



**NSW  
Resources  
Regulator**

FWP0001180

# **ASHTON COAL MINE FORWARD PROGRAM**

Saturday 31 December 2022 to Tuesday  
30 December 2025

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## Summary

### DETAIL

<b>Mine</b>	Ashton Coal Mine
<b>Reference</b>	FWP0001180
<b>Forward program commencement date</b>	Saturday 31 December 2022
<b>Forward program end date</b>	Tuesday 30 December 2025
<b>Forward program revision (if applicable)</b>	
<b>Contact</b>	Alyssa Gorman
<b>Mining leases</b>	ML 1533 (1992), ML 1834 (1992), ML 1696 (1992), ML 1836 (1992), ML 1835 (1992), ML 1623 (1992), ML 1529 (1992), ML 1837 (1992)
<b>Project location</b>	WHITE MINING (NSW) PTY LIMITED
<b>Date of submission</b>	Tuesday 23 May 2023

## 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

Ashton Coal Operations Pty Limited (ACOL) operates the ACP, located approximately 14km north west of Singleton, NSW. The approved ACP includes:

- A now exhausted and predominantly rehabilitated North East Open Cut (NEOC), where the final void is utilised for reject coal storage;
- Multi-seam underground mine using longwall mining methods (Ashton Underground and ACOL-operated Ravensworth Underground Mine);
- Associated surface infrastructure for the underground mine that includes gas management and extraction infrastructure;
- A CHPP, rail siding, site office and associated infrastructure; and
- Bowmans Creek Diversion which allows coal recovery from the underground mine while protecting surface water.

The ACP was granted planning approval under Development Consent 309-11-2001-i, in October 2002. The current approval (approved in 2022) allows for extraction of ROM coal at a rate of up to 5.45Mtpa and for the undertaking of associated coal mining activities.

## Description of surface disturbance activities

### Exploration activities

No further exploration activities for the NEOC area are scheduled to occur during the Forward Program Term. Exploration activities within the Ashton Underground area will provide base line geological and coal quality data for modelling and planning purposes. Current exploration projects at the ACP include seam continuity and splitting exploration.

### Construction activities

Construction activities at the ACP and ACOL-operated RUM during the Forward Program term will include the installation of goaf and dewatering boreholes and a nitrogen compound.

Borehole locations are indicative and consist of a surface pad approximately 30 metres x 30 metres above the Pikes Gully Seam.

No construction activities are proposed during Year 1. During Year 2, activities include construction of 12 boreholes above the Pikes Gully Seam associated with Longwall 401, Longwall 402 and a portion of Longwall 403, one de-watering borehole (BP9) and a nitrogen compound. During Year 3, activities include construction of 12 boreholes above the Pikes Gully Seam associated with Longwall 403, Longwall 404 and a portion of Longwall 405 and one de-watering borehole (BP10).

### Mining schedule

Mining development method and sequencing and general mine features.

Underground mining during this Forward Program term intends to recover coal reserves from remaining panels of the Upper Liddell Seam (ULD) Seam and the Upper Lower Liddell Seam (ULLD) Seam. Extraction of coal reserves from the Pikes Gully Seam from the Ravensworth Underground Mine (RUM) area will also commence during this Forward Program term. Mining will be progressive, using longwall mining methods. The main headings of the ULD Seam and the ULLD Seam are aligned parallel to the New England Highway with longwall panels aligned parallel to the eastern boundary of ML 1533, extending from the New England Highway in the north to the Hunter River in the south. The western limit of mining is defined by the western limit of ML 1533.

Mining within the ULLD Seam at the ACP has commenced and is expected to be completed in approximately July 2024. Longwall mining operations will transition to the RUM area with first workings planned to be developed in early 2023. Secondary extraction of the Pikes Gully Seam at the RUM will commence in 2024 and continue until 2026.

Future longwall mining will occur in the Middle Liddell Seam in the RUM area, followed by the Lower Barrett Seam in the Ashton Underground Mine area.

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

ROM coal from the mine contains varying amounts of stone and ash that needs to be removed prior to sale into the export market. ROM coal from the underground mine is processed through the CHPP which results in the production of product coal, coarse rejects and fine rejects (tailings).

Coarse rejects have a bulk density of approximately 2.0 tonnes per cubic metre. Coarse rejects are currently used to fill available void space in the NEOC void. Coarse rejects may also be used for the construction of tailings pond walls within the NEOC void to act as a filter medium to enhance the recovery of process water from the tailings for use in the CHPP. Rejects trucks servicing the CHPP operate 24 hours per day, seven days per week in accordance with Condition 2.8 of Development Consent 309 11-2001 i.

Previously, the NEOC area was utilised as an emplacement area for overburden material. Since cessation of open cut mining operations, the NEOC area (excluding the NEOC Void) has been rehabilitated to a native ecosystem area.

