan="3">All other Appin West Receivers</td><td>14, 26</td><td>45</td><td>45</td><td>35</td><td rowspan="3">53</td></tr><tr><td>15-25, 27-48, 50-56</td><td>43</td><td>43</td><td>35</td></tr><tr><td>58, 67, 71, 72</td><td>41</td><td>41</td><td>41</td></tr><tr><td rowspan="4">Appin No. 3 Receivers</td><td>68, 74, 75</td><td>40</td><td>40</td><td>40</td><td rowspan="4">49</td></tr><tr><td>69, 70, 76,</td><td>39</td><td>39</td><td>39</td></tr><tr><td>217, 218, 233, 279-282</td><td>35</td><td>35</td><td>35</td></tr><tr><td>82, 91, 216</td><td>42</td><td>42</td><td>42</td></tr><tr><td rowspan="4">Appin No. 1 and No. 2 Receivers</td><td>83, 85</td><td>41</td><td>41</td><td>41</td><td rowspan="4">50</td></tr><tr><td>78, 84, 86-90, 199,</td><td>40</td><td>40</td><td>40</td></tr><tr><td>212-215, 226, 228-230, 232, 234, 235</td><td>35</td><td>35</td><td>35</td></tr><tr><td>136, 137, 139, 142, 143</td><td>44</td><td>44</td><td>44</td></tr><tr><td rowspan="2">Appin Township</td><td>135</td><td>43</td><td>43</td><td>43</td><td rowspan="2">52</td></tr><tr><td>Any other privately owned property</td><td>42</td><td>42</td><td>42</td></tr><tr><td>Douglas Park</td><td>All privately-owned</td><td>45</td><td>45</td><td>39</td><td>49</td></tr></table> <table><tr><th colspan="2">Location</th><th>Day</th><th>Evening</th><th colspan="2">Night</th></tr><tr><th>Area</th><th>Receiver Number</th><th>L_{Aeq} (15 min)</th><th>L_{Aeq} (15 min)</th><th>L_{Aeq} (15 min)</th><th>L_{A1} (1 min)</th></tr><tr><td></td><td>residences</td><td></td><td></td><td></td><td></td></tr><tr><td colspan="2">All other privately-owned land (excluding receivers in Table 3)</td><td>35</td><td>35</td><td>35</td><td>45</td></tr></table>	Location		Day	Evening	Night		Area	Receiver Number	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (1 min)	Appin West Receivers south-west of Appin West	1-7, 9-11, 13, 184, 188- 189	39	39	35	49	Appin West receivers near Hume Highway	185-187, 190	35	35	35	53	All other Appin West Receivers	14, 26	45	45	35	53	15-25, 27-48, 50-56	43	43	35	58, 67, 71, 72	41	41	41	Appin No. 3 Receivers	68, 74, 75	40	40	40	49	69, 70, 76,	39	39	39	217, 218, 233, 279-282	35	35	35	82, 91, 216	42	42	42	Appin No. 1 and No. 2 Receivers	83, 85	41	41	41	50	78, 84, 86-90, 199,	40	40	40	212-215, 226, 228-230, 232, 234, 235	35	35	35	136, 137, 139, 142, 143	44	44	44	Appin Township	135	43	43	43	52	Any other privately owned property	42	42	42	Douglas Park	All privately-owned	45	45	39	49	Location		Day	Evening	Night		Area	Receiver Number	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (1 min)		residences					All other privately-owned land (excluding receivers in Table 3)		35	35	35	45	
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Condition 2A of Schedule 4	The Applicant shall ensure that the noise generated by construction activities relating to the Appin East Mine Safety Gas Management Project is managed in accordance with the requirements of the Interim Construction Noise Guideline (DECC, 2009), as may be updated from time to time.	Section 5.8 (note that the Appin East MSGD Project has been completed)																																																																																																																		
Condition 2B of Schedule 4	The Proponent shall ensure that the construction noise generated by the Appin Ventilation Shaft No. 6 project, does not exceed the noise impact assessment criteria set out in Table 2A at any residence on privately-owned land or on more than 25 percent of any privately-owned land. Table 2A: Construction noise criteria dB(A) <table><tr><th rowspan="2">Location</th><th>Day</th><th>Evening</th><th colspan="2">Night</th></tr><tr><th>L_{Aeq} (15 min)</th><th>L_{Aeq} (15 min)</th><th>L_{Aeq} (15 min)</th><th>L_{A1} (1 min)</th></tr><tr><td>All privately owned residences – 7.00am to 6.00pm, Monday to Saturday and 8.00 am to 1.00 pm Saturday</td><td>50</td><td>45</td><td>39</td><td>49</td></tr><tr><td>All privately owned residences – outside the above hours</td><td>45</td><td>45</td><td>39</td><td>49</td></tr></table>	Location	Day	Evening	Night		L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{A1} (1 min)	All privately owned residences – 7.00am to 6.00pm, Monday to Saturday and 8.00 am to 1.00 pm Saturday	50	45	39	49	All privately owned residences – outside the above hours	45	45	39	49	Section 5.4 (note that the Appin Ventilation Shaft No. 6 project has been completed)																																																																																															
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Condition 2C of Schedule 4	Operational Noise - Appin Mine Ventilation and Access Site The Proponent must ensure that the noise generated by operational activities at the Appin Mine Ventilation and Access Site does not exceed the noise impact assessment criteria set out in Table 2B at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.	Section 6.1.2.3 and 6.3																																																																																																																		

