



**NSW
Resources
Regulator**

ARR0001574

DENDROBIUM COLLIERY ANNUAL REHABILITATION REPORT

Monday 1 July 2024 to Monday 30 June 2025



Summary table

DETAIL	
Mine	Dendrobium Colliery
Reference	ARR0001574
Annual report period commencement date	Monday 1 July 2024
Annual report period end date	Monday 30 June 2025
Forward program	FWP0001481
Mining leases	ML 1566 (1992), ML 1510 (1992), CCL 768 (1973)
Lease holder(s)	Dendrobium Coal Pty Ltd, Illawarra Coal Holdings Pty Ltd
Contact	Amy Alice Bradbury
Date of submission	Tuesday 23 September 2025

Important

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

Mine details

Project description

The Dendrobium Operations are managed in accordance with Development Consent 60- 03-2001, as modified (the Consent). Dendrobium Operations incorporate legacy sites and the Cordeaux Pit Top which are covered by CCL 768 and Development Consent D74/134 (Cordeaux). Dendrobium Mine is owned and operated by Dendrobium Coal Pty Ltd, a subsidiary company of Illawarra Coal Holdings Pty Ltd (ICHPL), a previously wholly owned subsidiary of South32 Limited. On 29 February 2024, South32 announced that they had entered into a binding agreement for the sale of ICHPL to Gear M Illawarra Met Coal Pty Ltd, trading as GM3, an entity owned by Golden Energy and Resources Pte Ltd (GEAR) and M Resources Pty Ltd. The transaction was completed on 29 August 2024. A Transitional Service Agreement was in place until 30 April 2025. Five major mining areas make up the approved mine plan for Dendrobium (Areas 1, 2, 3A, 3B and 3C). Cordeaux is under care and maintenance.

Life of mine

5 years

Current development consents, leases and licences

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

DA60032001
DA60032001
DA60032001
DA60032001
DA60032001
DA60032001
DA60032001
DA60032001
D74/134
DA60032001
DA60032001
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DA60032001
DA60032001
DA60032001

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

ML 1566 (1992), ML 1510 (1992), CCL 768 (1973)

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

Environment Protection Licence - 3241
Environment Protection Licence - 611
WaterNSW Access Consent - F2020/1545
AUTH 143 - Exploration Authorisation
AUTH 374 - Exploration Authorisation
AUTH 338 - Exploration Authorisation
Longwall 21A SMP Approval
Longwall 22 and 23 SMP Approval

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

EPL 3241 was varied in August 2024, adding a requirement for Cobalt monitoring to Point 5. The licence was further varied in December to add a new wet weather water discharge point (32) to the licence and the removal of high-volume air samplers. Consent - F2020/1545 was reissued on 19 July 2024. On 11 March 2025, the consent expiry was extended by WaterNSW to 30 September 2025. Development Consent 60-03-2001 MOD 10 (Coal Processing) was approved on 9 August 2024. MOD 11 was submitted in June 2025.

Changes to land ownership and land use

No changes to land ownership and land use occurred during the annual reporting period.

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

One minor slope stability project was completed at Dendrobium Pit Top, involving: the removal of slumped sediment; installation of multiple basalt filled gabion baskets and concrete blocks; and, improving drainage lines behind and in front of the wall to prevent further slumping. The temporary gas drainage plant was removed from Ventilation Shaft 2/3 site. Rehabilitation works and erosion and sediment improvements undertaken include: asphaltting of the site entry road and yard; earthworks to shape the area of the removed temporary gas management infrastructure; installation of sediment controls including coir logs; jute mesh and rock check dams; spraying of soil binder and hydromulch; and, drainage improvements. The relocation of the power line to facilitate the removal of the redundant O'Briens Drift infrastructure was completed in June 2025. Additional rehabilitation works were completed in Kembla Heights for an area that was subject to subsidence in 2013. Rehabilitation works undertaken include: removal of weeds species; installation of new fencing to reduce the impact of feral deer; planting of 36 local natives tube stock; and, removal of dumped rubbish. Exploration rehabilitation across CCL 768 in FY25 was primarily focused on the rehabilitation of sites drilled in late FY24 and throughout FY25, and instrumentation termination and final surface remediations of sites no longer requiring monitoring. Rehabilitation is monitored for success over several years.

