



NEWCREST
MINING LIMITED

CADIA

Noise Monitoring Program

710-005-EN-PLA-0003

DOCUMENT CONTROL

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DOCUMENT HISTORY AND STATUS

Rev.	Date Issued	Issued To	Approved By	Date Approved
1	06/04/2010	Department of Planning and Infrastructure	D Kitto	09/06/2010
2	05/12/2011	Department of Planning and Infrastructure	D Kitto	16/05/2012
3	09/12/2013	Department of Planning and Infrastructure	K Winwood	11/07/2014
4	11/06/2018	Department of Planning and Environment	Clay Preshaw	21/12/2018
5	24/06/2021	Department of Planning, Industry and Environment	Stephen O'Donoghue	02/09/2021

AMENDMENTS

Rev.	Date	Section	Page	Developed By	Nature of Amendment
5	12/05/2021	4	15	K. Hatch	New Template Include items from Independent Audit Removal of Blayney Dewatering Facility (decommissioned)
5	19/08/2021	1.1 5 6.3	4,7 17 20	K. Hatch	Respond to RFI-24654958 from DPI&E
5	30/08/2021	2.0 6.3	4 20	K. Hatch	Respond to RFI-26705492 from DPI&E

APPROVAL

Revision No.	Approval Date	Signature
5	20/09/2021	Nicolas Bourgeot (Acting)
		Superintendent - Environment

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1.0 INTRODUCTION AND BACKGROUND

Project Approval for the Cadia East Project was granted by the NSW Minister for Planning under Part 3A of the *Environmental Planning and Assessment Act, 1979* (EP&A Act) on 6 January 2010. The Cadia East Project is described in Schedule 1 of the Project Approval as including the Cadia East underground mine, the Cadia Hill open cut mine (now used for tailings deposition), the Ridgeway underground mine (currently in 'care and maintenance'), the Blayney Dewatering Facility (now decommissioned) and CVO Dewatering Facility, and ancillary infrastructure. These components are together known as the Cadia Valley Operations (Cadia).

This Noise Monitoring Program (NMP) outlines noise monitoring that is undertaken at Cadia. The NMP addresses the requirements contained in the Cadia East Project Approval (PA-06_0295) and Environment Protection Licence (EPL) 5590.. The table below summarises the requirements of Condition 9, and an indication of which sections of the NMP address these requirements. The NMP is also consistent with the requirements of Environment Protection Licence (EPL 5590 – version).

Table 1-1: Cadia East Project Approval- Condition 9 Requirements

Project Approval Requirement	Relevant Section of Plan
The Proponent shall prepare and implement a detailed Noise Monitoring Program for the project to the satisfaction of the Secretary. This program must:	All Sections
(a) Be prepared in consultation with EPA, and be submitted to the Secretary for approval within 3 months of the date of this approval; and	1.1
(b) Include:	
• a combination of unattended and attended monitoring measures; and	4
• a noise monitoring protocol for evaluating compliance with the relevant noise impact assessment and land acquisition criteria in this approval.	5.1

1.1 Consultation

CHPL consulted with the Bathurst regional office of the Office of Environment & Heritage (OEH) (formerly Department of Environment, Climate Change and Water) in March 2010 during the development of Version 1 of the NMP.

CHPL consulted with directly affected stakeholders and the CVO Community Consultative Committee during development of Version 1 and Version 2 of the NMP.

The EPA was consulted through the Annual Environmental Management Review (AEMR) process in November 2013 on changes associated with Version 2 of the NMP. Version 3 of the NMP was approved by the Department of Planning and Environment (DoPE) in July 2014 and changes to this version were presented to the EPA and other stakeholders as part of the 2014/15 AEMR process in November 2015.

The Cadia East Project Environmental Assessment (CHPL, 2009) describes the cumulative effects of noise associated with Cadia. A summary of the noise assessment is provided below to provide some overall context to this NMP.

The Cadia East Project Approval Schedule 3 Condition 9 requires that the Noise Monitoring Program be developed in consultation with EPA. Following internal review and update of management plans and monitoring programs (within the specified timeframes), the documents will be sent by email to the EPA. The consultation process and any feedback or comments received during the consultation process will be included in the document prior to sending to DPIE (via the Major projects Portal) for approval.

Cadia will use the CNESS (Community, Health, Environmental, Safety System) database to track the reasonable requests of the secretary. All incoming requests from the Secretary will be assigned as Actions in CNESS, taking into consideration the due date for the request.**Existing Environment**

The noise emissions from Cadia generally comply with the existing operational noise criteria. Further afield, the noise environment is typical of a rural setting.

Background noise surveys were conducted in the vicinity of the CVO Dewatering Facility site near Blayney. This noise environment was also characterised as typical of a rural setting, notwithstanding that the dewatering facility is located adjacent to an existing refrigerated warehouse facility (the Blayney Cold Storage and Distribution warehouses).

Potential Impacts

A cumulative noise assessment was undertaken as part of the Cadia East Environmental Assessment. This assessment predicts that compliance with operational noise criteria would be met at all sensitive receivers in the vicinity of Cadia, except for one sensitive receiver to the immediate east of Cadia during Year 1 at night-time. The overall noise emissions from the Project are predicted to reduce over time.

An iterative noise modelling process was also undertaken for the CVO Dewatering Facility. This process initially indicated exceedances of criteria at sensitive receivers near Blayney. One property adjacent to the CVO Dewatering facility was predicted to have a high level of noise impact and as such acquisition on request provisions are included in the Project Approval (See Section 2.2). Noise impacts at other properties near the CVO Dewatering Facility will be managed through the installation of a noise-reducing fence and train-loading activities would be undertaken during daytime hours only.

