



DENDROBIUM MINE NOISE MANAGEMENT PLAN

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DOCUMENT REVISION LOG

Persons authorising this Plan

NAME	TITLE	DATE
Chris Schultz	Superintendent Environment	20 September 2022

Document Revisions

REVISION	DESCRIPTION OF CHANGES	DATE
1.0	Draft Submitted	November 2004
2.0	Incorporating comments on draft	February 2005
3.0	Update following Department of Planning Compliance Audit	October 2006
4.0	Three yearly review as required by Development Consent	March 2008
5.0	Review as required by the revised Development Consent (issued December 8 2008)	April 2009
6.0	Triennial review required by the Development Consent	March 2012
7.0	Review and update of Noise Monitoring Program	July 2014
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11.0	Updated to include Gas Drainage Infrastructure and clarify assessment of compliance at Kemira Valley Coal Loading facility.	August 2022

Persons involved in the review of this Plan

NAME	TITLE	COMPANY	EXP (YRS)	DATE
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1. INTRODUCTION

Dendrobium Mine is an underground mine which commenced construction in January 2002 following approval from the Minister of the then Department of Urban Affairs and Planning on 20 November 2001. Longwall mining commenced at Dendrobium in April 2005. The mine is owned and operated by Dendrobium Coal Pty Ltd, a subsidiary of Illawarra Coal Holdings Pty Ltd (ICHPL), which is a wholly owned subsidiary of South32 Limited. The mine operates on a continuous basis, 24 hours a day and 7 days a week.

The mining operations are located immediately adjacent to Mt Kembla, approximately 8 km west of Wollongong, NSW, on the Illawarra escarpment (refer to Plan 1). Mt Kembla village, located within 500 m of the Pit Top site, has close historical links with coal mining.

Dendrobium produces predominately metallurgical coal from the Wongawilli Seam (Areas 1, 2 and 3) and is approved to produce up to 5.2 million tonnes of run of mine (RoM) coal per annum. The BlueScope Steel Port Kembla Steel Works (PKSW) and Liberty Primary Steel (Whyalla) are major customers. In addition to these Australian based customers, coal is exported via the Port Kembla Coal Terminal to international customers.

Approval for mining in Areas 1, 2 and 3 was granted under DA 60-03-2001, as modified (the Consent).

The Consent allows mining operations to take place in the mining area until 31 December 2030. Resources are available for mining to extend beyond this period and would be subject to further approvals.

Dendrobium Mine, Cordeaux Colliery and Appin Mine (and associated facilities) collectively operate as South32 Illawarra Metallurgical Coal (IMC).

This Noise Management Plan (NMP) has been prepared to detail the relevant noise impact assessment criteria and management measures, compliance procedures, and controls relating to the mining operations and associated activities. This NMP has been prepared to satisfy Condition 7 of Schedule 4 of the Consent for the Noise Monitoring Program.

1.1 Objectives

The objectives of the NMP are to:

- provide the framework for the responsible management of noise emissions associated with Dendrobium 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 Consent;
- describe measures for the reduction of noise emissions; and
- comply with South32 and other relevant standards and requirements.

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1.2 Scope

The scope of the NMP applies to all existing and future activities related to Dendrobium Mine including operational and construction noise impacts at:

- Dendrobium Pit Top - consists of administration buildings, workshop, machinery and equipment storage areas, personnel and materials access to the underground workings via the Dendrobium Tunnel, sediment pond and water treatment facility.
- Kemira Valley Coal Loading Facility (KVCLF) – receives coal from underground via the Kemira Valley Tunnel. ROM coal is transported from underground to KVCLF via an extensive coal clearance system. The coal is then fed into a rill tower and deposited onto a 140,000 tonne stockpile from which it is loaded into trains via an enclosed rail-loading chute.
- Dendrobium Coal Preparation Plant (DCPP) – located within the PKSW, the DCPP receives and washes ROM coal from the underground operations.
- Kemira Valley Rail Line (KVRL) – used to transport the coal from KVCLF to the DCPP.
- Ventilation Shaft (VS) 1 - located within the Metropolitan Special Area (MSA) administered by WaterNSW, operates as a downcast shaft (i.e. drawing fresh air into the underground workings). VS1 is located on land owned by IMC.
- VS2 and VS3 – located within the MSA and within Mining Lease (ML) 1566. VS2 operates as an additional downcast shaft whilst VS3 operates as an upcast shaft (i.e. drawing air out of the underground workings). The site includes gas drainage infrastructure for Area 3C.
- Dendrobium Underground Operations – coal is extracted from the Wongawilli Seam. The underground operations consist of a longwall shearer, development units, coal clearance conveyor network and associated infrastructure.

Refer to Plan 1 for locations of the above.

1.3 Environmental Management System

IMC 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). The comments from the consultation process have been incorporated into this version of the NMP.

Appendix 2 outlines comments from the relevant government agencies following consultation and the IMC response.

Consultation with agencies as stated in Condition 7 of Schedule 4 of the Consent will only be undertaken where there is a material change to the NMP or if specifically requested by the Department of Planning and Environment (DPE). Administrative or descriptive changes do not constitute a material change.

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2. ROLES AND RESPONSIBILITIES

Roles and responsibilities associated with environmental management at Dendrobium 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	<p>Implementation and periodic review of the NMP.</p> <p>Liaise with government regulators and IMC senior leadership team in relation to noise issues, including reporting.</p> <p>Ongoing review of environmental performance and associated management/preventative actions.</p>
Specialist Environment	<p>Advise, coach and mentor IMC operations with respect to meeting the standards and requirements of the NMP.</p> <p>Monitor and review compliance against these requirements.</p> <p>Coordinate or undertake monitoring as required.</p> <p>Review monitoring results and implement management/preventative actions as required.</p> <p>Update noise monitoring data in EQUIS.</p>
External Affairs Team	<p>Meet the commitments contained within the NMP for stakeholder engagement and landowner notifications.</p>
Engineering and Maintenance Managers	<p>Maintain plant and equipment to minimise noise emissions.</p>
<p>Manager Approvals General Manager Dendrobium Mine</p>	<p>Provide the necessary resources and systems to ensure that requirements of the NMP are met.</p>
<p>Maintenance Technicians Operations Personnel Superintendent Infrastructure and RTV Superintendent Logistics</p>	<p>Operate and maintain noise management controls and monitoring equipment in a competent, efficient and reliable manner.</p>



Noise consultant	<p>Undertake monitoring to determine compliance against Consent conditions.</p> <p>Maintain and calibrate noise monitoring equipment.</p> <p>Advise site Specialist Environment as soon as practicable of any issues/potential exceedances to enable timely rectification.</p>
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3. LEGISLATION AND PLANNING

3.1 Consent Conditions

Potential noise impacts associated with Dendrobium Mine were modelled during the preparation of the Dendrobium Project Environmental Impact Study (EIS) 2001 and the Noise Review (Appendix 5) for the Gas Management Infrastructure Modification (MOD 9) . The EIS and MOD 9 were assessed and approved under the *Environmental Planning and Assessment Act 1979 (EP&A Act)* and associated Regulations.

IMC will carry out the development generally in accordance with all of the necessary approvals, licences and other information described in Condition 2 of Schedule 2.

All activities carried out at Dendrobium Mine will be in compliance with the conditions of Consent (Condition 2A of Schedule 2).

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

The documents as listed in Condition 11 of Schedule 8 will be made publicly available.

3.2 Environment Protection Licence Requirements

EPL 3241 applies to Dendrobium Mine and associated activities. A copy of the licence can be accessed at the EPA website: <http://www.epa.nsw.gov.au/prpoeoapp/>.

3.3 Mining Leases

Dendrobium Mine operates in accordance with the following mining leases:

- Consolidated Coal Lease (CCL) 768.
- ML 1510 (covers the KVCLF).
- ML 1566 (covers VS2 and 3).

3.4 Relevant Legislation

Key regulatory and NMP obligations applicable to Dendrobium 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.

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Legislation that may be applicable to noise management includes but is not limited to:

- *Protection of the Environment Operations Act 1997 (POEO Act)*; and
- *Environmental Planning and Assessment Act 1979 (EP&A Act)*.

3.5 Guidelines and Standards

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

- ISO 14001:2015 Environmental Management Systems;
- South32 Sustainability Policy; and
- South32 Environment Standard.

Other relevant guidelines that may be applicable for noise management include:

- Compliance Policy (DPE, 2020);
- NSW Industrial Noise Policy (2000);
- Noise Policy for Industry (2017);
- Implementation and transitional arrangements for the Noise Policy for Industry (2017);
- Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments (NSW Government September 2018);
- NSW Road Noise Policy (DECCW, 2011);
- Interim Construction Noise Guideline (DECC, 2009);
- Assessing Vibration: A Technical Guideline (DEC, 2006);
- IEC 61672-1: Electroacoustics – Sound level meters – Part 1: Specifications;
- AS 1055:2018 Acoustics - Description and measurement of environmental noise;
- AS 2659.1 - Guide to the use of sound measuring equipment; and
- AS 2659 - Sound level meters.

4. BASELINE ASSESSMENT

4.1 Development Consent

An Environmental Noise and Vibration Impact Assessment was undertaken in 2001 by Renzo Tonin and Associates Pty Ltd as part of the original Dendrobium Project EIS (refer to Volume 3). The purpose of the assessment was to assess the potential impacts on the neighbouring residential premises and other noise sensitive receivers through the use of a computer model.

The assessment was used as a basis for the identification and implementation of suitable management strategies to minimise noise emissions associated with the Dendrobium operations. The strategies are outlined in Section 5.

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4.2 MOD 9

A Noise Review was conducted by Renzo Tonin & Associates (2022) for MOD 9 (Appendix 5 of the Modification Report). MOD 9 relates to the gas management infrastructure being installed at the Ventilation Shaft 2/3 site, located in the MSA (in the vicinity of Cordeaux Dam – refer to Plan 1).