	Table 2B: Operational noise criteria dB(A) <table><tr><th rowspan="2">Location</th><th>Day</th><th>Evening</th><th colspan="2">Night</th></tr><tr><th>L_{Aeq} (15 min)</th><th>L_{Aeq} (15 min)</th><th>L_{Aeq} (15 min)</th><th>L_{Amax}</th></tr><tr><td>All privately owned residences</td><td>43</td><td>43</td><td>39</td><td>54</td></tr></table> However, these criteria do not apply if the Proponent has a written agreement with the relevant landowner to exceed the criteria, and the Proponent has advised the Department in writing of the terms of this agreement. Notes: • To identify the privately owned residences referred to in Table 2B, refer to titled “Appin Mine Ventilation and Access Project – Sensitive Receivers” in Appendix 5; and • Noise generated by the Appin Ventilation and Access Site is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the Noise Policy for Industry (EPA, 2017).	Location	Day	Evening	Night		L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Amax}	All privately owned residences	43	43	39	54	
Location	Day		Evening	Night												
	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Aeq} (15 min)	L _{Amax}												
All privately owned residences	43	43	39	54												
Condition 3 of Schedule 4	Upon receiving a written request from the owner of any residence listed in Table 3, the Proponent shall implement noise mitigation measures (such as double-glazing, insulation, and/or air conditioning) at the residence in consultation with the landowner. These measures must be reasonable and feasible. If within 3 months of receiving this request from the owner, the Proponent and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution. Table 3: Land where noise mitigation measures are available on request <table><tr><th>Receiver Number</th></tr><tr><td>57,60, 63, 64, 66, 79, 80, 138, 140, 144, 165</td></tr></table>	Receiver Number	57,60, 63, 64, 66, 79, 80, 138, 140, 144, 165	Section 7.3												
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Condition 4 of Schedule 4	Operating Conditions The Proponent shall: • implement best management practice, including all reasonable and feasible noise mitigation measures, to minimise the construction, operational and road traffic noise generated by the project; • operate a comprehensive noise management system on site that uses real-time noise monitoring data for mining operations and the implementation of noise mitigation measures to ensure compliance with the relevant conditions of this approval; and • regularly assess the real-time noise monitoring to ensure compliance with the relevant conditions of this approval, to the satisfaction of the Planning Secretary.	Section 5 Section 6 Section 6.4														
Condition 5 of Schedule 4	Noise Management Plan The Proponent shall prepare a Noise Management Plan for the project to the satisfaction of the Planning Secretary. This plan must: a) be prepared in consultation with EPA and WSC, and submitted to the Planning Secretary for approval by 30 September 2012;	This Document Section 1.4														

