



**NSW
Resources
Regulator**

ARR0001577

APPIN COLLIERY ANNUAL REHABILITATION REPORT

Monday 1 July 2024 to Monday 30 June 2025



Summary table

DETAIL	
Mine	Appin Colliery
Reference	ARR0001577
Annual report period commencement date	Monday 1 July 2024
Annual report period end date	Monday 30 June 2025
Forward program	FWP0001483
Mining leases	MPL 201 (1973), ML 1832 (1992), CL 388 (1973), CCL 767 (1973), ML 1473 (1992), MPL 200 (1973), ML 1874 (1992), ML 1698 (1992), CL 381 (1973), ML 1382 (1992), ML 1678 (1992), ML 1847 (1992), CCL 724 (1973), ML 1574 (1992), ML 1433 (1992)
Lease holder(s)	Illawarra Coal Holdings Pty Ltd, Endeavour Coal Pty Limited
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

Appin Mine consists of the merged Appin, Tower, and West Cliff collieries. Appin Mine is owned and operated by Endeavour 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. Key areas associated with the current operations include Appin North, West and East Pit Tops, Appin East Ventilation Shaft 1/2 and 3 sites, Appin West Ventilation Shaft 6 and Ventilation Shaft 7/8 sites (under construction), Douglas North Substation site, West Cliff Coal Preparation Plant, Coal Wash Emplacement Area and North Cliff Mine site.

Life of mine

16 years

Current development consents, leases and licences

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

PA08/0150
PA08/0150
PA08/0150
PA08/0150
PA08/0150
PA08/0150
PA08/0150
PA08/0150
PA08/0150
PA08/0150

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

MPL 201 (1973), ML 1832 (1992), CL 388 (1973), CCL 767 (1973), ML 1473 (1992), MPL 200 (1973), ML 1874 (1992), ML 1698 (1992), CL 381 (1973), ML 1382 (1992), ML 1678 (1992), ML 1847 (1992), CCL 724 (1973), ML 1574 (1992), ML 1433 (1992)

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

Appin Area 7 Longwalls 707 - 710 SMP Approval
Appin Longwalls 709-711 and 905 Extraction Plan
Environment Protection Licence – 2504
Appin Area 9 Longwalls 901-904 Extraction Plan
EPBC 2010/5350
EPBC 2010/5722

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

MP08_0150 was modified on 9 August 2024 in relation to transport and receipt of coal wash.
An additional modification to MP08_0150 was approved on 11 October 2024 in relation to blasting hours and frequency.

Changes to land ownership and land use

No changes to land ownership or 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

Construction of the Operational Purpose Deduction (OPD) Haul Road continued in FY25 and is expected to be completed in FY26. Earthworks were undertaken at the Appin Mine Ventilation and Access Project (AMVA Project) site for electrical installation, high voltage switchyard installation, service borehole construction, emulsion bunker construction, vent fan switchyards and transformer skids. Spoil from the No. 8 and No. 7 shaft pre-sink and main sink was used as engineered fill to construct the visual bund around the southwest perimeter of the site. Progressive rehabilitation of the Coal Wash Emplacement Area (CWEA) has been undertaken during the reporting period in accordance with the approved CWEA Management Plan. During the reporting period there was additional landform establishment of ~1.7 ha. Seeding of ~1.5 ha was completed during Spring in FY25. Progress of rehabilitation in the CWEA is detailed in the Annual CWEA Monitoring Report as published in the FY25 Annual Review. Monitoring of revegetation at the BioBanking and offset sites was undertaken during the reporting period. At the cessation of drilling, exploration site rehabilitation takes place progressively. In FY25, five sites were fully remediated, and one site is undergoing remediation. Additionally, instrumentation termination and final surface remediation was undertaken at three sites where monitoring is no longer required. Refer to the FY25 Annual Review on the GM3 website: <https://gm3.au/>.