The estimated construction noise produced from proposed construction works are estimated to be at least 5 dB(A) below the most stringent Noise Management Levels at the nearest receiver, located approximately 3 km away from the site.

The estimated operational noise at the nearest receiver would be at least 10-15 dB(A) below the most stringent Project Specific Trigger Levels.

Therefore, noise generated during construction and operational phases are expected to comply comfortably with the established noise criteria at the nearest affected receiver location and no further mitigation measures are required (Renzo Tonin & Associates, 2022).

5. NOISE MANAGEMENT AND MITIGATION

There are three main strategies for controlling noise as described in Section 3.4 of the Noise Policy for Industry (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 Consent requires all feasible and reasonable noise mitigation measures to be considered in order to minimise the construction and operational noise generated by Dendrobium operations. The following sub-sections provide details of the noise management measures that have been implemented across the Dendrobium operations.

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 Dendrobium Pit Top and Underground Activities

All coal extraction activities occur beneath the surface and are not expected to present any direct noise issues to residential premises.

Activities on the Dendrobium Pit Top with the potential to generate noise impacts include:

- materials handling including the use of forklifts;
- ballast/underground road base materials delivery and transport;
- vehicles moving around the surface;

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- vehicles accessing the site;
- compressor operation (permanent and temporary);
- periodic construction activities or upgrading of facilities; and
- operation of maintenance and cleaning equipment.

The underground workings are accessed via a drift from the Dendrobium Tunnel. Rubber-tyred vehicles transport personnel and materials into the mine via this drift. Noise from this activity has been minimised through modification of underground machinery (rubber tyred vehicles) and the introduction of a self-imposed night time restriction from 10 pm to 6 am. During these hours, surface vehicle movements associated with safety, emergencies and change of shifts will occur, however other vehicle movements will be minimised.

Activities that have been identified to generate higher levels of noise will be preferentially undertaken during day-time hours.¹

One of the key management strategies to reduce the noise impact from vehicle movements around the site has been the introduction of intrinsically safe low frequency alarms. The low frequency alarms have been fitted to select permanent surface mobile equipment (SME) and mine vehicles.

Where possible, plant and equipment has been strategically placed to minimise noise emissions from the site and contained within suitably designed noise mitigation structures.

Low noise emission mine site equipment has and will continue to be sourced and/or designed where practicable, to assist in meeting site noise limits, or as a noise mitigation measure. Noise barriers may also be utilised where feasible and reasonable to shield sensitive receivers from intrusive noise.

5.2 KVCLF

The KVCLF is located in a valley, generally set apart from residential areas. There are several residences in the vicinity of the KVCLF potentially affected by its operation. The nearest non-mining residence is located approximately 600 metres to the south and is separated from the KVCLF by a ridge which is approximately 50 metres high. Other nearby residences are located to the south-east of the KVCLF.

Coal is transferred to the surface via a coal clearance system. The coal is sized in the coal sizer before being deposited on the stockpile via a vertical rill tower. The surface conveyor has been designed to address noise impacts, including:

- Partial enclosure of the conveyor.
- Design of the conveyor profile to eliminate the need for any exposed surface transfer points. The system consists of one continuous conveyor with the drive intentionally located underground to reduce noise.
- Polyurethane coated conveyor rollers.

¹ Day-time hours as defined in the Consent is the period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6 pm on Sundays and public holidays.

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The rill tower method of transfer is considered to have a lower noise emission than trip conveyors or other systems. Extensive modifications have been made to the rill tower to modify the impact plates on the coal delivery chute and the exit doors to reduce noise emissions. Polyurethane has been placed on the chute work to lower noise levels and rubber doors have also been installed at all rill tower exit points to minimise ‘ringing’ that occurred when the RoM coal struck the previous steel rill tower doors.

Train loading occurs under gravity via a vibratory feeder from the base of the stockpile into trains as they are shunted through a tunnel beneath the stockpile.

A bulldozer and excavator operate on the stockpile to clear blockages and to push coal from those parts of the stockpile from which coal cannot self-load under gravity. Select SME have been fitted with low frequency reversing alarms.

5.3 KVRL

All coal is transported from KVCLF via the KVRL to the DCP. Rail movements are controlled by a travel curfew in accordance with Condition 23 b) of Schedule 4 of the Consent. Train movements are only permitted between 6 am and 11 pm².

In accordance with Condition 5 of Schedule 4 of the Consent, IMC is required to use best endeavours to minimise wheel squeal, brake squeal and locomotive wheel slippage on the KVRL.

The condition of the rolling stock and rail track (and associated infrastructure) are important aspects in controlling rail noise emissions, as poorly maintained or defective rolling stock and/or track can lead to elevated noise levels.

An ongoing track maintenance program is undertaken to maintain the track to an acceptable standard. Noise emissions from the rolling stock are controlled through a regular maintenance program targeting brake and wheel condition (i.e. flat spots etc).

Regular track walks are undertaken to identify defects to the rail infrastructure. Any defects identified during these track walks that could either result in safety or community issues (i.e. noise generation) are rectified as soon as feasibly possible to minimise potential impacts.

The rail line is located within 200 m of more than 500 receivers within the Mount Kembla, Cordeaux Heights and Unanderra communities. The track geometry consists of relatively tight curves which can increase the likelihood of squeal events caused by the wheel/track interface and/or brake related issues. Noise issues are addressed by the Rail Noise Working Group (RNWG) (refer to Section 6.3.3).

5.4 Ventilation Sites

Mine ventilation is provided through a series of downcast and upcast shafts and portals in combination with fans that remove stale air and draw fresh air into the mine. The fans, located on the surface, have the potential to cause noise impacts however due to their remote locations (in the MSA) they are unlikely to impact on any residences.

² Unless written approval is obtained from the EPA for emergency use of the rail line.

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VS3 is an upcast shaft and VS1 and VS2 operate as downcast shafts. Ventilation fans operate 24 hours a day, 7 days a week.

No specific noise mitigation has been installed on gas drainage infrastructure at the VS2/3 site due to the remote location of the facility.

Noise monitoring will not be undertaken at the site due to the remote location of the facility.

5.5 DCP

The DCP is located within the PKSW. No specific noise management or mitigation is in place.

5.6 Construction Activities

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

The noise mitigation 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 (where required).

These measures will be incorporated into the relevant Construction Environment Management Plan for the project as required.

Construction activities on site may be classified as exempt development and therefore the operational noise levels in Table 2 will not apply. In these circumstances, the *Interim Construction Noise Guideline* or subsequent document will be considered as a reference for acceptable noise levels.

In addition, construction activities subject to a modification to the Consent may have construction noise assessment criteria applied to the activity. The construction activity will be undertaken in accordance with the relevant conditions where applied.

5.7 Traffic Noise

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

- scheduling heavy vehicle deliveries to reduce impact on community amenity (in accordance with the Dendrobium Drivers' Code of Conduct (DCOC));
- providing employee briefings and awareness communications as required on nuisance noise prevention;
- installing in-vehicle monitoring in selected site and heavy vehicles to monitor driver behaviour;
- surveillance monitoring on-site and at the site entrance to identify vehicles associated with complaints or excessive noise;

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- encouraging car-pooling for site personnel (see Section 5.2.6 of the Dendrobium 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 to site etc.

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 Dendrobium Mine Traffic Management Plan.

5.8 Blasting

No blasting is undertaken at any of the surface facilities associated with Dendrobium. In the unlikely event that blasting be required on the surface, approval from the EPA will be sought.

5.9 Notification of Potential Significant Noise Events

Where a planned operational activity has the potential to create significant noise in the local community, notifications of the planned activity will be undertaken prior to the event occurring:

- to potentially affected residences via a letter box drop and/or email; and
- to the community representatives on the Dendrobium Community Consultative Committee (CCC) either at the meeting prior to the event, or, in the case that a meeting is not scheduled close to the event, via email.

Relevant government authorities such as DPE, EPA and Wollongong City Council may be notified if the activities are likely to cause significant community impacts.

Notification will generally include the scheduled date, time and length of the planned construction or operational activity, a description of the activity to be undertaken and the associated noise characteristics and company contact details for further information.

6. NOISE MONITORING PROGRAM

The objectives of the monitoring program are to:

- verify the effectiveness of the noise management controls;
- proactively manage operational activities to reduce noise impact on the community;
- assess the noise impact on the local communities surrounding Dendrobium operations; and
- assess compliance against the noise impact criteria outlined in the Consent.

Ongoing refinement of the monitoring programs, including monitoring locations, may be necessary as a result of monitoring result analysis or following a review of operational activities.

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6.1 Noise Criteria

6.1.1 Pit Top and KVCLF

The noise impact assessment criteria applicable to the Dendrobium operations, as outlined in Table 1, Condition 1 of Schedule 4 of the Consent, are replicated in Table 2.

Table 2: Noise Impact Assessment Criteria dB(A)

Day	Evening	Night		Residence
$L_{Aeq}(15min)$	$L_{Aeq}(15min)$	$L_{Aeq}(15min)$	$L_{A1}(1min)$	
42	42	38	48	R2
41	41	40	50	R22
40	40	39	49	R1
				R9
				R15a
40	40	37	47	R3a
				R5a
				R6a&b
37	35	35	45	R39a

These noise emission limits apply under meteorological conditions of:

- Wind speeds up to 3m/s at 10 metres above ground level: or
- Up to 3°C/100m inversion strength for all receivers, plus a 2 m/s source to receiver component drainage flow wind at 10 metres above ground level for those receivers.

6.1.2 Land Acquisition Criteria

The noise impact assessment criteria applicable to land acquisition, as outlined in Table 2, Condition 2 of Schedule 4 of the Consent, are replicated in Table 3.

