NSW GOVERNMENT

NSW Resources Regulator

ARR0001517

RIXS CREEK MINE ANNUAL REHABILITATION REPORT

Monday 1 April 2024 to Monday 31 March 2025

Summary table

DETAIL	
Mine	Rixs Creek Mine
Reference	ARR0001517
Annual report period commencement date	Monday 1 April 2024
Annual report period end date	Monday 31 March 2025
Forward program	FWP0001423
Mining leases	CL 352 (1973), ML 1649 (1992), ML 1803 (1992), ML 1648 (1992), CL 357 (1973), ML 1725 (1992), ML 1650 (1992), ML 1651 (1992), ML 1630 (1992), ML 1432 (1992)
Lease holder(s)	Bloomfield Collieries Pty Ltd
Contact	Chris Quinn
Date of submission	Thursday 29 May 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

Rix's Creek Mine (RCM) is wholly owned and operated by Bloomfield Collieries Pty Limited an Australian owned company. The mine consists of Rix's Creek North (RCN) and Rix's Creek South (RCS) which are formally two separate mines. Each includes an approved open cut operation and CHPP facilities, with a rail loop located at RCN.

Life of mine

15 years

Current development consents, leases and licences

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

PA08-0102 (MOD9)
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PA08-0102 (MOD9)

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

CL 352 (1973), ML 1649 (1992), ML 1803 (1992), ML 1648 (1992), CL 357 (1973), ML 1725 (1992), ML 1650 (1992), ML 1651 (1992), ML 1630 (1992), ML 1432 (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)

RCN PA08-0102 Modification 10 Approved 5 March 2025. Additional Conditions include the use of Mobile rock crushing. Waste tyre storage handling and disposal, including recycling options. Upgrades to RCN Coal handling preparation plant, Run of mine coal stockpiles and RCN workshop facilities.

Changes to land ownership and land use

During the reporting period, a freehold property was acquired by Bloomfield Collieries Pty Ltd Lot 30 DP 1018512.

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 reporting period Rix's Creek Mine progressed with the disturbance of the Western out of Pit dump area (WOOPD) and WH15 near the high-wall. A small section of the Camberwell Pit RL150 was disturbed for dump progression. 17.40 ha of land was disturbed as per the land disturbance procedure. The planned disturbance for the Year Ending March (YEM) 2025 reporting period was scheduled to be 47.59ha. The WS15 block pre-strip and Camberwell Pit RL150 were disturbed during the reporting period. During the reporting period, 10.4 ha of rehabilitation occurred at WOOPD and 9.38ha of rehabilitation occurred at West Pit South. A total 19.78 ha of rehabilitation occurred during the reporting period. This was greater than the 17.89ha specified in the Year 1 forward program. Larger areas of rehabilitation was completed in the WOOPD during the reporting period.

Rehabilitation planning activities that were conducted, including any specialist studies

A Quality Assurance and Quality Control rehabilitation process continued to be implemented during the reporting period. The QA/QC system provides an integrated process for the design, approval, construction and documentation to meet the requirements of the rehabilitation records guideline. Further refinements to the QA/QA system will continue to improve the rehabilitation process. Agronomist reports relating to recently established rehabilitation and grazing areas assessments were completed to identify the quality of topsoil to be reclaimed. Biosolid pre-application reports for the Western out of pit dump (WOOPD) and West Pit South rehabilitation were completed to determine rates of biosolid application. Rix's Creek Mine applies biosolids to boost organic matter, soil nutrient levels and improve vegetation growth and groundcover.

Overview of subsidence repair and/or remediation works undertaken

No subsidence repairs were required during the reporting period.

Overview of rehabilitation management and maintenance activities

Weed management was undertaken during the period. A weed action plan was undertaken with a land management service provider completing weed management focusing on Galenia, Acacia Saligna, Coolatai grass, African boxthorn prickly pear. Other common species of weeds were also targeted during the year. Wild Dog and Fox baiting was undertaken during the reporting period. A combination of ejector baits and meat baits were utilised with a total of

108 bait sites presented with 29 Dogs and 46 foxes controlled based on the animal sign left on the mound and surrounding areas. A Pig trapping and baiting program was undertaken following recent disturbance in the West Pit South rehabilitation area. 43 pigs were controlled following an extensive trapping and baiting program within the reporting period.