Rehabilitation planning activities that were conducted, including any specialist studies

A Rehabilitation Options and Feasibility Analysis was submitted to WaterNSW and the Resources Regulator in June 2024 for the Bulli No. 1, 2 and 3 shafts. The shafts have been previously sealed to the standard of the day. The report provided a risk-based evaluation of a range of rehabilitation scenarios for removal of infrastructure and sealing of the shafts. Discussions were held with WaterNSW and Resources Regulator in FY25 whom both indicated their general support for a campaign of comprehensive rehabilitation for all these sites including fully backfilling each shaft to the current guidelines for coal mines entry sealing. As part of the North Cliff Rehabilitation Execution Plan (NCREP), a High-Risk Activity (HRA) application for sealing the shafts was prepared with associated studies, engineering and risk assessment in FY24. The submission was reviewed by Appin Mine statutory personnel. The application was submitted to the Resources Regulator in September 2024 and approved in November 2024. Discussions occurred with the NPWS regarding the removal of redundant powerlines between North Cliff and Appin North in the Dharawal National Park. A REF was submitted in FY24 and was approved by NPWS via a Consent in January 2025. Planning is underway in relation to decommissioning works and surface rehabilitation with works

expected to commence in FY26. Planning occurred for the construction of additional nest boxes for the CWEA. These boxes are planned to be placed in FY26.

Overview of subsidence repair and/or remediation works undertaken

The Georges River Rehabilitation Program continued during FY25. The rehabilitation involves drilling a series of boreholes in a line across the river's rockbar, then injecting the holes with polyurethane resin (PUR). Once injected, the resin expands to fill subsidence fractures in the rock. Filling these fractures creates a grout 'curtain' which essentially acts as a dam beneath the surface, where diverted flow backs up and ultimately returns water to the surface, filling pools and returning flow across rockbars. Rehabilitation works were undertaken at the following sites during the FY25 reporting period: Rockbar 40, Rockbar 39, Rockbar 36, Rockbar 45, and Rockbar 49 (commenced in FY25 and completed in FY26). Rehabilitation success is still to be determined. All sites are undergoing post-rehabilitation monitoring.

Overview of rehabilitation management and maintenance activities

Construction activities continued at the AMVA Project site in FY25. Erosion and sediment control measures implemented at the site during these construction activities included the establishment and use of clean water diversion drains, catch drains for dirty water, and use of a sediment pond. Temporary controls included sediment fences, coir logs and geofabrics. The potential for erosion at the CWEA is managed in accordance with the CWEA Management Plan. The following activities are undertaken to minimise the likelihood of erosion within the CWEA: compaction of emplaced material, profiling of finished areas to designed gradients, placement of boulders and logs; and revegetation of the CWEA (once material is emplaced to meet design criteria). Approximately 1.7 ha of landform establishment and topsoiling in preparation for seeding was completed at the CWEA. Sediment is controlled by a series of sediment ponds. Weed control was undertaken at Appin East, Appin West and Appin North Pit top sites, as well as Biobanking and Offset areas. Works include; regular spraying/ slashing of weed zones by licenced contractors and, regular inspections that review the effectiveness of weed management activities. Targeted weed control occurred within the CWEA including slashing of perennial grasses and targeted weed spraying. Further details can be found within the FY25 Annual Review, located on the GM3 website: <https://gm3.au/>.

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

A Targeted Assessment Program (TAP) for revegetation was conducted by the Resources Regulator against the RMP in FY24. Most recommendations were actioned in FY25 through the review of the RMP. Following refusal from the Resources Regulator, revised Rehabilitation Objectives and FLRP were submitted and approved during FY25. Following refusal of the rehabilitation sign-off application for Stage 1 and 2 of the CWEA, the Rehabilitation Objectives

were revised in FY25, and the Rehabilitation Completion Criteria were submitted on 11 September 2025 (pending approval). An indicative schedule was prepared for Bulli Shafts works, including background studies, approvals and physical rehabilitation works, as requested by the Resources Regulator.

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

No rehabilitation areas achieved final land use during the annual reporting period. An ESF2 Form was submitted to the Resources Regulator for assessment in FY24 for Stages 1 and 2 of the CWEA. The Resources Regulator refused the application on 14 November 2024, advising that they were unable to determine the application as Appin Colliery is yet to have a Rehabilitation Completion Criteria Statement approved. A Rehabilitation Completion Form will be submitted once the Rehabilitation Completion Criteria have been approved.