Table 3: Land Acquisition Noise Criteria dB(A)

Day	Evening	Night	Residence
$L_{Aeq}(15min)$	$L_{Aeq}(15min)$	$L_{Aeq}(15min)$	
47	47	43	R2
46	46	45	R22
45	45	44	R1
			R9
			R15a
45	45	42	R3a
			R5a
			R6a&b



42

40

40

R39a

6.1.3 Rail Haulage Impact Assessment Criteria

IMC shall ensure that noise generated by locomotives using the KVRL does not exceed the rail noise impact assessment criteria in Table 3, Condition 3 of Schedule 4 of the Consent, as replicated in Table 4.

Table 4: Rail Noise Impact Assessment Criteria

Operating Conditions	Measurement Conditions	Criteria	Supplementary criteria ³
		$L_{A1(1min)}$	L_{Amax}
Locomotive at idle, with compressor radiator fans and air conditioning operating at maximum load	Stationary 15 metre contour	70 dB(A)	70 dB(A)
All other throttle settings under self-load, with compressor radiator fans and air conditioning operating at maximum load	Stationary 15 metre contour	87 dB(A) 95 dB(Lin) (95 dB(Z) ³)	87 dB(A) 95 dB(Z) ³
All service conditions	Up to 50 km/hr, 15 metres from the centreline of rail track	87 dB(A) 95 dB(Lin) (95 dB(Z) ³) Must be non-tonal, Linear noise must not exceed A-weighted noise levels by more than 15 dB	87 dB(A) 95 dB(Z) ⁴ Must be non-tonal, Linear noise must not exceed A-weighted noise levels by more than 15 dB

In addition to these noise level limit requirements, there are conditions relating to potential tonal/low frequency noise from locomotives. All locomotives used on the KVRL must comply with the tonality emission requirements specified below:

- All measured noise levels must be assessed for tonality unless otherwise specified.
- Assessment of tonality is to be based on one-third octave analysis. To comply with the requirements of non-tonality the sound pressure level in each one-third octave band must not exceed the level of the adjacent bands on both sides by:

³ Permits comparison with national criteria in Australian Standard AS 2377 *Acoustics - Methods for the Measurement of Railbound Vehicle Noise* and typical NSW EPLs for locomotives. Differences greater than 2dB indicate a likely error in the $L_{A1(1min)}$ measurement which was not derived for assessing moving locomotives. A moving locomotive is absent for most of the required 1 minute measurement period under the consent. No minimum time period is required to measure L_{Amax} passby.

⁴ Amended from dB(L_{in}) to dB(Z) for consistency with IEC61672.

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- 5 dB if the centre frequency of the band containing the tone is above 400 Hz;
 - 8 dB if the centre frequency of the band containing the tone is between 160 and 400 Hz, inclusively; and
 - 15 dB if the centre frequency of the band containing the tone is below 160 Hz.
- The overall linear noise level must not exceed the overall A weighted noise level by more than 15 dB (relating to low frequency noise).

The noise limits specified above must be assessed at 15 metres from the centreline of the track with a sound level meter operated with a fast time weighting. The assessment of tonality for this condition and the comparison between linear and A-weighted levels in this condition are to be conducted using all one-third octave bands between 10 Hz and 20 kHz.

6.2 Noise Monitoring Program – Pit Top and KVCLF

6.2.1 Attended Noise Monitoring

Quarterly attended noise monitoring occurs at three representative locations as described in Table 5 and as shown on Plan 2. Additional monitoring may be required based on community complaints, additional investigations/studies and/or unplanned events. The compliance monitoring program is carried out in accordance with AS 1055:2018 Acoustics - Description and measurement of environmental noise and the NSW Environment Protection Authority (EPA) Industrial Noise Policy (INP) (2000).

Sound levels, which can be associated with specific sources at the operations, are captured and recorded via attended monitoring. This is to identify sources contributing to the overall noise environment in the monitoring area and to calculate the $L_{Aeq,15min}$ and $L_{A1,1min}$ contribution from Dendrobium operations.

Monitoring is undertaken during the day, evening and night-time periods at each location and the results assessed in accordance with the INP against the criteria in Table 2 for that location. Sleep disturbance events are evaluated for compliance during the night time surveys by measuring $L_{A1(1min)}$ at all locations. During the night time, L_{Amax} sleep disturbance events are also recorded.⁵

Meteorological data will be used when evaluating noise data. The Port Kembla Bureau of Meteorology station (ID 068253) is used which complies with the requirements in the Approved Methods for Sampling of Air Pollutants in New South Wales guideline.

All noise measuring equipment is 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.

For each site, the following details will be collected/noted while carrying out the monitoring:

- location, date and time, and name of person undertaking the monitoring;

⁵ Only $L_{Aeq,15min}$ and $L_{A1,1min}$ results are recorded in the 14 day report.

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- type of instrument used and calibration status;
- parameters measured and the results;
- weather conditions; and
- sound levels from specific identifiable sources.

During adverse weather conditions e.g. rain, wind > 3 m/s, valid noise monitoring data cannot be collected.

Table 5: Attended Noise Monitoring Program – Dendrobium Mine⁶

Location	GPS Coordinates		Address	Description
	Easting	Northing		
R1 ⁷	298935	6188309	17 High Street	Across the cattle grid on the left before the shed and house.
R6a ⁷	298948	6187739	374 Cordeaux Road	Next to dust monitor at the property boundary
R39a ⁸	300788	6188449	Figtree Farm	On the western end of the house
R39a intermediate ⁹	300972	6188690	Ashmount Farm	On farm track under the power line with line of sight to KVCL and rail line

The location of monitoring sites allow noise levels from the high potential areas of the Pit Top and KVCLF sites to be monitored, the impact on the surrounding communities to be assessed, and compliance against the noise consent conditions determined. Table 6 identifies the high potential noise sources and potential impact areas.

Table 6: High potential noise sources and potential impact areas

Site	Relevant Site	High Potential Area/s	Community
R1	Pit Top	Main Portal Ballast Movements Compressor Shed Portal Road movements	Kembla Heights
R6a	Pit Top	Workshop Area Bulk Store General Yard Area	Mt Kembla

⁶ Detailed reviews of the noise data and associated community complaints were undertaken in 2009 and 2014 respectively. This review consisted of an assessment of compliance levels achieved at each of the noise receiver locations for the preceding three or five-year period. The reviews recommended the removal of several monitoring sites.

⁷ Located on IMC owned land.

⁸ Located on private property.

⁹ Monitoring is undertaken on this site to avoid contributions from ambient noise e.g. Brandy and Water Creek and has direct line of site to the KVCLF. The results from monitoring at this location are extrapolated to R39a to determine compliance.

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		Carpark Portal Road	
R39a	KVCLF	Rail line and train movements ¹⁰ Train loading operations Stockpile SME movements Compressor Shed General site movements	Mt Kembla/Figtree

Noise from Dendrobium at surrounding receivers is dependent on activities occurring on site at the time, and also the prevailing weather conditions (wind and temperature inversions).

6.2.2 Real Time Monitoring – Pit Top

A directional noise monitoring system (DNMS) was installed in 2021.

The DNMS is comprised of five loggers that provide coverage of the Pit Top entrance, workshop and warehouse areas and Portal Road. The location of the loggers is shown in Plan 2. The loggers record data on a continuous basis, and assist IMC to identify activities, events and locations that contribute to the site noise level 15 minute average. The data is uploaded to a software interface that generates noise contour maps that show how activities on site are contributing to total noise levels.

Predicted maximum noise level events are displayed at each residence and can be investigated by zooming to a shorter time period. The display at each residence includes the time of the event.

Noise trigger levels have been identified, and when the trigger levels are reached, a notification is provided to relevant personnel. This allows personnel to identify noisy equipment or activities that are contributing to higher noise levels and take action to reduce noise levels on site where practical and feasible.¹¹

Data from the DNMS is also able to be used in the investigation of noise complaints.

The DNMS is used for operational management of noise sources. Attended noise monitoring as detailed in 6.2.1 is used for compliance monitoring.

6.3 Noise Monitoring Program – KVRL

The rail noise monitoring program includes a combination of attended monitoring of locomotives and unattended monitoring at two locations. Additional monitoring may be undertaken dependent on train performance, operational characteristics and community concern in relation to wheel and brake squeal.

¹⁰ Locomotive movements are assessed against Condition 3 of Schedule 4 – Rail Haulage Impact Assessment Criteria. Noise contributions from rail haulage at the KVCLF are not included in the assessment of compliance with the R39a noise impact assessment criteria, associated with surface activities, consistent with cabinet approved EPA noise policy and guidelines (refer to report dated March 2022 and letter dated 27 May 2022, prepared by Spoke Acoustics).

¹¹ Project underway to implement this functionality.

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6.3.1 **Attended Noise Monitoring (Locomotive)**

Attended noise monitoring of the locomotives used on the KVRL is undertaken annually, with one of the three locomotives tested (on a rotating basis) in each campaign to minimise disruption to the rail haulage operations. The location the locomotive monitoring is undertaken is shown on Plan 3.

All noise measuring equipment is field calibrated before and after each set of measurements with a calibrator with current NATA certification. All noise measuring equipment is Type 1 will be 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.

For each site, the following shall be reported:

- location, date and time, and name of person undertaking the monitoring;
- type of instrument used and the calibration status;
- parameters measured and their results; and
- weather conditions.

6.3.2 **Real-time Monitoring**

An unattended real-time rail noise monitoring system was implemented in 2010 and supplemented in 2020 with a second monitor to allow the performance of the rail haulage fleet to be monitored. The location of these monitors is shown on Plan 2. The system provides real time noise monitoring for each train movement along the line. The system has been designed to monitor several variables, including L_{Amax} and L_{Aeq} , and is also able to automatically detect squeal events via a frequency distribution analysis.

The data from the real-time noise monitors is used on an as needed basis dependent on community complaints, reporting and review processes.

