NSW GOVERNMENT

NSW Resources Regulator

ARR0001589

NORTHPARKES MINES ANNUAL REHABILITATION REPORT

Monday 1 January 2024 to Tuesday 31 December 2024

Summary table

DETAIL	
Mine	Northparkes Mines
Reference	ARR0001589
Annual report period commencement date	Monday 1 January 2024
Annual report period end date	Tuesday 31 December 2024
Forward program	FWP0001384
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 (Northparkes) Pty Ltd
Contact	Chris Higgins
Date of submission	Tuesday 30 September 2025

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

Evolution Mining Northparkes Operations (Northparkes) is a copper-gold mine located 27 kilometres northwest of the town of Parkes in central west New South Wales, Australia. The Northparkes business continues to run under a joint venture arrangement with 80% interest with Evolution Mining (Northparkes) Pty Ltd and the remaining 20% share owned by the Sumitomo Group. 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 campaigns occur to build surface ore reserves. The most recent being the E31 and E31N open cuts that were mined from 2023 to 2025. The next open cut is the E28NE, which is schedule to start in 2026.

Life of mine

8 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

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. • MOD 11 was approved on 5 March 2025. MOD 11 allows for the expansion of the E28NE open cut pit and E28 waste rock emplacement, permits development of the new Altona Water Storage and implements other minor operational changes. • MOD12 was approved on 13 November 2024. MOD 12 approves underground mining and the associated tunnelling and development works in a sub-level cave under E48 known as E48SLC. EPL4784 was subject to a minor wording update during the reporting period.

Changes to land ownership and land use

No change.

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 the unloading of TSF2, the East Embankment landform was re-established in 2022, and growth medium development and re-seeding undertaken in 2023. The germination rate was moderate, but a period of low rainfall resulted in significant loss of juvenile vegetation. The presence of rock in the growth medium reduced erosion risk until vegetation established. No action was required as adequate vegetative cover has established. Open-cut mining at E31 and E31N was completed during the reporting period, with the disturbance reflected in Plan 1A. Geotechnical monitoring of the pits continued, with more than 200 additional prisms installed for remote monitoring of the pit walls; no large-scale instability was identified. Dewatering of the accumulated rainfall (rather than groundwater); pit walls are largely dry. Tailings were primarily deposited within Rosedale TSF with minor deposition into Estcourt TSF. Construction of the contractor's yard/workshop shed was completed in March 2024. Preliminary works associated with the Infill Extension Project commenced in the October to December quarter (2024). With the majority of the construction works occurring outside of the Annual Rehabilitation reporting period, from July 2025 to March 2026. This project will complete the programe to improve the factor of safety for TSF2 north and west embankments. The aforementioned progressive work is generally consistent with the forecast Year 1 schedule presented in the 2024 Forward Program.

Rehabilitation planning activities that were conducted, including any specialist studies

Northparkes responded to the Notice NTCE0013371 issued by NSW RR containing 3 directives relating to tailings closure design. - 1: Modelled assessment of erosional stability of TSF landforms Outcomes from the study showed that the embankments can be covered with either waste rock alone or a 0.1m 50:50 soil:waste rock blend. - 2: Support TSF capping planned for closure Based on long term TSF1 & TSF2 works, the study concluded beach and walls should have a 0.1m cover of soil:waste rock blend, however the beach is also able to have direct seeding or a 0.1m of organic matter instead of soil. Studies confirm there is adequate material inventory. - 3: Rehab risk assessment including the outcomes from directions 1 & 2. Facilitated by Umwelt including the representatives from the tailing's operations, tailings designs and tailings construction projects. Also continued studies investigating amendments to the final landform design. Components being considered include: - Raising of TSF final heights to reduce future TSF footprints; - Filling of E31 and E31N open cut voids with tailings. Filling voids with tailings is desired for the final landform. Research continued with universities into options for tailings cover designs. The focus on utilisation of tailings material as a growth medium and is based on the natural succession of native species across TSF2. A PHD student at Federation University has commenced this research.

