



**NSW  
Resources  
Regulator**

**FWP0001544**

# **BALRANALD MINERAL SANDS PROJECT FORWARD PROGRAM**

**Wednesday 1 January 2025 to Friday 31 December 2027**

## Summary

### DETAIL

<b>Mine</b>	Balranald Mineral Sands Project
<b>Reference</b>	FWP0001544
<b>Forward program commencement date</b>	Wednesday 1 January 2025
<b>Forward program end date</b>	Friday 31 December 2027
<b>Forward program revision (if applicable)</b>	
<b>Contact</b>	Brendan Isaacs
<b>Mining leases</b>	ML 1855 (1992), ML 1736 (1992)
<b>Project location</b>	Iluka Resources Limited
<b>Date of submission</b>	Thursday 27 February 2025

## Important

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

# Three-year forecast – surface disturbance activities

## Project description

Iluka have approval to develop a mineral sands mine in south-western NSW, known as the Balranald Mineral Sands Mine. It includes construction, open-cut mining, primary processing, and rehabilitation of two linear mineral sand deposits, known as the West Balranald and Nepean deposits, located approximately 12 kilometres (km) and 66 km north-west of the town of Balranald, respectively. The Balranald Mine also included undertaking an approved bulk sampling activity at the West Balranald deposit to trial the use of underground mining methods. On 21 December 2022, Iluka were granted approval to modify the consent (MOD1) to expand the underground mining trial which includes an additional area of disturbance to the approved Balranald Mine area to enable primary processing of the ore into heavy mineral concentrate (HMC) and transport of HMC offsite for secondary processing at Iluka's facilities.

## Description of surface disturbance activities

### Exploration activities

There are two drilling programs proposed within the next three years. Infill RC-AC drilling is proposed to delineate the geometry of the strand over an area impacted by faulting of the basement at depth. The West Balranald strand elevation is changed by 10 metres between two 400m spaced drill sections at 549,300N and 549,700N in the Balranald local grid system. Prior to mining the northern faulted area, a grade control drill program consisting of between 10 to 16 AC drill holes will be required to refine the strand geometry and this is proposed to be completed in late 2025 to early 2026. Further Sonic drilling will be required in 2026 to support conversion of Indicated Resources to Measured Resource classification in advance of mining activities. Sonic drilling enables upgrading of mineral resources to Measured Resource classification and verifies correlations between the RC-AC and Sonic sample dataset. It is expected that an additional four sections of Sonic drilling will be completed for resource definition during this period.

### Construction activities

Construction associated with the approved MOD1 underground mining trial commenced in 2023. Construction and commissioning activities will continue until late 2025. The following will be located within Mining Leases ML1736 and ML1855:

- Processing Plant infrastructure – comprising wet concentrator plant (WCP), floatation plant, and wet high intensity magnetic separation plant (WHIMS);
- timber stockpiles (felled vegetation);
-

Stockpile Emplacement Facility - includes the underground mining area; ore stockpile; and the temporary stockpiles area for topsoil, subsoil and overburden

- Product and Tails Pads – heavy mineral concentrate (HMC), sand tails;
- Liquid Storage Facility - process water (PWD), potassium amyl xanthate (PAX) and fines dams;
- Hydrocarbon Infrastructure – diesel fuel storage and dispensing station
- underground mining infrastructure;
- hardstand and laydown areas;
- site offices, warehousing, workshops, amenities and carparking;
- accommodation camp, services and utilities infrastructure, telecommunications tower;
- Roadway network - Main haul road, mine access roads and internal access tracks

## Mining schedule

Mining development method and sequencing and general mine features.

Mineral ore will be extracted to surface by utilising underground bore hole mining technology developed during previous bulk sampling activities. The predicted processing rate is anticipated to be between 50 and 200 tph. Mining stopes and drill pads will be developed at strategic locations within the mining panels to accommodate the directional drill rigs for the extraction of ore and re-injection of fines. An underground pillar will be left after every 11th underground stope or approximately 500m to ensure stability and maintain ground monitoring infrastructure. The extension of the underground mining trial has been approved for up to six years with mining operations scheduled to commence in September 2025.