Rehabilitation planning activities that were conducted, including any specialist studies

The Rehabilitation Risk Assessment and Rehabilitation Management Plan (RMP) was revised in FY25. A study was undertaken to identify conceptual closure options for surface water management (SLR, 2025).

Overview of subsidence repair and/or remediation works undertaken

Subsidence impacts associated with underground mining operations, predominantly soil cracking, rock fracturing or rock movement, were monitored and reported as they were identified. Active remediation (fill and compaction) was undertaken for three soil cracking sites on Fire Road 6C and smaller unnamed trails. Cracks identified in bushland were monitored to verify they remediated naturally to avoid additional ground and vegetation disturbance. Where there is a potential safety risk near these sites, signage and caution tape is put in place. Any ongoing changes to these impacts will be monitored and rehabilitated as required. ICHPL commissioned trial grouting works at two affected pools (Pool 24 and 25) on tributary WC21, which were completed in 2022. Post-grouting monitoring of pool water levels and

recession was undertaken in FY23 and continued in FY24 due to low rainfall totals. A specialist report looking at the results of the rehabilitation trial was prepared, with data available at the end of FY24, and report finalised in July 2024. The report determined there was no observable improvement in the water-holding capacity of WC21 Pools 24 and 25 as a result of grouting. ICHPL is currently in consultation with WaterNSW regarding alternate measures to account for impacts at WC21.

Overview of rehabilitation management and maintenance activities

Erosion and sediment control at Dendrobium is managed in accordance with the approved Water Management Plan. One minor slope stability project was completed on Portal Road. Remediation involved: the removal of slumped sediment; installation of multiple basalt filled gabion baskets and concrete blocks; and, improving drainage lines behind and in front of the wall to prevent further slumping. Following the removal of the temporary gas drainage plant, erosion and sediment works were undertaken for the disturbed areas of the site. This included: earthworks to shape the area of the removed temporary gas management infrastructure; installation of sediment controls including coir logs, jute mesh and rock check dams; spraying of a soil binder and hydromulch; and, drainage improvements. Rehabilitation works were undertaken at the Kembla Heights site that was subject to subsidence in 2013. Works included: removal of weeds species; installation of new fencing to reduce the impact of feral deer; planting of 36 local natives tube stock; and, removal of dumped rubbish. Ongoing monitoring is occurring at this site to check plant health, weeds, and the protective barriers against grazing from fauna. Weeds are managed in accordance with the RMP. Weed control was undertaken at Dendrobium Pit Top area, Kemira Valley Coal Loading Facility, Kemira Valley Rail Line, Cordeaux Colliery and Corrimal No. 3 Shaft.

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

A Groundwater and Surface Water Targeted Assessment Program (TAP) was conducted at Dendrobium Mine on 12 November 2024 by the Resources Regulator. Actions completed as a result of the TAP include: Rehabilitation Risk Assessment was updated; Water Management Plan was updated; a review of the conceptual closure surface water structures was undertaken by a specialist consultant; studies listed in the "Rehabilitation research and trials" table of the RMP; and, RMP updated to include the above dot points (where relevant). Following the rejection of the ESF2 application for an area of rehabilitation in Kembla Heights that was subject to subsidence in 2013, additional rehabilitation activities were undertaken as detailed above. Various submissions of the Final Land Use and Rehabilitation Plans, and Rehabilitation Objectives Statement was undertaken as advised by the Resources Regulator.

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

Remediation of the O’Briens Gap switchyard was completed in FY20. An ESF2 form was submitted to the Resources Regulator in FY23 and the site was inspected by the Resources Regulator in May 2024. A Notice of Satisfactory Rehabilitation was received from the Resources Regulator on 4 October 2024. Rehabilitation works at Corrimal No.2 Shaft were completed in 2005, and the works signed off by the then NSW Department of Primary Industries in 2008. An ESF2 form for Corrimal No. 2 Shaft was signed by WaterNSW (as the landholder) on 10 March 2025.