2.0 COMPLIANCE CONDITIONS AND COMMITMENTS

Noise impact assessment criteria for Cadia are determined according to Schedule 3, Condition 2, of the Project Approval (PA06_0295) and Conditions described in L4 (Noise limits) of Environmental Protection Licence (EPL5590).

Cadia will take all reasonable and practical measures to ensure that the noise generated by the project does not exceed the noise impact assessment criteria as described in Section 2.1.

2.1 PROJECT APPROVAL

Project Approval (PA06_0295) Noise Impact Assessment Criteria are divided into:

- Project Noise Criteria (Impact Assessment) (Schedule 3, Condition 2)
- Land Acquisition Criteria (Schedule 3, Condition 3)

- Cumulative Noise Criteria (Schedule 3, Condition 4)
- Traffic Noise Impact Assessment Criteria (Schedule 3, Condition 5)

These conditions are extracted below.

Schedule 3, Condition 2: Project Noise Criteria

The Proponent shall ensure that the noise generated by the project does not exceed the noise impact assessment criteria in Table 2 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land.

Table 2: Noise Impact Assessment Criteria dB(A) $L_{Aeq}(15min)$

Location	Day	Evening	Night	Night ($L_{A1}(1min)$)
Mining Operations				
41-CW Knox ('Meribah'), 43-CJ Healey ('Triangle Park'), 138-AC & A Bailey ('Mayburies'), 45-CC Colman ('Mirrabooka'), 246-CK Channell and KP & DV Donlan ('Eastburn'), 209-JI McLennan ('Northwest'), 171-GA Knox ('South Log')	43	38	38	45
1-GT & JA Christou ('Coorabin'), 137-MP & LA Ellis ('Arqyle'), 169-RL & SL Chamberlain ('Weemalla')	43	38	37	45
44-AR Colman ('Triangle Flat'), 105-KA Hughes ('Barton Park'), 133-LC & LR Baker ('Bonnie Glen')	43	38	36	45
Other privately owned land	43	38	35	45
Blayney Dewatering Facility				
Location 1	50	50	39	49
Location 2	50	50	36	46
Location 3	46	46	37	47
Location 4	46	46	36	46
Location 5	58	58	45	55
CVO Dewatering Facility				
MC & PA Ewens	50	42	42	45
GP Nixon & Sons	43	35	35	45
D Palmer	40	39	35	45
H Tetlaw	40	36	35	45
ML Gardner	40	35	35	45
GJ Keen	39	35	35	45
D Somerville	38	38	35	45

Notes:

- To interpret the locations referred to Tables 2-5, see the applicable figures in Appendices 2 and 4.
- Noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.
- The noise limits do not apply if the Proponent has an agreement with the relevant owner/s of these residences/land to generate higher noise levels, and the Proponent has advised the Department in writing of the terms of this agreement.
- Noise associated with the mining operations may exceed the night time limits in Table 2 at Property 22 – JL Gill by 1 decibel during construction of the Cadia East mine.
- Noise associated with the construction of the upgrade to the Blayney Dewatering Facility may exceed the noise impact assessment criteria in Table 2 by up to 3 decibels at all locations except Location 4, and is to be measured in accordance with the relevant procedures in the EPA's Interim Construction Noise Guideline.

Condition 3, Schedule 3: Land Acquisition Criteria

If the noise generated by the project exceeds the criteria in Table 3 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land, the Proponent shall, upon receiving a written request for acquisition from the landowner, acquire the land in accordance with the procedures in conditions 5-7 of schedule 4.

Table 3: Land acquisition criteria dB(A) $L_{Aeq}(15min)$

Location	Day	Evening	Night
Mining Operations			
All privately-owned land	43	43	40
CVO Dewatering Facility			
D Palmer	45	44	40
H Tetlaw	45	41	40
GP Nixon & Sons, ML Gardner, GJ Keen	44	40	40
D Somerville	43	43	40

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

Schedule 3, Condition 4: Cumulative Noise Criteria

The Proponent shall implement all reasonable and feasible measures to ensure that the noise generated by the project combined with the noise generated by other mines and industries does not exceed the amenity criteria in Table 4 at any residence on privately-owned land or on more than 25 per cent of any privately-owned land, to the satisfaction of the [Secretary](#).

Table 4: Cumulative noise criteria dB(A) L_{Aeq} (period)

Location	Day	Evening	Night
Mining Operations			
All privately-owned land	50	45	40
CVO Dewatering Facility			
D Palmer	55	45	40
H Tetlaw, GP Nixon & Sons, ML Gardner, GJ Keen, D Somerville	50	45	40

Note: Cumulative noise is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy.

Schedule 3, Condition 5: Traffic Noise Impact Assessment Criteria

The Proponent shall take all reasonable and feasible measures to ensure that the traffic noise generated by the project does not exceed the traffic noise impact assessment criteria in Table 5.

Table 5: Traffic noise impact assessment criteria dB(A)

Road	Day/Evening	Night
Forest Road, Orange Road	60 $L_{Aeq}(15\text{hours})$	55 $L_{Aeq}(9\text{hours})$
Cadia Road, Orchard Road, Four Mile Creek Road, Woodville Road, Panuara Road	55 $L_{Aeq}(1\text{hour})$	50 $L_{Aeq}(1\text{hour})$

Note: Traffic noise generated by the project is to be measured in accordance with the relevant procedures in the EPA's Environmental Criteria for Road Traffic Noise.

Schedule 5, Condition 3: Revision of Strategies, Plans and Programs

Revision of Strategies, Plans and Programs

3. Within 3 months of:
 - (a) an annual review under condition 2 above;
 - (b) an incident report under condition 5 below;
 - (c) an audit under condition 7 below; or
 - (d) any modification of this approval,the Proponent shall review, and if necessary revise, the strategies, plans, and programs required under this approval to the satisfaction of the [Secretary](#).