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

Topsoil, subsoil and overburden will be stockpiled separately, with topsoil stockpiled to a maximum height of 2 m to preserve soil biota and minimise compaction. Subsoil will be stockpiled to a maximum height of 10 m, dependent on soil properties and condition. Stockpile attributes will be recorded including location, placement date, originating vegetation community, material strip depth, soil type, stripping conditions and volumes. Stockpiles will be managed in accordance with the erosion and sediment control measures outlined in the Water Management Plan. Vehicle access to stockpiles will be controlled to prevent further compaction and erosion. Weeds will be managed on topsoil stockpiles to minimise weed seed accumulation and spread. During mining operations topsoil, subsoil and approximately 2 m of overburden will be pre-stripped from the mine path and stockpiled for use in the rehabilitation phase. Sand tailings from ore processing will be placed within the pre-stripped mining voids and the next phase of pre-stripping volumes direct placed. This includes overburden, subsoil and topsoil from the proceeding mining voids. The final landform will be constructed approximately 1-2m above natural surface to account for expected subsidence. Final land form establishment works will be undertaken once subsidence has stabilised according to monitoring results. A “direct strip and replace” approach will then be adopted as the general mining practice where reasonably practicable.

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

The processing plant will have a number of circuits including the screening, wet concentrator plant, flotation plant and wet high intensity magnetic separation plant. The ore will be concentrated through the processing plant to generate two primary product streams, magnetic Heavy Mineral Concentrate (HMC) and non-magnetic HMC. HMC will be temporarily stockpiled on site and transported to an off-site location for processing. Two primary tailings streams will be generated. These are fine particle (slimes) and sand tails (Float tails and coarse sand). The sand tails will be dewatered and stockpiled prior to being mechanically placed in the pre-stripped voids ahead of underground mining. The topsoil, subsoil and overburden pre-stripped from these areas prior to the emplacement of the coarse sand tails will be returned in order to achieve a sustainable rehabilitation outcome. The slimes will be reinjected underground in accordance with processes and management measures outlined in the Water Management Plan. Processing is scheduled to commence September 2025, shortly after underground mining commences.

### Waste disposal and materials handling operations.

Putrescible waste generation will be disposed of in onsite skip bins, bins will remain covered at all times and replaced on a regular basis by a third party contractor who will dispose of the waste to an appropriately licenced waste facility. There may be an opportunity to manage putrescible waste onsite, this will be identified through potential long-term recycling initiatives developed during the operational phase. Liquid hydrocarbons will be stored within purpose built bunds that can contain 120% of the largest container to fully contain any leakage. Other hydrocarbon waste such as oil filters, fuel filters, oily rags and spill absorbents will be stored separately in plastic bins to prevent leakage of hydrocarbons. Hydrocarbon waste will be collected by a licenced third party contractor and disposed of at an appropriately licenced waste facility. Soils contaminated with hydrocarbons will be collected by scraping up the minimum amount of soil necessary and storing in plastic bins or 1000L shuttles for collection by a licenced third party contractor and disposal to an appropriately licenced waste facility. For larger amounts of contaminated soil, a lined sump may be used to temporarily store contaminated soil for either onsite remediation and disposal in pit below the overburden layer or disposal offsite to an appropriately licenced facility.

**Key production milestones**

<b>MATERIAL</b>	<b>UNIT</b>	<b>YEAR 1</b>	<b>YEAR 2</b>	<b>YEAR 3</b>
<b>Stripped topsoil</b> (if applicable)	(m <sup>3</sup> )	164,770	19,105	112,875
<b>Rock/overburden</b>	(m <sup>3</sup> )	449,135	225,660	180,623
<b>Ore</b>	(Mt)	0.16	1.04	1
<b>Reject material<sup>1</sup></b>	(Mt)	0.06	0.47	0.45
<b>Product</b>	(Mt)	0.1	0.57	0.54

<sup>1</sup> This includes coarse rejects, tailings and any other wastes resulting from beneficiation.