Key production milestones

MATERIAL	UNIT	FWP0001481 YEAR 1	THIS REPORT
Stripped topsoil <small>(if applicable)</small>	(m ³)	98	0
Rock/overburden	(m ³)	0	0
Ore	(Mt)	2.73	3.5
Reject material¹	(Mt)	0.65	1
Product	(Mt)	2.08	2.5

¹ This includes coarse rejects, tailings and any other wastes resulting from beneficiation.

Disturbance and rehabilitation statistics

Current disturbance and rehabilitation progression

ELEMENT	UNIT	THIS REPORT
A1 Total disturbance footprint – surface disturbance	(ha)	203.95
B Total active disturbance	(ha)	163.27
C Rehabilitation – land preparation	(ha)	1.53
D Ecosystem and land use establishment	(ha)	0
E Ecosystem and land use development	(ha)	2.1
F Rehabilitation completion	(ha)	37.05

Rehabilitation key performance indicators (KPIs)

ELEMENT	UNIT	THIS REPORT
G New disturbance area	(ha)	-9.16
H New rehabilitation commenced during annual reporting period	(ha)	0.38
I Established rehabilitation	(ha)	39.16
J Annual rehabilitation to disturbance ratio	%	-0.04
K Rehabilitated land to total mine footprint	%	19.2

Progressive achievement of established rehabilitation

ELEMENT	UNIT	THIS REPORT
L Established rehabilitation for agricultural final land uses	%	0
M Established rehabilitation for native ecosystem final land uses	%	99.35
N Established rehabilitation for other/non-vegetated final land uses	%	0

Variation to the rehabilitation schedule

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

No components of the most recent forward program have flagged within this report. Stripped topsoil values were lower than expected due to delays in the Little John’s Tree Frog (LJTF) pond construction project. An in-depth revision of the disturbance and rehabilitation spatial data was undertaken in FY25. This included the addition of pre-existing disturbed areas and the revision of rehabilitation status to meet the Resources Regulator guidelines.

Key factors that delayed progressive rehabilitation

A specialist report completed for the WC21 trial remediation works concluded that there was no observable improvement in the water-holding capacity of WC21 Pools 24 and 25 as a result of grouting. ICHPL engaged with WaterNSW to discuss alternate contingency measures in FY25, with consultation to continue in FY26.

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

Consultation with WaterNSW will continue in FY26 regarding alternate contingency measures to remediation works on WC21.

Rehabilitation monitoring and research findings

Rehabilitation monitoring

The rehabilitation monitoring carried out in the annual reporting period

A specialist report looking at the results of the rehabilitation trial was prepared, with data available at the end of FY24, and report finalised in July 2024. The report determined there was no observable improvement in the water-holding capacity of WC21 Pools 24 and 25 as a result of grouting.

Status of performance against rehabilitation objectives and rehabilitation completion criteria

The monitoring program that has been implemented

Monitoring has continued at WC21 trial remediation site as per the WC21 and Donalds Castle Creek Rehabilitation Plan. Monitoring commenced at the Kembla Heights rehabilitation site that was subject to subsidence in 2013. Monitoring includes regular checks of plant health, weeds and the protective barriers against grazing from fauna.

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.

Due to the anticipated long life of the mine, and the requirement of most surface facilities for current operational requirements, detailed rehabilitation and monitoring programs will be developed closer to the time of closure. Rehabilitation plans will be formed to align with the proposed final landform and land use. Future actions regarding the trial remediation works along WC21 are in consultation with WaterNSW. Rehabilitation Objectives were approved by the Resources Regulator on 10 July 2025. Generally, rehabilitation is progressing towards achieving the rehabilitation objectives as approved and provided in the RMP on the GM3 website: <https://gm3.au/dendrobium-mine/>. Rehabilitation completion criteria were

submitted to the Resources Regulator on 11 September 2025. Feedback has not yet been received.

Appraisal description

There are performance issues preventing rehabilitation moving towards achieving the final land use as soon as reasonably practicable.

