Appendix 7

Noise Impact Assessment
prepared by
Todoroski Air Science Pty Ltd

(Total No. of pages including blank pages = 28)

NOISE IMPACT ASSESSMENT

TRITTON COPPER MINE MOD 9

RW Corkery & Co Pty Ltd

17 December 2024

Job Number 24061732

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Noise Impact Assessment

Tritton Copper Mine Mod 9

DOCUMENT CONTROL

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GLOSSARY OF TERMS

Amenity noise level	Pre-defined suitable level of noise amenity within particular land use zone
dB(A)	Decibels A-weighted
EPA	Environmental Protection Authority
Intrusive noise level	Noise level from the Project relative to the existing acoustic environment
L_{Aeq}	Equivalent continuous sound pressure level
NSW Government	State Government for NSW
RBL	Rating background level
Sound power level	A measure of the acoustic energy emitted from a source of noise

1 INTRODUCTION

Todoroski Air Sciences has prepared this report for RW Corkery & Co Pty Ltd on behalf of Tritton Resources Pty Ltd (Tritton). The report presents an assessment of potential noise impacts associated with the proposed modifications to the Tritton Copper Mine (hereafter referred to as the Project).

The Project is located in the 'Bogan Shire' local government area (LGA) of central-western New South Wales. The Project site is located approximately 47 kilometres (km) northwest of Nyngan and approximately 85km east-northeast of Cobar.

The Tritton Copper Mine is an existing copper ore underground mining operation with associated processing infrastructure including a Tailings Storage Facility (TSF) and waste rock emplacement. The Project seeks to optimise existing operations and further integrate with other operations in the region, including Murrawombie Copper Mine, North East Copper Mine, Avoca Tank Project and the (separately) proposed Constellation Copper Mine. This would be achieved by the following key elements of the Project.

- Increase to the annual processing rate from 1.4 million (M) tonnes per annum (tpa) to 1.8Mtpa.
- Increase to the maximum elevation of the existing TSF from 272 meters (m) Australian Hight Datum (AHD) to 278mAHD via three 2m raises.
- Importation of up to 1.8Mtpa of mined materials (ore material and waste rock).
- Increase in the total area used for stockpiling of Non-acid-forming (NAF)waste rock through extension of the existing NAF Waste Rock Emplacement.
- An extension to the Mine life to allow for ongoing mining operations until 31 December 2036 which would effectively extend the existing approved Mine life by a further eight years to allow for the processing of ore sourced from the (separately) proposed Constellation Copper Mine.

The Project would also facilitate further integration with surrounding approved and proposed mining operations owned and operated by Tritton through the following.

- The export of tailing material to all mines within the Tritton Copper Operations (currently only permitted to the Murrawombie Copper Mine) and increase to the limit on export to 500,000tpa.
- Inclusion of additional sources of waste material to be received at the Mine Site for disposal in the existing Tritton landfill.

This noise impact assessment has been prepared in general accordance with the NSW Environment Protection Authority (EPA) documents:

- Noise Policy for Industry (**NSW EPA, 2017**);
- NSW Road Noise Policy (**NSW DECCW, 2011**); and,
- Interim Construction Noise Guideline (**NSW DECC, 2009**).

2 PROJECT BACKGROUND

2.1 Project setting

The area surrounding the Project site is predominately comprised of rural agricultural land with scattered residential dwellings identified in the surrounding area, with the closest residential dwelling to the site being identified as R2, located approximately 4.1km to the south.

Table 2-1 presents the nearest residential dwellings to the Project that have been considered in this assessment.

Table 2-1: Residential receptor locations for the Project

Receiver ID	Easting (m)	Northing (m)	Approximate distance from Project site (km)
R1	472815	6531518	4.5
R2	476224	6523212	4.1
R3	476789	6520466	6.6
R4	485244	6528947	10.6
R5	479465	6533729	7.4

Figure 2-1 presents the location of the Project with reference to the residential dwellings considered in this assessment.

Figure 2-2 presents a pseudo three-dimensional visualisation of the topography in the general vicinity of the Project. The Project site can be characterised as primarily gently undulating hills with elevation becoming more level in the northwestern region.

