

# Appendix 2

## Rehabilitation Risk Control Checklist – Tritton Copper Operations

(Total No. of pages including blank pages = 19)

**Table A2**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Active Mining (Production)</b>	
<b>Soil and Materials Management</b>	
<p>Develop and maintain a materials and soils balance and database to include the following information:</p> <ul style="list-style-type: none"> <li>• volume of inert capping material, topsoil and subsoil stockpiled.</li> <li>• location, age and quality of stockpiles.</li> <li>• chronology of treatments (e.g. weed control, application of cover crop) undertaken on the stockpile.</li> <li>• volume of material, topsoil and subsoil required for application to current and future disturbance areas (e.g. capping material for tailings dams, reject emplacement areas).</li> <li>• an estimate of the volume of suitable alternative material required to be imported onto site to supplement potential material, topsoil and subsoil deficits.</li> <li>• record data on the location of the stockpiled material including date stripped, source area, indicative volume, pre-strip plant community type.</li> </ul> <p>Information is to be stored using site-based GIS.</p>	<p>A Biological Resource Stockpile Register and data base with the required details has been developed for all Mine Sites within the Tritton Copper Operations.</p>
<p>Locate soil stockpiles away from traffic areas and at an appropriate distance from watercourses.</p>	<p>Soil stockpiles are located away from operational areas to minimise risks associated with traffic and are a significant distance from the ephemeral watercourses.</p>
<p>Locate soil stockpiles on level or gently sloping areas to minimise the potential for erosion and soil loss.</p>	<p>Soil stockpiles are stored on generally level areas of the Mine Sites.</p>
<p>Limit soil stockpiles to less than two to three metres high and set out in windrows to maximise surface exposure and biological activity.</p>	<p>Soil stockpiles are no greater than two metres in height to ensure the viability of the stockpiled materials.</p>
<p>Install appropriate erosion, dust and sediment controls around soil stockpiles to reduce the potential for soil loss.</p>	<p>Ripping along the contours of soil stockpiles has been implemented to reduce risks of erosion. Passive revegetation of stockpile surfaces is permitted and further reduces erosion.</p>

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Active Mining (Production) (Cont'd)</b>	
<b>Soil and Materials Management (Cont'd)</b>	
Appropriately sign-post soil stockpiles to identify the area and minimise the potential for unauthorised use or disturbance.	Sign-posts are in place at areas used for soil stockpiling.
Monitor and control weed growth on soil stockpiles.	Weed control is included in the regular pest and disease monitoring and management of topsoil stockpiles.
<b>Materials Handling</b>	
<p>Develop specific strategies (e.g. selective handling, management and placement) for mine materials management to address potential geochemical and geotechnical constraints for rehabilitation as follows:</p> <ul style="list-style-type: none"> <li>• adopt an appropriate geological model (typically block model for metalliferous mines) to determine source of problematic material.</li> <li>• continued sampling and testing of overburden/interburden materials during operations to confirm the potential geochemical constraints across the deposit (e.g. spontaneous combustion, acid mine drainage, sodicity).</li> <li>• continued sampling to ensure materials are understood (e.g. particle size distribution) and to identify potential changes in material properties.</li> <li>• development of a procedure/strategy for selective handling and management of materials (e.g. potentially acid forming and non-acid forming, inert material).</li> <li>• continued sampling and testing of the beneficiation waste stream.</li> </ul>	<p>The <i>Waste Rock Characterisation and Management Plan 2023</i> identifies and sets out management measures for waste rock at the Mine Sites. Potentially Acid Forming (PAF) waste rock was identified using resource definition drilling.</p> <p>The Company undertakes regular geochemical monitoring and monthly sampling of waste rock and tailings. The sampling is undertaken to assess the total Sulfur, the Acid-Neutralising Capacity, the Net Acid Production Potential, and the Net Acid Generation.</p>
Seek specialist advice (as relevant) to develop effective mitigation strategies to minimise any potential interference to rehabilitation establishment or downstream pollution because of the exposure of adverse geochemical material.	Specialists have previously been engaged in the developing rehabilitation strategies and designing final landforms and will continue to be.
Develop and implement an operational and rehabilitation program for reject emplacement areas to ensure geochemical and geotechnical long-term stability (e.g. capping).	Conceptual capping designs have been developed for landforms such as the Tailings Storage Facility.
Develop and maintain a register of any contaminated sites, waste landfill sites and bioremediation areas and where they are located.	A Contaminated Site Register has been developed.