Rehabilitation monitoring program findings

Rehabilitation Monitoring is undertaken in accordance with the RMP, located on the GM3 website: <https://gm3.au/dendrobium-mine/>. ICHPL has continued to monitor sites associated with the WC21 trial remediation works; Pools 24 and 25 as well as nearby groundwater levels. For more details, refer to the WC21 and Donalds Castle Creek Rehabilitation Plan published on the GM3 website: <https://gm3.au/dendrobium-mine/>. Regular monitoring was undertaken at the rehabilitation site in Kembla Heights that was subject to subsidence in 2013. The monitoring commenced following the planting of local natives in April 2025 and includes regular checks of plant health, weeds and the protective barriers against grazing from fauna. Monitoring was undertaken at Ventilation Shaft 2/3 site where an area was cleared for the construction of gas drainage infrastructure. Improved erosion and sediment controls were implemented, including hydromulching of the disturbed area with native grasses and the use of a soil binder to stabilise the disturbance to allow for vegetation growth. Regular checks were undertaken during the monthly site inspections. Subsidence remediation monitoring is undertaken when travelling along tracks where remediation activities have occurred. A post-mining inspection of all sites is completed as part of the EoP Report.

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

The trial remediation final report determined there was no observable improvement in the water-holding capacity of WC21 Pools 24 and 25 as a result of grouting. ICHPL is currently in consultation with WaterNSW regarding alternate measures to account for impacts at WC21.

Outcomes of rehabilitation research and trials

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS	ON TRACK?
RRT000100 2	Investigations to Support Rehabilitation in WC21 and Donalds Castle Creek	The principal objective of the trial is to hold water in the two targeted pools following remediation activities.	Hand grouting, shallow pattern grouting and directional/angled grout curtain. Cofferdams and diversion piping will be used to divert any surface flow during works if required. It is likely that water will need to be pumped into the sites in order to assess the water holding potential of the pools following remediation. Overlying sediment will be managed during the drilling and grouting process.	30 Jun 2026	Ongoing	Yes
RRT000113 1	Pond construction for Little John's Tree Frogs (LJTF) in Dendrobium Area 3 – TBC with WNSW	Installing 33 artificial ponds as habitat to promote breeding for LJTF within Dendrobium Area 3.	Types of ponds to be installed: Tank ponds: - Remove any vegetation in work area and commence digging of topsoil. Create a flat-bottomed surface large enough to fit the diameter of the tank and place a layer of sand over the base. The tank will be fitted into the ground, so the tank sits flush with the soil level. Secure tank. Clay-lined ponds: - Dig hole and compact soil, apply clay to pond by either by mixing clay or creating a clay blanket over the pond and then by compacting the pond area	1 Jun 2026	Not started	Yes

Outcomes of completed trials and research

N/A

Attachment 1 – Reporting Definitions

REPORTING CATEGORY	DEFINITION
<p>A1 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>A2 Underground Mining Area</p>	<p>Underground mining operations areas/subsidence management areas.</p>
<p>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>C 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
<p>D 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>
<p>E Ecosystem and Land Use Development</p>	<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>
<p>F Rehabilitation Completion</p>	<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>
<p>G New active disturbance area</p>	<p>The area of any new active disturbance that has been created during the annual reporting period (definition A1 in Table 5).</p>
<p>H New rehabilitation commenced during annual reporting period</p>	<p>The sum of any new rehabilitation commenced in the annual reporting period. These areas may be in the rehabilitation land preparation phase or the ecosystem & land use establishment phase (definitions C and D in Table 5).</p>
<p>I Established rehabilitation (hectares)</p>	<p>The total area of land that is verified to be within either the ecosystem and land use development phase or the rehabilitation completion phase (definitions E & F in Table 5).</p>