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

On 17/10/2024, the Resources Regulator (RR) completed a Targeted Assessment Program (TAP) focusing on re-vegetation on rehabilitated land. Correspondence was received on 6/01/2025, which provided recommendations following the audit. Most of the recommendations were generic and sent out to audited mines. An official warning was received because the Rehabilitation Management Plan (RMP) did not adhere to the Form and Way guideline format for Large Mines. The updated RMP was published on The Bloomfield Group (TBG) website on 8/01/2025. The RR was informed of the update, which now complies with the guideline format. The Department of Planning, Housing and Infrastructure completed a site inspection of operations and rehabilitation on the 19/09/2024. No formal correspondence was received regarding rehabilitation.

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

As per Clause 6 of Schedule 8A of the Mining Regulation 2016, no rehabilitation has been certified as meeting completion to date. A number of areas of rehabilitation continued to be grazed throughout the period aligned with the approved final landuse.

Key production milestones

MATERIAL	UNIT	FWP0001423 YEAR 1	THIS REPORT
Stripped topsoil (if applicable)	(m^3)	47,500	17,400
Rock/overburden	(m^3)	15,627,000	16,445,217
Ore	(Mt)	4.15	5.34
Reject material[1]	(Mt)	2.42	2.78
Product	(Mt)	1.73	1.7

[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)	2,255.61
B	Total active disturbance	(ha)	1,405.96
C	Rehabilitation – land preparation	(ha)	19.78
D	Ecosystem and land use establishment	(ha)	71.01
E	Ecosystem and land use development	(ha)	758.86
F	Rehabilitation completion	(ha)	0

Rehabilitation key performance indicators (KPIs)

	ELEMENT	UNIT	THIS REPORT
G	New disturbance area	(ha)	17.4
H	New rehabilitation commenced during annual reporting period	(ha)	12.11
I	Established rehabilitation	(ha)	758.86
J	Annual rehabilitation to disturbance ratio	%	0.7
K	Rehabilitated land to total mine footprint	%	33.64

Progressive achievement of established rehabilitation

	ELEMENT	UNIT	THIS REPORT
L	**Established rehabilitation for agricultural final land uses**	%	98.59
M	**Established rehabilitation for native ecosystem final land uses**	%	0
N	**Established rehabilitation for other/non-vegetated final land uses**	%	1.36

Variation to the rehabilitation schedule

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

A total of 19.78ha of rehabilitation land preparation was achieved compared to the 17.89ha of rehabilitation planned for the YEM25 reporting period. This results in 1.89ha more rehabilitation that scheduled in YEM25. Within the West Pit South rehabilitation area a small section was not completed on the western end as the area has not reached the final landform height. A larger area in the WOOPD rehabilitation was undertaken during the reporting period to compensate this minor area. Overall, more rehabilitation was established compared to rehabilitation scheduled within the reporting period. Larger sections of rehabilitation were completed in the West Pit area and WOOPD location. During the reporting period Rix's Creek Mine progressed with the disturbance of the Camberwell RL 150 dump area. The West Pit WS14 block was also disturbed during the YEM25 reporting period. A total 17.4ha of land was disturbed as per the land disturbance procedure. The planned disturbance for the Year Ending March (YEM) 2025 reporting period was planned to be 47.59ha. The WS15 pre-strip was not progressed during YEM25 and is planned to be disturbed in YEM26. The old north pit disturbance didn't occur and will be completed in Y1 of the forward program.

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

Rix's Creek Mine has approval to mine to 2040 at Rix's Creek South and operations are in the process of opening up new mining areas in West Pit operations. As mining progresses north, there will be some years where disturbance will be larger than the proposed rehabilitation target. Overtime as the emplacement areas reach final landform, there will be more

opportunity to increase the rehabilitation of final shaped areas and reduce the disturbance ratio compared to active disturbance areas.

