



SIMEC

MEMBER OF



TAHMOOR SOUTH - NOISE MANAGEMENT PLAN

Tahmoor Coal



Doc # TAH-HSEC-372
Version: 4.1

Page 1 of 61

Issued Date: Thursday, 17 August 2023
Status: Monday, 17 August 2026

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1 Introduction

1.1 Background

Tahmoor Coal Pty Ltd (Tahmoor Coal) owns and operates Tahmoor Mine, an underground coal mine extracting coking coal which is an ingredient in the production of steel. The mine surface operations are located south of Tahmoor NSW, which is within the greater Sydney Basin - approximately 80 km southwest of Sydney. Tahmoor Mine is within the Wollondilly Shire Council (WSC) Local Government Area (LGA). Underground workings extend north under the town of Tahmoor and Picton with two ventilation shafts being located on the outskirts of town. The location of Tahmoor Mine in the regional context is shown in **Figure 1**.

Tahmoor Mine surface facilities are situated in between the townships of Tahmoor and Bargo, and adjacent to Remembrance Drive on land owned by Tahmoor Coal with mining conducted under both crown and freehold property (see **Figure 1**). Surface facilities at Tahmoor Mine include administration buildings and offices, a materials store, diesel tanks, electrical workshop, mechanical workshop, bathhouse, ventilation fan, Coal Handling Preparation Plant (CHPP), storage areas, run of mine stockpile and product stockpiles. A third party owned power station is also located on-site and utilises methane from the mines' gas drainage system to produce electricity. Extracted coal is processed on site prior to transportation via rail to the Port Kembla Coal Terminal.

An Environmental Impact Statement (EIS) was exhibited in early 2019 seeking approval for the extraction of up to 48 million tonnes (Mt) of ROM coal over a 13-year mine life. Tahmoor Coal subsequently revised the proposed mine design and submitted amended development applications on two occasions (in February and August 2020). In April 2021, Tahmoor Coal received Development Consent SSD 8445 (the Consent) for the Tahmoor South Project, which involves use of the existing surface infrastructure and the extension of underground longwall mining to the south of existing workings. The Project has consent to extract up to 4 Mtpa of ROM coal, with a total of up to 33 Mt of ROM coal extracted over a 10-year period until 31 December 2033.

1.2 Purpose

The purpose of this Noise Management Plan (NMP) is to provide a framework for Tahmoor Coal personnel to ensure that compliance is achieved with relevant internal and external regulatory requirements related to noise management at Tahmoor Mine. The plan ensures that impacts on the community are minimised and managed within a structured framework.

This plan has been prepared to address the requirements of Condition B7 of SSD 8445.

1.3 Scope

This NMP includes management measures and monitoring requirements relating to noise. The NMP applies to all activities associated with Tahmoor Coal and forms part of the Environmental Management System (EMS). Separate Construction Noise and Vibration Management Plans will also be created for specific approved construction activities onsite. These plans will be used in conjunction with this NMP. Blasting is not required as part of the general operations or construction phase of Tahmoor South.

1.4 Preparation

This management plan has been prepared by Michelle Grierson, Senior Environmental Scientist with Umwelt (Australia) Pty Ltd and has been technically reviewed by Katie Teyhan, Associate Acoustics Manager Newcastle with EMM Consulting Pty Limited. Michelle and Katie have been endorsed by the Department of Planning, Industry and Environment (DPIE) as suitability qualified to prepare this NMP (see **Appendix B**).

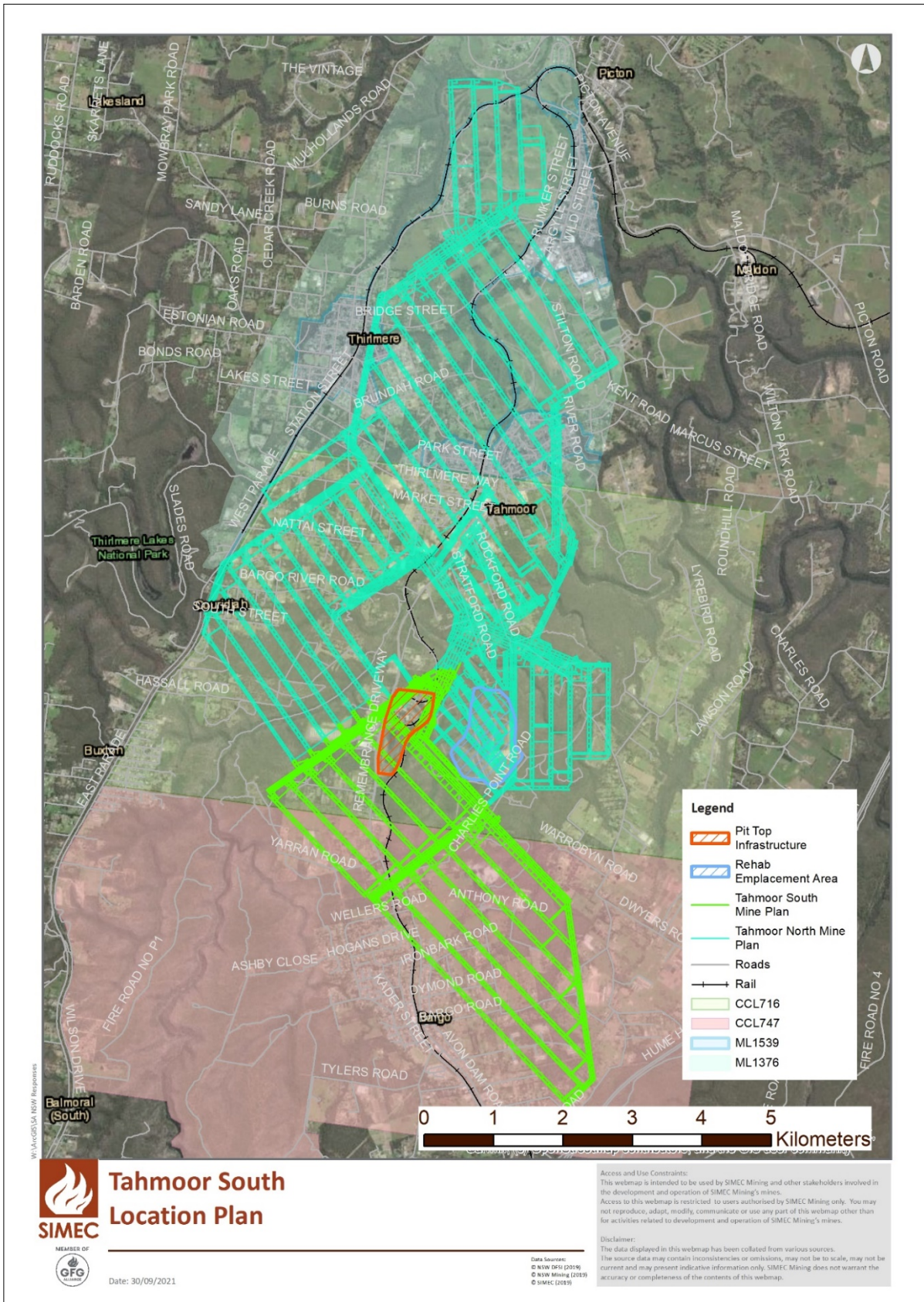


Figure 1 Tahmoor Coal Site Location

2 Planning

2.1 Statutory Requirements and Legislation

2.1.1 Development Consent Conditions

The requirement for this management plan is established by Condition B7 under Part B of the Consent. **Table 1** outlines the requirements of Condition B7 and other conditions relevant to noise. **Table 1** also identifies where these requirements have been addressed within this NMP.

Table 1 SSD 8445 Development Consent Conditions

Condition Reference	Condition	Where Addressed
NOISE AND BLASTING		
Noise Criteria		
B1	The Applicant must ensure that noise generated during construction activities at the ventilation shaft sites does not exceed the criteria in Table 1 (of the Consent) at any receiver on privately-owned land.	Section 5.1 Project specific Construction Noise and Vibration Management Plans will be prepared.
B2	Within two years of the commencement of development, the Applicant must ensure that the noise generated by the development does not exceed the criteria in Table 2 (of the Consent) at any receiver on privately-owned land.	Section 5.3
B3	Noise generated by the development must be monitored and measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Noise Policy for Industry (EPA, 2017). The noise enhancing meteorological conditions determined by monitoring at the meteorological station required under condition B21 and as defined in Part D of the Noise Policy for Industry (EPA, 2017) apply to the noise criteria in Table 1 and 2 of development consent.	Section 5.4
B4	The noise criteria in Table 2 of development consent do not apply if the Applicant has an agreement with the owner/s of the relevant receiver or land to exceed the noise criteria, and the Applicant has advised the Department in writing of the terms of this agreement.	Section 2.1.1
Noise Operating Conditions		
B5	The Applicant must:	
(a)	take all reasonable steps to minimise noise from the construction and operational activities, including low frequency noise and other audible characteristics, as well as road and rail noise associated with the development;	Section 5.3
(b)	operate a comprehensive noise management system using a combination of predictive meteorological forecasting and real-time noise monitoring data to guide the day to day planning of mining operations, and the implementation of both proactive and reactive noise mitigation measures to ensure compliance with the relevant conditions of this consent;	Section 5
(c)	take all reasonable steps to minimise the noise impacts of the development during noise-enhancing meteorological conditions;	Section 5.4.4 and Appendix A
(d)	continue to investigate ways to reduce the noise generated by the development;	Section 6.1.1
(e)	only use locomotives and rolling stock that are approved to operate on the NSW rail network in accordance with EPL's issued for railway activities –	Section 5.3

	rolling stock operations and use reasonable endeavours to ensure that rolling stock is selected to minimise noise;	
(f)	carry out regular attended noise monitoring (at least quarterly, unless otherwise agreed by the Planning Secretary) to determine whether the development is complying with the relevant conditions of this consent; and	Section 5.4.2
(g)	regularly assess the noise monitoring data and modify or stop operations on the site to ensure compliance with the relevant conditions of this consent.	Section 5.4.4
Reject Emplacement		
B6	Prior to the implementation of noise mitigation measures, the Applicant must ensure that:	
(a)	reject emplacement in the REA does not occur at heights above RL 300m, except in areas identified as Stages 1 and 5 (see Figure 2 in Appendix 2 of the Consent) where reject material may be emplaced up to a height of RL 310 m; and	Section 5.3
(b)	the emplacement of rejects above RL 300 m in the areas specified in (a) above does not occur concurrently with ventilation shaft construction activities.	
Noise Management Plan		
B7	The Applicant must prepare a Noise Management Plan for the development to the satisfaction of the Planning Secretary. This plan must:	
(a)	be prepared by a suitably qualified and experienced person/s whose appointment has been endorsed by the Planning Secretary;	Appendix B
(b)	be prepared in consultation with the EPA;	Section 3.3
(c)	describe the measures to be implemented to ensure:	
(i)	compliance with the noise criteria and operating conditions in this consent;	Section 5.3
(ii)	best practice noise management is being employed;	Section 5.4.1
(iii)	noise impacts of the development are minimised during noise-enhancing meteorological conditions;	Section 5.4.4
(d)	describe the noise management system in detail;	Section 5
(e)	include a noise monitoring program that:	
(i)	uses a combination of real-time and supplementary attended monitoring to evaluate the performance of the development;	Section 5.4
(ii)	monitors noise at the nearest and/or most affected receivers;	
(iii)	enables and facilitates reporting of perceived noise exceedances by potentially affected receivers;	Section 7.5
(iv)	includes a program to calibrate and validate the real-time noise monitoring results with the attended monitoring results over time;	Section 5.4.4
(v)	adequately supports the noise management system;	Section 5.4.2
(vi)	includes a protocol for identifying any noise-related exceedance, incident or non-compliance and for notifying the Department and relevant stakeholders of any such event.	Section 7.3 and 7.4
B8	The Applicant must not commence construction until the Noise Management Plan is approved by the Planning Secretary.	Noted – Tahmoor Coal will not commence construction until this plan is approved.
B9	The Applicant must implement the Noise Management Plan as approved by the Planning Secretary.	Noted – Tahmoor Coal will implemented the NMP as approved.
ACQUISITION UPON REQUEST		
D1	Upon receiving a written request for acquisition from the owner of the privately-owned land listed in Table 9 (of the Consent), the Applicant must	Noted – Tahmoor Mine will adhere to these conditions

	acquire the land in accordance with the procedures in conditions D11 to D18, inclusive.	when necessary.
D2	<p>Upon receiving a written request for mitigation from:</p> <ul style="list-style-type: none"> a) the owner of any residence on the privately-owned land listed in Table 10 of the Consent (unless the landowner has requested acquisition); or b) a landowner listed in Table 10 (of the Consent); or c) the owner of any residence where subsequent noise monitoring shows the noise generated by the development is equal to or greater than the relevant mitigation criteria (except where a negotiated noise agreement is in place); <p>the Applicant must implement additional mitigation measures at or in the vicinity of the residence in consultation with the landowner. These measures must be consistent with the measures outlined in the Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Development (NSW Government, 2018). They must also be reasonable and feasible, proportionate to the level of predicted impact and directed towards reducing the noise impacts of the development. The Applicant must also be responsible for the reasonable costs of ongoing maintenance of these additional mitigation measures until the cessation of mining operations.</p>	
D3	If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.	