6.3.3 **Noise Working Groups**

The RNWG meets regularly with the below objectives:

- review rail noise monitoring results and complaints;
- review available information and data to identify rail noise mitigation options;
- review and improve targeted track maintenance; and
- develop strategies for positive proactive community engagement.

The RNWG consists of IMC employees (operational, community and environmental personnel) and rail contract partners (maintenance and operations).

A Pit Top Noise Working Group was established in 2022 to review the results from the real time noise monitoring and complaints, and progress opportunities for improving noise management on-site. The Pit Top Noise Working Group consists of IMC employees (operational, community and environmental personnel).

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6.4 Supplementary Monitoring

Supplementary noise monitoring in the form of spot checks, surveys and audits may be undertaken to confirm that the various Dendrobium Mine activities (whether existing or new) do not generate unacceptable noise levels affecting the amenity of the nearby community or are exceeding the noise criteria.

If relevant, IMC will review low frequency noise by comparing 'C' and 'A' weighted noise levels for operations and equipment in accordance with the EPA Noise Policy for Industry (NPfI) and EPA's transition arrangements.

6.5 Training and Competency

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

7. COMPLAINTS AND NON-COMPLIANCE MANAGEMENT

7.1 Complaints and Dispute Resolution

IMC has a 24 hour, free community call line (1800 102 210) and email address (illawarracommunity@south32.net) which is displayed at IMC Projects 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 IMC's operations.

Community complaints and enquiries may also be received in person by any employee of IMC, with details to be immediately shared with the External Affairs Team for investigation. All noise complaints received in relation to Dendrobium operations 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 response 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 required 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, that will include a comparison with complaints received the previous year. A log of complaints is also maintained on the IMC website at:

<https://www.south32.net/our-business/australia/illawarra-metallurgical-coal/documents>.

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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 all IMC 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.

Exceedances and non-compliances with noise impact assessment 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 2 or Table 4 (as applicable)¹²; and
- the exceedance is validated by analysis and assessment of monitoring data (in accordance with the INP); and
- Residential Background Level (RBL) noise is not above the noise criteria; and
- the exceedance of noise criteria is not attributable to some other source (e.g. meteorological event or other source); and
- no landholder agreement is in place to allow the exceedance; and
- the exceedance is determined to be a sustained emission; 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.

¹² Locomotive movements are assessed against Condition 3 of Schedule 4 – Rail Haulage Impact Assessment Criteria (Table 4). Noise contributions from rail haulage from the KVCLF are not included in the assessment of compliance with the R39a noise impact assessment criteria, associated with surface activities, consistent with cabinet approved EPA noise policy and guidelines (refer to report dated March 2022 and letter dated 27 May 2022, prepared by Spoke Acoustics).

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Where noise monitoring has recorded a noise criteria exceedance and the exceedance is confirmed as being related to operational activities associated with Dendrobium, 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 2dB above the statutory noise limit specified in the consent or licence condition.

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

7.2.2 Adaptive Management

Where any exceedance of the criteria in Table 2 or Table 4 of the Consent has occurred and has been assessed to be non-compliant as detailed in Section 0, IMC will take all reasonable and feasible steps to ensure the exceedance ceases and does not recur and consider reasonable and feasible options for remediation (where relevant).

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 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 Mitigation

In accordance with Condition 6 of Schedule 4 of the Consent, where subsequent noise monitoring shows that the noise generated by the development is 3 dB(A) greater than the noise impact assessment criteria in Table 2 and the results have been assessed to be non-compliant as detailed in Section 7.2.1, upon receiving a written request from the owner of any residence (except where a negotiated noise agreement is in place), IMC will implement reasonable and feasible noise mitigation measures (such as double glazing, insulation and/or air conditioning) at the residence in consultation with the landowner. The Voluntary Land Acquisition and Mitigation Policy will be reviewed as a guide for potential mitigation treatments.

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

7.3.2 Land Acquisition

Where noise monitoring results have been assessed to be non-compliant as detailed in Section 7.2.1 and the results verify that noise generated from Dendrobium operations exceeds the relevant criteria in Table 3, at any residence on privately-owned land or more than 25% of privately-owned land, IMC will, upon receiving a written request for acquisition

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from the landowner, acquire the land in accordance with the procedures in Conditions 6 - 8 of Schedule 7¹³.

7.4 Independent Review

If a landowner considers that impact assessment criteria in Schedule 4 are being exceeded, they may request an independent review in accordance with Condition 2 of Schedule 7. If the Planning Secretary is satisfied that an independent review is required, it will be undertaken in accordance with Conditions 3, 4 and 5 of Schedule 7.

8. REPORTING AND REVIEW

8.1 Reporting

Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the *EP&A Act*. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.

8.1.1 Annual Review

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

The Annual Review is prepared in accordance with the requirements of Condition 5 of Schedule 8 of the Consent and is submitted to relevant agencies in September each year. Annual Reviews are made available to the regulatory agencies and general public via the South32 website.

The Annual Review will include:

- noise monitoring results including comparison to relevant statutory requirements, limits or performance measures/criteria, requirements of any plan or program required under the Consent, monitoring results of previous years and relevant predictions in the documents listed in Condition 2 of Schedule 2;
- identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies;
- identification of trends;
- noise related complaints and management/mitigation measures undertaken;
- management/mitigation measures undertaken in the event of any confirmed non-compliances, environmental impacts or failures of controls to rectify the non-compliance and avoid reoccurrence;
- review of the performance of management/mitigation measures and the monitoring program;

¹³ Note incorrect reference in Consent.

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- describe the measures that will be implemented over the next financial year to improve the environmental performance of the development; and
- describe the development carried out in the previous financial year and proposed to be carried out in the current financial year.

8.1.2 Public Reporting of Results (via website)

A summary of the noise monitoring results, including details of exceedances and non-compliances (as determined in accordance with the protocol for assessing compliance as described in 0 of the NMP), will be provided on the IMC website in the 14-day Report at: <https://www.south32.net/our-business/australia/illawarra-metallurgical-coal/documents>.

8.2 Exceedance Notifications

8.2.1 Notification of Noise Criteria Exceedances – Government Authorities

In the event that an exceedance or non-compliance of the relevant noise criteria is confirmed in accordance with Section 7.2.1, a notification is to be made in accordance with Condition 1 of Schedule 7 via the DPE Major Projects Planning Portal: <https://www.planningportal.nsw.gov.au/major-projects>. This notification is to be made as soon as practicable after becoming aware of the exceedance. The EPA should also be notified of the exceedance/non-compliance (via email).

8.2.2 Notification of Noise Criteria Exceedances – Landowners

Condition 1 of Schedule 7 of the Consent requires the notification of affected landowners if an exceedance is recorded. IMC will notify exceedances of noise impact assessment criteria (as stated in Section 6.1) 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 and monitoring results will be provided to each affected landowner until compliance with criteria is achieved.¹⁴ The notifications will be sent out to the landowners as identified in Table 7.

Table 7: Landholder Notifications

Noise Monitoring Location		Receivers to be notified
ID	Description	
R1	Kembla Heights	High Street and Central Avenue
R6a	Cordeaux Road	372 and 374 Cordeaux Road
R39a	Figtree/Ashmount Farm	Northern end of Stones Road, Figtree Farm and Ashmount Farm

¹⁴ Monitoring results are available in the 14 day report available on the South32 website.

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

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

8.3 Review of NMP

In accordance with Condition 2A of Schedule 8 of the Consent, the NMP will be reviewed, and if necessary revised, within three months, of:

- the submission of an annual review;
- the submission of an incident report;
- the submission of an Independent Environmental Audit (IEA) report; or
- any modification to the conditions of the Consent (unless the conditions require otherwise).

If necessary, to either improve the environmental performance of the development or cater for a modification, the strategies, plans and programs required under this consent must be revised, to the satisfaction of the Secretary and submitted to the Secretary for approval within six weeks of the review.

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 Secretary for approval. Once approved, the NMP will be uploaded to the IMC website.

The approved NMP will be implemented.

8.4 Audits

8.4.1 IEA

In accordance with Condition 6 of Schedule 8 of the Consent, an IEA shall be commissioned every three years, that will include a review of the NMP.

The IEA will:

- (a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;
- (b) include consultation with the relevant agencies and the CCC;
- (c) assess the environmental performance of the development and assess whether it is complying with the relevant requirements in this consent and any relevant EPL or mining lease (including any strategy, plan or program required under these approvals);
- (d) review the adequacy of strategies, plans or programs required under these approvals;

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- (e) recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals; and
- (f) be conducted and reported to the satisfaction of the Secretary.

The report is required to be submitted to the Planning Secretary and any other NSW agency that requests it, together with the response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations, within three (3) months of commencing¹⁵ the IEA, in accordance with Condition 7 of Schedule 8 of the Consent. A copy of the IEA and response to recommendations will be provided on the IMC website.

The recommendations of the IEA must be implemented to the satisfaction of the Secretary.

IEAs have been conducted every three years since 2008, with the last IEA being conducted in 2020 and the next IEA to be conducted in 2023. Recommendations from the IEA will be incorporated into the NMP where appropriate.

8.4.2 ISO 14001

As part of the ISO 14001 certification, IMC 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 years.

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

¹⁵ The date of commencing the IEA is defined as the first day of the site inspection.

