

ARR0001313

MARULAN SOUTH LIMESTONE MINE ANNUAL REHABILITATION REPORT

Saturday 1 July 2023 to Sunday 30 June 2024

Summary table

DETAIL	
Mine	Marulan South Limestone Mine
Reference	ARR0001313
Annual report period commencement date	Saturday 1 July 2023
Annual report period end date	Sunday 30 June 2024
Forward program	FWP0001271
Mining leases	ML 1857 (1992), CML 16 (1992)
Lease holder(s)	Boral Cement Limited
Contact	Therese Thomas

Thursday 29 August 2024

Important

Date of submission

The department may make the information in your report 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 report to be confidential, please communicate this to the department via the message function on this submission within the NSW Resources Regulator Portal.

Mine details

Project description

Boral's Marulan South Limestone Mine has been operational since the 1860s, consisting of a limestone mine and processing plant . It is located directly to the north of Bungonia Gorge and approximately 35km east of Goulburn NSW, with lands covering 688 hectares (ML1857) and 75 hectares (CML16) of a significant limestone deposit . The mine produces up to 3.38 million tonnes (Mt) of limestone based products per year for the cement, steel, agricultural, construction and commercial markets. Development consent SSD 7009 was granted by the Department of Planning, Industry and Environment (DPIE) on 19 August 2021 to continue mining limestone at a rate of up to 4 million tonnes per annum for a period of up to 30 years.

Life of mine

180 years

Current development consents, leases and licences

Development consents granted under the Environmental Planning and Assessment Act 1979

SSD7009			
SSD7009			

Authorisations covering the mining area granted under the Mining Act 1992

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ML 1857 (1992), CML 16 (1992)
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Any other approvals, licences, or authorities issued by government agencies that are relevant to the progress of mining operation and rehabilitation activities

SSD 7009 WAL25207, WAL25373, WAL25352, WAL24697, WAL41976 EPL 944

Summary of the scope and/or purpose of the new applications or modifications to existing approvals (if applicable)

No changes

Changes to land ownership and land use

No changes

Surface disturbance and rehabilitation activities during the reporting period

Surface disturbance and rehabilitation activities that were conducted and an analysis of the progress against the rehabilitation schedule

During the reporting period, overburden continued to be emplaced in the existing Western Overburden Emplacement, reaching the final batter height. Rehabilitation works during the reporting period have focused on the spreading of site-collected, seedbank rich topsoil across 2.5Ha of the highest bench of the Western Overburden Emplacement (WOE) and 6.6Ha of previously rehabilitated lower benches. Topsoil spreading was selected in preference to hydro mulching this reporting period to take advantage of available topsoil and in response to recommendations made by the hydro mulching contractor regarding the suitability of forecasted weather conditions in the Spring.

Rehabilitation planning activities that were conducted, including any specialist studies

An Ecosystem Functional Analysis was undertaken in November 2023. The EFA monitoring program is primarily designed to track rehabilitation progression and success through time. These results can be used as a baseline for the future.

Overview of subsidence repair and/or remediation works undertaken

The performance of the hydro mulching from the previous year was seen to have varying degrees of success across 6.6Ha due to an excessive amount of rain. For this reason, this area was recovered in seedbank rich topsoil which was collected from the northern disturbed area during this reporting period.

Overview of rehabilitation management and maintenance activities

Erosion control works include grading and monitoring of roads within the rehabilitation areas to ensure road washouts and erosion do not contribute to sediment dispersal or unstable surfaces leading to further surface water runoff and sediment dispersal. Weed monitoring and control was undertaken site wide throughout the financial year with a focus on the control of pampas grass, serrated tussock, cottoneaster and hawthorn via foot and drone along the Eastern Batters, Rehabilitation areas and South Pit border using Glyphosate, Taskforce and Woody spray across the months of August, October, November and March. Feral animal control was undertaken in conjunction with the National Parks and Wildlife (NPWS) by way of aerial shooting across the months of September, December and March, removing a total of 17 goats and 1 fox from the site.

Details of any rehabilitation actions taken as required by any letters, notices or directions issued by government agencies, including the NSW Resources Regulator

In April 2023, the site received a notice from the resources regulator regarding the landslip which occurred on 25/11/22. A response was given to the regulators in September 2023. A further notice was issued by the regulators in October 2023 advising the initial response was not adequate. The site closed out the notice in December 2023 with acceptance by the regulators of the proposed long term remediation plans. The site has commenced initial recommendations by geotechnical experts to commence removing the weight from the back of the slip area.