	b) include provisions to ensure that the road haulage fleet attains and maintains best practices in both equipment and operations; c) seek to minimise road traffic noise generated by employee commuter vehicles on public roads, particularly Douglas Park Drive and Macarthur Road; d) describe the measures that would be implemented to ensure compliance with the relevant conditions of the approval; e) prior to commencement of construction of the operational winder/cage, describe the outcome of investigations into alternatives to the use and implementation of audible warning alarms for the operation of the winder/cage at the Appin Mine Ventilation and Access Site. f) outline procedures to manage responses to any complaints or issues raised by the owners of affected residences; g) include a noise monitoring program that: • uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the project, including at the Appin Mine Ventilation and Access Site; and • includes a protocol for determining exceedances of the relevant conditions of this approval.	Section 5.10 Section 5.10 Section 5 Section 5.5 Section 7 Section 6 Section 7.2.1
Condition 5 A of Schedule 4	The Proponent must implement the Noise Management Plan approved by the Planning Secretary.	Section 8.3
Condition 6 of Schedule 4	Road Traffic Noise Mitigation If after the end of June 2013, road traffic noise generated by the project (including employee vehicles) results in an exceedance by more than 2 dB(A) of the NSW criteria for road traffic noise on Douglas Park Drive or Macarthur Road at any residence on privately-owned land, then the proponent shall, upon receiving a written request from the landowner, implement reasonable and feasible noise mitigation measures (such as double-glazing, insulation, and/or air conditioning) at the residence in consultation with the landowner. If within 3 months of receiving this request from the landowner, the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.	Section 7.3.2
Condition 13 of Schedule 4	Meteorological Monitoring During the life of the project, the Proponent shall ensure that there is a suitable meteorological station operating in the vicinity of the site that: • complies with the requirements in the <i>Approved Methods for Sampling of Air Pollutants in New South Wales</i> guideline; and • is capable of continuous real-time measurement of temperature lapse rate in accordance with the <i>NSW Industrial Noise Policy</i>.	Section 6.4.2

Condition 1 of Schedule 4A	Construction Noise The Proponent must ensure that the noise generated by the pre-construction and surface construction activities identified in Condition 7B of Schedule 2 relating to the Appin Mine Ventilation and Access Site is managed in accordance with the requirements of the Interim Construction Noise Guideline (DECC, 2009), as may be updated from time to time	Section 5.5
Condition 2 of Schedule 4A	The Proponent must ensure that the noise generated by shaft sinking activities at the Appin Mine Ventilation and Access Site does not exceed the noise impact assessment criteria set out in Table 2B of condition 2C, Schedule 4 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.	Section 5.5
Condition 11 of Schedule 4A	Construction Environmental Management Plan Prior to the commencement of Appin Mine Ventilation and Access Site early works, the Proponent must prepare a Construction Environmental Management Plan for the construction phase of the Appin Mine Ventilation and Access Site to the satisfaction of the Planning Secretary. This plan must: (a) be prepared in consultation with the EPA; (b) provide specific environmental management and monitoring measures for construction works, including for: i. minimising construction-related noise, dust, visual impacts, and surface disturbance; ... (f) include a Construction Noise Management Plan that: i. describes the measures that would be implemented to ensure compliance with the noise conditions of this approval; ii. includes a noise monitoring program that: • uses a combination of real-time and supplementary attended monitoring to evaluate noise generated by the project during construction; and • includes a protocol for determining exceedances of the relevant conditions of this approval.	Section 1.2 The requirements of this condition are covered in the AMVA Project CEMP (separate to this management plan)
Condition 1 of Schedule 5	Notification of Landowners As soon as practicable and no longer than 7 days after obtaining monitoring results showing: an exceedance of any relevant criteria in schedule 4, the Proponent shall notify affected landowners in writing of the exceedance, and provide regular monitoring results to each affected landowner until the project is again complying with relevant criteria.	Section 8.2.3
Condition 2 of Schedule 5	Independent Review If an owner of privately-owned land considers the project to be exceeding the relevant criteria in Schedule 4, then he/she may ask the Planning Secretary in writing for an independent review of the impacts of the project on his/her land. If the Planning Secretary is satisfied that an independent review is warranted, then within 2 months of the Planning Secretary's decision the Proponent shall:	Section 7.4

