2. Final Land Use

2.1 Regulatory Requirements for Rehabilitation

Table 3 lists the regulatory requirements relating to the rehabilitation of the Mine Site and post-mining land uses. It is noted that the conditional requirements for MLs within the Mine Site have been adopted from Schedule 8A of the *Mining Amendment (Standard Conditions of Mining Leases – Rehabilitation) Regulation 2021*, gazetted by the NSW Government on 2 July 2021. It has been assumed that site specific conditions within Mining Authorities relating to rehabilitation have been retained, and the standard conditions have been replaced by those identified in Schedule 8A of the *Mining Amendment (Standard Conditions of Mining Leases – Rehabilitation) Regulation 2021*. In the event that there are any discrepancies between the conditions identified in this Plan and those included in the Mining Authorities for the Mine Site following updates to the conditions of these Mining Authorities, this Plan will be updated to correct these discrepancies.

2.2 Final Land Use Options Assessment

A final land use options assessment is not required for the Murrawombie Mine as Condition 2 of DA 1/91 states that development is to be undertaken in accordance with the *Environmental Impact Assessment* (EIS) for the Murrawombie Mine (RWC, 1990). Section 2.17.1 of the EIS (RWC, 1990) states that the final landform features will, as far as practicable, blend with the existing topography. Sections 2.17.2-2.17.6 describe the final landform features of each mining domain in detail.

Further, the approved *Mining Operations Plan* (MOP) for the Murrawombie Mine (RWC, 2015) defines the final land use to be agricultural and grazing activities reflecting the pre-mining land uses within the area, or native vegetation conservation. Section 4.2 of the MOP defines that the final land use goals are as follows.

- To implement successful design and rehabilitation of landforms to ensure structural stability, revegetation success and free drainage of water;
- To ensure rehabilitation and revegetation is self-sustaining, blends with the surrounding landscape, as far as practicable, and follows the principles of sustainable development; and
- To retain areas of the Mine Site amenable to future agricultural activities or other mining operations in the region. These aspects would be subject to written agreement with a future landowner or the development approvals for other operations.

The final landform is displayed on Plan 4 of the MOP. For the purposes of this RMP, the final land use approved in the MOP is reproduced in **Figure 9** as the approved final landform.

Following advice from DnA Environmental regarding a revegetation strategy for the Murrawombie Mine Site, it is now proposed that woodland vegetation established be established across the entire Murrawombie Waste Rock Emplacement (see Section xx of Appendix xx).

Table 3
Regulatory Requirements for Rehabilitation

Consent	Condition No. or Section	Requirement	Area	Timing	RMP Section
Murrawombie Mine DA 1/91	2	The Development be generally in accordance with the Environmental Impact Statement dated December 1990 prepared by R.W. Corkery & Co. Pty Ltd and submitted to Council with development application 1/91 dated 2 January 1991. Except where amended by The "Statement of Environmental Effects for ML1280 – Tritton Expansion Project – Stage 3", Dated October 2007 – prepared by Tritton Resources Limited and the Statement of Environmental Effects for the Extension of the Murrawombie Open Cut, prepared by R.W. Corkery & Co. Pty. Limited dated May 2015.	ML1280	During operations and rehabilitation works	Noted
	9	The Applicant is to consult with the Soil Conservation Service of N.S.W to ensure rehabilitation, and run-off control standards are met.			
	14	The site is to be progressively rehabilitated as outlined in the Environmental Impact Statement and in accordance with the requirements of the Soil Conservation Service, Department of Agriculture and Department of Minerals and Energy.			
Murrawombie Mine Environmental Impact Statement (RWC, 1990)	2.17.1	As far as practicable blend the landform with the surrounding land fabric.	ML1280	During operations and rehabilitation works	5
		Provide a stable ground cover for erosion control.			6.2.6.2
		To provide a low maintenance, stable and safe landform commensurate with a grazing land use capability.			2
		As far as practicable minimise impacts on scenic amenity.			2
		Revegetate with native tress and scrub species comparable with pre-existing vegetation communities.			6.2.5
	2.17.2	Construct the final landform in accordance with Section 2.17.2 of the EIS (RWC, 1990) to maintain long term safety of the landform.			6.2.3
	2.17.3	Construct the Murrawombie Waste Rock Emplacement such that any waste rock identified as potentially acid forming is encapsulated. Construct the landform so that the surface is free draining and suitable for revegetation with native groundcover, shrub and tree species.			6.2.3
	2.17.4	Establish a stable, free draining landform. Minimise surface percolation of rainfall through doming the surface and applying an appropriate cover. Maintain the integrity of the pad lining to minimise the spread of potential contamination.			6.2.3

Table 3 (Cont'd)
Regulatory Requirements for Rehabilitation

Consent	Condition No. or Section	Requirement	Area	Timing	RMP Section
Murrawombie Mine Statement of Environmental Effects (Tritton, 2007)	5.14	Provide a landform for controlled grazing of livestock with a post-closure aim to provide a decommissioned site which consists of stable non-polluting structures that are vegetated with self-sustaining vegetation.	ML1280	During rehabilitation works	6.2.5
Murrawombie Mine Statement of Environmental Effects (RWC, 2015b)	2.6.3	The final land uses of disturbed areas would include agricultural and grazing activities reflecting the pre-mining land uses within the area.			6.2.5
Long-term Rehabilitation Objectives					
Mine Closure Plan (2011)	Land Use	The Mine will be rehabilitated to accommodate pastoral activities on a combination of class 4 and class 5 land. Infrastructure will be removed, where possible, and all contaminated water sources will be rehabilitated. Fresh water sources will remain on site.	ML1280	During rehabilitation	6.2.5
	Water Management	Any contaminated water storage sites will be rehabilitated leaving only fresh water sources on site. All clean water facilities will be left at all three sites. These will be used for grazing stock and wildlife around the area. Environmental liabilities for some infrastructure will be transferred to future landholders such as bores, access roads and fences.			6.2.3.1
	Open Voids	All open voids are to remain as open voids with the underground access to be closed up. Safety bunds will be constructed around the outside of the open pit to restrict all access.			6.2.2.1, 6.2.3
	Other	Murrawombie Waste Rock Emplacement areas will be covered with topsoil and re-seeded. Various flora species similar to pre-disturbance conditions will be distributed. Infrastructure, materials and rubbish will be removed and/or appropriately buried, areas will be reshaped and vegetated, and the site will be left clean, stable and tidy. Disturbed areas will be contoured to blend into the surrounding topography the ripped, topsoiled and seeded, if required, to promote natural regeneration of native vegetation communities. Surface water drainage patterns will be reinstated to reduce the risk of unacceptable water ponding and/or erosion.			6.2.4, 6.2.5, 6.2.6