ACQUISITION UPON REQUEST

D1	<p>Upon receiving a written request for acquisition from the owner of the privately-owned land listed in Table 9 (of the Consent), the Applicant must acquire the land in accordance with the procedures in conditions D11 to D18, inclusive.</p> <p>Table 9: Land subject to acquisition upon request Acquisition Basis - Noise Land - 1426</p> <p>* The locations of the land referred to in Table 9 are shown in Figure 1 in Appendix 3 of the Consent.</p>	Noted – Tahmoor Mine will adhere to these conditions when necessary.
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MITIGATION UPON REQUEST

D2	<p>Upon receiving a written request for mitigation from:</p> <ul style="list-style-type: none"> a) the owner of any residence on the privately-owned land listed in Table 10 of the Consent (unless the landowner has requested acquisition); or b) a landowner listed in Table 10; or c) the owner of any residence where subsequent noise monitoring shows the noise generated by the development is equal to or greater than the relevant mitigation criteria (except where a negotiated noise agreement is in place); <p>the Applicant must implement additional mitigation measures at or in the vicinity of the residence in consultation with the landowner. These measures must be consistent with the measures outlined in the Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Development (NSW Government, 2018). They must also be reasonable and feasible, proportionate to the level of predicted impact and directed towards reducing the noise impacts of the development. The Applicant must also be responsible for the reasonable costs of ongoing</p>	Noted – Tahmoor Mine will adhere to these conditions when necessary.
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	<p>maintenance of these additional mitigation measures until the cessation of mining operations.</p> <p>Land subject to additional mitigation upon request</p> <p>Mitigation Basis: Noise</p> <p>Land:</p> <p>966, 973, 975, 979, 982 ,984, 987, 988, 989, 991, 1004, 1007, 1017, 1020, 1023, 1024, 1025, 1026, 1028, 1061, 1062, 1405, 1406, 1408, 1411, 1417, 1423, 1424, 1426, 1427, 1428, 1429, 1430, 1538, 1572, 1583, 1592, 1594, 1992, 1997, 1998, 1999,2000,2003,2014,2015,2021, 2022 2025, 2746</p> <p>*The locations of the land referred to in Table 10 are shown in Figure 1 in Appendix 3 of the Consent.</p>	
D3	If within 3 months of receiving this request from the owner, the Applicant and the owner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Planning Secretary for resolution.	Noted – Tahmoor Mine will adhere to these conditions when necessary.
NOTIFICATION OF LANDOWNERS/TENANTS		
D4	Within one month of the date of this consent, the Applicant must:	
	(a) notify in writing the owner of:	
	(i) the residences on the land listed in Table 10 (of the Consent) that they are entitled to ask the Applicant to install additional mitigation measures at the residence; and	Section 3.3
	(b) notify the tenants of any mine-owned land of their rights under this consent.	
D5	Prior to entering into any tenancy agreement for any land owned by the Applicant that is predicted to experience exceedances of the recommended noise criteria, the Applicant must advise the prospective tenants of the rights they would have under this consent, to the satisfaction of the Planning Secretary.	Noted – Tahmoor Mine will adhere to these conditions when necessary.
D6	As soon as practicable and no longer than 7 days after obtaining monitoring results showing an exceedance of any noise or air quality criterion in PART B of this consent, the Applicant must provide the details of the exceedance to any affected landowners, tenants and the CCC.	Section 7.4
INDEPENDENT REVIEW		
D8	If a landowner considers the development to be exceeding any relevant air quality or noise criterion in Part B of this consent, they may ask the Planning Secretary in writing for an independent review of the impacts of the development on their residence or land.	Noted
D9	If the Planning Secretary is not satisfied that an independent review is warranted, the Planning Secretary will notify the landowner in writing of that decision, and the reasons for that decision, within 21 days of the request for a review.	Noted
D10	If the Planning Secretary is satisfied that an independent review is warranted, within 3 months, or other timeframe agreed by the Planning Secretary and the landowner, of the Planning Secretary's decision, the Applicant must: <ul style="list-style-type: none"> a) commission a suitably qualified, experienced and independent person, whose appointment has been approved by the Planning Secretary, to: <ul style="list-style-type: none"> i. consult with the landowner to determine their concerns; ii. conduct monitoring to determine whether the development is complying with the relevant criteria in PART B or PART C; and 	Noted – Tahmoor Mine will adhere to these conditions when necessary.

	<ul style="list-style-type: none"> iii. if the development is not complying with the relevant criterion, identify measures that could be implemented to ensure compliance with the relevant criterion; and b) give the Planning Secretary and landowner a copy of the independent review; and c) comply with any written requests made by the Planning Secretary to implement any findings of the review. 	
LAND ACQUISITION		
D11	<p>Within 3 months of receiving a written request for acquisition from a landowner with acquisition rights, the Applicant must make a binding written offer to the landowner based on:</p> <ul style="list-style-type: none"> a) the current market value of the landowner's interest in the land at the date of this written request, as if the land was unaffected by the development, having regard to the: <ul style="list-style-type: none"> i. existing and permissible use of the land, in accordance with the applicable planning instruments at the date of the written request; and ii. presence of improvements on the land and/or any approved building or structure which has been physically commenced at the date of the landowner's written request, and is due to be completed subsequent to that date, but excluding any improvements that have resulted from the implementation of the additional noise mitigation measures in condition D2; b) the reasonable costs associated with: <ul style="list-style-type: none"> i. relocating within the Wollondilly local government area, or to any other local government area determined by the Planning Secretary; and ii. obtaining independent legal advice and expert advice for determining the acquisition price of the land, and the terms upon which it is to be acquired; and c) reasonable compensation for any disturbance caused by the land acquisition process. 	Noted – Tahmoor Mine will adhere to these conditions when necessary.
D12	If, within two months of the binding written offer being made under condition D11, the Applicant and landowner cannot agree on the acquisition price of the land and/or the terms upon which the land is to be acquired, then either party may refer the matter to the Planning Secretary for resolution.	Noted
D13	<p>Upon receiving such a request, the Planning Secretary will request the President of the NSW Division of the Australian Property Institute to appoint a qualified independent valuer to:</p> <ul style="list-style-type: none"> a) consider submissions from both parties; b) determine a fair and reasonable acquisition price for the land and/or the terms upon which the land is to be acquired, having regard to the matters referred to in condition D11; c) prepare a detailed report setting out the reasons for any determination; and d) provide a copy of the report to both parties. 	Noted
D14	Within 14 days of receiving the independent valuer's report, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the independent valuer's determination.	Noted – Tahmoor Mine will adhere to these conditions when necessary.
D15	However, if either party disputes the independent valuer's determination, then within 14 days of receiving the independent valuer's report, either party may refer the matter to the Planning Secretary for review. Any request for a review must be accompanied by a detailed report setting out the reasons why the party disputes the independent valuer's determination. Following	Noted

	consultation with the independent valuer and both parties, the Planning Secretary will determine a fair and reasonable acquisition price for the land, having regard to the matters referred to in condition D11, the independent valuer's report, the detailed report of the party that disputes the independent valuer's determination and any other relevant submissions.	
D16	Within 14 days of this determination, the Applicant must make a binding written offer to the landowner to purchase the land at a price not less than the Planning Secretary's determination	Noted – Tahmoor Mine will adhere to these conditions when necessary.
D17	If the landowner refuses to accept the Applicant's binding written offer under this condition within 6 months of the offer being made, then the Applicant's obligations to acquire the land shall cease, unless the Planning Secretary determines otherwise.	Noted
D18	The Applicant must pay all reasonable costs associated with the land acquisition process described in conditions D11 to D17 inclusive, including the costs associated with obtaining Council approval for any plan of subdivision (where permissible), and registration of this plan at the Office of the Registrar-General.	Noted – Tahmoor Mine will adhere to these conditions when necessary.
MONITORING AND ENVIRONMENTAL AUDITS		
E21	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. For the purposes of the condition, as set out in the EP&A Act, "monitoring" is monitoring of the development to provide data on compliance with the consent or on the environmental impact of the development, and an "environmental audit" is a periodic or particular documented evaluation of the development to provide information on compliance with the consent or the environmental management or impact of the development.	Noted
E22	Noise and/or air quality monitoring under this consent may be undertaken at suitable representative monitoring locations instead of at privately-owned residences or other locations listed in Part B, providing that these representative monitoring locations are set out in the respective management plan/s.	Section 5.4

2.1.2 Management Plan Requirements

Consent Condition E5 outlines the general requirements for all management plans. **Table 2** outlines the requirements under this condition and identifies where these requirements have been addressed.

Table 2 Management Plan Requirements

Condition Reference	Condition	Where Addressed
E5	Management plans required under this consent must be prepared in accordance with relevant guidelines, and include:	NA
(a)	a summary of relevant background or baseline data;	Section 4
(b)	details of:	NA
(b) (i)	the relevant statutory requirements (including any relevant approval, licence or lease conditions);	Section 2.1
(b) (ii)	any relevant limits or performance measures and criteria; and	Section 2.1.1

(b) (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;	Section 2.1.4
(c)	any relevant commitments or recommendations identified in the document/s listed in condition A2(c);	Section 2.1.1
(d)	a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;	Section 5.3
(e)	a program to monitor and report on the:	NA
(e) (i)	impacts and environmental performance of the development; and	Section 5.4
(e) (ii)	effectiveness of the management measures set out pursuant to condition E5(d);	Section 5.3.1
(f)	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;	Section 6
(g)	a program to investigate and implement ways to improve the environmental performance of the development over time;	Sections 6.1.1 and 8
(h)	a protocol for managing and reporting any:	NA
(h) (i)	incident, non-compliance or exceedance of any impact assessment criterion or performance criterion;	Sections 7.3 and 7.4
(h) (ii)	complaint; or	Section 7.5
(h) (iii)	failure to comply with other statutory requirements;	Covered collectively within Sections 5.3, 5.4 and 5.5
(i)	public sources of information and data to assist stakeholders in understanding environmental impacts of the development; and	Section 9.1
(j)	a protocol for periodic review of the plan.	Section 8

2.1.1 Environment Protection and Biodiversity Conservation Act

Under Section 130(1) and 133(1) of the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act), Tahmoor Coal received approval (EPBC 2017/8084) for the Tahmoor South Project on the 1st October 2021.

2.1.2 EIS Commitments

Condition A2 (c) of the Consent states that the development may only be carried out generally in accordance with the EIS. The relevant EIS documents include:

- a) Tahmoor South Project Environmental Impact Statement (EIS), Volumes 1 and 7, dated January 2019;
- b) Tahmoor South Project Amendment Report (PAR), including Appendices A to R and response to submissions, dated February 2020;
- c) Tahmoor South Project Second Amendment Report, Appendices A to O and response to submissions, dated August 2020;
- d) Additional information responses dated 14 September 2020, 23 October 2020 and 4 November 2020; and
- e) Submission to the Independent Planning Commission (IPC) February 2021.

EIS commitments relevant to this management plan are outlined in **Table 3**.

Table 3 Noise and Vibration EIS Commitments

Instrument	Reference	Commitment	Where Addressed
EIS/RTS	NV-1	<p>Potential impact: Impacts of construction noise on sensitive receivers</p> <p>Management and mitigation measures: Develop and implement a Construction Noise and Vibration Management Plan.</p>	Noted – specific plans will be implemented for construction activities.
EIS/RTS	NV-3	<p>Potential impact: Impacts of operational noise on sensitive receivers</p> <p>Management and mitigation measures: Implement mitigation measures determined to be reasonable and feasible which were modelled in the Project operational mine scenario.</p>	Section 5.3
RTS	NV-6	<p>Potential impact: Impacts of operational noise on sensitive receivers</p> <p>Management and mitigation measures: Implement the following controls:</p> <ul style="list-style-type: none"> - CHPP improvements: Tahmoor Coal will commence investigations and concept design study for this work in 2020. Feasibility study works, including consideration of various options, is anticipated to continue through the first two years of the Amended Project. It is estimated that the CHPP mitigation measures could be implemented within approximately three years of physical commencement of the Amended Project. - Dozers: the use of only one dozer at night, as well as the restriction to operating area for the stockpile dozer would be implemented upon approval of the Amended Project. The noise suppression kit for the dozer would be procured and installed within the first 12 months after approval of the Amended Project. - Restriction of REA operations: to enable the restriction of REA operations to day and evening only modifications are required to the conveyor, as well as procurement of a front-end loader to assist with loading the second haul truck. It is anticipated that the design, procurement and installation process would be completed within approximately three years of physical commencement of the Amended Project. - Compressors: the upgrade to the compressor enclosure would be installed within approximately two years after approval of the Amended Project. - Barriers: improvements to bund shielding of the rail loop, as well as design/construction of the barrier adjacent to the product stockpile area are expected to be completed within three years after approval of the Amended Project. 	<p>Section 5.3</p> <p>Note: mitigation measures will be implemented within two years from commencement of Development in accordance with Condition B2 of the Consent.</p>

2.1.3 Noise Limits

Consent Condition E5 (b) (ii) outlines the requirement for management plans to provide details of any relevant limits.

Until the noise mitigation measures outlined in **Table 3** are implemented, Tahmoor Coal will continue to apply previously utilised noise criteria (herein referred to as interim limits) as specified under Development Consent DA57/93. Interim noise limits can be found within **Table 4**.

In accordance with Consent Condition B2, within two years of the commencement of development, Tahmoor Coal must ensure that the noise generated by the development does not exceed the criteria listed in **Table 5**. Specific noise mitigation measures outlined in **Section 5.3** are required to be

implemented during this two-year period to allow Tahmoor Coal to meet the criteria specified in SSD 8445. Noise assessment locations can be found in **Figure 3**.

To demonstrate compliance with Consent Condition B1, Tahmoor Coal will, (if construction of shaft sites is required in the future) implement specific Construction Noise and Vibration Management Plans to ensure that noise generated during construction activities at the ventilation shaft sites does not exceed the noise limits listed under the Construction Phase in **Table 5** at any receiver on privately-owned land.

Table 4 DA57/93 Interim Noise Limits

Source	L _{A10} Level (within 3 metres of any residence) (dB) (applicable to any residence existing at the time of DA57/93 approval)
Tahmoor and Associated Facilities	45
Refuse Emplacement	37 or background + 5 dBA (whichever is greater)

Table 5 SSD 8445 Noise Limits (Source: Condition B1 and B2 of SSD 8445)

Instrument	Project Phase	Timing	Noise Assessment Location	Day c	Evening	Night	Night
				Leq(15 min) dB(A)	Leq(15 min) dB(A)	Leq(15 min) dB(A)	LMax dB(A)
SSD 8445	Construction	During construction of ventilation shaft sites	971, 1003, 1409, 1416, 981, 1013, 1413, 972, 980, 1009	40	36	36	52 (all locations)
			546, 1419, 960	42	38	38	
			993, 1412, 2735	40	37	37	
			999, 1399	43	39	39	
			1061, 2739	43	40	40	
			970	42	36	36	
			975 b	49	37	37	
			1028 b	48	36	36	
SSD 8445	Development	Within two years from the commencement of development	975, 999, 1423 b, 1549, 1553, 1556, 1557, 1563, 1565, 1566, 1583 b, 1589, 1592 b, 1594 b, 1613, 1621, 2021 b, 2025 b, 2551, 2570	40	38	35	52 (all locations)
			546, 960, 986, 990, 1022, 1028, 1545, 1559, 1575, 1577, 1578, 1579, 1580, 1581, 1584, 1586, 1591, 1602, 1603, 1610, 1616, 1624, 1632, 1717, 2037, 2046, 2585	40	37	35	
			968, 970, 971, 972, 981, 993, 1409, 1009, 1412, 1413, 1430, 1570, 1576, 1582, 1595, 1596, 1598, 1600, 1601, 1605, 1606, 1607, 1609, 1614, 1615, 1617, 1618, 1625, 1626, 1628, 1634, 1729, 2042, 2043, 2579, 2599, 2539, 2540, 2544, 2546, 2557, 2565, 2566, 2580, 2735,	40	36	35	
			966 b, 989 b, 1007 b, 1020 b, 1026 b, 1405 b, 1417 b	41	41	39	
			988 b, 1419	40	38	36	
			987 b, 992, 1008, 1058, 1060, 1404, 2736, 2739	40	39	37	

Instrument	Project Phase	Timing	Noise Assessment Location	Day c	Evening	Night	Night
				Leq(15 min) dB(A)	Leq(15 min) dB(A)	Leq(15 min) dB(A)	LMax dB(A)
			1024 b, 1339, 1411 b	40	39	36	
			1543, 1555, 1560, 1572 b, 1587, 1588, 1622, 1623, 2022 b, 2047	40	39	35	
			1547, 1593, 1996	43	43	37	
			1554, 1558, 1562, 1573, 1994, 2002, 2003 b, 2549, 2746 b	41	41	35	
			982 b, 984 b, 1061 b, 1408 b, 1538 b,	40	40	38	
			973 b, 991 b, 1025 b,	42	42	40	
			1023 b, 1062 b, 1406 b, 1424 b	40	40	37	
			1992 b, 1997 b, 1998 b, 2000 b, 2014 b	44	44	36	
			1542, 1544, 1546, 1550, 1561, 1620, 1993, 2017, 2550, 2586	40	40	35	
			1999 b, 2015 b	45	45	38	
			2005, 2011	44	44	40	
			1004 b, 1017 b	43	43	41	
			979 b	42	42	39	
			1421	47	47	45	
			1425	47	49	45	
			1427 b	48	50	47	
			1429 b	47	49	46	
			1420	40	39	39	
			1428 b	44	46	44	
			2006	46	46	43	
			Wollondilly Anglican College Administration	68	-	-	-
			Wollondilly Anglican College Sports Field	58	-	-	-
			Wollondilly Anglican College Classroom (external)	53	-	-	-
			Wollondilly Anglican Community Church (external)	53	53	-	-
			All Other Receivers	40	35	35	52

a The Noise Assessment Locations referred to in Table 1 are shown in Appendix 3 of the Consent

b Identified receivers are eligible for noise mitigation under condition D2

c Day is the period from 7 am to 6 pm on Monday to Saturday, and 8 am to 6 pm on Sundays and Public Holidays

d Evening is the period from 6 pm to 10 pm

e Night is the period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays

The noise criteria in **Table 5** do not apply if Tahmoor Coal has an agreement with the owner/s of the relevant receiver or land to exceed the noise criteria, and Tahmoor Coal has advised the Department in writing of the terms of this agreement.