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9. SUMMARY OF COMMITMENTS

Commitment	Section in NMP
IMC will provide personnel and resources to implement the NMP.	Section 2
IMC will comply with the conditions of the Consent and relevant legislation.	Section 3
IMC will implement and maintain reasonable and feasible noise mitigation measures to comply with operational noise criteria and minimise the impact on the community.	Section 5
IMC will implement site specific noise mitigation measures for construction where reasonable and feasible.	Section 5.6
IMC will notify local government authorities or RMS regarding noticeable deterioration in road pavement on roads that may increase noise generation	Section 5.7
IMC will not undertake blasting at any surface facilities without approval from the EPA.	Section 5.8
IMC will implement the noise monitoring program.	Section 6
The RNWG will meet regularly to discuss the results of noise monitoring and the results of maintenance and mitigation measures implemented.	Section 6.3.3
IMC will implement additional noise mitigation measures where reasonable and feasible if impacts to the community have been identified and existing noise mitigation and management measures have been deemed to be ineffective.	Section 7.2.2
IMC will implement reasonable and feasible noise mitigation measures at residences where noise criteria are exceeded and the conditions for mitigation have been met.	Section 7.3.1
IMC will progress acquisition of properties where a written request has been received and the criteria for acquisition have been met.	Section 7.3.2
IMC will commission an Independent Review where requested by the Secretary.	Section 7.4
IMC will report and investigate complaints, incidents and exceedances of limits as required, and identify and implement corrective actions.	Section 7.1 and 7.2
IMC will undertake reporting as required.	Section 8
IMC will review the NMP as required.	Section 8.3
IMC will undertake audits as required.	Section 8.4

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10. ACRONYMS

Term	Definition
BATEA	Best Available Technology Economically Achievable
BMP	Best Management Practice
CCC	Community Consultative Committee
DCPP	Dendrobium Coal Preparation Plant
dB(A)	Decibel (A weighted)
DPIE	Department of Planning, Industry and Environment
EIS	Environmental Impact Study
EMS	Environmental Management System
EPA	Environment Protection Authority
EP&A Act	Environmental Planning and Assessment Act
EPL	Environment Protection Licence
EQulS	Environmental monitoring database
FY	Financial year
G360	IMC event reporting system
HSE	Health Safety and Environment
ICHPL	Illawarra Coal Holdings Pty Ltd
IEA	Independent Environmental Audit
IMC	Illawarra Metallurgical Coal
INP	Industrial Noise Policy
km	kilometre
KVCLF	Kemira Valley Coal Loading Facility
$L_{Aeq,15min}$	The equivalent continuous A-weighted sound level over the measurement interval of 15-minutes
$L_{A90,15min}$	The A-weighted sound level exceeded for 90% of the time in the measurement interval of 15 minutes

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L _{A1.1min}	The A-weighted sound level exceeded for 1% of the time in the measurement interval of 1 minute
L _{Amax}	The maximum A-weighted sound level in the measurement interval.
ML	Mining Lease
MOD	Modification to Consent
MSA	Metropolitan Special Area
Mtpa	Million tonnes per annum
NATA	National Association of Testing Authorities
NPfi	Noise Policy for Industry
POEO	Protection of the Environment Operations
PKSW	Port Kembla Steel Works
RBL	Rated Background Level
RoM	Run of Mine
SME	Surface Mobile Equipment
VS	Ventilation Shaft

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11. REFERENCES

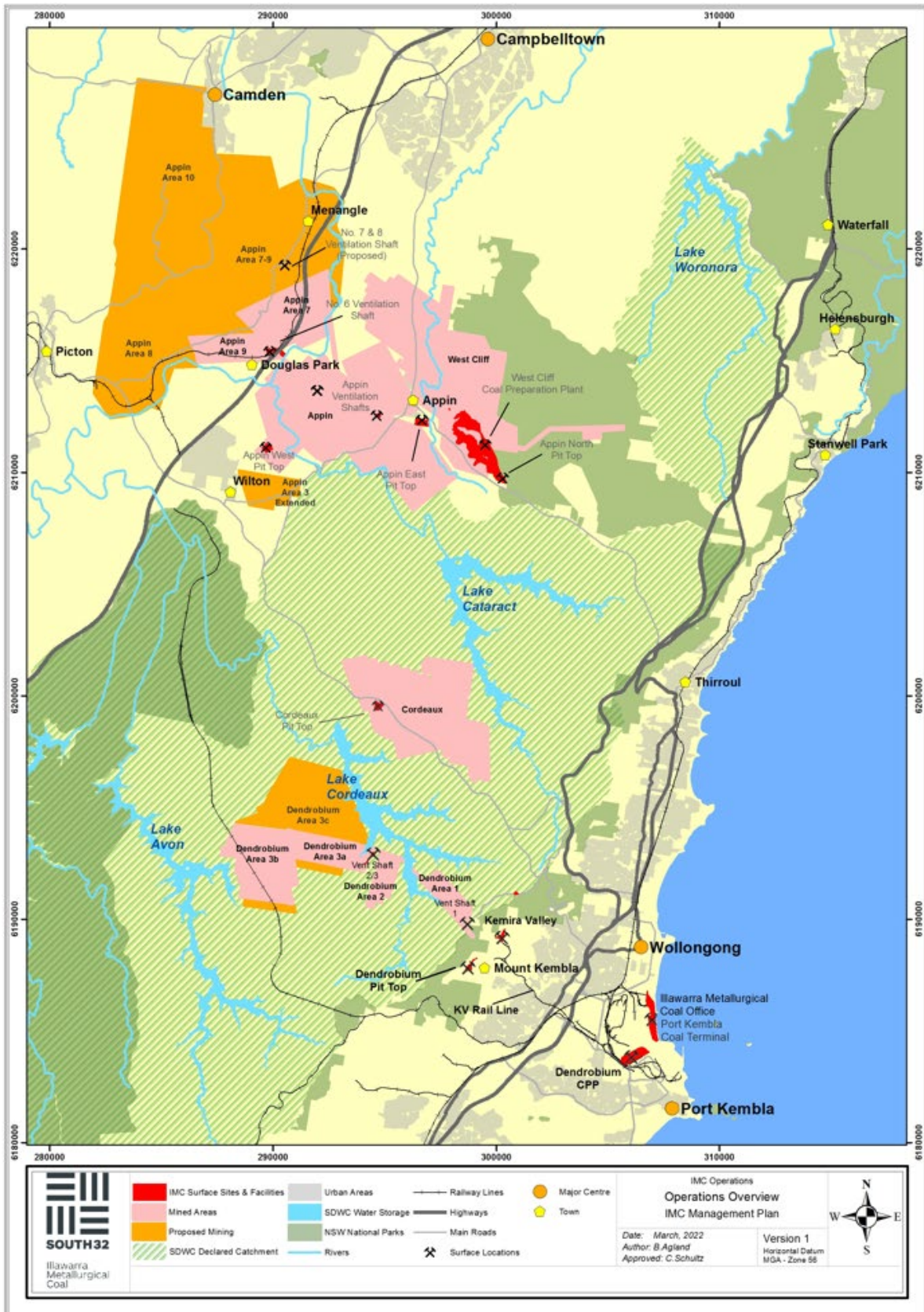
- Development Consent 60-03-2001, as modified
- Dendrobium Mine Modification – Gas Management Infrastructure Modification Report (February 2022)
- Noise Review for Additional Gas Management Infrastructure at Dendrobium No. 2 and 3 Shafts (Renzo Tonin and Associates (2022)).
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- Wilkinson Murray (2009), “Quarterly Noise Monitoring Review – Summer 2006 to Spring 2008”, prepared for BHP Billiton (now South32) by Wilkinson Murray Pty Ltd, January 2009.
- Review of Noise Monitoring Program July 2014 v2.pdf (ICH Report: Dated July 2014).
- Dendrobium Mine - DPE Request for Information Response, March 2022 (prepared by Spoke Acoustics).
- Handling Community Complaints, Enquiries and Disputes Procedure (IMCP0112)
- Reporting and Investigation Standard (IMCSTD0069)
- Environmental Compliance/Conformance Assessment and Reporting Procedure (IMCP0186)
- ISO 14001:2015 Environmental Management Systems Standard
- Dendrobium Mine Traffic Management Plan (DENMP0043)
- Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments (NSW Government September 2018)