Key production milestones

MATERIAL	UNIT	FWP0001483 YEAR 1		THIS REPORT
Stripped topsoil <small>(if applicable)</small>	(m ³)		21,000	4,900
Rock/overburden	(m ³)		0	0
Ore	(Mt)		4.36	4.39
Reject material¹	(Mt)		0.74	0.84
Product	(Mt)		3.63	3.55

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)	307.97
B Total active disturbance	(ha)	228.16
C Rehabilitation – land preparation	(ha)	11.38
D Ecosystem and land use establishment	(ha)	4.85
E Ecosystem and land use development	(ha)	53.8
F Rehabilitation completion	(ha)	9.79

Rehabilitation key performance indicators (KPIs)

ELEMENT	UNIT	THIS REPORT
G New disturbance area	(ha)	14.66
H New rehabilitation commenced during annual reporting period	(ha)	-1.46
I Established rehabilitation	(ha)	63.59
J Annual rehabilitation to disturbance ratio	%	-0.1
K Rehabilitated land to total mine footprint	%	20.65

Progressive achievement of established rehabilitation

ELEMENT	UNIT	THIS REPORT
L Established rehabilitation for agricultural final land uses	%	1.74
M Established rehabilitation for native ecosystem final land uses	%	97.13
N Established rehabilitation for other/non-vegetated final land uses	%	0.01

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. 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

N/A

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

N/A

Rehabilitation monitoring and research findings

Rehabilitation monitoring

The rehabilitation monitoring carried out in the annual reporting period

The 2025 CWEA Annual Report concluded that rehabilitation areas were within or above the local benchmarks for majority of the Stage 2 and 3 biometric attributes. Stage 2 and 3 are continuing to trend towards benchmark values whereas, Stage 1 continues to stay below benchmark in native plant species richness. Weed incursion remains the key threat to the rehabilitation of the CWEA. One threatened plant species, *Persoonia hirsuta*, was detected during the FY25 monitoring. In previous years, eight additional *P. hirsuta* and four *A. bynoeana* were found just outside the CWEA of Stage 4. The *Persoonia hirsuta* individuals are considered a significant observation, contributing to the understanding of the species' capacity for regeneration within the rehabilitation areas and will continue to be considered during future monitoring. The habitat features within the rehabilitation are being occupied by native mammals, reptiles and birds. As the rehabilitation matures, it is expected that native fauna abundance will increase further.

Status of performance against rehabilitation objectives and rehabilitation completion criteria

The monitoring program that has been implemented

Rehabilitation monitoring is undertaken in accordance with the Rehabilitation Management Plan (RMP) and the approved Rehabilitation Objectives. Rehabilitation progression within the CWEA is monitored in accordance with the CWEAMP. The RMP and CWEAMP can be found on the GM3 Website: <https://gm3.au/>. Rehabilitation completion criteria were submitted to the Resources Regulator in FY26 and are awaiting approval. Georges River Rehabilitation activities commenced in FY24 and were completed early FY26. All areas are undergoing post-rehabilitation monitoring. The monitoring compares logged water level data at various sites, before and after rehabilitation, as well as control sites. This approach assesses the water holding-capacity of pools following rehabilitation activities in order to determine the success of the program. Monitoring will continue to capture a range of rainfall and catchment inflow conditions. This approach will be applied at all monitoring sites where stream features allow equipment to be installed. Other monitoring used where stream features permit includes spot flow gaugings and time lapse cameras to compare surface flow before and after rehabilitation.

Are all rehabilitation areas in Landform Establishment phase or higher represented in the monitoring program to assess performance against the rehabilitation objectives and approved or, if not yet approved rehabilitation completion criteria and final landform and rehabilitation plan?

Yes

Year rehabilitation areas will be included as part of the monitoring program**An appraisal of whether rehabilitation is moving towards achieving the proposed rehabilitation objectives, approved or, if not yet approved, rehabilitation completion criteria and final landform and rehabilitation plan as soon as reasonably practicable.**

Rehabilitation is managed and progressing in accordance with the approved Rehabilitation Management Plan. Rehabilitation within the CWEA is progressing as per the CWEAMP. Rehabilitation has been completed along the Georges River and post-rehabilitation monitoring is underway as per the GRRP. Due to the anticipated long life of the mine, and the requirement of most surface facilities for operational function, detailed rehabilitation and monitoring programs for surface facilities will be developed closer to the time of closure. Rehabilitation plans will be formed to align with the proposed final landform and land use. A Rehabilitation Completion form is expected to be submitted for the CWEA Stages 1 and 2 following approval of the Completion Criteria.

