

FWP0001607

MOUNT PLEASANT COAL MINE FORWARD PROGRAM

Wednesday 1 January 2025 to Friday 31 December 2027



Summary

DETAIL	
Mine	Mount Pleasant Coal Mine
Reference	FWP0001607
Forward program commencement date	Wednesday 1 January 2025
Forward program end date	Friday 31 December 2027
Forward program revision (if applicable)	
Contact	Lisa Richards
Mining leases	ML 1808 (1992), ML 1829 (1992), ML 1713 (1992), ML 1709 (1992), ML 1708 (1992), ML 1750 (1992), ML 1645 (1992)
Project location	Mach Energy Australia Pty Ltd
Date of submission	Thursday 15 May 2025

Important

The department may make the information in your program and any supporting information available for inspection by members of the public, including by publication on its website or by displaying the information at any of its offices. If you consider any part of your program to be confidential, please communicate this to the department via the message function on this submission within the NSW Resources Regulator Portal.

Three-year forecast – surface disturbance activities

Project description

The Mount Pleasant Operation (MPO) is located in the Upper Hunter Valley of NSW. Development is undertaken within ML 1645, ML 1713, ML 1708, ML 1808, ML 1709, ML 1750 and ML 1829 and is operated in accordance with relevant Authorities and in accordance with Development Consents DA 92/97 and SSD 10418. The Mount Pleasant Optimisation Project approved under SSD 10418 allows for the extraction of up to 21 Mtpa ROM and the continuation of mining operations until 2048. The approved MPO includes a rail loop and spur, load-out facility and conveyor, connecting the mine to the Muswellbrook–Ulan Rail Line. Major components include:

- Open cuts;
- out-of-pit emplacements;
- water management infrastructure;
- CHPP and coal stockpiles; and
- Fines Emplacement Areas.

Description of surface disturbance activities

Exploration activities

Annual pre-production drilling programs have been undertaken since 2017. These annual programs are undertaken within ML 1645 and ML 1709 to increase geological confidence, 3 years in advance of production. Infill drilling is spaced with 125 metres (m) centres between the current highwall crest and the planned crest three years hence. Drilling is undertaken using the water injection method, which generates minimal dust and noise emissions. There are 91 planned geological drill holes for 2025. All completed exploration drill holes will be grouted (cemented) and decommissioned and drill pad disturbance areas rehabilitated, in accordance with the requirements of AUTH 459 and MPO's ML Authorities.

Construction activities

Construction activities to be undertaken at MPO throughout the next 3 years include:

- Continuation of CHPP and MIA upgrades and expansions including:
 - o Train load out upgrade and optimisation for additional train loading; and
 - o ROM coal permanent lighting installation and dust suppression systems.
- Construction of Northern Link Road and Dorset Road upgrades as an alternate route for Castlerock Road.
- Fines Emplacement Area wall lift and associated in Fines Emplacement Area borrow pit for wall lift material.
- Controlled release infrastructure (including DW1) and powerline rerouting in ML 1829.
- Continued construction of water management infrastructure in advance of mining.
- Progressive rehabilitation of temporary construction areas and mining areas.

Mining schedule

Mining development method and sequencing and general mine features.

Mining will continue to utilise open pit surface mining methods, involving conventional truck and excavator/shovel excavation removing pre-strip and overburden sequences and coal seam interburden materials, hauling ex-pit and in-pit to overburden emplacements. Dozer push may also be utilised where practical. Coal will be extracted by either an excavator/hydraulic shovel or loader, depending on seam thickness and equipment scheduling requirements. A small percentage of coal seams may require ripping by dozers, or may be blasted. Extracted coal will be loaded onto a fleet of mine haul trucks for transport to the CHPP. ROM coal will be trucked to a ROM dump hopper and transferred to the sizing station and stacker by conveyors. ROM coal may be temporarily stockpiled in the active mining area prior to being trucked to the ROM dump hopper.

Areas identified for emplacements, the sequencing of emplacements, construction, and management.

Overburden and interburden material will continue to be primarily placed in the Eastern Out-of-Pit Overburden Emplacement and as backfill within open cut voids. The emplacement landform would be developed in 10 m lifts to enable more rapid establishment of the final surface levels, as waste rock placement progresses more rapidly than the alternative of construction in 20 m emplacement lifts that takes significantly longer to develop, and also requires longer to reshape. The spontaneous combustion management strategy for the MPO provides that no zones of poorly blended, potentially acid forming (PAF) or prone to spontaneous combustion material is placed within 10m of final landform. This will be achieved by excluding the material identified as potentially being acid forming (i.e. non-economic coal and identified coal seam roof and floor rock from the Wynn Seam). Coarse rejects will be placed on the lower levels of the mined-out void and Out of-Pit Emplacements at a minimum of 5 m from the exposed face. As such, no additional capping of coarse reject is required. Reactive ground testing is also undertaken at the MPO to assist with identifying reactive materials. No co-disposal is undertaken at the MPO.

Processing infrastructure activities and the location of tailings facilities and schedule for emplacement.

Deposition of fine rejects will continue within the Fines Emplacement Area which commenced in late 2019. MACH Energy operates the Fines Emplacement Area using sub-aerial deposition which involves the additional of flocculant, an extended period of air drying that maximises in-situ tailings densities and in turn maximises the storage efficiency of the facility and it provides a more competent fines surface for future rehabilitation purposes. Fine reject (tailings) will be thickened into a solids density of approximately 20 per cent (%) to 30% by weight and will predominantly be fine rock and clay with some coal and flocculant. The fine reject will be wet with moderate conductivity. Additional and/or alternate fine rejects processing

technologies may also be undertaken during the Forward Program term, which may result in increased densities.

