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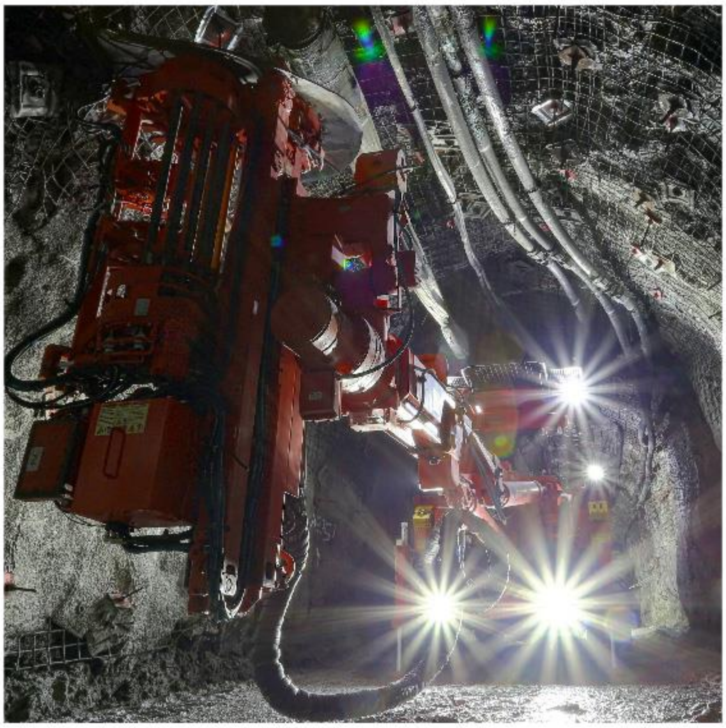


Mineral Projects Pty Ltd.

Dianne Copper Mine - Waste Rock Management Plan

November 2024

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DEFINITIONS

Acronym/Initialism	Definition
AMD	Acid and metalliferous drainage
NAF	Non-Acid Forming
PAF	Potentially-Acid Forming
WRMP	Waste Rock Management Plan
PRCP	Progressive Rehabilitation Closure Plan
EA	Environmental Authority
BCM	Bank Cubic Metre
LCM	Loose Cubic Metre
CCM	Compacted Cubic Metre
t	Tonne
PMLU	Post-mining land use
ROM	Run-of-Mine pad

1 INTRODUCTION

1.1 Project Description

The Dianne Copper Mine is located in Cape York Peninsula, Queensland, approximately 165 kilometres northwest of Cairns and 100 km southwest of Cooktown (Figure 1). The Dianne Copper Mine comprises Mining Leases ML 2810, ML 2811, ML 2831, ML 2832, ML 2833, and ML 2834. The mine has been under care and maintenance since copper mining activities ceased in 1982. The proponents for the Dianne Copper Mine are Mineral Projects Pty Ltd and Tableland Resources Pty Ltd.

The Dianne Copper Mine consists of the following infrastructure, of which key features are shown in Figure 1.

- A small open cut pit;
- Historic underground portal (backfilled in 1983);
- Waste rock stockpile;
- Settling dam, drainage channels, spillway, and other water management infrastructure;
- Run of mine laydown areas;
- Main access road and internal mine roads;
- Old mine camp building concrete footings and associated remnant infrastructure;
- Rehabilitation areas.

The mine was developed for copper in the 1970s and operations ceased in 1982 when the mine was put under care and maintenance due to the global fall of copper prices. At this time, all processing infrastructure, administration, and accommodation were removed from site and rehabilitation of some areas of the site was carried out.

Figure 1: Site location and existing layout

The proponents plan to re-establish Dianne Copper Mine. The mine will be a traditional truck and shovel hard rock mine and processing facility. It will consist of the following elements, which are shown in Figure 2:

- Reprocessing and disposing of Legacy Ore from previous mining operations;
- Mining Overburden, Waste Rock and Ore from the pit;
- Crushing and beneficiating Ore;
- Acid leaching of copper metal in gravity heaps;
- Solvent extraction of the leach liquor for purification and concentration of copper and subsequent recycling of acid to leaching;
- Electrowinning of high purity copper cathodes from the concentrated SX solution;
- Ancillary operations such as maintenance and camp facilities;

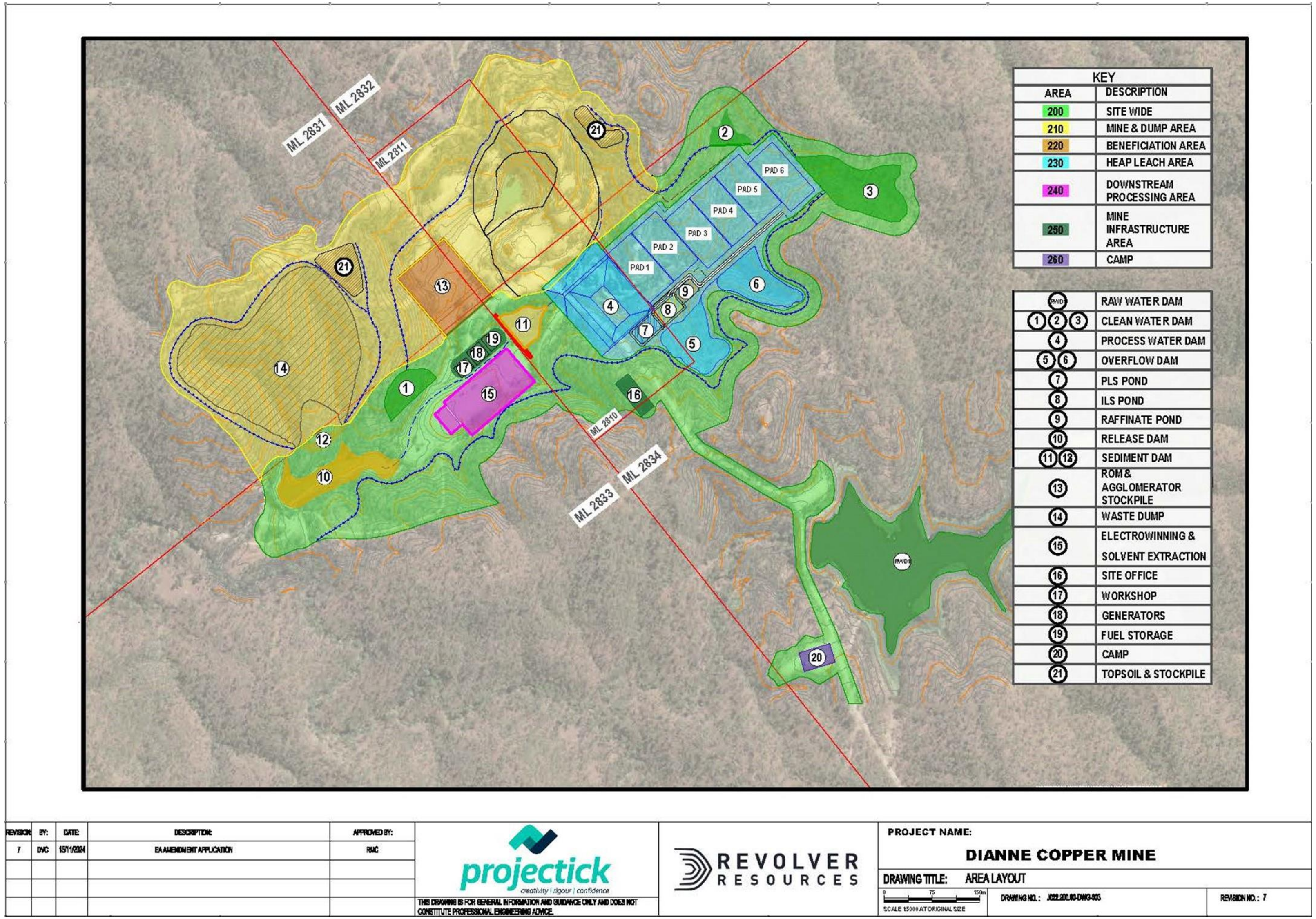

Figure 2: Planned site layout

1.2 Purpose & Scope

This Waste Rock Management Plan (WRMP) has been prepared in accordance with the Environmental Authority (EA) EPML00881213. The purpose of this WRMP is to outline the strategies and process for managing the existing waste rock stockpile and planned waste rock storage areas to minimise potential adverse impacts on the environment and human health. Objectives include:

1. Environmental Protection: Preventing contamination of soil, groundwater, and surface water through effective waste rock management practices;
2. Compliance: Ensuring all waste rock management activities comply with relevant regulations and industry standards;
3. Monitoring and Reporting: Establishing protocols for regular monitoring and reporting to track the effectiveness of waste rock management practices and identify areas for improvement.