Appraisal description

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

Rehabilitation monitoring program findings

Monitoring of the CWEA was conducted in accordance with the CWEAMP available on the GM3 website. Additional monitoring was undertaken to assess the use of nest boxes, Broad-Headed snake habitat and Bee hotels. ICHPL is continuing to explore the use of remote sensing to supplement the CWEA rehabilitation monitoring program. Monitoring of revegetation and invasive flora management at Biobanking sites BA 215, BA 382 and BA 345 occurred in FY25 in accordance with the appropriate biobanking Agreements. As of May 2025, the Cataract BioBanking site (345) moved from passive to active management. Outcomes of these monitoring events can be found within the Appendices of the FY25 Annual Review. Rehabilitation activities continued at the Georges River during FY25 and were completed in early FY26. Works were undertaken at sites: Rockbar 40, Rockbar 39, Rockbar 36, Rockbar 45 and Rockbar 49. All sites are undergoing post-rehabilitation monitoring. Details of the rehabilitation program available on the GM3 website: <https://gm3.au/>. The twelfth round of annual condition monitoring of the *P. hirsuta* population at Appin North was conducted during the reporting period. The monitoring was undertaken in accordance with the approved *P. hirsuta* Offset Management Plan, which complies with Condition 2 of EPBC Approval 2010/5350 (the EPBC Approval). Further details can be found within the FY25 Annual Review, located on the GM3 website: <https://gm3.au/>.

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?
RRT0001008	Population supplementation of the endangered <i>Persoonia hirsuta</i> to mine rehabilitation.	The overall objective of the program is to increase the population of <i>Persoonia hirsuta</i> plants within mine rehabilitation.	Propagative material was collected from source plants over three years (2017-2019) from a several wild populations throughout the natural plant distribution. <i>P. hirsuta</i> plant stock is grown within the nursery at the Australian Botanic Gardens Mt Annan (ABGMA). Plants are transported by vehicle from ABGMA to the recipient sites on the finalised planting dates. Translocations have been carried out over a number of staged plantings (2019, 2021 and 2022). Monitor the plants health overtime.	30 Jun 2026	Ongoing	Yes
RRT0001009	Impact of Fire on Rehabilitation	The overall objective is to test the resilience of the rehabilitation at the Coal Wash Emplacement Area (CWEA) and demonstrate that the rehabilitation can withstand a bushfire.	Complete a literature review. Fire Trial Design. Seek approval to carry out the burn. Subject to approval under the Rural Fires Act, carry out a test burn. Carry out post-burn monitoring of the rehabilitation.	30 Jun 2025	Complete	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
<p>J Annual rehabilitation to disturbance ratio</p>	<p>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.</p>
<p>K % Rehabilitated land to total mine footprint</p>	<p>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.</p>
<p>L Established rehabilitation for agricultural final land uses (hectares)</p>	<p>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.</p>
<p>M Established rehabilitation for native ecosystem final land uses (hectares)</p>	<p>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.</p>
<p>N Established rehabilitation for other/non-vegetated final land uses (hectares)</p>	<p>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.</p>

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	<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"> ■ active mining ■ decommissioning ■ landform Establishment ■ growth medium development ■ ecosystem and land use establishment ■ ecosystem and land use development.
Progressive rehabilitation	<p>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.</p>
Rehabilitation Completion	<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>
Rehabilitation Completion criteria	<p>As defined in the Mining Regulation 2016.</p>
Rehabilitation cost estimate	<p>As defined in the Mining Regulation 2016.</p>
Rehabilitation management plan	<p>As defined in the Mining Regulation 2016.</p>
Rehabilitation objectives	<p>As defined in the Mining Regulation 2016.</p>
Rehabilitation risk assessment	<p>As defined in the Mining Regulation 2016.</p>
Rehabilitation schedule	<p>The defined timeframes for progressive rehabilitation set out in the forward program.</p>