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 key action within the period was erosion control works on the access road adjacent to the area under repair. The TSF1 North and East Embankment batter monitoring continued in consultation with the TSF Engineer of Record. Assessment of corrective actions to address the loss of juvenile vegetation on the TSF2 East embankment was completed. No actions were deemed necessary as the established vegetation within the placed growth medium has provided adequate cover.

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 issued a notice (NTCE0013371) 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 have been addressed under the section on rehabilitation planning activities.

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	FWP0001384 YEAR 1	THIS REPORT
Stripped topsoil (if applicable)	(m^3)	17,500	19,598
Rock/overburden	(m^3)	900,000	8,407,639
Ore	(Mt)	7.4	12.25
Reject material[1]	(Mt)	7.2	10.24
Product	(Mt)	0.15	0.22

[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
A1	Total disturbance footprint – surface disturbance	(ha)	1,364.45
B	Total active disturbance	(ha)	1,155.05
C	Rehabilitation – land preparation	(ha)	157.88
D	Ecosystem and land use establishment	(ha)	51.52
E	Ecosystem and land use development	(ha)	0
F	Rehabilitation completion	(ha)	0

Rehabilitation key performance indicators (KPIs)

	ELEMENT	UNIT	THIS REPORT
G	New disturbance area	(ha)	24.46
H	New rehabilitation commenced during annual reporting period	(ha)	9.52
I	Established rehabilitation	(ha)	0
J	Annual rehabilitation to disturbance ratio	%	0.39
K	Rehabilitated land to total mine footprint	%	0

Progressive achievement of established rehabilitation

	ELEMENT	UNIT	THIS REPORT
L	**Established rehabilitation for agricultural final land uses**	%	0
M	**Established rehabilitation for native ecosystem final land uses**	%	0
N	**Established rehabilitation for 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 E22 Portal was forecast to commence construction in 2023. Development for the E22 Block Cave has been delayed until future years. The approved construction of the Altona Water Storage Facility is not intended at this time. In pit water from the E22 void will be transferred to Caloola North and South. Additionally, Northparkes are also seeking approval to transfer in-pit water from the E22 Void to E31 and E31N. Construction of the Infill TSF Extension was delayed and has now commenced in July 2025. Investigation of options to raise all northern TSFs was forecast to commence in 2024. Northparkes will seek regulatory approval for increasing final height of all TSFs in the coming years.

Key factors that delayed progressive rehabilitation

Years 1 and 2 of the Forward Program (relevant to this 18 month Annual Rehabilitation Report) included the planned disturbance of areas to facilitate future operations. Areas included: • Clearing for the temporary waste rock stockpiles adjacent to the main access road. • Additional clearing to the north of the Processing Plant and Administration Building. • Planned disturbance to the east of TSF1. • Disturbance adjacent to E48 • Disturbance to the east of the Infill TSF. Works completed during the Annual Rehabilitation Report period included less than the planned disturbance, with less than anticipated clearing occurring adjacent to E48 and no disturbance east of TSF1 or the Infill TSF. No progressive rehabilitation was completed during the reporting period, this is consistent with the Forward Program (Years 1 and 2). Opportunities for rehabilitation areas are currently limited due to most disturbance remaining necessary for active mining.

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

To minimise future disturbance, regulatory approval will be sought to raise all the TSFs higher than the current approved height. If approved, this change would reduce future disturbance and alter the current final landform. The assessment will include tailings beach settlement (particularly the E27 portion of Estcourt TSF), batter erosion and landform modelling.

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. The next round of monitoring is due to occur within the coming reporting period.

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 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 2032	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 2032	Ongoing	Yes

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS	ON TRACK?
RRT0001158	TSF2 Biosolids Plant Trial	To provide data on biosolids to support tailings as a growth medium.	On the 23 May 2025 a Biosolids Plant Trial was established on the eastern side of TSF2. Five north south rows of 100m x 4m were pegged out with 4 m gaps in between. There were five different seed mixes used across the trial plot strips. The species were chosen based on their salt tolerance. Promising outcomes have been observed to date and it is intended for trial areas to increase over time.	31 Dec 2032	Ongoing	Yes

Outcomes of completed trials and research

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.
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	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.

REPORTING 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).
H	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).