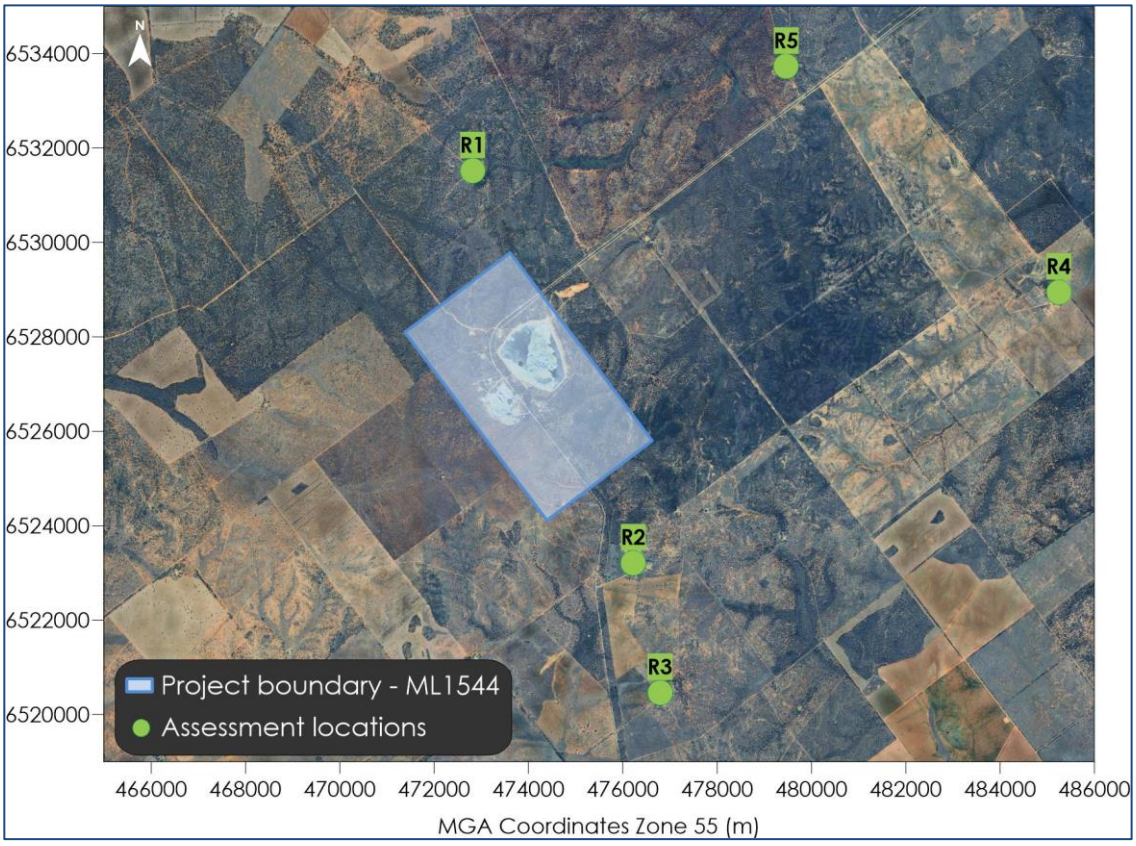

Figure 2-1: Project setting

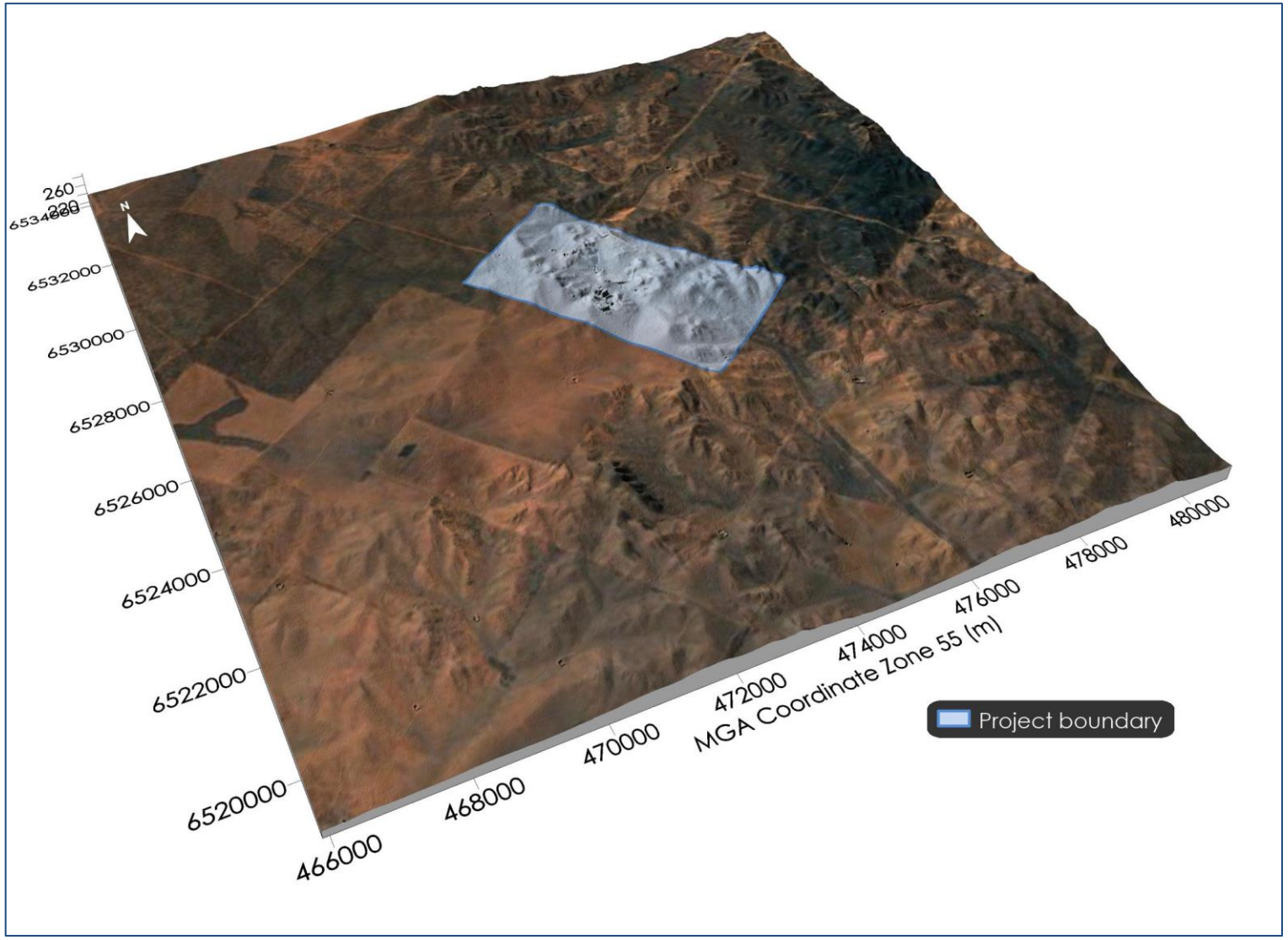

Figure 2-2: Representative visualisation of topography in the area surrounding the Project

2.2 Existing operations

Development Consent (DA) 41/98 for Tritton Copper Mine was approved on 1 September 1999 and has since been modified eight times with the approved operations comprising the following principal activities:

- Extraction of a total of approximately 12.8 million tonnes (Mt) of ore using underground mining techniques;
- Construction and use of a Non-acid Forming Waste Rock Emplacement to a maximum height of 30 metres (m) above the natural surface or approximately 301mAHD;
- Importation of no more than 1Mt of ore in a calendar year for processing at the Mine;
- Processing of up to 1.4Mtpa on-site and imported ore to produce a mineral concentrate;
- Export of no more than 30,000 tonnes of waste rock from the Mine in a calendar year, generally for the purposes of local road construction and maintenance;
- Transportation of the mineral concentrate in shipping containers to the Hermidale rail siding, located approximately 19km to the south of the Mine, and transportation of that material by train to port for export;
- Export of tailings for paste fill operations at the Murrawombie Copper Mine;
- Construction and use of a Tailings Storage Facility; and,
- Construction and use of a landfill for disposal of solid and inert wastes generated onsite and/or at other TCO mines.

The Tritton Copper Mine is one of four approved mining operations owned and operated by Tritton, others include the Murrawombie Copper Mine, North East Copper Mine and Avoca Tank Project.

2.3 Proposed operations

The Project is seeking to optimise aspects of the Tritton Copper Mine operations and integrate the proposed Constellation Copper Mine. Key aspects of the Project relevant to this NIA include:

- Increasing the maximum elevation of the TSF by 6m to 278mAHD via three 2m lifts;
- Increasing the annual processing rate from 1.4Mtpa to 1.8Mtpa;
- Extending the mine life by an additional eight years to 2036;
- Including additional receivers for the export of tailings material and increase to the limit on export to 500,000tpa.
- Including additional sources for the receipt of waste material;
- Increase in the total area used for stockpiling of NAF waste rock through extension of the existing NAF Waste Rock Emplacement; and,

- Increasing the importation of mined materials (ore material and waste rock to 1.8Mtpa), requiring an additional Waste Rock Emplacement.