The scope of this WRMP encompasses all activities related to the handling, storage, and rehabilitation of the existing and planned waste rock stockpiles. This includes:

A. Waste Rock Characterisation
   - Identifying the types of waste rock, including their chemical and physical properties;
   - Assessing potential environmental risks associated with different types of waste rock, such as acid and metalliferous drainage (AMD) potential.

B. Waste Rock Storage
   - Designing waste rock stockpiles to ensure stability and minimise environmental impact, including the use of liners, covers, and drainage systems.

C. Environmental Monitoring
   - Establishing a comprehensive monitoring program to regularly assess the environmental impact of waste rock storage.

D. Rehabilitation and Closure
   - Outlining plans for the progressive rehabilitation of the waste rock stockpile, including recontouring, topsoil replacement, and revegetation.

E. Reporting and Documentation
   - Defining the requirements for regular reporting to regulatory authorities and stakeholders on waste rock management activities and environmental performance.

By addressing these elements, the WRMP aims to ensure that waste rock management at the Dianne Copper Mine is conducted in an environmentally responsible, safe, and compliant manner.

This Waste Rock Management Plan was developed based on the information provided to MEC at the time the plan was created. The existing data sets require further information for the WRMP and input reports to fully address all considerations at a consistent standard. Revision of this document is essential when the noted data is obtained to ensure validity and accuracy of this document and the corresponding PRCP document.

2 STATUTORY REQUIREMENTS

This WRMP has been developed in alignment with the requirements of the Dianne Copper Mine EA (EPML00881213) and the Dianne Copper Mine Progressive Rehabilitation and Closure Plan (Dianne Mining Corporation Pty Ltd, 2024).

2.1 Environmental Authority

Schedule D – Land and Rehabilitation of the Dianne Copper Mine EA (EPML00881213) outlines the requirements for the WRMP as follows:

"Waste Rock Management Plan

D6 - A Waste Rock Management Plan must be developed and certified by an appropriately qualified person and implemented by 1 February 2014. The Waste Rock Management Plan must be reviewed annually to assess the adequacy of the plan, ensure actual and potential environmental impacts are managed, and identify any necessary amendments to the plan to ensure compliance with this environmental authority. The Waste Rock Management Plan must include, but not necessarily be limited to, the following:

a) A detailed design of any waste rock dump(s) to be constructed; and

b) A detailed site plan showing the location of existing and planned waste rock dumps, including drainage features; and

c) An Action Plan for the management of the existing waste rock dump, as identified in Schedule A — Table 1 (Project Infrastructure Layout — Mine Area). The Action Plan must include, but not necessarily be limited to, the following:

i) timeframes and critical dates;

ii) details of relocation, capping or other control strategies that remove, minimise or mitigate the current environmental risk from mine drainage, including contingency plans;

iii) characterisation of the waste rock to allow conclusive determination of the chemistry of runoff and seepage generated;

iv) a materials balance and disposal plan demonstrating how waste rock will be managed to minimise the generation of acid, neutral and/or saline mine drainage;

v) a sampling program to verify the management of potentially acid forming rock and acid forming rock and waste rock that has a potential to generate neutral mine drainage;

D7 - The actions referred to in condition D6 - c), must be completed within the timeframes stated in the action plan, unless written agreement has been obtained from the administering authority."

3 EXISTING ENVIRONMENT

Section 3 of this report outlining the existing environment, except for Section 3.4 and 3.5, summarises sections of the Dianne Copper Mine Progressive Rehabilitation and Closure Plan (Dianne Mining Corporation Pty Ltd, 2022).

3.1 Local Drainage Setting

The mining leases are located on undulating topography and on the upper stretches of a ridgeline, with a number of small gullies that constitute ephemeral drainage lines that connect to Gum Creek which connects to the Palmer River and flows into the Mitchell River. All drainage lines within the mining leases are minor in nature and unnamed.

The region has historically been mined for gold, including alluvial gold mining from the 1850's, with cattle grazing the current main land use. An active alluvial gold mining lease is currently being operated approximately 5km upstream of the mining leases on Gum Creek.

The existing waste rock stockpile has been reprofiled and compacted to prevent ponding and reduce water infiltration, including the installation of contour drains to ensure run off flows into the Settling Dam. A drainage channel has been installed north of the waste rock stockpile to divert water around the area and directly into the Settling Dam. An additional bund has been installed upstream of the waste rock stockpile, to divert all overland flow (clean water) around disturbance areas.

3.2 Groundwater

Due to the site's location being in the upper reaches of the catchment and higher elevation, there are no known groundwater resources within the mining leases. There are no known or mapped groundwater resources within the vicinity of the mining leases, including the absence of any historic agricultural bores, and current operations do not involve mining activities or extraction of groundwater. Other than the constructed raw water dams, which are ephemeral creek impoundments fed by surface flow, there is no permanent water on site that is likely to be fed by groundwater. In addition, Queensland Government mapping (including WetlandMaps and QueenslandGlobe) do not identify any groundwater resources or linkages within the mining leases.

3.3 Climate

The site sits within the Queensland dry tropics. The climate in this region is dominated by high rainfall during the wet season (November to April) and low rainfall during the dry season (May to October). The region is characterised by hot weather throughout the year, and as such evaporation usually exceeds total rainfall.

3.4 Geology

The description of the project geology has been based on the Dianne Copper Mineral Resource report (AMC Consultants, 2022).

The Dianne Copper project is located withing the Silurian-Devonian Hodgkinson Province which consists of an elongate, deformed sedimentary terrain of flysch character bordering the North Queensland coast.

The copper mineralisation is assumed to be a Besshi-type volcanogenic massive sulphide (VMS) deposit. There is some evidence that the deposit might alternatively be a late-stage epigenetic system with mineralisation focussed along a shear zone.

The main sulphide lens has a northwest strike (330^o), dips east at 70^o and pitches steeply towards the south. As a result of substantial weathering, the deposit has a pronounced supergene copper-enriched halo. A fine stockwork and disseminated secondary copper mineralisation occurs as malachite-azurite-chalcocite minerals.

The main zone of mineralisation sits at a lithology contact between interbedded black shale and greywacke on the eastern side of the mineralisation to a massive greywacke unit on the western side. This main mineralisation zone has a strike of 330^o (magnetic). A well-developed kaolinitic alteration zone occurs in the hanging wall of the mineralisation and extends for approximately 10 metres above the mineralisation. The primary mineralisation is a steeply dipping sheet of copper and zinc rich pyritic massive sulphide. The supergene enriched copper is a chalcocite replacement of chalcopyrite. The primary zone has significant copper in chalcopyrite and zinc in sphalerite. Secondary copper mineralogy includes malachite, azurite, tenorite, and lesser cuprite, chalcocite (variety djurleite of the chalcocite group), and native copper.