Table 3 (Cont'd)
Regulatory Requirements for Rehabilitation

Consent	Condition No. or Section	Requirement	Area	Timing	RMP Section
Mining Leases					
ML1280, MPL294, MPL295	4	**Must prevent or minimise harm to the environment** The holder of a mining lease must take all reasonable measures to prevent, or if that is not reasonably practicable, to minimise, harm to the environment caused by activities under the mining lease. In this clause – ***harm*** to the environment has the same meaning as in the *Protection of the Environment Operations Act 1997.*	ML1280	During operation and rehabilitation	Noted
	5	**Rehabilitation to occur as soon as reasonably practicable after disturbance** The holder of a mining lease must rehabilitate land and water in the mining area that is disturbed by mining activities under the mining lease as soon as reasonably practicable after the disturbance occurs.			Noted
	6	**Rehabilitation must achieve final land use** The holder of a mining lease must ensure that rehabilitation of the mining area achieves the final land use for the mining area. The holder of a mining lease must ensure any planning approval has been obtained that is necessary to enable the holder to comply with subclause (1). The holder of the mining lease must identify and record any reasonably foreseeable hazard that presents a risk to the holder's ability to comply with subclause (1) **Note –** clause 7 requires a rehabilitation risk assessment to be conducted whenever a hazard is identified under this subclause. In this clause – ***final land use*** for the mining area means the final landform and final land uses to be achieved for the mining area – as set out in the rehabilitation objectives statement and rehabilitation completion criteria statement, and for a large mine – as spatially depicted in the final landform and rehabilitation plan, and if the final land use for the mining area is required by a condition of development consent for activities under the mining lease – as stated in the condition. ***Planning approval*** means – a development consent within the meaning of the *Environmental Planning and Assessment Act 1979*, or an approval under that Act, Division 5.1.		During rehabilitation	2.3

Table 3 (Cont'd)
Regulatory Requirements for Rehabilitation

Consent	Condition No. or Section	Requirement	Area	Timing	RMP Section
Mining Leases (Cont'd)					
ML1280, MPL294, MPL295 (Cont'd)	7	**Rehabilitation risk assessment** The holder of a mining lease must conduct a risk assessment (a ***rehabilitation risk assessment***) that – identifies, assesses and evaluates the risks that need to be addressed to achieve the following in relation to the mining lease – the rehabilitation objectives, the rehabilitation completion criteria, for large mines – the final land use as spatially depicted in the final landform and rehabilitation plan, and identifies the measures that need to be implemented to eliminate, minimise or mitigate the risks. The holder of the mining lease must implement the measures identified. The holder of a mining lease must conduct a rehabilitation risk assessment – for a large mine – before preparing a rehabilitation management plan, and for a small mine – before preparing the rehabilitation outcome documents for the mine, and whenever a hazard is identified under clause 6(3) – as soon as reasonably practicable after it is identified, and whenever given a written direction to do so by the Secretary.	ML1280	During construction, operation and rehabilitation	3
	8	**Application of Division** This Division does not apply to a mining lease unless— the security deposit required under the mining lease is greater than the minimum deposit prescribed under the Act, section 261BF in relation to that type of mining lease, or the Secretary gives a written direction to the holder of the mining lease that this Division, or a provision of this Division, applies to the mining lease.		During construction, operation and rehabilitation	Noted
	9	**General requirements for documents** A document required to be prepared under this Division must— be in a form approved by the Secretary, and **Note—** The approved forms are available on the Department's website. Include any matter required to be included by the form, and if required to be given to the Secretary—be given in a way approved by the Secretary.		During construction, operation and rehabilitation	This Plan

Table 3 (Cont'd)
Regulatory Requirements for Rehabilitation

Consent	Condition No. or Section	Requirement	Area	Timing	RMP Section
Mining Leases (Cont'd)					
ML1280, MPL294, MPL295 (Cont'd)	10	**Rehabilitation management plans for large mines** The holder of a mining lease relating to a large mine must prepare a plan (a rehabilitation management plan) for the mining lease that includes the following— a description of how the holder proposes to manage all aspects of the rehabilitation of the mining area, a description of the steps and actions the holder proposes to take to comply with the conditions of the mining lease that relate to rehabilitation, a summary of rehabilitation risk assessments conducted by the holder, the risk control measures identified in the rehabilitation risk assessments, the rehabilitation outcome documents for the mining lease, a statement of the performance outcomes for the matters addressed by the rehabilitation outcome documents and the ways in which those outcomes are to be measured and monitored. If a rehabilitation outcome document has not been approved by the Secretary, the holder of the mining lease must include a proposed version of the document. A rehabilitation management plan is not required to be given to the Secretary for approval. The holder of the mining lease— must implement the matters set out in the rehabilitation management plan, and if the forward program specifies timeframes for the implementation of the matters—must implement the matters within those timeframes.	ML1280	During construction, operation and rehabilitation	This Plan
	11	**Amendment of rehabilitation management plans** The holder of a mining lease must amend the rehabilitation management plan for the mining lease as follows— to substitute the proposed version of a rehabilitation outcome document with the version approved by the Secretary—within 30 days after the document is approved, as a consequence of an amendment made under clause 14 to a rehabilitation outcome document—within 30 days after the amendment is made, to reflect any changes to the risk control measures in the prepared plan that are identified in a rehabilitation risk assessment—as soon as practicable after the rehabilitation risk assessment is conducted, whenever given a written direction to do so by the Secretary—in accordance with the direction.		During construction, operation and rehabilitation	Noted

Table 3 (Cont'd)
Regulatory Requirements for Rehabilitation

Consent	Condition No. or Section	Requirement	Area	Timing	RMP Section
Mining Leases (Cont'd)					
ML1280, MPL294, MPL295 (Cont'd)	12	**Rehabilitation outcome documents** The holder of a mining lease must prepare the following documents (***the rehabilitation outcome documents***) for the mining lease and give them to the Secretary for approval— the ***rehabilitation objectives statement***, which sets out the rehabilitation objectives required to achieve the final land use for the mining area, the ***rehabilitation completion criteria statement***, which sets out criteria, the completion of which will demonstrate the achievement of the rehabilitation objectives, for a large mine, the ***final landform and rehabilitation plan***, showing a spatial depiction of the final land use. If the final land use for the mining area is required by a condition of development consent for activities under the mining lease, the holder of the mining lease must ensure the rehabilitation outcome documents are consistent with that condition.	ML1280	During construction, operation and rehabilitation	4.2, 5.1
	13	**Forward program and annual rehabilitation report** The holder of a mining lease must prepare a program (a ***forward program***) for the mining lease that includes the following— a schedule of mining activities for the mining area for the next 3 years, a summary of the spatial progression of rehabilitation through its various phases for the next 3 years, a requirement that the rehabilitation of land and water disturbed by mining activities under the mining lease must occur as soon as reasonably practicable after the disturbance occurs. The holder of a mining lease must prepare a report (an ***annual rehabilitation report***) for the mining lease that includes— a description of the rehabilitation undertaken over the annual reporting period, a report demonstrating the progress made through the phases of rehabilitation provided for in the forward program applying to the reporting period, a report demonstrating progress made towards the achievement of the following— the objectives set out in the rehabilitation objectives statement, the criteria set out in the rehabilitation completion criteria statement, for large mines—the final land use as spatially depicted in the final landform and rehabilitation plan.		During construction, operation and rehabilitation	11

Table 3 (Cont'd)
Regulatory Requirements for Rehabilitation

Consent	Condition No. or Section	Requirement	Area	Timing	RMP Section
Mining Leases (Cont'd)					
ML1280, MPL294, MPL295 (Cont'd)	13 (Cont'd)	If a rehabilitation outcome document has not been approved by the Secretary, the holder of the mining lease must rely on a proposed version of the document. The holder of the mining lease must give the forward program and annual rehabilitation report to the Secretary. In this clause— ***annual reporting period*** means each period of 12 months commencing on— the date on which the mining lease is granted, or if the Secretary approves another date in relation to the mining lease— the other date	ML1280		
	14	**Amendment of rehabilitation outcome documents and forward program** This clause applies to— a rehabilitation outcome document if it has been approved by the Secretary, and a forward program if it has been given to the Secretary. The holder of a mining lease must not amend a document to which this clause applies that relates to the mining lease unless— the Secretary gives the holder a written direction to do so, or the Secretary, on written application by the holder, gives a written approval of the amendment. The holder of the mining lease must amend the document in accordance with the Secretary's direction or approval. Nothing in this clause prevents the holder of a mining lease preparing a draft amendment for submission to the Secretary for approval.		During construction, operation and rehabilitation	Noted

