

ARR0001244

NORTHPARKES MINES ANNUAL REHABILITATION REPORT

Sunday 1 January 2023 to Sunday 31 December 2023

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Summary table

DETAIL	
Mine	Northparkes Mines
Reference	ARR0001244
Annual report period commencement date	Sunday 1 January 2023
Annual report period end date	Sunday 31 December 2023
Forward program	FWP0001148
Mining leases	ML 1247 (1973), ML 1367 (1992), ML 1641 (1992), ML 1743 (1992)
Lease holder(s)	SC MINERAL RESOURCES PTY LTD, SUMITOMO METAL MINING OCEANIA PTY LTD, EVOLUTION MINING (NORTH PARKES) PTY LTD
Contact	Chris Higgins
Date of submission	Thursday 28 March 2024

Important

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

Northparkes is a copper-gold mine 27km north-west of Parkes, within the Parkes LGA, in central west NSW. Northparkes is operated by Northparkes Mining Services Pty Limited as agent severally for and on behalf of the Northparkes Joint Venture, an unincorporated joint venture between Evolution Mining (Northparkes) Pty Limited (80%), Sumitomo Metal Mining Oceania Pty Ltd (13.3%) and SC Mineral Resources Pty Ltd (6.7%). Development consent was originally issued to North Mining Limited, as DA 504/90 in 1992. This approval was based on open cut mining of locations E22 and E27 and underground mining of E26. In 2019 MP11_0060 was gazetted as a State Significant Development (SSD) under section Part 4 of the EP&A Act and expires on 31 December 2032. Northparkes currently operate E48 and E26 underground mine utilising the block cave method and sub-level methods. Open-cut mining recommenced at E31 and E31N in 2023.

Life of mine

9 years

Current development consents, leases and licences

Development consents granted under the *Environmental Planning and Assessment Act 1979*

PA11_0060
PA11_0060
PA11_0060
PA11_0060
PA11_0060
PA11_0060
PA11_0060
PA11_0060
PA11_0060

Authorisations covering the mining area granted under the *Mining Act 1992*

ML 1247 (1973), ML 1367 (1992), ML 1641 (1992), ML 1743 (1992)

Any other approvals, licences, or authorities issued by government agencies that are relevant to the progress of mining operation and rehabilitation activities

EPL4784
EPBC 20136788

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

PA11_0060 was subject to modifications during the reporting period. Modification (MOD) 9 was approved 20 April 2023. MOD 9 permits low impact geotechnical drilling prior to the retirement of biodiversity credits required by Condition 28A of MP11_0060. MOD 10 was approved 9 November 2023. MOD 10 allows Northparkes to implement operational changes to improve efficiency of the site, while maintaining or improving environmental outcomes. Northparkes also commenced preparation of the MOD 11 and MOD 12 applications. MOD 11 will seek to expand the E28NE open cut pit and E28 waste rock emplacement, permit development of the new Altona Water Storage and implement other minor operational changes. Following the cessation of mining at the E48 block cave in December 2023, MOD 12 will seek to approve underground mining in a sub-level cave under E48 known as E48SLC.

Changes to land ownership and land use

Northparkes land is owned by the Northparkes Joint Venture. During the reporting period, the majority ownership share of the Northparkes Joint Venture was transferred from the previous owner China Molybdenum Company (CMOC) Mining Pty Limited to Evolu

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

Following works associated with the unloading of TSF2, the East embankment landform was re-established in 2022, and growth medium development and re-seeding took place in 2023. The germination rate was moderate, but a period of low rainfall resulted in loss of juvenile vegetation. Northparkes will assess the appropriate corrective actions in year 1 of the Forward Program. Open-cut mining recommenced at E31 and E31N in 2023, resulting in new disturbance which is reflected in Plan 1A. The third raise of the Rosedale TSF was completed in mid-2023 as forecast. As anticipated, tailings were primarily deposited within Estcourt TSF and deposition into Rosedale TSF commenced in the second half of 2023. Estcourt TSF is approaching capacity and may be utilised over the next three years. Deposition into TSF1 has been postponed while the possibility of a raise is investigated. Construction of the new laboratory building was completed in 2023, and the contractor's yard/workshop shed was commenced, with an estimated completion date of April 2024. The aforementioned progressive work is generally consistent with the forecast year 1 schedule presented in the 2023 Forward Program.