The noise limits provided in **Table 5** apply under standard and noise-enhancing meteorological conditions as defined in the Noise Policy for Industry (NPI) (EPA 2017) determined by monitoring at the onsite weather station. Consistent with the requirements of Condition B3 of the Consent, noise limits apply under all meteorological conditions except for the following:

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- wind speeds greater than 3m/s at 10m above ground level;
- stability class F temperature inversion conditions with wind speeds greater than 2m/s at night; or
- stability class G temperature inversion conditions.

Table 6 below outlines the defining characteristics of stability class F and G.

Table 6 Stability Class Characteristics

Stability Class	Stability Class Characteristics
F	Moderately stable conditions Night-time, low to very low wind speeds (<3 m/s) Moderate temperature inversion ($1.5 \leq DT/DZ^* < 4$)
G	Extremely stable conditions Night-time, very low wind speed (<2 m/s) Strong temperature inversion ($4 \leq DT/DZ^*$)

*Degrees Celsius/100 metres

2.1.4 Performance Indicators

In accordance with Consent Condition E5 (b) (iii), **Table 7** outlines the specific performance indicators that are proposed to be used to evaluate the performance of, or guide the implementation of, the development or any management measures (discussed in **Section 5.3**).

Performance Indicators are defined as ‘Tahmoor Coal derived environmental performance indicators set to maintain compliance with the performance measures and/or objectives outlined within Schedule 2 Part B of the Consent’.

Monitoring that will be conducted to assess Tahmoor Coal’s performance against these indicators is outlined within **Section 5.4**.

Table 7 Performance Indicators

Aspect	Indicator	Reporting Mechanism
Noise	Number of exceedances of relevant noise limits	Annual Review
Noise	Number of complaints regarding noise	Annual Review

2.1.5 Other Leases and Licences

All development consents, leases, licences, and other relevant approvals are stored in the Cority Compliance Management database, which is administered by both site and Liberty GFG Corporate. A summary of the relevant mining leases are provided in **Table 8**. A summary of other approvals and licences are provided in **Table 9**. These leases, approvals and licences do not currently have any specific requirements in relation to noise. Pollution Reduction Programs have previously been required under conditions of EPL 1389 and are summarised in **Section 4.5**.

Table 8 Mining Leases

Title	Description	Granted	Expires
CCL 716	Original Tahmoor Leases	15/06/1990	13/03/2021 (approval pending)
CCL 747	Bargo Mining Lease	23/05/1990	06/11/2025
ML 1376	Tahmoor North Lease	28/08/1995	28/08/2043
ML 1308	Small Western lease to west of CCL716	02/03/1993	02/03/2035
ML 1642	Pit-top and REA surface Mining Lease	27/08/2010	27/08/2031

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ML 1539	Tahmoor North Extensions Lease	16/06/2003	16/06/2024
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Table 9 Approvals/Licences

Approval Title / Description	Date Granted	Expiry Date
Environmental Protection Licence 1389	01/05/2012	No Expiry
WAL36442, WAL25777, WAL43572, WAL43656 and WAL44608	6/12/2013	No Expiry
Dangerous Goods Licence XSTR200005	18/01/2012	02/02/2027

3 Stakeholder Consultation

3.1 Internal Stakeholder Communication

Internal stakeholders include employees, contractors and visitors of Tahmoor Coal. Any internal communications relating to noise will be conducted in accordance with the *TAH-HSEC-00119-Communication and Engagement Procedure*. This procedure outlines:

- a) Methods of communication between internal stakeholders;
- b) Types of information that is communicated between internal stakeholders;
- c) Responsibilities for communication of information to internal stakeholders; and
- d) Review of communication methods, including the consideration of feedback to / from internal stakeholders.

3.2 External Stakeholder Communication

External stakeholders include neighbours and the local / regional community, local council, state and federal government agencies and regulators, and press / media. Any external communications relating to noise will be conducted in accordance with Tahmoor Coal’s standard communications procedures. External stakeholders are identified within the following documents:

- *TAH-HSEC-00031- Community Development Plan; and*
- *TAH-HSEC-00039 – Stakeholder Engagement Plan.*

External stakeholder communication is undertaken in accordance with:

- *TAH-HSEC-00039– Stakeholder Engagement Plan; and*
- *TAH-HSEC-00119- Communication and Engagement Procedure.*

These documents include information on the following topics:

- a) Methods of communication to external stakeholders.
- b) Types of information that is communicated between external stakeholders.
- c) Responsibilities for communication of information to external stakeholders.
- d) Review of communication methods, including the consideration of feedback to / from external stakeholders.

A key objective of *TAH-HSEC-00119 - Communication and Engagement Procedure* is to maintain positive relationships established with the local community and other external stakeholders.

3.3 Consultation to Date

The following stakeholders have been involved in the drafting of this NMP:

- a) *Environmental Protection Authority (EPA)*

All consultation completed (post approval) in relation to noise is summarised within **Table 10**.

Table 10 Consultation to Date

Consulted Parties	Consultation	Outcomes of Consultation
EPA	Reviewed draft Noise Management Plan received on 25/10/2021	All suggested changes have been implemented by Tahmoor South. See Appendix C for specific details.

Consulted Parties	Consultation	Outcomes of Consultation
Landowners in Table 10 of Consent	<p>Within one month of the date of the Consent, Tahmoor Coal must:</p> <p>(a) notify in writing the owner of:</p> <p>(i) the residences on the land listed in Table 10 that they are entitled to ask the Applicant to install additional mitigation measures at the residence; and</p> <p>(b) notify the tenants of any mine-owned land of their rights under this consent.</p>	<p>Letter entitled “20210521 TCCO Notification of Entitlement to Noise Mitigation measures” sent on 21 May 2021. Development Consent was granted on 23 April 2021. Letter is provided in Appendix C.</p>

4 Baseline Data

Tahmoor Mine is located south of the township of Tahmoor, with the Picton-Mittagong Railway to the west, the Nepean River, Metropolitan Special Area (MSA) and Upper Nepean State Conservation Area to the east, and the township of Bargo, Crown land and the M31 Hume Motorway to the south. The surface facilities area is located approximately 3 km south of Tahmoor and 3.5 km north of Bargo.

The mine infrastructure at the surface facilities area is surrounded by vegetated land and gullies and is bounded by Remembrance Driveway to the west and bisected by the Main Southern Railway. Tahmoor South extraction area extends beneath semi-rural and partly forested landscapes, along with a mix of rural and environmental land uses. Tahmoor South extends under the residential, semi-rural and agricultural areas of the villages of Buxton, Bargo and Balmoral.

Tahmoor Mine is located in a region with a long history of agricultural use. Rural uses within the vicinity of Tahmoor Mine include small-scale agricultural activities such as poultry, cattle grazing, trotting horse training, greyhound training and several horse studs.

4.1 Hours of Operation

Underground mining operations may be undertaken 24 hours a day, 7 days a week, however any periodic transport of coal and/or coal reject material to/from the site by road will only be undertaken between 7am to 6pm, Monday to Saturday.

Rejects may continue to be conveyed to the onsite load-out stockpile area 24 hours a day, and then loaded into a haul truck and transported around the REA. However, on the completion of noise mitigation works (i.e. within two years of commencement of development), a review of 24-hour REA operations will be conducted to determine compliance with noise limits. If noise limits cannot be met following noise mitigation works, further assessments will be undertaken to determine compliance.

Except for drilling activities at the ventilation shaft sites (no longer required) and the construction of the intersection upgrade¹, construction activities at the surface facilities site and ventilation shaft sites will only be undertaken between the hours of 7am to 6pm Monday to Friday, and 8am to 1pm Saturday, with no construction activities on Sundays or public holidays.

4.2 Background Noise Data

Ambient and background acoustic environment was quantified in the Noise and Vibration Impact Assessment Reports prepared by EMM Australia Pacific Pty Ltd (EMM, 2019 and EMM, 2020) to accompany the EIS and Amended Project report.

4.3 Historical Quarterly Noise Monitoring Results

A summary of the quarterly noise monitoring results, as provided in the quarterly reports, for the period between Q1 2014 and Q1 2023 is shown in **Table 11** together with the previously applied criteria at each location. It is noted that noise criteria do not apply at some of the monitoring locations since they were not noise-sensitive receptors. Results indicate that noise levels are generally in compliance with the interim noise limits (i.e. within 2 dB) at the relevant residential monitoring locations.

¹ Tahmoor Coal have sought an amendment to Condition A16 of Consent SSD 8445 which allowed construction activities associated with the intersection upgrade to occur at night, to reduce any impacts to traffic in the area. A specific Construction Environmental Management Plan has been developed and provided to the Department of Planning and Environment.

4.4 Noise Complaints

Noise complaint data from 2006 to May 2023 is captured to monitor noise performance of the Tahmoor Colliery. Noise complaints since 2006 are summarised in **Figure 2**. Olive Lane complaints have been shown separately below as they have been received from one complainant.

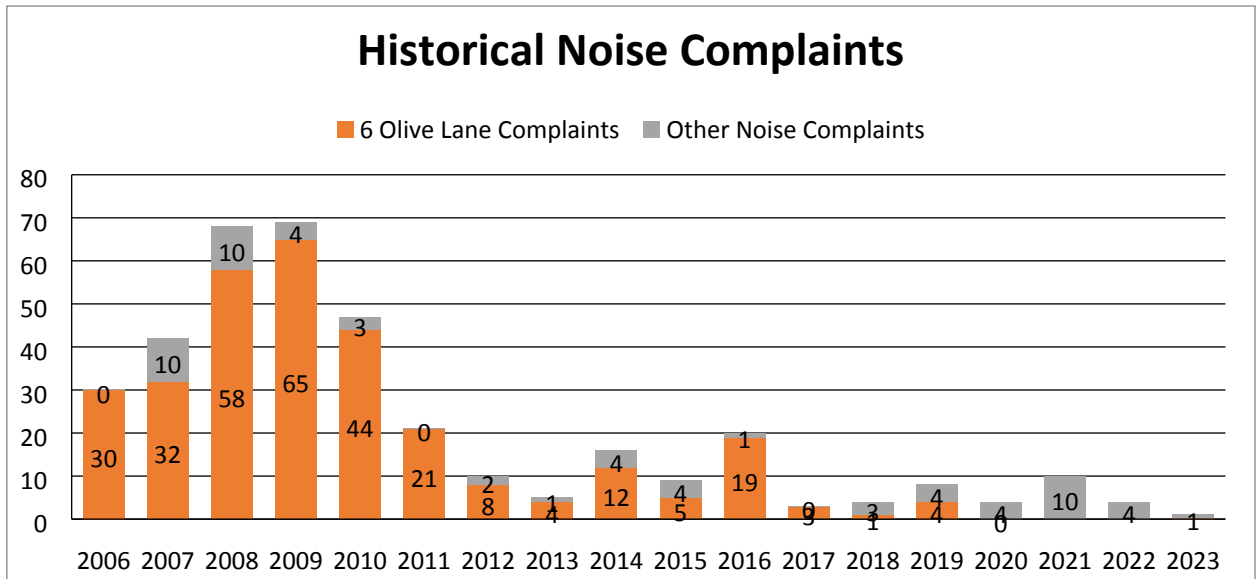


Figure 2 Baseline Noise Complaints (up to August 2023)

Table 11 Baseline Quarterly Noise Results

Year	Site	EIS Site Name	Assessment Goal L10	Estimated contribution Q1 (L10)	Estimated contribution Q2 (L10)	Estimated contribution Q3 (L10)	Estimated contribution Q4 (L10)	Description	Residential Property
2014	M1	C12		<45/6	<48	<48	<48	Remembrance Driveway (Service Station)	No
2015				<52	<50	<46	54/5		
2016				<50	<50	<55	<45		
2017				53/4	50/1	54/5	53/4		
2018				48/9	50/1	<45	<45		
2019				<49	<52	<56	<45		
2020				<48	<46	<46	<44		
2021				<47	<56	<47	<58***		
2022				<50***	<50***	<50**	<50**		
2023				<49***	<49***				
2014				M2	C1		46/7		
2015	<53	<54	<47				55/6		
2016	<50	<50	<50				<46		
2017	53/4	55/7	56/7				53/3		
2018	48/9	50/1	<45				<46		
2019	<53	<56	<56				<48		
2020	<48	<46	<48				<45		
2021	<49	<56	<48				<60***		
2022	<52***	<53***	<50***				<50***		
2023	<50***	<52***							
2014	M3	C2	45				<44	<47	<45
2015				<48**	<47	<42	44/5		
2016				44/5	<40	<45	<45*		
2017				<45**	<47**	<47	<45*		
2018				<47***	<47**	<44	<47***		
2019				<46***	<47***	<42**	<44		
2020				<46***	<44**	<46**	<45**		
2021				<45**	<45**	<45**	<51***		
2022				<47***	<50***	<45***	<44***		
2023				<44**	<44**				
2014				M4	C3		<45	<49	<47
2015	<48	<53	<47				47/8		
2016	<45	<40	<45				<46		
2017	<48	<50	<50				<50		
2018	<45	<50	<50				<48		
2019	<50	<46	<46				<50		
2020	<48	<47	<47				<46		
2021	<50	<52	<50				<60***		
2022	<52***	<55***	<50***				<50***		
2023	<47**	<55***							
2014	M5	C4	45				<40	<40	<47
2015				<40	<46	<42	<42		
2016				<40	<40	<45	<45*		
2017				<45**	<45**	<45	<40		
2018				<35	<35	<45	<40		
2019				<43**	<45**	<40**	<40		
2020				<44**	<45**	<35	<40		
2021				<45**	<45**	<42**	<48***		
2022				<45**	<45**	<44**	<40**		
2023				<42**	<44**				