Figure 2-3 presents an indicative site layout for the approved operations and the Project.

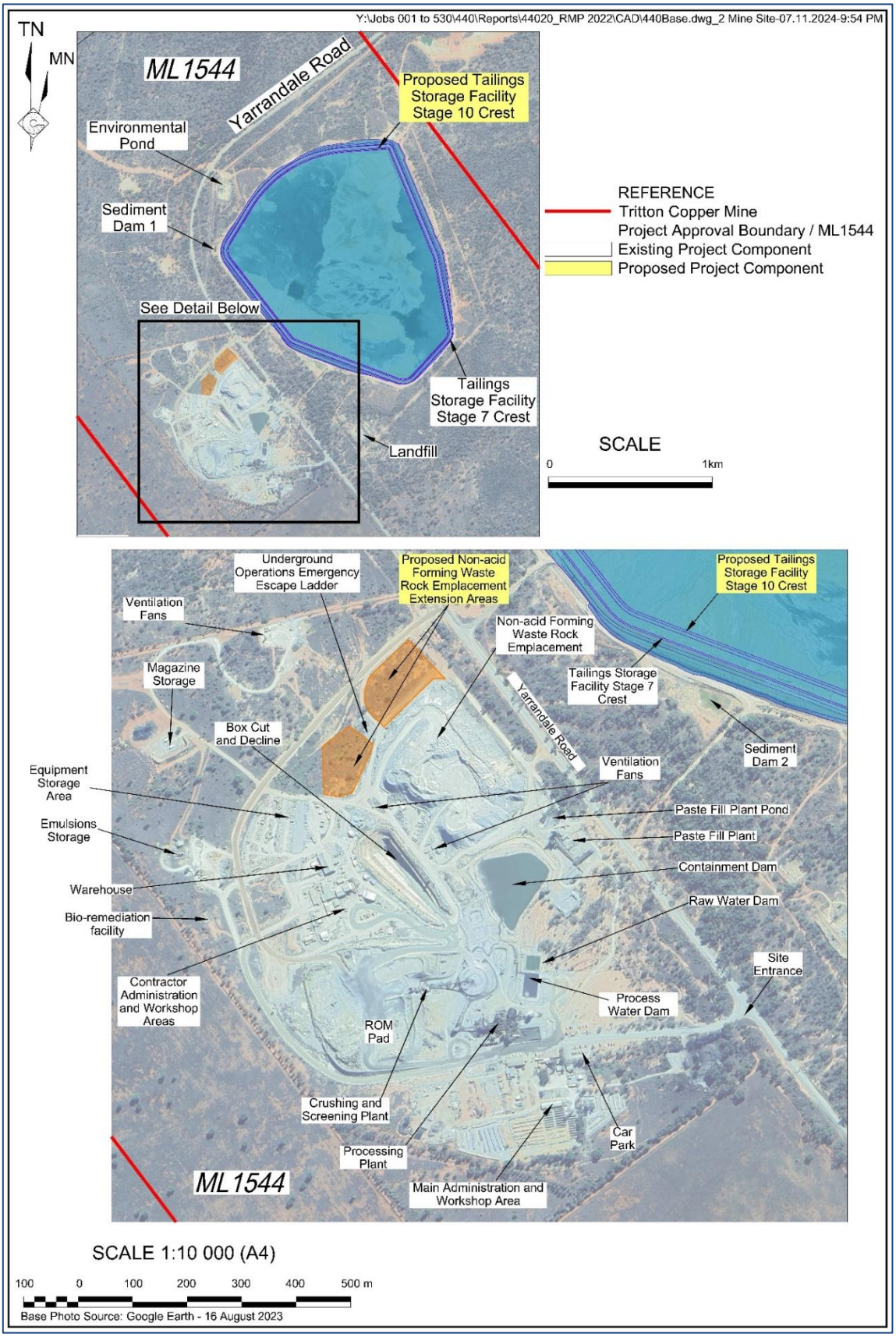

Figure 2-3: Existing operations and Project site layout

2.4 Construction activity

The construction activities associated with the Project would include increasing the elevation of the TSF via three 2m lifts and development of a new waste rock emplacement in an already disturbed area of the site.

Key activities generating noise during Project construction would be earthworks; machinery operation; construction activity/ building works; and traffic. Traffic during the construction phase would include trucks transporting materials as well as light vehicles used by construction personnel.

The construction noise profile for the Project has been integrated into the operational noise profile as these activities are considered part of the operations. While increased traffic levels are expected, this traffic would primarily be operating on existing road networks and would only occur during construction hours.

3 NOISE CRITERIA

3.1 Operational noise criteria

Per the *Noise Policy for Industry* (**NSW EPA, 2017**), the Project noise trigger level determined as the lower (more stringent) value of the project intrusiveness noise level and project amenity noise level and are applied to the most affected point at a noise-sensitive receiver.

The project intrusiveness noise level aims to protect receivers against a significant increase in noise levels from just the project relative to the existing acoustic environment, whilst the project amenity noise level seeks to protect noise-sensitive receivers against cumulative noise impacts from many noise sources and to thus maintain a pre-defined, suitable level of amenity within particular land use zones.

3.1.1 Intrusive noise levels

The intrusiveness of an industrial noise source may generally be considered acceptable if the level of noise from the source's $L_{Aeq,\ 15min}$ does not exceed the background noise level by more than 5 dB. Where the $L_{Aeq,\ 15min}$ represents the equivalent continuous (energy average) A-weighted sound pressure level of the source over 15 minutes.

The minimum Rating Background Levels (RBL) presented in the *Noise Policy for Industry* (**NSW EPA, 2017**) have been adopted to represent the background noise levels and are set out in **Table 3-1**. The minimum RBLs are to be applied even where actual background noise levels are likely to be lower, such is likely for the Project. These are considered to be the most stringent background noise levels that can be applied per the *Noise Policy for Industry* (**NSW EPA, 2017**).

