NSW GOVERNMENT

NSW Resources Regulator

ARR0001476

HUNTER VALLEY OPERATIONS ANNUAL REHABILITATION REPORT

Monday 1 January 2024 to Tuesday 31 December 2024

Summary table

DETAIL	
Mine	Hunter Valley Operations
Reference	ARR0001476
Annual report period commencement date	Monday 1 January 2024
Annual report period end date	Tuesday 31 December 2024
Forward program	FWP0001295
Mining leases	ML 1705 (1992), ML 1748 (1992), ML 1869 (1992), ML 1871 (1992), ML 1622 (1992), ML 1474 (1992), ML 1811 (1992), CCL 755 (1973), ML 1526 (1992), ML 1704 (1992), ML 1849 (1992), ML 1841 (1992), ML 1870 (1992), CL 360 (1973), ML 1560 (1992), CCL 714 (1973), ML 1428 (1992), ML 1840 (1992), ML 1359 (1992), CL 584 (1973), ML 1732 (1992), ML 1589 (1992), CL 359 (1973), ML 1753 (1992), CL 327 (1973), ML 1482 (1992), CML 4 (1992), ML 1867 (1992), ML 1324 (1992), ML 1682 (1992), ML 1406 (1992), ML 1734 (1992), CL 398 (1973), ML 1706 (1992), ML 1634 (1992), ML 1710 (1992), ML 1707 (1992), ML 1465 (1992), ML 1500 (1992), ML 1337 (1992), ML 1810 (1992)
Lease holder(s)	Coal & Allied Operations Pty Ltd, Anotero Pty Limited
Contact	Thomas Scott
Date of submission	Tuesday 1 April 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

Hunter Valley Operations (HVO) is situated in the Upper Hunter Valley between Singleton and Muswellbrook, approximately 24 km northwest of Singleton, and approximately 100 km northwest of Newcastle. The Hunter River geographically divides HVO into HVO North (DA 450-10-2003) and HVO South (PA_06_0261); however, they are integrated operationally with personnel, equipment and materials utilised as required.

HVO is owned through a Joint Venture (JV) between Glencore (49%) and Yancoal (51%).

HVO North includes the Carrington Pit, West Pit (which includes the Mitchell Pit and Wilton Pit), North Pit Tailings Storage Facility (TSF), Dam 6W TSF, Newdell Coal Preparation Plant (NCPP), Hunter Valley Coal Preparation Plant (HVCPP), Howick Coal Preparation Plant (HCPP), and the stockpiling/train loading facilities at Newdell Load Point (NLP) and Hunter Valley Load Point (HVLP). HVO South includes Cheshunt Pit, Riverview Pit and Lemington South Pit.

Life of mine

5 years

Current development consents, leases and licences

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

PA06-0261
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Authorisations covering the mining area granted under the *Mining Act 1992*

ML 1705 (1992), ML 1748 (1992), ML 1869 (1992), ML 1871 (1992), ML 1622 (1992), ML 1474 (1992), ML 1811 (1992), CCL 755 (1973), ML 1526 (1992), ML 1704 (1992), ML 1849 (1992), ML 1841 (1992), ML 1870 (1992), CL 360 (1973), ML 1560 (1992), CCL 714 (1973), ML 1428 (1992), ML 1840 (1992), ML 1359 (1992), CL 584 (1973), ML 1732 (1992), ML 1589 (1992), CL 359 (1973), ML 1753 (1992), CL 327 (1973), ML 1482 (1992), CML 4 (1992), ML 1867 (1992), ML 1324 (1992), ML 1682 (1992), ML 1406 (1992), ML 1734 (1992), CL 398 (1973), ML 1706 (1992), ML 1634 (1992), ML 1710 (1992), ML 1707 (1992), ML 1465 (1992), ML 1500 (1992), ML 1337 (1992), ML 1810 (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)

Nil changes DA450-10-2003 or PA06-0261

Changes to land ownership and land use

Nil.