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2014	M6	C5	45 (37)	<35 (<35)	<43 (<35)	<38 (<35)	<30	Stratford Road	Yes
2015				<30	40/1 (-)	40/1 (-)	39/40 (-)		
2016				<35 (<35)	<50	<55	<45		
2017				<40** (<35)	<40** (<35)	<40 (<35)	<40 (<35)		
2018				<35	<37	<40	<40**		
2019				<35**	<37**	<39**	<39		
2020				<35	<39	<35	<40		
2021				<44** (<35)	<42 (<35)	<40 (<35)	<42** (<35)		
2022				<40** (<35)	<43** (<35)	<44***	<40 (<35)		
2023				<44*** (<35)	<44 (<35)				
2014	M7	C6	45 (37)	<35	<35	<35	<30	Hodgson Grove (End of Cul-de-sac)	Yes
2015				<30	35/6(-)	<35	<30 (-)		
2016				<30 (-)	<30 (-)	<30 (-)	<35* (-)		
2017				<35** (<35)	<35** (<35)	<35** (<35)	<35** (<35)		
2018				<35	<35	<35	<35		
2019				<35	<35	<35	<35		
2020				<35	<35	<35	<35		
2021				<35 (<35)	<35 (<35)	<35 (<35)	<42** (<35)		
2022				<40 (<35)	<40 (<35)	<40**	<40 (<35)		
2023				<40 (<35)	<42** (<35)				
2014	M8	C7	45 (37)	<35	<35	<35	<32	Rockford Road	Yes
2015				<33	32/3(-)	<34	<35 (-)		
2016				<33 (-)	<30 (-)	<30 (-)	<40* (<35)		
2017				<35** (<35)	<35** (<35)	<37** (<35)	<37** (<35)		
2018				<35	<35	<40	<40		
2019				<35	<35	<35	<35		
2020				<35	<35	<35	<37**		
2021				<37 (<35)	<35 (<35)	<35 (<35)	<42 (<35)		
2022				<40** (<35)	<40** (<35)	<40**	<42** (<35)		
2023				<38** (<35)	<42** (<35)				
2014	M9	C8	45 (37)	<35	<35	<35	<30	Kammer Place (End of Cul-de-sac)	Yes
2015				<30	<30 (-)	<30 (-)	<30 (-)		
2016				<30 (-)	<30 (-)	<30 (-)	<35* (<35)		
2017				<35* (<35)	<35* (<35)	<35* (<35)	<35* (<35)		
2018				<35	<35	<35	<35		
2019				<35	<35	<35	<35		
2020				<35	<35	<35	<35		
2021				<35 (<35)	<35 (<35)	<35 (<35)	<35 (<35)		
2022				<40** (<35)	<40 (<35)	<40** (<35)	<40 (<35)		
2023				<35 (<35)	<35 (<35)				
2014	M10	C11	45 (37)	<35 (<35)	<36 (<35)	<32 (<35)	<30	Charlies Point Road	No
2015				<30	<30	<6	<35		
2016				<30	<35	<35	<35		
2017				<45	<45	<35	<35		
2018				<35	<35	<35	<35		
2019				<35	<35	<35	<35		
2020				<35	<35	<30	<30		
2021				<35	<35	<35	<35		
2022				<35	<35	<35	<45***		
2023				<35	<35				
2023	M11			<35	<35			Charlies Point Rd Driveway Entrance	Yes
2023	M12			<44***	<40			Remembrance Driveway (Garden Centre)	Yes

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Table 11 NOTES: # Ambient noise controlled by insects (2-5kHz)

* Includes DECC INP +2dB(A) allowance (INP Section 11.1.3)

** Includes +2dB correction for low frequency noise (NPfl Table C.1)

*** Includes +5dB correction for low frequency noise (NPfl Table C.1)

() Noise Assessment Goal for REA

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The results of noise monitoring conducted in preparing the noise impact assessment to accompany the EIS (EMM, 2019) indicated that low frequency noise above the current relevant NPfI thresholds is present in the vicinity of Olive Lane and the Wollondilly Anglican Church and College. Information from residents and corresponding noise data indicates that the major source of C - weighted noise is in the coal handling and processing plant (CHPP). Noise Mitigation works are currently underway to reduce low frequency noise emissions from CHPP. These works are further discussed in **Section 5.1**.

4.5 Pollution Reduction Programs

Tahmoor Coal's EPL 1389 has also included a number of Pollution Reduction Programs (PRP) with the aim of reducing noise emissions from the site. The completed noise related PRPs are summarised as follows:

- PRP12 – Noise Assessment Survey – Completed 31 March 2007;
- PRP13 – Stage 2 Noise Investigation and Mitigation Program – Completed 31 January 2009;
- PRP14 – Noise Mitigation Program – Completed 31 December 2009;
- PRP16 – Noise Survey Review and Assessment – Completed 30 May 2011;
- PRP17 – Review of Noise Mitigation Works – Completed 29 July 2011; and
- PRP 18 – Feasible and Reasonable Noise Mitigation Works – Completed 29 September 2011.

Works associated with the PRPs have been previously implemented and completed to the EPA's requirements. Noise mitigation works undertaken as part of PRPs included the following:

- use of a Programmable Logic Controller (PLC) to control the operation of the main surface shaker screen at the CHPP;
- GPS tracking installed in REA haul trucks to monitor speed and truck movements;
- a real - time noise monitoring network and alarm reporting system;
- secondary acoustic treatments to the Vent Shaft 2;
- decommissioning of the Shaft 3 ventilation system;
- acoustic treatments to the head of the drift conveyor to reduce product impact airborne noise and vibration transfer;
- dampening of product deflector plates, external insulation and cladding of the reject bin; and
- replacement of building cladding and closing of openings in buildings.

Other works implemented as a result of the PRPs specifically targeted at reducing maximum noise events from the site include the following:

- laminated transfer chutes at conveyor transfer points;
- lagging of the reject stone bin;
- limit switches to ensure the stone bin levels are maintained at not less than 30% full;
- replacement of mobile plant reversing alarms with low level, broad spectrum alarms (colloquially referred to as "quackers"); and
- installation of an onsite real - time noise monitor.

Further information on baseline data for Tahmoor South is available within Appendix M of the Tahmoor South EIS (January 2019).

5 Noise Management and Monitoring

5.1 Construction Noise

In accordance with commitments outlined within the EIS (**Table 3**), project-specific Construction Noise and Vibration Management Plans will be created for specific approved construction activities onsite. Construction activities and their commencement dates include:

- Intersection upgrades (Remembrance Driveway and Mine Access Road, Remembrance Driveway and Olive Lane) – completed 2022;
- Noise mitigation works to the CHPP – commenced mid 2022; and
- Stockpile extension – completed 2022.

Proposed noise mitigations works to the CHPP will be completed to meet noise criteria requirements. The proposed works will be staged and may include:

- Close openings (for example installing doors and windows) on CHPP facades.
- Improved cladding and insulation for CHPP.

These plans will be prepared prior to the commencement of construction activity and will be used in conjunction with this **NMP**.

The Construction Noise and Vibration Management Plans will consider the following requirements of the Consent:

- To demonstrate compliance with Consent Condition B1, Tahmoor Coal will implement specific Construction Noise and Vibration Management Plans to ensure that noise generated during construction activities at the ventilation shaft sites and the intersection upgrades does not exceed the noise limits listed under the Construction Phase in **Table 5** at any receiver on privately-owned land.
- *“The proposed downcast ventilation shaft TSC2 must be constructed on the same site as TSC1. Disturbance must not occur at the proposed TSC2 site. Construction of shafts TSC1 and TSC2 must not be commenced until a revised layout and design has been submitted to and approved by the Planning Secretary...”* as required by Condition A9 of the Consent. A revised layout and design is expected to be completed in 2022.
- Truck movements at the ventilation shaft sites during construction activities must not exceed 16 movements per day in accordance with Condition A12 of the Consent.
- Construction activities at the surface facilities site and ventilation shaft sites must only be undertaken between the hours of 7 am to 6 pm Monday to Friday, and 8 am to 1 pm Saturday, with no construction activities on Sundays or public holidays, unless the Planning Secretary agrees otherwise, as per Condition A16 of the Consent (See Section 4.1 for further details).
- The exception to the previous requirement is drilling activities at the ventilation shaft sites which may be undertaken 24 hours per day, 7 days per week as per Condition A17 of the Consent.
- Ventilation shaft construction noise limits as per Table 1 of the Consent.
- Tahmoor Coal will take all reasonable steps to minimise noise from the construction activities as per Condition B5 a) of the Consent.

5.2 Sources of Operational Noise

Tahmoor Mine surface operations include several activities that have the potential to generate noise, including:

- Coal Handling & Preparation Plant (CHPP);
- Surface Workshops;
- Ventilation Fans;
- Rail Loading Facilities;

- Coal Handling Conveyors;
- Refuse Handling Conveyors;
- Mobile Equipment;
- Gas Extraction Plant;
- Approved construction activities; and
- General surface operations and activities.

Noise from these sources is recognised and managed as per the general noise controls outlined in the following sections.

Road traffic noise levels at the nearest receivers on most roads were predicted within the EIS to marginally increase by up to 1 dB for Tahmoor South. Such an increase is considered negligible and satisfies the Road Noise Policy (RNP) (DECCW, 2011) 2dB allowance increase following all feasible and reasonable mitigation measures. At receivers along Charlies Point Road, road traffic noise levels were predicted to increase by up to 7 dB and 8 dB compared to the existing (2017) levels of road traffic noise calculated for day and night. However, this is below the RNP road traffic relative increase criteria (LAeq, period + 12 dB) for residential land uses and overall road traffic noise levels are predicted to be below the relevant day and night-time criteria. Therefore, Tahmoor South works are not expected to generate road traffic noise impacts at the nearest potentially affected receivers.

No increase in rail capacity between Tahmoor Mine and Port Kembla is required for Tahmoor South. As such, existing rail infrastructure and the number of allowable train movements will remain unchanged. Potential future mitigation measures for rail noise are provided in **Table 13**. These measures will be implemented if required to meet noise limits, within two years of the commencement of development for Tahmoor South.

Noise management measures associated with the construction of ventilation shafts and other site construction activities will be managed in accordance with project specific Construction Noise and Vibration Management Plans.

5.3 Management Measures

General noise management and mitigation measures to ensure compliance with relevant consent conditions are outlined within **Table 12**.

Table 12 Noise Management and Mitigation Measures

Control Type	Control	Responsibility
Proactive	Implementation of a predictive forecasting system that provides site personnel with information on daily environmental risk associated with air quality and noise. Weather conditions will be monitored by CHPP Control and Mine Control to identify if noise enhancing conditions are forecast for each day/night shift. Trigger Action Response Plans (further discussed in Section 6, and provided in Appendix A) include triggers related to potential noise enhancing conditions onsite at Tahmoor Mine.	CHPP Control and Mine Control
Reactive	Real time monitoring noise level data and audio recordings are utilised to verify compliance with noise limits (and conditions of consent), particularly in response to community complaints or other specific enquiries or investigations. Real time noise monitor SX48 at Tahmoor Mine is programmed with pre-defined alarm trigger levels, which are linked to the mine's control room and Citect control system, for monitoring night-time operational noise. Further information is provided in Section 5.4.2.	CHPP Control and Mine Control
Proactive	Broadband sound emitting reverse alarms on all surface mobile equipment and regular inspections to confirm installation as part of Tahmoor Mine entry requirements.	Surface Superintendent

Control Type	Control	Responsibility
Proactive	Plant and equipment alarms will be minimised at night, within safety limits.	Surface Superintendent and CHPP Control
Proactive	Acoustic barriers such as the earthen mound adjacent the rail loop and on the western side of the clean coal stockpile area will be maintained.	Surface Superintendent
Proactive	All surface plant, equipment and noise suppression devices will be inspected to ensure that it is in ideal running order, regularly maintained to the manufacturer's specification and free of defective components to minimise noise emissions.	Surface Superintendent
Proactive	Noise mitigation initiatives will be included in the design of all new equipment. Where practical, mechanical machinery will be silenced by the best practical means using current technology if noise levels from the equipment are assessed as being excessive.	Maintenance Superintendent and Mine Mechanical Engineer
Proactive	Noise management and awareness will be included in employee and contractor inductions and environmental awareness training conducted annually.	Environment and Community Manager
Reactive	Community noise complaints investigated accordingly and the cause attempted to be identified.	Environment and Community Manager
Proactive	Where possible, Tahmoor Coal will only use one dozer on either stockpile during the night. Occasionally two dozers may be required to be utilised, appropriate investigations and noise mitigations measures will be implemented prior to this occurring to remain compliant with noise limits. Additional noise monitoring will be conducted as required to confirm compliance with noise limits during these occasions.	CHPP Operational & Environmental Specialist
Proactive	Work on the southern end of the stockpile area at night will be minimised, where possible.	CHPP Operational
Proactive	Tahmoor Coal only engage railway providers who use locomotives and best practice rolling stock that are approved to operate on the NSW rail network in accordance with EPL's issued for railway activities and rolling stock operations. This ensures that rolling stock selected is best practice to minimise noise..	CHPP Operational
Proactive	Predicted weather conditions will be reviewed by CHPP Control to identify if noise enhancing conditions are forecast for each day/night shift. During noise-enhancing conditions Tahmoor Coal will review and amend operations accordingly.	CHPP Control
Proactive	Prior to the implementation of noise mitigation measures: <ul style="list-style-type: none"> a) reject emplacement in the REA will not occur at heights above RL 300m, except in areas identified as Stages 1 and 5 (see Figure 2 in Appendix 2 of the Consent) where reject material may be emplaced up to a height of RL 310 m; and b) the emplacement of rejects above RL 300 m in the areas specified in (a) above does not occur concurrently with ventilation shaft construction activities. 	CHPP Control and E&C Department
Reactive	Alarms to alert CHPP Control of noise-enhancing conditions will be set. If noise-enhancing conditions commence, Tahmoor Coal will review and amend operations accordingly.	CHPP Control

Tahmoor Coal will also investigate the implementation of proactive future noise mitigation measures that are considered both reasonable and feasible. These measures will be implemented if required to meet noise limits, within two years of the commencement of development for Tahmoor South. **Table 13** outlines potential future mitigation measures.

Table 13 Potential future mitigation measures

Control	Details
CHPP Improvements	Tahmoor Coal will commence feasibility study works on reducing low frequency noise, including consideration of various options for CHPP improvements, such as: <ul style="list-style-type: none"> • Close openings (for example installing doors and windows) on CHPP facades. • Improved cladding and insulation for CHPP.
Noise suppression equipment for dozer.	Installation of noise suppression equipment on the dozers to reduce noise from the stockpile.
Improved feed chute into rail wagons.	Engineering design will be used to improve the feed of coal into the wagons to reduce the maximum noise event associated with this activity.
Improvement to enclosure of Champion compressors.	The current Champion compressor enclosure is open on several sides. Enclosing the open areas would reduce noise from the compressors.
Installation of a noise barrier around coal stockpile area.	The barrier would be located along the western side of the existing stockpile area and be in the form of 3 shipping containers stacked on each other.
Increase height of bund to shield northern section of rail loop.	Increasing the bund height will further reduce locomotive engine noise and noise from wheel/track interaction when rail loading is occurring.
Restriction of REA operations	Review of 24 hour REA operations to meet consent noise limits. Review of location of dozer operation at night to meet consent noise limits.