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the project.

ENVIRONMENTAL PROTECTION LICENCE

The noise limits prescribed in EPL5590 are reproduced below.

Condition L4.1: Operational Noise (Excluding Blayney and Cadia Dewatering Facilities)

L4.1 Noise generated at the premises (excluding the dewatering facility) must not exceed the noise limits in the table below. The locations referred to in the table below are indicated by property name and/or name of the property owner.

Locality and Location	Day - LAeq (15 minute)	Evening - LAeq (15 minute)	Night - LAeq (15 minute)	Night - LA1 (1 minute)
'Meribah'; 'Triangle Park'; 'Mayburies'; 'Mirrabooka'; 'Eastburn'; 'Northwest'; 'South Log'	43	38	38	45
'Coorabin'; 'Argyle'; 'Weemalla'	43	38	37	45
'Triangle Flat'; 'Barton Park'; 'Bonnie Glen'	43	38	36	45
'Chesterfield'; 'Warrengong'; 'Willow Creek'	43	38	35	45
Other privately owned land	43	38	35	45

Note: For the purpose of condition L4.1:

- a) Day is defined as the period from:
 - i. 7am to 6pm Monday to Saturday, and
 - ii. 8am to 6pm on Sundays and Public Holidays;
- b) Evening is defined as the period 6pm to 10pm; and
- c) Night is defined as the period from:
 - i. 10pm to 7am Monday to Saturday, and
 - ii. 10pm to 8am on Sundays and Public Holidays.

Condition L4.2: Blayney and CVO Dewatering Facilities

L4.2 Noise generated at the Blayney dewatering facility and the CVO Dewatering Facility must not exceed the noise limits in the table below. The locations referred to in the table below are indicated by location name.

Locality and location	Day - LAeq (15 minute)	Evening - LAeq (15 minute)	Night - LAeq (15 minute)	Night - LA1 (1 minute)
85 Carcoar Street Blayney (Location 1)	50	50	39	49
15 Railway Lane Blayney (Location 2)	50	50	36	46
9 Hill Street Blayney (Location 3)	46	46	37	47

Blayney Primary School (Location 4)	46	46	36	46
Blayney Pre-School (Location 5)	58	58	45	55
84 Newbridge Road Blayney (Athol Gardens)	38	38	35	45
247 Newbridge Road Blayney	50	42	42	45
331 Newbridge Road Blayney (Hollywood)	43	35	35	45

Note: For the purpose of condition L4.2:

a) Day is defined as the period from:

- i. 7am to 6pm Monday to Saturday, and
- ii. 8am to 6pm on Sundays and Public Holidays;

b) Evening is defined as the period 6pm to 10pm; and

c) Night is defined as the period from:

- i. 10pm to 7am Monday to Saturday, and
- ii. 10pm to 8am on Sundays and Public Holidays.

Also for the purpose of condition L4.2, monitoring locations that refer to Newbridge Road are locations with respect to the CVO Dewatering Facility. All other locations under L4.2 concern the Blayney Dewatering Facility.

2.2 OTHER CONDITIONS

It is stipulated in the Cadia East Project Approval and Environmental Protection Licence that noise generated by the project is to be measured in accordance with the relevant requirements, and exemptions (including certain meteorological conditions), of the NSW Industrial Noise Policy (INP). The meteorological exclusions specified in the INP include:

- Wind speeds greater than 3 m/s at 10 m above ground level;
- Temperature inversion conditions greater than 3°C/100 m and wind speeds greater than 2m/s at 10m above ground level; or
- During rainfall events (as stated in Section 3.4 of the INP)

3.0 NOISE STANDARDS AND GUIDELINES

The following standards have been referenced in the NMP and are applied, where relevant. The standards include:

- NSW Industrial Noise Policy (INP) (EPA, 2000)
- NSW Environmental Criteria for Road Traffic Noise (ECRTN) (EPA, 1999)
- AS1055.1997: Acoustics – Description and Measurement of Environmental Noise
- AS IEC 61672.1 – 2004: Electroacoustics – Sound Level Meter – Sound Level Meters

4.0 MONITORING

4.1 MONITORING OVERVIEW

4.1.1 Operational Noise CVO

A review of sensitive noise receptors surrounding Cadia has identified five distinct 'clusters' of residences (Appendix A). Cadia will monitor one representative residence from each cluster on a biannual basis. Based on previous monitoring results, noise modelling and liaison with the community, two of these clusters are perceived to be more sensitive than others (namely to the east and south east of the operations). In these areas, more than one residence will be chosen from each cluster. Selection of the monitoring residence will generally be the closest to the operations, where previous monitoring has identified noise concerns or where complaints have previously been received. Generally, residences on privately-owned land (as defined in the Cadia East Project Approval) will be selected, subject to the agreement of land owners.

Where monitoring shows that operational noise is within project approval criteria at the closest receiver, it will be assumed that compliance is achieved at other locations within the cluster.

Where monitoring shows that operational noise is not within project approval criteria at the monitored location, additional monitoring or modelling will be undertaken within the cluster to determine compliance.

Complaints based monitoring will be undertaken as required with the timing and duration of monitoring agreed between the resident and Cadia.

Monitoring will be undertaken using a combination of attended and directional (unattended) monitoring as described in Table 1.

4.1.2 Operational Noise CVO Dewatering Facility

A combination of attended and unattended directional monitoring around the CVO Dewatering Facility will be undertaken on a biannual basis during construction of the facility and once operational. There are two main residential clusters which are monitored one is to the east and the other to the south-west of the CVO Dewatering Facility. The properties where monitoring takes place are '247 Newbridge Rd', 'Athol' and 'Hollywood'. These locations have been selected as they represent the closest residential receivers to the facility.