	(a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to: • consult with the landowner to determine his/her concerns; • conduct monitoring to determine whether the project is complying with the relevant criteria in Schedule 4; and • if the project is not complying with these criteria then identify the measures that could be implemented to ensure compliance with the relevant criteria; and (b) give the Planning Secretary and landowner a copy of the independent review.	
Condition 3 of Schedule 5	If the independent review determines that the project is complying with the relevant criteria in Schedule 4, then the Proponent may discontinue the independent review with the approval of the Planning Secretary. If the independent review determines that the project is not complying with the relevant impact assessment criteria in Schedule 4, and that the project is primarily responsible for this non-compliance, then the Proponent shall: (a) implement all reasonable and feasible mitigation measures, in consultation with the landowner and appointed independent person, and conduct further monitoring until the project complies with the relevant criteria; or (b) secure a written agreement with the landowner to allow exceedances of the relevant criteria, to the satisfaction of the Planning Secretary. If the independent review determines that any relevant acquisition criteria in schedule 4 are being exceeded and that the project is primarily responsible for this non-compliance, then upon receiving a written request from the landowner, the Proponent shall acquire all or part of the landowner's land in accordance with the procedures in Conditions 4-5 below	Section 7.4
Condition 4 of Schedule 5	Land Acquisition Within 3 months of receiving a written request from a landowner with acquisition rights, the Proponent shall make a binding written offer to the landowner based on: (a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the project, having regard to the: • existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and • presence of improvements on the land and/or any approved building or structure which has been physically commenced on the land at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of any additional noise mitigation measures under Condition 6 of Schedule 4; (b) the reasonable costs associated with:	Section 7.4

	• relocating within the Wollondilly local government area, or to any other local government area determined by the Planning Secretary; and • obtaining legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and (c) reasonable compensation for any disturbance caused by the land acquisition process. If the Proponent and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired within 28 days after the Proponent makes its written offer, then either party may refer the matter to the Planning Secretary for resolution. Upon receiving such a request, the Planning Secretary will request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to: • consider submissions from both parties; • determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in paragraphs (a)-(c) above; • prepare a detailed report setting out the reasons for any determination; and • provide a copy of the report to both parties. Within 14 days of receiving the independent valuer's report, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination. However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, they may refer the matter to the Planning Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following consultation with the independent valuer and both parties, the Planning Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in paragraphs (a)-(c) above, the independent valuer's report, the detailed report disputing the independent valuer's determination, and any other relevant submissions. Within 14 days of this determination, the Proponent shall make a binding written offer to the landowner to purchase the land at a price not less than the Planning Secretary's determination. If the landowner refuses to accept the Proponent's binding written offer under this condition within 6 months of the offer being made, then the Proponent's obligations to acquire the land shall cease, unless the Planning Secretary determines otherwise.	
Condition 5 of Schedule 5	The Proponent shall pay all reasonable costs associated with the land acquisition process described in Condition 4 above, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.	Section 7.4

Condition 2 of Schedule 6	The Proponent shall ensure that the management plans required under this approval are prepared in accordance with any relevant guidelines, and include: a) detailed baseline data; b) a description of: • 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; c) a description of the measures that would be implemented to comply with the relevant statutory requirements, limits, or performance measures/criteria; d) a program to monitor and report on the: • impacts and environmental performance of the project; • effectiveness of any management measures (see c above); e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible; f) a program to investigate and implement ways to improve the environmental performance of the project over time; g) a protocol for managing and reporting any: • incident; • complaints; • non-compliances with statutory requirements; and • exceedances of the impact assessment criteria and/or performance criteria; and h) a protocol for periodic review of the plan.	Section 4 Section 3 Section 6.1 Section 6.3 Section 5 Section 6 and 8.1 Section 7.2.2 Section 7.2 Section 7 and 8 Section 8.3
Condition 3 of Schedule 6	Adaptive Management The Proponent must assess and manage project-related risks to ensure that there are no exceedances of the criteria and/or performance measures in Schedules 3 and 4. Any exceedance of these criteria and/or performance measures constitutes a breach of this approval and may be subject to penalty or offence provisions under the <i>EP&A Act</i> or <i>EP&A Regulation</i>. Where any exceedance of the criteria and/or performance measures has occurred, the Proponent must, at the earliest opportunity: a) take all reasonable and feasible steps to ensure the exceedance ceases and does not recur; b) consider all reasonable and feasible options for remediation (where relevant) and submit a report to the Department describing these options and any preferred remediation measures or other course of action; and	Section 7.2.2