Waste disposal and materials handling operations.

The MPO Waste Management Plan (WasteMP) describes the measures that will be implemented to avoid, minimise, reuse and recycle all waste streams generated during the construction and operation stages of the MPO. Wastes generated on site will be segregated at source and stored and transported off site by approved waste transporter. The disposal of tyres in the backfilled open cuts would be undertaken in accordance with the Waste MP and Environment Protection Licence. There is one sewage management facility at the MPO. The ongoing operation of this facility will continue to comply with the conditions of Development Consent DA 92/97, the requirements of Muswellbrook Shire Council (MSC) and any applicable legislation. Hazardous substances will be managed through the MPO Environmental Management System procedures for site contamination prevention and control. Additionally, the MPO will register all chemicals used on site in a central database. The central database will contain all information in the Safety Data Sheets and an inventory of chemicals held on site. The information will be accessible at computer terminals within the MPO, and will provide guidance on storage, use and disposal.

Key production milestones

MATERIAL	UNIT	YEAR 1	YEAR 2	YEAR 3
Stripped topsoil (if applicable)	(m ³)	200,000	100,000	200,000
Rock/overburden	(m ³)	41,200,000	41,400,000	46,800,000
Ore	(Mt)	12.8	12.6	12.6
Reject material¹	(Mt)	3.8	3.8	3.8
Product	(Mt)	8.6	8.3	8

¹ This includes coarse rejects, tailings and any other wastes resulting from beneficiation.

Three-year rehabilitation forecast

Rehabilitation planning schedule

Rehabilitation planning schedule

MACH Energy prepares internal annual rehabilitation plans which provide a more detailed guide for how and where rehabilitation works are to be undertaken for the next year. The plans include (but are not limited to):

- Detailed rehabilitation specifications to be adhered to, including specifications for landform design; final landform surface profiling; drainage design; topsoil replacement; deep ripping on the contour, planting and seeding and habitat feature placement.
- Key rehabilitation stages when Inspection and Test Plan (ITP) checks must be undertaken (note, ITP checks are quality assurance checks which are undertaken to ensure the rehabilitation specifications have been met). MACH Energy implements ITPs for Landform Design, Landform Construction Profiling, Topsoil Placement, Drainage Construction and Ripping and Seeding. Each ITP is required to be signed off by relevant MACH Energy personnel.
- A rehabilitation schedule, including planned rehabilitation areas and species lists and densities for target Plant Community Types (PCTs).
- Inspection, maintenance and reporting requirements.

Stakeholder consultation

Consultation is regularly undertaken with relevant stakeholders, including regular discussions with the community consultative committee (CCC), MSC, surrounding landowners, neighbouring mines, Registered Aboriginal Parties, and the NSW Resources Regulator, and detailed consultation as part of the State Significant Development process.

Rehabilitation studies, risk assessments and/or design work

MACH Energy continues to build on industry research and conduct various studies to inform best practices for final land use development on mine landforms and disturbed areas. Details of research may include:

- Potential variables impacting on rehabilitation programs and causes of localised rehabilitation failure
- Assessing rehabilitation strategies that have successfully reinstated woodland communities (or rehabilitation with species typical of various communities) on other mine sites, including
 - establishing appropriate soil substrate: direct application of topsoil; stockpiled native topsoil; raw overburden and interburden material plus addition of biosolids/organic growth medium; addition of other organic material; rehabilitation trials on fines material
 - establishment of grassy understorey: grass species suitable for mine rehabilitation; low and high photosynthetic pathway species; establishing native herbs and forbs
 - establishing shrubby understorey and overstorey
 - seed distribution methods: hand-broadcasting; brush-matting; hydro-mulching; spreading seed-bearing hay; direct and air seeding;
 - progressive rehabilitation strategy: pre-stripping

requirements; sequence of rehabilitation strategies • Rehabilitation irrigation trials subject to weather conditions and water availability • Tiger Orchid (*Cymbidium canaliculatum*) propagation trial • Biochar project to convert coal tailings to biochar for fertiliser to improve soil quality (in early stages of development)

Rehabilitation research and trials

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RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS
RRT0001016	ACARP Tailings to Topsoil Research Project	The project aims to optimise existing tailings processes and technologies and provide a commercially viable system for tailings utilisation.	The project methodology involves four major processes: 1. Characterisation and pre-treatment of tailings; 2. Delivery of tailings slurry to the trial site via a high-efficiency solids separation mobile tailings handling plant; 3. De-watering of tailings via a mobile dewatering plant; and 4. Integrating the upgraded tailings with the existing soil profile at the trial site to improve soil resources for crop production or native vegetation establishment.	31 Dec 2024	Ongoing
RRT0001017	Rehabilitated Landform Erosion Monitoring	Monitoring to inform future rehabilitation monitoring and adaptive management of the geomorphic landform design.	Rehabilitation monitoring sites have been identified in representative rehabilitation and analogue locations. Each monitoring site will consist of a flume to measure surface water runoff and soil erosion rate and a weather station that records rainfall, air temperature, incoming and outgoing radiation as well as soil moisture. This allows both surface and subsurface hydrology to be quantified. Deeper soil moisture and temperature probes may be added depending on the depth of the soil material.	31 Dec 2026	Ongoing

