



**NSW  
Resources  
Regulator**

**ARR0001491**

# **ASHTON COAL MINE ANNUAL REHABILITATION REPORT**

**Monday 1 January 2024 to Tuesday 31 December 2024**

## Summary table

DETAIL	
<b>Mine</b>	Ashton Coal Mine
<b>Reference</b>	ARR0001491
<b>Annual report period commencement date</b>	Monday 1 January 2024
<b>Annual report period end date</b>	Tuesday 31 December 2024
<b>Forward program</b>	
<b>Mining leases</b>	ML 1836 (1992), ML 1835 (1992), ML 1623 (1992), ML 1529 (1992), ML 1696 (1992), ML 1533 (1992), ML 1834 (1992), ML 1861 (1992), ML 1837 (1992)
<b>Lease holder(s)</b>	White Mining (NSW) Pty Limited
<b>Contact</b>	Alyssa Gorman
<b>Date of submission</b>	Thursday 5 June 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

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 and tailings disposal
- 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
- 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 (as modified 6 July 2022). The current approval (approved in 2022) allows for extraction of ROM coal at a rate of up to 5.45 Mtpa and for the undertaking of associated coal mining activities.

### Life of mine

10 years

### Current development consents, leases and licences

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

DA104/96  
DA104/96  
DA104/96  
DA104/96  
DA104/96  
DA104/96  
DA104/96  
DA104/96  
DA104/96  
DA309-11-2001-i  
DA309-11-2001-i  
DA309-11-2001-i  
DA309-11-2001-i  
DA309-11-2001-i  
DA309-11-2001-i  
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DA309-11-2001-i  
DA104/96

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

ML 1836 (1992), ML 1835 (1992), ML 1623 (1992), ML 1529 (1992), ML 1696 (1992), ML 1533 (1992), ML 1834 (1992), ML 1861 (1992), ML 1837 (1992)

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

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

N/A

## Changes to land ownership and land use

No changes to land ownership and land use related to the land has occurred during the Annual Reporting Period (ARP) (1 January 2024 to 31 December 2024).

# Surface disturbance and rehabilitation activities during the reporting period

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

During the ARP, surface disturbance was limited to the construction of a raise bore above the Pikes Gully Seam, a gas riser and associated compound. Rehabilitation activities were limited to ongoing management and maintenance in portions of: • the NEOC; • Bowman's Creek Diversion; and • the impacted "farmland" above the underground mine. Rehabilitation works also consisted of the remediation of surface cracking where required. During the ARP, rehabilitation areas are considered to be in the ecosystem and land use development phase of rehabilitation. No areas of rehabilitation at the ACP are considered to have matured to a level where target revegetation outcomes have completely achieved the approved ACP Rehabilitation Objectives (ROBJs) and proposed rehabilitation completion criteria (RCC) (i.e. rehabilitation completion).

## Rehabilitation planning activities that were conducted, including any specialist studies

During the ARP, no specialist studies have been conducted at the ACP for rehabilitation planning purposes.

## Overview of subsidence repair and/or remediation works undertaken

Subsidence repair and/or remediation works undertaken at the ACP during the reporting period included the LW206B sump subsidence crack repairs near U/S blockbank (eastern BCD) and works associated with LW207A/LW07B predicted crack zones. Ongoing subsidence monitoring is undertaken in accordance with the Subsidence Effects Monitoring Program incorporated into the approved Extraction Plan.

## Overview of rehabilitation management and maintenance activities

Ongoing management and maintenance of rehabilitation areas at the ACP has been undertaken by ACOL and suitably qualified persons (where relevant) to monitor that rehabilitated areas are maturing to achieve a standard capable of relinquishment. Ongoing rehabilitation management and maintenance activities include: • Weed and pest animal control of rehabilitation areas. • Native vegetation rehabilitation management and agricultural monitoring. During the ARP, maintenance activities focused on the improvement of woodland and pasture across rehabilitation areas, biodiversity conservation areas and buffer land. The priority noxious weeds that were targeted for active weed control management at the NEOC rehabilitation sites included African boxthorn (Lycium

ferocissimum), African Love Grass (*Eragrostis Curvula*), blue heliotrope (*Heliotropium amplexicaule*), coolatai grass (*Hyparrhenia hirta*), fireweed (*Senecio madagascariensis*), galenia (*Galenia pubescens*), olive (*Olea europaea*), prickly pear (*Opuntia stricata*) and other general weeds. Pest control included two 1080 baiting programs and continuation of the feral pig and cat management programs.