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12. PLANS

Plan 1: Dendrobium Mine Locality Plan

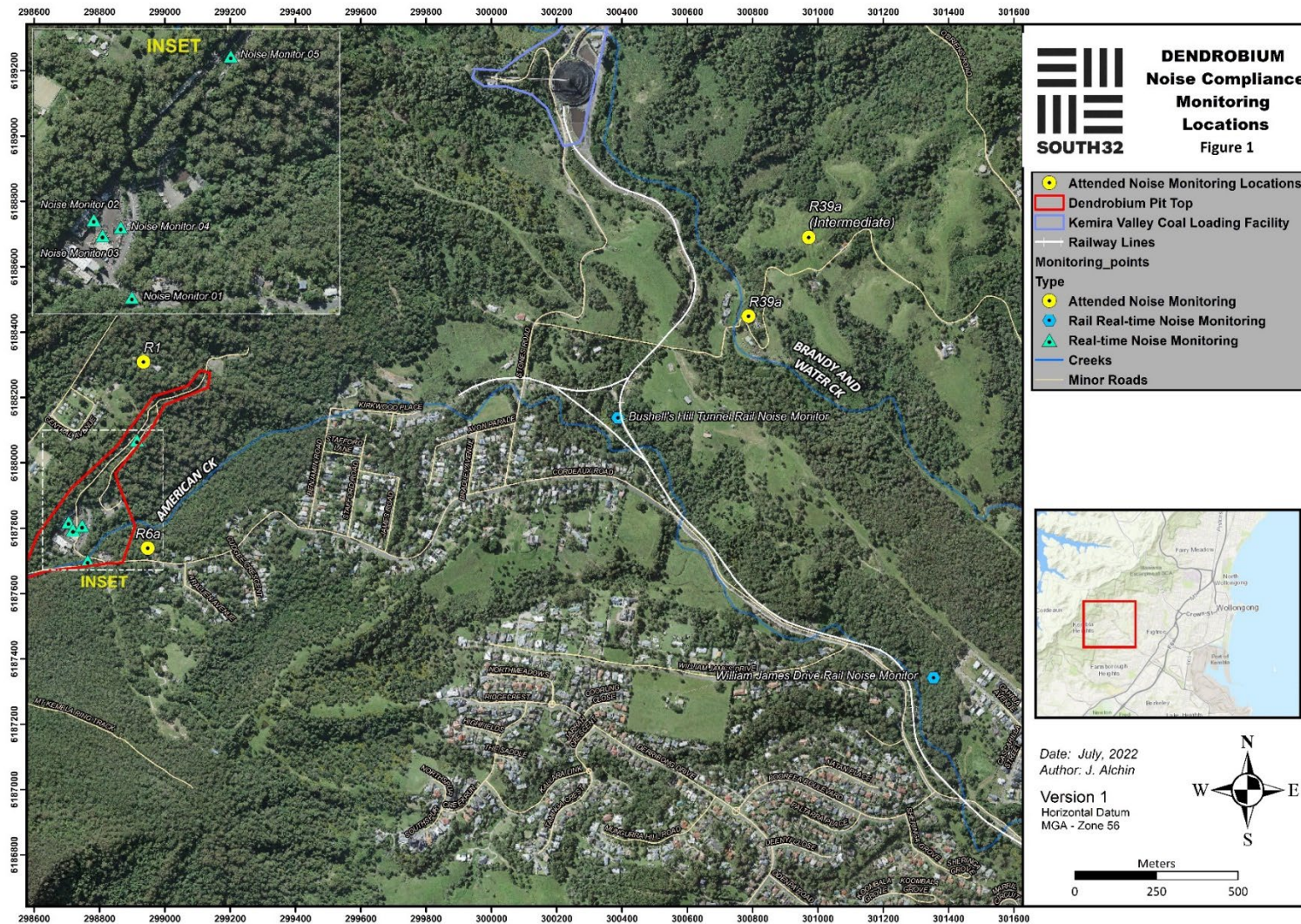


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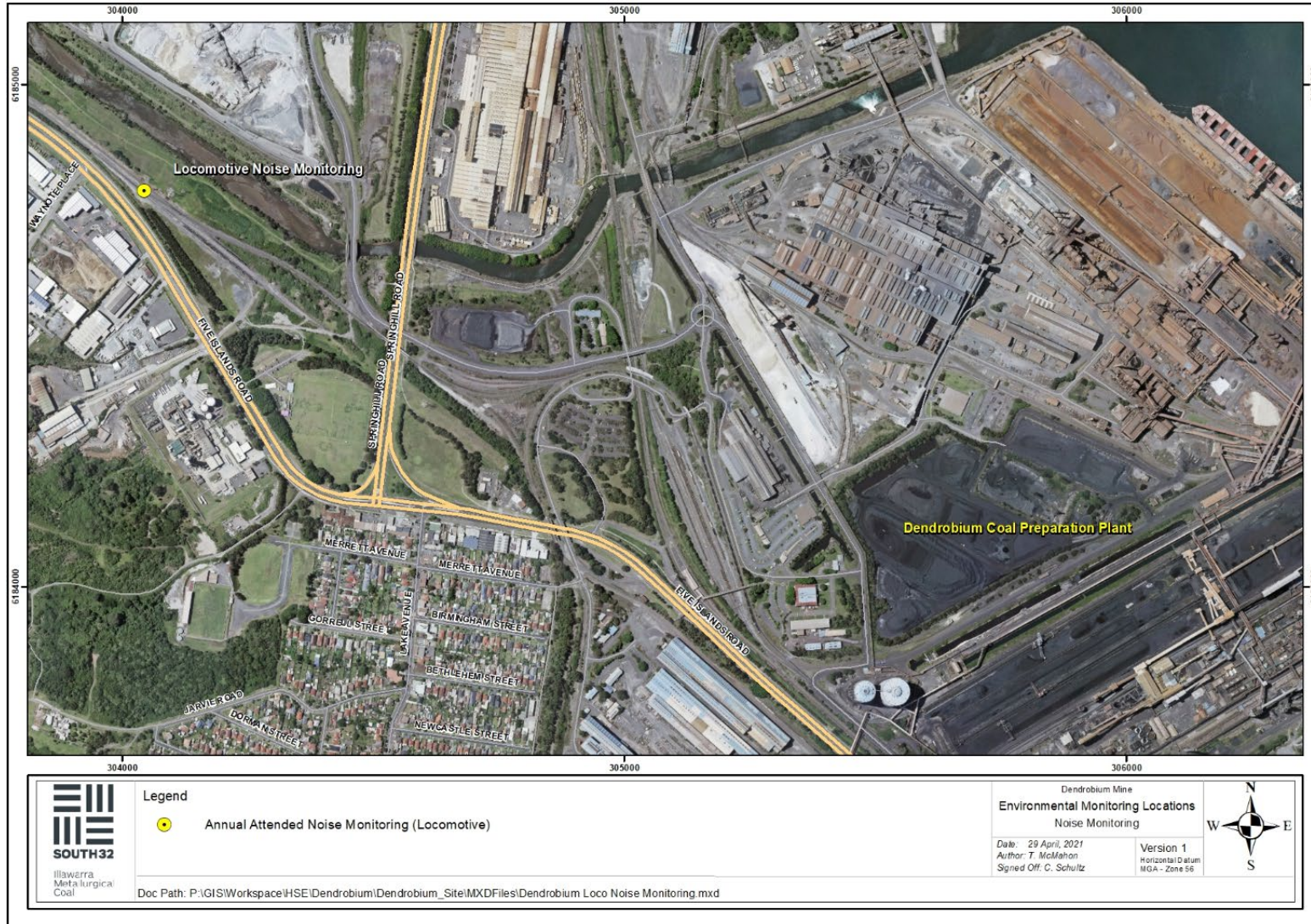
Plan 2 : Noise Monitoring Locations – Pit Top, KVCLF and KVRL



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Plan 3 : Noise Monitoring Locations – Locomotives