Noise modelling of the mitigation works for Tahmoor South resulted in improved noise emissions compared to existing at all but two residences. Tahmoor Coal have since acquired these properties and no further mitigation measures are required at these two properties.

5.3.1 Management Measure Effectiveness

The effectiveness of noise controls will continue to be evaluated throughout the life of the mine. Additional noise management controls, including new technologies, will be investigated, and implemented where feasible and reasonable.

Adaptive management and continuous improvement measures will be implemented accordingly as outlined in **Section 6**.

5.4 Noise Monitoring Program

5.4.1 Monitoring Standards

Noise compliance monitoring at Tahmoor Mine will be undertaken in accordance with the following relevant standards and guidelines:

- AS1055 – 2018: Acoustics – Description and Measurement of Environmental Noise;
- NSW Industrial Noise Policy (EPA, 2000) (superseded but relevant to the interim noise criteria);
- NSW Noise Policy for Industry (EPA, 2017);
- Environmental Noise Control Manual (DEC, 1994) (superseded but relevant to the interim noise criteria);
- AS/NZS IEC 61672.1:2019: Electroacoustics – Sound Level Meters Specifications.

5.4.2 Monitoring Program

Compliance with noise limits at the mine is monitored through quarterly (as required by Consent Condition B5 (f)) operator-attended night-time surveys. Two continuous real-time noise monitors are also monitored daily to assist with the management of on-site noise levels. These real-time units operate 24 hours per day 7 days per week. The real-time noise monitoring data is not utilised to determine noise compliance, however the data from these monitors are used to manage noise levels from the site to an

acceptable level. Once quarterly attended noise monitoring results are received, they will be reviewed by the Environmental Specialist and utilised to calibrate/validate real time monitoring results.

Representative noise monitoring locations around the mine were provided within the Tahmoor South EIS and can be found in **Figure 3**. These locations are representative of potentially impacted residences surrounding the Tahmoor Mine surface operations and generally consistent with historical noise compliance monitoring locations.

Any exceedance of these noise monitoring criteria will require further investigation in line with the Contingency Plan outlined within **Section 6**. Noise monitoring will only be conducted during night-time hours (10pm to 7am) to minimise the influence of extraneous noise since it is the most sensitive period.

Interim noise criteria outlined in **Table 4** and **Table 14** below will be applicable during noise monitoring until the noise mitigation measures required under SSD 8445 are complete. Following the implementation of noise mitigation measures, the noise limits provided in Table 2 of the Consent will be applicable. The impact assessment criteria, provided within **Table 14**, have been formed based on the predicted 'achievable' night-time noise levels for these monitoring locations. These are not statutory limits, rather they are guidelines to determine compliance with the limits outlined in **Table 5**. If these levels are achieved by Tahmoor Coal, then it is predicted that noise limits from **Table 5** (Consent Condition B1 and B2) will be achieved at nearest residences.

Table 14: Quarterly Noise Monitoring Locations

Monitoring Type	EIS Site ID	Site ID for Quarterly Noise Assessments	Nearest Noise Assessment Location (Development Consent SSD 8445)	Location Description	Interim Noise Limits LA10 (dB)	Impact Assessment Criteria LAeq(15 min) dB
						(Following implementation of noise mitigation measures under SSD 8445)
						Night
Attended Noise Monitoring	C1	M2	2766	Wollondilly Anglican Church (western side of Remembrance Drive directly out the front of the Church)	N/A	51*
	C2	M3	1429	Western end of Olive Lane (at end of cul-de-sac adjacent driveway to 7 Olive Lane)	45/37**	46
	C3	M4	1427	Eastern end of Olive Lane (adjacent driveway to 1 Olive Lane)	N/A	47
	C4	M5	2006	2900 Remembrance Drive (western side of Remembrance Drive on the northern side of the service station)	45/37**	43
	C5	M6	2015	Southern end of Stratford Road (near driveway to 135 Stratford Road)	45/37**	38
	C6	M7	1546	Eastern end of Hodgson Grove (near driveway of 2 Hodgson Grove)	45/37**	35
	C7	M8	2003	Rockford Road (near driveway of 250 Rockford Road)	45/37**	35
	C8	M9	2021	Kammer Place (near driveway to 10 Kammer Place)	45/37**	35
	C9	M11	975	80 Charlies Point Road (driveway of residence)	N/A	35

	C10	M12	1017	3076 Remembrance Drive (western side of Remembrance Drive adjacent residence)	N/A	41
	C11	M10	1028	Entry to REA Haul Road	N/A	35
	C12	M1	1421	3030 Remembrance Driveway (western side of Remembrance Drive on the northern side of the service station)	N/A	45

**Although noise limits do not apply during the night at the Wollondilly Anglican Church demonstration of compliance with this level during the night will indicate compliance with the daytime noise limit at this location.*

*** Interim noise limits, as specified under Development Consent DA57/93, are applicable within 3m of any residence (existing at the time of the Development Consent DA57/93). These are separated; LA10 45 dB from Tahmoor and Associated Facilities and LA10 37 dB (or background + 5dB – whichever is higher) from the refuse emplacement area.*

Noise level data and audio recordings from the real-time monitors are utilised to verify compliance with noise limits (and conditions of consent), particularly in response to community complaints or other specific enquiries or investigations. Real time noise monitor SX48 at Tahmoor Mine is programmed with pre-defined alarm trigger levels, which are linked to the mine’s control room and Citect control system, for monitoring night-time operational noise. This system (detailed in the site document *TAH-HSEC-00079 Noise Alarm Procedure & TAH-HSEC-00068 Surface Noise Trigger Action Response Plan*) allows Tahmoor Coal to proactively manage noise levels during night-time hours, with the intent of managing identified elevated noise levels as they occur, ultimately reducing the number of community complaints.

Noise alarms at the real time monitoring unit (Unit 48) have been established based on results of noise modelling. For example, the trigger level at Unit 48 is predicted to result in noise emissions at nearest residences that are approaching the relevant noise limit.

A process of ‘alarm escalation’ has been developed based on the trigger level at the real time noise monitor. This is shown in the **Appendix A**.

Noise alarms are only active during night-time hours, as daytime noise alarms may be difficult to manage considering the abundance of background noise from Remembrance Drive and not generated by the mine. The majority of noise complaints at the site are also related to night-time operational noise only.

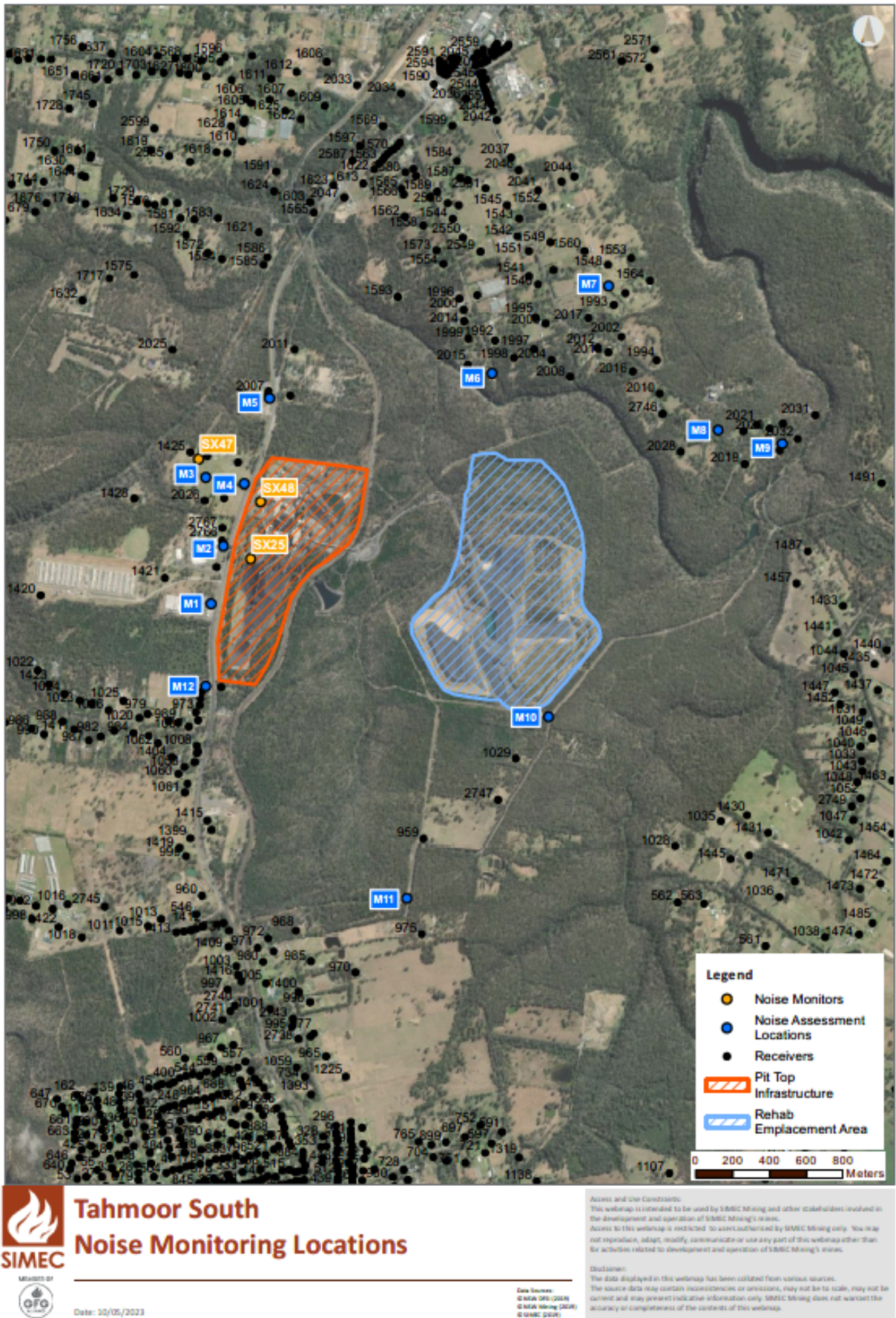


Figure 3 Noise Monitoring Locations

Number: TAH-HSEC-372
 Owner: Zina Ainsworth

Status: Released
 Version: 4.1

Effective: Thursday, 17 August 2023
 Review: Monday, 17 August 2026

5.4.3 Meteorological Station

Tahmoor Coal operate a meteorological station on an ongoing basis to manage adverse weather conditions and to assist with the implementation of appropriate controls on a proactive basis. The monitoring station complies with the requirements in the Approved Methods for Sampling and Analysis of Air Pollutants in New South Wales (EPA, 2016) and the Industrial Noise Policy (INP) (EPA, 2000). Logged meteorological parameters include:

- barometric pressure;
- Sigma theta;
- Pasquill Gifford Stability Number
- evapotranspiration;
- saturation vapour pressure;
- solar radiation;
- relative humidity;
- wind speed;
- wind direction;
- temperature at 2 metres and 10 metres above ground; and
- rainfall.

The weather station is maintained and operated in accordance with AS 3580.14:2014 Methods for sampling and analysis of ambient air – Meteorological monitoring for ambient air quality monitoring applications.

In accordance with the NPfl, wind speed and rainfall data from the weather station will be utilised to determine the applicability of noise limits. In accordance with Condition B3, noise limits apply during standard or noise-enhancing meteorological conditions as defined in Part D of the NPfl (EPA 2017).

5.4.4 Noise Enhancing Conditions

During certain weather conditions, mine noise emissions may increase or decrease compared with noise during calm conditions. This is due to refraction caused by the varying speed of sound with increasing height above the ground that occurs during winds or where air temperature changes with height.

Weather conditions will be monitored daily by CHPP Control and Mine Control to identify if noise enhancing conditions are forecast for each day/night shift. A predictive weather alert has been incorporated for site use which sends a daily alert for predicted weather conditions and Noise enhancing conditions based on TARP Levels for site to inform operational stakeholders. Trigger Action Response Plans (further discussed in **Section 6**, and provided in **Appendix A**) include triggers related to potential noise enhancing conditions onsite at Tahmoor Mine. If noise enhancing conditions are encountered, works will be reviewed and if required will be relocated or rescheduled.

5.4.5 Monitoring Equipment Effectiveness

Noise monitors are calibrated before and after each set of measurements current NATA certified calibrator. All noise measuring equipment will be in accordance with AS/NZS IEC 61672.1:2019: Electroacoustics – Sound Level Meters Specifications.

The real time monitoring units are inspected monthly by a licensed technician. This inspection requires a bulk data download from the unit, as well as a physical inspection including the following:

- A field calibration check is completed on the sound level meter;
- The rain gauge and wind sensors are checked and cleaned;
- The power supply is inspected to verify the state of charge on the battery is adequate;
- General physical inspection is completed to identify any damaged or absent components.

The completed field sheet are supplied to the Environment Coordinator/Officer. Any missing components, faults or defects are reported to the Environment Coordinator/Officer for repair or replacement.

In addition to the above monthly physical inspection, a daily data download is completed by licensed technicians and sent to the Environmental Co-ordinator and/or Environmental team. This involves downloading a sample of recorded audio to review the quality is adequate, and to ensure the recorded audio is saving correctly in the online repository.

6 Contingency Plan

In accordance with Condition E5 (f) of the Consent, in the event that monitoring indicates that performance measures are considered to have been exceeded or are likely to be exceeded, a response will be undertaken in accordance with the **Trigger Action Response Plans (TARP) provided in Appendix A**. This response is a contingency plan that describes the management/corrective actions which can be implemented where required to remedy the exceedance. For the purposes of this plan, an exceedance is considered the same as a non-compliance. An exceedance up to 2dB higher than the noise limit is considered negligible but will be reported as an exceedance regardless (see Section 7.4 for further information).

The success of noise mitigation measures that have been implemented for any TARP exceedance would be reviewed as part of any Corrective Action Management Plan and the Annual Review.

6.1.1 Adaptive Management/Continuous Improvement

In accordance with Condition E4 of the Consent, where any exceedance of the criteria or performance measures outlined within this document has occurred, Tahmoor Coal will:

- a) take all reasonable and feasible steps, as outlined within the TARP provided in **Appendix A**, to ensure that the exceedance ceases and does not recur;
- b) consider all reasonable and feasible options for mitigation (where relevant) and submit a report to DPIE describing those options and any preferred mitigation/management measures or other course of action;
- c) within 14 days of the exceedance occurring (or other timeframe agreed by the Planning Secretary), submit a report to the Planning Secretary describing these remediation options and any preferred remediation measures or other course of action; and
- d) implement reasonable mitigation measures as directed by the Planning Secretary

Tahmoor Coal have adopted the “Plan-Do-Check-Act” model as shown in **Figure 4**. This model will be applied to all aspects of Tahmoor Coal’s environmental management and is utilised to embed the continuous improvement process in all system documents.