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Active Mining (Production) (Cont'd)</b>	
<b>Environmental Monitoring</b>	
Develop, maintain and document an environmental monitoring program that includes: <ul style="list-style-type: none"> <li>• surface and groundwater</li> <li>• flora</li> <li>• land contamination</li> <li>• historic heritage</li> </ul>	The following management plans are part of the environmental monitoring program and address the required factors. <ul style="list-style-type: none"> <li>• Flora and Fauna Management Plan 2023</li> <li>• Land Management Plan 2023</li> <li>• Cultural Heritage Management Plan 2023</li> <li>• Water Management Plan 2023</li> <li>• Waste Rock Characterisation and Management Plan 2023</li> <li>• Environmental Management Plan 2023</li> </ul>
<b>Management of potential heritage issues</b>	
Before demolition activities, undertake any necessary assessments to determine potential heritage approvals and or management measures that may be required (e.g. retention/restoration of building, archival recording).	An Unexpected Finds Protocol has been developed for the Mine Sites. Surface Disturbance Permits are sought after prior to any disturbance.
<b>Site Services</b>	
Electricity services to any infrastructure scheduled for demolition will be removed before the start of building demolition works.	Any electricity services will be disconnected and removed prior to demolition and decommissioning.
Telecommunications, water supply and other services will also be disconnected and removed where practical.	All site services will be disconnected and removed prior to demolition works where practical.
Where services are buried (e.g. pipelines, cables) and their retrieval may lead to further disturbance, the infrastructure may be left in situ (subject to any necessary approvals or agreements) if they don't pose constraints to the final land use. In this situation, the location of the services will be surveyed and marked on the site plan and a suitable caveat developed to provide that they are readily identifiable for future land holders.	Infrastructure underground such as pipelines, electrical cables, and communication lines will only be removed if the process will not result in further disturbance.

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Active Mining (Production) (Cont'd)</b>	
<b>Buildings and Fixed Plant</b>	
Before demolition, the infrastructure should be evaluated in terms of the presence of hazardous substances (e.g. asbestos, radiation devices and sources) and appropriate management strategies developed to protect employees, the public and minimise potential environmental harm. This includes the identification of the various waste streams and development of management strategies in accordance with the appropriate waste legislation.	Various engineering and structural assessments are planned for prior to demolition of buildings or infrastructure.
All buildings, fixed plant and other infrastructure that are not required as part of the final land use will be demolished and removed. Demolition will be carried out in accordance with the relevant Australian Standard.	Any infrastructure not required for the final land use will be subject to engineering assessments, and if no risks are present, they will be demolished in accordance with the relevant Australian Standard.
Remaining structures will be surveyed and recorded on a plan, with a suitable caveat developed to provide that they are readily identifiable for future land holders.	The plan will be developed during decommissioning.
<b>Buildings and Fixed Plant to be Retained</b>	
<p>Where infrastructure is approved to remain as part of the final land use, a structural assessment should be prepared by a suitably qualified person to:</p> <ul style="list-style-type: none"> <li>• determine the structural integrity of the structure.</li> <li>• identify the associated short and long-term risks to public safety and the environment from the infrastructure remaining in situ, which should identify potential modes of failure.</li> </ul> <p>Based on assessment, identify and implement controls to address any potential residual risks and modes of failure.</p>	Structural assessments will be prepared prior to decommissioning.
<b>Equipment Storage Areas, Hardstand Areas, Roadways, Sealed and Unsealed Roads and Car Parks</b>	
Any redundant plant or equipment will either be sold for reuse, recycled (e.g. scrap metal) or disposed of at an authorised landfill facility.	Noted.
Removal of ore spillages and hazardous materials.	All ore spillages and hazardous materials will be removed from site.
Storage areas and hardstands will be assessed for potential contamination (e.g. hydrocarbons, salt accumulation) and remediation undertaken as required.	All storage areas and hardstands will be assessed prior to rehabilitation, with specific focus on the designated hydrocarbon and chemical storage areas.

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Active Mining (Production) (Cont'd)</b>	
<b>Equipment Storage Areas, Hardstand Areas, Roadways, Sealed and Unsealed Roads and Car Parks (Cont'd)</b>	
<p>Waste material (e.g. bitumen, concrete, ore) generated as part of the removal of car parks and hardstands is to be managed in accordance with relevant guidelines under the Protection of the Environment Operations Act 1991. The relevant guidelines can be found on the Environment Protection Authority's website.</p> <p>Where authorised to dispose of on the site, waste material must be buried at depth or suitably capped to ensure that it does not compromise the final land use.</p>	<p>The POEO Act guidelines are followed on the Mine Sites for the management of any waste material and will continue to be during rehabilitation.</p>
<b>Management of Contaminated Material</b>	
<p>Excess ore material remaining at closure will be scraped up and either reprocessed or disposed of within the reject emplacement areas or in accordance with the appropriate waste legislation.</p>	<p>Any excess ore material at closure will be disposed of within the reject emplacement areas, or otherwise in accordance with waste legislation.</p>
<p>Any contaminated material should be managed in accordance with relevant guidelines under the Contaminated Land Management Act 1997.</p> <p>Records will need to be retained to validate that contamination has been remediated or managed effectively to meet the final land use rehabilitation objectives and rehabilitation completion criteria.</p>	<p>The Contaminated Site Register will continue to be used for records of contaminated material.</p>
<b>Hazardous Materials Management</b>	
<p>All remaining hydrocarbons such as diesel and lubricants and other hazardous materials will be either used or discarded by an authorised waste contractor.</p>	<p>All waste disposal is handled by an authorised waste collector and this will continue in rehabilitation.</p>
<p>Removal of any oily water treatment system, following the demolition of the workshop and associated facilities.</p>	<p>Any oily water on site will be handled and removed from site by an authorised professional.</p>
<p>Removal of sewage treatments systems and associated sewerage network.</p>	<p>The on-site system is pumped out by a licenced contractor on an as needs basis, and similarly, will be removed by a licenced contractor.</p>
<p>Storage tanks of hazardous materials will be removed and, depending on their condition, either sold or disposed at an authorised facility.</p>	<p>A Land Contamination and Hazard Assessment is to be undertaken prior to closure and rehabilitation. Hazardous materials are collected at the Mine Sites and disposed of off site by a licenced contractor.</p>