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
4 Sep 2023	Department of Planning and Environment, NSW Resources Regulator (RR), Appin Mine Community Consultative Committee (ACCC)	Email correspondence and bi-monthly meetings. Note: Correspondence occurred over multiple dates.	Rehabilitation Management Plan, particularly: Feedback received on Rehabilitation Management Plan (6/09/2022); Refusal of Final Landform Plan (1/05/2023); and, Provide information on current and proposed plans.	Rehabilitation Management Plan revised. Final Landform Plan revised and approved on 4 September 2023.
17 Aug 2023	Biodiversity Conservation Trust, ACCC	Email correspondence, site visit (25/07/2024), and bi-monthly meetings. Note: Consultation occurred over multiple dates.	Annual Biobanking Reports, particularly: Submission of Annual Biobanking report for BA 215 (17/08/2023), BA 345 (6/03/2024) and Re-submission BA 382 (15/05/2024); and, Provide update on the Nepean Biobanking site.	Reports accepted by Biodiversity Conservation Trust.
1 Jul 2024	RR, Department	Email correspondence. Note: Consultation occurred over multiple dates.	Coal Wash Emplacement Area Rehabilitation, particularly: Refusal of ESF2 form for Stage 1 and 2 of the CWEA (14/11/2024); and, Revised CWEA Management Plan.	Rehabilitation Objectives revised. Rehabilitation Completion Criteria submitted (11/09/2025). Approval granted for revised CWEA Management Plan (10/06/2025).
1 Jul 2024	RR	Email correspondence. Note: Consultation occurred over multiple dates.	Rehabilitation Objectives, and, Final Landuse and Rehabilitation Plan (FLRP), particularly: Refusal of Rehabilitation Objectives Statement; and, Refusal of FLRP.	Rehabilitation objectives and FLRP revised and approved on 19/06/2025.
27 Aug 2024	RR, WaterNSW	Site visit (27/08/2024).	Bulli Shaft No.4 Shaft, particularly: Rehabilitation Sign off.	All parties agreed that rehabilitation sign-off should be sought for this site.
1 Jul 2024	Biodiversity Conservation Trust, Appin Mine CCC	Email correspondence and bi-monthly meetings. Note:	Annual Biobanking Reports/Biodiversity Stewardship Areas, particularly: Submission of Annual Biobanking	Reports accepted by Biodiversity Conservation Trust. BSA (BA245) changed to active management (17/04/2025).

APPIN COLLIERY ANNUAL REHABILITATION REPORT

ARR0001577 | 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.	report for BA 215 (16/08/2024), BA 345 (7/03/2025) and BA 382 (16/08/2024).	
1 Jul 2024	NPWS	Email correspondence . Note: Consultation occurred over multiple dates.	Removal of powerlines between North Cliff and West Cliff, particularly: Approvals required to rehabilitate powerlines; and, Progress updates.	Consent issued by the NPWS in January 2025. Actions as required by the Consent prior to and during powerline removal i.e submission of track management plan.
4 Sep 2023	RR, ACCC	Email correspondence and bi-monthly meetings. Note: Consultation occurred over multiple dates.	Rehabilitation Objectives, particularly: Refusal of Rehabilitation Objectives Statement (1/05/2023); and, Provide information on current and proposed objectives.	Rehabilitation objectives revised and approved on 4 September 2023.
20 Sep 2024	Department of Planning and Environment, National Parks and Wildlife Service (NPWS), Tharawal Aboriginal Land Council, Landholders, ACCC	Email and phone correspondence, offsite meetings, site visits and bi-monthly meetings. Note: Consultation occurred over multiple dates.	Georges River Rehabilitation Project, including: Update on the progress of Georges River Rehabilitation Project; Land access arrangements; Review of Environmental Factors; Proposed locations of tracks and staging areas.	Development of land access agreements. Review of the GRRP. Regular site visits and rehabilitation updates.
29 May 2024	Tharawal Local Aboriginal Land Council, ACCC, RR	Email correspondence, onsite meetings, site visit (15/02/2024), bi-monthly meetings and Targeted Assessment Program – Revegetation (29/05/2024). Note: Consultation occurred over multiple dates.	Coal Wash Emplacement Area Rehabilitation, particularly: Appin North CWEA Aboriginal Heritage signage Stage 3; Provide information of the progress of stage 3 and updates regarding actions for Stage 4; and, Discuss redesign of Stage 3 to avoid direct impacts to Aboriginal heritage sites.	Consulted on the path to install a sign for the BC2 on Stage 3 and provided feedback on content. Awaiting methodology of consultation regarding Aboriginal Heritage sites on Stage 4.