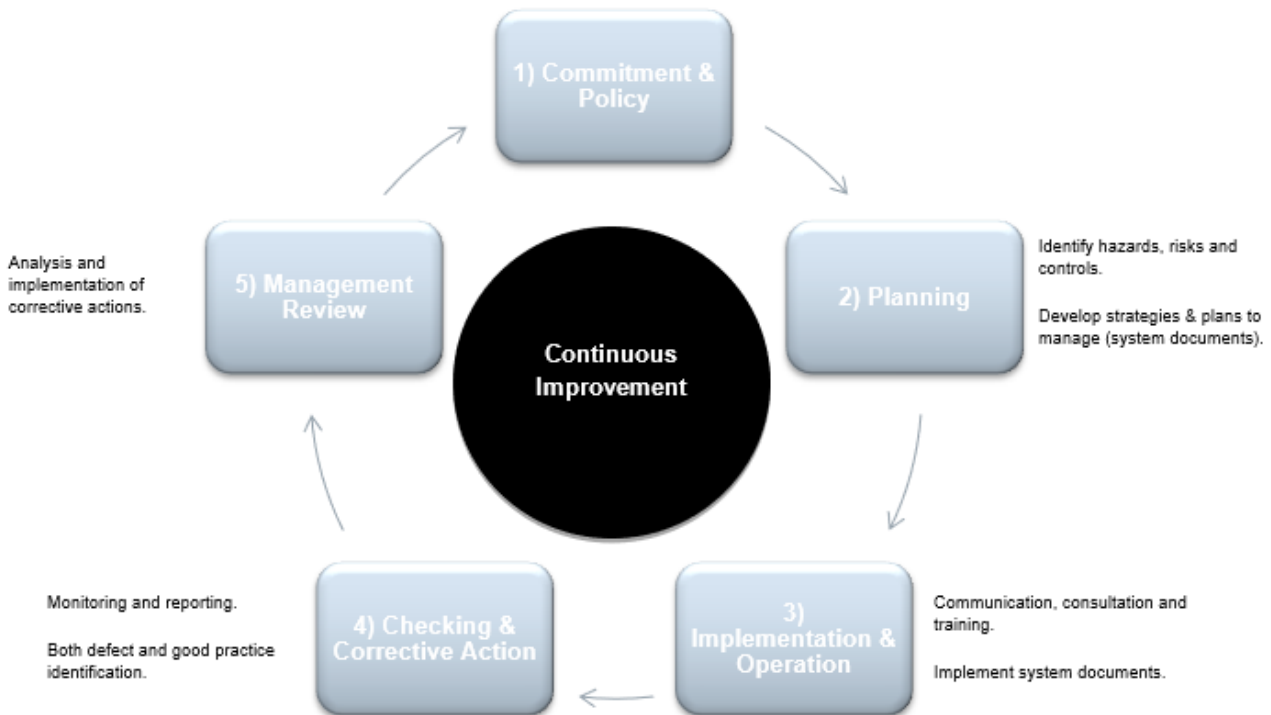


Figure 4: Continuous Improvement Model

Decisions regarding any required continuous improvement noise mitigation measures will be made on a case-by-case basis and take into account various factors including, but not limited to, the feasible and reasonable mitigation options, the absolute level of noise, likely improvement to existing noise levels and existing measures of community impact including complaints. Potential methods to continuously improve and reduce noise generation have been considered in a hierarchical approach and may include:

1. control of noise at the source;
2. once the feasible and reasonable controls at the source are exhausted, controlling the transmission of noise; and
3. once source and transmission feasible and reasonable controls are exhausted, considering mitigation measures at the noise-sensitive receivers.

7 Implementation and Reporting

7.1 Tahmoor Environmental Management System (EMS) Framework

The *TAH-HSEC-00173 - Tahmoor Coal Environmental Management System (EMS) Framework Document* provides the strategic context for the environmental management of Tahmoor Coal and forms part of the broader Health, Safety, Environment and Community (HSEC) management systems at Tahmoor Coal. The EMS outlines how Tahmoor Coal manages environment and community (E&C) aspects, impacts and performance. It provides a framework for the standards, plans and procedures implemented to ensure operations are managed in accordance with the ISO:14001 principles. The objectives of the EMS are:

- a) To provide an overall framework for environmental management at Tahmoor utilising the principles of ISO:14001;
- b) To ensure compliance with all development consent, licences and approvals at Tahmoor Coal;
- c) To detail the relationship and interactions between various operational and environmental components at Tahmoor Coal;
- d) To provide effective mechanisms for external communications, maintaining a relationship with the local community; and
- e) To assist Tahmoor Coal employees and contractors in administering their responsibilities regarding environmental management.

This plan will be implemented in conjunction with the EMS framework.

7.2 Reporting

Tahmoor Coals' reporting requirements are outlined in **Table 15**.

Table 15 Tahmoor Coal NMP Reporting Requirements

Instrument	Report	Details	Submitted/Uploaded
Consent Condition E13 and E14	Annual Review	<p>Tahmoor Coal submit an Annual Review by the end of March each year.</p> <p>The Annual Review:</p> <ul style="list-style-type: none"> - describes the development (including any rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year; - includes a comprehensive review of the monitoring results and complaints records of the development over the previous calendar year, including a comparison of these results against the relevant statutory requirements, limits or performance measures/criteria; requirements of any plan or program required under this consent; monitoring results of previous years; and relevant predictions in the EIS; - identifies any non-compliance or incident which occurred in the previous calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence; evaluates and reports on the effectiveness of air quality management systems; and compliance with the performance measures, criteria and operating conditions of this consent; 	<p>Copies of the Annual Review are submitted to DPIE, Council and relevant agencies and made available to the CCC and any interested person upon request.</p> <p>Copies are also available on the Tahmoor Coal website http://www.simec.com/mining/tahmoor-coal-pty-ltd/publications/</p>

Instrument	Report	Details	Submitted/Uploaded
		<ul style="list-style-type: none"> - identifies any trends in the monitoring data over the life of the development and provide any raw monitoring data as requested by the Planning Secretary; - identifies any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and - describes what measures will be implemented over the next calendar year to improve the environmental performance of the development. 	

7.3 Incidents

The Consent defines an incident as ‘an occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance’.

Material Harm is defined within the Consent as ‘harm to the environment that:

- involves actual or potential harm to the health or safety of human beings or to the environment that is not trivial, or results in actual or potential loss or property damage of an amount, or
- amounts in aggregate, exceeding \$10,000, (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment)

Incidents with the potential to cause, or causing material harm do not typically occur in relation to noise. Regardless, Tahmoor Coal manages and responds to incidents in accordance with the following plans:

- a) *TAH-HSEC-232 - Emergency and Incident Manual;*
- b) *TAH-HSEC-00155 - Pollution Incident Response Management Plan; and*
- c) *TAH-HSEC-00224 - Notification of Environmental Pollution Incidents.*

These plans have been developed to manage preparation, incident response and reporting requirements under the Protection of the Environment Operations Act 1997 (NSW).

The management plans provide roles and responsibilities, management strategies, action and response plans and record management protocols for incidents and emergencies.

A Written Incident Notification will be submitted to the Planning Secretary via the Major Projects website within seven days after Tahmoor Coal becomes aware of an incident.

Written Incident Notifications will include:

- a) the development and application number;
- b) details of the incident (date, time, location, a brief description of what occurred and why it is classified as an incident);
- c) how the incident was detected;
- d) when Tahmoor Coal became aware of the incident;
- e) any actual or potential non-compliance with conditions of consent;
- f) describe what immediate steps were taken in relation to the incident;
- g) identify further action(s) that will be taken in relation to the incident; and
- h) identify a project contact for further communication regarding the incident.

Within 30 days of the date on which the incident occurred or as otherwise agreed to by the Planning Secretary, Tahmoor Coal will provide the Planning Secretary and any relevant public authorities/stakeholders (as determined by the Planning Secretary) with a Detailed Incident Report.

Detailed Incident Reports will include:

- a) a summary of the incident;
- b) outcomes of an incident investigation, including identification of the cause of the incident;
- c) details of the corrective and preventative actions that have been, or will be, implemented to address the incident and prevent recurrence; and
- d) details of any communication with other stakeholders regarding the incident.

7.4 Non-Compliances and Exceedances

The Consent defines a non-compliance as ‘an occurrence, set of circumstances or development that is in breach of the consent’. Non-compliances or system defects detected during monitoring, inspections and audits will be managed in accordance with the *TAH-HSEC-00173 Tahmoor Coal Environmental Management Framework Document*, with corrective action plans developed and implemented to rectify any issues. Both non-compliances and exceedances will be managed by Tahmoor Coal through the Contingency Plan and TARP process as outlined in **Section 6** and **Appendix A**.

For the purposes of this plan, an exceedance is considered the same as a non-compliance. An exceedance up to 2dB higher than the noise limit is considered negligible but will be reported as an exceedance regardless.

The Planning Secretary and relevant stakeholders will be notified in writing via the Major Projects website within seven days after Tahmoor Colliery becomes aware of any non-compliance/exceedance. As soon as practicable and no longer than 7 days after obtaining monitoring results showing an exceedance of any noise criterion in PART B of the Consent, Tahmoor Coal will provide the details of the exceedance to any affected landowners, tenants, relevant stakeholders and the CCC.

If a non-compliance/exceedance is detected, the following steps will be followed:

- a) Identify and confirm the non-compliance (i.e. review against approval criteria or condition and confirm that a non-compliance has occurred);
- b) Complete internal environmental reporting documentation including an investigation to capture all relevant information;
- c) In accordance with the relevant approval, determine what action (i.e. external reporting) is required. Specifically, determine if immediate reporting is required and to which stakeholders, or ensure that the event is captured for future reporting;
- d) Following the incident investigation, develop a corrective action plan aimed at preventing future re-occurrence; and
- e) Complete all required reporting and consult with relevant agencies on the corrective action plan to be implemented.

A non-compliance notification will identify the following:

- a) the development and the application number,
- b) the condition of consent that the development is non-compliant with
- c) the way in which it does not comply and the reasons for the non-compliance (if known); and
- d) any actions which have been, or will be, undertaken to address the non-compliance.

7.5 Complaints and Disputes

Community Complaints at Tahmoor Coal are managed in accordance with *TAH-HSEC-00119- Communication and Engagement* and *TAH-HSEC-00120- Community Complaints & Enquiry Procedure*. Tahmoor Coal operates a 24-hour complaints line (1800 154 415) for receiving community complaints and other stakeholder communications. The general process detailed in *TAH-HSEC-00120- Community Complaints & Enquiry Procedure* for responding to complaints is:

- a) Acknowledging all complaints and responding to the complainant within 24 hours where practicable;

- b) Registering all complaint details in Cority;
- c) Investigating complaints impartially considering the facts and the circumstances prevailing at the time;
- d) Implementing corrective actions if required; and
- e) Reporting to relevant stakeholders of investigation outcomes and corrective actions taken.

A record of all community complaints in relation to activities undertaken by the licensee must be kept in a legible form and be in accordance with Tahmoor Coal’s Environmental Protection Licence 1389.

The following information will also be kept in the event of a community complaint; as required by Section M4 in Tahmoor Coal’s EPL 1389:

- a) The date and time of the complaint;
- b) The method by which the complaint was made;
- c) Any personal details of the complainant which were provided by the complainant or a note to that effect;
- d) The nature of the complaint;
- e) The action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
- f) If no action was taken by the licensee, the reasons why no action was taken.

These records must be kept for at least 4 years after the complaint was made and be able to be produced to any authorised officer who asks to see them. In accordance with Consent Condition E23 (a), Tahmoor Mine will upload the following details to the Tahmoor Coal Website:

- contact details to enquire about the development or to make a complaint; and
- complaints register, updated monthly.

In the event of a dispute or conflict between Tahmoor Coal personnel and a member of the community, the Tahmoor Coal E&C Manager will facilitate communication between both parties to reach a resolution, which may include a meeting with the complainant to discuss the issue.

Where relevant, negotiations will be initiated in accordance with any relevant Consent conditions. This general process is documented in *TAH-HSEC-00119- Communication and Engagement*. If a dispute cannot be resolved, the matter will be escalated to involve the Head of Operations or Executive General Manager as required and may involve consultation with the relevant government agency to assist in reaching a determination on the matter.

7.6 Risk and Change Management

Aspects and impacts of environmental matters at Tahmoor Coal are considered for operational activities, legislative requirements and internal and external stakeholder views, in accordance with Condition E4 of the Consent. Key aspects and impacts, including noise management, are identified during the annual review of the Tahmoor Coal Environment and Community (E&C) Broad Brush Risk Assessment (BBRA) and the operational Life of Mine (LOM) Risk Assessment and Site Wide Broad-Brush Risk Assessment (Mine BBRA).

The purpose of the E&C BBRA is to identify significant E&C aspects and impacts across the site, the risk they pose and the controls necessary to effectively manage them. Management of potential impacts is prioritised according to the level of risk each aspect is assigned. Once all identified aspects, impacts, risks and management controls have been identified within the Annual E&C Risk Assessment, associated plans are updated accordingly.

The purpose of the Mine BBRA is to identify significant aspects and impacts of operations at a site level. Existing or proposed management controls are identified to reduce the risk of impacts on the E&C. The need for any new (or modifications to existing) approvals is also identified during this process.

The LOM Risk Assessment considers aspects and impacts of business activities at a strategic level. These risk assessments cover the life of mine risks associated with each operation. The outcomes of the LOM

Risk Assessment are used in conjunction with the Tahmoor Coal E&C BBRA and Mine BBRA to develop the annual capital and operational budget and the associated work schedule.

In accordance with Tahmoor Coal’s Health & Safety Management System, project and activity specific risk assessments are completed as required and include assessment of E&C risks.

7.7 Roles & Responsibilities

E&C management is regarded as part of the responsibilities of all employees and contractors at Tahmoor Coal. Specific information pertaining to the role, responsibility, authority and accountability of key personnel involved in environmental management at Tahmoor Coal is provided in **Table 16** below.

Table 16 Roles and Responsibilities

Role	Responsibilities
Head of Operations	Provide adequate environmental personnel/resources for implementation of this plan and associated plans.
Environment & Community Manager	Facilitate a process of managing overall compliance with regulatory requirements and undertake external reporting for legislative non-compliances as required. Determine adequate resources and funds are available to ensure the effectiveness of this procedure; and certify compliance and adherence to this plan. Develop, implement and maintain this plan. Liaise with relevant government authorities in relation to regulatory conditions and compliance issue. Liaise with the community as required and as per the Stakeholder Engagement Strategy, including facilitation of Community Consultative Committee meetings.
CHPP Control	Monitor unattended monitoring alarms through Citect Initiate TARP responses and noise investigations in accordance with TARPs
All Managers	Activities under their control are to be undertaken in accordance with this plan and associated management plans and site procedures. Manage environmental controls within their jurisdiction are operated and maintained in a proper and efficient manner. Report all environmental incidents and complaints in a timely manner.
Environmental Specialist	Responsible for coordinating environmental compliance on-site including timely completion of monitoring and reporting in accordance with internal and external requirements. Sign off on the accuracy of reports and the suitability of recommendations. Develop, implement, review and maintain this plan and system documents. Implement process for self-assessment audits. Assign persons responsible for completion of audit actions and set a due by date. Monitor that planned actions arising out of audits are implemented. Ensure all community complaints and noise non-compliances, exceedances and triggers are addressed, investigated and appropriately managed as per site procedures, and reported internally as per internal requirements. Once quarterly attended noise monitoring results are received, review and utilise to calibrate/validate real time monitoring results.
All Coordinators	Activities under their control are to be undertaken in accordance with this plan and associated management plans and site procedures. Manage environmental controls within their jurisdiction are operated and maintained in a proper and efficient manner. Report all environmental incidents and complaints in a timely manner.
All Persons	Activities under their control are to be undertaken in accordance with this plan and associated management plans and site procedures. Manage environmental controls within their jurisdiction are operated and maintained in a proper and efficient manner. Report all environmental incidents and complaints in a timely manner.