Rehabilitation monitoring and research findings

Rehabilitation monitoring

The rehabilitation monitoring carried out in the annual reporting period

An agronomist undertook agricultural assessments to assess the progress of recently established rehabilitated pasture sites completed in 2024. The following summary was provided about for the recently established sites: • "Topsoil analysis indicates the soils to have high nutrient levels and moderate to good organic matter levels. This will provide a good base for pasture growth. • The soils are non-sodic. This is helpful to soil structure, water infiltration and internal soil drainage. • The soils are neutral to alkaline. The pH levels are in a good range for pasture growth. • There are no nutrient deficiencies indicated, though available nitrogen levels are low in some situations. Encouraging /sowing legumes will help build nitrogen levels. Legume growth can be limited if the herbage mass in the paddock remains high. Rank growth of pasture reduces clover establishment. • The amelioration with biosolids and gypsum has been successful in improving soil quality. • The pasture composition has been influenced by sowing time and seasonal conditions. The range of species established varies considerably as a result. The most dominant species forming a stable pasture base includes Kikuyu and Rhodes grass with other summer tropical species (Panic and Setaria). Phalaris has established from autumn and spring sowings but is a palatable species that is often targeted by grazing animals (including kangaroo's and rabbits).

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 Rix's Creek Mine Rehabilitation Management Plan which includes the requirement for the assessment of a range of performance metrics relating to ground cover, landscape function, erosion, vegetation, weeds and soil properties. Based on the analysed and interpreted field collected data, an overall assessment of rehabilitation performance was undertaken against the relevant rehabilitation objectives and completion criteria defined in the Rehabilitation Management Plan. The continued monitoring of rehabilitation performance through the monitoring methodology is allowing RCM to improve soil and land quality of rehabilitated sites across the mine lease area. Land improvements and supporting scientific data provide a strong case to regulators that successful land relinquishment is being achieved through current management.

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.

The continued monitoring of rehabilitation performance through the monitoring methodology is allowing Rix's Creek Mine to improve soil and land quality of rehabilitated sites across the mine lease area. Land improvements and supporting scientific data provide a case to regulators that successful land relinquishment is being achieved through current management.

Appraisal description

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

Rehabilitation monitoring program findings

Rix’s Creek Mine undertake detailed biennial rehabilitation monitoring in accordance with the Rehabilitationtion Management Plan. Detailed rehabilitation monitoring will be completed in 2025 and reported in the next Annual Rehabilitation Report. An agricultural assessment was undertaken by an agronomist to assess the progress of recently established rehabilitated pasture sites completed in the 2024 period. The following summary was provided about for the recently established sites: • “Topsoil analysis indicates the soils to have high nutrient levels and moderate to good organic matter levels. This will provide a good base for pasture growth. • The soils are non-sodic. This is helpful to soil structure, water infiltration and internal soil drainage. • The soils are neutral to alkaline. The pH levels are in a good range for pasture growth. • There are no nutrient deficiencies indicated, though available nitrogen levels are low in some situations. Encouraging /sowing legumes will help build nitrogen levels. Legume growth can be limited if the herbage mass in the paddock remains high. Rank growth of pasture reduces clover establishment. • The amelioration with biosolids and gypsum has been successful in improving soil quality. • The pasture composition has been influenced by sowing time and seasonal conditions. The range of species established varies considerably as a result. The most dominant species forming a stable pasture base includes Kikuyu and Rhodes grass with other summer tropical species (Panic and Setaria). Phalaris has established from autumn and spring sowings but is a palatable species that is often targeted by grazing animals (including kangaroo’s and rabbits). • Weed control should be targeted earlier in the establishment phase. With Drone technology the use of ‘selective’ herbicides is possible in the establishment phase of the pasture. Early weed

control removes competition from establishing pasture plants." A Quality Assurance and Quality Control rehabilitation process continued to be implemented during the reporting period. The QA/QC system provides an integrated process for the design, approval, construction and documentation to meet the requirements of the rehabilitation records guideline. Further refinements to the QA/QA system will continue to improve the rehabilitation process. Agronomist reports relating to recently established pasture and active grazing areas were completed. Biosolid pre-application reports for the Western out of pit dump (WOOPD) and West Pit South rehabilitation were completed to determine rates of biosolid application. Rix's Creek Mine applies biosolids to boost organic matter, soil nutrient levels and improve vegetation growth and groundcover.