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 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 *Biodiversity Conservation Act 2016* and the *Fisheries Management Act 1994* (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 *Mining Act 1992.*
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 *Mining Act 1992*.
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 *Mining Act 1992.*
Native vegetation	Has the same meaning as that term under section 60B of the *Local Land Services Act 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, performance 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 *Form ESF2 Rehabilitation completion and/or review of rehabilitation cost estimate* 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 *Protection of the Environment Operations Act 1997*.

[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)

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
24 Oct 2024	Community Consultative Committee (CCC)	Face to face meeting and presentation on new project (E48 SLC), Back Trundle (proposed E44 mine) and infill extension and cycloning initiatives to enhance tailings use and capacity.	n/a	n/a
4 Jul 2022	DPE - Water	Letter (via email)	Northparkes sought feedback on the proposed rehabilitation outcomes. DPE – Water requested consideration of general surface and groundwater quality and regime outcomes.	DPE – Water: Requests addressed in Rehabilitation Management Plan (RMP) S. 6.2 and 6.3

DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
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
4 Jul 2022	Biodiversity Conservation Division (BCD)	Letter (via email)	Seeking feedback on the proposed rehabilitation objectives, performance indicators and closure criteria. BCD recommended quantitative performance measures, a detailed monitoring plan and quantitative trigger points relating to the performance criteria in the TARP.	RMP S. 4 provides proposed performance indicators and completion criteria. S. 8 provides a detailed monitoring program to track performance. S. 10 provides a TARP with quantified measures to track performance against performance indices and criteria.
4 Jul 2022	Forestry Corporation NSW (FC NSW)	Letter (via email)	Northparkes sought feedback on the proposed rehabilitation outcomes FC NSW referred to safety measures, vegetation composition (request White Cypress Pine), fencing authorisations, and disagreement that Limestone State Forest is a Biodiversity Offset Area.	The identification of the Limestone State Forest as a Biodiversity Offset Area in the consultation letter was made in error and has since been corrected. The other feedback is noted and will be taken into consideration for future review of rehabilitation planning.
21 Oct 2022	Community Consultative Committee	Meeting	Northparkes sought feedback on various components of rehabilitation and final landform – refer to CCC meeting minutes. The CCC responded that they were comfortable with the proposed rehabilitation plans	No actions requested.
4 Jul 2022	DPE, NRAR, Parkes Shire Council	Letter (via email)	Northparkes sought feedback on the proposed rehabilitation outcomes No responses were received.	DPE, NRAR and Parkes Shire Council did not provide feedback.

DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
31 Oct 2024	October 2024 NSW Resources Regulator (RR) Northparkes received a Rehabilitation Notice Direction (NT	Northparkes received a Rehabilitation Notice Direction (NTCE0013371) in January 2024 under Section 240 of the Mining Act 1992 containing three directives relating to tailings closure design. Northparkes responded to the notice from the NSW Resources Regulator in October 2024. The notice contained three directives relating to tailings closure design.	Inadequate tailings closure design.	October 2024 NSW Resources Regulator (RR) Northparkes received a Rehabilitation Notice Direction (NTCE0013371) in January 2024 under Section 240 of the Mining Act 1992 containing three directives relating to tailings closure design. Northparkes responded to the notice from the NSW Resources Regulator in October 2024. The notice contained three directives relating to tailings closure design. Inadequate tailings closure design. *A digital elevation model was created to determine erosion risks to t
8 Apr 2025	Community Consultative Committee (CCC)	Face to face meeting and presentation on completion of open cut mining; the Infill Extension Project (another tailings storage facility within existing footprint) and the potential of next open cut pits.	n/a	n/a
20 Sep 2022	Wiradjuri Executive Committee (WEC)	Discussion	Northparkes sought feedback on the proposed rehabilitation outcomes. WEC requested consideration of medical and food species woodland, avoid cypress	Cyprus pine will be avoided in revegetation activities. Inclusion of medical and food species and potential availability of freehold land for Wiradjuri people to be further considered and discussed in updates of the RMP.

DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
			pine, parcels of freehold land for local Wiradjuri people, require proper informed consultation in the future	
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.