Above the massive sulphide zone, the sediments are strongly kaolinized Within this kaolinized zone, a reasonably coherent body of lesser grade copper mineralisation occurs as part of the eastern chalcocite zone. Copper mineralisation occurs as chalcocite blebs and clots within the soft white sediment.

The Green Hill supergene oxide mineralisation is generally lower grade, dispersed, fracture line, body of copper mineralisation in greywacke. A relatively high-grade footwall zone (and Green Hill west) is noted above which occurs broad low to medium-grade copper mineralisation.

3.5 Soils

Due to historic disturbance and clearing there is limited topsoil available on site. Soil tests carried out in 2024 (C&R Consulting, 2024) show that the undisturbed soils have an A horizon consisting of a clayey loam overlying a finer texture, light to medium-clay B horizon. In most of these soils are coarse, angular- to sub-angular metamorphic pebble fragments are abundant. These soils would generally be classed as dermosols, which are soils with structured B2 horizons and lacking a strong texture-contrast between the A and B horizons. Natural soils were moderate to very slightly slightly acidic, while subsoils were moderately acidic to moderately alkaline. These soils are generally within nutrient and salinity ranges conducive to successful plant growth of endemic species. The majority of the soils sampled are not overly susceptible to erosion based on the physical and chemical properties observed (C&R, 2024).

One sample site was located in the previous ROM area and was highly disturbed by historic mining works and entirely altered. This site was classed as an Anthrosol. Samples from this site showed a pH of 4.1 which is considered highly acidic. Electrical conductivity tests showed a result of µS/cm which is regarded as extreme. Such levels are typically too saline for the majority of plants. Because of the disturbed profile at this site, samples were sometimes treated as outliers in the chemical analysis in the soil assessment (C&R, 2024).

3.6 Existing Land Use and Ecology

The existing land use within the mining leases and surrounding areas is cattle grazing, with a number of other mining tenements overlaying the grazing properties.

The area remains subject to formal exploration and unauthorised exploration and mining activities primarily prospecting alluvial gold.

The region has been heavily cleared and disturbed historically for gold mining including both alluvial and instream mining as well as cattle grazing. Remaining vegetation generally consists of non-remanent Eucalyptus Ironbark open woodland which is subject to frequent uncontrolled fire.

4 WASTE ROCK MANAGEMENT

The site is currently under care and maintenance with new mining activities being proposed under an EA amendment. Current disturbance at the site is minimal, totalling 14.4 ha across all mining leases. Rehabilitation related activities to date have focused on water management, in particular the construction and maintenance of infrastructure to isolate the waste rock stockpile from overland flow and to manage mine affected water.

Planned mining activities are expected to generate waste rock from two primary activities, the mining of overburden and waste rock, and the heap leaching of oxide and secondary sulphide ore. Any material mined from the pit that is below the ore cutoff grade of 0.25% copper will be classified as waste rock. This material will be used and disposed of in one of the following ways:

- Construction materials;
- Stored in an Out of Pit Waste Rock Dump;
- Temporarily stored until mining ceases and disposed of as backfill in the mined out pit void.

To achieve best use of raw materials and minimise the area required for the Waste Dump, the project design maximises the use of overburden as bulk fill for roads and pads and for the production of road base. Bulk fill is required in the processing area, for dams, drains, and heap leach pad construction. Construction works will require road base for roads, hardstands and laydown areas. This will also be sourced from overburden and crushed onsite.

Waste rock used for construction materials will only include Non-Acid Forming material. Until detailed waste rock characterisation has been completed only material with probable low AMD potential will be used for construction materials. This will be sourced from mining of overburden and unmineralised waste rock.

Any material identified as Oxide or Secondary Sulphide material above the ore cutoff grade of 0.25% copper will be placed on the ROM where it will be crushed, agglomerated and then carted and stacked on the heap leach Pads, where the ore will be heap leached. Retention time of all stockpiled ore materials prior to crushing will be kept to a minimum. Heap leaching will be carried out on an HDPE-lined pad (HL Pad) area with dimensions of 300 m in length and 100 m in width. The HL Pad lining will be made with an impermeable 1.5 mm HDPE material, covered by a 300 mm cushion layer (crushed & screened material from Existing Ore Stockpiles) to protect the liner from mechanical damage. A total of six heaps, each with dimensions of 100 m length by 50 m width, will be filled at 1 pad per month by truck dumping of ore, followed by stacking and levelling with an excavator to a height of 5 m.

Leaching of copper ore is achieved by distributing a dilute sulphuric acid onto the heaps. Solution distribution to the heaps will be by drip emitters or drippers at 1 m spacings on the heap surface and arranged in 50 m cells to ensure even pressure and flow distribution. After leaching the ore until it has reached its targeted recovery of copper, the ore on the heaps will be deemed to be spent ore. The spent ore will be irrigated with water to displace leach solution from the heap and the spent ore will then be carted to either the Out of Pit Waste Rock Dump or a Temporary Waste Rock Stockpile where it will be stored until it can be disposed of in its permanent location of either the Out of Pit Waste Rock Dump or as backfill in the mined out pit void.

A relatively small volume of Primary Sulphide Ore will be mined and carted off the site to a suitable copper processing facility. Removal of the Primary Sulphide Ore, which is unsuitable for the leaching process, is required to access the Oxide and Secondary Sulphide Ores, which can be treated and processed on the site

Table 1 outlines the sources and destinations of all waste rock. The table shows how material will be stored during operations as well as at closure. This shows that the overburden, waste rock and spent ore from the pit make up 98% of the mass of material that will be mined. The copper recovered on-site will be removed and sold, as will the primary sulphide ores as they will be processed off-site. Of the remaining material, 41% will be used in various pre-production construction activities, 49% will be used to backfill the pit void, and 10% will remain to be stored in the waste dump.

Table 1: Material Balance

Item	Description	Quantity	Units	Tonnage
STARTING CONDITION - MATERIAL TO BE MINED				
1	**Low grade ore being removed from the legacy ore stockpiles for reprocessing**			
1a	Existing Stockpile Ore	1,303	LCM	2,606
1b	Existing Stockpile Overburden	49,762	LCM	99,524
2	**Overburden from the pit**	967,650	BCM	2,602,007
3	**Ore from the pit**	593,483	BCM	1,506,882
	Total Material Mined		**t**	**4,211,019**
MATERIAL INVENTORY DURING OPERATIONS				
4	**Copper Recovered On Site**	14,086	t	14,086
5	**Primary Sulphide Ores**	21,341	t	21,341
6	**Overburden used in construction:**			
6a	Heap Leach Pads and Dams	1,101,563	CCM	2,313,283
6b	Building Pad for SX/EW Plant	60,000	CCM	126,000
6c	General Site Earthworks (ROM)	50,000	CCM	105,000
6d	Roadworks	50,000	CCM	112,500
7	**Temporary Stockpiles**			
7a	Waste Dump Design Volume	548,500	LCM	1,104,131
7b	Reshaping drainage east of the pit.	110,000	LCM	221,430
7c	Spent Ore on Leach Pads	96,000	LCM	193,248
	Total Material Inventory during Operations		**t**	**4,211,019**
MATERIAL INVENTORY AT MINE CLOSURE				
4	**Copper Recovered On Site**	14,086	**t**	14,086
5	**Primary Sulphide Ores**	21,341	**t**	21,341
6	**Overburden used in construction:**			
6a	Heap Leach Pads and Dams	650,645	CCM	1,366,355
6b	Building Pad for SX/EW Plant	60,000	CCM	126,000
6c	General Site Earthworks (ROM)	50,000	CCM	105,000
6d	Roadworks	50,000	CCM	112,500
8	**Final Stockpiles**			
8a	In Pit Dump	1,024,906	LCM	2,063,136
8b	Out of Pit Waste Dump Final Volume	200,000	LCM	402,600
	Total Material Inventory at Mine Closure			**4,211,019**

4.1 Waste Rock Stockpile Design

4.1.1 Existing Waste Rock Stockpile

There is one existing waste rock stockpile on site, totalling 0.98 ha. This stockpile and associated water management features are shown in Figure 3. There is a small amount of amount of material stockpiled that is above the copper cut-off grade and will be processed in the planned heap leach facilities.