# Three-year rehabilitation forecast

## Rehabilitation planning schedule

### Rehabilitation planning schedule

The Rehabilitation Management Plan was updated in November 2024 to include rehabilitation of mining activities approved under the Modification (MOD1) of Development Consent SSD-5285. Prior to the commencement of mining operations in 2025 the mine plan outlining movement of overburden, subsoil and topsoil will be established that includes sequencing and scheduling of material movements ahead of underground mining. A Subsidence Management Plan will be developed prior to commencement of underground mining in 2025 to monitor areas where underground mining has concluded to understand the rate of subsidence and when maximum subsidence is reached to allow final land form establishment to be undertaken.

### Stakeholder consultation

Balranald Shire Council will be informed when necessary, as an ongoing commitment to provide updates on the Project's progress with construction works, including when Iluka expect to finish construction and formally commence mining operations (i.e., following successful commissioning of the processing plant). Balranald Shire Council and Transport for NSW will also be consulted regarding the key requirements on road upgrades during the construction of the mine's road network and the transportation of mine infrastructure and building materials. Consultation with Registered Aboriginal Parties (RAPs) will be undertaken as required in the next 3 years. The mine will coordinate with RAPs should they be required to assist in the salvage and recording of any unexpected heritage finds discovered during construction. Consultation with RAPs will continue to maintain the Aboriginal Cultural Heritage Working Group. The group will continue to meet at least twice per year, and will be an advisory committee which Iluka will work with in relation to ongoing management of Aboriginal heritage associated with the project. Consultation with the Resources Regulator will be undertaken as an ongoing commitment as part of the rehabilitation objectives and final land use plans as approved under MOD1 for the site required under the Mining Regulation 2016. Community consultation including attending community events, providing project updates and responding to queries or complaints.

### Rehabilitation studies, risk assessments and/or design work

A risk assessment will be conducted to identify risks associated with preparing a final landform post underground mining, this includes the use of remote dozer. Monitoring results and studies from previous underground mining trials will be used to better understand subsidence behaviour and stability issues after the extraction of mineral sands at depth. The outcome of

the studies will inform how the final landform will present and any re-work required prior to ecosystem establishment. The land prepared in front of underground mining operations will be constructed approximately 1-2 m above natural surface and be informed by these studies and local geology. Subsidence will be monitored post mining to build a data set to calibrate the modelled subsidence rate and extent prior to final landform establishment. It is proposed that an un-manned remotely operated dozer will be utilised post mining to initially test geotechnical stability and re-shape landform prior to topsoil placement utilising conventional earthmoving equipment. Surface water management will be in accordance with the approved Water Management Plan and site surface water plans developed when planning to disturb additional areas. Surface water management objectives are to prevent offsite release of turbid water through diversion and sediment dams and re-use of water to maximise efficiency. No final void using underground mining method. No decommissioning works planned.

## Rehabilitation research and trials

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS
RRT0001136	<b>Remote dozer trials</b>	To confirm that areas previously mined using underground mining method are geotechnical stable for final landform establishment.	Remotely operated dozer and tow behind compactor will be deployed on previously mined areas where subsidence was observed during the T3 trials.	30 Jun 2025	Not started

## Rehabilitation maintenance and corrective actions

No rehabilitation activities were undertaken during the 2024 annual reporting period as construction activities were still ongoing. The Environmental Management Plans (EMPs) were updated and approved in 2024, replacing the care and maintenance EMP to ensure environmental risks associated with construction activities and different phases of rehabilitation are appropriately managed, and mitigated in a timely manner. All rehabilitation areas will be maintained in accordance with the mine's Rehabilitation Management Plan (RMP) and Biodiversity Management Plan (BMP). Inspections and control of declared weeds and vertebrate pests will continue at all mining domains during construction, operations and all phases of rehabilitation. Rehabilitation areas will be inspected after significant rain events to ensure drainage structures are working effectively and there is no significant erosion occurring to landform or stockpiled materials. Maintenance of drainage and erosion control infrastructure will be undertaken where corrective actions are warranted.