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13. APPENDICES

Appendix 1: Consent Conditions: Noise Management

Condition	Requirement	Section																																																							
Condition 2 of Schedule 2	<p>Terms of Consent</p> <p>The Applicant must carry out the development generally in accordance with the documents as listed in Condition 2 of Schedule 2 of the consent.</p>	Section 3.1																																																							
Condition 2A of Schedule 2	The Applicant must carry out the development in accordance with the conditions of this consent.	Section 3.1																																																							
Condition 2B of Schedule 2	The Applicant must carry out the development generally in accordance with the development layout Shown in Appendix 2.	Section 3.1																																																							
Condition 1 of Schedule 4	<p>Noise Impact Assessment Criteria</p> <p>The Applicant must ensure that the noise generated at the surface facilities does not exceed the noise impact assessment criteria in Table 1 at any residence on privately-owned land, or on more than 25% of any privately-owned land. The applicable criteria for any residence not listed in Table 1 shall be the criteria applying at the nearest listed residence.</p> <p><i>Table 1: Noise impact assessment criteria dB(A)</i></p> <table border="1"> <thead> <tr> <th>Day</th> <th>Evening</th> <th colspan="2">Night</th> <th>Residence</th> </tr> <tr> <th><i>L_{Aeq}(15 min)</i></th> <th><i>L_{Aeq}(15 min)</i></th> <th><i>L_{Aeq}(15 min)</i></th> <th><i>L_{A1}(1 min)</i></th> <th><i>(as shown in the Noise Monitoring Program)</i></th> </tr> </thead> <tbody> <tr> <td>42</td> <td>42</td> <td>38</td> <td>48</td> <td>R2</td> </tr> <tr> <td>41</td> <td>41</td> <td>40</td> <td>50</td> <td>R22</td> </tr> <tr> <td>40</td> <td>40</td> <td>39</td> <td>49</td> <td>R1</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>R9</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>R15a</td> </tr> <tr> <td>40</td> <td>40</td> <td>37</td> <td>47</td> <td>R3a</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>R5a</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>R6a&b</td> </tr> <tr> <td>37</td> <td>35</td> <td>35</td> <td>45</td> <td>R39a</td> </tr> </tbody> </table> <p><i>Notes:</i></p> <ul style="list-style-type: none"> To determine compliance with the <i>L_{Aeq}(15 minute)</i> limit, noise from the development is to be measured at the most affected point within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary. Where it can be demonstrated that direct measurement of noise from the development is impractical, EPA may accept alternative means of determining compliance. To determine compliance with the <i>L_{A1}(1 minute)</i> limit, noise from the development is to be measured at 1 metre from the dwelling façade. Where it can be demonstrated that direct measurement of noise from the development is impractical, DECC may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The noise emission limits identified in the above table apply under meteorological conditions of: <ul style="list-style-type: none"> wind speeds of up to 3 m/s at 10 metres above ground level; or up to 3°C/100 m temperature inversion strength for all receivers, plus a 2 m/s source-to-receiver component drainage flow wind at 10 metres above ground level for those receivers where applicable. These limits do not apply if the Applicant has an agreement with the relevant owner/s of these residences to generate higher noise levels, and the Applicant has advised the Department and EPA in writing of the terms of this agreement. 	Day	Evening	Night		Residence	<i>L_{Aeq}(15 min)</i>	<i>L_{Aeq}(15 min)</i>	<i>L_{Aeq}(15 min)</i>	<i>L_{A1}(1 min)</i>	<i>(as shown in the Noise Monitoring Program)</i>	42	42	38	48	R2	41	41	40	50	R22	40	40	39	49	R1					R9					R15a	40	40	37	47	R3a					R5a					R6a&b	37	35	35	45	R39a	Section 6.1
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<p>Condition 2 of Schedule 4</p>	<p>Land Acquisition Criteria</p> <p>If the noise generated at the surface facilities exceeds the relevant criteria in Table 2 at any residence on privately-owned land or on more than 25% of any privately-owned land, the Applicant must, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 8 - 10 of schedule 4. The applicable criteria for any residence not listed in Table 2 shall be the criteria applying at the nearest listed residence.</p> <p><i>Table 2: Noise acquisition criteria dB(A)</i></p> <table border="1"> <thead> <tr> <th>Day <i>L_{Aeq(15 min)}</i></th> <th>Evening <i>L_{Aeq(15 min)}</i></th> <th>Night <i>L_{Aeq(15 min)}</i></th> <th>Residence <i>(as shown in the Noise Monitoring Program)</i></th> </tr> </thead> <tbody> <tr> <td>47</td> <td>47</td> <td>43</td> <td>R2</td> </tr> <tr> <td>46</td> <td>46</td> <td>45</td> <td>R22</td> </tr> <tr> <td>45</td> <td>45</td> <td>44</td> <td>R1</td> </tr> <tr> <td></td> <td></td> <td></td> <td>R9</td> </tr> <tr> <td>45</td> <td>45</td> <td>42</td> <td>R15a</td> </tr> <tr> <td></td> <td></td> <td></td> <td>R3a</td> </tr> <tr> <td></td> <td></td> <td></td> <td>R5a</td> </tr> <tr> <td>42</td> <td>40</td> <td>40</td> <td>R6a&b</td> </tr> <tr> <td></td> <td></td> <td></td> <td>R39a</td> </tr> </tbody> </table> <p><i>Note: Noise generated by the development is to be measured in accordance with the notes to Table 1.</i></p>	Day <i>L_{Aeq(15 min)}</i>	Evening <i>L_{Aeq(15 min)}</i>	Night <i>L_{Aeq(15 min)}</i>	Residence <i>(as shown in the Noise Monitoring Program)</i>	47	47	43	R2	46	46	45	R22	45	45	44	R1				R9	45	45	42	R15a				R3a				R5a	42	40	40	R6a&b				R39a	<p>Section 6.1</p> <p>Section 7.3.2</p>
Day <i>L_{Aeq(15 min)}</i>	Evening <i>L_{Aeq(15 min)}</i>	Night <i>L_{Aeq(15 min)}</i>	Residence <i>(as shown in the Noise Monitoring Program)</i>																																							
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			R39a																																							
<p>Condition 3 of Schedule 4</p>	<p>Rail Haulage Impact Assessment Criteria</p> <p>The Applicant must ensure that noise generated by locomotives using the Kemira Valley rail line does not exceed the rail noise impact assessment criteria in Table 3.</p> <p><i>Table 3: Rail noise impact assessment criteria</i></p> <table border="1"> <thead> <tr> <th>Operating Condition</th> <th>Measurement Conditions</th> <th>Criteria <i>L_{A1(f min)}</i></th> </tr> </thead> <tbody> <tr> <td>Locomotive at idle, with compressor radiator fans and air conditioning operating at maximum load</td> <td>Stationary 15 metre contour</td> <td>70 dB(A)</td> </tr> <tr> <td>All other throttle settings under self-load, with compressor radiator fans and air conditioning operating at maximum load</td> <td>Stationary 15 metre contour</td> <td>87 dB(A) 95 dB(Lin)</td> </tr> <tr> <td>All service conditions</td> <td>Up to 50 kilometres per hour, 15 metres from centreline of rail track</td> <td>87 dB(A) 95 dB(Lin) Must be non-tonal Linear noise levels must not exceed A-weighted noise levels by more than 15 dB</td> </tr> </tbody> </table> <p><i>Note: All measured noise levels must be assessed for tonality in accordance with the NSW Industrial Noise Policy, unless otherwise specified.</i></p>	Operating Condition	Measurement Conditions	Criteria <i>L_{A1(f min)}</i>	Locomotive at idle, with compressor radiator fans and air conditioning operating at maximum load	Stationary 15 metre contour	70 dB(A)	All other throttle settings under self-load, with compressor radiator fans and air conditioning operating at maximum load	Stationary 15 metre contour	87 dB(A) 95 dB(Lin)	All service conditions	Up to 50 kilometres per hour, 15 metres from centreline of rail track	87 dB(A) 95 dB(Lin) Must be non-tonal Linear noise levels must not exceed A-weighted noise levels by more than 15 dB	<p>Section 6.1</p>																												
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<p>Condition 4 of Schedule 4</p>	<p>Continuous Improvement</p> <p>The Applicant must:</p> <p>(a) continue to investigate ways to reduce the noise generated by the development (including off-site road noise, noise and vibration impacts from the operation of the Kemira Valley rail line and maximum noise levels which may result in sleep disturbance);</p>	<p>Section 5</p>																																								



	<p>(b) continue to implement all reasonable and feasible best practice noise mitigation measures; and</p> <p>(c) report on these investigations and the implementation and effectiveness of these measures in the Annual Review, to the satisfaction of the Secretary.</p>	<p>Section 7.2.2</p> <p>Section 8.1.1</p>
<p>Condition 5 of Schedule 4</p>	<p>The Applicant must use its best endeavours to minimise wheel squeal, brake squeal and locomotive wheel slippage arising from rail haulage on the Kemira Valley rail line.</p>	<p>Section 5</p> <p>Section 6.3.3</p>
<p>Condition 6 of Schedule 4</p>	<p>Additional Noise Mitigation Measures</p> <p>Upon receiving a written request from the owner of any residence where subsequent noise monitoring shows the noise generated by the development is 3 dB(A) greater than the noise impact assessment criteria in Table 1 (except where a negotiated noise agreement is in place) the Applicant must implement reasonable and feasible noise mitigation measures (such as double glazing, insulation and/or air conditioning) at any residence on the land in consultation with the landowner.</p> <p>If within 3 months of receiving this request from the landowner, the Applicant and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Secretary for resolution.</p>	<p>Section 7.3.1</p>
<p>Condition 7 of Schedule 4</p>	<p>Monitoring</p> <p>The Applicant must prepare a Noise Monitoring Program for the development to the satisfaction of the Secretary. This program must:</p> <p>(a) be submitted to the Secretary for approval by 30 April 2009;</p> <p>(b) be prepared in consultation with EPA;</p> <p>(c) provide for quarterly attended noise monitoring and real-time noise monitoring (where appropriate) to monitor the performance of the development, especially in residential areas close to the surface facilities; and</p> <p>(d) include a noise monitoring protocol for evaluating compliance with the noise impact and land acquisition criteria in this consent.</p> <p>The Applicant must implement the Noise Monitoring Program as approved by the Secretary.</p>	<p>Date is in the past</p> <p>Appendix 2</p> <p>Section 6</p> <p>Section 7.2.1</p> <p>Section 6.1.3</p>

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	Note: This program must expressly monitor the modifying factors referred to in the NSW Industrial Noise Policy (such as intermittency, tonality and low frequency). ¹⁶	
Condition 8 of Schedule 4	<p>Blasting and Vibration</p> <p>The Applicant is not permitted to undertake blasting operations at the surface facilities except with the prior written approval of EPA and subject to any conditions which EPA may impose.</p>	Section 5.8
Condition 23 of Schedule 4	<p>Rail Transport of Coal</p> <p>The Applicant must ensure that trains do not travel on the Kemira Valley rail line:</p> <p>(a) between 12 midnight and 6 am, until 29 April 2010; and</p> <p>(b) between 11 pm and 6 am, from 30 April 2010</p> <p>unless written approval is obtained from EPA for emergency use of the rail line.</p>	Section 5.3
Condition 1 of Schedule 7	<p>Notification of Landowners</p> <p>If the results of monitoring required in Schedule 4 identify that the impacts generated by the development are greater than the relevant impact assessment criteria in Schedule 4, except where this is predicted in the documents listed in condition 2 of schedule 2 or where a negotiated agreement has been entered into in relation to that impact, then the Applicant must notify the Secretary and the affected landowners and/or existing or future tenants (including tenants of mine-owned properties) accordingly, and provide quarterly monitoring results to each of these parties until the results show that the development is complying with the criteria in Schedule 4.</p>	Section 8.2.2
Condition 2 of Schedule 7	<p>Independent Review</p> <p>If a landowner considers the development to be exceeding the impact assessment criteria in schedule 4, except where this is predicted in the EA, then he/she may ask the Secretary in writing for an independent review of the impacts of the development on his/her land.</p>	Section 7.4

¹⁶ Note: Under the EPA's Implementation and transitional arrangements for the Noise Policy for Industry (NPfI) (2017), this program must expressly monitor the modifying factors referred to in the NSW Industrial Noise Policy (such as intermittency, tonality and low frequency) in accordance with the NPfI.