Details of any rehabilitation areas that have achieved the final land use

NA

Key production milestones

MATERIAL	UNIT	FWP0001271 YEAR 1	THIS REPORT
Stripped topsoil (if applicable)	(m³)	67,000	19,420
Rock/overburden	(m³)	6,000,000	1,573,127
Ore	(Mt)	2,800,000	2.67
Reject material ¹	(Mt)	0	0
Product	(Mt)	2,800,000	2.67

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

Disturbance and rehabilitation statistics

Current disturbance and rehabilitation progression

ELEMENT	UNIT	THIS REPORT
A Total surface distur footprint	rbance (ha)	352.51
B Total active disturb	pance (ha)	273.68
C Land prepared for r	rehabilitation (ha)	11.63
D Ecosystem and land establishment	d use (ha)	5.32
E Ecosystem and land development	d use (ha)	61.87
F Rehabilitation com	pletion (ha)	0

Rehabilitation key performance indicators (KPIs)

	ELEMENT	UNIT	THIS REPORT
G	Total new active disturbance area	(ha)	NA - this value will display after 2nd year ARR submission as calculation relies on comparison between sequential yearly ARR data
н	New rehabilitation commenced during annual reporting period	(ha)	NA - this value will display after 2nd year ARR submission as calculation relies on comparison between sequential yearly ARR data
ı	Established rehabilitation	(ha)	61.87
J	Annual rehabilitation to disturbance ratio	%	NA - this value will display after 2nd year ARR submission as calculation relies on comparison between sequential yearly ARR data
K	Rehabilitated land to total mine footprint	%	17.55

Progressive achievement of established rehabilitation

	ELEMENT	UNIT	THIS REPORT
L	Established rehabilitation - agricultural final land uses	%	0
M	Established rehabilitation - native ecosystem final land uses	%	100
N	Established rehabilitation - other/non-vegetated final land uses	%	0

Variation to the rehabilitation schedule

Identify the components of the most recent forward program that were not achieved

The site achieved a total of 11.63 Ha of land prepared for rehab in the 2024 reporting period, exceeding the the 2023 forecast of 4.79 Ha. This was achieved by utilising a contractor to focus on achieving final landform in sections of the Western Overburden Emplacement and the Middle Gully, allowing an additional 6.84 Ha to be spread with topsoil. The existing areas categorised as Rehabilitation- Land Preparation are expected to be progressed from this category once growth from topsoil, hydromulch and/or tree planting is established.

Key factors that delayed progressive rehabilitation

NA. The site has exceeded the forecast Rehabilitation- Land Preparation.

Outline actions that will be included in the forward program and carried out to minimise disturbance and undertake progressive rehabilitation as far as reasonably practical

The site will continue to undertake hydromulching, topsoil spreading and tree planting in the category Rehabilitation- Land Preparation in order to progress these areas into ecosystem and land use establishment.

Rehabilitation monitoring and research findings

Rehabilitation monitoring

The rehabilitation monitoring carried out in the annual reporting period

The 2023-2024 Ecosystem Function Analysis notes: RVA2- Near Maggie Dump: An old track runs through the site and there is a large pile of rock which has been dumped. There was no presence of feral animals, mine rubbish, fire disturbance or erosion. Weed presence was approximately 25% which is mostly serrated tussock. RVA7- Lime Dump Road North. There is a high percentage of weed cover (50%), which is predominantly serrated tussock. There were no signs of feral or native animals at this site, and no evidence of fire disturbance or erosion is present. RVA4- EFA Site T2: Groundcover is dominated by a dense layer of broadleaf weeds and grasses. A deer antler was found at this site, as well as evidence of deer grazing on bark of trees. Deer, rabbit, kangaroo and wombat scat was visible. There was no evidence of human disturbance or mine rubbish. The weed cover percentage was estimated at 20%, and no erosion was evident. RVA5 – EFA Site T3: This area is comprised mostly of A. decurrens and lower half of the site is dominated by weed species which is progressively taking over the bare patches on the lower half of the site. The weed cover was estimated at approximately 30%. A small amount of rilling is present although no sediment problems are evident. Feral and native animal scat is present. There is no mine rubbish or evidence of recent fire damage. There has been no mine disturbance at this site. RVA3-EFA Site T5: ground cover in dense grass.