## Rehabilitation schedule

Resource recovery of felled vegetation, topsoil and subsoil during construction activities of the 2023-2025 Forward Program period was implemented for later use in rehabilitation phases. During the active mining phase, early rehabilitation ("prehab") will progressively be undertaken ahead of underground mining operations to ensure there is 50 m buffer between underground mining and surface disturbance activities. Pre-prepared mining pits (shallow void) of approx. 2.5 m deep will be created by salvaging topsoil, subsoil and overburden then temporarily stockpiled adjacent to the mine path. Once there is sufficient buffer, sand tailings from the processing plant will be returned to the mining pits for encapsulation. The salvaged soil will then be stripped and returned by direct replacement into the voids to a height of 1-2 m above natural ground level. When underground mining is completed, the final landform will be allowed to subside. Sand tailings will be progressively placed in the voids within subsidence zones and risk assessed for geotechnical stability before final land form establishment. Growth medium development will include minor shaping and contour ripping of batter slopes to create a safe, stable and non-polluting landform. Seeding of prepared topsoil areas will occur generally between April-June when seasonal conditions are most favourable for seed germination.

## Completion of rehabilitation

No rehabilitation has been completed to date.

## Subsidence remediation for underground operations

Monitoring of pre-prepared areas ahead of underground mining will be undertaken from 2025 to establish the rate of subsidence and expected maximum subsidence. This will inform the timing of final landform establishment, and the extent of re-work required for ecosystem establishment.

## Progressive mining and rehabilitation statistics

### Three-yearly forecast cumulative disturbance and rehabilitation progression

FORECAST	UNIT	YEAR 1	YEAR 2	YEAR 3
<b>A Total surface disturbance footprint</b>	(ha)	289.34	301.65	348.09
<b>B Total active disturbance</b>	(ha)	289.34	301.65	348.09
<b>P Total new area of land proposed for active rehabilitation</b>	(ha)	0	0	0

### Rehabilitation key performance indicators (KPIs)

FORECAST	UNIT	YEAR 1	YEAR 2	YEAR 3
<b>O Total new active disturbance area</b>	(ha)	59.89	12.31	46.44
<b>P Total new area of land proposed for active rehabilitation during the reporting period</b>	(ha)			
<b>Q Annual rehabilitation to disturbance ratio</b>				

## Attachment 1 – Reporting Definitions

REPORTING CATEGORY	DEFINITION
<p><b>A</b> Total disturbance footprint – surface disturbance</p>	<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>
<p><b>B</b> Total active disturbance</p>	<p>Includes on-lease exploration areas, stripped areas ahead of mining, infrastructure areas, water management infrastructure, sewage treatment facilities, topsoil stockpile areas, access tracks and haul roads, active mining areas, waste rock emplacements (active/unshaped/in or out-of-pit), tailings dams (active/unshaped/uncapped) and temporary stabilised areas (e.g. areas sown with temporary cover crops for dust mitigation and temporary rehabilitation).</p>
<p><b>C</b> Rehabilitation – land preparation</p>	<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>
<p><b>D</b> Ecosystem and land use establishment</p>	<p>Includes the area which has been seeded/planted with the target vegetation species for the intended final land use. However, vegetation has not matured to a stage where it can be demonstrated that it will be sustainable for the long term and or require only a maintenance regime consistent with target reference/analogue sites.</p> <p>Typically, rehabilitation areas would be in this phase for at least two years (and usually more) before rehabilitation can be classified as being in the ecosystem and land use development phase. This phase does not apply to infrastructure areas that are being retained as part of final land use for the site.</p>

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

## Attachment 2 – Definitions

WORD	DEFINITION
<b>Active</b>	In the context of rehabilitation, land associated with mining domains is considered ‘active’ for the period following disturbance until the commencement of rehabilitation.
<b>Active mining phase of rehabilitation</b>	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.
<b>Analogue site</b>	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.
<b>Annual rehabilitation report and forward program</b>	As described in the Mining Regulation 2016.
<b>Annual reporting period</b>	As defined in the Mining Regulation 2016.
<b>Closure</b>	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).
<b>Decommissioning</b>	The process of removing mining infrastructure and removing contaminants and hazardous materials.
<b>Decommissioning Phase of Rehabilitation</b>	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.