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 2024, the following rehabilitation and disturbance activities were completed:

- 69.5ha of new rehabilitation
- 88.5ha of GMD progression rehabilitation
- 262.7ha of new disturbance
- 34.9ha of rehabilitation disturbance

The completed rehabilitation exceeded the Forward Program target of 68.95ha by 0.55ha when considering new rehabilitation, and by 89.05ha when considering the GMD progression rehabilitation completed in 2024. The location of the rehabilitation activities were consistent with the Forward Program, with rehabilitation being completed in the West Pit, Carrington Pit, Riverview Pit and Cheshunt Dumps.

The location of the proposed disturbance areas was also consistent with the Forward Program, with the majority of disturbance occurring in HVO North for the development of the Mitchell Pit.

Rehabilitation was completed in line with the HVO South Project Approval (PA06_0261) and HVO North approval (DA4510-10-2003) during 2024.

Land under active rehabilitation at HVO North at the end of 2024 totaled 1,810ha. This is below the predicted EIS total rehabilitation at the end of 2024 of 1950ha. This is due to the rate of mining progression in HVO North being slower than forecast in the EIS and hence effecting areas available for rehabilitation.

In HVO South, land under active rehabilitation at the end of 2024 was 1,151ha (including 41 ha of GMD). This is in line with the predicted EIS total at the end of 2024 of 1,158 hectares.

Rehabilitation planning activities that were conducted, including any specialist studies

During 2024 HVO completed ongoing refinement of the HVO South landform and drainage design utilising the GeofluvTM design package. HVO also continues soil assessment program on established pasture rehabilitation areas to inform maintenance activities.

Overview of subsidence repair and/or remediation works undertaken

Not applicable.

Overview of rehabilitation management and maintenance activities

Rehabilitation maintenance was undertaken generally in accordance with the detailed maintenance program in 2024. Activities undertaken include:

- Preparation and seeding of 88.5ha of GMD areas;
- Rehabilitation areas totalling 233ha were boom sprayed, wick wiped, slashed/mulched or spot sprayed to target identified weed species including Galenia, Acacia saligna, Blue heliotrope, Rhodes grass and Mustard weed;

- Topsoil stockpile inspections, weed management and seeding; and
- Summer, winter andspring wild dog and fox baiting
- Autum and winter pig trapping and baiting

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

During 2024, remediation works on the WOOP dump were completed in response to NTCE0009902 and NTCE009942. All drainage works were completed in December 2024 and revegetation works were completed through December 2024 and January 2025. In March 2025 a joint inspection was undertaken with Hunter Local Land Services to confirm works were completed to their satisfaction. A completion report was submitted to the Regulator (as required by NTCE0009902 and NTCE009942) on 4 March 2025. Furthermore, all rehabilitation activities required at the East TSF by an Enforceable Undertaking with the NSW EPA were completed. Rehabilitation activities were completed in December 2025 and a completion report was provided to the EPA in March 2025.

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

Not applicable.

Key production milestones

MATERIAL	UNIT	FWP0001295 YEAR 1	THIS REPORT
Stripped topsoil (if applicable)	(m^3)	184,800	138,000
Rock/overburden	(m^3)	110,030,000	104,680,000
Ore	(Mt)	17.26	13.5
Reject material[1]	(Mt)	4.79	3.9
Product	(Mt)	12.77	9.7

[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)	7,233.24
B	Total active disturbance	(ha)	4,292.16
C	Rehabilitation – land preparation	(ha)	0
D	Ecosystem and land use establishment	(ha)	593.63
E	Ecosystem and land use development	(ha)	2,347.44
F	Rehabilitation completion	(ha)	0

Rehabilitation key performance indicators (KPIs)

	ELEMENT	UNIT	THIS REPORT
G	New disturbance area	(ha)	268.46
H	New rehabilitation commenced during annual reporting period	(ha)	137.38
I	Established rehabilitation	(ha)	2,347.44
J	Annual rehabilitation to disturbance ratio	%	0.51
K	Rehabilitated land to total mine footprint	%	32.45