Table 3 (Cont'd)
Regulatory Requirements for Rehabilitation

Consent	Condition No. or Section	Requirement	Area	Timing	RMP Section
Mining Leases (Cont'd)					
ML1280, MPL294, MPL295 (Cont'd)	15	**Times at which documents must be prepared and given** The holder of a mining lease must do the following before the end of the initial period— prepare a rehabilitation management plan, and prepare rehabilitation outcome documents and give them, other than the rehabilitation completion criteria statement, to the Secretary for approval, and prepare a forward program and give it to the Secretary. The holder of the mining lease must prepare a forward program and annual rehabilitation report and give them to the Secretary before— 60 days after the last day of each annual reporting period, commencing with the annual reporting period in which the forward program was given to Secretary under subclause (1)I, or a later date approved by the Secretary. A rehabilitation completion criteria statement relating to completion of rehabilitation during a period covered by a forward program must be given to the Secretary for approval when the forward program is required to be given to the Secretary. The holder of the mining lease must prepare updated rehabilitation outcome documents for the mining lease and give them to the Secretary for approval before— 60 days after a development consent is modified following an application referred to in clause 20(1)(b), or a later date approved by the Secretary. A rehabilitation completion criteria statement is not required to be given to the Secretary under subclause (4) unless a rehabilitation completion criteria statement has already been given to the Secretary under subclause (3). The Secretary may, by written notice, direct the holder of a mining lease to prepare, or give to the Secretary, a document required to be prepared under this Division at a time other than that specified in this clause. The holder of the mining lease must comply with the direction. In this clause— initial period means the period commencing when the mining lease is granted and ending— 30 days, or other period approved by the Secretary, after this Division first applies to the mining lease, or if this Division applies to the mining lease because of an increase in the required security deposit— when the surface of the mining area is disturbed by activities under the mining lease, or at a later date approved by the Secretary.	ML1280	During construction, operation and rehabilitation	This Plan

Table 3 (Cont'd)
Regulatory Requirements for Rehabilitation

Consent	Condition No. or Section	Requirement	Area	Timing	RMP Section
Mining Leases (Cont'd)					
ML1280, MPL294, MPL295 (Cont'd)	16	**Certain documents to be publicly available** This clause applies to the following documents— a rehabilitation management plan, a forward program, an annual rehabilitation report. The holder of a mining lease must make a document to which this clause applies publicly available by— publishing it on its website in a prominent position, or if the holder does not have a website— providing a copy of it to a person— on the written request of a person, and without charge, and within 14 days after the request is received. If a document is published on the website of the holder of the mining lease, the holder must ensure that it is published— for a rehabilitation management plan—within 14 days after it is prepared or amended, or for a forward program or an annual rehabilitation report—within 14 days after it is given to the Secretary or amended, Personal information within the meaning of the *Privacy and Personal Information Protection Act 1998* is not required to be included in a document made available to a person under this clause.	ML1280	During construction, operation and rehabilitation	Noted
	17	**Records demonstrating compliance** The holder of a mining lease must create and maintain records of all actions taken that demonstrate compliance with each of the conditions set out in this Part. **Note—** The Act, sections 163D and 163E provide for the form in which records must be kept and the period for which they must be retained.		During construction, operation and rehabilitation	Noted

Table 3 (Cont'd)
Regulatory Requirements for Rehabilitation

Consent	Condition No. or Section	Requirement	Area	Timing	RMP Section
Mining Leases (Cont'd)					
ML1280, MPL294, MPL295 (Cont'd)	18	**Report on non-compliance** The holder of a mining lease must provide the Minister with a written report detailing any non-compliance with— a condition of the mining lease, or Note— The Act, section 364A contains provisions relating to the use and disclosure of information provided under this condition. a requirement of the Act or this Regulation relating to activities under the mining lease. The holder of the mining lease must provide the report within 7 days after becoming aware of the non-compliance. The holder of the mining lease must ensure the report— identifies the condition of the mining lease, or the requirement of the Act or this Regulation, to which the non-compliance relates, and describes the non-compliance and specifies the date or dates on which, or the period during which, the non-compliance occurred, and describes the causes or likely causes of the non-compliance, and describes the action that has been taken, or will be taken, to mitigate the effects, and to prevent any recurrence, of the non-compliance.	ML1280	During construction, operation and rehabilitation	Noted

2.3 Final Land Use Statement

The final land use for the Mine Site were described in the EIS for the Mine (RWC, 1990) and subsequent environmental assessments and Mining Operations Plans. Condition 2 of DA 1/91 states that development is to be undertaken in accordance with the Environmental Impact Assessment (EIS) (RWC, 1990). Section 2.17.1 of the EIS states that the final landform features would, as far as practicable, blend with the existing topography. In summary the expected final land uses of the disturbed areas would include agricultural and grazing activities reflecting the pre-mining land uses within the area and the use of neighbouring properties.

Final land uses within the Mine Site will include the following.

- Native Ecosystem Area (Grassland and Woodland) – includes revegetated areas containing flora species assemblages and ecosystem characteristics consistent with the surrounding vegetation community types (see Section 6.2.5).
- Agricultural Area (Grazing) – includes areas that will be rehabilitated in a manner suitable for agricultural purposes, consistent with land capability prior to mining disturbance and the surrounding topography.
- Water Storage Area – includes the Raw Water Dam and Duck Pond and other sediment basins or containment dams.
- Infrastructure Area – includes the access roads.
- Final Void Area – the Murrawombie Open Cut final void.

Final land use and rehabilitation plans for the Mine Site are presented in Section 5. It is noted that the proposed final land uses will not interfere with the use of existing reserves within the Mine Site.

2.4 Final Land Use and Mining Domains

The *Form and Way: Rehabilitation Management Plan for Large Mines (July 2021)* guideline defines a domain as follows.

> *"An area (or areas) of the land that has been disturbed by mining and has a specific operational use (mining domain) or specific final land use (final land use domain). Land within a domain typically has similar geochemical and/or geophysical characteristics and therefore requires specific rehabilitation activities to achieve the associated final land use."*

2.4.1 Final Land Use Domains

Table 4 defines the final land use domains for the Mine Site and **Plan 1** displays the final land use domains for the Mine Site. For reference, **Figure 7** presents the most recently approved final land use for the Mine Site, as defined by the final Mining Operations Plan (2015).