4.1.3 Traffic Noise Monitoring

Traffic noise monitoring will be conducted biannually on Orchard, Cadia or Woodville Roads. If a complaint is received, traffic noise monitoring will also occur on Forest, Four Mile Creek, Panuara and Orange Roads. Complaints based monitoring will be undertaken as required with the timing and duration of monitoring agreed between the resident and Cadia.

Table 1 Monitoring locations

Area	Location	Easting	Northing	Directional Unattended	Attended (Biannual)
Mining Operations	Chesterfield	689,371	6,298,417	✓	✓
	Warrengong	690,097	6,294,708	✓	✓
	Willow Creek	690,428	6,292,673	✓	✓
	South Log	686,356	6,286,272	✓	✓
	Bonnie Glen	679,230	6,290,994	✓	✓
	Rosebank	681,773	6,298,569	✓	✓
	Northwest	688,616	6,291,142	✓	✓
CVO Dewatering Facility	247 Newbridge Rd	711,834	6,287,029	✓	✓
	Athol	710,341	6,287,152	✓	✓
	Hollywood	712,371	6,287,073	✓	✓
Traffic	Cadia Road	689,030	6,301,811	✓	
	Woodville Road	690,661	6,296,120		
	Orchard Road	691,920	6,303,638		

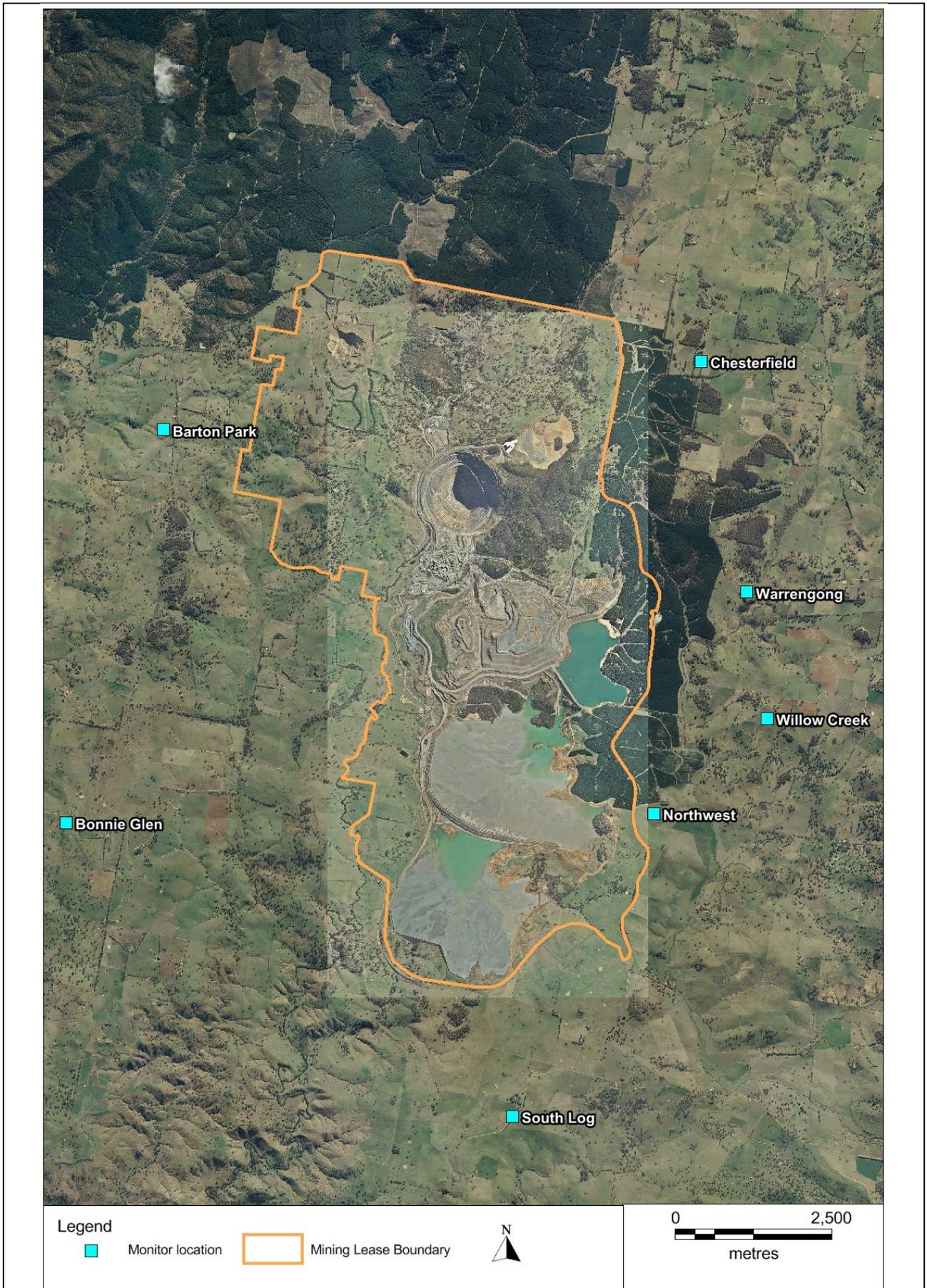


Figure 1 Mining operation noise monitoring sites

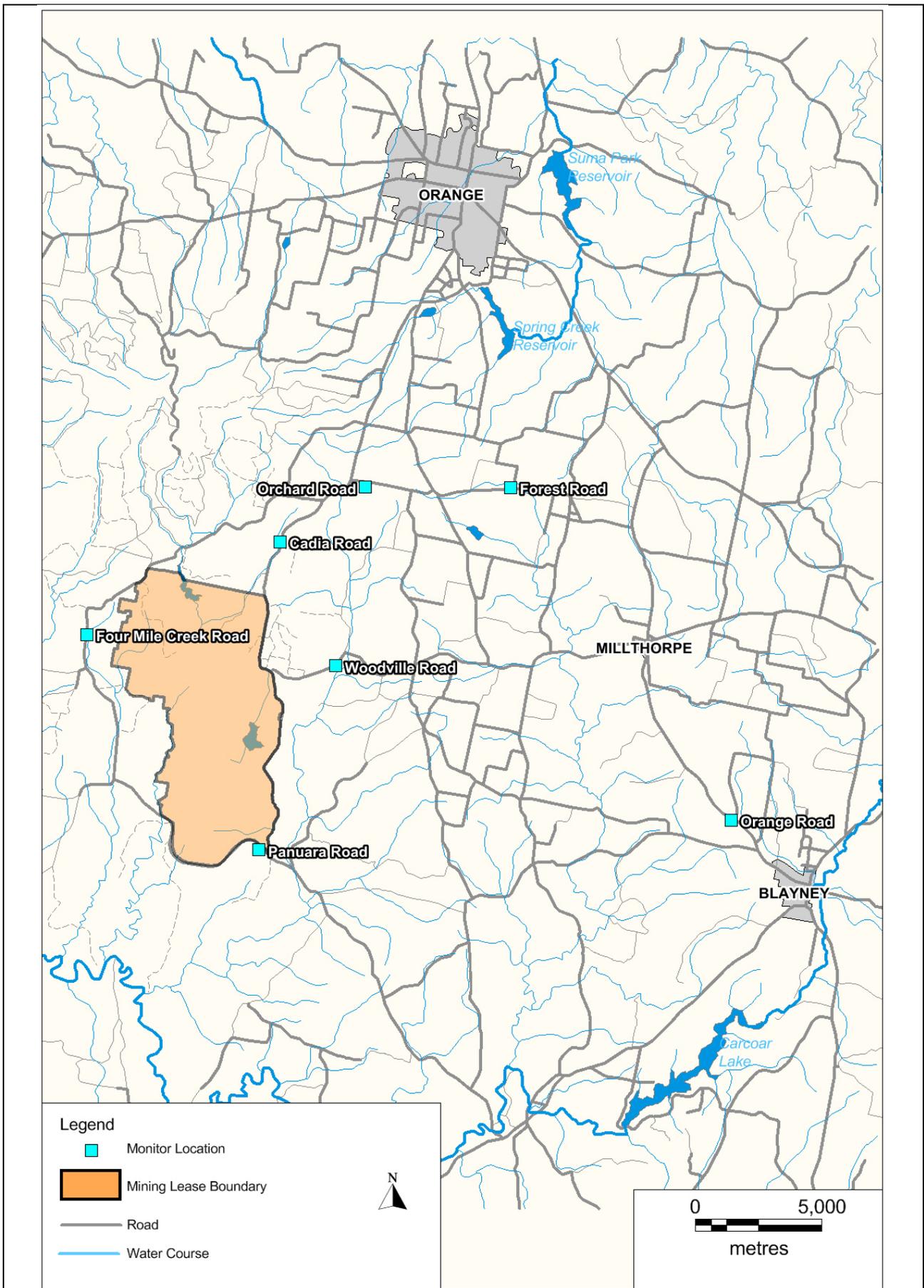


Figure 2 Traffic noise monitoring sites



Figure 3 CVO Dewatering Facility noise monitoring locations



4.2 ASSESSMENT PERIODS

In accordance with the definitions provided in the Project Approval and Environmental Protection Licence, the noise assessment periods that are mentioned in this program are shown in the following table.

Table 2 Noise assessment periods

Period	Weekdays	Start	Finish
Day	Monday - Saturday	7am	6pm
	Sundays and Public Holidays	8am	6pm
Evening	Monday - Sunday	6pm	10pm
Night	Monday - Saturday	10pm	7am
	Sundays and Public Holidays	10pm	8am

4.3 DIRECTIONAL (UNATTENDED) NOISE MONITORING

Directional noise monitoring will be conducted to assess mining operational noise. The details of the monitoring are as follows:

- monitoring will be conducted using a directional noise monitor (e.g. Quattrosound monitor)
- monitoring will be conducted continuously over a seven day period