Progressive achievement of established rehabilitation

	ELEMENT	UNIT	THIS REPORT
L	**Established rehabilitation for agricultural final land uses**	%	69.01
M	**Established rehabilitation for native ecosystem final land uses**	%	28.06
N	**Established rehabilitation for other/non-vegetated final land uses**	%	1.59

Variation to the rehabilitation schedule

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

As outlined in the sections above, rehabilitation completed in 2024 exceeded the targets in the Forward Program. Disturbance however fell short of the targets set in the Forward Program:
• 262.7ha of new disturbance completed vs target of 384.5ha
• 34.9ha of rehabilitation disturbance completed vs target of 16.4ha.
This was due to a delay in clearing works associated with the commencement of the Mitchell Pit in HVO North and other ancillary areas surround existing infrastructure. It is expected that these areas will be progressed in 2025.
Rehabilitation disturbance was slightly ahead of schedule due to advancement of the Riverview Pit.

Key factors that delayed progressive rehabilitation

There were no issues that delayed progressive rehabilitation during 2024 and all rehabilitation was completed as scheduled.

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

As outlined in the Forward Program, HVO conducts a detailed Budget and Life of Mine process on an annual basis which identifies areas of disturbance required, and areas forecast for rehabilitation. These areas are checked against EIS projections, and incorporated into the Annual Mine Closure and Rehabilitation Plan which allows tracking of progress throughout the year.

Rehabilitation monitoring and research findings

Rehabilitation monitoring

The rehabilitation monitoring carried out in the annual reporting period

Pasture IEM blocks generally performed well, with only low occurrence of weeds or bare ground being observed. Erosion was present within a number of these blocks however it was generally minor and isolated in nature. Pasture composition also either met, or was trending towards meeting, early establishment targets.

Pasture LTM block monitoring results were more variable. Groundcover was acceptable across all blocks, however moderate to major erosion was also noted in three of the 17 blocks monitored. Weed species were also more prevalent, however targeted maintenance was only identified as being required in six of the 17 blocks.

Native woodland IEM blocks exhibited acceptable groundcover and minimal erosion. Weed species were present and require targeted maintenance in three of the four blocks monitored. Tree stems and native composition were generally below early establishment targets, however active management of these aspects were not recommended due to the young age of the rehabilitation and expectation they will improve over time.

Of the 19 native woodland LTM blocks monitored, two exhibited moderate to major erosion which requires rework, despite all blocks having acceptable groundcover levels. Weed species were also prevalent, with only two of the 19 blocks not requiring targeted weed control.

Native tree canopy results performed well, despite native tree stem densities and native species composition generally being below target levels.

Status of performance against rehabilitation objectives and rehabilitation completion criteria

The monitoring program that has been implemented

As outlined above, the LTM monitoring program includes a detailed assessment of rehabilitation performance and evaluation of results against completion criteria.

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.

Overall, the majority of the rehabilitation blocks monitored in 2024 are trending towards meeting the rehabilitation criteria. Generally, older rehabilitation blocks (prior to 2015) exhibited lower target species diversity and higher weed coverage. Recommendations have been made to improve these blocks and a detailed maintenance plan has been developed. Erosion was also a major contributor to maintenance works required in older rehabilitation blocks. Monitoring results from younger blocks generally identified a higher abundance of species from target communities, lower weed presence and less erosion. HVO has developed a detailed maintenance plan for all rehabilitation blocks on site, which will be implemented continuously to continue progressing rehabilitation towards closure criteria.