Rehabilitation planning activities that were conducted, including any specialist studies

During the reporting period, Northparkes continued studies investigating amendments to the final landform design, which will be progressed as part of the planning approvals process for a future SSD application. Components being considered include: - Raising of TSF final heights to reduce future TSF footprints; - Filling of current and future mining voids with tailings; and - Using cyclone tailings material as construction material for the upstream portion of all future tailings embankment lifts. The Rehabilitation Objectives Statement and Final Landform Rehabilitation Plans were approved by the NSW Resources Regulator on 22 August 2023.

Overview of subsidence repair and/or remediation works undertaken

There were no subsidence repair or remediation works undertaken in the reporting period.

Overview of rehabilitation management and maintenance activities

The E22 batter rehabilitation maintenance program continued. The TSF1 North and East embankment batter monitoring continued in consultation with the TSF Engineer of Record. As noted above, the TSF2 East embankment underwent growth medium development and re-seeding, and follow up actions will be determined during year 1 of the Forward Program. A

kangaroo culling campaign was undertaken in 2023. The success of the program was limited as the majority of kangaroos were located in areas of the site where firearms are not permitted.

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

Following an inspection in October 2023, the NSW RR (NTCE0013371) issued a notice under Section 240 of the Mining Act 1992 (the Notice) in January 2024 relating to undertaking further landform stability assessments, progressing TSF capping designs and conducting an updated rehabilitation risk assessment. The directions presented to Northparkes will be addressed during year 1 of the Forward Program.

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

There are no rehabilitation areas that have achieved the final land use.

Key production milestones

MATERIAL	UNIT	FWP0001148 YEAR 1		THIS REPORT
Stripped topsoil (if applicable)	(m ³)	55,000		25,000
Rock/overburden	(m ³)	2,505,744		1,196,000
Ore	(Mt)	7.85		6.9
Reject material ¹	(Mt)	7.71		7.1
Product	(Mt)	0.14		0.14

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 disturbance footprint	(ha)	1,339.99
B Total active disturbance	(ha)	1,140.11
C Land prepared for rehabilitation	(ha)	157.88
D Ecosystem and land use establishment	(ha)	42
E Ecosystem and land use development	(ha)	0
F Rehabilitation completion	(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
H 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
I Established rehabilitation	(ha)	0
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	%	0

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	%	0
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

N/A

Key factors that delayed progressive rehabilitation

N/A

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

N/A

Rehabilitation monitoring and research findings

Rehabilitation monitoring

The rehabilitation monitoring carried out in the annual reporting period

All reference sites have been subjected to some prior form of disturbance, in particular clearing, logging and grazing, and some sites were likely to be older regrowth. Exotic annual grasses and a range of other agricultural weeds were also common. The rehabilitation monitoring sites occur on various waste emplacements and on the TSF embankments. Some sites were also established in revegetation areas located around the farming properties as well in the Limestone State Forest area. The monitoring sites were chosen based on their final land use/vegetation community type and year of establishment and were considered representative of the rehabilitation area as a whole. Due to re-disturbance on the TSF2 East Embankment and the E22 batter, the two associated monitoring sites were restarted and had low levels of functional patch areas. Older monitoring sites, such as E26 and E27 have developed well with patch areas remaining high. Many sites were dominated by naturalised exotic annuals. Although they are weeds, they function as soil stabilisers and are consistent with the reference sites. The drier season prior to the monitoring survey resulted in fewer exotic annuals compared to other years. Macropod grazing impact was less in 2023 compared to the 2020 survey, primarily due to the improved seasonal conditions across the region.

Status of performance against rehabilitation objectives and rehabilitation completion criteria

The monitoring program that has been implemented

Opportunities for rehabilitation areas are currently limited due to most disturbance remaining necessary for active mining. For areas in the rehabilitation phase, the results and observations of each monitoring survey are compared against the approved Rehabilitation Objectives and Final Landform and Rehabilitation Plan, and the proposed Rehabilitation Completion Criteria. Monitoring is used to establish if there are any early indicators of whether rehabilitation is likely to succeed or fail, which provides opportunities to identify necessary corrective actions. The rehabilitation monitoring in 2023 indicated that rehabilitation was progressing generally as predicted, with no significant corrective actions required.