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Active Mining (Production) (Cont'd)</b>	
<b>Hazardous Materials Management (Cont'd)</b>	
Specific consideration should be given to managing asbestos materials, radiation devices, hydrocarbon as well as other contaminated substances/materials/soils in accordance with relevant guidelines that can be found on the Environment Protection Authority's website.	Management of asbestos materials and hydrocarbons is undertaken in accordance with relevant guidelines from the EPA and will continue to be.
<b>Underground Infrastructure</b>	
Removal of remote equipment (e.g. powerlines to remote shafts, ventilation infrastructure, PED lines, services boreholes, pipeline).	Remote equipment to service underground infrastructure will be removed where and when safe to do so.
Decommission and rehabilitate any remote access tracks that are not to be used as part of the final land use.	Any unused remote access tracks are to be progressively rehabilitated when possible.
Seal mine openings (e.g. shafts, adits, drifts) and boreholes to address risks associated with public safety and access, exposure of hazardous mine gases and interference with groundwater aquifers. The seals should be designed, supervised and verified by a suitably qualified expert in consideration of relevant guidelines.	An engineering report for design of final capping is planned to seal all access points to underground workings.
Prepare as-constructed drawings to verify that mine seals have been constructed in accordance with design.	A suitably certified engineer will prepare as-constructed drawings post sealing.
<b>At the Completion of Exploration Activity</b>	
Remove and lawfully dispose of all grid pegs, tags, sample bags, flagging tape, drill chips and other waste.	All materials used to facilitate exploration activities have been lawfully disposed from the Mine Sites.
Remove all drill cores.	All drill cores from exploration activities have been removed from site or lawfully disposed at the conclusion of exploration.
Survey, seal and rehabilitate all boreholes.	All boreholes will be surveyed, sealed and rehabilitated once they are no longer required for operations.
Remove and lawfully dispose of all plant and equipment (including surface pipelines) and imported fill material.	Any exploration equipment that is not being used for mining operations has been removed and lawfully disposed.

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Active Mining (Production) (Cont'd)</b>	
<b>At the Completion of Exploration Activity (Cont'd)</b>	
Removal of concrete and footings.	Any concrete and footings from exploration that are not being reused for mining operations have been removed from the Mine Sites.
Undertake a visual contamination assessment where potential pollution generation activities have occurred (e.g. hazardous substance storage, saline water storage) to identify potential signs of contamination. Where contamination is present, develop and implement a contamination remediation program to ensure that the rehabilitation objectives and rehabilitation completion criteria for the intended post-exploration land use are met.	Visual inspections are completed by site personnel as part of regular site operations. Contamination is assessed as part of this process.
<b>Phase: Landform Establishment</b>	
<b>Characterisation of Waste Materials (Geochemical and Geotechnical)</b>	
<p>Characterisation analysis is conducted and geochemical and physical properties of waste materials are understood. Consideration should be given to the following as relevant:</p> <ul style="list-style-type: none"> <li>• adopt an appropriate geological model (typically block model for metalliferous mines) to determine source of problematic material.</li> <li>• collect rehabilitation material erosion data for calibration of landform stability models.</li> <li>• establish an ongoing sampling program to identify potential changes in material properties.</li> <li>• develop a strategy / procedure/ management plan for selective handling and management of problematic materials (e.g. potential acid forming material, spontaneous combustion).</li> <li>• ensure material handling field practices are in accordance with relevant plan/procedure.</li> </ul>	<p>The <i>Waste Rock Characterisation and Management Plan 2023</i> manages all waste rock characterisation and monitoring until cessation of mining activities.</p> <p>Monthly samples of the surface and batters of WRE's are taken to ensure that the implemented waste rock characterisation and segregation protocols are effective.</p>
<b>Emplacement Areas</b>	
<p>The geotechnical stability of the emplacement areas during construction must be understood and a strategy implemented to ensure:</p> <ul style="list-style-type: none"> <li>• location of waste/reject emplacement areas are clearly defined.</li> <li>• emplacement dimensions (e.g. height – RL) are consistent with those approved by the development consent.</li> <li>• consideration is given to geotechnical stability during placement, including methods to promote compaction/consolidation during construction.</li> </ul>	<p>A geotechnical assessment of the final landform will be undertaken prior to relinquishment in order to confirm final stability of all terminal faces and domain slopes.</p> <p>Additional geotechnical assessments may be undertaken during the landform establishment phase to identify risk and/or opportunities.</p>