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

An agronomist undertook periodic agistment grazing land assessments during the reporting period, which identified some localised damage to the pasture base of kikuyu, green panic, setaria, and rhodes grass that has occurred in the Rix's Creek South and Rix's Creek North cattle grazing monitoring areas. African Black Beetle (ABB) has been responsible for pasture death, its larvae eating the roots and lower stems of these pastures. While damage has been patchy, a loss of the pasture base has occurred. Setaria and Rhodes grass seedlings have established in some areas. Legumes (mostly white clovers) were evident in the rehabilitated pastures and showed no indication of ABB damage. The clover has the potential to provide very high-quality feed. Areas of rehabilitated and analogue pastures unaffected by insect damage have protective ground cover levels above the minimum 70% required to minimise erosion risk and maintain a stable soil cover. Cattle have been removed from the rehabilitated pastures to re-establish regrowth, and significant weed control has been conducted. Re-sowing during winter with pasture species that are tolerant or contain endophytes to protect against ABB has been recommended and will be undertaken. Contact and discussions with NSW Department of Primary Industries and Regional Development have been on-going to determine further management options for African Black Beetle.

Outcomes of rehabilitation research and trials

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS	ON TRACK?
RRT0001025	Grazing Land Monitoring Trial	Monitoring the productivity of rehabilitated pasture through grazing.	Measurements of soil sustainability and productivity (and to determine soil amelioration and fertiliser requirements) Measurements and indicators of the health and productivity of vegetation/pasture growth on the land. Develop some key indicators of and best management practices for pastures on rehabilitated land. Provide recommendations for best management practices for future grazing. Provide a comparison of the grazing potential of the rehabilitated land and the adjacent analogue n	29 Jan 2040	Ongoing	Yes
RRT0001026	Project C34025 investigating a new landscape evolution model	investigating a new landscape evolution model for assessing rehabilitation designs.	The model development is the refinement of the State-Space Soil Production and Assessment Model (SSSPAM) and looks at optimising the existing model.	31 Dec 2026	Ongoing	Yes
RRT0001027	Rix's Creek Pasture Assessment Trial	The purpose of this trial was to assess the quality and quantity of pasture produced on mine rehabilitation sites and determines the suitability of the site for the intended agricultural end use.	Improved pasture was sown on four treatments, which included a Control using conventional fertiliser, Biosolids, and two Alternate Waste Treatment (AWT) Compost treatments. An un-grazed Native Pasture area	29 Jul 2022	Complete	Yes

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS	ON TRACK?
			was also sampled to gather comparable baseline data. Random quadrats were assessed along transect lines in each treatment for species diversity, herbage mass and forage quality. Data was collected annually for 4 years, commencing 12 months after sowing.			

Outcomes of completed trials and research

N/A

Attachment 1 – Reporting Definitions

REPORTING CATEGORY		DEFINITION
A1	Total disturbance footprint – surface disturbance	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. 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). Underground mining operations should not include the footprint of underground mining areas/subsidence management areas in the total disturbance footprint.
A2	Underground Mining Area	Underground mining operations areas/subsidence management areas.
B	Total active disturbance	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).
C	Rehabilitation – land preparation	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. Refer to the glossary of terms in this document for the definition of these phases of rehabilitation.

REPORTING CATEGORY		DEFINITION
D	Ecosystem and land use establishment	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. 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.
E	Ecosystem and Land Use Development	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). 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).
F	Rehabilitation Completion	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 *Form: ESF2 Rehabilitation completion and/or review of rehabilitation cost estimate and/or notification of mine or petroleum site closure.*
G	New active disturbance area	The area of any new active disturbance that has been created during the annual reporting period (definition A1 in Table 5).
H	New rehabilitation commenced during annual reporting period	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).
I	Established rehabilitation (hectares)	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).

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 x 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	An area that has been disturbed and that requires rehabilitation. 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).
Domain	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.
Ecosystem and Land Use Development	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. 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. This phase of rehabilitation may include specific vegetation management strategies and maintenance such as tree thinning, supplementary plantings and weed management.
Ecosystem and Land Use Establishment	This phase of rehabilitation consists of the processes to establish the approved final land use following construction of the final landform. 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.
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	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. 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.
Habitat	Has the same meaning as that term under the *Biodiversity Conservation Act 2016* and the *Fisheries Management Act 1994* (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 *Mining Act 1992.*
Landform Establishment	This phase of rehabilitation consists of the processes and activities required to construct the final landform. 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).
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	Means the NSW Resources Regulator's online portal that lease holders must use (via a registered account) to: ■ 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. 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.
Mining area	As defined in the *Mining Act 1992*.
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 *Mining Act 1992.*
Native vegetation	Has the same meaning as that term under section 60B of the *Local Land Services Act 2013.*
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: ■ 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 *Form ESF2 Rehabilitation completion and/or review of rehabilitation cost estimate* 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	Means any persons or bodies who may be affected by the mining operations, including rehabilitation, carried out on the lease land, and includes: ■ 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 *Protection of the Environment Operations Act 1997*.