Monitoring of the NEOC rehabilitation area includes assessment of areas rehabilitated to mixed woodland habitat (formerly “Trees Over Grass”) and exotic pastures.

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

Tailings were previously processed through a thickener and are pumped to the old Ravensworth Void 4 Tailings Dam, where they are treated with coagulants and allowed to settle. Water is decanted from the tailings dam and pumped back to the process water dam for reuse on-site. Operations of the Ravensworth Void 4 Tailings Dam ceased in December 2022 with tailings generated from the processing of ROM coal currently being co emplaced with coarse rejects at the NEOC void.

The deposition of the coarse rejects and tailings will take place only in the designated NEOC emplacement area on a 24-hour, 7 day week basis.

The emplacement process will utilise existing available equipment including rear dump haul trucks, D10 dozer, grader and water cart. Emplacement will continue until the specified stages have been filled to the finished surface level.

### Waste disposal and materials handling operations.

Waste segregation and recycling is encouraged through providing appropriate recycling facilities. Materials that are available for recycling are collected and recycled off-site.

Materials that cannot be recycled are disposed of to a licensed landfill. Licenced contractors remove waste off site to licensed landfills that may accept the category of waste.

Three on-site sewage management systems are used to service the underground mine bathhouse and administration facilities, the CHPP facilities, and the NEOC Workshop and bathhouse.

Acid mine drainage is not considered to be a concern at the ACP. As an ongoing precautionary measure, groundwater seepage and drainage from emplaced materials will be periodically tested for signs of acid rock drainage.

There are no currently defined areas of contaminated land within the ACP boundaries.

ACOL has a current Dangerous Goods Register for all products stored and handled on the premises. This register lists the Dangerous Goods stored and handled at the site (for Open Cut, CHPP and Underground operations). Oils, fuels, greases and chemicals are labelled and stored in designated, impermeable bunded areas or approved storage facilities and are only used on a prescribed basis. Appropriate barriers are in place to eliminate the potential for soil contamination. Bunded fuel and oil storage areas are located near the NEOC Workshop, CHPP Store and the Underground Pit Top Workshop.

## Key production milestones

MATERIAL	UNIT	YEAR 1	YEAR 2	YEAR 3
<b>Stripped topsoil</b> (if applicable)	(m <sup>3</sup> )	0	0	0
<b>Rock/overburden</b>	(m <sup>3</sup> )	0	0	0
<b>Ore</b>	(Mt)	2.4	3.6	3.3
<b>Reject material<sup>1</sup></b>	(Mt)	1.3	2	1.6
<b>Product</b>	(Mt)	1.1	1.7	1.7

<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

Coal extraction will continue at the ACP during this Forward Program term. Rehabilitation at the ACP is expected to be minimal until cessation of mining activities as the majority of disturbance is required for the life of the mine. Rehabilitation of subsidence impacts of the underground mining area will continue to be undertaken on a case-by-case basis during mining operations.

In previously rehabilitated areas, ongoing maintenance activities will include controlling weeds and pests, repairing landforms, re-seeding and application of maintenance fertilisers as required.

Rehabilitation of subsidence impacts will also be undertaken, as required, including surface crack backfilling, compaction, and vegetation enhancement. Ongoing repairs will be made to any subsidence damaged infrastructure, including the right of way access road, in accordance with the approved subsidence monitoring and management plans.

Maintenance works, such as erosion and sediment control, and ongoing control of weeds and feral pests will also be undertaken as required. Additional feral pest control options may also be investigated including those targeting feral cats, hares, rabbits and feral pigs.

Ongoing weed control will continue to be undertaken, including manual methods and use of cut and paste herbicide where existing native trees and shrubs are present to minimise collateral mortality associated with broadcast spraying.

### Stakeholder consultation

Consultation with landowners, residents, stakeholders and regulatory bodies surrounding and associated with ACOL has been consistent and open through personal contact, newsletters and public meetings. ACOL has committed to a community program which includes undertaking activities that aim to reduce the impact of mining on the residents of Camberwell.



ACOL has a Community Consultative Committee that monitors compliance with conditions of consent and provides a forum for important community discussion. Members are from the local Camberwell community, Singleton Council (SC). DPE officers have an open invitation to all meetings, which are conducted every four months and provide a direct forum for the community to communicate environmental and operational concerns with site management, SC and regulatory authorities. ACOL has also implemented a community enquiry and complaints telephone line (1800 657 639) to enable direct contact with ACOL personnel.

ACOL works closely with local Aboriginal people through professional engagement and consultation on cultural heritage management.

An Aboriginal Community Consultative Forum is held twice per year with the representatives of the Registered Aboriginal Parties to provide an update of activities at Ashton Coal.

Ongoing consultation will continue through this Forward Program term including regular discussions with the parties mentioned above.