REPORTING CATEGORY		DEFINITION
J	Annual rehabilitation to disturbance ratio	The rehabilitation to disturbance ratio (H/G) indicates how many hectares of new rehabilitation are undertaken for each hectare of land disturbed during the year. A ratio of 1/1 indicates that the area of new rehabilitation and disturbance in that year are the same.
K	% Rehabilitated land to total mine footprint	The proportion of the total mine footprint (area of land that has been disturbed by past or present surface disturbance activities) that has established rehabilitation ($I/A1 \times 100$). For open cut mining, the proportion of the total mine footprint verified to be “established rehabilitation” should substantially increase as an operation progresses towards mine closure.
L	Established rehabilitation for agricultural final land uses (hectares)	The percentage of total area of land that is verified to be within either the ecosystem and land use development phase or the rehabilitation completion phase (definitions E & F in Table 5) that have been returned to an agricultural final land use.
M	Established rehabilitation for native ecosystem final land uses (hectares)	The percentage of total area of land that is verified to be within either the ecosystem and land use development phase or rehabilitation completion phase (definitions E & F in Table 5) that have been returned to native ecosystem final land use.
N	Established rehabilitation for other/non-vegetated final land uses (hectares)	The percentage of total area of land that is verified to be within either the ecosystem and land use development phase or the rehabilitation completion phase (definitions E & F in Table 5) that have been returned to other/non-vegetated final land use.

Attachment 2 – Definitions

WORD	DEFINITION
Active	In the context of rehabilitation, land associated with mining domains is considered 'active' for the period following disturbance until the commencement of rehabilitation.
Active mining phase of rehabilitation	In the context of rehabilitation, the active mining phase of rehabilitation constitutes the rehabilitation activities undertaken during mining operations such as salvaging and managing soil resources, salvaging habitat resources, and native seed collection. This phase also includes management actions taken during operations to manage risks to rehabilitation and enhance rehabilitation outcomes such as selective handling of waste rock and management of tailings emplacements.
Analogue site	In the context of rehabilitation, an analogue site is a 'reference site' that represents an example of the defining characteristics (such as vegetation composition and structure or agricultural productivity) of the final land use. Characteristics of analogue sites can be assessed to develop the rehabilitation objectives and completion criteria for final land use domains.
Annual rehabilitation report and forward program	As described in the Mining Regulation 2016.
Annual reporting period	As defined in the Mining Regulation 2016.
Closure	A whole-of-mine-life process, which typically culminates in the relinquishment of the mining lease. It includes decommissioning and rehabilitation to achieve the approved final land use(s).
Decommissioning	The process of removing mining infrastructure and removing contaminants and hazardous materials.
Decommissioning Phase of Rehabilitation	Activities associated with the removal of mining infrastructure and removal and/or remediation of contaminants and hazardous materials. In the context of the rehabilitation management plan this phase of rehabilitation may also include studies and assessments associated with decommissioning and demolition of infrastructure or works carried out to make safe or 'fit for purpose' built infrastructure to be retained for future use(s) following lease relinquishment.

WORD	DEFINITION
Department	The Department of Regional NSW.
Disturbance	See Surface Disturbance.
Disturbance area	<p>An area that has been disturbed and that requires rehabilitation.</p> <p>This may include areas such as on-licence exploration areas, stripped areas ahead of mining, infrastructure areas, water management infrastructure, sewage treatment facilities, topsoil stockpile areas, access tracks and haul roads, active mining areas, waste emplacements (active/unshaped/in or out-of-pit), tailings dams (active/unshaped/uncapped), and areas requiring rehabilitation that are temporarily stabilised (i.e. managed to minimise dust generation and/or erosion).</p>
Domain	<p>An area (or areas) of the land that has been disturbed by mining and has a specific operational use (mining domain) or specific final land use (final land use domain). Land within a domain typically has similar geochemical and/or geophysical characteristics and therefore requires specific rehabilitation activities to achieve the associated final land use.</p>
Ecosystem and Land Use Development	<p>This phase of rehabilitation consists of the activities to manage maturing rehabilitation areas on a trajectory to achieving the approved rehabilitation objectives and completion criteria.</p> <p>For vegetated land uses this phase may include processes to develop characteristics of functional self-sustaining ecosystems, such as nutrient recycling, vegetation flowering and reproduction, and increasing habitat complexity, and development of a productive, self-sustaining soil profile.</p> <p>This phase of rehabilitation may include specific vegetation management strategies and maintenance such as tree thinning, supplementary plantings and weed management.</p>
Ecosystem and Land Use Establishment	<p>This phase of rehabilitation consists of the processes to establish the approved final land use following construction of the final landform.</p> <p>For vegetated land uses this rehabilitation phase includes establishing the desired vegetation community and implementing land management activities such as weed control. This phase of rehabilitation may also include habitat augmentation such as installation of nest boxes.</p>
Exploration	Has the same meaning as that term under the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