Table 4
Final Land Use Domains

Final Land Use Domain	Domain ID[1]	Domain Description
Native Ecosystem Area (Woodland)	A	Includes the Murrawombie Waste Rock Emplacement not suitable for pastoral activity.
Native Ecosystem Area (Grassland)	A	Includes areas that will be rehabilitated to grassland, without shrubs or trees, where a mid- or over-storey of vegetation may adversely impact on the stability of the final landform (i.e. the upper surface and embankments of the Heap Leach Pads). It should be noted that the principal purpose of the vegetation cover will be as part of the functioning capped landform.
Agricultural Area - Grazing	B	Includes areas that will be rehabilitated to be suitable for light grazing agricultural purposes (i.e. areas of mine-related disturbance, stockpiles, ROM Pad and infrastructure and access tracks not being retained).
Water Storage Area	G	Includes all water management infrastructure to be retained for the final land use (i.e. the Raw Water Dam and Duck Pond and other sediment basins or containment dams).
Infrastructure Area	I	Includes all significant built infrastructure to be retained or constructed for the final land use (e.g. the access road).
Final Void Area	J	Includes the Murrawombie Open Cut final void.
Note 1: See **Plan 1**		

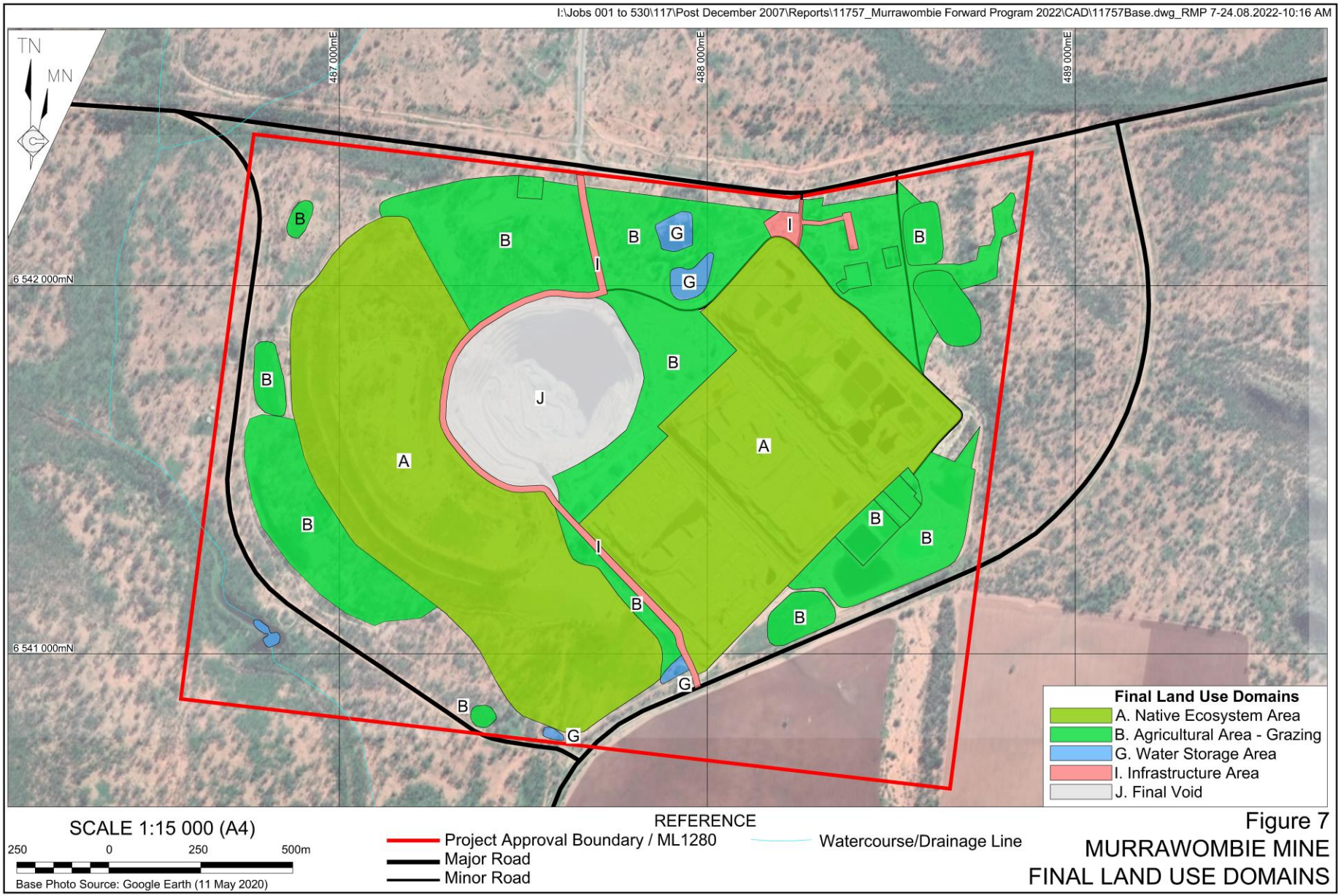


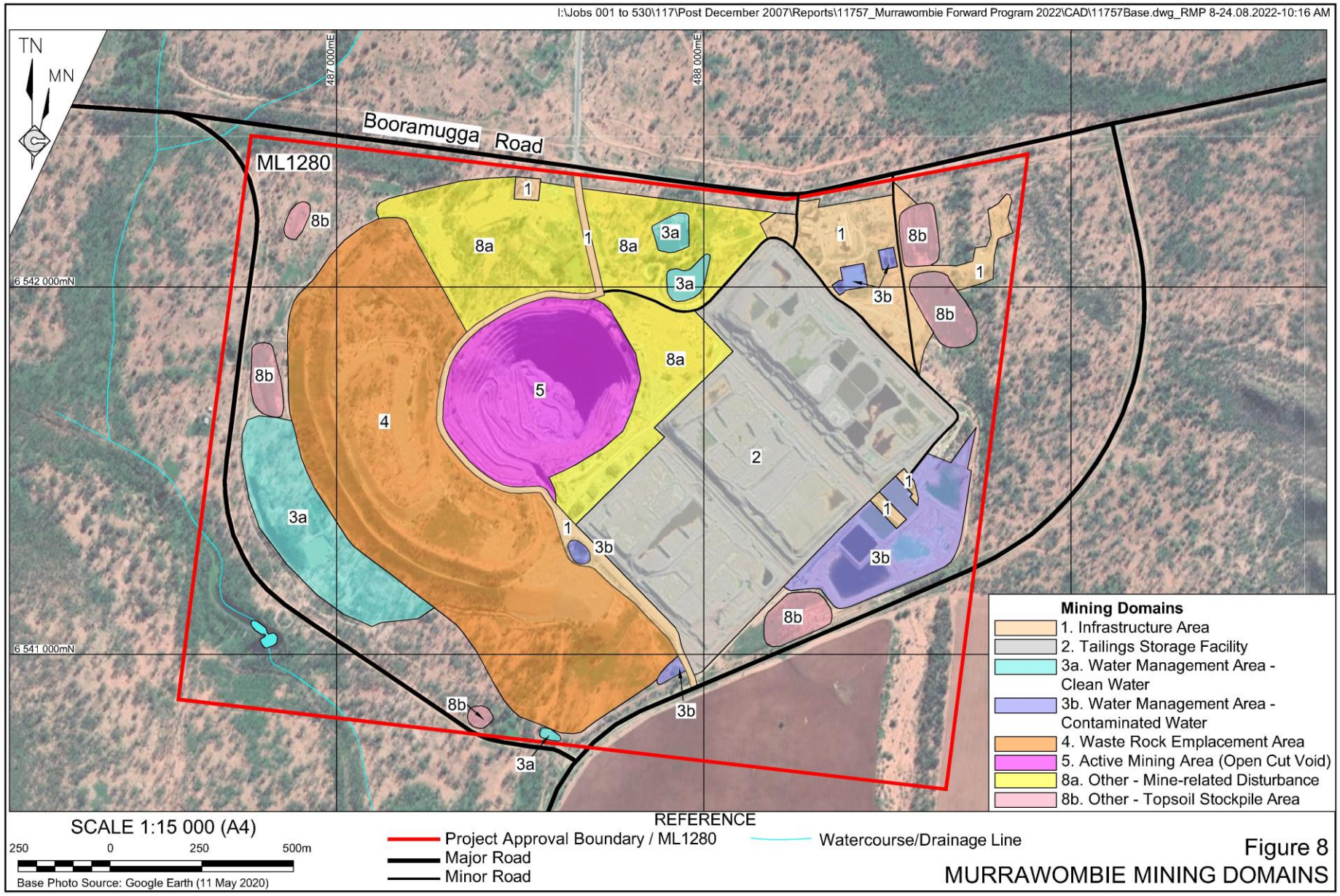
Figure 7
MURRAWOMBIE MINE
FINAL LAND USE DOMAINS

2.4.2 Mining Domains

Table 5 defines the mining domains for the Mine Site and **Figure 8** displays the mining domains for the Mine Site.