- monitoring will be conducted biannually at each location or on request if a complaint is received

Data will be independently reviewed by a qualified consultant

To avoid unnecessary impact to residents, the Quattrosound monitoring trailer is positioned at the closest practical location between the dwelling on privately owned land and the potential noise source. Consultation with the landholder is also undertaken in regards to their operational requirements e.g. cropping and/or livestock movements which can affect the location of the Quattrosound trailer on their property.

Where LA_{eq} (15min) monitoring results show that operational noise is within criteria it is assumed that compliance is achieved at the dwelling which is a further distance from the potential noise source. Should monitoring results indicate a non-compliant result, the incident is reported and modelling is conducted to determine other residences and properties affected.

In the case of determining LA_1 (1 min), additional mitigation monitoring is conducted within 1m of the façade during sleep disturbance assessments as required by the Cadia East Project Approval and Environmental Protection Licence.

4.4 ATTENDED NOISE MONITORING

Attended noise monitoring will be conducted to assess mining operational noise. The details of the monitoring are as follows:

- monitoring will be conducted using an attended noise monitor (eg. the Bruel and Kjaer Sound Level Analyser)
- monitoring will be conducted by a consultant in two 15 minute intervals during daytime, evening and night time criteria (as specified by the Cadia East Project Approval & EPL5590)
- monitoring will be conducted twice per year at each location

Data will be independently reviewed by a qualified consultant

Where possible the attended monitoring will be co-located with the directional (unattended) monitoring to verify the results of the directional monitor with the intention of reducing the attended monitoring requirement.