The existing waste rock stockpile has been reprofiled and compacted to prevent ponding and reduce water infiltration, including the installation of contour drains to ensure run off flows into the Settling Dam. A drainage channel has been installed north of the waste rock stockpile to divert water around the area and directly into the Settling Dam. An additional bund has been installed upstream of the waste rock stockpile, to divert all overland flow (clean water) around disturbance areas. This waste rock stockpile will be removed prior to constructing the processing facilities. Material from this stockpile that meets requirements for construction materials will be used for construction. All other material will be stored in other waste rock storage facilities or processed if found to contain sufficient copper grades.

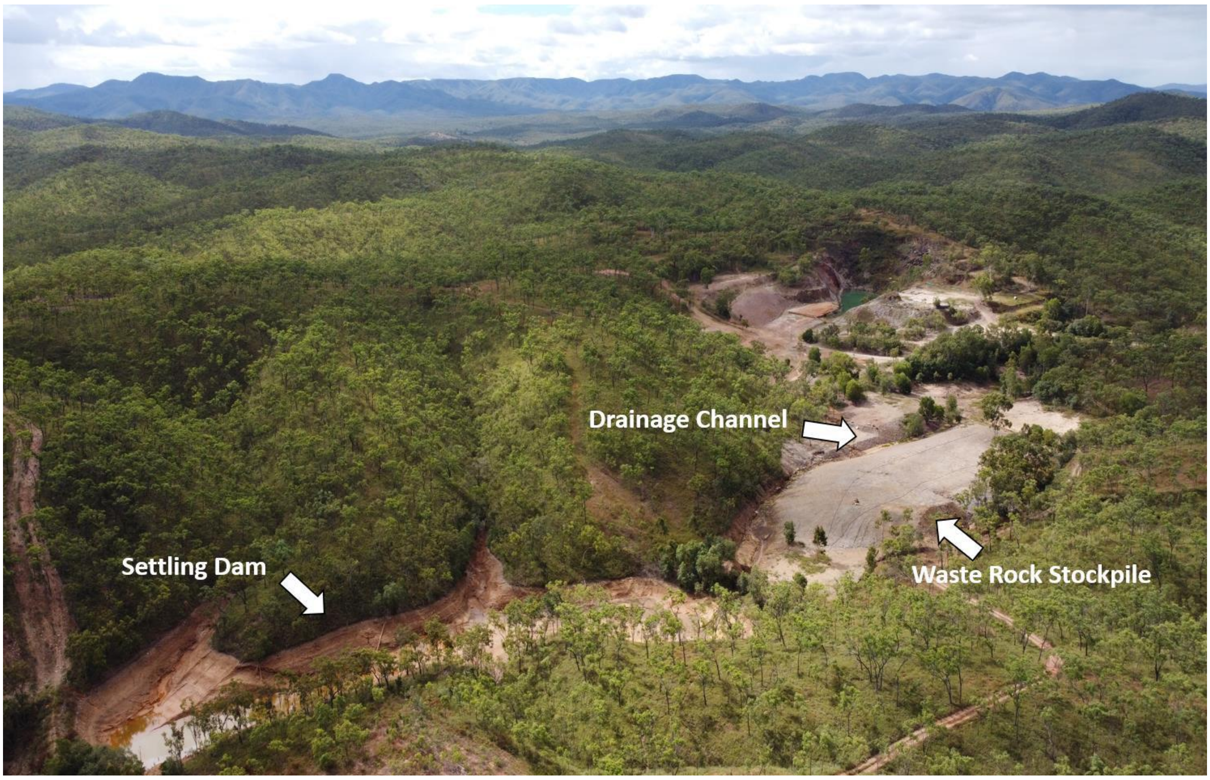

Figure 3: Waste Rock Stockpile (May 2021)

4.1.2 Out of Pit Waste Dump

There is one Out of Pit Waste Dump planned for the Dianne Copper Mine. A final landform design has been completed to determine the ultimate capacity, footprint, and integration into the site water management strategy. This waste dump is shown in Figure 4. The required capacity of the dump is 0.4 Mt after reshaping to final landform, which is 36% of its designed capacity. At the time of the development of this plan the designs for the waste dump prior to reshaping have not been completed. Prior to construction, designs will be completed to include:

- Operational lift heights, batter angles, and berms to allow for safe construction of the waste dump and removal of additional stockpiled waste material;
- Geotechnical analysis to support the operational waste dump design;
- Additional detail on placement of any identified PAF material.

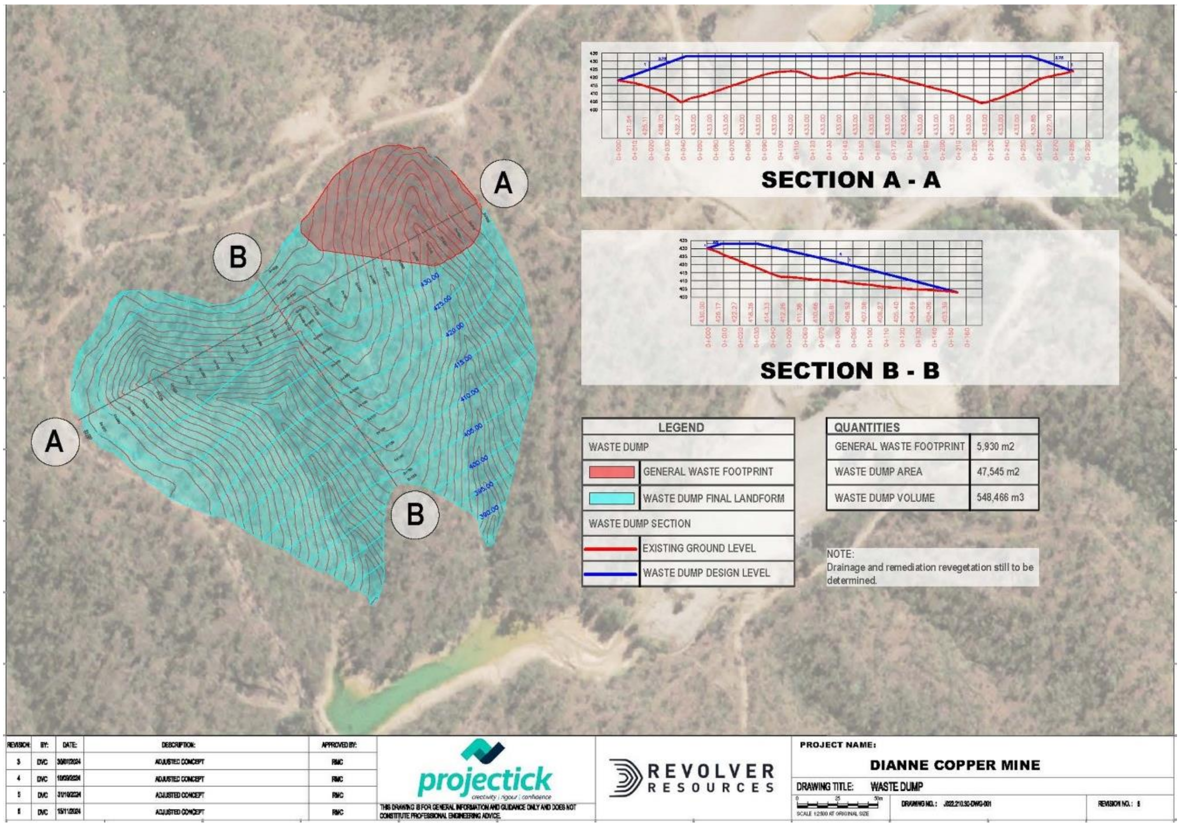

Figure 4: Designed final landform for the waste dump

4.1.3 Backfill of Final Pit Void

To minimise the impact on the final landform, the pit will be backfilled to the water line and graded to prevent water ponding. This will be the largest final placement of waste at approximately 2.06 Mt. Due to the configuration of the pit, this backfilling will only begin once mining of the pit has been completed. During mining operations, some of this material will be stored temporarily in the out of pit waste dump. Pit backfill material will also come from material used in reshaping the drainage east of the pit and from the construction materials for the heap leach pads and dams. Figure 5 shows the mined out pit with the final backfilled surface.