Table 5
Mining Domains

Mining Domain	Domain ID[1]	Domain Description
Infrastructure Area	1	Includes the administration and workshop area, the Copper Cementation Plant and miscellaneous infrastructure (i.e. access roads, sheds and a graveyard area). This also includes all remaining areas that have been disturbed through mining activities (i.e. the ROM Pads).
Heap Leach Pads	2	Includes the heap leach material storage area (i.e. all embankments, access tracks and drainage structures).
Water Management Area (Clean Water)	3	Water management structures that capture clean water from undisturbed areas within the Mine Site or that are used as temporary storage locations for water sourced under licence from the Bogan River (i.e. the Raw Water Dam and Duck Pond and other sediment basins or containment dams).
Water Management Area (Contaminated Water)	3	Includes all sediment dams used to manage potentially contaminated or chemical-laden water associated with the Heap Leach Pads or with runoff from waste rock material that has the potential to be acid forming. (i.e. the containment dams, Pregnant Liquor Ponds, sediment basins and the inactive sediment dam).
Overburden Emplacement Area	4	Includes the Murrawombie Waste Rock Emplacement.
Active Mining Area (Open Cut Void)	5	Includes the Murrawombie Open Cut final void.
Other (Topsoil Stockpile Area)	8	Includes topsoil and subsoil stockpiles.
Note 1: See **Figure 7**		


I:\Jobs 001 to 530\117\Post December 2007\Reports\11757_Murrawombie Forward Program 2022\CAD\11757Base.dwg_RMP 8-24.08.2022-10:16 AM
TN
MN
487 000mE
488 000mE
Booramugga Road
ML1280
6 542 000mN
6 541 000mN
Mining Domains
1. Infrastructure Area
2. Tailings Storage Facility
3a. Water Management Area - Clean Water
3b. Water Management Area - Contaminated Water
4. Waste Rock Emplacement Area
5. Active Mining Area (Open Cut Void)
8a. Other - Mine-related Disturbance
8b. Other - Topsoil Stockpile Area
SCALE 1:15 000 (A4)
250 0 250 500m
Base Photo Source: Google Earth (11 May 2020)
REFERENCE
Project Approval Boundary / ML1280
Major Road
Minor Road
Watercourse/Drainage Line
Figure 8
MURRAWOMBIE MINING DOMAINS

3. Rehabilitation Risk Assessment

The initial Rehabilitation Risk Assessment for the Mine was undertaken generally in accordance with *Australian Standard AS/NZS ISO 31000:2009 Risk Management*. The Rehabilitation Risk Assessment has been prepared to consider potential rehabilitation risks associated with any mine within the Tritton Copper Operations, and as such, also applies to those mines.

Risks to achieving the rehabilitation objectives and rehabilitation completion criteria outlined in Section 4, as well as the final landform outlined in Section 5, were identified and assessed jointly prior to the preparation of this plan by representatives from the following.

- Company staff, including specialists and/or managers for:
  - environmental;
  - geotechnical;
  - geological; and
  - operational activities.
- External consultants from:
  - R.W. Corkery & Co. Pty Limited (environmental management and approvals);
  - O'Kane Consulting Pty Ltd (geoscience); and
  - DnA Environmental (ecology).

For each identified risk to rehabilitation, potential adverse outcomes were identified and allocated a risk rating based on the potential consequences and likelihood of occurrence. **Tables 6**, **7**, **8** and **9** present the consequence, likelihood, risk rating and residual risk rating used during this analysis. Where risks were determined to be unacceptable, namely those risks classified as "Moderate" or above, a Trigger Action Response Plan has been developed and is presented in Section 10.

In accordance with Schedule 8A of the *Mining Regulation 2016*, the Rehabilitation Risk Assessment is maintained as a 'live' document and is regularly reviewed in response to changes to operations where potential risks to rehabilitation may occur.

Table 10 presents the results of the risk analysis assuming the implementation of standard mitigation measures and those outlined within this RMP.

Table 6
Tritton Consequence Table

Level				
5	**4**	**3**	**2**	**1**
Descriptor				
Insignificant	**Minor**	**Moderate**	**Major**	**Critical**
Health and Safety				
First aid treatment or injury only	Medical Treatment Injury (MTI)	Single Lost Time Injury (LTI)	Multiple Lost Time Injuries	Permanent disability >30%
Low level soreness or small amount of pain	Restricted Work Injury (RWI)	Short term hospitalisation (<7 days)	Extended hospital treatment (>7 days)	One or more fatalities
	Presented to hospital (no overnight stay)	Reversible impairment to human health	Permanent disability <30%	
			Serious long-term health issue	
Environment				
No or very low environmental impact	Low environmental Impact	Moderate environmental impact	Major environmental impact	Severe environmental impact
Impact confined to a small area	Rapid clean-up by internal staff or contractors	Clean-up by internal staff or contractors	Considerable clean-up effort required by internal staff and external contractors	Likely species destruction and long recovery period
	Impact contained to area already impacted by operations	Impact confined within lease boundary	Impact may extend across lease boundary	Extensive clean-up using external resources
				Impact on a regional scale
Community/External Relations				
Isolated complaint received	Multiple or sporadic complaints received	Repeated or serious rate of complaints	Ongoing complaints from local groups, NGO's or regulators	High level concern from community, regulators, stakeholders and/or stakeholders
No media coverage	No media coverage	Local media interest and coverage	Regional/national media interests	Adverse national or international media coverage
No damage to reputation or relationships with stakeholders	Short-term damage with relationship with one or more stakeholders but no damage to reputation	Reversible damage with stakeholders and to reputation	Protests by external stakeholders	International damage to reputation
			Local or regional damage to reputation	
Legal				
Questionable or minor non-conformance with operating condition	Non-compliance with operating conditions	Breach of local or national law with potential prosecution by regulator	Major breach of local or national law	Significant breach of national or international law with potential jail sentence
No fine or prosecution	Could attach low level administrative response from regulator	Continuing occurrence of minor breach	Prosecution or penalties by regulator likely	Operations suspended or cease (short term or long term)
Unlikely to attract regularity interest	No court appearance required		Short term treat to operations continuing	Licenses withdrawn or revoked
Easy to resolve			Civil action initiated	Class action initiated