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

No letters, notices or directions issued by government agencies (including the NSW Resources Regulator) have been issued. As such, there has been no directive to undertake specific rehabilitation actions.

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

Rehabilitation areas at the ACP are moving towards achieving the final land use as soon as reasonably practicable. To date, no rehabilitation areas have achieved the final land use to a standard that would warrant ACOL’s submission of an ESF2 to the NSW Resources Regulator.

**Key production milestones**

MATERIAL	UNIT	YEAR 1	THIS REPORT
<b>Stripped topsoil</b> (if applicable)	(m <sup>3</sup> )	0	0
<b>Rock/overburden</b>	(m <sup>3</sup> )	0	0
<b>Ore</b>	(Mt)	0	2.55
<b>Reject material<sup>1</sup></b>	(Mt)	0	1.04
<b>Product</b>	(Mt)	0	1.28

<sup>1</sup> 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)	417.54
B Total active disturbance	(ha)	169.22
C Rehabilitation – land preparation	(ha)	2.62
D Ecosystem and land use establishment	(ha)	0
E Ecosystem and land use development	(ha)	245.69
F Rehabilitation completion	(ha)	0

### Rehabilitation key performance indicators (KPIs)

ELEMENT	UNIT	THIS REPORT
G New disturbance area	(ha)	0.33
H New rehabilitation commenced during annual reporting period	(ha)	0
I Established rehabilitation	(ha)	245.69
J Annual rehabilitation to disturbance ratio	%	0
K Rehabilitated land to total mine footprint	%	58.84

## Progressive achievement of established rehabilitation

ELEMENT	UNIT	THIS REPORT
L Established rehabilitation for agricultural final land uses	%	27.8
M Established rehabilitation for native ecosystem final land uses	%	70.26
N Established rehabilitation for other/non-vegetated final land uses	%	1.94

## Variation to the rehabilitation schedule

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

ACOL experienced technical issues for KPIs A1 (Total Disturbance Footprint – Surface Disturbance), B (Total Active Disturbance) and K (% Rehabilitation Land to Total Mine Footprint). Following ongoing correspondence with the Resources Regulator, it was determined the variation appeared to be related to shapefiles needing to be re-projected from GDA2020 v GDA1994 Zone 56 before calculating the area.

### Key factors that delayed progressive rehabilitation

As mentioned above, the variation to the rehabilitation schedule appears to be related to the shapefiles needing to be re-projected from GDA2020 v GDA1994 Zone 56. ACOL does not consider there to have been a delay in the progressive rehabilitation schedule at the ACP.

### 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

ACOL will continue to undertake rehabilitation progressively as soon as reasonably practicable following disturbance from mining activities.

# Rehabilitation monitoring and research findings

## Rehabilitation monitoring

### The rehabilitation monitoring carried out in the annual reporting period

Specialist reports relevant to rehabilitation prepared during the ARP include the 2024 NEOC Rehabilitation Monitoring Report prepared by DnA Environmental (2024) for ACOL. For the NEOC rehabilitation area, DnA Environmental (2024) relevantly concluded that monitoring demonstrates that many completion targets have been met, with some minor exceptions. Ecological performance indicators for the mixed eucalypt woodland habitat and exotic pastures demonstrate these rehabilitated areas have generally developed into highly functional and stable communities, functionally comparable to the local woodlands and native grasslands. It was also noted that the extreme seasonal conditions experienced over the past 15 years, combined with simultaneous changes in total grazing pressure (both livestock and macropods), has had a significant impact on the composition and diversity of both the NEOC vegetation and the reference sites.

## Status of performance against rehabilitation objectives and rehabilitation completion criteria

### The monitoring program that has been implemented

Rehabilitation at the ACP is monitored on a regular basis to ensure vegetation is establishing in the rehabilitation areas and to determine the need for any maintenance and/or contingency measures (e.g. supplementary plantings, weed or erosion control). The monitoring also aims to demonstrate the effectiveness of the rehabilitation techniques and track the progression of rehabilitation towards achieving the approved ACP ROBJs and proposed RCCs.