4.5 NOISE PARAMETERS

The equipment used for noise monitoring will be programmed to measure the following parameters.

Table 3 Noise parameters

Parameter	Day	Evening	Night
Directional noise monitoring	dB(A) $L_{Aeq}(15min)$	dB(A) $L_{Aeq}(15min)$	dB(A) $L_{Aeq}(15min)$ dB(A) $L_{A1}(1min)$ dB(A) $L_{Aeq}(1min)$
Traffic	dB(A) $L_{Aeq}(1hour)$		dB(A) $L_{Aeq}(1hour)$

4.6 METEOROLOGICAL MONITORING

Meteorological monitoring is used to assist in the analysis of noise data. For example, data from periods where the wind speed is greater than 3m/s and/or rainfall occurs will be excluded since both these events can create extraneous noise on noise-monitoring equipment. The weather stations details are shown in the following table.

Table 4 Meteorological monitoring

Station	Easting	Northing	Parameters
Ridgeway (EPA identification point 17)	684,193	6,298,081	Temperature, barometric pressure, wind direction, wind speed, sigma-theta, relative humidity & solar radiation
Southern Lease Boundary (EPA identification point 18)	684,247	6,291,467	Temperature, barometric pressure, wind speed, wind direction, sigma-theta, relative humidity, solar radiation & evaporation

Meteorological data recorded by the weather station identified as EPA Identification Point 17 (Ridgeway) will be used to determine meteorological conditions when analysing noise data. Where the Ridgeway weather station cannot be used for any reason, the weather station identified as EPA Identification Point 18 (Southern Lease Boundary) will be used for this purpose.

When assessing noise monitoring data around the CVO Dewatering Facility, the meteorological data recorded by the weather station at the Orange Airport at Spring Hill will be used to determine meteorological conditions as stated in the Environmental Protection Licence.

5.0 NOISE MITIGATION MEASURES

Upon receiving a written request from:

- the landowner of the properties identified as:
 - MC & PA Ewens (unless the landowner has requested acquisition); or
 - GP Nixon & Sons; or
- the landowner of privately-owned land where subsequent operational noise monitoring shows the noise generated by the project exceeds the noise limits in Table 2 by more than:
 - 1 dB(A), in the case of daytime noise levels at the location identified as ML Gardner; or
 - 2 dB(A), in the case of all other locations; or
- the landowner of the residences on Forest Road, Orchard Road, Woodville Road or other road listed in Table 5 where subsequent noise monitoring shows traffic noise levels generated by the project exceed the traffic noise criteria in Table 5,

the Proponent shall implement additional noise mitigation measures such as double glazing, insulation, and/or air conditioning at any residence on the land in consultation with the landowner.

These additional mitigation measures must be reasonable and feasible.

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 [Secretary](#) for resolution.

Within 3 months of this approval, the Proponent shall notify all applicable landowners that they are entitled to receive additional noise mitigation measures, to the satisfaction of the [Secretary](#).

When exceedances are identified Cadia proactively engages with owners of affected properties to agree on mitigation works to reduce noise levels within the property.

Additionally, Cadia's short term contractors (e.g. Shutdown Workers) are required to travel to site on buses to reduce vehicle movements on the main routes to site.

Cadia are seeking to implement an Automated Noise Characterisation program which automatically classifies measurement data based on the identified noise source and identifying impacts of non-mining sources on measured noise levels, and automating efforts to resolve contributions from any underlying mine noise.

This will aim to improve real-time feedbacks of the unattended monitoring system and allow for Cadia to effectively respond to relevant noise emission events. Essentially, the system is aimed at identifying (and excluding) non-mining noise contributions and improve the precision of noise alarms.