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RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS
RRT0001018	Topsoil Stockpile Investigation	Assess the effectiveness of the stockpile management and soil replacement, and allow site-specific inputs to be incorporated into the SIBERIA program that supports geomorphic landform design.	Soil sampling and microbial sampling and testing will be conducted, where possible, pre-inoculation, post-inoculation, every 12 months post-inoculation and at placement on rehabilitation areas. Samples will be taken at 10 cm depths at each soil stockpile and rehabilitation area. The investigation will also include: <ul style="list-style-type: none">• photographs;• microbial biomass analysis;• collection and weighing of above ground biomass;• germination counts post-soil emplacement; and• recording of erosion.	31 Dec 2024	Ongoing
RRT0001020	Cultural Heritage Cool Burn	Assess an appropriate method to reduce fuel loads at MPO.	Opportunistically, a cultural cool burn may be undertaken in Spring each year, subject to weather and fire hazard conditions.	31 Dec 2024	Ongoing
RRT0001148	Biochar from Coal Tailings for Use as Fertiliser	The project aims to convert coal tailings into a biochar that can be used as fertiliser to improve soil quality.	Study in conjunction with DPHI and forestry. Investigate the processing of tailings through pyrolysis to a fertiliser that also improves soil moisture holding capacity.	31 Dec 2025	Ongoing

Rehabilitation maintenance and corrective actions

The Rehabilitation Monitoring Manual (RMM) guides rehabilitation monitoring and describes monitoring methodologies and monitoring parameters, MPO ROBJs, and performance indicators and completion criteria for progressive rehabilitation phases. An EFA data collection form is included in the RMM to ensure accurate data collection. The RMM includes a TARP for actions required to be undertaken should rehabilitation monitoring results indicate the rehabilitation area is not trending towards meeting the performance indicators and completion criteria. A rehabilitation monitoring program has been implemented at MPO based on the performance indicators and approved completion criteria. Details of rehabilitation performance will be reported in MPO Annual Review and updated in this report. Where necessary, rehabilitation procedures will be amended based on the monitoring results, to continually improve rehabilitation standards. A rehabilitation monitoring schedule is included, which will continually be updated to include the rehabilitation and analogue monitoring sites as they are added to the rehabilitation monitoring program. The rehabilitation monitoring program includes:

- Annual ecological monitoring using EFA and other monitoring methodologies
- Visual Inspection Monitoring
- Low intensity agriculture monitoring programme
- Stream health monitoring
- Ecosystem and landform assessment using drone technology (6 monthly image flight with LiDAR, and an annual spectral scanning flight).

Rehabilitation schedule

Rehabilitation of the Waste Rock Emplacement area will continue to be undertaken progressively following mining operations over the Forward Program term. MACH Energy targets reshaping of the Eastern Out-of-Pit Emplacement to final surface level and initial revegetation of all outer emplacement batter lifts within 6 months of each subsequent dump panel lift being completed. The rehabilitation methodology for the overburden emplacement includes reshaping to include macro and micro relief and geomorphic features to develop a natural-looking, functional landform. The rehabilitation methodology involves:

- Design by consultant hydrologist using geomorphic principles
- Shaping landform to design
- Spreading topsoil mixed with gypsum at a standard application rate onto rehabilitation areas
- Deep ripping of rehabilitation area along contour. Where practicable, ripping will be undertaken immediately prior to seeding to assist root/vegetation establishment, and key in topsoil
- Seeding rehabilitation area with a native seed mix (native grass, shrub and tree species and temporary cover crop species)
- Installation of habitat features (habitat/stag trees, log piles and rock piles) across the rehabilitation area
- Tubestock planting of ground, middle and upper stratum species of the relevant target PCTs
- Infill planting and maintenance where required
- Installation of signage denoting rehabilitation area to restrict access and minimise potential for disturbance to the area if necessary

Completion of rehabilitation

N/A

Subsidence remediation for underground operations

MPO is an open cut mining operation and therefore has no areas affected by underground mining subsidence.

Progressive mining and rehabilitation statistics

Three-yearly forecast cumulative disturbance and rehabilitation progression

	FORECAST	UNIT	YEAR 1	YEAR 2	YEAR 3
A1	Total disturbance footprint - surface disturbance	(ha)	2,825.5	2,883.53	2,936.43
B	Total active disturbance	(ha)	2,590.7	2,624.7	2,656.77
P	Total new area of land proposed for active rehabilitation	(ha)	55.33	79.36	100.19

Rehabilitation key performance indicators (KPIs)

	FORECAST	UNIT	YEAR 1	YEAR 2	YEAR 3
O	Total new disturbance area during reporting period	(ha)	246.82	58.03	52.9
P	Total new area of land proposed for rehabilitation during the reporting period	(ha)	55.33	24.04	20.82
Q	Annual rehabilitation to disturbance ratio		0.22	0.41	0.39