Rehabilitation monitoring conducted during the ARP utilised a combination of the following:

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

Rehabilitation areas at the ACP are moving towards achieving the final land use as soon as reasonably practicable. To date, no rehabilitation areas have achieved the final land use to a standard that would warrant ACOL's submission of an ESF2 to the NSW Resources Regulator. Notwithstanding, ACOL will continue to monitor how rehabilitation is progressing against the ACP ROBJs, RCCs and Final Landform and Rehabilitation Plan (FLRP) to ensure the final land uses are achieved as soon as reasonably practicable.

**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 at the ACP is progressing against the approved ACP ROBJs and FLRP and proposed RCCS. Rehabilitation of disturbed areas is undertaken progressively and concurrently with ongoing mining operations (i.e. as soon as reasonably practicable), to achieve the final land use. Ecological performance indicators obtained from the mixed eucalypt woodland habitat and present exotic pastures on the NEOC, demonstrate rehabilitation areas have typically developed into highly functional and stable communities that are functionally similar to the local woodlands and native grasslands, with some minor exceptions. The outcomes of the 2024 rehabilitation monitoring demonstrate that rehabilitation of the NEOC is moving towards achieving the final land use as soon as reasonably practicable with many completion criteria targets met, with some exceptions. Ecological performance indicators for the mixed eucalypt woodland habitat and exotic pastures demonstrate these rehabilitated areas have generally developed into highly functional and stable communities, functionally comparable to the local woodlands and native grasslands. They were, however, dominated by exotic grasses and many sites had a higher diversity of exotic species compared to the reference sites. The ongoing dry conditions resulted in a decline in ecological function and increased abundance of weeds. Notwithstanding, ACOL will continue to monitor how rehabilitation is progressing against the ACP ROBJs, RCCs and FLRP.

#### **Appraisal description**

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

#### **Rehabilitation monitoring program findings**

During the ARP, rehabilitation monitoring was conducted by ACOL and DnA Environmental in accordance with the Rehabilitation Quality Assurance Processes and Rehabilitation Monitoring Program detailed in Sections 7 and 8 of the ACP RMP, respectively. Photographic Monitoring Permanent photo-points along vegetation transects have been utilised to record woodland monitoring sites in the NEOC rehabilitated areas. The 20 x 20m quadrat is positioned such that the base line forms the basis for the Landscape Function Analysis (LFA) transect. The transects have been established in proximal areas to the ACP which represent

the varying landscapes and target communities planned for each rehabilitation areas. Vegetation monitoring has been undertaken during the ARP by DnA Environmental (7 to 15 May 2024). Landscape Function Analysis The results of LFA, vegetation dynamics and habitat complexity monitoring (i.e. EFA) are used at the ACP to monitor progress towards rehabilitation completion and to determine a trajectory towards self sustaining ecosystems. Rehabilitation monitoring at the ACP during the ARP included a visual assessment, comprising:

- monitoring of soil erosion status and the effectiveness of erosion control methods;
- usage of habitat enhancement features;
- evaluating the behaviour of placed topsoil;
- evaluating threats posed to rehabilitated areas posed by weed infestation and pest animals; and
- opportunistic flora and fauna observations.

LFA was undertaken by DnA Environmental. Ecosystem Characteristics During the ARP, an assessment of ecosystem characteristics was undertaken to provide quantitative data that measures changes in:

- floristic diversity including species area curves and growth forms;
- ground cover diversity and abundance;
- fire;
- vegetation structure and habitat characteristics (including ground cover, cryptogams, logs, rocks, litter, projected foliage cover at various height increments);
- understorey density and growth (including established shrubs, direct seeding and tubestock plantings and tree regeneration);
- overstorey characteristics including tree density, health and survival; and
- other habitat attributes such as the presence of hollows, mistletoe and the production of buds, flowers and fruit.

As described above, revegetation monitoring, including ecosystem characteristics monitoring of NEOC rehabilitation, was undertaken between 7 to 15 May 2024 by DnA Environmental.