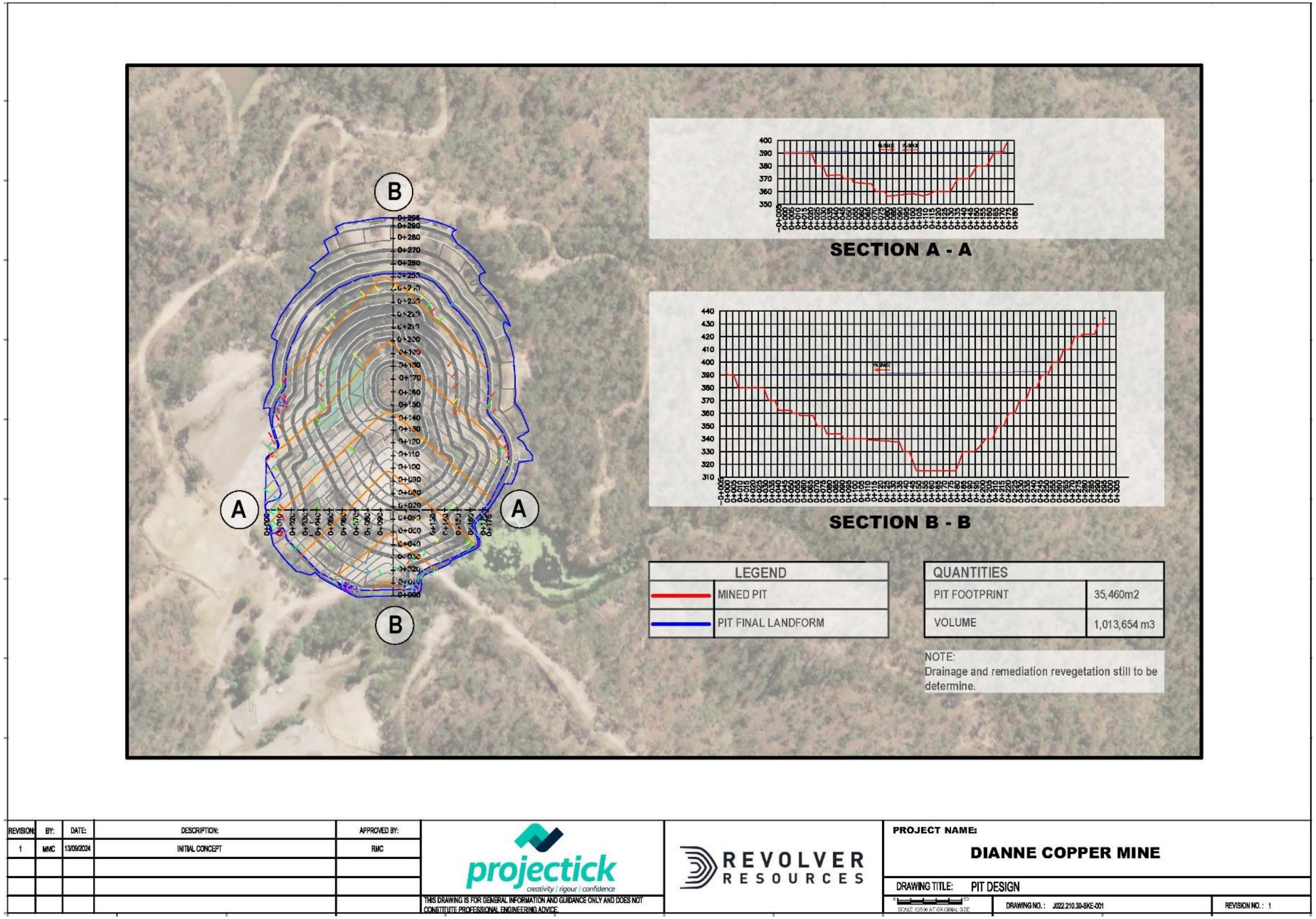

Figure 5: Pit void design with backfilled surface

5 WASTE ROCK ACTION PLAN

The waste rock action plan outlines the measures to be taken to effectively manage all waste rock, including the existing waste rock stockpile, that will be mined. It includes a summary of risks and mitigation plans associated with the waste rock, waste rock characterisation, waste rock dump construction, and rehabilitation of the waste rock facilities.

5.1 Risk Assessment

In accordance with Section 126C(1)(f) of the EP Act, a risk assessment was completed which assessed the risks of a stable PMLU not being achieved, and how these risks will be managed or minimised. Risks relating to the waste rock identified during the assessment include:

- Water quality of discharges from site during post mining phase is not suitable for receiving environment (both surface water and groundwater);
- Inadequate volume of topsoil or capping material for rehabilitation;
- Poor geochemistry of exposed surfaces of overburden and spent ore stockpiles and management dams, including acid sulphate soils and acid forming materials;
- Erosion causing failure of rehabilitation areas (i.e. not a stable landform);
- Final Landform is not stable, with instability or failure of reshaped landforms;

The progressive rehabilitation plan, water management plan, and monitoring programs have been put in place to adequately manage these risks. These measures are fully detailed in Table 7 of the PRCP, and include, but are not limited to:

- Progressive rehabilitation;
- Regular water quality testing;
- Topsoil and subsoil capping materials will be won from other areas of site, or use of NAF waste rock material as required for rehabilitation;
- New disturbance areas will strip topsoil and other capping materials where possible;
- Identify areas of poor geochemistry on site including exposed surfaces of waste rock through a comprehensive waste rock characterisation program;
- Mine water management system to redirect water around waste rock stockpiles;
- Encapsulation of PAF material in waste rock dumps at the base of the final landform or at depth in the backfilled pit void;
- Reshaped landforms will be shaped in such a way to ensure a stable landform long term including reduction of slopes, benching of areas, and adequate water management structure installation;
- Site investigation to evaluate the strength of the foundation of the proposed waste rock dump will be completed prior to construction of the waste rock dump;
- Complete additional erosion modelling to guide final landform design;

5.2 Waste Rock Characterisation

Waste rock materials that will be mined and require characterisation include:

- Existing Waste Rock Stockpile;
- Mined Overburden and Waste Rock;
- Spent Ore.

5.2.1 Existing Waste Rock Stockpile

A waste characterisation sampling program was completed in 2020 on the existing waste rock stockpile. A total of 46 auger drill holes were sampled across the waste rock stockpile to a maximum depth of 13 m, which provided spatially representative information for the entire stockpile. The results indicated that the waste rock material is intermittently layered with low grade waste containing presence of mineralisation consistent with the halo of mineralisation surrounding the historically mined ore body (Dianne Mining Corporation Pty Ltd, 2022). From drill data, a block model including sulphur content was created. For areas of the waste rock dump outside of available drill data, the average sulphur content of drill data intersecting the existing waste rock dump was applied. This model estimated that less than 2% of the material contained in this waste rock stockpile contained higher than 0.5% sulphur (MEC, 2022). However, the existing waste rock stockpile possibly contains a range of highly pyritic and potentially acid forming material, and further test work is required to determine the quantities and attributes of any PAF contained in this stockpile.