WORD	DEFINITION
Final landform and rehabilitation plan	As defined in the Mining Regulation 2016.
Final land use	As defined in the Mining Regulation 2016.
Form and way	Means the form and way approved by the Secretary. Approved form and way documents are available on the Department’s website.
Growth Medium Development	<p>This phase of rehabilitation consists of activities required to establish the physical, chemical and biological components of the substrate required to establish the desired vegetation community (including short lived pioneer species).</p> <p>This phase may include spreading the prepared landform with topsoil and/or subsoil and/or soil substitutes, applying soil ameliorants to enhance the physical, chemical and biological characteristics of the growth media, and actions to minimise loss of growth media due to erosion.</p>
Habitat	Has the same meaning as that term under the <i>Biodiversity Conservation Act 2016</i> and the <i>Fisheries Management Act 1994</i> (as relevant).
Indicator	An attribute of the biophysical environment (e.g. pH, topsoil depth, biomass) that can be used to approximate the progression of a biophysical process. It can be measured and audited to demonstrate (and track) the progress of an aspect of rehabilitation towards a desired completion criterion (i.e. defined end point). It may be aligned to an established protocol and used to evaluate changes in a system.
Land	As defined in the <i>Mining Act 1992</i> .
Landform Establishment	<p>This phase of rehabilitation consists of the processes and activities required to construct the final landform.</p> <p>In addition to profiling the surface of rehabilitation areas to the approved final landform profile this phase may include works to construct surface water drainage features, encapsulate problematic materials such as tailings, and prepare a substrate with the desired physical and chemical characteristics (e.g. rock raking or ameliorating sodic materials).</p>
Large mine	As defined in the Mining Regulation 2016.
Lease holder	The holder of a mining lease.

WORD	DEFINITION
Life of mine	The timeframe of how long a mine is approved to mine, from commencement to closure.
Mine rehabilitation portal	<p>Means the NSW Resources Regulator’s online portal that lease holders must use (via a registered account) to:</p> <ul style="list-style-type: none"> ■ upload rehabilitation geographical information system (GIS) spatial data ■ develop rehabilitation GIS spatial data (using online tracing functions) ■ generate rehabilitation plans and rehabilitation statistics using the map viewer and Rehabilitation Key Performance Indicator functionalities. <p>Data submitted to the mine rehabilitation portal is collated in a centralised geodatabase for use by the NSW Resources Regulator to regulate rehabilitation performance of lease holders.</p>
Mining area	As defined in the <i>Mining Act 1992</i> .
Mining domain	A land management unit with a discrete operational function (e.g. overburden emplacement), and therefore similar geophysical characteristics, that will require specific rehabilitation treatments to achieve the final land use(s).
Mining land	As defined in the <i>Mining Act 1992</i> .
Native vegetation	Has the same meaning as that term under section 60B of the <i>Local Land Services Act 2013</i> .
Overburden	Material overlying coal or a mineral deposit.
Performance indicator	An attribute of the biophysical environment (for example pH, slope, topsoil depth, biomass) that can be used to demonstrate achievement of a rehabilitation objective. It can be measured and audited to demonstrate (and track) the progress of an aspect of rehabilitation towards a desired completion criterion, that is, a defined end point. It may be aligned to an established protocol and used to evaluate changes in a system.

WORD	DEFINITION
Phases of rehabilitation	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"> ■ active mining ■ decommissioning ■ landform Establishment ■ growth medium development ■ ecosystem and land use establishment ■ ecosystem and land use development.
Progressive rehabilitation	The progress of rehabilitation towards achieving the approved rehabilitation completion criteria. This may be described in terms of domains, phases, performance indicators and rehabilitation completion criteria.
Rehabilitation Completion	The final phase of rehabilitation when a rehabilitation area has achieved the approved rehabilitation objectives and rehabilitation completion criteria for the final land use. Rehabilitation areas may be classified as complete when the NSW Resources Regulator has determined in writing that the relevant rehabilitation obligations have been fulfilled following submission of <i>Form ESF2 Rehabilitation completion and/or review of rehabilitation cost estimate</i> application by the lease holder.
Rehabilitation Completion criteria	As defined in the Mining Regulation 2016.
Rehabilitation cost estimate	As defined in the Mining Regulation 2016.
Rehabilitation management plan	As defined in the Mining Regulation 2016.
Rehabilitation objectives	As defined in the Mining Regulation 2016.
Rehabilitation risk assessment	As defined in the Mining Regulation 2016.
Rehabilitation schedule	The defined timeframes for progressive rehabilitation set out in the forward program.