Table 3-1: Project intrusiveness noise levels

Period	RBL	Intrusive noise criteria ($L_{Aeq,\ 15min}$ dBA)
Day	35	(35 + 5) 40
Evening	30	(30 + 5) 35
Night	30	(30 + 5) 35

3.1.2 Amenity noise levels

To limit continuing increases in noise levels from application of the intrusiveness level alone, the ambient noise level within an area from all noise sources combined should, where reasonable and feasible, remain below the recommended amenity noise levels for the specific land use, as set out in **Table 3-2**.

The recommended amenity noise levels represent the objective for total industrial noise at a noise-sensitive receiver. For the Project, the rural noise amenity area is considered to apply to the surrounding receivers.

Table 3-2: Amenity noise levels

Receiver	Noise amenity area	Time of day	Recommended amenity noise level ($L_{Aeq,\ 15min}$ dBA)
Residential	Rural	Day	50
		Evening	45
		Night	40
	Suburban	Day	55

Receiver	Noise amenity area	Time of day	Recommended amenity noise level ($L_{Aeq, 15min}$ dBA)
		Evening	45
		Night	40
	Urban	Day	60
		Evening	50
		Night	45
Hotels, motels, caretakers' quarters, holiday accommodation, Permanent resident caravan parks			5 dBA above recommended amenity noise level for a residence for the relevant noise amenity area and time of day
School classroom – internal	All	Noisiest 1-hour period when in use	35
Hospital ward internal	All	Noisiest 1-hour	35
Hospital ward external	All	Noisiest 1-hour	50
Place of worship – internal	All	When in use	40
Area specifically reserved for passive recreation (e.g. national park)	All	When in use	50
Active recreation area (e.g. school playground, golf course)	All	When in use	55
Commercial premises	All	When in use	65
Industrial premises	All	When in use	70
Industrial interface (applicable only to residential noise amenity areas)	All	All	Add 5 dBA to recommended noise amenity area

3.1.3 Project noise trigger level

As noted above, the Project noise trigger levels are determined as the lower (more stringent) value of the project intrusiveness noise level and project amenity noise level. The Project noise trigger levels are set out in **Table 3-3**.

Table 3-3: Project noise trigger levels ($L_{Aeq, 15min}$ dB(A))

Receiver	Period	Project intrusiveness noise levels	Project amenity noise levels	Trigger levels
Residential receivers	Day	40	50	40
	Evening	35	45	35
	Night	35	40	35

3.2 Road traffic noise criteria

The applicable road traffic noise criterion for the Project is presented in *NSW Road Noise Policy* (**NSW DECCW, 2011**).

The transport route along Yarrandale Road is considered under the local roads category. The assessment criteria for residential land uses relevant in this assessment are presented in **Table 3-4**.

Table 3-4: Road traffic noise criteria for residential land-use

Road category	Type of project/ land use	Assessment criteria - dBA	
		Day (7:00am-10:00pm)	Night (10:00pm-7:00am)
Local roads	Existing residences affected by additional traffic on existing local roads generated by land use developments	$L_{Aeq,\ (1\ hour)}$ 55 (external)	$L_{Aeq,\ (1\ hour)}$ 50 (external)

3.3 Construction Criteria

Management levels for construction noise at residences and how they are to be applied are presented in the *Interim Construction Noise Guideline* (**NSW DECC, 2009**) and outlined in **Table 3-5** below.

Table 3-5: Construction noise management level

Time of day	Management level $L_{Aeq,\ (15\ min)}$	How to apply
Recommended standard hours: Monday to Friday 7am to 6pm Saturday 8am to 1 pm No work on Sundays or public holidays	Noise affected RBL + 10dB	The noise affected level represents the point above which there may be some community reaction to noise. • Where the predicted or measured LAeq, (15-min) is greater than the noise affected level, the proponent should apply all feasible and reasonable work practices to meet the noise affected level. • The proponent should also inform all potentially impacted residents of the nature of works to be carried out, the expected noise levels and duration, as well as contact details.
	Highly noise affected 75 dBA	The highly noise affected level represents the point above which there may be strong community reaction to noise. • Where noise is above this level, the relevant authority (consent, determining or regulatory) may require respite periods by restricting the hours that the very noisy activities can occur, taking into account: 1. Times identified by the community when they are less sensitive to noise (such as before and after school for works near schools, or mid-mornings or mid-afternoon for works near residences). 2. If the community is prepared to accept a longer period of construction in exchange for restrictions on construction times.
Outside recommended standard hours	Noise affected RBL + 5 dB	• A strong justification would typically be required for works outside the recommended standard hours. • The proponent should apply all feasible and reasonable work practices to meet the noise affected level. • Where all feasible and reasonable practices have been applied and noise is more than 5 dBA above the noise affected level, the proponent should negotiate with the community.

3.4 NSW Voluntary Land Acquisition and Mitigation Policy

Part of the NSW *Voluntary Land Acquisition and Mitigation Policy for State Significant Mining, Petroleum and Extractive Industry Developments* (VLAMP) (**NSW Government, 2018**) describes the NSW Government's policy for voluntary mitigation and land acquisition to address noise impacts from state significant mining, petroleum and extractive industry developments.

Voluntary mitigation rights should only apply where, even with the implementation of best practice management:

- The noise generated by the development would be equal to or greater than 3dB(A) above the NSW Industrial Noise Policy (INP) project specific noise level at any residence on privately-owned land; or
- The development would increase the total industrial noise level at any residence on privately-owned land by more than 1db(A) and noise levels at the residence are already above the recommended amenity criteria in Table 2.1 of the INP; or
- The development includes a private rail line and use of that private rail line would cause exceedances of the recommended acceptable levels in Table 6 of Appendix 3 of the Rail Infrastructure Noise Guideline (RING) by greater than or equal to 3db(A) at any residence on privately-owned land.

Voluntary acquisition rights should only apply where, even with the implementation of best practice management:

- The noise generated by the development would be equal to or greater than 5dB(A) above the project specific noise level at any residence on privately-owned land; or
- The noise generated by the development would contribute to exceedances of the recommended maximum noise levels in Table 2.1 of the INP on more than 25% of any privately-owned land where there is an existing dwelling or where a dwelling could be built under existing planning controls[1]; or
- The development includes a private rail line and use of that private rail line would cause exceedances of the recommended maximum criteria in Table 6 of Appendix 3 of the RING at any residence on privately-owned land.

[1] Voluntary land acquisition rights should not be applied to address noise levels on vacant land other than vacant land specifically meeting these criteria.

4 EXISTING ENVIRONMENT

4.1 Local meteorological conditions

To characterise the local meteorological conditions for the Project site, representative local meteorological data required for this assessment were obtained from the CALMET meteorological modelling, as used in the Air Quality Impact Assessment for the Project (**Todoroski Air Sciences, 2024**).