Table 6 (Cont'd)
Tritton Consequence Table

Level				
5	**4**	**3**	**2**	**1**
Descriptor				
Insignificant	**Minor**	**Moderate**	**Major**	**Critical**
Operational/Cost				
Minor impact, easily corrected with insignificant cost to the operation:	Minor damage/failure to equipment or infrastructure with minimal associated cost:	Damage/failure to equipment or infrastructure marginal cost to the operation:	Damage/failure to equipment or infrastructure resulting in significant cost to the operation:	Damage/failure to equipment or infrastructure resulting in a detrimental cost to the operation:
<$5,000	$5,000 - $50,000	$50,000 - $100,000	$100,000 - $500,000	> $500,000
Business Interruption				
Minimal disruption to concentrate production (<4hrs)	Minor loss of concentrate production (< 1 day)	Significant loss of concentrate production (1 - 3 days)	Major disruption to concentrate production (3-7 days)	Critical loss of revenue from extended disruption to concentrate production (>1 week)
<100,000	$100, 000 to $500, 000	$500,000 - 1,500,000	$1,500,000 - $4,500,000	> $4,500,000
Source: Tritton Resources				

Table 7
Qualitative Likelihood Rating

Level	Descriptor	Description in terms of full operating life of the Site	Description in terms of frequency
A	Almost Certain	Consequences expected to occur in most circumstances	Daily or continuous
B	Likely	Consequences will probably occur in most circumstances	Weekly or monthly
C	Possible	Consequences could occur at some time	Annually
D	Unlikely	Consequence will probably NOT occur in most circumstances	Within the life of the operation
E	Rare	Consequence may occur in exceptional circumstances	>100 years
Source: Tritton Resources			

Table 8
Qualitative Risk Rating

Likelihood		Consequence				
		5 Insignificant	4 Minor	3 Moderate	2 Major	1 Critical
A	Almost Certain	15(H)	10(H)	6(E)	3(E)	1(E)
B	Likely	19(M)	14(H)	9(H)	5(E)	2(E)
C	Possible	22(L)	18(M)	13(H)	8(E)	4(E)
D	Unlikely	24(L)	21(L)	17(M)	12(H)	7(E)
E	Rare	25(L)	23(L)	20(M)	16(H)	11(H)

Source: Tritton Resources

Table 9
Residual Risk Level Action

Residual Risk Level	Priority	Actions to Minimise Risk	Actions to Maximise Opportunity
Critical	1	Detailed research and planning required; determine whether activity or task should be stopped pending further investigation	Detailed research and planned required; high payoff potential; pursue opportunity aggressively
High	2	Senior management attention; immediate corrective and preventative action required	Near term opportunity with above average rate of return; pursue diligently
Moderate	3	Conditionally acceptable risk – management responsibility assigned; corrective and preventative action plan developed	Opportunity to realise average rate of return with certainty pursue with existing plans
Low	4	Manage by routine procedures; accept risk	Manage by routine procedures

Table 10
Rehabilitation Risk Assessment

Risk	Risk Controls	Residual Risk Rating*	Where Addressed in this RMP
General			
Insufficient skills and experience of rehabilitation personnel.	• Site based environmental staff are to be supported by external consultants. • Procedural documents and records are to be located in central server for document control and storage. • Company to implement succession planning and staff training as much as is feasible. • Company to maintain a Rehabilitation Management Plan as a staff manual and ensure it is available for ease of guidance to new or inexperienced staff. • Company to assess and assign sufficient resources to manage environmental and closure risk.	17 (M)	Section 7
Lack of clearly defined responsibilities.	• Clearly mapped and available organisation chart and management plans to be maintained. • Position descriptions for relevant staff include rehabilitation and mine closure responsibilities. • Quality Assurance program to be established through Rehabilitation Management Plan. • Clear communication between departments and relevant stakeholders relating to rehabilitation planning, scheduling and execution.	18 (M)	Section 7
Insufficient funding for or prioritisation of rehabilitation activities.	• Budget and reforecast process applied. • Rehabilitation commitments acknowledged and understood at senior leadership level. • Long-term rehabilitation schedule to be included in Rehabilitation Management Plan with currently estimated costing for each action to be maintained confidentially for staff action and update. • All capital investment decision making to include recognition of rehabilitation and closure aspects.	21 (L)	Section 7
Not compliant with permit/licence approvals.	• Obligation Register to be regularly reviewed and updated. Development of a system to assign responsibilities from Obligation Register to 'Obligation Owners'. • Annual reporting, monitoring and Independent Environmental Audits as required under conditions of consent. • Trigger Action Response Plans (TARPs) and summary of legal and permit requirements included in RMPs. • Regular risk assessments used to identify and assess compliance with permit and licence conditions. • Devise and implement corrective actions (following audits, incidents, non-compliances, specialist reports) as needed.	24 (L)	

Table 10 (Cont'd)
Rehabilitation Risk Assessment

Risk	Risk Controls	Residual Risk Rating*	Where Addressed in this RMP
Active Mining Phase of Rehabilitation			
Poor / inadequate / lost opportunity to salvage topsoil & other biological resources through clearing, salvage and handling practices (including timing).	• Progressive stripping and storage of topsoil. • Practices that minimise the re-handling of topsoil. • Topsoil tested and analysed through rehabilitation monitoring. • Habitat structures (timber / trees etc) retained for placement at rehabilitation. • Material inventory (including topsoil, NAF waste rock) and a projection of future closure requirements. • Geotechnical and geochemical characterisation of growth medium and capping material to be undertaken opportunistically as stripped. • Seed collection including a seed quantity inventory to be established where necessary to support ongoing purchase of seed and tubestock.	21 (L)	6.2.1.1, 6.2.1.11
Limited pre-existing and stockpiled biological resources for salvage.	• Progressive stripping and storage of topsoil. • Practices that minimise the re-handling of topsoil. • Topsoil tested and analysed through rehabilitation monitoring. • Habitat structures (timber / trees etc) retained for placement at rehabilitation. • Material inventory (including topsoil, NAF waste rock) and a projection of future closure requirements. • Develop contingency plan for where material inventory projection forecasts a deficit (TARP). • Investigate use of Company owned farming land for seed and biological resource salvage.	21 (L)	6.2.1.11, 10.2
Adverse geochemical/chemical composition of materials such as overburden, tailings, heap leach, subsoils and topsoils etc	• Design and Rehabilitation Planning – Cover design/model for Heap Leach Pads. – Ongoing kinetic geochemical characterisation of waste rock and update of Waste Rock Characterisation and Management Plan. – Ongoing rehabilitation trials or assessments and accurate records. • Rehabilitation brine trial on Murrawombie Heap Leach Pads (and broader implementation if successful). • Survey and testing of historical mining areas to identify contaminated areas / materials that need to be removed / treated prior to rehabilitation. • Rehabilitation-focused assessments of high-risk landforms including groundwater modelling, water balance modelling.	17 (M)	6.2.1.4, 6.2.1.6, 6.2.1.9, 6.2.1.11, 9.1.1