**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Landform Establishment (Cont'd)</b>	
<b>Emplacement Areas (Cont'd)</b>	
<ul style="list-style-type: none"> <li>consideration is given to material selection and treatment (e.g. handling low strength or dispersive/sodic soils).</li> <li>material handling field practices are in accordance with defined management practices – location, dump process, lift heights, compaction/consolidation treatment.</li> </ul>	
<p>A strategy should be developed to manage any geochemically unstable materials (e.g. acid mine drainage) with consideration of the following:</p> <ul style="list-style-type: none"> <li>emplacement construction design should utilise modelling to optimise design considering the need to limit gas transport (air ingress) and resulting acidity production (if relevant).</li> <li>placement methods should reduce the likelihood of depositional layering or high permeability zone 'rubble zone' (e.g. base-up via 'paddock dump' rather than 'end tipping').</li> <li>treatment during placement to reduce gas transport/oxygen supply (engineered layers – vertical gas management, encapsulation, oxygen consuming materials, sulphide passivation).</li> <li>monitoring to determine emplacement strategy effectiveness, including a trigger action response plan (TARP).</li> <li>ensuring material handling field practices are in accordance with defined management practices – placement method, lift height, treatment.</li> </ul>	<p>Risks and management measures related to acid mine drainage are incorporated in the <i>Waste Rock Characterisation and Management Plan 2023</i>.</p> <p>Further targeted testing of materials will be completed prior to rehabilitation to ensure as far as practicable that PAF contamination is below criteria levels.</p>
<p>An emplacement capping strategy should be developed and implemented to ensure the performance requirements of the cap are understood. Consideration should be given to the following:</p> <ul style="list-style-type: none"> <li>the emplacement capping function is identified (e.g. 'rainfall shedding', 'store and release') and the design takes into account the final land use - including vegetation requirements or exclusion.</li> <li>the capping design is defined (e.g. materials and thickness) based on site specific geochemical and physical constraints in order to sustain the final land use outcomes.</li> <li>engineering requirements are understood.</li> <li>performance requirements of the cap to control gas (oxygen flux) and seepage are identified and measured.</li> <li>use of water balance modelling to determine likely seepage post closure.</li> <li>ensuring capping construction is consistent with design (material type, thickness).</li> </ul>	<p>The Company is in the process of developing a detailed capping design for the TSFs.</p> <p>A suitably qualified person(s) will be engaged to prepare site-specific detailed design reports for capping of Tailings Storage Facilities.</p>

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Landform Establishment (Cont'd)</b>	
<b>Emplacement Areas (Cont'd)</b>	
<p>The emplacement capping strategy should ensure that the capping material type, source and quantity has been identified and assessed as suitable for the final land use (e.g. does not become a source of contamination). Methods to quarantine adequate quantities of capping material should be specified and implemented.</p>	<p>Noted.</p>
<b>Landform Design/Shape</b>	
<p>The final landform design should build on the minimum requirements of the development consent and, wherever practicable, take into account the following:</p> <ul style="list-style-type: none"> <li>• a landform that is commensurate with surrounding natural landform and, where appropriate, incorporates geomorphic design principles.</li> <li>• appropriate use of landform design stability principles of reduced slope length and surface water management structures.</li> <li>• use of erosion models to optimise the landform design and to show where high-risk erosion areas are likely to occur (and to nominate how risk controls will be incorporated into the final landform design to appropriately treat these risks).</li> </ul>	<p>The Final Landform of the four Mine Sites are designed to be consistent with the surrounding natural landform.</p> <p>The Company plans to engage a suitably qualified person(s) to undertake Landform Evolution Modelling prior to closure which will incorporate stability and erosion.</p>
<ul style="list-style-type: none"> <li>• use of erosion modelling and/or hydrological projections to demonstrate the long-term competency of the capping of problematic material emplacement (e.g. acid mine drainage waste rock emplacements).</li> <li>• use of appropriate parameter model inputs – preferably field parameter data collected from the materials to be used in rehabilitation.</li> <li>• potential for settlement and how this will be accounted for in the design (especially differential settlement).</li> <li>• long-term stability of voids/pit walls and steep slopes, including determination of engineering treatments required for walls/ steep slopes.</li> </ul>	<p>As above.</p>

