



**SUNNYSIDE COAL PROJECT
ENVIRONMENTAL
MANAGEMENT SYSTEM**

Document Owner:	Rehabilitation Manager
Last Revision Date:	19/08/2020
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WHC_PLN_SUN_NOISE MANAGEMENT PLAN

**SUNNYSIDE COAL MINE
NOISE MANAGEMENT PLAN**



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ACRONYMS USED THROUGHOUT THIS DOCUMENT

AS	-	Australian Standard
BOM	-	Bureau of Meteorology
EPA	-	Environment Protection Authority
NMP	-	Noise Management Plan
NMPL	-	Namoi Mining Pty Ltd
PA	-	Project Approval



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1 INTRODUCTION

This Noise Management Plan (NMP) has been prepared in accordance with Schedule 3, Condition 9A of Project Approval (PA) 06_0308 for the Sunnyside Coal Project (Sunnyside). Sunnyside is operated by Namoi Mining Pty Ltd (NMPL), a subsidiary company of Whitehaven Coal Limited. Mining operations at Sunnyside were suspended in late November 2012 and recommenced in late 2017. This document considers the area of land corresponding to the project site boundary for Sunnyside, referred to as the “mine site”.

As illustrated in Figure 1, Sunnyside is located approximately 15km west of Gunnedah. The project layout is shown in Figure 2.

Sunnyside Mine ceased coal extraction in mid-2019, crushing and transporting of coal to Gunnedah Coal Handling and Processing Plant (CHPP) ceased on the 27th October 2019. Site activity is limited to day time operations which consists of bulk earthworks and rehabilitation activities. Site is serviced by a crew of approximately 10 operators and maintenance personal. Earthworks are scheduled to conclude by end September 2020.



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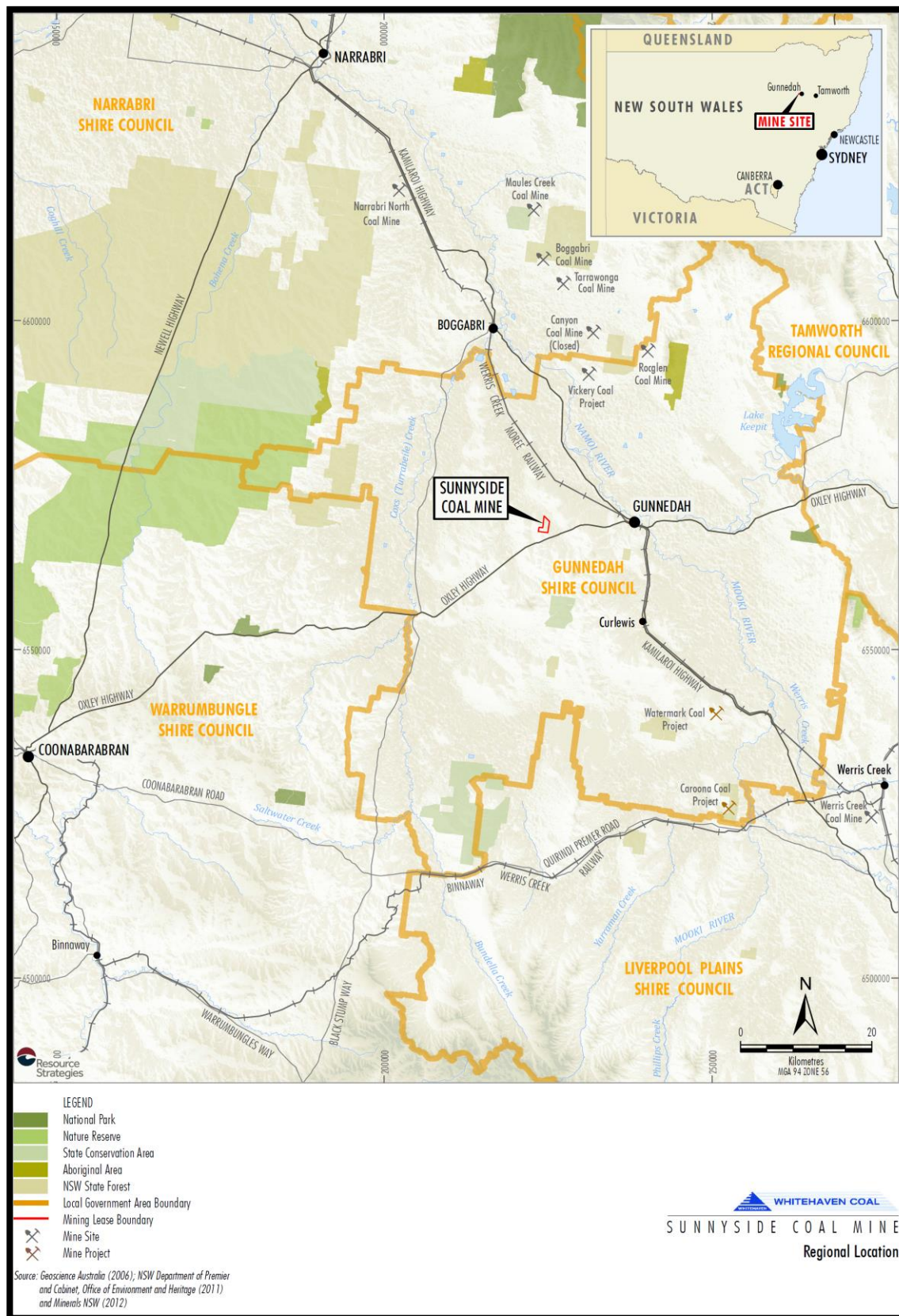