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

Nil

## Outcomes of rehabilitation research and trials

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS	ON TRACK?
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A  
RR0001491

**Outcomes of completed trials and research**

N/A

## Attachment 1 – Reporting Definitions

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

REPORTING CATEGORY	DEFINITION
D Ecosystem and land use establishment	<p>Includes the area which has been seeded/planted with the target vegetation species for the intended final land use. However, vegetation has not matured to a stage where it can be demonstrated that it will be sustainable for the long term and or require only a maintenance regime consistent with target reference/analogue sites.</p> <p>Typically, rehabilitation areas would be in this phase for at least two years (and usually more) before rehabilitation can be classified as being in the ecosystem and land use development phase. This phase does not apply to infrastructure areas that are being retained as part of final land use for the site.</p>
E Ecosystem and Land Use Development	<p>Rehabilitation has matured to a level where target revegetation outcomes are on a trajectory towards meeting the final rehabilitation objectives and rehabilitation completion criteria (as verified by monitoring).</p> <p>This phase includes infrastructure areas that are to be retained for an approved post mining land use, following completion of all necessary measures to render the infrastructure fit for this purpose (for example structural integrity).</p>
F Rehabilitation Completion	<p>The NSW Resources Regulator has determined in writing that the mining area has achieved the approved rehabilitation objectives and approved rehabilitation completion criteria and final landform and rehabilitation plan following the submission of <i>Form: ESF2 Rehabilitation completion and/or review of rehabilitation cost estimate and/or notification of mine or petroleum site closure</i>.</p>
G New active disturbance area	<p>The area of any new active disturbance that has been created during the annual reporting period (definition A1 in Table 5).</p>
H New rehabilitation commenced during annual reporting period	<p>The sum of any new rehabilitation commenced in the annual reporting period. These areas may be in the rehabilitation land preparation phase or the ecosystem &amp; land use establishment phase (definitions C and D in Table 5).</p>
I Established rehabilitation (hectares)	<p>The total area of land that is verified to be within either the ecosystem and land use development phase or the rehabilitation completion phase (definitions E &amp; F in Table 5).</p>

REPORTING CATEGORY		DEFINITION
<b>J</b>	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.
<b>K</b>	% Rehabilitated land to total mine footprint	The proportion of the total mine footprint (area of land that has been disturbed by past or present surface disturbance activities) that has established rehabilitation ( $I/A1 \times 100$ ). For open cut mining, the proportion of the total mine footprint verified to be “established rehabilitation” should substantially increase as an operation progresses towards mine closure.
<b>L</b>	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.
<b>M</b>	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.
<b>N</b>	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
<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.

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>	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 – Rehabilitation Complaints

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

DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
4 Jan 2023	Resources Regulator	Via email	Review of ACP Final Landform and Rehabilitation Plan (FLRP) and Rehabilitation Objectives (ROBJ) and request for resubmission by 17/02/2023.	Yancoal organised a meeting with Resources Regulator to discuss comments received on the Yancoal sites FLRP and ROBJ.
17 Feb 2023	Resources Regulator	Via email	Submission of a TICON for the ACP.	ACOL submitted a TICON application via the Resources Regulator Portal. Confirmation of the application was received via email.
14 Sep 2023	Resources Regulator	Via email.	Review of ACP ROBJ and request for resubmission by 29/09/2023.	Incorporated Resources Regulator's review comments into the revised dataset resubmission. Resubmission of ACP ROBJ on 28/09/2023 via the Resources Regulator Portal.
20 Feb 2023	Resources Regulator	Via email	Approval of the ACP TICON.	Resources Regulator approved the ACP TICON on 20/02/2023. Confirmation was received via email.
3 Oct 2023	Resources Regulator	Via email.	Approval of the ACP ROBJ.	Resources Regulator approved the ACP ROBJ on 03/10/2023. Confirmation was received via email. ACOL amended the ACP Rehabilitation Management Plan to substitute the proposed ROBJ with the approved version.
13 Jul 2023	Resources Regulator	Via email	Review of ACP ROBJ and request for resubmission by 23/08/2023.	Incorporated Resources Regulator's review comments into the revised dataset resubmission. Resubmission of ACP ROBJ on 23/08/2023 via the Resources Regulator Portal. Provided an email on 25/08/2023 that detailed how the Resources Regulator's review comments were incorporated into the revised FLRP and ROBJ submission.