WORD	DEFINITION
Relevant stakeholders	<p>Means any persons or bodies who may be affected by the mining operations, including rehabilitation, carried out on the lease land, and includes:</p> <ul style="list-style-type: none"> ■ the relevant development consent authority ■ the local council ■ the relevant landholder(s) ■ community consultative committee (if required under the development consent) or equivalent consultative group ■ affected land holder(s) ■ government agencies relevant to the final land use ■ affected infrastructure authorities (electricity, telecommunications, water, pipeline, road, rail authorities) ■ local Aboriginal communities, and ■ any other person or body determined by the Minister to be a relevant stakeholder in relation to a mining lease.
Risk	The effect of uncertainty on objectives. It is measured in terms of consequences and likelihood (AS/NZS ISO 31000:2009).
Secretary	The Secretary of the Department.
Security deposit	An amount that a mining lease holder is required to provide and maintain under a mining lease condition, to secure funding for the fulfilment of obligations under the lease (including obligations that may arise in the future).
Surface disturbance	Includes activities that disturb the surface of the mining area, including mining operations, ancillary mining activities and exploration.
Tailings	A combination of the fine-grained solid material remaining after the recoverable metals and minerals have been extracted from the mined ore, and any process water ² .
Waste	Has the same meaning as that term under the <i>Protection of the Environment Operations Act 1997</i> .

² Commonwealth of Australia (DITR), 2007. *Tailings Management*.

Attachment 3 – Rehabilitation Complaints

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

DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
2 Dec 2022	NSW Resources Regulator	Email correspondence.	Forward Program, particularly: Requesting IMC to nominate a contact person in relation to the mining lease(s) for the purposes of the Mining Act 1992; and, Requesting IMC publish the Forward Program on the IMC website (2/12/2022).	Evidence submitted of nominated contact person provided previously to the NSW Resources Regulator. Forward Program published to the IMC Website.
1 Jan 2025	WaterNSW, DPHI	Email correspondence and meetings. Note: Consultation occurred over multiple dates.	WC21 and DCC Rehabilitation Trial, particularly: Progress of WC21 Rehabilitation Trial; Final trial works report; and, Revised WC21 and DCC Rehabilitation Plan.	Ongoing consultation and discussion of alternative contingency measures for impacts at WC21.
18 Jul 2024	WaterNSW	Email correspondence.	Repair of subsidence induced soil cracking on Fire Road 6F, over Longwall 19A, DA3A mining area.	Soil cracks remediated.
20 Sep 2024	Sydney Water, National Parks and Wildlife Service	Email correspondence and onsite meetings. Note: Consultation occurred over multiple dates.	Progress of the O’Briens Gap Pumphouse Rehabilitation Project to satisfaction of landowners.	Continuation of O’Briens Gap Rehabilitation Project to satisfaction of the landowner (Sydney Water). Issue of site validation report and SWC acceptance via cancellation of Licence at the site for works on 31/01/2024. Consultation with NPWS and issue site validation report on 05/04/2024.
20 Sep 2024	Department of Planning and Environment, Biodiversity Conservation Division, WaterNSW, Dendrobium Community Consultative Committee	Email correspondence, inspections of WC21 trial rehabilitation site, offsite meetings, bi-monthly meetings, and onsite tour – 4/05/2023. Note:	WC21 and DCC Rehabilitation Trial, particularly: Update on the progress of WC21 Rehabilitation Trial; and, Success of WC21 Rehabilitation Trials (WaterNSW).	Revision of the WC21 and DCC Rehabilitation Plan. Ongoing consultation and discussion of alternative contingency measures for impacts at WC21. Commitment to revisit site once trial has progressed further.