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Landform Establishment (Cont'd)</b>	
<b>Landform Design/Shape (Cont'd)</b>	
<p>Develop specific strategies (e.g. selective handling and placement) for mine materials management to address potential geochemical constraints for rehabilitation (e.g. acid rock drainage, saline and sodic materials) based on sampling and testing of overburden/interburden materials used to construct the final landform.</p>	<p>The <i>Waste Rock Characterisation and Management Plan 2023</i> discusses strategies for mine materials management.</p> <p>Sampling and testing of materials used to construct the final landform will continue until rehabilitation has been completed.</p>
<p>Develop specific strategies (e.g. selective handling and placement) to address any potential geotechnical issues associated with the final landform, including seepage pathways into groundwater and surface waters, for example saline seepage. Based on risk, these strategies may need to be developed in consideration of geotechnical studies.</p>	<p>Geotechnical assessments have previously been undertaken and the geotechnical characteristics of the Mine Sites are well understood by the Company.</p> <p>Design and construction of the final landform will take into consideration the potential for geotechnical issues.</p>
<b>Final Voids</b>	
<p>Where a final void is approved to remain as part of the final landform (e.g. by the development consent), the design and construction should be developed in accordance with the minimum requirements of the development consent, associated environmental assessments/environmental impact statements and in consideration of the following:</p> <ul style="list-style-type: none"> <li>• a constraints and opportunities analysis of final void options (including backfilling or partial backfilling) to identify and implement the most feasible and environmentally sustainable option (where this option is not inconsistent with the development consent) to minimise the sterilisation of land post-mining.</li> </ul>	<p>Where final voids are to be retained, they will be done so in accordance with the minimum requirements.</p> <p>A constraints and opportunities analysis will be completed prior to rehabilitation.</p>

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Landform Establishment (Cont'd)</b>	
<b>Final Voids (Cont'd)</b>	
<ul style="list-style-type: none"> <li>a geotechnical assessment should be undertaken to determine the likely long-term stability risks associated with the proposed final landform, including any remaining highwalls or low walls (if any). Based on the outcome of this assessment, suitable measures (e.g. bunding and highwall fences) are to be implemented to minimise potential risks to public safety as well as support the final land use(s).</li> <li>updated surface and groundwater assessments should be undertaken in relation to the likely final water level in the void and post mining water take (groundwater inflows into the void and surface water capture). This should include an assessment of the potential for fill and spill, along with measures required to be implemented to minimise associated impacts to the environment and downstream water users.</li> </ul>	<p>A geotechnical assessment for final void stability will be completed by a suitably certified person. The assessment will include a focus on the stability of the final void walls.</p> <p>The final void will be secured by a safety bund, fenced, and access restricted through a lockable gate.</p> <p>The Post-Closure Water Management Strategy will be developed prior to rehabilitation and will include groundwater modelling focused on the post-closure groundwater environment at each mine within the Tritton Copper Operations. The strategy will include identification of likely equilibrium water levels within the final void.</p>
<p>The final void must address any relevant approval requirements of regulatory authorities and demonstrate the satisfaction of licensing requirements under the relevant legislation (e.g. <i>Water Management Act 2000</i>).</p> <p>This should include whether sufficient licence shares are available in the water source(s) to account for the water inflow into the final void(s).</p>	<p>The final void will be designed and rehabilitated in accordance with any and all relevant approval requirements and legislation.</p>
<p>The final stabilisation and revegetation strategy associated with the final void should be designed and implemented based on the outcomes of the above assessments.</p>	<p>The final stabilisation and revegetation strategy will not be designed until the above outcomes have been implemented.</p>
<b>Water Management Infrastructure</b>	
<p>Depending on the final land use, issues that should be addressed as part of the post-mining water management system may include:</p> <ul style="list-style-type: none"> <li>removal of excess sediment (e.g. saline sediment) from the surface dams for future use by the subsequent land owner or alternatively filling or removing the dams if they are no longer required.</li> <li>the installation of appropriate sediment and erosion control measures.</li> <li>water within final voids is appropriately licensed in perpetuity (e.g. under the <i>Water Management Act 2000</i>).</li> </ul>	<p>Post-mining water will be managed through the <i>Water Management Plan 2023</i>.</p>