# ASHTON COAL MINE ANNUAL REHABILITATION REPORT

ARR0001491 | Monday 1 January 2024 to Tuesday 31 December 2024

DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
3 Oct 2023	Resources Regulator	Via email.	Approval of the ACP FLRP.	Resources Regulator approved the ACP FLRP on 03/10/2023. Confirmation was received via email. ACOL amended the ACP Rehabilitation Management Plan to substitute the proposed FLRP with the approved version.
13 Jul 2023	Resources Regulator	Via email	Review of ACP FLRP and request for resubmission by 23/08/2023.	Incorporated Resources Regulator's review comments into the revised dataset resubmission. Resubmission of ACP FLRP on 23/08/2023 via the Mine Rehabilitation Portal. Provided an email on 25/08/2023 that detailed how the Resources Regulator's review comments were incorporated into the revised FLRP and ROBJ submission.
18 Jan 2023	Resources Regulator	Online Meeting	Discussion of the comments received on the ROBJs and FLRPs of Yancoal sites.	Resubmitted ACP FLRP and ROBJ on 17/02/2023. Provided an email on 17/02/2023 that detailed how the Resources Regulator's review comments were incorporated into the revised FLRP and ROBJ submission.
12 Apr 2024	Resources Regulator	Via email	Initial confirmation that the Resources Regulator received the ARR submission.	No
12 Apr 2024	Resources Regulator	Via email	Reference number for ARR and FP upload technical difficulties.	No action.
12 Apr 2024	Resources Regulator	Via email	Technical difficulties with regard to error with reporting period dates for ARR and FP submission.	ACOL responded and requested the Resources Regulator resolve the reporting period date issue on the portal system.
16 Apr 2024	Resources Regulator	Via email	Technical difficulties with regard to error with reporting period dates for ARR and FP submission.	ACOL updated and re-submitted the Current Landform Contours to be dated '2023' (as requested by Resources Regulator) on 16/04/24.

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9 May 2024	Resources Regulator	Via email	Technical difficulties with regard to error with reporting period dates for ARR and FP submission.	ACOL re-submitted ARR and FP to the Resources Regulator Portal on 23/05/24.
23 May 2024	Resources Regulator	Via email	Resources Regulator confirmed submission of the ARR.	No action.
4 Jul 2024	Resources Regulator	Via email	Review of RCE and Request for Information (RFI), Request for resubmission of FLRP.	ACOL requested extension of response timeframe on 31/07/24. ACOL responded to the Resource Regulator's RFI for the RCE. Resubmitted revised FLRP on 16/08/24. ACOL responded to re-assessment comments on revised FLRP from Resources Regulator.
28 Aug 2024	Resources Regulator	Via email	Assessment of FLRP and RFI. Response to RFI requested before 20/09/24.	ACOL provided response to FLRP RFI to Resources Regulator on 20/09/24.
13 Sep 2024	Resources Regulator	Via email	Copy of email provided to tenement in relation to RCE for ACP.	No action from ACOL.
25 Sep 2024	Resources Regulator	Via email.	Assessment and approval of ACP FLRP.	ACOL updated RMP to include revised and approved FLRP.
22 Apr 2024	Resources Regulator	Via email	Technical difficulties with regard to error with reporting period dates for ARR and FP submission.	ACOL attempted re-submission of ARR and FP, however reporting period date error was still occurring.
23 May 2024	Resources Regulator	Via email	Confirmation of application withdrawal for previous ARR upload attempt.	No action.
29 May 2024	Resources Regulator	Via email	Further correspondence regarding reporting period dates following submission.	No action.
20 Aug 2024	Resources Regulator	Via email	ACP Final Landform and Rehabilitation Plan (FLRP) application.	ACOL contacted Resource Regulator by phone on 21/08/24 and clarified reason for FLRP re-submission.

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13 Sep 2024	Resources Regulator	Via email	Assessment of security deposit associated with RCE.	No action from ACOL.
20 Sep 2024	Resources Regulator	Via email.	ACOL sent notice of resubmission of ACP FLRP to Resources Regulator.	ACOL provided summary of how re-assessment comments were addressed and no further action required.
31 Oct 2024	Community Consultative Committee	In-person meeting	Rehabilitation plans for the tailings dam.	ACOL discussed the process of capping the tailings dam.

## Attachment 5 – Plans

PLAN 1A Current Status of Mining and Rehabilitation 2024.pdf

PLAN 1B Current Landform Contours 2024.pdf

Annual Report (LARGE MINE) v1.11