	c) implement remediation measures as directed by the Planning Secretary to the satisfaction of the Planning Secretary.	
Condition 4 of Schedule 6	Annual Review By 30 September 2012, and annually thereafter, the Proponent shall review the environmental performance of the project to the satisfaction of the Planning Secretary. This review must: (a) describe the development (including any rehabilitation) that was carried out in the past financial year, and the development that is proposed to be carried out over the next year; (b) include a comprehensive review of the monitoring results and complaints records of the project over the past financial year, which includes a comparison of these results against the: • relevant statutory requirements, limits or performance measures/criteria; • requirements of any plan or program required under this approval; • monitoring results of previous years; and • relevant predictions in the EA; (c) identify any non-compliance over the past financial year, and describe what actions were (or are being) taken to ensure compliance; (d) identify any trends in the monitoring data over the life of the project; (e) identify any discrepancies between the predicted and actual impacts of the project, and analyse the potential cause of any significant discrepancies; and (f) describe what measures will be implemented over the current financial year to improve the environmental performance of the project.	Section 8.1.1
Condition 5 of Schedule 6	Revision of Strategies, Plans and Programs Within 3 months of: (a) the submission of an annual review under Condition 4 above; (b) the submission of an incident report under Condition 7 below; (c) the submission of an audit report under Condition 9 below; and (d) any modification to the conditions of this approval, (unless the conditions require otherwise); or (e) a direction of the Planning Secretary under Condition 4 of Schedule 2; the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the Planning Secretary.	Section 8.3
Condition 7 of Schedule 6	Incident Notification, Reporting and Response The Applicant must notify the Department within 24 hours of becoming aware of an incident. The notification must be made via the NSW planning portal (Major Projects) and address details of the incident including: (a) date, time and location;	Section 8.2

	(b) a brief description of what occurred and why it has been classified as an incident; (c) a description of what immediate steps were taken in relation to the incident; and (d) identifying a contact person for further communication regarding the incident.	
Condition 7AA of Schedule 6	The Applicant must provide the Department with a subsequent incident report in accordance with Appendix 7.	Section 8.2
Condition 7A of Schedule 6	Non-compliance Notification Within seven days of becoming aware of a non-compliance, the Applicant must notify the Department of the non-compliance. The notification must be in writing and must be submitted via the NSW planning portal (Major Projects). The notification must identify the development (including the development application number and name), set out the condition of this consent that the development is non-compliant with, why it does not comply, the reasons for the non-compliance (if known), and what actions have been undertaken, or will be undertaken, and when, to address the non-compliance. <i>Note: A non-compliance which has been notified as an incident does not need to also be notified as a noncompliance.</i>	Section 8.2
Condition 8 of Schedule 6	Regular Reporting The Proponent shall provide regular reporting on the environmental performance of the project on its website, in accordance with the reporting arrangements in any plans or programs approved under the conditions of this approval.	Section 8.1
Condition 9 of Schedule 6	Independent Environmental Audit By the end of December 2013, and every 3 years thereafter, unless the Planning Secretary directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the project. This audit must: (a) be conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary; (b) include consultation with the relevant agencies; (c) assess the environmental performance of the project and assess whether it is complying with the requirements in this approval and any relevant EPL or Mining Lease (including any assessment, plan or program required under these approvals); (d) review the adequacy of strategies, plans or programs required under the abovementioned approvals; and (e) recommend appropriate measures or actions to improve the environmental performance of the project, and/or any assessment, plan or program required under the abovementioned approvals. <i>Note: This audit team must be led by a suitably qualified auditor and include experts in any field specified by the Planning Secretary</i>	Section 8.4.1

Condition 10 of Schedule 6	Within 6 weeks of the completion of this audit, or as otherwise agreed by the Planning Secretary, the Proponent shall submit a copy of the audit report to the Planning Secretary, together with its response to any recommendations contained in the audit report.	Section 8.4.1
Condition 10A of Schedule 6	Independent Environmental Audits of the development must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements (2020) or as updated from time to time and published on the Department's website.	Section 8.4.1
Condition 11 of Schedule 6	Access to Information From 30 June 2012, the Proponent shall: (a) make copies of the following publicly available on its website: • the documents referred to in Condition 2 of Schedule 2; • all current statutory approvals for the project; • all approved strategies, plans and programs required under the conditions of this approval; • a comprehensive summary of the monitoring results of the project, reported in accordance with the specifications in any conditions of this approval, or any approved plans and programs; • a complaints register, updated on a monthly basis; • minutes of CCC meetings; • the annual reviews of the project; • any independent environmental audit of the project, and the Proponent's response to the recommendations in any audit; • any other matter required by the Planning Secretary; and (b) keep this information up-to-date, to the satisfaction of the Planning Secretary	Section 3.1 Section 7.1 Section 8