6.0 DATA REVIEW

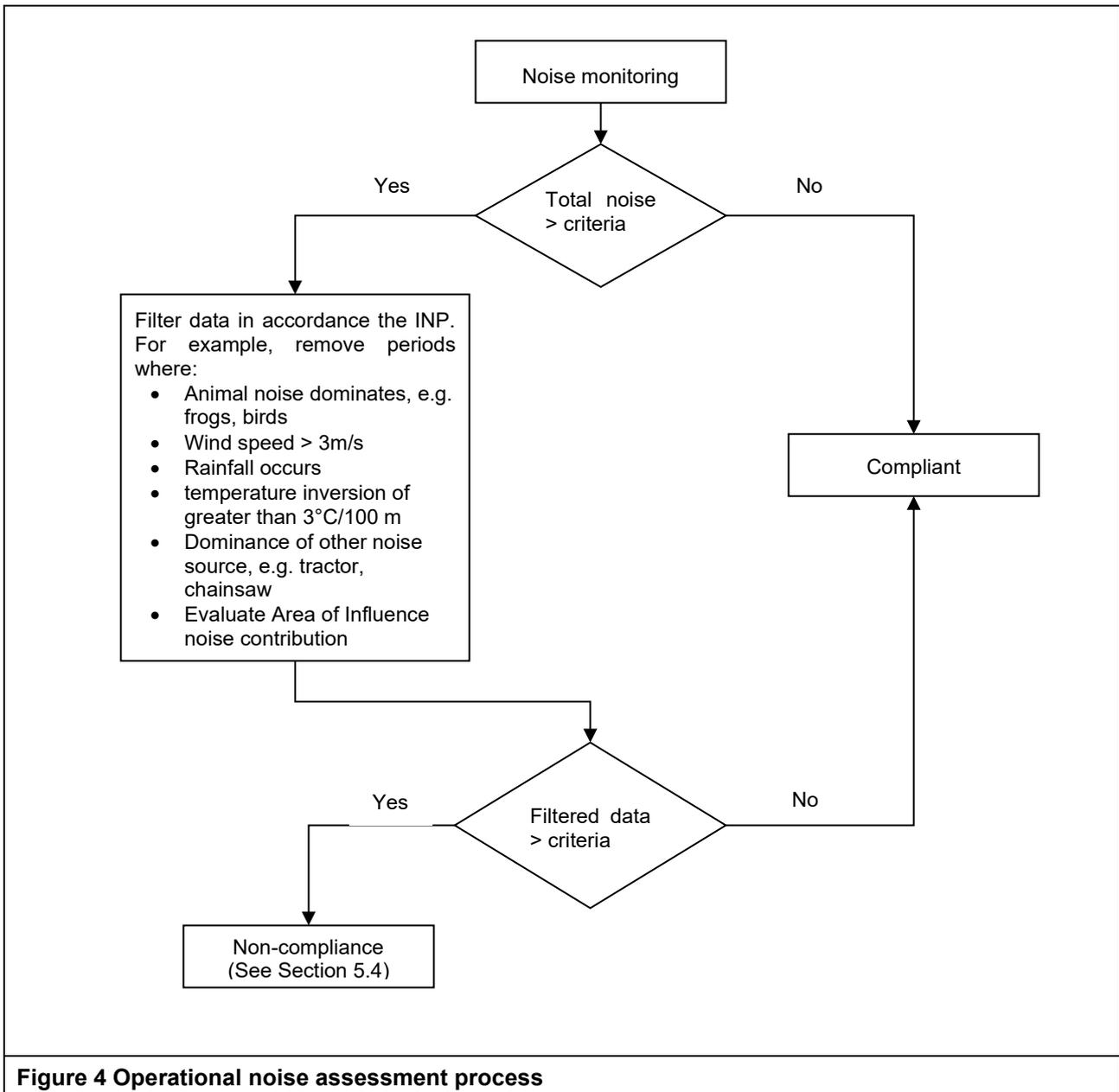
Results from the monitoring program will be reviewed and reported in a number of ways as described in the following subsections.

6.1 PROTOCOL FOR EVALUATING COMPLIANCE

The data will be analysed and evaluated on a monthly/ as conducted basis by an independent noise specialist consultant.

6.1.1 CVO Operational noise

The assessment process to evaluate compliance is shown in the Figure 5.



6.1.2 Traffic noise

Traffic noise will be analysed and evaluated on a monthly/ as conducted basis by an independent noise specialist consultant. The evaluation will include:

- Determination of the total noise
- Filtering data to remove the influence of wind and/or rain, animal noise, or other factors generally in accordance with the Environmental Criteria for Road Traffic Noise (1999), where the total noise is above the criteria.

6.2 REPORTING

6.2.1 Monthly reports

The data will be summarised in a monthly report produced by the relevant independent noise consultant. The report will describe:

- The sites monitored during that period.
- Comparison of the raw monitoring results against the appropriate criteria.
- Further analysis required where the raw monitoring results are above the appropriate criteria.
- Comparison of the filtered monitoring results against the appropriate criteria.
- Assessment of compliance with the criteria.

6.2.2 Cadia Website

In accordance with Condition 9, Schedule 5 of the Project Approval and Section 66 (6) of the Protection of the Environment Operations Act 1997 (POEO Act), CHPL is required to provide environmental monitoring data to the public via its website. A summary of the monitoring data will be updated on a monthly basis (as final monthly reports are available) on the Cadia website (www.cadiavalley.com.au) and will generally involve placement of an assessment report generated by the respective noise consultant.

6.2.3 Annual Review

An annual review will be completed for the financial year as required by the Cadia East Project Approval and Environmental Protection Licence. The annual review will be published on the Newcrest website and will include:

- Summary of all monitoring conducted during the year, including additional complaints based monitoring.
- Discussion of the noise monitoring results against the appropriate criteria.
- Discussion of the noise sources contributing to levels above the criteria.
- Steps taken to address noise exceedances.
- Recommendations for addition and/or removal of monitoring sites.

6.3 NOISE COMPLAINTS MANAGEMENT

Complaints are managed and recorded according to the Complaints Management and Reporting Protocol (Figure 6). Additional monitoring may be conducted if it is determined there is insufficient information to respond adequately to a noise complaint.

Cadia commit to investigate, take action to reduce the noise or implement management controls/mitigation when landowners raise concerns about noise. This may include installation of sound-proofing windows and/or doors, installation of roller shutters or louvres on windows and/or installation of air conditioners.

When community members raise concerns about operational noise levels each incident is investigated and action undertaken at the time to reduce the noise (e.g. cease specific activities for period) or management controls are implemented (e.g. change the operation of pumps).

6.4 MANAGEMENT OF NON-COMPLIANCES

Determining non-compliances with criteria will be guided by Section 11.1.3 of the *Industrial Noise Policy*, which states:

Non-compliances with noise conditions

When is a development in non-compliance with a noise condition?

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 may occur for two reasons:

- *The noise from the development is excessive, in which case the development is truly not complying with its consent or licence condition.*
- *The noise was increased by extreme, nonstandard weather effects—in which case the development is not considered to be in noncompliance with its consent or licence condition. Non-standard weather effects can be considered to be present during monitoring if the cloud cover is less than 40 per cent and the wind speed (at 10 m height) is less than 1.0 m/s (represents an extremely adverse weather condition for noise)—during the period from 6 pm to 7 am in non-arid areas (see Section 9.2).*

In this latter case, further monitoring at a later date is required to determine compliance under the meteorological conditions specified in the consent/ licence condition.