Status of performance against rehabilitation objectives and rehabilitation completion criteria

The monitoring program that has been implemented

The establishment of the final land use domains will be completed during the term of the newly approved RMP. An Ecosystem Function Analysis (EFA) developed by Tongway and Hindley (2004) is being utilised to assess the rehabilitation progression at the mine. The EFA monitors transects to measure the landscape function, vegetation dynamics, habitat complexity and disturbance. These measures are converted into indices for comparisons of rehabilitation over time and to undisturbed reference sites. The methodology used does not replace the traditional methods of monitoring vegetation and fauna but adds a functional interpretation to link vegetation structure and organisation more closely with soil function and the development of habitat for native fauna. A total of five transects, including one reference site were surveyed, the descriptions and results of testing are detailed in the site's Annual Review and EFA Report.

Are all rehabilitation areas in Landform Establishment phase or higher represented in the monitoring program to assess performance against the rehabilitation objectives and approved or, if not yet approved rehabilitation completion criteria and final landform and rehabilitation plan?

Yes

Year rehabilitation areas will be included as part of the monitoring program

An appraisal of whether rehabilitation is moving towards achieving the proposed rehabilitation objectives, approved or, if not yet approved, rehabilitation completion criteria and final landform and rehabilitation plan as soon as reasonably practicable.

Rehabilitation is moving towards the rehabilitation objective of achieving acceptable post-disturbance land use suitability; to create a stable landform with land use capability and/or suitably similar to that prior to disturbance unless otherwise pre-determined and agreed. Rehabilitation is being achieved by setting clear success criteria as noted in the Ecosystem Functionality Assessment (EFA) where vegetation composition is measured by species richness at three strata levels, by cover percentage and observations using fixed points each year to compare the difference in growth and provide feedback for forward planning. The 2023-2024 EFA notes "The reduction of bare patches resulted in overall higher Landscape Organisation Indices (LOI) across all sites. The highest possible LOI was calculated for rehabilitated Site 2 and Site 4, closely followed by LOI of 0.99 at Site 5. This suggests that these sites represent highly functional landscapes." and "Minimal changes to soil characteristics were measured in December 2023. Soil structure takes many years to develop and it takes many years for a soil type to change its composition". Vegetation composition and dynamics were reported in the EFA to have ground cover increase in the last year of reporting in all transect sites, with shrub and canopy either remaining the same or improving slightly.

Appraisal description

Rehabilitation is moving towards achieving the final land use as soon as reasonably practicable.

Rehabilitation monitoring program findings

The Project Site's success criteria (or closure criteria) for the rehabilitation areas on the site have been determined based on the proposed final land use of woodland / grassland mosaic. The progressive indicator measurements in the Ecosystem Functionality Analysis are compared against the success criteria to ascertain if rehabilitation objectives are being met. The 2023-2024 EFA noted the reduction of bare patches in transect areas resulting in overall higher Landscape Organisation Indices (LOI) across all study sites. Site 2, 4 and 5 LOI suggests that these sites represent highly functional landscapes. Vegetation composition and dynamics were reported in the EFA to have ground cover vegetation increase in the last year of reporting in all transect sites, with shrub and canopy either remaining the same or improving slightly. Improvements to the vegetation in the rehabilitation areas are a good indicator that

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rehabilitation efforts are working towards the success criteria, with active management being employed to take feedback and adapt methods or actions as required.

Performance issues and their causes including identification of any knowledge gaps that must be addressed

The Rehabilitation Strategy identified the key constraints to achieving rehabilitation success. These are: Soil pH levels which are naturally elevated. Steep slopes, remnants of historical emplacement practices Climate which is highly variable and quite dry Water supply which is reliant on seasonal rainfall.



Outcomes of rehabilitation research and trials

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS	ON TRACK?

A RR0001313

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Outcomes of	f comp	leted t	trials	s and	researc	h
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N/A

Attachment 1 – Reporting Definitions

REPORTING CATEGORY		DEFINITION
A1	Total disturbance footprint – surface disturbance	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.
		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).
		Underground mining operations should not include the footprint of underground mining areas/subsidence management areas in the total disturbance footprint.
A2	Underground Mining Area	Underground mining operations areas/subsidence management areas.
В	Total active disturbance	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).
C	Rehabilitation – land preparation	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. Refer to the glossary of terms in this document for the definition of these
		phases of rehabilitation.