Attachment 1 – Reporting Definitions

REPORTING CATEGORY	DEFINITION
A Total disturbance footprint – surface disturbance	<p>All areas within a mining lease that either have at some point in time or continue to pose a rehabilitation liability due to surface disturbance activities.</p> <p>The total disturbance footprint is the sum of the total active disturbance, decommissioning, landform establishment, growth medium development, ecosystem and land use establishment, ecosystem and land use development and rehabilitation completion (see definitions below).</p> <p>Underground mining operations should not include the footprint of underground mining areas/subsidence management areas in the total disturbance footprint.</p>
B Total active disturbance	<p>Includes on-lease exploration areas, stripped areas ahead of mining, infrastructure areas, water management infrastructure, sewage treatment facilities, topsoil stockpile areas, access tracks and haul roads, active mining areas, waste rock emplacements (active/unshaped/in or out-of-pit), tailings dams (active/unshaped/uncapped) and temporary stabilised areas (e.g. areas sown with temporary cover crops for dust mitigation and temporary rehabilitation).</p>
C Rehabilitation – land preparation	<p>Includes the sum of all disturbed land within a mining lease that have commenced any, or all, of the following phases of rehabilitation – decommissioning, landform establishment and growth medium development.</p> <p>Refer to the glossary of terms in this document for the definition of these phases of rehabilitation.</p>
D Ecosystem and land use establishment	<p>Includes the area which has been seeded/planted with the target vegetation species for the intended final land use. However, vegetation has not matured to a stage where it can be demonstrated that it will be sustainable for the long term and or require only a maintenance regime consistent with target reference/analogue sites.</p> <p>Typically, rehabilitation areas would be in this phase for at least two years (and usually more) before rehabilitation can be classified as being in the ecosystem and land use development phase. This phase does not apply to infrastructure areas that are being retained as part of final land use for the site.</p>

REPORTING CATEGORY		DEFINITION
O		The area of any new active disturbance that will be created during the next three years, as defined under definition A1 (definition A1 Table 5).
P		The sum of any new rehabilitation to be commenced in the next three years. These areas may be in the phases “Rehabilitation - Land Preparation” or the “Ecosystem & Land Use Establishment” (definitions C & D in Table 5).
Q		The rehabilitation to disturbance ratio (S / R) indicates how many hectares of new rehabilitation are undertaken for each hectare of land disturbed during the three years. A ratio of 1/1 indicates that the area of new rehabilitation and disturbance in that period are the same.

Attachment 2 – Definitions

WORD	DEFINITION
Active	In the context of rehabilitation, land associated with mining domains is considered 'active' for the period following disturbance until the commencement of rehabilitation.
Active mining phase of rehabilitation	In the context of rehabilitation, the active mining phase of rehabilitation constitutes the rehabilitation activities undertaken during mining operations such as salvaging and managing soil resources, salvaging habitat resources, and native seed collection. This phase also includes management actions taken during operations to manage risks to rehabilitation and enhance rehabilitation outcomes such as selective handling of waste rock and management of tailings emplacements.
Analogue site	In the context of rehabilitation, an analogue site is a 'reference site' that represents an example of the defining characteristics (such as vegetation composition and structure or agricultural productivity) of the final land use. Characteristics of analogue sites can be assessed to develop the rehabilitation objectives and completion criteria for final land use domains.
Annual rehabilitation report and forward program	As described in the Mining Regulation 2016.
Annual reporting period	As defined in the Mining Regulation 2016.
Closure	A whole-of-mine-life process, which typically culminates in the relinquishment of the mining lease. It includes decommissioning and rehabilitation to achieve the approved final land use(s).
Decommissioning	The process of removing mining infrastructure and removing contaminants and hazardous materials.
Decommissioning Phase of Rehabilitation	Activities associated with the removal of mining infrastructure and removal and/or remediation of contaminants and hazardous materials. In the context of the rehabilitation management plan this phase of rehabilitation may also include studies and assessments associated with decommissioning and demolition of infrastructure or works carried out to make safe or 'fit for purpose' built infrastructure to be retained for future use(s) following lease relinquishment.

WORD	DEFINITION
Department	The Department of Regional NSW.
Disturbance	See Surface Disturbance.
Disturbance area	<p>An area that has been disturbed and that requires rehabilitation.</p> <p>This may include areas such as on-licence exploration areas, stripped areas ahead of mining, infrastructure areas, water management infrastructure, sewage treatment facilities, topsoil stockpile areas, access tracks and haul roads, active mining areas, waste emplacements (active/unshaped/in or out-of-pit), tailings dams (active/unshaped/uncapped), and areas requiring rehabilitation that are temporarily stabilised (i.e. managed to minimise dust generation and/or erosion).</p>
Domain	<p>An area (or areas) of the land that has been disturbed by mining and has a specific operational use (mining domain) or specific final land use (final land use domain). Land within a domain typically has similar geochemical and/or geophysical characteristics and therefore requires specific rehabilitation activities to achieve the associated final land use.</p>
Ecosystem and Land Use Development	<p>This phase of rehabilitation consists of the activities to manage maturing rehabilitation areas on a trajectory to achieving the approved rehabilitation objectives and completion criteria.</p> <p>For vegetated land uses this phase may include processes to develop characteristics of functional self-sustaining ecosystems, such as nutrient recycling, vegetation flowering and reproduction, and increasing habitat complexity, and development of a productive, self-sustaining soil profile.</p> <p>This phase of rehabilitation may include specific vegetation management strategies and maintenance such as tree thinning, supplementary plantings and weed management.</p>
Ecosystem and Land Use Establishment	<p>This phase of rehabilitation consists of the processes to establish the approved final land use following construction of the final landform.</p> <p>For vegetated land uses this rehabilitation phase includes establishing the desired vegetation community and implementing land management activities such as weed control. This phase of rehabilitation may also include habitat augmentation such as installation of nest boxes.</p>
Exploration	Has the same meaning as that term under the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