Figure 1 – Regional Location



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Figure 2 – Project Layout

2 **NOISE CRITERIA**

The noise criteria, as per Schedule 3, Conditions 2, 3, 4 and 6 of PA 06_0308, is detailed in Table 1, which should be read in conjunction with the full conditions in PA 06_0308.

Table 1 - Noise Criteria

Location	Day/Evening			
	Construction Noise	Operational Noise	Land Acquisition	Traffic Noise
	L _{A10} (15 minute)	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{Aeq} (1 hour)
Any residence on, or more than 25% of, any privately owned land (except at "Lilydale")	40	35	40	
Any residence adjacent to Torrens Road				55

These criteria do not apply if there is a written agreement with the landholder of any affected land, and a copy of the agreement has been provided to DP&E and EPA. Further, "Lilydale" is now mine owned.

3 **NOISE CONTROLS AND MANAGEMENT MEASURES**

Schedule 3, Conditions 8 and 9 of PA 06_0308 are addressed as follows:

- Condition 8(a) – Section 3.2
- Condition 8(b) – Section 3.3
- Condition 8(c) – Section 4.3.2
- Conditions 9(a) to (d) – Secretary acceptance of Annual Review which describes undertakings for the reporting period.

3.1 **Hours of Operation**

Operations are restricted to the following hours, which prevent noise impacts during the night time period:

- Mining Operations – 7am to 10pm each Monday to Friday and 7am to 6pm on Saturdays, and not on Public Holidays.

The Sunnyside project has transitioned from mining to closure activities which are only taking place during the hours of 7am to 6pm Monday to Friday. All coal transport has ceased.



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3.2 Noise Management and Mitigation

Table 2 includes the management actions listed in the Statement of Commitments in relation to noise. These actions, in addition to monitoring (Section 4), reporting (Section 4) and implementation of additional mitigation measures (Section 3.3), constitute the noise management system for the site.

Table 2 - Operational Controls

Statement of Commitments	Current Status
Seal the re-aligned Coochooboonah Lane and all other upgraded road sections.	Complete.
Regularly maintain all roads comprising the proposed coal transport route under a contribution plan with Gunnedah Shire Council.	Ongoing, coal transport has ceased.
Avoid all noisy activities occurring concurrently during construction particularly before 9:00am when affects of local inversions may be noticeable.	Not applicable.
Construct the out of pit overburden emplacement to provide an acoustic barrier between the open cut and Non-Project related residences.	Complete.
Construct the amenity bund around the coal processing area to act as an acoustic barrier.	In process of being removed as part of rehabilitation.
Adhere strictly to hours of operation, including transport activities, enforced by Mine Management.	Where relevant to current closure activities, noting section 3.1
Use equipment with lower sound power levels in preference to more noisy equipment.	Ongoing
Regularly service all equipment used on site to ensure sound power levels remain at or below the levels used in the modelling to assess generated noise levels and compliance with the criteria.	Ongoing
Ensure that bulldozers either operate in first gear when reversing on the out-of-pit emplacement (and demonstrating compliance with noise criteria) or suspend operations (when compliance is not achieved with noise criteria).	Ongoing
Manage scraper operations to avoid operations during inversion conditions and to reduce the number of scrapers operating from two to one when noise monitoring demonstrates the $L_{Aeq(15minute)}$ criteria of 35dB (A) is or will be exceeded.	<u>NA - Scrapers not used on site.</u>
Confine operations to lower levels of in-pit overburden emplacement to mitigate noise exceedances under adverse wind conditions, i.e. avoid operations on elevated section of the overburden emplacements during inversions and SSW winds.	Not Applicable, Void being backfilled (Completed by end of September 2020).