The CALMET model was setup in general accordance with methods provided in the NSW EPA document *Generic Guidance and Optimum Model Settings for the CALPUFF Modelling System for Inclusion into the 'Approved Methods for the Modelling and Assessments of Air Pollutants in NSW, Australia'* (**TRC Environmental Corporation [TRC]**, **2011**).

Figure 4-1 presents the annual and seasonal windroses from the CALMET data. On an annual basis, winds are generally evenly distributed with the highest portion of winds from the south. In summer, winds are typically from the east. The autumn windrose shows winds greatest from the south-southeast and south-southwest. In winter, the winds predominately occur from the north-northeast, south-southeast and southwest. The spring distribution is similar to the annual distribution with generally evenly distributed winds and dominant winds from the northeast.

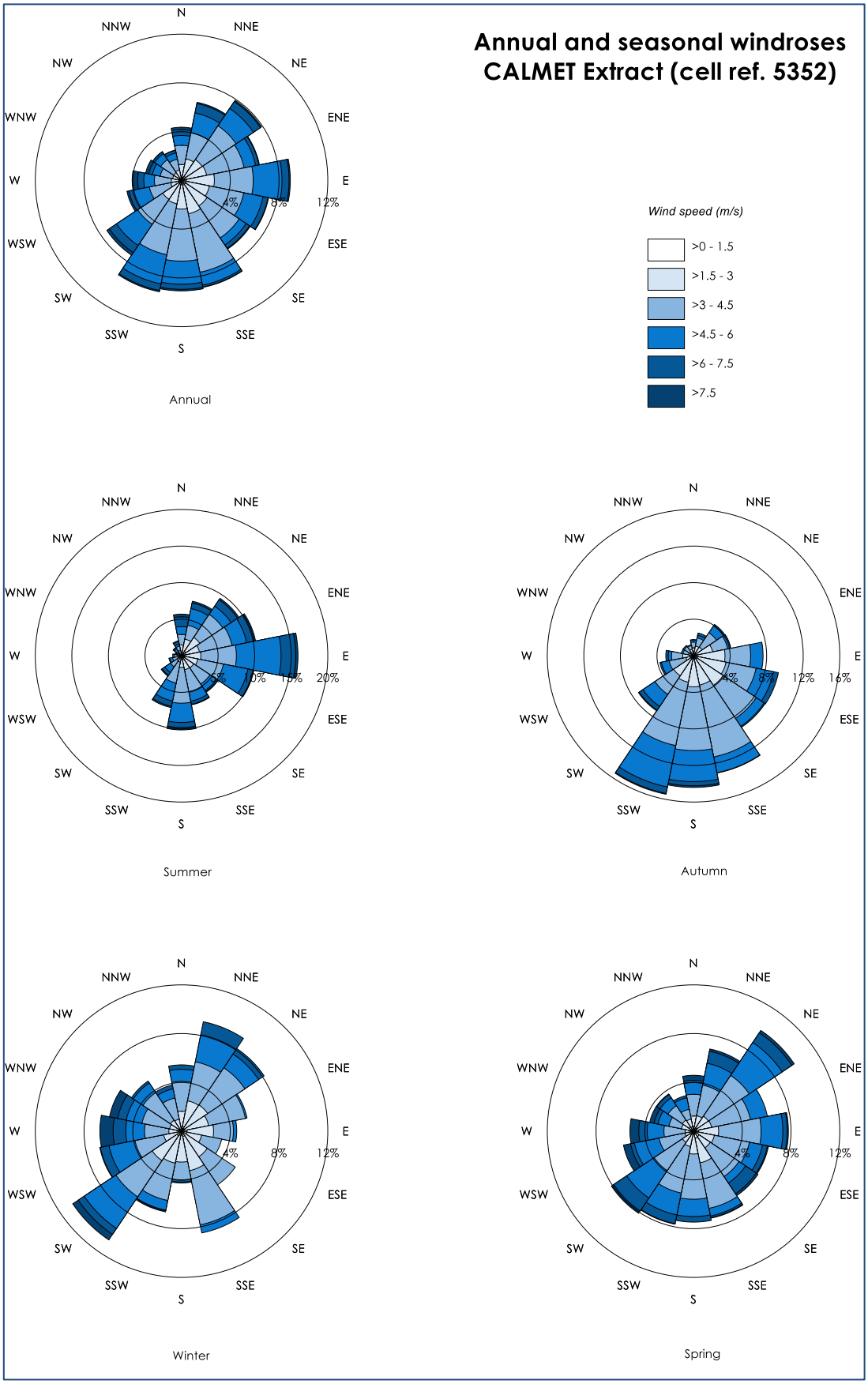

Figure 4-1: Windroses from CALMET extract (5352)

4.1.1 Wind

Light winds blowing in the direction from a source to a receiver can increase the source noise levels experienced by the receiver. Where the frequency of wind speeds of up to 3 metres per second (m/s) from a source to a receiver is greater than 30% for each seasonal assessment period, wind is considered a significant characteristic of the area.

To assess the frequency of winds in the CALMET data, the Noise Enhancement Wind Analysis (NEWA) program has been applied. For each season, the dominant wind direction was analysed to determine the frequency of winds in the range 0.5m/s to 3m/s. The results of the analysis are presented in **Table 4-1**.

The analysis indicates that significant winds are characterised to occur in the day period from the south-southeast during winter and spring and in the night-time period from the south-southeast during winter.

Based on the location of the Project relative to the residential dwelling located to the south, this receptor would experience these significant winds.

Table 4-1: Wind frequency for seasonal assessment periods

Season	Daytime		Evening		Night	
	Direction	Percentage	Direction	Percentage	Direction	Percentage
Summer	E	22.3	ENE	18.6	S	21.2
Autumn	SSE	15.1	SSW	0.8	SSE	17
Winter	SSE	**34.4**	SW	2.7	SSE	**35.4**
Spring	SSE	**33.7**	SSW	0.3	SSE	26.3

4.1.2 Temperature inversions

A temperature inversion is a meteorological phenomenon where the air temperature profile increases vertically through the atmosphere. As sound moves faster in warmer air, this phenomenon causes sound waves to bend towards the ground, increasing the received noise levels from a source, some distance away.

For temperature inversions to be a significant characteristic of the area, they need to occur for approximately 30% of the total night-time periods during winter. An analysis of the CALMET data indicates that the frequency of temperature inversion occurring at night during the winter months is approximately 34% of the time and hence inversions are a significant feature of the area.