5.2.2 Mined Overburden and Waste Rock

Mined waste rock and overburden will consist of a range of rock types. This includes unmineralised waste rock units as well as material from the mineralised zones that is below the copper cut-off grades. Several of these rock types are likely to be highly pyritic within the main steeply dipping sheet of copper and zinc rich pyritic massive sulphide unit and possible also within any associated proximal and distal sulphur alteration zones where pyrite has remobilised. Highly pyritic materials are likely to be PAF and a significant potential source of AMD in the waste dump and areas where they are temporarily stored at surface, as well as within the open pit void upon emplacement. The quantity and geochemical characteristics of such PAF materials and more geochemically benign materials that will be mined will be determined through a waste rock characterisation test work program.

The current mine schedule estimates that 96% of the waste rock that will be mined from the pit is from the unmineralised zone. It is assumed that this unmineralised waste rock will provide sufficient NAF material for use in construction and to encapsulate the PAF material in the waste rock storage areas. The waste rock characterisation program is planned to validate and improve the confidence in this assumption. In addition to copper, the current block model includes estimates for sulphur and a range of other metals. The current mine schedule includes the estimate of sulphur in the waste rock. This model estimates that 2.7% of the waste rock will have a sulphur content above 0.2%. The geological understanding of elements contained in the deposit other than copper is at an early stage of understanding and the waste rock characterisation test work program will improve this understanding prior to mining.

5.2.3 Spent Ore

More than 95% of the ore planned to be leached is Oxide ore, while the remaining 5% is Secondary Sulphide ore. After leaching, spent ore may still contain significant loadings of sulphuric acid and readily leachable metals and metalloids as well as sulphides that may have not oxidised completely over the course of residence time at the heap leach pad. These materials represent a significant potential source of AMD while stored at the waste dump as well as within the open pit void upon emplacement. Column leach tests of ore materials are currently underway which will provide material representative of spent ore for additional test work.

5.2.4 Waste Rock Characterisation Program

A comprehensive program for characterising all waste rock materials will be required to effectively manage the waste rock. A staged geochemistry sampling and test work program will be completed to estimate the types and quantities of rock with AMD potential. For each material type the program will:

- Develop project specific set of criteria that can be used to readily identify Potentially-Acid Forming (PAF) and Non-Acid Forming (NAF) materials;
- Indicate the proportions of PAF and NAF materials to be mined;
- Develop protocol for regular short interval sampling and geochemical test work to identify PAF materials for the future drilling programs;
- Develop a protocol for incorporating the data into the block model and producing a life of mine schedule of PAF and NAF materials to be mined;

This program will include sampling and testing of the existing waste rock stockpiles, waste rock and overburden to be mined from the pit, and samples of spent ore material to provide an indication of the acid-forming and leaching characteristics of mined materials which will include:

- Paste pH and EC;
- Total sulphur;
- Standard ANC;
- Single addition NAG;
- Chromium reducible sulphur;
- Sequential NAG;
- Acid-buffering characteristic curve (ABCC);
- Carbon forms;
- XRD mineralogy;
- Single stage water extracts and peroxide extracts.

A selection of samples most representative of key PAF and NAF mine materials will be used for kinetic column test work. This will provide an indication of longer-term leaching behaviour under oxidising conditions. Results from the kinetic column test work will also be used to validate and adjust the AMD classification criteria and define geochemical source terms for any water quality modelling.

For the spent ore, in addition to these tests, multi-stage water extractions will be completed to provide an indication of the degree to which the materials will require rinsing and/or lime treatment to attenuate loadings of acidity and metals and metalloids prior to emplacement within the waste rock storage facilities.

5.3 Waste Rock Dump Construction

Following completion of the waste rock characterisation program detailed construction plans for all waste rock facilities will be completed. These plans will likely include:

- Segregation of AMD rock types and tracking of these materials to their storage areas;
- Where practicable, maintaining material with the highest AMD potential at the core of the waste rock dump;
- Paddock dumping material with higher AMD potential and traffic compacting it in thin lifts where practicable;
- Limiting lift heights to approximately 5 m to minimise the risk of coarse rock segregation providing pathways for convective oxygen and subsequent generation of high loads of AMD;
- Operate multiple tip heads when possible to allow sufficient time for waste dump development works;
- When backfilling the pit void, place material with the highest AMD potential at depth;
- Plan use of geochemically benign, well graded material for use in construction of the cover system for infiltration control.

5.4 Final Landform and Cover Design

A final landform and cover design report for the waste rock dump was completed (MEC 2024). The proposed final landform design for the Waste Rock Dump was provided by Mineral Projects Pty Ltd. Geotechnical stability analysis of the proposed final landform completed by MEC recommended a slope of 14 degrees be utilised for the highest slopes facing the southeast for the final landform closure, which would provide a structure that meets the long term acceptance criteria. The final landform design was updated to meet these criteria. A geotechnical site investigation will be completed prior to constructing the waste rock to allow for improved confidence in the stability analysis. The Waste Rock Dump design will be updated following the site investigation.

Prior to reshaping the Waste Rock Dump to the final landform, any excess waste rock that has been stockpiled inside the Waste Rock Dump footprint will be removed and placed in the pit void as backfill. Any remaining PAF material inside the Waste Rock Dump will be placed in the interior of the landform so that it can be covered with suitable NAF material.

The proposed final landform of the waste rock dump will:

- Provide a geotechnically stable final landform;
- Provide for the final land use of native ecosystem.

To minimise the impact on the final landform, the pit will be backfilled to the water line and graded to prevent water ponding.

Suitable erosion modelling will be completed prior to constructing any waste rock storage facilities. The results of this erosion modelling will be incorporated into the final landform and cover design to ensure the long term stability of all final waste storage landforms.

Guidelines published by the Queensland Department of Environment and Science on general rehabilitation practices require placement of a cover system on any waste landform where waste has the potential for AMD, neutral mine drainage, or saline mine drainage. In accordance with these guidelines, the design of cover systems must take into account the following:

- Geochemical and physical characteristics of the waste material being covered;
- Site conditions;
- Availability of suitable cover material in terms of both quality and quantity;
- Design criteria for discharge (i.e. to protect environmental values);
- Suitable vegetation.

A conceptual cover design assessment was completed by Environmental Geochemistry International (MEC 2024). The intent of this conceptual cover system options assessment is to complete the following key tasks in a manner that provides a preliminary basis for the above-mentioned requirements:

- Selection of appropriate cover type(s) for the climate regime prevalent at Dianne Copper Mine considering the site-specific climate classification, rainfall and evaporation;
- Conceptual development of three cover system layering options using reference material properties.
- 1D numerical modelling of the conceptual cover systems to assess performance;
- Preparation of a technical memorandum to document methods and key findings of the conceptual cover system and the preferred option.

Considering the general objectives of the cover system and uncertainty of available materials, the focus of the preliminary modelling has been on three variations of a store and release cover over waste rock:

- Cover #1: Store and Release;

- Cover #2: Store and Release with Vegetation;
- Cover #3: Store and Release with Infiltration Barrier Layer.

The conceptual layering of these variations at closure is presented in Figure 6.

Figure 6: Closure conceptual layering for modelled store and release cover variations

The cover modelling shows that placement of a 2 m store-and-release cover using typical silty sand type material is predicted to reduce infiltration into the waste rock to 109.1 mm/yr (approximately 15 % of annual rainfall) as long as there is good vegetation established in the growth horizon (Cover #2). Much greater security can be achieved with a compacted infiltration barrier layer at the base of the store and release layer, which would help control high intensity and high duration rainfall events, and also account for the current uncertainty around re-vegetation effectiveness (Cover #3).