Managing non-compliances

Where the noise exceedance is found to be caused by excessive noise levels from a development, the development is considered to be in non-compliance with its consent or licence condition. Strategies for mitigation of noise need to be considered and implemented, or a further negotiation process could be

commenced.

When is a development in breach of a noise condition?

A development will be in breach of a noise consent or licence condition if sustained non-compliances are not addressed and rectified.

The following steps will be undertaken in the event of a non-compliance:

1. Investigation

An investigation will be undertaken into the noise non-compliance and include:

- The likely source and location of the noise;
- The likely level of the noise;
- Other contributing factors
- Assessment of meteorological conditions
- The development of management and mitigation measures such as:
 - mine operational activities and potential for implementation of operational controls
 - any measures implemented at receivers in accordance with Condition 7, Schedule 3 will be taken into consideration
 - equipment placement and timing of particular activities
 - equipment noise suppression status
- Action / implementation plan
 - A representative of the CVO Environmental and Community Relations Department would facilitate an investigation drawing on the knowledge and expertise of key operational personnel and technical staff where required.

2. Implementation

This stage involves the implementation of the noise control and management measures selected in the management strategy process. The relevant mining operations personnel will be responsible for the timely implementation of the selected measures. Implementation of actions will be tracked using the Newcrest incident management process (CHESS).

3. Review

The effectiveness of the adopted measures will be assessed against the relevant criteria identified in Section 3. The management strategy phase of the protocol will be revisited as required if the noise criteria continue to be exceeded.

4. Reporting

Non-compliance with the criteria will be reported based on the analysis completed in the monthly reports. These would be reported to the EPA, DoPE and the landholder. Landholder notification would be undertaken in accordance with Condition 2, Schedule 4 (see Section 2.2).

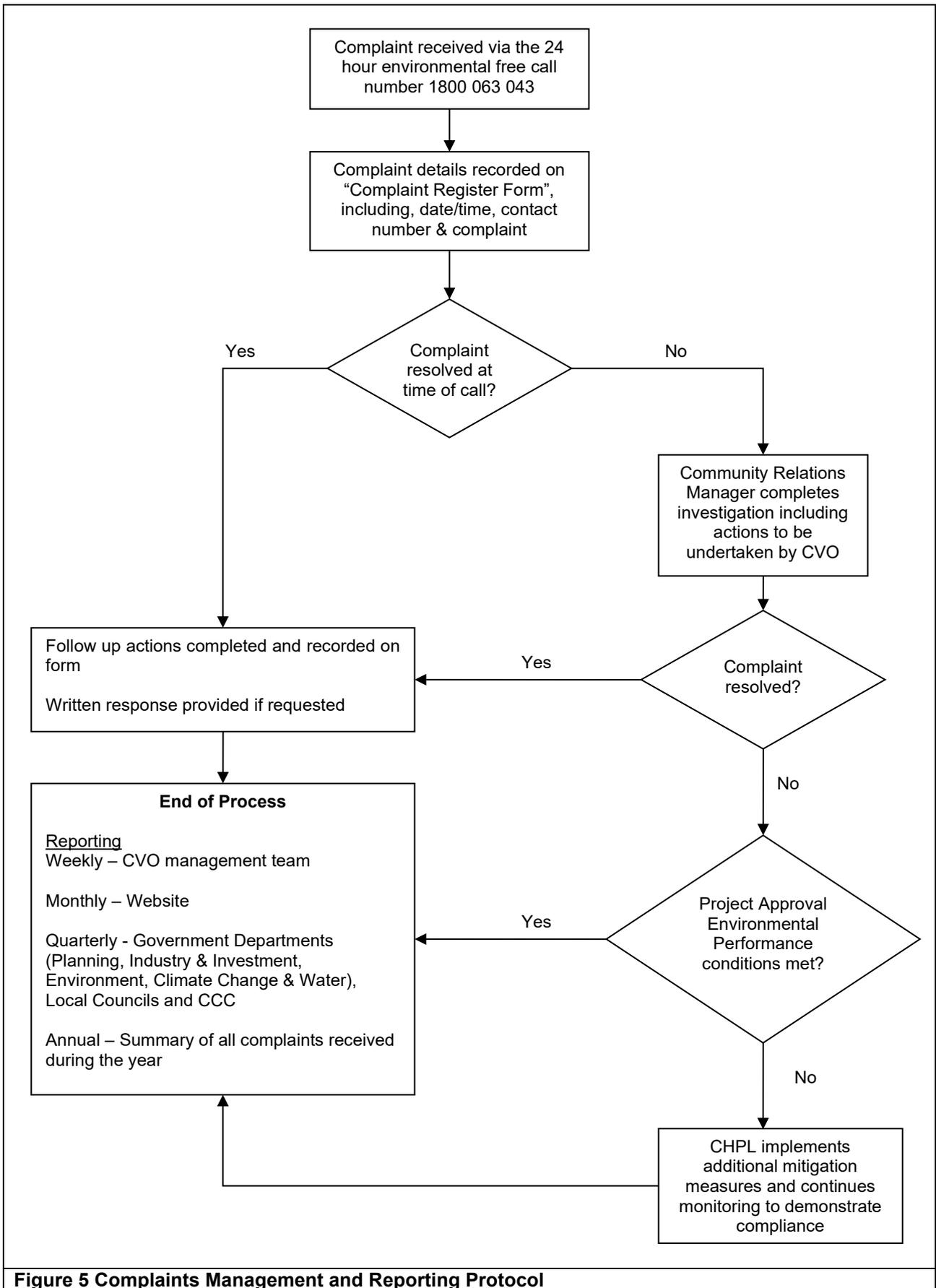


Figure 5 Complaints Management and Reporting Protocol

7.0 REFERENCES

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