5 NOISE ASSESSMENT

The operational noise assessment for the Project has considered a potential worst-case scenario, based on the potential maximum likely number of plant and equipment operating simultaneously at the site against the Project noise trigger level. The worst-case scenario considers all key plant and equipment operated during the surface, underground mining and TSF operations that is anticipated to result in the maximum amount of noise generated.

The Project noise sources at the site are assessed in the following sections with the potential noise associated with off-site haulage assessed separately in the road traffic noise assessment in **Section 6**.

5.1 Operational noise modelling methodology

For this assessment, noise predictions were made using the Environmental Noise Model (ENM) noise model, which calculates noise propagated from the site to receivers in consideration of the following factors:

- distance;
- barrier effects from existing buildings;
- ground attenuation;
- air absorption; and,
- wind enhancement.

Digital terrain data were included in the modelling.

Per the analysis of local meteorological conditions, refer to **Section 4.1**, noise-enhancing meteorological conditions were found to be a significant feature of the area and would be in the general direction of the nearest receivers.

Potential worst-case (noise-enhancing) meteorological conditions assuming low wind speeds and a stability category F were applied in the assessment, along with a maximum level of plant activity. Stability category F represents the most stable atmospheric conditions and would enhance noise propagation.

5.2 Source noise levels

This assessment is based on a worst-case operating scenario by modelling the noise due to a likely maximum number of potentially operating plant and equipment items associated with the Project.

The identified noise levels of each significant noise source included in the assessment are presented in **Table 5-1** along with the number of items modelled to be operating concurrently at the site.

Figure 5-1 presents the locations of the noise sources included in the assessment.

Table 5-1: Equipment sound power levels included in modelling

Equipment	Number of equipment	Sound power levels (dBA)	Source description
Bulldozer	2	110	EMM[1]
Excavator	2	107	EMM[1]
FEL	1	116	EMM[1]
Fixed Crusher and Screening	1	119	EMM[1]
Grader	2	107	EMM[1]
Mill	1	116	EMM[1]
Mobile Crushing and Screening	1	114	EMM[1]
Ore Stacker	1	103	EMM[1]
Padfoot Roller	1	110	Defra Noise Database
Paste Plant	1	113	EMM[1]
Processing Plant	1	113	EMM[1]
Truck	6	118	EMM[1]
Ventilation Fan	4	104	EMM[1]
Water Truck	2	114	EMM[1]

[1] Source: (**EMM, 2014)**

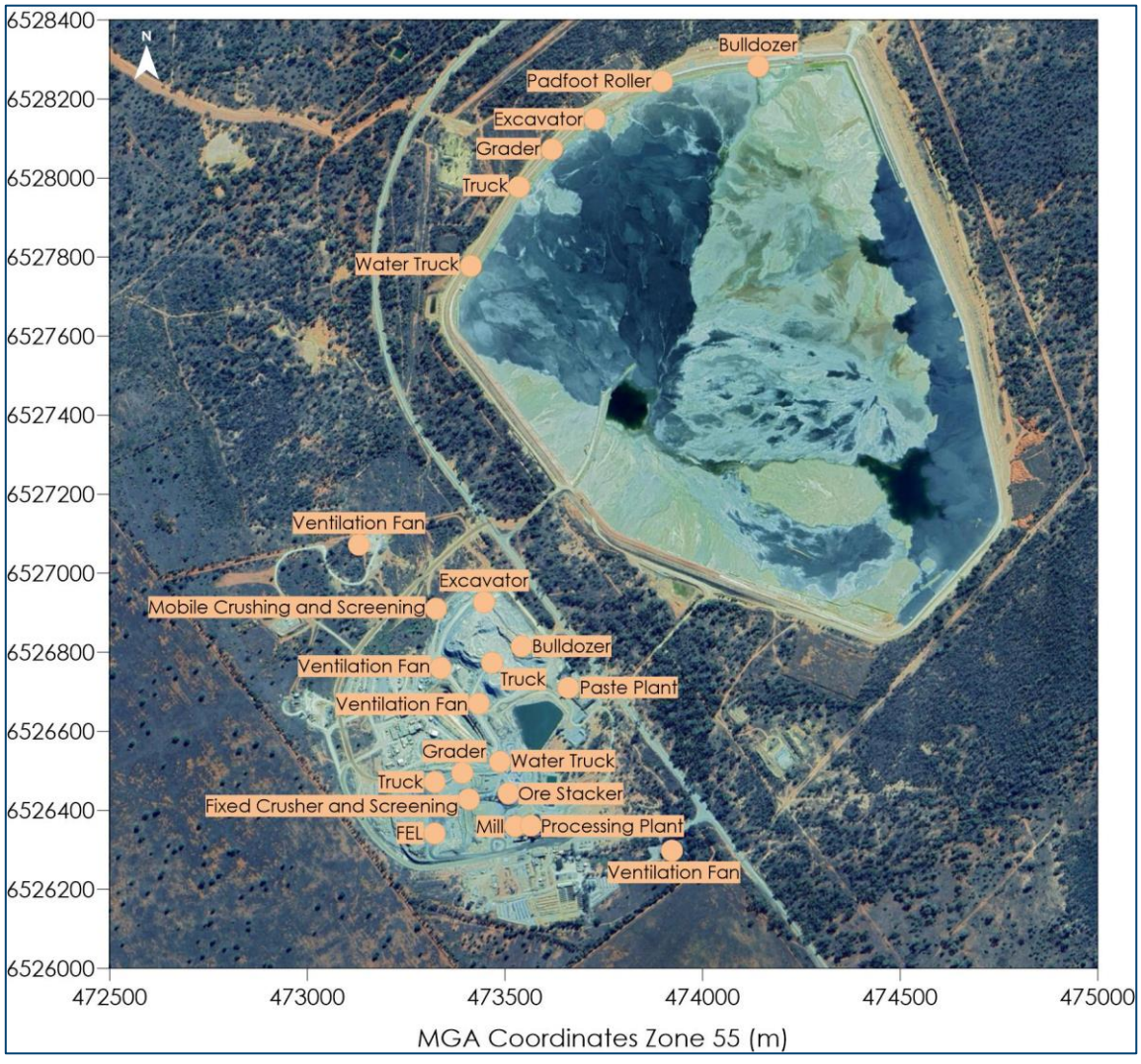

Figure 5-1: Noise source locations

5.3 Predicted noise levels

Table 5-2 presents the predicted noise modelling results at the assessed sensitive receiver locations for a single worst-case operational scenario.