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Landform Establishment (Cont'd)</b>	
<b>Water Management Infrastructure (Cont'd)</b>	
Sediment material extracted from surface dams should be analysed to determine the potential for contamination and, if present, must be appropriately managed as identified above (refer to <i>Management of carbonaceous/contaminated material</i> above).	The <i>Erosion and Sediment Control Plan</i> has been developed to manage sediment from the Mine Sites.
<b>As-Constructed Drawings</b>	
Prepare 'as-constructed' drawings to verify that drainage and landform have been completed in accordance with design before 'growth medium development' phase.	As-constructed drawings will be drafted by a suitably qualified person upon completion.
<b>Phase: Growth Medium Development</b>	
<b>Before Commencing Rehabilitation (substrate preparation)</b>	
Develop rehabilitation methodologies in consideration of site-specific constraints (e.g. topsoil and subsoil availability and quality, presence of contamination) required to achieve the approved, or if not yet approved, proposed rehabilitation objectives and rehabilitation completion criteria.	Rehabilitation methodologies have and will continue to be developed in consideration of material characterisations and soil surveys
Where revegetation is required, analyse representative samples to characterise the nature of the substrate (e.g. sodicity, acid-generating potential, particle size distribution, nutrient levels for planting) and determine any potential limitations to rehabilitation and sustainable plant growth. Immediately prior to application, collect and analyse samples of topsoil stockpiles to characterise material to determine any potential impacts to vegetation (e.g. sodicity, limited microbial activity, nutrients, organic matter).	Material characterisation and surveys have been undertaken in the past and will be conducted where necessary in order to gain an understanding of the substrates. Further analysis will be undertaken prior to use of topsoil.
Use the results to determine specific amelioration techniques (e.g. addition of gypsum, lime, organic matter, fertiliser) that will be used to overcome potential limitations to landform stability, vegetation establishment and growth. Apply ameliorants (e.g. gypsum or lime) and organic material (e.g. mulch) based on the outcomes of the substrate characterisation analysis (as appropriate to address limitations in the revegetation substrate). Before revegetation activities, analyse the prepared substrate to determine whether amelioration measures have been successful.	Small amounts of the Mine Sites that have been revegetated have used gypsum as an ameliorant Future use of ameliorants will be determined following the future material characterisation assessments.

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Growth Medium Development (Cont'd)</b>	
<b>Before Commencing Rehabilitation (substrate preparation) (Cont'd)</b>	
Implement suitable erosion control measures (e.g. catch drains, sediments dams, silt fences, mulches, cover crops) to minimise soil loss from areas undergoing rehabilitation.	Erosion control measures are managed under the <i>Erosion and Sediment Control Plan 2015</i> . Periodic reviews of management plans throughout rehabilitation phases will address any further needs for erosion control measures as they are needed.  A variety of temporary erosion and sediment control measures are proposed to be implemented if necessary, including sediment fencing, fast germinating ground stabiliser species, and use of surface binding agents.
Preferentially schedule and undertake revegetation activities in or just before suitable seasonal conditions.	Meteorological monitoring will continue to be undertaken, and rehabilitation activities will be planned accordingly.  In the case of unfavourable weather events, rehabilitation plans will be postponed.
Where permissible, should revegetation be delayed due to unsuitable seasonal conditions, undertake temporary stabilisation measures (e.g. sterile cover crops, erosion and sediment controls) to avoid erosion and further land degradation.	If rehabilitation plans are postponed due to unsuitable seasonal conditions, additional temporary erosion and sediment controls will be implemented.
Return topsoil and subsoil layers in sequential order, assuming suitability of material for the final land use.	Where the material is suitable, rehabilitation
<b>During Rehabilitation (general methodologies)</b>	
Use appropriate earthmoving equipment to avoid compacting the rehabilitation substrate.	The appropriate earthmoving equipment will be used. If the Company does not have access to appropriate equipment, specialist contractors will be engaged.

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Growth Medium Development (Cont'd)</b>	
<b>During Rehabilitation (general methodologies) (Cont'd)</b>	
Restore soil structure by scarifying or ripping (if soil compaction or erosion has occurred) in parallel with the contour. Apply soil ameliorants (where required) such as fertiliser to the substrate before the start of revegetation activities.	Soil will be ripped in parallel with contour to restore the structure. Ameliorants such as fertiliser and/or organic matter will be applied if necessary.
Implement erosion and sediment controls in accordance with Managing Urban Stormwater: Soils and Construction Volume 2E, Mines and Quarries (DECC 2008b).	The <i>Erosion and Sediment Control Plan 2015</i> has been prepared in accordance with <i>Managing Urban Stormwater: Soils and Construction Volume 2E, Mines and Quarries (DECC 2008b)</i> .
Where direct seeding is planned, rip final surfaces parallel with the contour before the application of seed to provide for an adequate seed bed.	Surfaces will be ripped prior to direct seeding.
Where access tracks are to be removed (e.g. not to be left as part of the final land use as defined by rehabilitation objectives and rehabilitation completion criteria), remove imported fill material (where used) and reprofile the disturbance area to the pre-existing landform.	Upon removal of access tracks, fill material will be removed and the disturbance area rehabilitated.
Topsoil shortages are to be supplemented with suitable alternatives such as biosolids, organic growth medium or another substitute, if required. However, the risk of introducing hazards to the establishment of the preferred plant community type (e.g. non-native species, elevated nutrient levels through the application of soil ameliorants) should be evaluated.	If growth medium needs to be outsourced, the company will purchase material from credible sources. Material characterisation will be undertaken to minimise risk of introducing hazards.
Identify key habitat requirements for key fauna species.	Ecological surveys and assessments have been completed for the Mine Sites, so there is a pre-existing understanding of nearby fauna and their habitat.
Use structures such as tree hollows, logs and other woody debris, rock material to augment the target habitat value of native rehabilitation (if appropriate, in consideration of bushfire risks).	Where practicable, tree hollows, logs, and other woody and rocky debris will be placed around the Mine Sites for fauna habitat.
<b>Phase: Ecosystem and Land Use Establishment</b>	
<b>During Rehabilitation (revegetation – native ecosystem)</b>	
Native revegetation activities in rehabilitation areas should preferentially use local provenance seed for direct seeding or tube stock propagation.	An indicative and non-exhaustive list of target revegetation species has been put together by DnA Environmental. The species have been identified within analogue sites that are representative of the target vegetation.