Prior to the construction of the waste dump, and to confirm the suitability of construction material in exhibiting the characteristics expected of the store and release layer, the following will be completed:

Availability and suitability of materials properties:

- Infiltration testing will be performed using a Guelph permeameter or equivalent;
- Test pits will be used to examine soil structure below the surface and permeability testing by falling head tests in the test pits;
- Geotechnical testing including of cover system material and waste rock will be completed, including:
  - Particle size distribution;
  - Specific gravity;
  - Dry density;
  - Moisture content;
  - Modified Proctor;
  - Atterberg Limits;

These tests will allow:

- Improved estimates of both saturated hydraulic conductivity and soil moisture content of available material;
- Detailed calibration of seepage models and confirmation of design parameters (e.g., thickness, target compaction) for the store and release layer;

Following these investigations, the seepage model applied in the assessment will be calibrated to the estimated parameter values and the concept design presented confirmed or updated if required.

5.5 Rehabilitation Schedule

The rehabilitation of the pit area is included in RA2 while the waste dump is included in RA3 in the PRCP. Section C of the PRCP Schedule shows that this rehabilitation will take place at the end of mine life and will take place beginning 01/07/30 and will be completed by 30/12/41. Table 2 and Table 3 show the Rehabilitation Milestone schedules for these two areas. Further details on required actions are contained in the PRCP. The proposed PMLU for both areas is Native ecosystem.

Table 2: Rehabilitation Area 2 Milestone Schedule

Post-mining land uses (PMLU)										
Rehabilitation area				RA2						
Relevant activities				Pit						
Total rehabilitation area size (ha)				4.84						
Commencement of first milestone: <insert milestone reference>				End of mine life						
PMLU				Native ecosystem						
Date area is available	1/07/30	30/12/31								
Cumulative area available (ha)	4.84	4.84								
Milestone completed by	30/12/31	30/12/41								
Milestone Reference	**Cumulative area achieved (ha)**									
RM2	4.84									
RM6	4.84									
RM7	4.84									
RM8		4.84								

Milestone references:

- RM2: Backfill of pit (void);
- RM6: Remediation of contaminated land;
- RM7: Landform Development and Reshaping/Reprofiling and Revegetation;
- RM8: Establishment of target PMLU vegetation and stable landform PMLU achieved.

Table 3: Rehabilitation Area 3 Milestone Schedule

Post-mining land uses (PMLU)											
Rehabilitation area				RA3							
Relevant activities				Overburden Stockpile							
Total rehabilitation area size (ha)				4.69							
Commencement of first milestone: <insert milestone reference>				End of mine life							
PMLU				Native ecosystem							
Date area is available	1/07/30	30/12/31									
Cumulative area available (ha)	4.69	4.69									
Milestone completed by	30/12/31	30/12/41									
Milestone Reference	**Cumulative area achieved (ha)**										
RM3	4.69										
RM6	4.69										
RM7	4.69										
RM8		4.69									

Milestone references:

- RM3: Rehabilitation of overburden stockpile;
- RM6: Remediation of contaminated land;
- RM7: Landform Development and Reshaping/Reprofiling and Revegetation;
- RM8: Establishment of target PMLU vegetation and stable landform PMLU achieved.

6 MONITORING PROGRAM

The Dianne Copper Mine currently has an extensive maintenance and monitoring program in accordance with the EA requirements. The program for monitoring the existing waste rock stockpile focuses on water quality and is outlined below and shown in Figure 7.

- Annual Receiving Environment Monitoring Program monitoring and reporting as outlined in the REMP Design Report (C&R Consulting, 2021);
- Annual environmental monitoring program;
- All water management infrastructure, including earth bunds, dam walls, drainage channels and other infrastructure will be checked at least annually as part of the site environmental monitoring program. These inspections will include water levels, sediment build up, and any new areas of erosion. Maintenance will be conducted as required post inspection and may include sediment removal and erosion remediation.

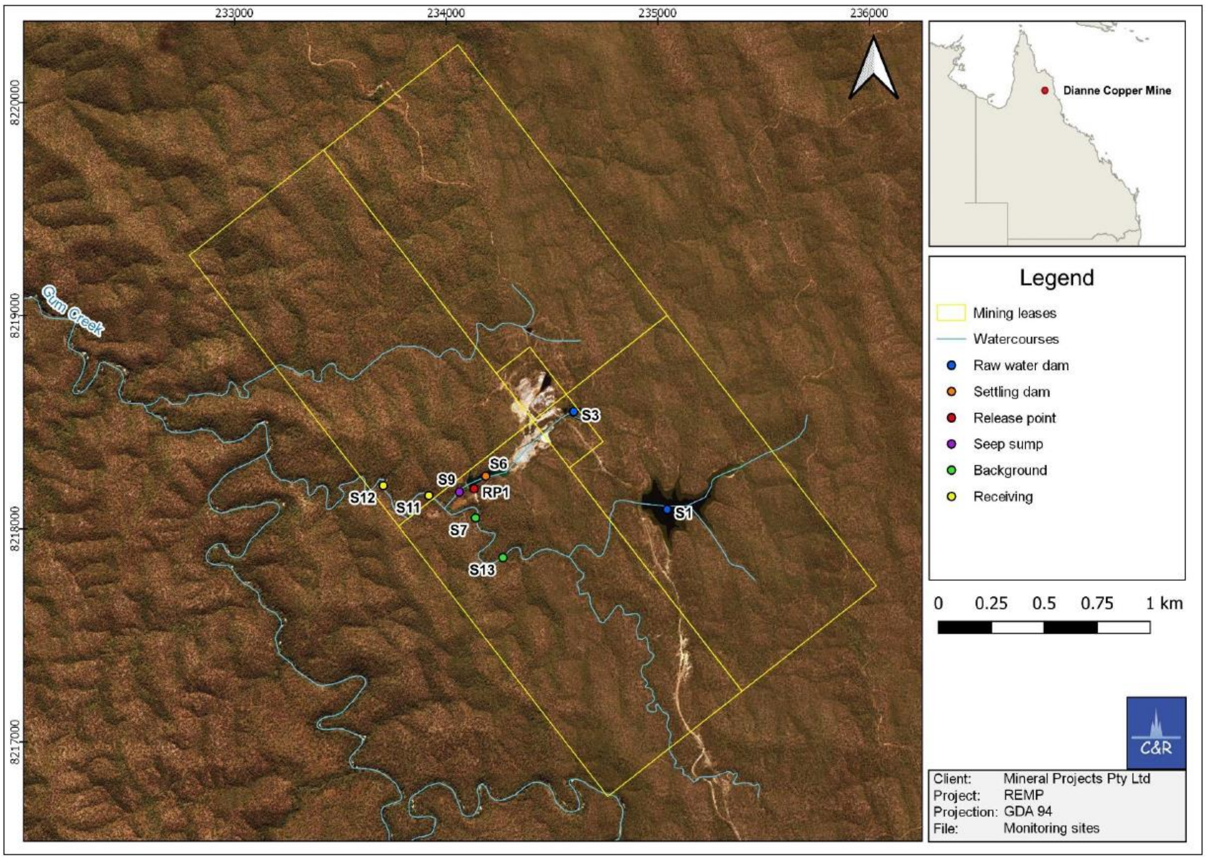

Figure 7: Monitoring Site locations across the project site (C&R Consulting 2021)

The monitoring program for the proposed operations will be increased to include the newly constructed features. An updated Water Management Plan was developed by Engeny, key features of which are shown in Figure 8, along with proposed water monitoring locations. Further details on the water monitoring program are available in the Water Management Plan (Engeny, 2024), including details on reporting, record keeping, and notifications of emergencies, incidents, and exceptions related to the water monitoring.