REP	ORTING CATEGORY	DEFINITION
D	Ecosystem and land use establishment	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. 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.
E	Ecosystem and Land Use Development	Rehabilitation has matured to a level where target revegetation outcomes are on a trajectory towards meeting the final rehabilitation objectives and rehabilitation completion criteria (as verified by monitoring).
		This phase includes infrastructure areas that are to be retained for an approved post mining land use, following completion of all necessary measures to render the infrastructure fit for this purpose (for example structural integrity).
F	Rehabilitation Completion	The NSW Resources Regulator has determined in writing that the mining area has achieved the approved rehabilitation objectives and approved rehabilitation completion criteria and final landform and rehabilitation plan following the submission of Form: ESF2 Rehabilitation completion and/or review of rehabilitation cost estimate and/or notification of mine or petroleum site closure.
G	New active disturbance area	The area of any new active disturbance that has been created during the annual reporting period (definition A1 in Table 5).
н	New rehabilitation commenced during annual reporting period	The sum of any new rehabilitation commenced in the annual reporting period. These areas may be in the rehabilitation land preparation phase or the ecosystem & land use establishment phase (definitions C and D in Table 5).
I	Established rehabilitation (hectares)	The total area of land that is verified to be within either the ecosystem and land use development phase or the rehabilitation completion phase (definitions E & F in Table 5).

REP	ORTING CATEGORY	DEFINITION
J	Annual rehabilitation to disturbance ratio	The rehabilitation to disturbance ratio (H/G) indicates how many hectares of new rehabilitation are undertaken for each hectare of land disturbed during the year. A ratio of 1/1 indicates that the area of new rehabilitation and disturbance in that year are the same.
К	% Rehabilitated land to total mine footprint	The proportion of the total mine footprint (area of land that has been disturbed by past or present surface disturbance activities) that has established rehabilitation (I/A1 x 100). For open cut mining, the proportion of the total mine footprint verified to be "established rehabilitation" should substantially increase as an operation progresses towards mine closure.
L	Established rehabilitation for agricultural final land uses (hectares)	The percentage of total area of land that is verified to be within either the ecosystem and land use development phase or the rehabilitation completion phase (definitions E & F in Table 5) that have been returned to an agricultural final land use.
M	Established rehabilitation for native ecosystem final land uses (hectares)	The percentage of total area of land that is verified to be within either the ecosystem and land use development phase or rehabilitation completion phase (definitions E & F in Table 5) that have been returned to native ecosystem final land use.
N	Established rehabilitation for other/non-vegetated final land uses (hectares)	The percentage of total area of land that is verified to be within either the ecosystem and land use development phase or the rehabilitation completion phase (definitions E & F in Table 5) that have been returned to other/non-vegetated final land use.

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	An area that has been disturbed and that requires rehabilitation. 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).		
Domain	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.		
Ecosystem and Land Use Development	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. 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. This phase of rehabilitation may include specific vegetation management strategies and maintenance such as tree thinning, supplementary plantings and weed management.		
Ecosystem and Land Use Establishment	This phase of rehabilitation consists of the processes to establish the approved final land use following construction of the final landform. 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.		
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	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.		
	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.		
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	This phase of rehabilitation consists of the processes and activities required to construct the final landform. 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).		
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	Means the NSW Resources Regulator's online portal that lease holders must use (via a registered account) to: 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. 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.		
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</i> 2013.		
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	The stages and sequences of actions required to rehabilitate disturbed land to achieve the final land use. The phases of rehabilitation are: active mining decommissioning landform Establishment growth medium development ecosystem and land use establishment ecosystem and land use development.		
Progressive rehabilitation The progress of rehabilitation towards achieving the approved rehabilitation completion criteria. This may be described in terms of domains, phases, perform indicators and rehabilitation completion criteria.			
Rehabilitation Completion	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.		
Rehabilitation Completion criteria	As defined in the Mining Regulation 2016.		
Rehabilitation cost estimate	As defined in the Mining Regulation 2016.		
Rehabilitation management plan	As defined in the Mining Regulation 2016.		
Rehabilitation objectives	As defined in the Mining Regulation 2016.		
Rehabilitation risk assessment	As defined in the Mining Regulation 2016.		
Rehabilitation schedule	The defined timeframes for progressive rehabilitation set out in the forward program.		

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: 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*.

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Attachment 3 – Rehabilitation Complaints

DATE	COMPLAINANT	COMPLAINT DETAILS	RESPONSE DETAILS	STATUS OF RESPONSE	DATE RESPONSE COMPLETED (IF APPLICABLE)
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Attachment 4 – Stakeholder consultation

DAT	re	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
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Attachment 5 - Plans

MSL FY-24 Plan 1A.2.zip MSL FY-24 Plan 1B.2.zip

Annual Report (LARGE MINE) v1.6