DENDROBIUM COLLIERY ANNUAL REHABILITATION REPORT

ARR0001574 | Monday 1 July 2024 to Monday 30 June 2025

DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
		Consultation occurred over multiple dates.		
30 Jun 2023	-	-	-	-
21 May 2024	Resources Regulator	Email correspondence and site inspection with Resources Regulator (21/05/2024).	Progress of rehabilitated site (O'Briens Gap Switchyard).	Rehabilitation completion report submitted to Resources Regulator on 13/06/2023 for this site pursuant to obtaining formal rehabilitation sign-off from Resources Regulator.
10 May 2024	Resources Regulator	Email correspondence, submission of ESF2 form (10/05/2024), and site inspection.	Seeking sign off on rehabilitation undertaken for localised surface failure - Harry Graham Drive.	Awaiting feedback following submission of ESF2 form.
29 Aug 2022	Department of Planning and Environment, Environment Protection Authority	Email correspondence. Note: Consultation occurred over multiple dates.	Tree removal at Dendrobium Pit Top, including: Complaint received on tree removal and noise at Dendrobium; and, Inclusion of Special Condition for slope stabilisation work within EPL 3241.	Response provided by IMC and accepted by Department of Planning and Environment. Special condition approved in EPL. CEMP for the Slope Stabilisation work submitted to the EPA as required. CEMP accepted by the Environment Protection Authority.
30 Jun 2023	NSW Resources Regulator, Landholders	Email correspondence. Note: Consultation occurred over multiple dates.	Application for part cancellation of CCL 768 for area covered by rehabilitated powerlines approved by NSW RR.	Correspondence issued to affected Landholders informing them that Leases have been cancelled.
6 Sep 2022	Department of Planning and Environment, NSW Resources Regulator, Dendrobium Community Consultative Committee	Email correspondence and meetings. Note: Consultation occurred over multiple dates.	Rehabilitation Management Plan, particularly: Feedback on draft rehabilitation management plan; Meetings to discuss rehabilitation objectives and spatial data following refusal; and, Provide information and discuss rehabilitation plan.	RMP revised. Rehabilitation objectives and spatial data revised and resubmitted in RMP.

DENDROBIUM COLLIERY ANNUAL REHABILITATION REPORT

ARR0001574 | Monday 1 July 2024 to Monday 30 June 2025

DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
27 Aug 2024	Resources Regulator and WaterNSW	Email correspondence and site inspection (27/08/2024).	Corrimal No. 2 Shaft, particularly: Seeking sign off on rehabilitation undertaken.	ESF2 form signed by WaterNSW (as the landholder) (10/03/2025).
4 Oct 2024	Resources Regulator	Email correspondence.	Localised surface failure – Harry Graham Drive, particularly: Refusal of ESF2 form.	Additional rehabilitation works undertaken onsite.
7 Mar 2025	Resources Regulator	Email correspondence and meetings. Note: Consultation occurred over multiple dates.	Rehabilitation Management Plan (RMP), particularly: Discussion of rehabilitation objectives and FLRP spatial data following refusal; and, Resubmission of completion criteria (11/09/2025).	Rehabilitation objectives and spatial data revised and approved. RMP revised.
21 Sep 2022	NSW Resources Regulator	Email correspondence.	Inclusion of securities for exploration in Rehabilitation Cost Estimate (RCE) for CCL 768 (21/09/2022).	RCE revised and submitted to the NSW Resources Regulator.
1 Jan 2025	WaterNSW	Email correspondence. Note: Consultation occurred over multiple dates.	Repair of subsidence induced soil cracking on Fire Road 6C, over Longwall 22, DA3C mining area.	Soil cracks remediated.
4 Oct 2024	Resources Regulator	Email correspondence.	O’Briens Gap Switchyard Rehabilitation, particularly: Seeking sign off on rehabilitation undertaken.	Notification of satisfactory rehabilitation received (4/10/2024). RMP and spatial data updated accordingly.

Attachment 5 – Plans

Plan 1A - Current Status of Mining and Rehabilitation-DEN.zip

Plan 1B - Current landform contours-DEN.zip

Annual Report (LARGE MINE) v1.11