Table 10 (Cont'd)
Rehabilitation Risk Assessment

Risk	Risk Controls	Residual Risk Rating*	Where Addressed in this RMP
Active Mining Phase of Rehabilitation (Cont'd)			
Handling and containment of waste materials including Tailings, waste rock, heap leach, waste / contaminated water.	• Proactive waste classification and segregation (NAF / PAF) including update of Waste Rock Characterisation and Management Plan. • Design and Rehabilitation Planning – Cover design/model for Heap Leach Pads. – Ongoing kinetic geochemical characterisation of waste rock and update of Waste Rock Characterisation and Management Plan. – Ongoing rehabilitation trials or assessments and accurate records. • Rehabilitation brine trial on Murrawombie Heap Leach Pads (and broader implementation if successful). • Survey and testing of historical mining areas to identify contaminated areas / materials that need to be removed / treated prior to rehabilitation. • Rehabilitation-focused assessments of high-risk landforms including for example groundwater modelling or water balance modelling.	17 (M)	6.2.1.4, 6.2.1.5, 6.2.1.9
Adverse surface and groundwater quality and quantity.	• Sediment and erosion control structures/dams. Current studies indicate pits and underground workings act as groundwater sinks. • Closure plans include design for contaminated waters to passively drain towards pits. • Rehabilitation-focused assessments of high-risk landforms including groundwater modelling, water balance modelling. • Implement mitigation/containment controls as required.	21 (L)	6.2.1.10
Decommissioning Phase of Rehabilitation			
Failure to disconnect services / remove infrastructure.	• Survey records, as built records of services and evidence of prior decommissioning. • Decommissioning activities to commence in close association with the mine production schedule. • Infrastructure that can be used at the other nearby Tritton operations will be re-located to these facilities.	21 (L)	6.2.2.2
Hazards associated with retained infrastructure.	• Identification of equipment and material to be retained. • Prior to mine closure - undertake risk assessment on infrastructure that is proposed to be retained. Risk assessment to focus on future / long term liability for the environment, community and the beneficial use of land and water. Implement controls as identified.	21 (L)	6.2.2.3

Table 10 (Cont'd)
Rehabilitation Risk Assessment

Risk	Risk Controls	Residual Risk Rating*	Where Addressed in this RMP
Decommissioning Phase of Rehabilitation (Cont'd)			
Any identified hazards on items of heritage or biodiversity assets (e.g. known heritage items / fauna species at the operational site) e.g. migratory birds (utilising water sources), bats (utilising underground portals, etc.)	• Cultural and heritage registers. • Flora and fauna registers. • Annually monitoring. • Undertake survey (fauna) and risk assessments prior to mine closure to ensure mine closure activities do not impact on heritage or fauna within active mining areas.	21 (L)	
Generation of material and waste products from the demolition process (including hazardous waste materials).	• Survey and identification of generated wastes prior to commencing demolition. • Hazardous materials, demolition products and transport assessments prior to demolition. • Demolition according to relevant Australian Standards. • Consultation with BSC regarding landfill impact. • Maximise re-use and recycle principles, where feasible.	21 (L)	6.2.1.5, 6.2.2.4, 6.2.2.5
Accumulation of groundwater in underground / open pit workings - impact on beneficial use of groundwater resources.	• Current studies indicate pits and underground workings act as groundwater sinks. • Current groundwater monitoring network. • Develop modelling assessment of long term/future groundwater impact risks. Mine closure plans adjusted following model results.	21 (L)	
Failure to remove hazardous materials resulting in land / water contamination	• All spills reported and cleaned up. • Designated hydrocarbon and chemical storage areas, with hydrocarbons stored in bunded areas (compliant with AS1940). • Contaminated site register. • Contamination assessment undertaken for all 'at risk' areas with remediation undertaken as required. • Validation sampling undertaken to verify any residual contamination is below industry/government (NEPM) guidelines.	24 (L)	6.2.2.5

Table 10 (Cont'd)
Rehabilitation Risk Assessment

Risk	Risk Controls	Residual Risk Rating*	Where Addressed in this RMP
Decommissioning Phase of Rehabilitation (Cont'd)			
Failure to address contamination, resulting in residual contamination that impacts meeting mine closure criteria / impacts future beneficial land / surface water / ground water use.	• All spills reported and cleaned up. • Designated hydrocarbon and chemical storage areas, with hydrocarbons stored in bunded areas (compliant with AS1940). • Contaminated site register. • Contamination assessment undertaken for all 'at risk' areas with remediation undertaken as required. • Validation sampling undertaken to verify any residual contamination is below industry/government (NEPM) guidelines. • Heap Leach Pads have HDPE liner and containment structures. • Heap Leach Pads conceptual cover design advanced to detailed design. • Groundwater and surface water monitoring during operations and post-closure. • Consideration of passive water treatment options.	24 (L)	6.2.2.4, 6.2.2.5
Unauthorised access to open pit / voids, underground workings, infrastructure areas and general mining landforms.	• Establish safety and security bunds during operational life of mine where possible. • Underground workings and vent rises fitted with a concrete plug. • Safety bunds, fencing and signs established to limit public access. • Final landform assessment to ensure landforms are built to the approved final landform design and stable.	16 (H)	6.2.2.1
Landform Establishment Phase of Rehabilitation			
Final landform does not conform to the approved final landform. Lack of suitable materials for capping / encapsulation of adverse materials.	• All landforms planned and constructed as per approved project description, commitments, approvals and permits. • Detailed final landform design plans - design landform for free drainage. • Post closure 'as built' survey to confirm free draining landform i.e. built to design. • Re-profile slopes or install drainage to provide a stable free-draining landform i.e. meets construction design. • Where existing rehabilitation landforms show poor rehabilitation outcomes, develop and implement alternate designs.	21 (L)	6.2.3.2, 6.2.3.3, 6.2.3.4

Table 10 (Cont'd)
Rehabilitation Risk Assessment

Risk	Risk Controls	Residual Risk Rating*	Where Addressed in this RMP
Landform Establishment Phase of Rehabilitation (Cont'd)			
Geotechnical instability of Final Open Pit voids.	• Final void designed to be geotechnically stable during the operational life of the pit and post closure. • Any identified unstable pit walls addressed during operational life of mine. • Geotechnical monitoring and/or inspection. If required, suitably qualified geotechnical engineer engaged to assess the instability and provide a range of recommendations to mediate the instability. • Recommendations to be implemented in consultation with NSW Resource Regulator.	20 (M)	6.2.3.4
Heap Leach Pad landform design is unstable.	• Heap Leach Pads conceptual cover design advanced to detailed design including detailed drainage design. • Landform evolution modelling. • Geotechnical assessment of materials and slope. • Monitoring of cover performance (to cover all seasonal variations).	21 (L)	6.2.3.3
Heap Leach lining or capping is unsuccessful / inadequate.	• Groundwater monitoring, and purge where necessary. Groundwater purge to be diverted to pit. • Liner selection and installation QAQC. • Schedule visual inspections and required repairs. • Remedial Action Plan. • Modelling (such as SeepW modelling of groundwater flow) to better understand risks at closure and plan for remediation. • Heap Leach Pads conceptual cover design advanced to detailed design including detailed drainage design.	21 (L)	
Leachate from Heap Leach Pads uncontained/released into environment.	• Current drainage controls maintained until closure. • Detailed drainage design to direct runoff into the pit.	21 (L)	
Overall Heap Leach Design unsuitable to sustain final land use.	• Heap Leach Pads conceptual cover design advanced to detailed design including detailed drainage design. • Landform fenced to exclude grazing. • Landform evolution modelling. • Geotechnical assessment of materials and slope. • Monitoring of cover performance.	21 (L)	