[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)

Attachment 4 – Stakeholder consultation

DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
18 Oct 2023	Community Consultative Committee	Upper Hunter Mining Dialogue provided an overview of the annual rehabilitation reporting project noting of the results published	Rehabilitation reforms and rehabilitation cerfication and relinquishment.	Community member asked about timeframes from rehabilitation to be certified and relinquished. It was agreed to provide an update on the rehabilitation reforms as well as buffer land management including farming operations at the next meeting.
22 Dec 2023	NSW Resources Regulator	Offical Caution for late submission of Rehabilitation Cost Estimate (RCE).	Submission of Rehabiltiation Cost Estimate for 2023 period.	Rix's Creek Mine has put in place systems to ensure that the RCE is submitted with future Forward Programs and Annual Rehabilitation Reports.
5 Apr 2024	-	-	-	-
9 Oct 2024	Rix's Creek Mine Community Consultation Committee	site presentation with the CCC at Rix's Creek Mine.	A rehabilitation progress update was provided during the meeting.	The rehabilitation cost estimate process was discussed with the CCC. Weed and pest management results were also provided during the meeting.
11 May 2023	Community Consultative Committee	Consultation during. Reporting period included: Issue of community newsletter; Website update; CCC meetings; Bloomfield Family Day Rehabilitation inspections; Upper Hunter Mining Dialogue school tours;	Rehabilitation progress which involved a review of progress with rehabilitation requirements.	The CCC requested a breifing on the rehabilitation reforms including any areas that have been signed off by the Bloomfield Group.