Appendix 2: EA Commitments: Noise Management

EA Section	EA Commitment	Section
5.12.5	Noise Reduction Program The noise reduction program would be developed in consultation with the EPA (previously part of DECC) and would include, where reasonable and feasible: - the best available technology for Project upgrades including consideration of acoustical specifications for new Project equipment; - desktop design validation and supplier shop acoustical testing; - in-situ acoustic testing of new equipment; - acoustical field testing during plant commissioning; - refitting and/or replacement in the event of non-compliance with acoustic specifications; - computer-based acoustical modelling of installed plant using achieved sound power levels; and - measuring acoustical compliance of Project upgrades via on-site and off-site operator-attended noise measurements of acoustically significant plant.	Section 5.11
5.12.5	A Noise Management Plan will be developed to describe the following elements of relevance to noise monitoring: - applicable Project Approval noise criteria/limits; - noise monitoring to be undertaken (monitoring locations, frequencies, parameters & specifications); - a summary of relevant Project Noise mitigation measures; - procedures to be followed in the event of an exceedance; - complaint response protocols; and. - response to exceedances of criteria.	This Management Plan
5.12.5	Construction Noise The Noise Management Plan will describe the following elements of relevance to construction activities: - noise management measures to be implemented to minimise noise during construction; - protocol for community consultation and complaint response; - applicable construction times/noise limits; and - a protocol for the ongoing management of construction noise including ICHPL responsibilities for monitoring, review and implementation of the NMP.	Section 5.8 and 7
5.12.5	Road Transport Noise The following noise mitigation measures will be implemented:	Section 5.10

	• heavy vehicle deliveries to be scheduled during daylight hours where practicable • workforce to be encouraged to car-pool and minimise light vehicle movements • prompt notification of local government authorities or the RTA regarding noticeable deterioration in the road pavement.	
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Appendix 3: Agency Consultation

Agency Comments	ICHPL Response
Environment Protection Authority (EPA)	
<u>Response received 16 November 2020</u> The EPA has reviewed the updated management plan and has no comments to provide.	Noted.
<u>Response received 9 August 2022</u> The EPA has reviewed the plan which has been updated to include the Appin Mine Ventilation and Access (AMVA) Project site (including Ventilation Shafts 7 (downcast) and 8 (upcast). The EPA has no comments to make on the plan but would appreciate receiving a copy of the final plan or a link to its location on Endeavour Coal's website after it has been approved by the Planning Secretary.	Noted. Link will be provided once document has been approved by the Planning Secretary.
<u>Response received 9 December 2024</u> Thank you for forwarding the above plan for our records. The EPA encourages the development of such plans to ensure that proponents have determined how they will meet their statutory obligations and environmental objectives. However, we do not approve or endorse these documents as our role is to set environmental objectives for environmental management, not to be involved in developing strategies such as this plan to achieve those objectives.	Noted.
Wollondilly Shire Council	
<u>Response received 25 November 2020</u> WSC is happy for any comments on this matter to be provided by the EPA and will not be providing specific comments.	Noted.
<u>Response received 28 July 2022</u> A copy of the Comments on Proposed Conditions for Extraction Plan and Ventilation Shaft was provided. The comments relating to noise management conditions are provided below. Assessment of noise generating activities associated with the ventilation shaft Council's correspondence requested a condition that would require noise producing activity to cease where modelling identifies potential noise issues, particularly during night time periods, to	

allow for investigation and possible further acoustic controls. Council's Senior Environmental Health Officer has identified that the proposed conditions adequately address all previously raised issues specifically over the generation of noise at the ventilation shaft. The DPE is requested to note however, (as discussed below), residual concerns remain over the notification and engagement with the community over the impacts of noise generating activities during the establishment and management of this facility. Hours of operation Condition: <i>The Proponent may undertake mining operations and mine ventilation activities 24 hours a day, 7 days a week.</i> COMMENTS AND RECOMMENDATIONS The need for the Determination to permit the continued ongoing operation of mining operations and the ventilation shaft is recognised. However, the notification of commencement of works as well as any activity with noise emitted levels that could cause concerns for residents such as blasting is viewed as appropriate. Notification as part of the recommended broad community notification plan by these Council comments is suggested. The Mod 3 approval is recommended to be amended to contain a note or advice that this condition is subject to the development of a landholder notification program regarding noise generated activities prior to the commencement of any works.	These comments have been addressed in detail in the Early Works CEMP and will be addressed in the CEMP for construction activities. A summary is provided in Section 5.8 and 6.4.5 of the NMP. Landholder notifications are addressed in more detail in the AMVA Project CEMP.
<u>Response received 18 December 2024</u> I wish to advise that Wollondilly Shire Council do not have any comments to provide. The EPA are the ARA for the noise management plan and have been provided a copy for comment. The proposed changes appear to be mainly administrative in nature.	Noted.
Department	
<u>Response received 3 December 2020</u> You are requested to submit a revised document that addresses the following: Update Section 8.2.2 to align with Schedule 5, Condition 1. Current proposed process is inconsistent with the Condition of approval. Please adjust	Section 8.2.2 has been revised as requested.