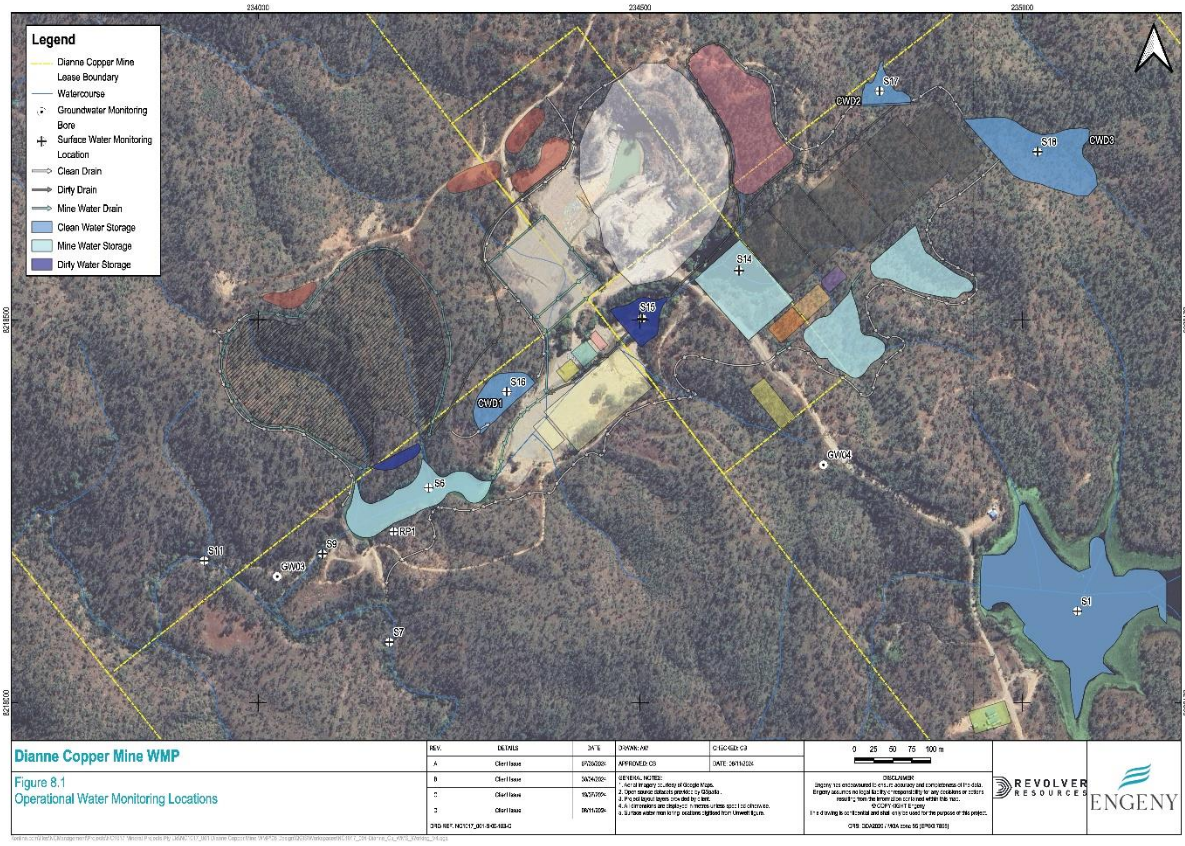

Figure 8: Operational water monitoring locations (Engeny, 2024)

Additional components of the planned waste rock monitoring program will include:

- Regular administrative checks and visual inspections of any ore and waste storage areas;
- Review of material segregation, AMD rock type material tracking, and reconciliation with quantity survey records;
- Mapping and survey of material types within waste storage areas;
- Survey of volume and height of all waste storage landforms to ensure compliance to designs;
- Checks on methods of waste emplacement;
- Visual inspection for evidence of AMD seepage around ore and waste storage areas, surface water drainage lines and dams, and around or near the crusher;
- Inspection for indicators of geotechnical instability such as surface cracking, subsidence, and scouring
- Review of QA/QC testing of cover system materials to ensure compliance with construction specifications;
- Infiltration monitoring below the cover system to confirm predicted control performance;

- Regular review of water quality data for indications of AMD development.

7 PLAN REVIEW

As per EA Condition D6, this WRMP will be reviewed annually by a suitably qualified person. The annual review will assess the adequacy of the plan, ensure actual and potential environmental impacts relating to waste rock are managed, and identify any necessary amendments to the plan to ensure compliance. The review process will include consideration of the results of the monitoring program. If required amendments to this WRMP are identified, this WRMP will be updated and communicated to responsible persons.

This WRMP will be updated prior to any additional waste rock production from mining activities.

8 WRMP IMPLEMENTATION

Environmental management at the Dianne Copper Mine is the responsibility of all employees. The Mineral Projects directors having overall responsibility for environmental management of the operations, which includes the implementation of this WRMP. Roles and responsibilities for implementation of this WRMP for all personnel are outlined in Table 4.

Table 4: Roles and Responsibilities

Role	Responsibility
Mineral Projects Directors	• Provide sufficient resources for the implementation of this plan • Be aware of the environmental legislative requirements associated with the Dianne Copper Mine and take measures to ensure compliance • Ensure employees are competent through training and awareness programs • Evaluate and report monitoring results as required by the EA
Mine Site Senior Executive (SSE)	• Control and direction of the construction of leach pads, infrastructure and waste rock storage locations to comply with the WRMP recommendations for safe and environmentally suitable execution. • Undertake the monitoring program described in this plan • Maintain records of monitoring results as required by the EA
All Employees and Contractors	• Comply with all requirements in this plan • Report al potential environmental incidents to the Mineral Projects Directors and/or Mine SSE immediately • Operate in a manner that minimises risks of incidents to themselves, fellow workers, or the surrounding environment • Follow any instructions provided by the Mineral Projects Directors or Mine SSE

9 CERTIFICATION

MEC certifies that this WRMP is feasible and meets the intent of the relevant approved EA conditions. The qualifications of the MEC personnel suitably qualified to certify this WRMP are provided below.

9.1 Suitably Qualified Persons – Company Details

MEC is a global technical consulting firm specialising in mining services capabilities across the project life cycle, from early-stage exploration through development, mine planning, onsite management, to mine closure and rehabilitation. Since 2005, MEC has grown into one of the leading consultancy firms with an experienced team of consultants, specialising in both the open cut and under mining for the coal and mineral sectors. MEC has completed work for more than 375 clients, including major mining houses, mine owners and operators.

MEC's services include operational systems implementation, landform planning, closure liability minimisation planning, and pit and dump re-profiling design.

9.2 Suitably Qualified Persons – Relevant Experience

Chris Catania is listed as the suitably qualified person for mining engineering components of final landform design and closure planning relevant to this WRMP. Chris has completed landform designs, material movement, placement and scheduling on multiple mine closure projects for Australian mines. This work has been completed in conjunction with expert recommendations from content experts in adjacent disciplines, including geotechnical, geochemical, geological, hydrogeological, landform evolution modelling, environmental, legal and operational execution. The expert recommendations and opinions are taken utilised with reliance on their validity and appropriateness for the basis of the design.

Chris's experience relevant to the WRMP at Dianne mine, covers mining engineering components including:

- Reshaping of mine impacted topography (excavations and placed surface material);
- Waste placement and encapsulation strategies;
- Operational surface water drainage management;
- Determination of appropriate post mining land uses (PMLU);
- Liaison with content experts in adjacent disciplines.

10 REFERENCES

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Environmental Geochemistry International (2024a) Conceptual Cover System Options

Environmental Geochemistry International (2024b) Mine Waste Management Planning Review

MEC Mining (2022) Dianne Copper Mine PRCP Assistance, 29 July 2022

MEC (2024) Final Landform and Cover Design, November 2024

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