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<p>Condition 3 of Schedule 7</p>	<p>If the independent review determines that the development is complying with the relevant impact assessment criteria in schedule 4, then the Applicant may discontinue the independent review with the approval of the Secretary. If the landowner disputes the results of the independent review then either the Applicant or the landowner may refer the matter to the Secretary for resolution.</p> <p>Where matters referred to the Secretary under this condition cannot be resolved by the Secretary within 28 days, the Secretary shall refer the matter to an Independent Dispute Resolution Process.</p>	<p>Section 7.4</p>
<p>Condition 4 of Schedule 7</p>	<p>If the independent review determines that the development is not complying with the relevant impact assessment criteria in Schedule 4, and that the development is primarily responsible for this noncompliance, then the Applicant must:</p> <p>(a) take all reasonable and feasible measures, in consultation with the landowner, to ensure that the development complies with the relevant criteria and conduct further monitoring to determine whether these measures ensure compliance; or</p> <p>(b) secure a written agreement with the landowner to allow exceedances of the relevant criteria; or</p> <p>(c) offer to acquire all or part of the landowner’s land in accordance with the procedures in conditions 6-8 below to the satisfaction of the Secretary.</p>	<p>Section 7.4</p>
<p>Condition 5 of Schedule 7</p>	<p>If further monitoring under condition 4(a) determines that the development is complying with the relevant impact assessment criteria, then the Applicant may discontinue the independent review with the approval of the Secretary.</p> <p>If further monitoring under condition 4(a) determines that measures implemented under that condition have not achieved compliance with the impact assessment criteria in schedule 4, and the Applicant cannot secure a written agreement with the landowner under condition 4(b) to allow these exceedances, then the Applicant must, upon receiving a written request from the landowner, acquire all or part of the landowner’s land in accordance with the procedures in conditions 6-8 below.</p>	<p>Section 7.4</p>
<p>Condition 2 of Schedule 8</p>	<p>Management Plan Requirements</p> <p>Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:</p> <p>(a) a summary of relevant background or baseline data;</p> <p>(b) details of:</p>	<p>Section 4</p>



	<p>(i) the relevant statutory requirements (including any relevant approval, licence or lease conditions);</p> <p>(ii) any relevant limits or performance measures and criteria; and</p> <p>(iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;</p> <p>(c) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;</p> <p>(d) a program to monitor and report on the:</p> <p>(i) impacts and environmental performance of the development; and</p> <p>(ii) effectiveness of the management measures set out pursuant to condition 2(c);</p> <p>(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;</p> <p>(f) a program to investigate and implement ways to improve the environmental performance of the development over time;</p> <p>(g) a protocol for managing and reporting any:</p> <p>(i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria);</p> <p>(ii) complaint;</p> <p>(iii) failure to comply with statutory requirements; and</p> <p>(h) a protocol for periodic review of the plan.</p>	<p>Section 3</p> <p>Section 6.1</p> <p>Section 6.1</p> <p>Section 5</p> <p>Section 8</p> <p>Section 7.2.2</p> <p>Section 8.4</p> <p>Section 7</p> <p>Section 8.3</p>
<p>Condition 5 of Schedule 8</p>	<p>Annual Review</p> <p>By the end of September each year (or other such timing as may be agreed by the Secretary), and for at least 3 years following the cessation of mining at the development, the Applicant must submit an Annual Review to the Secretary, CCC and all relevant agencies reviewing the environmental performance of the development to the satisfaction of the Secretary. This report must relate to the previous financial year and:</p> <p>(a) identify the standards and performance measures that apply to the development;</p> <p>(b) describe the development (including any rehabilitation) that was carried out in the previous financial year;</p> <p>(c) describe the development (including any rehabilitation) that is proposed to be carried out over the current financial year;</p>	<p>Section 8.1.1</p>



	<p>(d) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;</p> <p>(e) include a summary of the monitoring results for the development during the past year;</p> <p>(f) a comprehensive review of the monitoring results and complaints records of the development over the previous financial year, including a comparison of these results against the: (i) relevant statutory requirements, limits or performance measures/criteria; (ii) requirements of any plan or program required under this consent; (iii) monitoring results of previous years; and (iv) relevant predictions in the documents listed in condition 2 of Schedule 2.</p> <p>(g) identify any non-compliance or incident which occurred in the previous financial year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;</p> <p>(h) evaluate and report on: (i) the effectiveness of the noise and air quality management systems; and (ii) compliance with the performance measures, criteria and operating conditions in this consent;</p> <p>(i) identify any trends in the monitoring data over the life of the development;</p> <p>(j) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and</p> <p>(k) describe what measures will be implemented over the next financial year to improve the environmental performance of the development. Copies of the Annual Review must be submitted to the affected Councils and made available to the CCC and any interested person upon request.</p>	
<p>Condition 6 of Schedule 8</p>	<p>Independent Environmental Audit</p> <p>By 31 December 2011, and every 3 years thereafter, unless the Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development. This audit must:</p> <p>(a) be conducted by suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Secretary;</p> <p>(b) include consultation with the relevant agencies and the CCC;</p> <p>(c) assess the environmental performance of the development and assess whether it is complying with the relevant requirements in this consent and any relevant EPL or mining lease (including any strategy, plan or program required under these approvals);</p> <p>(d) review the adequacy of strategies, plans or programs required under these approvals;</p>	<p>Section 8.4.1</p>

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	<p>(e) recommend measures or actions to improve the environmental performance of the development, and/or any strategy, plan or program required under these approvals; and</p> <p>(f) be conducted and reported to the satisfaction of the Secretary. Note: This audit team must be led by a suitably qualified auditor and include experts in the fields of a) mine subsidence impacts and remediation and b) stream hydrology and water quality.</p>	
Condition 7 of Schedule 8	<p>Within three months of commencing an Independent Environmental Audit, or within another timeframe agreed by the Secretary, the Applicant must submit a copy of the audit report to the Secretary, and any other NSW agency that requests it, together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. The recommendations must be implemented to the satisfaction of the Secretary. Note: The audit team must be led by a suitably qualified auditor and include experts in any fields specified by the Secretary.</p>	Section 8.4.1
Condition 8 of Schedule 8	<p>Any condition of this consent that requires the carrying out of monitoring or an environmental audit, whether directly or by way of a plan, strategy or program, is taken to be a condition requiring monitoring or an environmental audit under Division 9.4 of Part 9 of the EP&A Act. This includes conditions in respect of incident notification, reporting and response, non-compliance notification, compliance report and independent audit.</p>	Section 8
Condition 11 of Schedule 8	<p>Access to Information</p> <p>Before the commencement of Modification 8 until the completion of all rehabilitation required under this consent, the Applicant must:</p> <p>a) make the following information and documents (as they are obtained, approved or as otherwise stipulated within the conditions of this consent) publicly available on its website:</p> <ul style="list-style-type: none"> i. the documents referred to in condition 2 of Schedule 2 of this consent; ii. all current statutory approvals for the development; iii. all approved strategies, plans and programs required under the conditions of this consent; iv. minutes of CCC meetings; v. regular reporting on the environmental performance of the development in accordance with the reporting requirements in any plans or programs approved under the conditions of this consent; vi. a comprehensive summary of the monitoring results of the development, reported in accordance with the specifications in any conditions of this consent, or any approved plans and programs; vii. a summary of the current stage and progress of the development; 	<p>Section 3.1</p> <p>Section 7.1</p> <p>Section 8</p>



	<ul style="list-style-type: none"> viii. contact details to enquire about the development or to make a complaint; ix. a complaints register, updated monthly; x. the Annual Reviews of the development; xi. audit reports prepared as part of any Independent Environmental Audit of the development and the Applicant's response to the recommendations xii. any other matter required by the Secretary; and <p>keep such information up to date, to the satisfaction of the Secretary.</p>	
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Appendix 2: Agency Consultation

Agency Comments	IMC Response
Environment Protection Authority (EPA)	
<p><u>Comment received 12 May 2021</u></p> <p>The EPA has reviewed the plan and makes the following comments for your consideration.</p> <ul style="list-style-type: none"> Section 6.2.1, page 16, “NSW Office of Environment and Heritage (OEH) Industrial Noise Policy (INP) (2000)” should instead refer to “NSW Environment Protection Authority (EPA) Industrial Noise Policy (INP) (2000)”. The plan appropriately integrates the INP and the EPA’s “Noise Policy for Industry (2017)” as required under the EPA’s “Implementation and transitional arrangements for the Noise Policy for Industry (2017)”. 	<p>Reference amended</p> <p>Noted</p>
<p><u>Comment received 9 August 2022</u></p> <p>The EPA has reviewed the plan which has been updated to include the Gas Management Infrastructure Modification (MOD 9) and a real time directional noise monitoring system (DNMS) at the pit top.</p> <p>The EPA makes the following (minor) comments.</p> <ul style="list-style-type: none"> The location of works being completed under MOD 9 could be described in section 4.2 to provide context to readers not familiar with the approval. A note could be added to section 5.4 that states noise monitoring will not be undertaken at the Vent Shaft 2 & 3 location due to the remoteness of the site. <p>The EPA would appreciate receiving a copy of the final plan or a link to its location on Illawarra Coal’s website after it has been approved by the Planning Secretary.</p>	<p>Noted.</p> <p>Further context provided.</p> <p>Note included in text.</p> <p>Link to website will be included when approval received.</p>
Department of Planning, Industry and Environment	
<p><u>Approval received 29 May 2021</u></p> <p>The Department has carefully reviewed the document and is satisfied that it generally meets the relevant conditions.</p>	<p>Noted</p>

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<p>Accordingly, the Planning Secretary has approved the Noise Management Plan (Revision 10, dated April 2021). Please ensure that the approved plan is placed on the project website at the earliest convenience.</p>	
<p><u>Approval received 19 September 2022</u></p> <p>I note the Noise Management Plan has been prepared in consultation with the Environment Protection Authority and contains the information required by the conditions of approval.</p> <p>Accordingly, as nominee of the Planning Secretary, I approve the Noise Management Plan (Version 11.0, dated August 2022) under Condition 7 of Schedule 4.</p> <p>You are reminded that if there are any inconsistencies between the Noise Management Plan and the conditions of approval, the conditions prevail.</p> <p>Please ensure you make the document publicly available on the project website at the earliest convenience.</p>	<p>Noted</p>

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Appendix 3: Management Plan Approval

Department of Planning and Environment



Our ref: DA60-03-2001-PA-155

Chris Schultz
Environment Superintendent
ILLAWARRA COAL HOLDINGS PTY LTD
Via email: chris.schultz1@south32.net

19/09/22

Subject: Dendrobium Mine - Noise Management Plan Version 11

Dear Mr Schultz

I refer to your request for the approval of the Noise Management Plan for Dendrobium Mine.

I note the Noise Management Plan has been prepared in consultation with the Environment Protection Authority and contains the information required by the conditions of approval.

Accordingly, as nominee of the Planning Secretary, I approve the Noise Management Plan (Version 11.0, dated August 2022) under Condition 7 of Schedule 4.

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

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

If you wish to discuss the matter further, please contact Gabrielle Allan on 9585 6078.

Yours sincerely

Jessie Evans
Director, Resource Assessments
Resource Assessments

As nominee of the Planning Secretary

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