<b>WORD</b>	<b>DEFINITION</b>
<b>Department</b>	The Department of Regional NSW.
<b>Disturbance</b>	See Surface Disturbance.
<b>Disturbance area</b>	<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>
<b>Domain</b>	<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>
<b>Ecosystem and Land Use Development</b>	<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>
<b>Ecosystem and Land Use Establishment</b>	<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>
<b>Exploration</b>	Has the same meaning as that term under the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

<b>WORD</b>	<b>DEFINITION</b>
<b>Final landform and rehabilitation plan</b>	As defined in the Mining Regulation 2016.
<b>Final land use</b>	As defined in the Mining Regulation 2016.
<b>Form and way</b>	Means the form and way approved by the Secretary. Approved form and way documents are available on the Department’s website.
<b>Growth Medium Development</b>	<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>
<b>Habitat</b>	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).
<b>Indicator</b>	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.
<b>Land</b>	As defined in the <i>Mining Act 1992</i> .
<b>Landform Establishment</b>	<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>
<b>Large mine</b>	As defined in the Mining Regulation 2016.
<b>Lease holder</b>	The holder of a mining lease.

WORD	DEFINITION
<b>Life of mine</b>	The timeframe of how long a mine is approved to mine, from commencement to closure.
<b>Mine rehabilitation portal</b>	<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"> <li>■ upload rehabilitation geographical information system (GIS) spatial data</li> <li>■ develop rehabilitation GIS spatial data (using online tracing functions)</li> <li>■ generate rehabilitation plans and rehabilitation statistics using the map viewer and Rehabilitation Key Performance Indicator functionalities.</li> </ul> <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>
<b>Mining area</b>	As defined in the <i>Mining Act 1992</i> .
<b>Mining domain</b>	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).
<b>Mining land</b>	As defined in the <i>Mining Act 1992</i> .
<b>Native vegetation</b>	Has the same meaning as that term under section 60B of the <i>Local Land Services Act 2013</i> .
<b>Overburden</b>	Material overlying coal or a mineral deposit.
<b>Performance indicator</b>	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.

<b>WORD</b>	<b>DEFINITION</b>
<b>Phases of rehabilitation</b>	The stages and sequences of actions required to rehabilitate disturbed land to achieve the final land use. The phases of rehabilitation are: <ul style="list-style-type: none"> <li>■ active mining</li> <li>■ decommissioning</li> <li>■ landform Establishment</li> <li>■ growth medium development</li> <li>■ ecosystem and land use establishment</li> <li>■ ecosystem and land use development.</li> </ul>
<b>Progressive rehabilitation</b>	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.
<b>Rehabilitation Completion</b>	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.
<b>Rehabilitation Completion criteria</b>	As defined in the Mining Regulation 2016.
<b>Rehabilitation cost estimate</b>	As defined in the Mining Regulation 2016.
<b>Rehabilitation management plan</b>	As defined in the Mining Regulation 2016.
<b>Rehabilitation objectives</b>	As defined in the Mining Regulation 2016.
<b>Rehabilitation risk assessment</b>	As defined in the Mining Regulation 2016.
<b>Rehabilitation schedule</b>	The defined timeframes for progressive rehabilitation set out in the forward program.

WORD	DEFINITION
<b>Relevant stakeholders</b>	<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"> <li>■ the relevant development consent authority</li> <li>■ the local council</li> <li>■ the relevant landholder(s)</li> <li>■ community consultative committee (if required under the development consent) or equivalent consultative group</li> <li>■ affected land holder(s)</li> <li>■ government agencies relevant to the final land use</li> <li>■ affected infrastructure authorities (electricity, telecommunications, water, pipeline, road, rail authorities)</li> <li>■ local Aboriginal communities, and</li> <li>■ any other person or body determined by the Minister to be a relevant stakeholder in relation to a mining lease.</li> </ul>
<b>Risk</b>	The effect of uncertainty on objectives. It is measured in terms of consequences and likelihood (AS/NZS ISO 31000:2009).
<b>Secretary</b>	The Secretary of the Department.
<b>Security deposit</b>	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).
<b>Surface disturbance</b>	Includes activities that disturb the surface of the mining area, including mining operations, ancillary mining activities and exploration.
<b>Tailings</b>	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 <sup>2</sup> .
<b>Waste</b>	Has the same meaning as that term under the <i>Protection of the Environment Operations Act 1997</i> .