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 trending toward achieving the approved Rehabilitation Objectives and Final Landform and Rehabilitation Plan, and proposed Completion Criteria. There are various areas of the mine that have reached landform establishment phase, growth medium development phase and ecosystem and land use establishment phase, with plans to progress rehabilitation further detailed in the Forward Program. The rehabilitation monitoring program has not identified any issues that are likely to result in failure to achieve the proposed Completion Criteria.

Appraisal description

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

Rehabilitation monitoring program findings

Rehabilitation monitoring surveys are undertaken every three years in accordance with the Rehabilitation Management Plan (RMP). The rehabilitation monitoring program was conducted in 2023 in accordance with the RMP (Section 8). In 2009, monitoring sites were established which included mixed woodland and native grassland reference sites. These monitoring sites are assessed on a three-year basis, with the latest monitoring being carried out in the 2023 reporting period across 16 rehabilitation sites and seven reference sites.

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

The area in ecosystem and land use establishment phase to the West and South of E22, and the TSF1 embankments in growth media development phase were observed during the reporting period to have a high prevalence of established weed species, which will continue to be monitored.

Outcomes of rehabilitation research and trials

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS	ON TRACK?
RRT0001014	TSF1 Trial Plots	Establish tailings cover trial plots directly on representative Northparkes tailings to guide the effective closure design for the TSFs	Four plots were established in 2014 in the SW corner of TSF1. All plots have 100mm of topsoil, however they each have varying depths of waste rock. A range of tests have been carried out over the years. Recent years the assessments have been focused on species contribution to cover. All the plots have adequate groundcover however the species composition is different and has continued to change with the seasons. The plots are located in a corner that should be maintained till 2027.	31 Dec 2027	Ongoing	Yes
RRT0001015	TSF2 tailings growth medium	Provide data to support the progression of tailings into growth medium. Visually, the vegetation on TSF2, in drought and recent wet years, indicate tailings is sustaining native groundcover easily.	Partnered with Uni of Queensland and Federation Uni to research the biological and chemical changes in tailings composition. Samples of the tailings material have been taken below established vegetation and within adjacent bare areas to assess the change. TSF2 was a dust issue in the past until barley crops were sown within the tailings. With time, natives have established across the tailings beach directly in the tailings. This research ensures the progression is captured and recorded.	31 Dec 2025	Ongoing	Yes

Outcomes of completed trials and research

N/A

Attachment 1 – Reporting Definitions

REPORTING CATEGORY		DEFINITION
A1	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>
A2	Underground Mining Area	Underground mining operations areas/subsidence management areas.
B	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	<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>

REPORTING CATEGORY	DEFINITION
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>
E Ecosystem and Land Use Development	<p>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).</p> <p>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).</p>
F Rehabilitation Completion	<p>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 <i>Form: ESF2 Rehabilitation completion and/or review of rehabilitation cost estimate and/or notification of mine or petroleum site closure</i>.</p>
G New active disturbance area	<p>The area of any new active disturbance that has been created during the annual reporting period (definition A1 in Table 5).</p>
H New rehabilitation commenced during annual reporting period	<p>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).</p>
I Established rehabilitation (hectares)	<p>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).</p>

REPORTING 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.
K	% 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 ($I/A1 \times 100$). 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	<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	<p>Means any persons or bodies who may be affected by the mining operations, including rehabilitation, carried out on the lease land, and includes:</p> <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 – Rehabilitation Complaints

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

DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
3 Mar 2023	NSW Dept. of Planning	Online presentation regarding waste dump options, tyre disposal onsite, biosolid use and TSF designs.	Biosolids used as a fertiliser to improve the vegetated dust cover over TSF2.	Limited annual volume of Biosolids used on TSF2
10 Jul 2023	Northparkes Community Consultative Committee (CCC)	Face to face meeting and presentation on future approvals, including the proposal to increase the heights of TSFs and new mining areas	n/a	n/a
13 Jul 2023	Wiradjuri Executive Committee (WEC)	Face to face meeting and presentation on future approvals, including the proposal to increase the heights of TSFs and new mining areas	n/a	n/a
20 Apr 2023	NSW EPA	Online presentation on tailing construction, disposal of waste tyres onsite, use of biosolids, new waste emplacement and other longer term mining components	Tyre disposal on site	Request to be able to dispose of tyres onsite removed from Mod10

Attachment 5 – Plans

Plan 1A attachment not provided.

Plan 1B attachment not provided.

Annual Report (LARGE MINE) v1.6