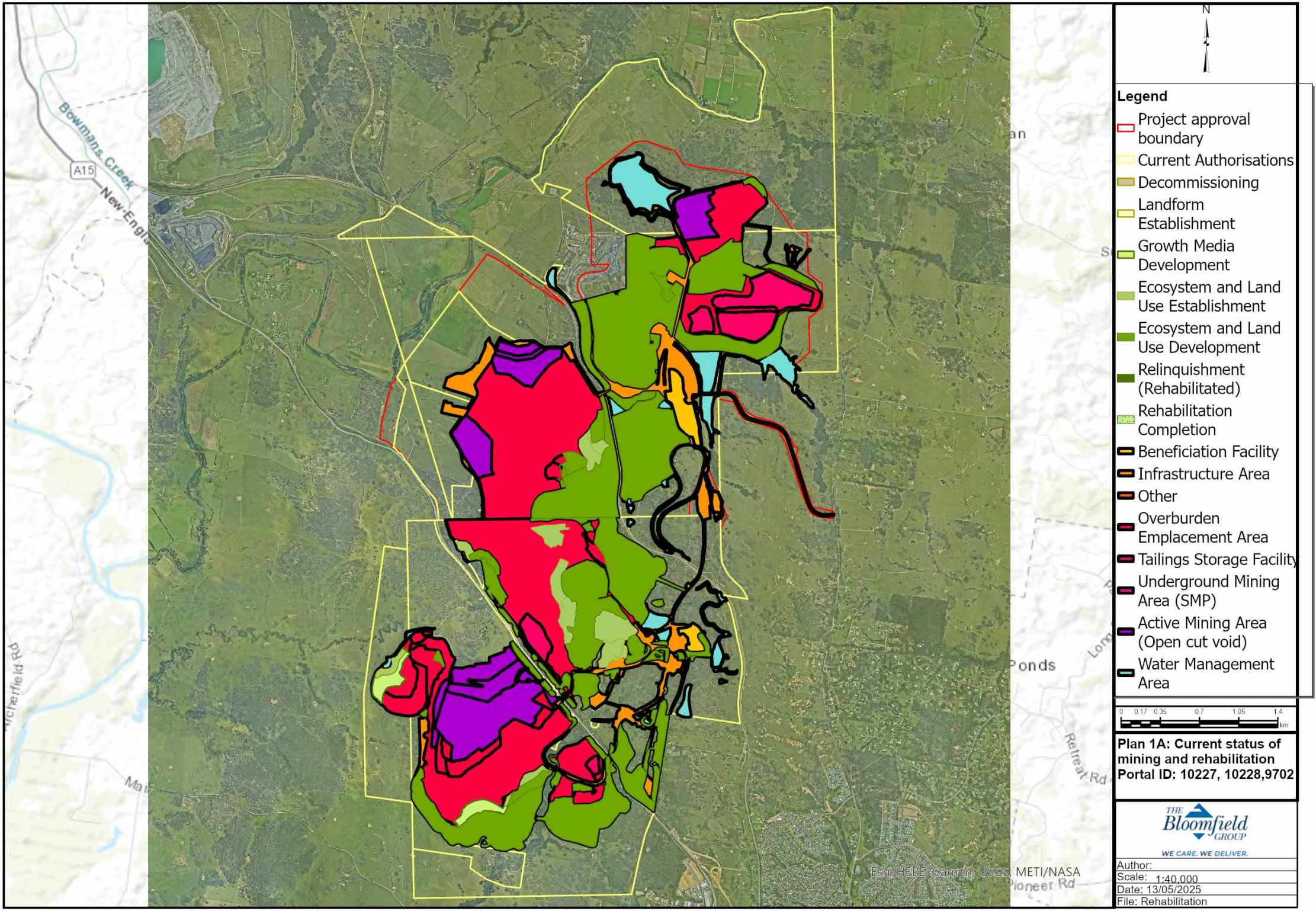
DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
22 Nov 2022	Department of planning and Environment	A site inspection of Rix's Creek Mine was undertaken.	Site inspection of operations which included a rehabilitation inspection.	No written correspondence in regarding rehabilitation occurred.
19 Sep 2024	Department of Planning, Housing and Infrastructure	Site inspection of operations which included a rehabilitation and a biodiversity offset inspection	Site inspection undertaken on 19/9/2024	No written correspondence in regarding rehabilitation occurred.
16 Nov 2023	Department of Planning and Environment	Inspection of site operations	site inspection of rehabilitation areas and water management area.	No formal correspondence was received regarding rehabilitation.
26 Oct 2022	Community	Consultation during. Reporting period included: -Issue of community newsletter -Website update -CCC meetings -Singleton Coal Festival site inspections -Bloomfield Family Day Rehabilitation inspections -Upper Hunter Mining Dialogue school tours	Rehabilitation progress which involved a site inspection, review of progress with rehabilitation requirements.	CCC and community inspected rehabilitation. Overall there were positive comments regarding the rehabilitation at Rix's Creek Mine.
17 Oct 2024	NSW Resources Regulator	Site inspection undertaken 17/10/2024. The assessment focused on how revegetation is being undertaken to achieve	On 17/10/2024, the Resources Regulator (RR) completed a Targeted Assessment Program (TAP) focusing on re-vegetation on rehabilitated land. Correspondence was received on 6/01/2025, which provided recommendations following the audit. Most of the recommendations were generic and sent out to audited	The updated RMP was published on The Bloomfield Group (TBG) website on 8/01/2025. The RR was informed of the update, which now complies with the guideline format. Since the inspection the rehabilitation risk assessment has been updated and the Rehabilitation

DATE	STAKEHOLDER	CONSULTATION ACTIVITIES AND FORMS	MATTERS SUBJECT TO CONSULTATION	ACTIONS TAKEN
		sustainable rehabilitation outcomes.	mines. An official warning was received because the Rehabilitation Management Plan (RMP) did not adhere to the Form and Way guideline format for Large Mines.	Management Plan updated inlight of the recommendations provided in the generic letter.
8 Feb 2024	Community	letter box drop	operations update and modification 10 progress update	No action or correspondence recevied after letter box drop.
19 Jun 2024	Community School Tours	Site presentation and site tour focusing on environmental management, pre and post approval requirements and obligation for progressive rehabilitation.	The tour focused on environmental management, pre and post approval requirements and obligation for progressive rehabilitation.	Nil
22 May 2024	Rix's Creek Mine Community Consultavtive Commitee	Site meeting at Rix's Creek Mine	Rehabilitation progress. Review of progress with rehabilitation requirements.	An overview of the rehabilitation reforms was provided. The rehabilitation objectives and completion criteria guidelines were provided to the CCC members.