WORD	DEFINITION
Final landform and rehabilitation plan	As defined in the Mining Regulation 2016.
Final land use	As defined in the Mining Regulation 2016.
Form and way	Means the form and way approved by the Secretary. Approved form and way documents are available on the Department's website.
Growth Medium Development	<p>This phase of rehabilitation consists of activities required to establish the physical, chemical and biological components of the substrate required to establish the desired vegetation community (including short lived pioneer species).</p> <p>This phase may include spreading the prepared landform with topsoil and/or subsoil and/or soil substitutes, applying soil ameliorants to enhance the physical, chemical and biological characteristics of the growth media, and actions to minimise loss of growth media due to erosion.</p>
Habitat	Has the same meaning as that term under the <i>Biodiversity Conservation Act 2016</i> and the <i>Fisheries Management Act 1994</i> (as relevant).
Indicator	An attribute of the biophysical environment (e.g. pH, topsoil depth, biomass) that can be used to approximate the progression of a biophysical process. It can be measured and audited to demonstrate (and track) the progress of an aspect of rehabilitation towards a desired completion criterion (i.e. defined end point). It may be aligned to an established protocol and used to evaluate changes in a system.
Land	As defined in the <i>Mining Act 1992</i> .
Landform Establishment	<p>This phase of rehabilitation consists of the processes and activities required to construct the final landform.</p> <p>In addition to profiling the surface of rehabilitation areas to the approved final landform profile this phase may include works to construct surface water drainage features, encapsulate problematic materials such as tailings, and prepare a substrate with the desired physical and chemical characteristics (e.g. rock raking or ameliorating sodic materials).</p>
Large mine	As defined in the Mining Regulation 2016.
Lease holder	The holder of a mining lease.

WORD	DEFINITION
Life of mine	The timeframe of how long a mine is approved to mine, from commencement to closure.
Mine rehabilitation portal	<p>Means the NSW Resources Regulator’s online portal that lease holders must use (via a registered account) to:</p> <ul style="list-style-type: none"> ■ upload rehabilitation geographical information system (GIS) spatial data ■ develop rehabilitation GIS spatial data (using online tracing functions) ■ generate rehabilitation plans and rehabilitation statistics using the map viewer and Rehabilitation Key Performance Indicator functionalities. <p>Data submitted to the mine rehabilitation portal is collated in a centralised geodatabase for use by the NSW Resources Regulator to regulate rehabilitation performance of lease holders.</p>
Mining area	As defined in the <i>Mining Act 1992</i> .
Mining domain	A land management unit with a discrete operational function (e.g. overburden emplacement), and therefore similar geophysical characteristics, that will require specific rehabilitation treatments to achieve the final land use(s).
Mining land	As defined in the <i>Mining Act 1992</i> .
Native vegetation	Has the same meaning as that term under section 60B of the <i>Local Land Services Act 2013</i> .
Overburden	Material overlying coal or a mineral deposit.
Performance indicator	An attribute of the biophysical environment (for example pH, slope, topsoil depth, biomass) that can be used to demonstrate achievement of a rehabilitation objective. It can be measured and audited to demonstrate (and track) the progress of an aspect of rehabilitation towards a desired completion criterion, that is, a defined end point. It may be aligned to an established protocol and used to evaluate changes in a system.

WORD	DEFINITION
Phases of rehabilitation	<p>The stages and sequences of actions required to rehabilitate disturbed land to achieve the final land use. The phases of rehabilitation are:</p> <ul style="list-style-type: none"> ■ active mining ■ decommissioning ■ landform Establishment ■ growth medium development ■ ecosystem and land use establishment ■ ecosystem and land use development.
Progressive rehabilitation	<p>The progress of rehabilitation towards achieving the approved rehabilitation completion criteria. This may be described in terms of domains, phases, performance indicators and rehabilitation completion criteria.</p>
Rehabilitation Completion	<p>The final phase of rehabilitation when a rehabilitation area has achieved the approved rehabilitation objectives and rehabilitation completion criteria for the final land use. Rehabilitation areas may be classified as complete when the NSW Resources Regulator has determined in writing that the relevant rehabilitation obligations have been fulfilled following submission of <i>Form ESF2 Rehabilitation completion and/or review of rehabilitation cost estimate</i> application by the lease holder.</p>
Rehabilitation Completion criteria	<p>As defined in the Mining Regulation 2016.</p>
Rehabilitation cost estimate	<p>As defined in the Mining Regulation 2016.</p>
Rehabilitation management plan	<p>As defined in the Mining Regulation 2016.</p>
Rehabilitation objectives	<p>As defined in the Mining Regulation 2016.</p>
Rehabilitation risk assessment	<p>As defined in the Mining Regulation 2016.</p>
Rehabilitation schedule	<p>The defined timeframes for progressive rehabilitation set out in the forward program.</p>