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1 Jul 2024	RR, WaterNSW	Email correspondence and meetings. Note: Consultation occurred over multiple dates.	Bulli Shafts No 1, 2 & 3, particularly: Review of Rehabilitation Options and Feasibility Analysis for Bulli Shafts 1, 2 and 3.	General support received to progress decommissioning and rehabilitation works. An indicative schedule was prepared and submitted for background studies, approvals, and physical rehabilitation works.
2 Dec 2022	RR	Email correspondence. Note: Consultation occurred over multiple dates.	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.	Evidence submitted of nominated contact person provided previously. Forward Program published to the GM3 website.
29 Sep 2023	RR, Crown Lands, Environmental Protection Authority (EPA), Biodiversity and Conservation Services (BCS), Transport for NSW (TfNSW), DPE - Environment and Heritage Group, NPWS, Tharawal Aboriginal Land Council, ACCC	Email correspondence, onsite meetings, site visits (19/07/24 and 27/07/2024), bi-monthly meetings, emails and phone calls. Note: Consultation occurred over multiple dates.	North Cliff Rehabilitation, particularly: External agency consultation regarding ICHPL's proposed North Cliff Rehabilitation Execution Plan; Update on the progress of North Cliff Rehabilitation Project; and, Identified stockpiles of CWR located in the DNP (not related to North Cliff or ICHPL).	Revision of the North Cliff Rehabilitation Execution Plan to address external stakeholder feedback that was submitted to RR on 29/09/23. Letter of intent issued to NPWS from IMC dated 12/07/24 regarding assistance with removal of identified stockpiles of potential CWR in DNP.
2 Apr 2024	NPWS	Email correspondence and online meetings. Note: Consultation occurred over multiple dates.	Removal of powerlines between North Cliff and West Cliff, particularly: In principle agreement for scope of works and approvals required to rehabilitate North Cliff powerline.	Preparation and submission of a Review of Environmental Factors (REF) for the removal of the redundant North Cliff powerline to NPWS that was submitted on 02/04/2024.
1 Jul 2024	DPHI, NPWS, ACCC, Landholders, Tharawal Aboriginal Land Council	Email, phone calls, offsite meetings and site visits. Note: Consultation occurred over multiple dates.	Georges River Rehabilitation Project, particularly: Update on the progress of Georges River Rehabilitation Project; Land access arrangements; Review of Environmental Factors; and, Proposed locations of tracks and staging areas.	Review of land access agreements. Regular site visits and rehabilitation updates.

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DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
24 Jun 2024	RR, WaterNSW	Email correspondence and onsite meetings. Note: Consultation occurred over multiple dates.	Bulli Shafts Rehabilitation, particularly: Preliminary discussions to inform initiation of Bulli shafts rehabilitation.	Preparation and completion of a Rehabilitation Options and Feasibility Analysis Report that was issued to RR and WaterNSW on 24/06/2024.
1 Jul 2024	RR, Crown Lands, EPA, BCS, TfNSW, DPHI, NPWS, ACCC, Tharawal Aboriginal Land Council	Email correspondence, phone calls, onsite meetings, site visits (19/07/24 and 27/07/2024), and bi-monthly meetings. Note: Consultation occurred over multiple dates.	North Cliff Rehabilitation, particularly: High-Risk Activity (HRA) application submitted to the Resources Regulator in September 2024; Update on the progress of North Cliff Rehabilitation Project; and, Identified stockpiles of CWR located in the DNP (not related to North Cliff or ICHPL).	High-Risk Activity (HRA) application submitted to the Resources Regulator in September 2024 and approved in November 2024. GM3 has commenced actions to progress Shaft sealing in accordance with the HRA with procurement and design of the remote monitoring system for shaft atmosphere. Removal of Coal Wash stockpiles in Dharawal National Park, April 2025.

Attachment 5 – Plans

Plan 1A.zip

Plan 1B.zip

Annual Report (LARGE MINE) v1.11