6. Rehabilitation Implementation

6.1 Life of Mine Rehabilitation Schedule

Figure 8 depicts the current extent of disturbance at the Mine Site (i.e. the mining domains). Plans 3 and 4 present the indicative rehabilitation schedule for the Mine Site by depicting the areas of focus for rehabilitation research and studies at the Mine during each 5-yearly increment between the commencement of this Plan and mine closure. Whilst rehabilitation of the Waste Rock Emplacement at the Mine Site has commenced, rehabilitation monitoring reports undertaken in September 2020 identified targets for improvement of rehabilitation outcomes.

It is noted that successful rehabilitation of the Mine is dependent on the outcomes of rehabilitation research and trials identified in Section 9. Further studies are necessary to determine the causes and appropriate corrective action. As such, the life of mine rehabilitation schedule is indicative only.

Based on current production rates and the extent of known mineralisation, it is anticipated that mining operations at the Murrawombie Mine will be completed during 2029.

Prior to the cessation of mining operations, rehabilitation will only be undertaken in areas which are no longer required for operational purposes. **Figure 8** identifies the current mining domains at the Mine Site, effectively delineating the extent of areas required for ongoing mining operations and ancillary activities (e.g. waste rock and growth medium stockpiling). Due to the inter-related nature of the Company's operations in the region, some components used for the Mine may be retained for use at other operations, consistent with the development consent(s) for those Projects. These requirements would be nominated closer to closure or in planning for the other operations.

The rehabilitation schedule for the Mine, as presented on **Plan 3** and **Plan 4**, is summarised as follows.

- 2024 to 2028 (**Plan 3**)
 - The Mine Site remains operational to support open cut mining.
 - Closure of the Heap Leach Pads continues using waste rock soured from the cutback.
 - Prior to completion of mining activities, undertake rehabilitation research and studies including detailed Heap Leach Pad cover design, drainage design for closure, modelling of final void behaviour and landform evolution modelling.
 - Landform establishment and growth medium development of the Murrawombie Waste Rock Emplacement, following completion of landform evolution modelling.



- 2029 to 2034 (**Plan 4**)
 - Whole of site decommissioning, landform establishment, growth medium development and ecosystem and land use establishment and developments phases of rehabilitation to occur across all mining domains.
- 2035 to 2040 (**Plan 5**)
 - It is anticipated that the rehabilitation of all mining domains and the successful establishment of all final land use domains (up to the Ecosystem and Land Use Establishment phase, as a minimum) will be completed by 2034 with a further seven years of monitoring and maintenance (to 2039).

6.2 **Phases of Rehabilitation and General Methodologies**

6.2.1 Active Mining Phase

The following subsections provide a summary of the risks and opportunities for rehabilitation associated with the active mining phase across all mining domains within the Mine Site. Each subsection also summarises the status and actions that are in progress to support rehabilitation of the Mine. These management measures will be applied during the active mining phase as progressive rehabilitation or site management in readiness for future rehabilitation activities.

6.2.1.1 Soils and Materials

Existing Environment

Existing Assessments - Soils

Soils in the Girilambone-Hermidale region vary with specific location in depth and characteristics. Soils within the Girilambone region have been identified as consisting of sands, red-brown sandy gravels and colluvial soil. Silty clays and sandy loams predominate on the hill flanks and plains. Emerson Aggregate Tests, completed in 2013, indicated that soils within the Mine Site are moderately dispersive, although some samples were non-dispersive.

Existing Assessments – Capping Material

Capping requirements for the Heap Leach Pads are based on materials assessments undertaken for the *Murrawombie HLF Cover System and Landform Design* report prepared by O'Kane Consultants Pty Limited (O'Kane) (O'Kane, 2018). The *Murrawombie HLF Cover System and Landform Design* (O'Kane, 2018) report includes a review of the available cover materials within the Murrawombie Copper Mine Site and development of a set of material properties for the topsoil and non-acid-forming (NAF) waste rock. The results of that assessment provide substantial information pertaining to the physical characterisation, erosion and stability parameters of the material. In summary, the in-situ materials are identified as being suitable for a moisture store-and-release cover system.







REHABILITATION MANAGEMENT PLAN Report No. 117/62





TRITTON RESOURCES PTY LTD ML1280, MPL294, MPL295 – Murrawombie Copper Mine





REHABILITATION MANAGEMENT PLAN Report No. 117/62