The predicted noise levels for the Project are also presented as an isopleth diagram in **Figure 5-2**. The isopleths align well with the key noise sources on the site.

The results indicate the predicted worst-case scenario noise levels would comply with the applicable Project noise trigger level at the assessed receiver locations. The predicted noise levels due to the activities at the Project in **Table 5-2** are predicted to be less than 35 dB(A) and comply with the Project trigger level.

Table 5-2: Predicted operational noise impacts for sensitive receiver

Receiver ID	Predicted level (dB(A))	Trigger level (dB(A))*
R1	<35	**35**
R2	<35	**35**
R3	<35	**35**
R4	<35	**35**
R5	<35	**35**

* Refer to **Table 3-3**.

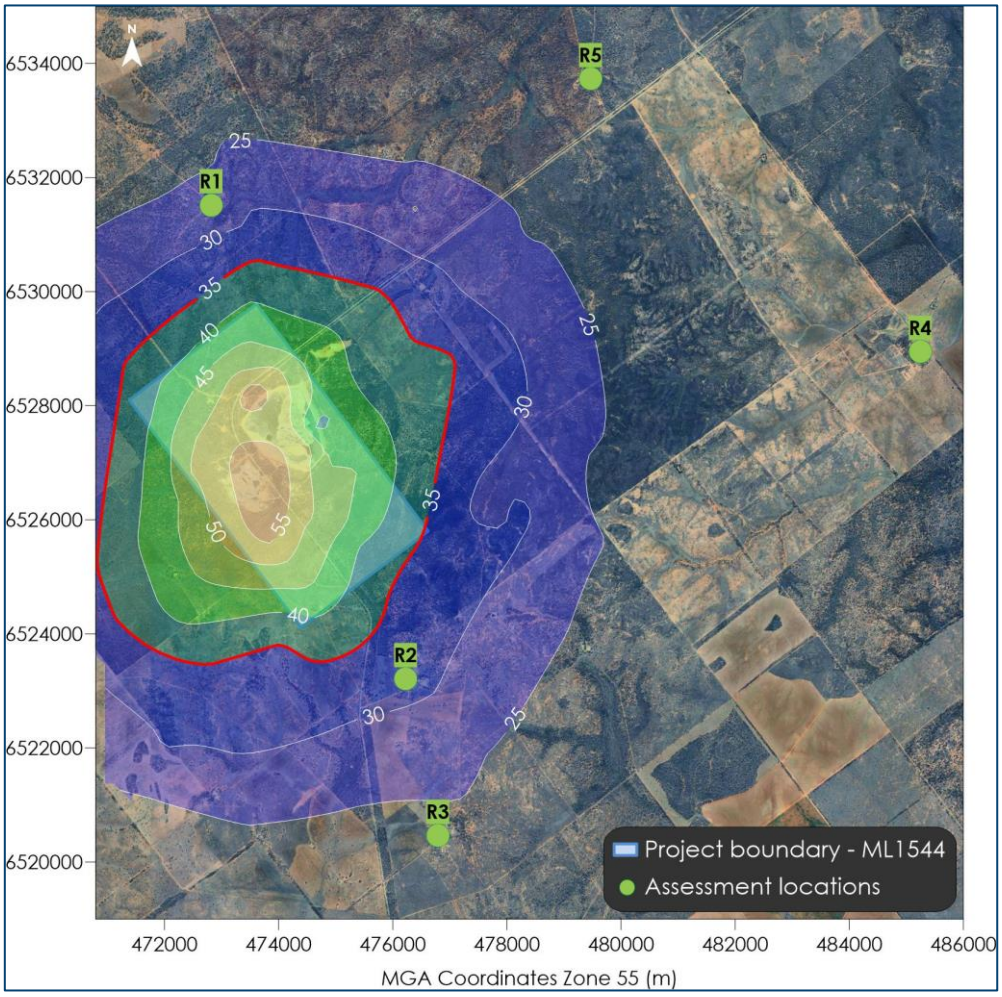

Figure 5-2: Predicted operational noise levels (dBA)

5.4 Potential cumulative noise impacts

In addition to the noise from the Project, noise would also be generated from the nearby approved mining operations. The approved mining operations include the Murrawombie, North East, and Avoca Tank mines and the proposed Constellation Copper Mine. The location of these mines relative to the Project is shown in **Figure 5-3**.

Based on the predicted noise levels from the Project and the separation distance to these operations, the potential for cumulative noise impacts are unlikely. The other mining operations are of a similar or significantly lesser scale to the Project and would have a corresponding scale of potential noise impacts.