7.8 Internal Audits & Reviews

In accordance with internal company requirements, Tahmoor Coal has implemented a system for the monitoring and review of E&C performance at the site. Tahmoor Coal is to provide ongoing monitoring and regular management review of E&C performance to:

- a) Confirm the adequacy and effectiveness of management plans, procedures and standards;
- b) Address any identified weaknesses;
- c) Share good performance and lessons learnt with other sites; and
- d) Ensure ongoing compliance with all leases, licences and approvals.

Process or area specific internal audits are also conducted periodically, generally administered by the E&C Manager, focussing on the following areas:

- a) Air quality;
- b) Water management;
- c) Noise;
- d) Erosion and sediment control; and
- e) Statutory approvals.

These audits may be conducted by consultants on behalf of Tahmoor Coal, by Liberty GFG employees or may be self-assessments conducted by Tahmoor Coal personnel. Audit results and corrective actions are recorded in Cority and assigned to responsible personnel for completion within appropriate timeframes.

7.9 Independent Environmental Audit

In accordance with Conditions E15 – E20 of the Consent, Tahmoor Coal will complete Independent Environmental Audits of the development at the frequencies determined within DPIE's *Independent Audit Post Approval Requirements (2020)*, and outlined below in **Table 17**.

Tahmoor Coal will complete independent audits in accordance with the following Consent Conditions:

- a) E15: Independent Audits of the development must be conducted and carried out in accordance with the Independent Audit Post Approval Requirements (2020).
- b) E16: Proposed independent auditors must be agreed to in writing by the Planning Secretary prior to the commencement of an Independent Audit.
- c) E17: Planning Secretary may require the initial and subsequent Independent Audits to be undertaken at different times to those specified in the Compliance Reporting Post Approval Requirements (2020), upon giving at least 4 weeks' notice (or timing) to Tahmoor Coal of the date upon which the audit must be commenced.
- d) E18: In accordance with the specific requirements in the Independent Audit Post Approval Requirements (2020), Tahmoor Coal will:
 - i. review and respond to each Independent Audit Report prepared under Condition C5 of the Development Consent, or Condition C6 where notice is given by the Planning Secretary;
 - ii. submit the response to the Planning Secretary; and
 - iii. make each Independent Audit Report, and response to it, publicly available within 60 days of submission to the Planning Secretary. unless otherwise agreed by the Planning Secretary.
- e) E19: Independent Audit Reports and Tahmoor Coal's response to audit findings must be submitted to the Planning Secretary within 2 months of undertaking the independent audit site inspection as outlined in the Independent Audit Post Approvals Requirements (2020) unless otherwise agreed by the Planning Secretary.

- f) E20: Notwithstanding the requirements of the Independent Audit Post Approvals Requirements (2020), the Planning Secretary may approve a request for ongoing independent operational audits to be ceased, where it has been demonstrated to the Planning Secretary's satisfaction that independent operational audits have demonstrated operational compliance.

Table 17: Independent Audit Frequencies

Phase	Initial Independent Audit	Ongoing Independent Audit Intervals
Construction	Within 12 weeks of the commencement of construction	At intervals, no greater than 26 weeks from the date of the initial Independent Audit or as otherwise agreed by the Secretary.
Operation	Within 26 weeks of the commencement of operation	At intervals, no greater than 3 years or as otherwise agreed by the Secretary.
Closure /Rehabilitation	Within 52 weeks from notifying of suspension/ceasing of operations	At intervals no greater than 1 year or as otherwise agreed by the Secretary.

The audits will assess:

- a) Environmental performance of the Mine;
- b) Compliance with the requirements of all relevant:
 - i. Development consents;
 - ii. Mining leases;
 - iii. Exploration Authorisations; and
 - iv. Site environmental protection licence

The audit will also assess:

- c) Environmental assessments; and
- d) Plans and programs required by above approvals.

The audit will review the adequacy of the following requirements under the abovementioned approvals:

- e) Strategies;
- f) Plans; and
- g) Programs

The audit will recommend appropriate measures and corrective actions to improve environmental performance at Tahmoor Coal. Audit results and corrective actions are recorded in Cority and assigned to responsible personnel for completion within appropriate timeframes.

7.10 Employee & Contractor Training

General environmental awareness training is provided to all employees and contractors through a generic visitor induction and the SafeCoal training session scheduled by the Tahmoor Coal Health, Safety & Training Department.

8 Review and Improvement

8.1 Plan Audit

Audits of the **NMP** will be conducted in consultation with the Plan owner and nominated individuals and shall focus on the content and implementation. Audits on the implementation shall consist of reviews of the safe working procedures and risk assessments developed to ensure safe operation of this **NMP**, they may also involve discussions with personnel involved in the management plan to determine understanding and compliance.

Should an audit of this **NMP** determine that a deficiency is evident in the content or implementation; a corrective action must be developed and implemented. Actions will be assigned to a nominated individual and tracked in Cority.

The Environment and Community Manager is responsible to verify that the nominated corrective action has been implemented by way of a follow up audit. Any changes to the **NMP** are to be managed and communicated to all personnel in line with the Change Management Process.

8.2 Plan Review

This **NMP** will be periodically reviewed:

Event based: in accordance with Condition E7 (a) of the Consent, a review will be required within 3 months of any incident, event or finding that identifies an inadequacy in the **NMP**, risk assessment or associated documents to continue to effectively manage the identified hazard; a change to the workplace itself or any aspect of the work environment, a change to a system of work, a process or a procedure; or

If necessary, to either improve the environmental performance of the development, cater for a modification or comply with a direction, the strategies, plans and programs required under the development consent must be revised, to the satisfaction of the Planning Secretary. Where revisions are required, the revised document will be submitted to the Planning Secretary for approval within six weeks of the review; or

Time based: in the absence of regular event-based reviews and in accordance with Condition E7 (b-e) of the Consent, this plan will be reviewed within three months of:

- b) the submission of an Annual Review under Condition E13;
- c) the submission of an Independent Environmental Audit under Condition E15;
- d) (the approval of any modification of the conditions of this consent (unless the conditions require otherwise); or
- e) notification of a change in development phase under Condition A19;

If deemed appropriate, external service providers may be included in the review process. All reviews are to be documented.

In accordance with Condition E8, this management plan will be revised to the satisfaction of the Planning Secretary to either improve the environmental performance of the development, cater for a modification or comply with a direction. Where revisions are required, the revised document must be submitted to the Planning Secretary for approval within six weeks of the review.

9 Document Information

Relevant legislation, standards and other reference information will be regularly reviewed and monitored for updates and will be included in the site management system. Related documents and reference information in this section provides the linkage and source to develop and maintain site compliance information.

9.1 Access to Information

Information pertaining to Tahmoor Coal’s general environmental performance against internal targets and external approvals criteria is reported to the community via the mine website and Tahmoor Coal’s Community Consultative Committee (TCCCC). In accordance with Consent Condition E23 (a), Tahmoor Coal will upload the following details to the Tahmoor Coal website:

- the EIS;
- all current statutory approvals for the development;
- all approved strategies, plans and programs required under the conditions of SSD 8445;
- the proposed staging plans for the development if the construction, operation or decommissioning of the development is to be staged;
- minutes of CCC meetings;
- 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 SSD 8445;
- 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;
- a summary of the current phase and progress of the development;
- contact details to enquire about the development or to make a complaint;
- a complaints register, updated monthly;
- a register of incident and non-compliance notifications made to the Planning Secretary, updated monthly;
- the Annual Reviews of the development;
- audit reports prepared as part of any Independent Environmental Audit of the development and the Tahmoor Coal’s response to the recommendations in any audit report;
- annual returns made under the National Greenhouse and Energy Reporting legislation; and
- any other matter required by the Planning Secretary.

9.2 Related Documents

Related documents, listed in the below table, are internal documents directly related to or referenced from this document.

Table 18 Related Documents

Number	Title
TAH-HSEC-00173	Tahmoor Coal Environmental Management System Framework Document
TAH-HSEC-00119	Communication and Engagement
TAH-HSEC-00120	Community Complaints & Enquiry Procedure
TAH-HSEC-00221	Website Management Procedure
TAH-HSEC-00031	Community Development Plan
TAH-HSEC-00039	Stakeholder Engagement Plan
TAH-HSEC-00232	Emergency and Incident Manual

TAH-HSEC-00079	Noise Alarm Procedure
TAH-HSEC-00068	Surface Noise Trigger Action Response Plan
TAH-HSEC-00155	Pollution Incident Response Management Plan
TAH-HSEC-00224	Notification of Environmental Pollution Incidents

9.3 Reference Information

Reference information, listed in the below table, is information that is directly related to the development of this document or referenced from within this document.

Table 19 Reference Information

Title
NSW Environment Protection Authority (EPA) 2000, NSW Industrial Noise Policy (INP)
NSW Environment Protection Authority (EPA) 2017, Noise Policy for Industry
EMM Consulting Pty Limited (2019). Tahmoor South Project Environmental Impact Statement, Appendix M - Noise and Vibration Impact Assessment
EMM Consulting Pty Limited. (2020). Tahmoor South Project Second Amended Project Appendix G - Noise and Vibration Impact Assessment
AECOM (2019). Tahmoor South Project Environmental Impact Statement, Volumes 1 to 7
AS1055 – 2018: Acoustics – Description and Measurement of Environmental Noise
NSW Industrial Noise Policy (EPA, 2000) (superseded but relevant to the interim noise criteria)
NSW Noise Policy for Industry (EPA, 2017)
Environmental Noise Control Manual (DEC, 1994) (superseded but relevant to the interim noise criteria)
AS/NZS IEC 61672.1:2019: Electroacoustics – Sound level meters Specifications

10 Change Information

10.1 Change Information

Full details of the document history are recorded in the document control register, by version

Document Control

Version	Date Reviewed	Review team (Consultation)	Change Summary
1.0	27/09/2021	Michelle Grierson, Natalie Brumby, Zina Ainsworth	Initial Document
1.1	26/10/2021	Michelle Grierson, Zina Ainsworth	Amendments following consultation with EPA
1.2	16/02/2022	Zina Ainsworth, Charlie Wheatley	Amendments from comments from DPIE
1.3	28/02/2022	Zina Ainsworth	Addition of night-time Construction noise clarifications
2.0	17/05/2022	Natalie Brumby	Reviewed in accordance with Condition 46 of DA 67/98 and Condition E7(b) of SSD 8445 following submission of the 2021 Annual Review to DPE. Reviewed in accordance with condition E7(e) of SSD 8445 following change in development phase under condition A9 (construction commencement on 16 th May 2022).
3.0	19/10/2022	Natalie Brumby	Reviewed in accordance with Condition E7(c), (d) and (e) following an Independent Environmental Audit (10 th August 2022), following the approval of any modification (Mod 1 approved 19 th July 2022) and following the commencement of first and second workings (18 th Oct 2022) of the Consent SSD 8445. Appendix C included.
4.0	16/06/2023	Natalie Brumby	Reviewed in accordance with Condition E7(b) following the submission of an Annual Review (31 st March 2023), Condition E7(c) following the submission of an Independent Environmental Audit (2 nd June 2023) and Condition E7 (d) following the approval of any modification (MOD 2 - 13 th June 2023) of the Consent SSD 8445.
4.1	17/08/2023	Natalie Brumby	Table 14 and Section 5.4 updated.

Appendices

APPENDIX A – Noise Trigger Action Response Plan (TARP)

Normal State	<ul style="list-style-type: none"> • <i>Normal</i> • <i>No Citect alarms</i> • <i>Noise levels <60 Leq dBA at SX48</i> • <i>No cause for review</i> • <i>Conduct operations in accordance with the Noise Management Plan and Noise Alarm Procedure.</i>
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Trigger Action Response Plan for Unattended Monitoring Noise Levels	Level 1 Trigger – Alert / Investigate	Level 2 Trigger – High Alert / Rectify	Level 3 Triggers – Stop – Withdrawal / Removal
	<ul style="list-style-type: none"> • <i>Level 1 alarm as indicated on real-time unattended monitoring</i> • <i>Unattended monitoring shows noise levels >60 Leq dBA for 2 x 15 minute period at SX48</i> OR • <i>Community Complaint</i> 	<ul style="list-style-type: none"> • <i>Level 2 alarm as indicated on Citect</i> • <i>Unattended monitoring shows noise levels >60 Leq dBA for 4 x 15 minute periods.at SX48</i> 	<ul style="list-style-type: none"> • <i>Continued and sustained exceedance of Level 2 alarms as indicated by Citect</i>

Persons affected	Action / Response	Action / Response	Action / Response
<i>CHPP Control and/or Mine Control</i>	<ul style="list-style-type: none"> • <i>Notify appropriate site personnel as soon as possible, and direct them to initiate an investigation, rectify if possible and report back to the appropriate Control Room on noise issues. Inform E&C Department and Undermanager’s of alarm via email.</i> 	<ul style="list-style-type: none"> • <i>Follow up with appropriate site personnel as to the status of the noise investigation conducted under Level 1 trigger. Inform E&C Department and Undermanager’s of alarm via email message as per Noise Alarm Procedure.</i> 	<ul style="list-style-type: none"> • <i>Follow up with appropriate site personnel as to the status of the noise investigation conducted under Level 1 and Level 2 triggers, escalate notification and inform E&C Department and Mining Engineering Manager.</i>

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Status: Released
Version: 4.1

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Persons affected	Action / Response	Action / Response	Action / Response
<i>CHPP Control and/or Mine Control</i>	<ul style="list-style-type: none"> <i>If noise is from the clean coal stockpiles, CHPP Control to re-assess the area which dozers working on the stockpiles and direct work further away from sensitive receptors (houses) if necessary.</i> <i>If work is from mine site, Mine Control to direct work further away from sensitive receptors (houses) if necessary.</i> 	<ul style="list-style-type: none"> <i>If noise is from the clean coal stockpiles, CHPP Control to direct work further away from sensitive receptors (houses). During night-time, consider temporarily ceasing works on stockpiles if mitigation measures cannot negate noise conditions.</i> <i>If work is from mine site, Mine Control to direct work further away from sensitive receptors (houses) if necessary. During night-time, consider temporarily ceasing works on site if mitigation measures cannot negate noise conditions.</i> 	<ul style="list-style-type: none"> <i>As above</i>
<i>E&C Department</i>	<ul style="list-style-type: none"> <i>E&C Department to follow up reported alarms as per Noise Alarm Procedure and complete necessary reporting. If necessary, notify Planning Secretary in writing via the Major Projects website within seven days.</i> 	<ul style="list-style-type: none"> <i>E&C Department to follow up reported alarms as per Noise Alarm Procedure. Notify Planning Secretary in writing via the Major Projects website within seven days.</i> 	<ul style="list-style-type: none"> <i>E&C Department to follow up reported alarms as per Noise Alarm Procedure. Notify Planning Secretary in writing via the Major Projects website within seven days.</i>
<i>Mining Engineering Manager</i>			<ul style="list-style-type: none"> <i>During night-time, temporarily cease all works on surface if mitigation works cannot negate noise conditions. Only resume works when conditions are favourable and noise impact has been reduced to an acceptable level through remedial measures.</i> <i>Assess need to stop operations if mitigation works are unsuccessful and the noise will impact the mines social licence to operate.</i>