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Fit mid frequency broadband reversing beepers to mobile mining equipment, decreasing sound power levels by 2dB(A) to 3dB(A).	Ongoing
Ensure the on-site road network is well maintained to limit body noise from empty trucks travelling on internal roads.	Ongoing
Maintain dialogue with neighbours and local community to ensure any concerns over construction, operational or transport noise are addressed.	Ongoing
Establish a noise monitoring program, in consultation with the EPA, prior to the commencement of the Project, designed to initially validate the predictions arising from the modelling and then record noise levels against the Project noise criteria.	EPA Armidale office have recommended that regular noise monitoring is no longer required due to closure of coaling operations, reduced equipment on site, and reduced operational hours. Monitoring will be undertaken as requested on an as needs basis.
Document all proposed noise management strategies formally in a Noise Management Plan.	This document.
Monitor construction noise near "Lilydale" when the realignment of Coochooboonah Land is being undertaken.	Not applicable.
Conduct operational noise monitoring monthly for the first six months of mining operations, reverting to quarterly for the remainder of the year.	As operations are in full closure with only rehabilitation activities being undertaken on reduced hours, quarterly monitoring has ceased
Instruct all truck drivers to avoid the use of engine brakes when approaching the Project Site entrance and coal transport route intersections and to be mindful when accelerating.	No Longer applicable.
Adhere strictly to approved hours of coal transportation.	No Longer applicable.


3.3 Additional Mitigation Measures

If noise levels from the mine exceed the levels outlined in Section 2, advice will be sought from the acoustic consultant to verify the source of the elevated noise and identify options to address noise related impacts. Such actions may include:

- Additional testing to confirm the elevated noise is systemic in nature;
- Changes to operational procedure or equipment type; and
- The installation of sound attenuation measures to plant and equipment, where necessary.

Where it is identified that the above options cannot achieve compliance with noise criteria, NMPL will undertake negotiations with the affected landowners with a view to entering into private agreements.

Schedule 3, Conditions 4, 5 and 7 of PA 06_0308 outline landholder's rights in relation to land acquisition and additional noise mitigation measures.

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Schedule 4 of PA 06_0308 details notification and independent review requirements.

4 **MONITORING AND REPORTING**

4.1 **Monitoring Program**

Attended noise monitoring will be undertaken on an as needs basis by an independent acoustic consultant. All attended noise monitoring will be conducted in accordance with the NSW Industrial Noise Policy, AS 1055.1-1997 'Acoustics – Description and Measurement of environmental noise – General Procedures', and will expressly monitor the modification factors referred to in the NSW Industrial Noise Policy.

The following notes from Schedule 3, Condition 3 must be considered:

Notes:

- *To determine compliance with the $L_{Aeq(15\text{ minute})}$ limit, noise from the project 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 project is impractical, the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy). The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.*
- *These limits apply under meteorological conditions of:*
 - *wind speeds of 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.*

Based on previous experience at the site when operational, the monitoring program is considered adequate to evaluate and report on the effectiveness of the noise management system, compliance against noise criteria and compliance against noise operating conditions.

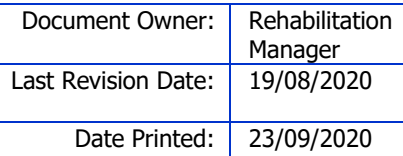
4.2 **Monitoring Locations**

Monitoring will be undertaken in accordance with Schedule 3, Condition 3 notes in PA 06_0308.

Monitoring will be conducted at the properties listed in Table 3 and shown in Figure 3 on request by regulator, community concern or suspected high noise activities. For monitoring purposes the locations presented in Table 3 are used to determine compliance as representative locations of receiver impact and irrespective of land ownership.

Table 3 - Noise Monitoring Locations

Property
Illili
Ferndale
Woodlawn
Glendower
Innisvale





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4.3 Reporting

4.3.1 Noise Incidents

A noise incident is considered to be an exceedance of the criteria listed in Table 1, as measured by attended noise monitoring.

Incident reporting will be undertaken in accordance with Conditions 5(3) and 5(4) of PA 06_0308.

4.3.2 General

A review of noise management and monitoring will be included in the Annual Review, in accordance with the requirements of Condition 5(5) of PA 06_0308.

5 DOCUMENT REVIEW

This document will be reviewed in accordance with the requirements of Condition 5(5A) of PA 06_0308.