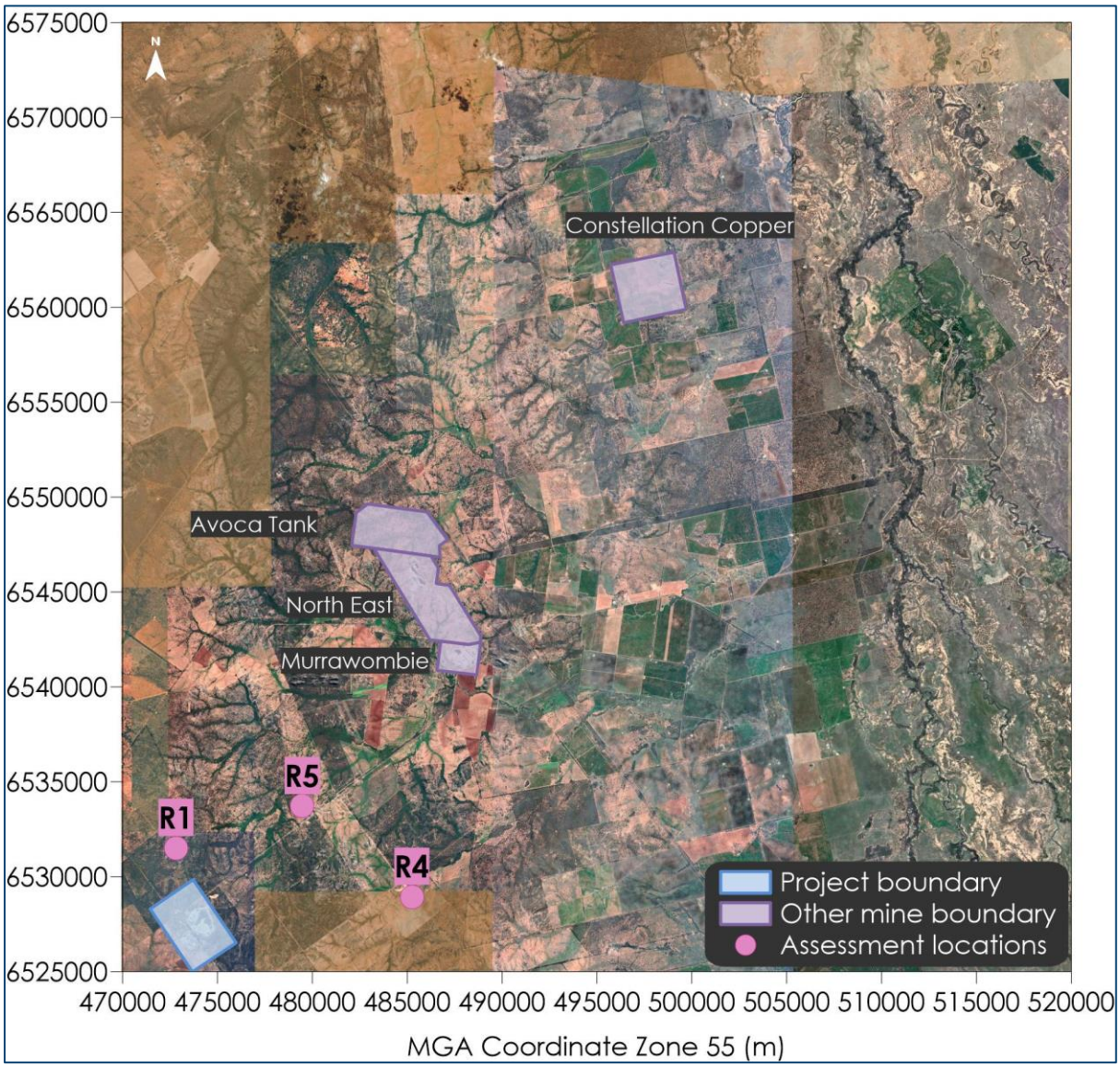

Figure 5-3: Other mining operations

6 ROAD TRAFFIC NOISE ASSESSMENT

The Project imports ore from nearby mines for processing, in addition to processing ore extracted from the site's underground operations. The imported ore is transported along public roads, specifically Yarrandale Road from Murrawombie to the Tritton Mine, and product is dispatched via Yarrandale Road from the Mine Site to the Hermidale Rail Siding, approximately 19km south of the Mine Site.

The Project aims to optimise current operations and enhance integration with regional mining activities, including the Murrawombie Copper Mine, North East Copper Mine, Avoca Tank Project, and the proposed Constellation Copper Mine, by increasing the annual processing rate from 1.4 Mtpa to 1.8 Mtpa.

The nearest residences likely impacted by road traffic noise from the Project and other key receivers are identified in **Table 2-1** and **Figure 2-1**. These receivers are within close proximity to the transport route and most likely to be impacted by noise from the Project haulage.

Table 6-1 presents a comparison of truck movements between the approved operations and the proposed Project, reflecting the anticipated increase in ore processing. It is understood that there will be no change in traffic movements and the Project will not lead to a change in noise emissions.

Table 6-1: Comparison of truck movements for approved and proposed operations

Truck type	Activity	Peak daily truck movements – Approved operations	Peak daily truck movements – Project	Change in truck movements
B-Double	Importing	288	288	0
	Exporting	54	54	0

Nevertheless, the Calculation of Road Traffic Noise (CORTN) was used to predict the noise levels associated with Project related traffic at the closest and most impacted receiver as presented in **Table 6-2**. The results in **Table 6-2** indicate that the Project related traffic noise levels would comply with the relevant criteria.

Table 6-2: Road traffic noise levels

Receiver	Road section	Distance to residence (km)	Traffic movements (per hour)	Project related traffic noise (dB(A))	Criteria (dB(A))*
R5	Yarrandale Road	0.7	15	<55	55 (daytime)
	Yarrandale Road	0.7	15	<50	50 (night-time)

* Refer to **Table 3-4**.

7 CONSTRUCTION ASSESSMENT

Given that the plant and equipment modelled would generate similar noise levels as operational plant and equipment and would comply with intrusive and amenity criteria, the indication is that the noise from construction activities, that is, the waste rock emplacement area would be below the applicable noise criteria for operation of the Project. Overall, the modelling indicates no significant risk of construction noise impacts will arise.

8 MITIGATION AND MANAGEMENT

The features of the Project are suitable, and no additional operational controls or mitigation measures need to be applied to adequately manage noise impacts from the Project.

Nevertheless, **Table 8-1** summarises suggested noise mitigation and management measures to ensure noise levels are minimised where possible.

Table 8-1: Suggested noise mitigation and management measures

Type	Mitigation measure
Plant and equipment	Engines to be switched off when not in use for extended periods.
	Broadband reversing and low nuisance start up alarms will be used on mobile equipment.
	Investigate attenuation of significant noise generating mobile equipment.
	Modify activity during periods of meteorological enhancement.
Incident and complaints management	Complaints are logged and investigated.
Unusually noisy activity	Consult with potentially affected receivers regarding any proposed activities that may generate higher than usual noise output, prior to the undertaking of that activity.

9 SUMMARY AND CONCLUSIONS

This report has assessed the potential noise impacts associated with the proposed modifications of the Tritton Copper Mine.

Noise modelling with EMN was used to predict potential off-site noise impacts in the surrounding area due to the modification and operation of the Project.

The modelling in this assessment assumed a potential worst-case scenario, with a maximum likely number of operational plant and equipment operating simultaneously at the site, under noise-enhancing conditions. The assumptions used in the operational noise modelling are generally conservative, with the predicted levels likely to somewhat overestimate the potential impact that may arise. The results indicate that noise levels would be within the applicable criteria at the nearest receivers and that increasing the TSF by 6m would not result in any adverse noise impacts at the nearby residential receptors.

The road traffic noise assessment considers the expected increase in traffic movements associated with the Project at the nearest receiver and the results indicate that road traffic noise would comply with the applicable criteria.

Potential construction noise impacts are unlikely to arise given the plant and equipment modelled for the operational activities would generate similar noise levels and comply with intrusive and amenity criteria.

Overall, the assessment confirms that the Project would operate within acceptable noise criteria at the nearest receivers.

10 REFERENCES

EMM (2014)

"Tritton Copper Mine Noise Assessment", prepared for Tritton Copper Resources Pty Ltd by EMM, October 2014

NSW DECC (2009)

"Interim Construction Noise Guideline", NSW Department of Environment and Climate Change, July 2009.

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