<sup>2</sup> Commonwealth of Australia (DITR), 2007. *Tailings Management*.

## Attachment 3 – Plans

Plan 2A\_Forecast Data Year 1\_2025.pdf

Plan 2B\_Forecast Data Year 2\_2026.pdf

Plan 2C\_Forecast Data Year 3\_2027.pdf

Forward Program (LARGE MINE) v2.1



### Underground Summary Rehabilitation Cost Estimation

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

Mine Name:

Lease(s):

Mine Owner:

Term of RCE:

Current Security:  Date of Last Security Deposit Review:

Mine Contact:

Domain		Security Deposit
Domain 1: Infrastructure		5,139,807.07
Domain 2: Tailings & Rejects		476,049.23
Domain 3: Overburden & Waste		
Domain 4: Subsidence & Management		739,630.00
Subtotal (Domains and Sundry Items)		<b>\$6,355,486.30</b>
Contingency	10%	<b>\$635,548.63</b>
Post Closure Environmental Monitoring	10%	<b>\$635,548.63</b>
Project Management and Surveying	10%	<b>\$635,548.63</b>
<b>Total Security Deposit for the Mining Project (excl. of GST)</b>		<b>\$8,262,132.19</b>

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

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

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

Shontelle Curtis  
-----  
Company Representative's Name

26/02/2025  
-----  
Date

Tenement & Access Manager  
-----  
Company Representative's Role / Responsibility

*Shontelle Curtis*  
-----  
Shontelle Curtis (Sep 15, 2025 19:24:07 GMT+8)  
Signature



### Underground Summary Rehabilitation Cost Estimation

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

Mine Name:

Lease(s):

Mine Owner:

Term of RCE:

Current Security:  Date of Last Security Deposit Review:

Mine Contact:

Domain		Security Deposit
Domain 1: Infrastructure		1,418,637.81
Domain 2: Tailings & Rejects		
Domain 3: Overburden & Waste		
Domain 4: Subsidence & Management		50,000.00
<b>Subtotal (Domains and Sundry Items)</b>		<b>\$1,468,637.81</b>
Contingency	10%	\$146,863.78
Post Closure Environmental Monitoring	10%	\$146,863.78
Project Management and Surveying	10%	\$146,863.78
<b>Total Security Deposit for the Mining Project (excl. of GST)</b>		<b>\$1,909,229.15</b>

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

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

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

Shontelle Curtis  
-----  
Company Representative's Name

26/02/2025  
-----  
Date

Tenement & Access Manager  
-----  
Company Representative's Role / Responsibility

*Shontelle Curtis*  
Shontelle Curtis (Sep 15, 2025 19:24:07 GMT+8)  
-----  
Signature






# FWP0001544\_Forward\_Program\_27 Feb 2025 226pm

Final Audit Report

2025-09-15

Created:	2025-09-10
By:	Brendan Isaacs (brendan.isaacs@iluka.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAujdNJFwo2HI2jX60Mh_QZKCnq_NQFe0Z

## "FWP0001544\_Forward\_Program\_27 Feb 2025 226pm" History

-  Document created by Brendan Isaacs (brendan.isaacs@iluka.com)  
2025-09-10 - 6:50:22 AM GMT- IP address: 163.116.192.13
-  Document emailed to Shontelle Curtis (shontelle.curtis@iluka.com) for signature  
2025-09-10 - 6:51:50 AM GMT
-  Email viewed by Shontelle Curtis (shontelle.curtis@iluka.com)  
2025-09-15 - 11:23:41 AM GMT- IP address: 163.116.202.24
-  Document e-signed by Shontelle Curtis (shontelle.curtis@iluka.com)  
Signature Date: 2025-09-15 - 11:24:07 AM GMT - Time Source: server- IP address: 163.116.202.24
-  Agreement completed.  
2025-09-15 - 11:24:07 AM GMT