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Ecosystem and Land Use Establishment (Cont'd)</b>	
<b>During Rehabilitation (revegetation – native ecosystem) (Cont'd)</b>	
Use of seed orchards or onsite nurseries should be considered to ensure an appropriate stock is maintained for rehabilitation works.	Local provenance seed will be collected and supplied to a local and qualified nursery provider at least six to twelve months prior to planting to allow adequate propagation time.
Consider techniques such as brush-matting where disturbed areas are situated directly adjacent to mature native ecosystems/area of clearing associated with mining that provide a good source of local seed, to stabilise the site while natural recruitment occurs.	Brush-matting is likely to be used as a revegetation method in suitable areas.
Where adverse seasonal conditions (e.g. drought) or other factors affect the availability of local provenance seed and supplementary non-local provenance seed is required, seed stock should be purchased from reputable suppliers with quality control processes including seed viability testing. (It is good practice to record the name of the supplier and batch of seed being applied. Recording such details may assist in prevention/management of misidentified seeds).	If seeds/plants are not available locally, the Company will purchase seed from reputable suppliers.
Undertake treatment of seed in terms to address issues such as seed dormancy and insect predation. Timing of treatment is to be aligned to timing of application with a focus on reducing the storage time of treated seed.	Seeds will be treated prior to sowing.
Confirm the availability of seed and plant material and amend the seed mix or schedule of revegetation based on material supply.	A material inventory will be prepared prior to rehabilitation. A contingency plan for if the material inventory projection forecasts a deficit will also be prepared.
Spread seed as soon as possible following ripping/scarifying. If seeding is delayed following ripping/scarifying, undertake an assessment to determine whether further re-ripping/tilling is required before applying seed to ensure sufficient surface roughness (e.g. to break up any crusting that may have resulted from rainfall events).	Seed will be spread as soon as possible following ripping of the growth medium is complete. Assessment of the growth medium will be completed if there is a delay to ensure suitability.
Develop a bushfire management plan (having regard to relevant ecological considerations and species fire tolerance) in consultation with NSW Rural Fire Service. Bushfire considerations should be factored into rehabilitation design (e.g. access tracks).	A bushfire management plan will be prepared.
Revegetation mix to capture species of all strata aligned to the plant community type. (If foundation species are being used, ensure that they do not compromise the attainment of the targeted plant community types).	The indicative mix of target species that are to be planted across the Mine Sites are in line with analogue sites representative of the target vegetation types.



**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Ecosystem and Land Use Establishment (Cont'd)</b>	
<b>During Rehabilitation (revegetation – native ecosystem) (Cont'd)</b>	
Use appropriate earthmoving equipment to avoid compacting the rehabilitation substrate.	A specialist contractor with suitable equipment will be engaged
Weed/pathogen control on equipment for sensitive sites to prevent the spread of pathogens.	Weed management will be implemented according to the <i>Weed Management Plan 2023</i> .
Rehabilitation can include direct seeding and/or tube stock planting. Seed germination and seeding/seedling rate records are to be retained so that future rates can be assessed to ensure that target densities are achieved.	Seed germination and seeding rates will be assessed and recorded in the Seed Balance and Procurement Strategy that will be developed at a later date.
Maximise the number of target species (groundcover, mid-story and canopy) within the first round of revegetation activities to facilitate species richness. If the target plant community type requires a staged seeding approach to achieve the species mix, underrepresented species may be prioritised in subsequent revegetation rounds.	There will be a wide variety of target species planted in the first round of revegetation in order to ensure species richness and diversity.
Stock control fencing should be erected where required to protect ecological rehabilitation areas.	A small-scale field trial on the western embankment of the Tailings Storage Facility is currently being conducted to assess the effectiveness of excluding grazing on rehabilitation outcomes. The exclusion fencing was erected in 2020 and rehabilitation monitoring was conducted in 2020 in conjunction with site wide rehabilitation monitoring.
<b>Rehabilitation Establishment Inspections</b>	
Conduct an initial establishment inspection no later than three months following the completion of each rehabilitation campaign to determine whether performance issues have occurred or are emerging, which have the potential to delay revegetation establishment.	Initial establishment inspection will occur at the completion of all rehabilitation campaigns.
Conduct regular site inspections (e.g. at least quarterly) to assess soil conditions and erosion, drainage and sediment control structures, runoff water quality, revegetation germination rates, plant health and weed infestation, until vegetation has become well established and the site can be considered stable.	Regular visual inspections of the general landform and vegetation cover will be conducted on at least a quarterly basis. Biannual weed inspections and annual pest species inspections will be conducted and included in the Annual Rehabilitation Report.