WORD	DEFINITION
Relevant stakeholders	Means any persons or bodies who may be affected by the mining operations, including rehabilitation, carried out on the lease land, and includes: <ul style="list-style-type: none"> ■ the relevant development consent authority ■ the local council ■ the relevant landholder(s) ■ community consultative committee (if required under the development consent) or equivalent consultative group ■ affected land holder(s) ■ government agencies relevant to the final land use ■ affected infrastructure authorities (electricity, telecommunications, water, pipeline, road, rail authorities) ■ local Aboriginal communities, and ■ any other person or body determined by the Minister to be a relevant stakeholder in relation to a mining lease.
Risk	The effect of uncertainty on objectives. It is measured in terms of consequences and likelihood (AS/NZS ISO 31000:2009).
Secretary	The Secretary of the Department.
Security deposit	An amount that a mining lease holder is required to provide and maintain under a mining lease condition, to secure funding for the fulfilment of obligations under the lease (including obligations that may arise in the future).
Surface disturbance	Includes activities that disturb the surface of the mining area, including mining operations, ancillary mining activities and exploration.
Tailings	A combination of the fine-grained solid material remaining after the recoverable metals and minerals have been extracted from the mined ore, and any process water ² .
Waste	Has the same meaning as that term under the <i>Protection of the Environment Operations Act 1997</i> .

² Commonwealth of Australia (DITR), 2007. *Tailings Management*.