Normal State	<ul style="list-style-type: none"> • Normal • No issues raised during attended monitoring • No cause for review • Conduct operations in accordance with the Noise Management Plan and Noise Alarm Procedure.
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Trigger Action Response Plan for Attended Monitoring Noise Levels	Level 1 Trigger – Alert / Investigate	Level 2 Trigger – High Alert / Rectify	Level 3 Triggers – Stop – Withdrawal / Removal
	<ul style="list-style-type: none"> • Attended monitoring indicates that Tahmoor Mine noise levels are intermittently exceeding relevant noise limits at monitoring location. OR • Community Complaint 	<ul style="list-style-type: none"> • Attended monitoring indicates that Tahmoor Mine noise levels are persistently exceeding relevant noise limits at monitoring location, despite mitigation measures implemented during Level 1 triggers response. 	<ul style="list-style-type: none"> • Continued and sustained exceedance of Level 2 trigger as indicated by attended monitoring

Persons affected	Action / Response	Action / Response	Action / Response
Attended noise monitoring team	<ul style="list-style-type: none"> • Attended noise monitoring team to immediately call appropriate Control Room regarding increasing noise levels. • Attended noise monitoring team to re-assess noise at same location. Appropriate Control Room to be re-notified of status of noise levels. If noise levels have decreased below noise limits, no further action required. 	<ul style="list-style-type: none"> • Attended noise monitoring team to immediately call appropriate Control Room regarding increasing or persistent elevated noise levels. • Attended noise monitoring team to re-assess noise at same location. Appropriate Control Room to be re-notified of status of noise levels. If noise levels have decreased below noise limits, no further action required. 	<ul style="list-style-type: none"> • Attended noise monitoring team to immediately call appropriate Control Room regarding increasing or persistent elevated noise levels. • Attended noise monitoring team to re-assess noise at same location. Appropriate Control Room to be re-notified of status of noise levels. If noise levels have decreased below noise limits, no further action required. Only resume works when conditions are favourable and noise monitoring indicates that noise levels have been reduced to an acceptable level through remedial measures.

Persons affected	Action / Response	Action / Response	Action / Response
<i>CHPP Control and/or Mine Control</i>	<ul style="list-style-type: none"> • <i>Appropriate Control Room to notify appropriate site personnel as soon as possible and direct them to investigate if noise appears to be persisting, rectify if possible and report back via phone call on noise issues to CHPP Control. Inform E&C Department and Undermanager's of noise trigger via email.</i> • <i>If noise is from the clean coal stockpiles, CHPP Control to re-assess the area which dozers working on the stockpiles and direct work further away from sensitive receptors (houses) if necessary.</i> • <i>If work is from mine site, Mine Control to direct work further away from sensitive receptors (houses) if necessary.</i> • <i>Appropriate Control Room to follow up with attended noise monitoring team members to inform them of status of mitigation works as soon as practical but no longer than 30min.</i> 	<ul style="list-style-type: none"> • <i>Appropriate Control Room to follow up with appropriate site personnel as soon as possible as to the status of the noise investigation, and then escalate notification if necessary. Inform E&C Department and Undermanager's of noise trigger via email message as per Noise Alarm Procedure.</i> • <i>Appropriate Control Room to follow up with attended noise monitoring team members to inform them of status of mitigation works.</i> • <i>If noise levels have not decreased below noise limits, move to a Level 3 trigger.</i> 	<ul style="list-style-type: none"> • <i>Follow up with appropriate personnel as soon as possible as to the status of the noise investigation, escalate notification and inform E&C Department and Mining Engineering Manager.</i> • <i>During night-time, temporarily cease all works on stockpiles if mitigation works cannot negate noise conditions.</i>
<i>E&C Department</i>	<ul style="list-style-type: none"> • <i>E&C Department to follow up reported alarms as per Noise Alarm Procedure. Notify Planning Secretary in writing via the Major Projects website within seven days.</i> 	<ul style="list-style-type: none"> • <i>E&C Department to follow up reported noise triggers as per Noise Alarm Procedure. If required, notify Planning Secretary in writing via the Major Projects website within seven days.</i> 	<ul style="list-style-type: none"> • <i>E&C Department to follow up reported alarms as per Noise Alarm Procedure. Notify Planning Secretary in writing via the Major Projects website within seven days.</i>

Persons affected	Action / Response	Action / Response	Action / Response
<i>CHPP Control</i>	<ul style="list-style-type: none"> <i>If noise levels become persistent and do not decrease below noise limits, move to a Level 2 trigger.</i> 	<ul style="list-style-type: none"> <i>If noise is from the clean coal stockpiles, CHPP Control to direct work further away from sensitive receptors (houses). During night-time, consider temporarily ceasing works on stockpiles if mitigation measures cannot negate noise conditions.</i> <i>If work is from mine site, Mine Control to direct work further away from sensitive receptors (houses) if necessary. During night-time, consider temporarily ceasing works on site if mitigation measures cannot negate noise conditions.</i> 	<ul style="list-style-type: none"> <i>During night-time, temporarily cease all works on surface if mitigation works cannot negate noise conditions. Only resume works when conditions are favourable and noise impact has been reduced to an acceptable level through remedial measures.</i> <i>Assess need to stop operations if mitigation works are unsuccessful and the noise will impact the mines social licence to operate.</i>
<i>Mining Engineer Manager</i>			<ul style="list-style-type: none"> <i>If noise levels persist above noise limits, assess need to stop operations if mitigation works are unsuccessful and the noise will impact the mines social licence to operate.</i>

Normal State	<p><i>Predicted (within the next 24 hrs) or current meteorological conditions are assessed as unlikely to be noise enhancing, namely:</i></p> <ul style="list-style-type: none"> • <i>Wind speed less than 0.5 m/s at 10 m Above Ground Level (AGL)</i> <p>AND</p> <ul style="list-style-type: none"> • <i>Temperature inversions of Stability Class A-E.</i> <p>Implement standard noise mitigation measures</p>
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Trigger Action Response Plan for Predicted or Current Adverse Meteorological Conditions	Level 1 Trigger – Alert / Investigate	Level 2 Trigger – High Alert / Rectify	Level 3 Triggers – Stop – Withdrawal / Removal
	<ul style="list-style-type: none"> • N/A 	<p><i>Predicted (within the next 24 hrs) or current meteorological conditions are assessed as likely to be noise enhancing, namely:</i></p> <ul style="list-style-type: none"> • <i>Wind speed up to 3 m/s at 10m Above Ground Level (AGL)</i> <p>AND</p> <ul style="list-style-type: none"> • <i>Temperature inversions of Stability Class F</i> 	<ul style="list-style-type: none"> • N/A

Persons affected	Action / Response	Action / Response	Action / Response
	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • <i>Review proposed surface activities as soon as possible, and relocate or reschedule potentially noisy activities during periods of noise enhancing conditions.</i> 	<ul style="list-style-type: none"> • N/A

APPENDIX B – Consultation

Agency	Date response received	Comments	Response
EPA	Via email on 25.10.2021	<p>Section 2.1.3: Suggest adding a map showing location of the sites in table 5.</p> <p>Section 5.4.2: Condition B5(c)(i) of the Development Consent requires a noise monitoring program to ensure compliance with statutory criteria in Development Consent.</p> <p>Compliance can be directly assessed by measurement at a specific location in table 1 or table 2 of Part B of the Consent.</p> <p>Table 14 contains site id's that are assumed to be representative of noise sub-catchments i.e. numbers C1, C2, C3 etc.</p> <p>However the EPA recommends that Table 14 also include the specific number of the nearest noise assessment location from Table 5 in order to determine compliance at that point.</p> <p>For example, C2 in table 14 appears to be assessment location number 1429 in table 5.</p> <p>General achievement with noise criteria for the wider noise sub catchment can be reasonably assumed with compliance at the specific location.</p> <p>The EPA may include these specific locations for assessment of compliance with noise limits if adopted in the Environment Protection Licence (from the Development Consent criteria).</p>	<p>Figure 3 amended to include noise assessment locations.</p> <p>Table 14 updated to include the nearest noise assessment location from Table 5.</p>

APPENDIX C – Noise Mitigation Measures



21 May 2021



Dear 

**Tahmoor Coal Pty Ltd
Tahmoor South Project – Noise Mitigation Measures**

Tahmoor Coal Pty Ltd (Tahmoor Coal) is a business unit of SIMEC Mining and uses longwall mining techniques to extract metallurgical coal for steelmaking purposes for mostly domestic customers. Tahmoor Coal is currently mining underground at Longwall West 2 which is located approximately 1.2km west of the Picton town centre in an area known as the Western Domain. Mining activities in the Western Domain are expected to be completed in August 2022.

On 23 April 2021 the NSW Independent Planning Commission (IPC) granted development consent for Tahmoor Coal's proposed extension to Tahmoor Coal Mine, the Tahmoor South Project (SSD 8445). There are a significant amount of preparation works to be completed and at this time there is no longwall mining in the Tahmoor South area.

To reduce the impact of noise from the mine site activities, Tahmoor Coal (as part of this consent) is required to implement noise mitigation measures within two years of commencement of development. These site-based noise mitigation measures include, but are not limited to, the following:

- Noise attenuation at the Coal Handling Preparation Plant (CHPP) which could be in the form of reducing openings, improved cladding, engineering design solutions to reduce noise emissions from CHPP plant and equipment or purchase of new equipment (or a combination of any of these).
- Noise suppression kit for Run Of Mine/stockpile dozer.
- Use of only one dozer during the night-time period (10pm to 7am Monday to Saturday and 10pm to 8am on Sundays and public holidays).
- Restricting dozer operation to northern section of stockpile area at night.
- No haulage or dozer operation in the reject emplacement area at night.
- Improvement to enclosure of site air compressors.
- Construct a barrier around coal stockpile area.
- Improvements to existing bund wall to increase acoustic shielding from northern section of rail loop.

Currently, Tahmoor Coal regularly monitors noise levels and operates within consent condition criteria. Upon completion of the noise mitigation activities, the new noise criteria limits as per the consent are more stringent.

Further to the site-based mitigation measures, Tahmoor Coal is required to notify the owner of 3092 Remembrance Drive Bargo NSW 2574 that they are entitled to seek additional noise mitigation measures for their residence. These measures must be reasonable and feasible and proportionate to

SIMEC

2975 Remembrance Drive, Bargo 2574
P.O Box 100, Tahmoor NSW 2571
Tahmoor Coal Pty Ltd ABN: 97 0366 639 68

T: +61 (02) 4640 0100
E: tahmoorenquiries@simecpg.com
simec.com



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the level of predicted impact and directed towards reducing the noise impacts of the development. Written requests for noise mitigation measures would be assessed post the implementation of site noise mitigation measures.

If you would like further information please contact a member of the Tahmoor Coal Environment & Community Team by phone 02 4640 0100 during business hours, 1800 154 415 for after hours, or email tahmoorenquiries@simecgfg.com.

Yours sincerely,

A handwritten signature in black ink, appearing to read "Zina Ainsworth".

Zina Ainsworth
Environment & Community Manager
Tahmoor Coal Pty Ltd

APPENDIX D – Letter of Endorsement



Planning,
Industry &
Environment

Ms Zina Ainsworth
Manager Environment and Community
SIMEC Mining
2975 Remembrance Drive
Tahmoor NSW 2573

16/08/2021

Dear Ms. Ainsworth

Tahmoor South Coal (SSD-8445) Management Plan Experts Endorsement

I refer to your request (SSD-8445-PA-2) for the Secretary's approval of suitably qualified persons to prepare the Management Plans for the Tahmoor South Coal (SSD-8445).

The Department has reviewed the nominations and information you have provided and is satisfied that these experts are suitably qualified and experienced. Consequently, I can advise that the Secretary approves the appointment of the following experts to prepare the following Management Plans:

Management Plan	Suitably Qualified Person
Noise Management Plan	Michelle Grierson – Senior Environmental Scientist Umwelt Australia Pty Ltd Katie Teyhan (Technical Reviewer) - Associate Acoustics Manager Newcastle EMM
Spontaneous Combustion Management Plan	Michelle Grierson – Senior Environmental Scientist Umwelt Australia Pty Ltd
Water Management Plan	Camilla West - Senior Water Resources Scientist Tony Marszalek - Director and Principal Water Resources Engineer Hydro Engineering & Consulting Pty Ltd
Groundwater Management Plan	Will Minchin – Hydrogeologist Maxime Philibert - Hydrogeologist SLR Consulting
Biodiversity Management Plan	Luke Baker - Team Leader Ecology Niche Environment and Heritage
Rehabilitation Strategy	Michelle Grierson – Senior Environmental Scientist Umwelt Australia Pty Ltd
Traffic Management Plan	Michelle Grierson – Senior Environmental Scientist Umwelt Australia Pty Ltd
Social Impact Management Plan	Amanda Bateman – Community Liaison Specialist Tahmoor Coal Pty Ltd

It is noted that it was proposed that Michelle Grierson – Senior Environmental Scientist Umwelt Australia Pty Ltd was proposed to prepare the Air Quality and Greenhouse Gas Management Plan. Given the significance of the technical aspects associated with air quality and greenhouse gas emissions at the project, the Department requests that a technical specialist be proposed to work with Ms Grierson to prepare this Air Quality and Greenhouse Gas Management Plan. Please provide further details of the proposed air quality expert by lodging further details via the portal.

320 Pitt Street Sydney 2000 | GPO Box 39 Sydney 2001 | dpie.nsw.gov.au | 1

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If you wish to discuss the matter further, please contact Wayne Jones on (02) 6575 3406.

Yours sincerely



Stephen O'Donoghue
Director
Resource Assessments
As nominee of the Secretary

APPENDIX E – Letter of Approval



Department of Planning and Environment

Zina Ainsworth
Environment & Community Manager
Tahmoor Coal Pty Ltd
2975 Remembrance Drive
Tahmoor, NSW, 2573

DATEWILLBEINSERTEDHERE

Dear Ms. Ainsworth

Tahmoor South Coal (SSD-8445) Noise Management Plan

I refer to the revised Noise Management Plan submitted in accordance with Condition B7 of Schedule 2 of the development consent for Tahmoor South Coal (SSD-8445).

Departmental staff have carefully reviewed the document and I note that only minor changes were made to include details regarding the mine site access intersection road upgrade works. I note the revised plan meets the requirements of the relevant conditions of consent.

Accordingly, I approve the Noise Management Plan (Version 4, dated 28 February 2022). Please ensure that the approved plan is placed on the project website at the earliest convenience.

If you wish to discuss the matter further, please contact Wayne Jones on (02) 6575 3406.

Yours sincerely

A handwritten signature in black ink, appearing to read 'C. Dumpleton'.

Carl Dumpleton
Acting Director – Resource Assessments
As nominee of the Secretary