Attachment 5 – Plans

Plan 1A - Current status of mining and rehabilitation 2024.pdf

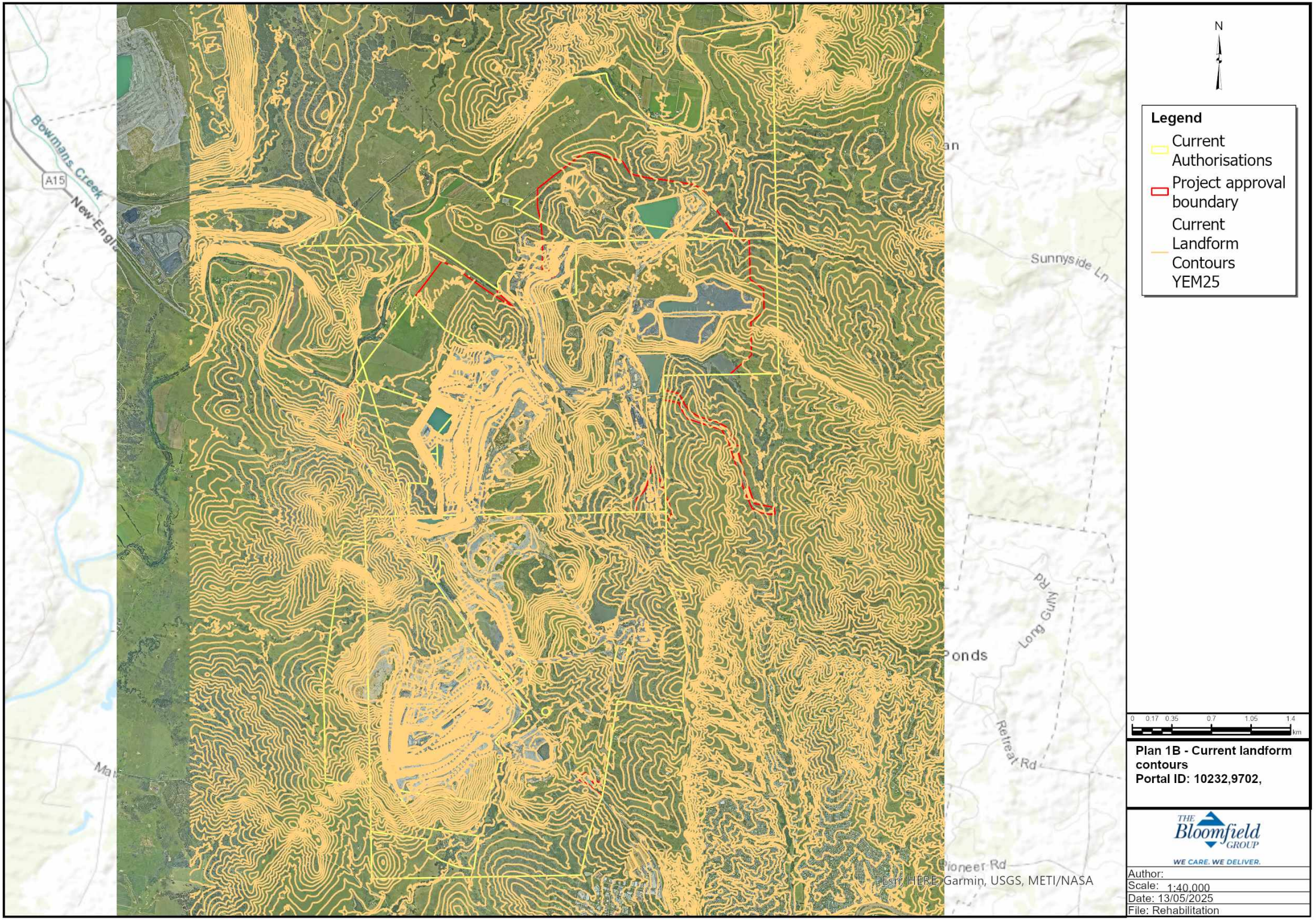
Plan 1B - Current landform contours at completion of annual reporting period 2024.pdf



Plan 1A: Current status of mining and rehabilitation
Portal ID: 10227, 10228,9702

THE Bloomfield GROUP
WE CARE. WE DELIVER.

Author:	
Scale:	1:40,000
Date:	13/05/2025
File:	Rehabilitation



Plan 1B - Current landform contours
Portal ID: 10232,9702,

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Author:	
Scale:	1:40,000
Date:	13/05/2025
File:	Rehabilitation