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Ecosystem and Land Use Establishment (Cont'd)</b>	
<b>Rehabilitation Establishment Inspections (Cont'd)</b>	
Where possible, use drones or LiDAR to conduct additional inspections and analysis of developing rehabilitation.	LiDAR surveys will potentially be used to survey and inspect rehabilitation works.
Record outcomes of inspections and implement any required intervention/adaptive management actions as soon as practicable after a monitoring program indicates that rehabilitation performance is unsatisfactory as part of the rehabilitation management and maintenance program.	All inspection outcomes will be recorded. The Trigger Action Response Plan (TARP) has been included in the RMP which supports the implementation of any intervention/adaptive management actions in the case of unsatisfactory rehabilitation.
<b>Rehabilitation Monitoring Programs</b>	
Implement long-term rehabilitation monitoring program and evaluate trajectory of rehabilitation against achieving rehabilitation objectives and rehabilitation completion criteria.	A Rehabilitation Monitoring Program has been developed with the aim of meeting the requirements for the final land use, and monitoring progress towards achieving the relevant rehabilitation objectives.
Broadly, the scope of the ecosystem rehabilitation monitoring program will be required to include indicators that measure site condition, vegetation composition and vegetation structure and ecosystem function. The range of indices should directly relate to the rehabilitation objectives and rehabilitation completion criteria identified for the specific ecological outcome.	Permanent vegetation monitoring quadrants will be established, and each quadrant will provide information on the species mix used, sowing/planting densities, and soil amelioration.
While the program should be designed to be comparable between monitoring periods, the program will also need to be flexible to enable incorporating evolving best practice in monitoring techniques.	The monitoring program has been designed to allow annual comparison, but is flexible enough that it can be adapted if necessary.
Include the monitoring and control of changes to surface and groundwater quality over time.	Water quality testing and monitoring will continue post-closure.
The scope of the monitoring program should usually include photographic monitoring from fixed points.	Photographic and visual inspections have fixed locations for monitoring.

**Table A2 (Cont'd)**  
**Rehabilitation Risk Control Checklist**

Rehabilitation Phase / Activity	Comment / Completion Date(s)
<b>Phase: Ecosystem and Land Use Establishment (Cont'd)</b>	
<b>Rehabilitation Management and Maintenance Program</b>	
<p>Develop and implement a rehabilitation management and maintenance program based on the needs identified in the rehabilitation monitoring program. Examples of what this program may include are as follows:</p> <ul style="list-style-type: none"> <li>• weed and feral animal control.</li> <li>• erosion and drainage control works.</li> <li>• monitoring and control of changes to surface and groundwater quality over time.</li> <li>• reseedling/planting of failed rehabilitation areas (e.g. through lack of germination, high plant mortality rate).</li> <li>• repairing fence lines, access tracks and other general related land management activities.</li> <li>• regular site inspections to assess rehabilitation performance.</li> </ul> <p>The objective of this program is to facilitate rehabilitation progressing towards achieving the rehabilitation objectives and rehabilitation completion criteria in accordance with an approved progressive rehabilitation schedule (forward program).</p>	<p>Following results from the rehabilitation monitoring program, a rehabilitation management and maintenance program will be developed.</p>
<b>Phase: Ecosystem and Land Use Development (Management of Rehabilitated Lands)</b>	
<b>During Rehabilitation (revegetation – native ecosystem)</b>	
<p>Continue rehabilitation management and maintenance program (refer to Ecosystem Establishment Phase) until rehabilitation can be demonstrated to have achieved the approved rehabilitation objectives, rehabilitation completion criteria and (for large mines) the final landform and rehabilitation plan.</p>	<p>The management and maintenance program will continue until the rehabilitation objectives and completion criteria are achieved.</p>
<p>Continue rehabilitation monitoring programs (refer to Ecosystem Establishment Phase) until rehabilitation can be demonstrated to have achieved the approved rehabilitation objectives, rehabilitation completion criteria and (for large mines) the final landform and rehabilitation plan.</p>	<p>The management and maintenance program will continue until the rehabilitation objectives and completion criteria are achieved.</p>
<p>Actively manage rehabilitated lands to achieve the approved final land use(s).</p>	<p>Monitoring and management of rehabilitated lands will continue once completed, where required.</p>