Appraisal description

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

Rehabilitation monitoring program findings

The monitoring program for 2024 included:

- Long term ecological monitoring program. This program splits rehabilitation areas into Initial Establishment Monitoring (IEM) sites that are less than three years old, and Long Term Monitoring (LTM) sites that are older than three years. The IEM methodology is a rapid style assessment principally to determine germination success and landform stability. The LTM methodology include more detailed assessments of rehabilitation performance and are targeted towards evaluating progress of rehabilitation towards fulfilling completion criteria and, ultimately, the targeted post-mining land use. During 2024, 12 IEM blocks (29 monitoring sites) and 36 LTM blocks (94 monitoring sites) were monitored.
- Annual Rehabilitation Walkover. This inspection provides a general assessment on rehabilitation health and potential emerging issues that require maintenance(e.g. weeds, erosion, poor growth rates). The walkover inspection does not review rehabilitation areas against the closure criteria, but provides management recommendations to assist the rehabilitation in moving towards the criteria. During 2024, 48 rehabilitation blocks were inspected as part of the walkover assessment.

In addition to the above formal monitoring programs, HVO environmental staff conduct ongoing, regular inspections of rehabilitation areas on a monthly basis to ensure emerging issues are captured and addressed outside of the annual monitoring periods.

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

As outlined in the summary of monitoring results section, rehabilitation is generally progressing towards meeting long term closure criteria. However, weed presence is a

performance issue within some rehabilitation areas that has the potential to hinder this progression. On an annual basis, HVO conducts a rehabilitation walkover assessment which maps and quantifies weed type and coverage. This data is then used to update the maintenance plan for that block and allocate resources for control. The repetitive and ongoing nature of this monitoring and control cycles ensures that all weed infestations are controlled appropriately.

Outcomes of rehabilitation research and trials

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS	ON TRACK?
A RR0001476						

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
7 Feb 2024	Community Consultative Committee	Meeting	Summary of rehab completed in 2023 and an overview of rehab planned for 2024	Documented via CCC Minutes available on HVO website.
12 Aug 2024	NSW Resources Regulator	Email	Approval of HVO Rehabilitation Objectives Statement	RMP updated and placed on HVO website.
3 Dec 2024	NSW Resources Regulator	Site visit	Ground / Surface Water Targeted Assessment Program including site inspection.	Recommendations and actions to be confirmed upon receival of inspection findings letter.
11 Jun 2024	NSW Resources Regulator	Site visit	Revegetation Targeted Assessment Program including site inspection.	Inspection findings entered into site compliance management system.
8 May 2024	Community Consultative Committee	Meeting	Update on rehab progression and maintenance in 2024, including East TSF and WOOP Dump.	Documented via CCC Minutes available on HVO website.
13 Nov 2024	Community Consultative Committee	Meeting	Update on rehab progression and maintenance in 2024, including East TSF and WOOP Dump.	Documented via CCC Minutes available on HVO website.
31 Jan 2024	NSW Resources Regulator	Meeting	Discussion on HVO FLRP and ROBJ.	Updated ROBJ and FLRP submitted to the RR portal on the 16/02/2024.
28 Aug 2024	Community Consultative Committee	Meeting	Update on rehab progression and maintenance in 2024, including East TSF and WOOP Dump.	Documented via CCC Minutes available on HVO website.