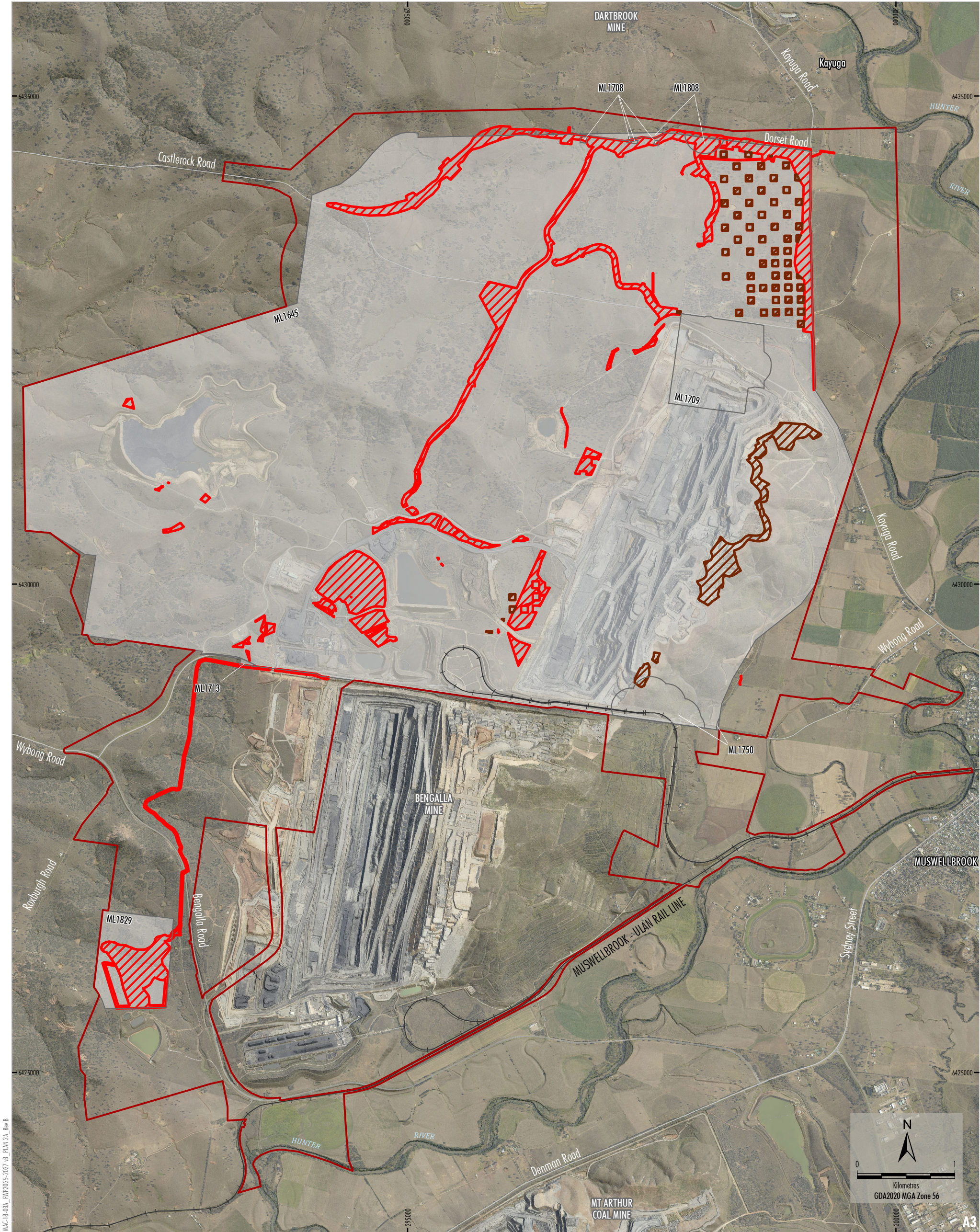
Attachment 3 – Plans

MPO_FWP2025-2027_Plan 2A.pdf

MPO_FWP2025-2027_Plan 2B.pdf

MPO_FWP2025-2027_Plan 2C.pdf

Forward Program (LARGE MINE) v2.5



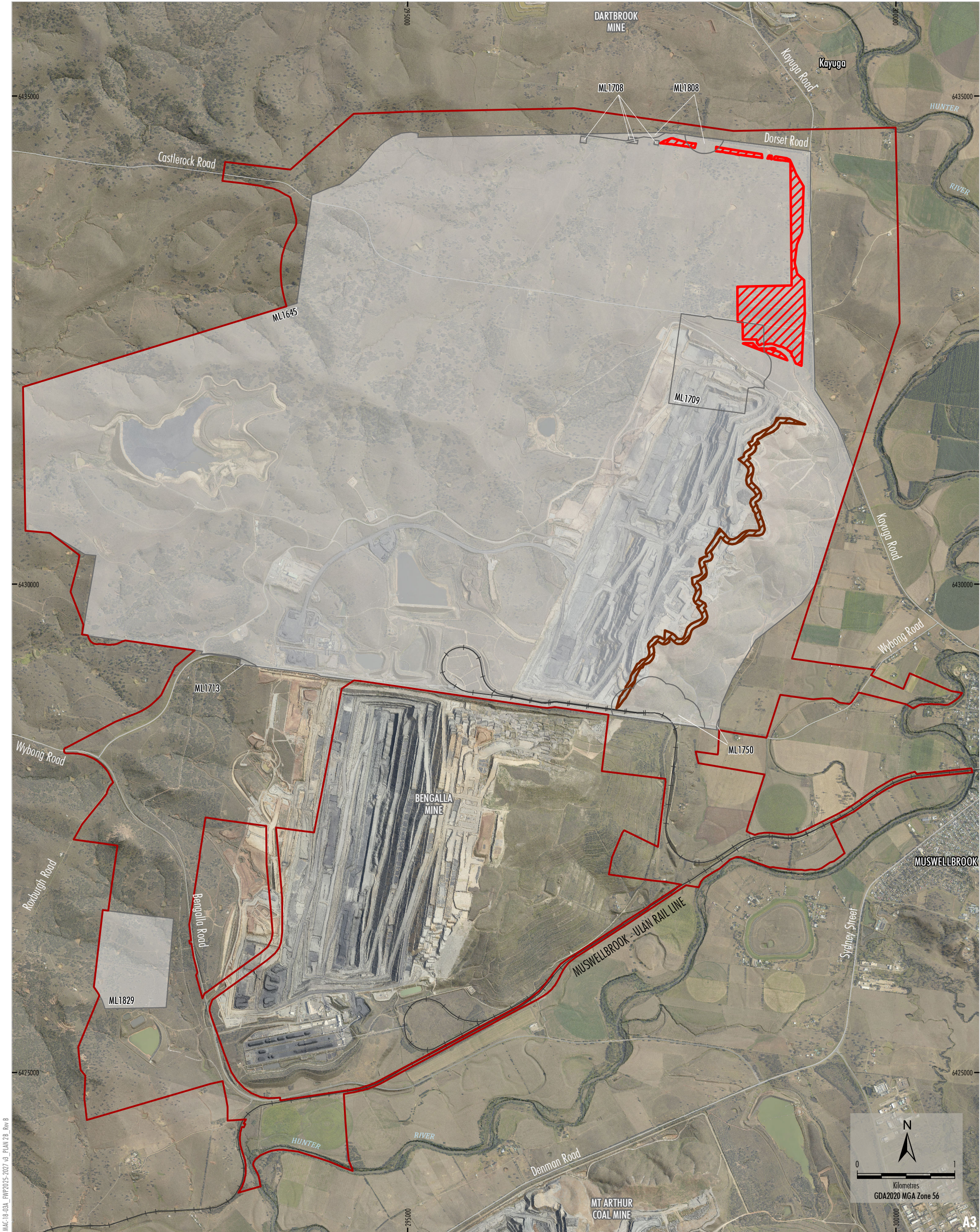
JMAC-18-03A_RWP2025-2027-3_PLAN 2A_Rev B

- LEGEND**
- Project Approval Boundary*
 - Coal - Current Titles
 - Forecast Area
 - Forecast Disturbance
 - Forecast Land Prepared for Rehabilitation

* Appendix 1 of Development Consent SSD 10418

Source: MACH (2025); NSW Spatial Services (2024)
Orthophoto: MACH (Dec 2024)
Date prepared: 21-03-2025

MACHEnergy
MOUNT PLEASANT COAL MINE
FORWARD PROGRAM 2025-2027
Mining and Rehabilitation
Year 1 (2025)