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

Risks associated with rehabilitation were identified during a rehabilitation risk assessment undertaken in July 2022 and February 2023, which is detailed in the ACP's RMP. Therefore, no rehabilitation studies, risk assessments and/or design work associated with finalising rehabilitation methodologies relating to establishment of the final landform, surface water management, final void management and tailings dam decommissioning are proposed within this Forward Program term.

Rehabilitation research and trials

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS
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## Rehabilitation maintenance and corrective actions

The ongoing annual rehabilitation monitoring program will continue throughout this Forward Program term. The program will assess the recovery of rehabilitation areas across the site. The program will be based on the performance indicators outlined in ACP's RMP and will utilise methodologies that can provide quantitative data to assess changes occurring over time.

The program compares the progress of a number of rehabilitation sites, against a set of completion criteria obtained from measurement made in areas of remnant woodland and grassland communities in the local area.

The monitoring methodology adopted is a standard and simple procedure that can be replicated over any vegetation community or rehabilitation area and allows results to compare similar communities. The monitoring methodologies utilise a combination of the following:

- Landscape Function Analysis;
- Soil Analysis;
- Assessment of Ecosystem Characteristics;
- Pasture Productivity Assessment;
- Land Capability Assessment;
- Photographic Monitoring; and
- Subsidence Monitoring

Amendments to the monitoring programs during the post-closure phase, following identification of any rehabilitation performance issues or knowledge gaps in the Annual Rehabilitation Report, will be reflected in the relevant environmental management plan revisions as well as future iterations of the ARRFP. It is expected that the residual monitoring programs will be undertaken for approximately ten years following mine closure.

## Rehabilitation schedule

Rehabilitation during this Forward Program term will principally relate to rehabilitation of disturbance associated with gas drainage network development and other minor infrastructure projects, as needed.

Should favourable meteorological conditions persist, the first block of the woodlands rehabilitation conversion program may be undertaken within the NEOC area.

Rehabilitation activities forecast for this Forward Program term include:

- progressively rehabilitate any lands within the ACP site boundaries which may have been disturbed by mining related operations;
- continue maintenance on completed rehabilitation of the NEOC area (including ongoing weed and pest control);
- progressive rehabilitation, including revegetation works, of Bowmans Creek in line with the Bowmans Creek Diversion, Construction Mining Operations Plan and Bowmans Creek Diversion Rehabilitation Strategy;
- progressive remediation of disturbed areas above the underground mining area including rehabilitation of subsidence troughs and if required, temporary drainage works;
- continued monitoring and remediation (if required as a result of subsidence impacts) of the Southern Woodland Conservation Area;
- further investigation into elevated soil sulfur and iron levels at a number of monitoring sites and the casuarina and eucalypt reference sites is also planned; and
- rehabilitation of constructed goaf and dewatering boreholes proposed at the ACOL-operated RUM area.

## Subsidence remediation for underground operations

Mine subsidence impacts are identified via the Subsidence Monitoring Program prepared by ACOL.

Where required, surface cracks will be reshaped, scarified and stabilised, topsoil applied if necessary and then direct seeded. Interim erosion control devices such as hay bales and geotextile barriers will be provided as necessary to divert surface runoff away from the remediated area until sufficient ground cover has been established. Nick points in grassland or woodland areas will be reshaped and remediated in a similar manner or may be managed by the use of coir log dams which may be installed at nick points to assist in slowing surface water flows allowing siltation upslope of the log.

Minor ephemeral drainage lines may develop nick points that will require reshaping to ensure velocities and scour characteristics are not altered. Once reshaped, any steepened areas that may remain unstable will be lined with loosely placed rock to dissipate runoff energy.

## Progressive mining and rehabilitation statistics

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

FORECAST	UNIT	YEAR 1	YEAR 2	YEAR 3
A Total surface disturbance footprint	(ha)	363.77	364.99	366.16
B Total active disturbance	(ha)	116.37	117.58	118.66
C Land prepared for rehabilitation	(ha)	0	0	0.09
D Ecosystem and land use establishment	(ha)	0	0	0

### Rehabilitation key performance indicators (KPIs)

FORECAST	UNIT	YEAR 1	YEAR 2	YEAR 3
O Total new active disturbance area	(ha)		1.21	1.17
P Area proposed for active rehabilitation	(ha)			0.09
Q Annual rehabilitation to disturbance ratio				0.08

## Attachment 1 – Reporting Definitions

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

REPORTING CATEGORY	DEFINITION
<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.

WORD	DEFINITION
<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.

WORD	DEFINITION
<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.

WORD	DEFINITION
<b>Phases of rehabilitation</b>	<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"> <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>	<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>
<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>	Means any persons or bodies who may be affected by the mining operations, including rehabilitation, carried out on the lease land, and includes: <ul style="list-style-type: none"> <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

ACOL FWP 2023 v1\_Plan 2A.pdf

ACOL FWP 2023 v1\_Plan 2B.pdf

ACOL FWP 2023 v1\_Plan 2C.pdf

Forward Program (LARGE MINE) v2.1