Attachment 5 – Plans

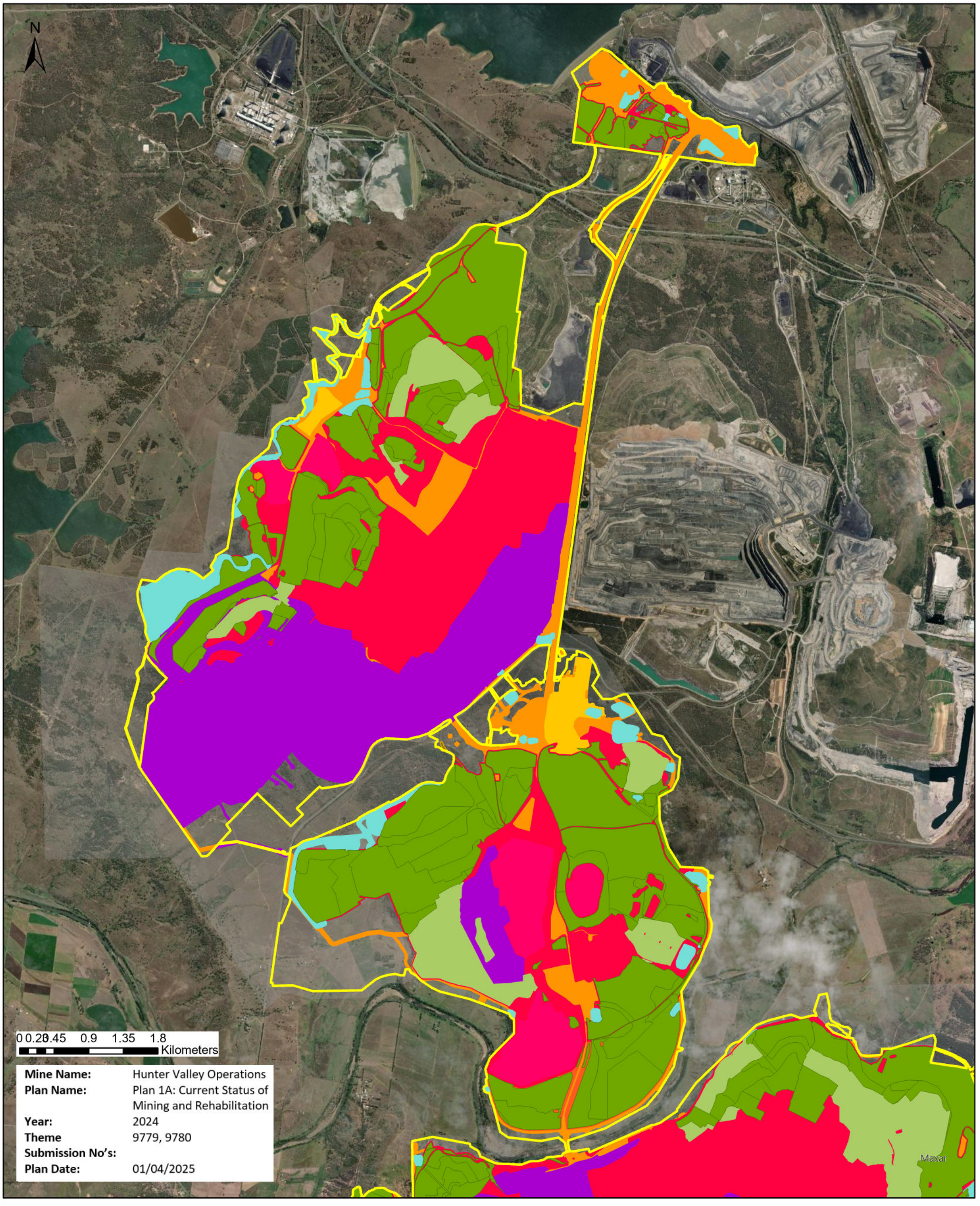
Plan1A (Nth).zip

Plan1B_North.zip

Hunter Valley Operations

Plan 1A: Current Status of Mining and Rehabilitation (HVO North)

HUNTER VALLEY OPERATIONS



Legend

- HVO Project Approval Boundary
- Current Authorisations

Mining Domain Type

- Beneficiation Facility
- Infrastructure Area
- Other
- Overburden Emplacement Area
- Tailings Storage Facility
- Active Mining Area (Open cut void)
- Water Management Area