wording as required by the condition of approval. Update Section 8.3 to clarify that the management plan will only be revised then submitted and approved by the Secretary in accordance with the requirements of the conditions of approval.	Section 8.3 has been revised as requested.
<u>Response received 15 November 2022</u> Condition 12 Schedule 1: The Proponent shall ensure that all plant and equipment used at the site is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner. <i>Include a commitment to ensure that all plant and equipment used at the site is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.</i>	The commitment is already included under the Section 5 heading.
Noise Impact Assessment Criteria Condition 1, Schedule 4: From the end of June 2013, the Proponent shall ensure that the noise generated by the project does not exceed the criteria in Table 1 at any residence on privately-owned land or on more than 25 percent of any privately-owned land. <i>Include reference to this condition and for clarity state that it has been superseded by Condition 2 Schedule 4.</i>	Footnote has been included to note that this condition has been superseded.
Construction Noise - Appin East Mine Safety Gas Management Project Condition 2B, Schedule 4: The Proponent shall ensure that the construction noise generated by the Appin Ventilation Shaft No. 6 project, does not exceed the noise impact assessment criteria set out in Table 2A at any residence on privately-owned land, or on more than 25 percent of any privately-owned land. <i>Include the requirement of the condition</i>	The requirement of this condition has been included in Section 6.1.2.1.
Operational Noise - Appin Mine Ventilation and Access Site Condition 2C, Schedule 4: The Proponent must ensure that the noise generated by operational activities at the Appin Mine Ventilation and Access Site does not exceed the noise impact assessment criteria set out in Table 2B at any	Footnote has been included in Section 6.1.1.

residence on privately-owned land, or on more than 25 percent of any privately-owned land. <i>Include reference to the “Appin Mine Ventilation and Access Project – Sensitive Receivers” for the ‘All privately owned residences’ in Section 6.1.1.1 and/or Section 6.3.</i>	
CONSTRUCTION NOISE Condition 1, Schedule 4A: The Proponent must ensure that the noise generated by the Appin Mine Ventilation and Access Site early works are managed in accordance with the requirements of the Interim Construction Noise Guideline (DECC, 2009), as may be updated from time to time. <i>Include the requirement consistent with condition 1.</i>	Section 5.5 has been updated to include this requirement. <i>Note: This condition has since been amended in the MOD 6 approval.</i>
Condition 2, Schedule 4A: The Proponent must ensure that the noise generated by construction of the Appin Mine Ventilation and Access Site does not exceed the noise impact assessment criteria set out in Table 2B of condition 2C, Schedule 4 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land. <i>Include a commitment and discuss how the project will ensure that the noise generated by construction of the Appin Mine Ventilation and Access Site does not exceed the noise impact assessment criteria set out in Table 2B of condition 2C, Schedule 4 at any residence on privately-owned land, or on more than 25 percent of any privately-owned land.</i>	Section 5.5 has been updated to include this commitment. Specific strategies to manage noise during the construction activities at the AMVA site are detailed in the CEMP for construction activities and not replicated in this NMP. The CEMP for construction activities will be subject to a separate approval by the Department. <i>Note: This condition has since been amended in the MOD 6 approval.</i>
Schedule 4 Condition 5(g): Prior to commencement of construction of the operational winder/cage, describe the outcome of investigations into alternatives to the use and implementation of audible warning alarms for the operation of the winder/cage at the Appin Mine Ventilation and Access Site. <i>Ensure the NMP is updated following the investigation.</i>	Requirement included in Sections 5.5 and 8.3.

Appendix 4: Management Plan Approval

To be included when received