Table 10 (Cont'd)
Rehabilitation Risk Assessment

Risk	Risk Controls	Residual Risk Rating*	Where Addressed in this RMP
Landform Establishment Phase of Rehabilitation (Cont'd)			
Generation and release of acid and metalliferous drainage.	• Geochemical assessment of waste rock during mining. • Identification and selective handling and storing of NAF/PAF material. • Refinement of Waste Rock Characterisation and Management Plan. • Established containment to prevent release of AMD leachate - maintained throughout operational and post closure phases. • Geochemical characterisation of existing Murrawombie Waste Rock Emplacements (kinetic and static) - targeting failed or underperforming rehabilitation areas. • Remediation of identified failures in rehabilitation of emplacements.	21 (L)	6.2.1.8, 6.2.3.3
Geotechnical instability of Murrawombie Waste Rock Emplacement leading to slope and landform failure.	• Original design as proposed in SEE's and approved. • Stability of rehabilitated Murrawombie Waste Rock Emplacements monitored and assessed during operational mining phases. • Original design as proposed in SEE's and approved • Any failed slopes repaired following assessment and re-design by qualified Geotechnical engineer in consultation with restoration ecologist. • Understand long term stability and risks to the rehabilitated landform through landform evolution modelling.	21 (L)	6.2.3.3
Murrawombie Waste Rock Emplacement leachate uncontained / released to environment.	• Sediment dams located to capture runoff from Murrawombie Waste Rock Emplacement. • Understand groundwater and surface water contamination risks for Murrawombie Waste Rock Emplacement by undertaking (for example) groundwater modelling. Implement mitigation / containment measures as required.	21 (L)	6.2.3.3

Table 10 (Cont'd)
Rehabilitation Risk Assessment

Risk	Risk Controls	Residual Risk Rating*	Where Addressed in this RMP
Landform Establishment Phase of Rehabilitation (Cont'd)			
Overall Murrawombie Waste Rock Emplacement landform design is unsuitable to sustain final land use.	• Stability of rehabilitated Murrawombie Waste Rock Emplacements monitored and assessed during operational mining phases. • Undertake further characterisation and selective use of closure materials in Murrawombie Waste Rock Emplacement design and construction. • Assess and develop corrective actions for existing rehabilitated Murrawombie Waste Rock Emplacement landforms to improve vegetation establishment and persistence (where required). • Any failed slopes repaired following assessment and re-design by qualified geotechnical engineer in consultation with restoration ecologist. • Landform evolution modelling to inform final landform establishment works that may be required. • Murrawombie Waste Rock Emplacement design updated following completion of above study / assessments and rehabilitation outcomes.	21 (L)	6.2.3.3
Soil erosion/pollution/sedimentation of waterways.	• Remediate eroding area through additional earthworks, soil works, revegetation or other stabilisation works. • Cross-ripping (parallel to the contour). • If current controls are unsuccessful, engage a suitably qualified professional in sediment and erosion control to prepare an assessment report and recommendations.	21 (L)	6.2.3.1
Growth Medium Development Phase of Rehabilitation			
Physical and structural properties of substrate.	• Materials inventory and characterisation (including topsoil and NAF waste rock) with a projection of future closure requirements.	21 (L)	6.2.4
Subsoil and topsoil deficit for rehabilitation activities.	• Undertake further characterisation and selective use of closure materials in Murrawombie Waste Rock Emplacement design and construction. • Incorporate specific materials into detailed rehabilitation designs.	21 (L)	6.2.4
Topsoil not applied as per plan.	• Topsoil applied as per mine closure planning requirements (nominally 100mm thick). • Engage a restoration ecologist to re-evaluate vegetation type for each domain (therefore topsoil requirements) and incorporate findings into mine closure plans. • Document amount of topsoil applied at the time of undertaking rehabilitation in 'as built' surveys and reports. • Develop and implement quality assurance program.	24 (L)	6.2.4

Table 10 (Cont'd)
Rehabilitation Risk Assessment

Risk	Risk Controls	Residual Risk Rating*	Where Addressed in this RMP
Growth Medium Development Phase of Rehabilitation (Cont'd)			
Topsoil unsuitable for vegetation establishment.	• Minimise handling of all soils so they retain their structural integrity. • Where possible direct placement of stripped topsoil to landform under rehabilitation. • For sub-optimal soils, investigate stockpile amelioration to improve rehabilitation outcomes.	24 (L)	6.2.4
Ecosystem and Land Use Establishment Phase of Rehabilitation			
Ant, insect, fauna predation of seed. Poor quality tube stock. Weed infestation during plant establishment. Inappropriate or inadequate rehabilitation techniques including fleet / machinery selection. Inappropriate revegetation species mix for target final land use. Poor timing of revegetation works (sub-optimal climatic conditions for rehabilitation.	• Soil tests prior to revegetation works. • Develop protocols for seed collection for other relevant species in consultation with a suitably qualified person. • Purchase additional seed as required. • Develop internal protocol for seed collection and storage.	21 (L)	6.2.5
Ecosystem and Land Use Development Phase of Rehabilitation			
Weather and climatic influences causing poor vegetation establishment resulting in failure to meet rehabilitation objectives / mine closure criteria.	• Selection of local native species adapted to local climate based on final land use vegetation type. • Undertake rehabilitation trials on native species establishment and persistence. • Develop and implement a revegetation strategy to guide revegetation works and improve the likelihood of success and reduce the likelihood of weed infestation or pest impacts. • Under prevailing drought conditions - defer rehabilitation activities. • Re-prepare (ripping, fertility/ameliorants etc.) and seeding of failed areas due to dry/drought conditions.	21 (L)	6.2.6.3

Table 10 (Cont'd)
Rehabilitation Risk Assessment

Risk	Risk Controls	Residual Risk Rating*	Where Addressed in this RMP
Ecosystem and Land Use Development Phase of Rehabilitation (Cont'd)			
Long term water quality issues (leachate, surface waters, etc).	• Rehabilitation Monitoring • Ongoing rehabilitation trials and accurate records. • Survey and testing of historical mining areas to identify contaminated areas or materials that need to be removed or treated prior to rehabilitation. • Designated hydrocarbon and chemical storage areas with hydrocarbons stored in bunded areas (compliant with AS1940). • All spills reported and cleaned up. • Groundwater and surface water monitoring conducted during mine life to monitor impact with any contamination issues managed during active mine life. • Stormwater containment structures ensure that stormwater, leachate etc is contained.	21 (L)	6.2.6.2
Damage to revegetation from pests, livestock, unauthorised machinery access, bushfire, vandalism, etc.	• Pest control and population monitoring. • Exclusion fencing. • Rehabilitation inspections. • Staff inductions and training. • TARPs for identifying and implementing pest species management programs.	18 (M)	6.2.6.1
Species established during revegetation operations do not meet mine closure objectives (diversity, structure, density, habitat).	• Suitable pasture species to be used for rehabilitation of lands with a final land use of 'intermittent agriculture' to be identified from monitoring of analogue sites. • Ongoing monitoring of revegetation success with corrective actions applied during operational phases. • Topsoil management and analysis. • Annual compliance monitoring. • If required, suitably qualified ecologist or revegetation expert engaged to assess reasons for failure of revegetation and recommend actions to ensure that the final vegetation community corresponds as closely as possible to analogue sites.	21 (L)	6.2.6.4
Erosion and failure of landform, drainage and water management storage structures	• Detailed post closure drainage and containment structures designed to withstand climate change scenarios. • All containment structures to include safe overflow facilities.	21 (L)	6.2.6.2
*Risk rating assumes successful implementation of risk controls.			