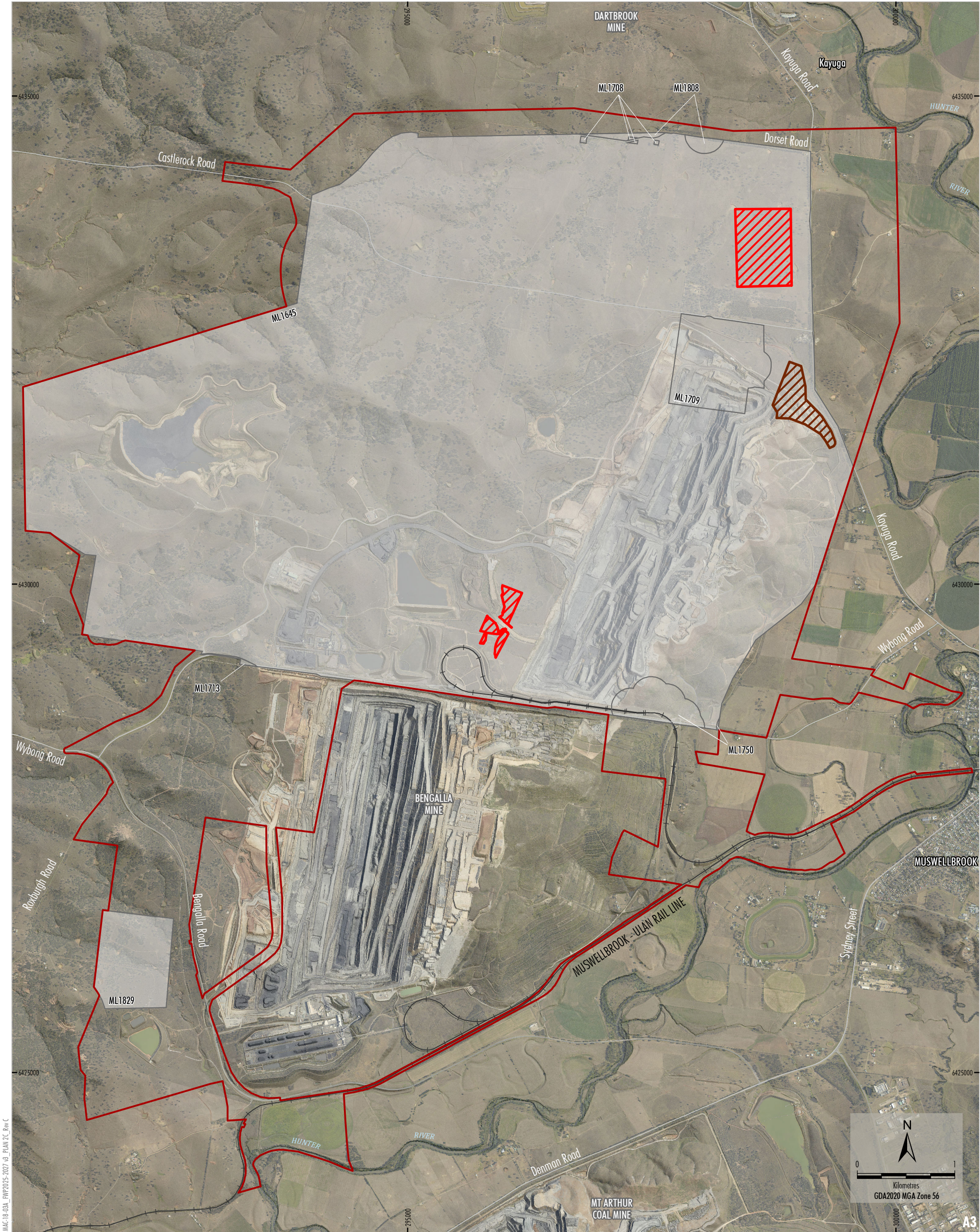
JMAC-18-03A_RWP2025-2027-3_PLAN 2B_Rev B

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Source: MACH (2025); NSW Spatial Services (2024)
Orthophoto: MACH (Dec 2024)
Date prepared: 21-03-2025

MACHEnergy
MOUNT PLEASANT COAL MINE
FORWARD PROGRAM 2025-2027
Mining and Rehabilitation
Year 2 (2026)



JMAC-18-03A_RWP2025-2027-3_PLAN 2C_Rev C

- LEGEND**
- Project Approval Boundary*
 - Coal - Current Titles
 - Forecast Area
 - Forecast Disturbance
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* Appendix 1 of Development Consent SSD 10418

Source: MACH (2025); NSW Spatial Services (2024)
Orthophoto: MACH (Dec 2024)
Date prepared: 21-03-2025

MACHEnergy

MOUNT PLEASANT COAL MINE
FORWARD PROGRAM 2025-2027

Mining and Rehabilitation
Year 3 (2027)



Open Cut Summary Rehabilitation Cost Estimation

Note: Sections of this page are automatically filled in from the registration page

Mine Name:	Mount Pleasant Operation		
Lease(s):	ML1645, ML1713, ML1708, ML1709, ML1750, ML1808, ML1829		
Authorisation Owner:	MACH Energy Australia Pty Ltd		
Term of RCE:	31/12/2025		
Current Security:	\$101,148,536	Date of Last Security Deposit Review:	28/03/2024
Mine Contact:	General Manager - Operations		

Domain		Security Deposit
Domain 1: Infrastructure		\$20,249,586
Domain 2: Tailings & Rejects		\$5,503,588
Domain 3: Overburden & Waste		\$9,183,364
Domain 4: Active Mine & Voids		\$46,115,533
Domain 5: Management Activities		\$914,260
Subtotal (Domains and Sundry Items)		\$81,966,331
Contingency	10%	\$8,196,633
Post Closure Environmental Monitoring	10%	\$8,196,633
Project Management and Surveying	10%	\$8,196,633
Total Security Deposit for the Mining Project (excl. of GST)		\$106,556,231

Note: GST is not included in the above calculation or as part of rehabilitation security deposits required by the Department.

- ☐ Alterations have been made to unit prices within this spreadsheet. (Attach a separate sheet providing details of changes).
- ☒ The proposed rehabilitation design is generally consistent with the development consent for the project.

This mine security calculation has been estimated using the best available information at the time.
It is a true and accurate reflection of the total rehabilitation liability held by this mine.

Michael Redman

31/03/2025

Company Representative's Name

Date

General Manager - Operations

Company Representative's Role / Responsibility

Signature