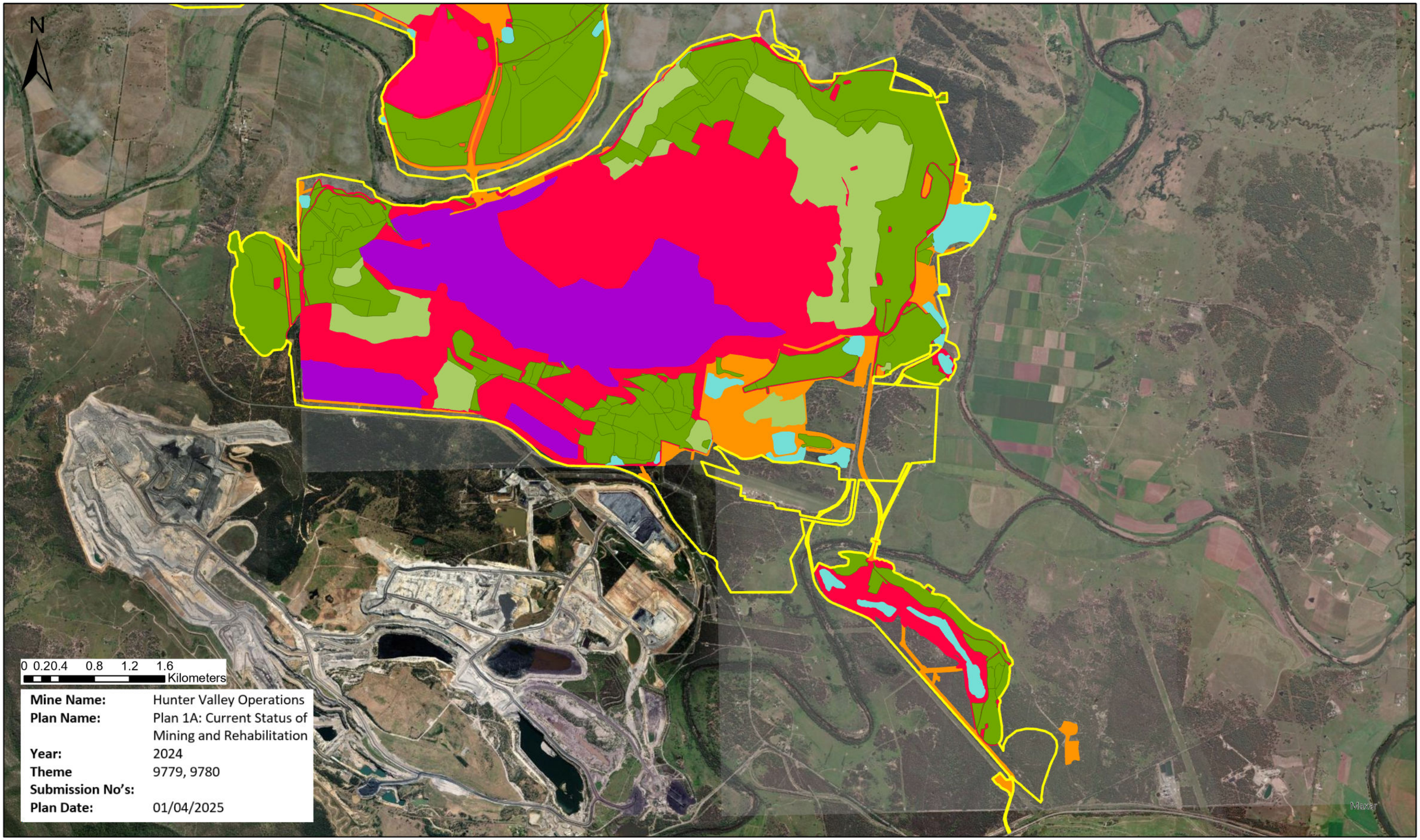
Rehabilitation Phase

- Ecosystem and Land Use Establishment
- Ecosystem and Land Use Development

Hunter Valley Operations

Plan 1A: Current Status of Mining and Rehabilitation (HVO South)

HUNTER VALLEY OPERATIONS



Legend

- HVO Project Approval Boundary
- Current Authorisations

Mining Domain Type

- Infrastructure Area
- Other
- Overburden Emplacement Area
- Tailings Storage Facility
- Active Mining Area (Open cut void)
- Water Management Area

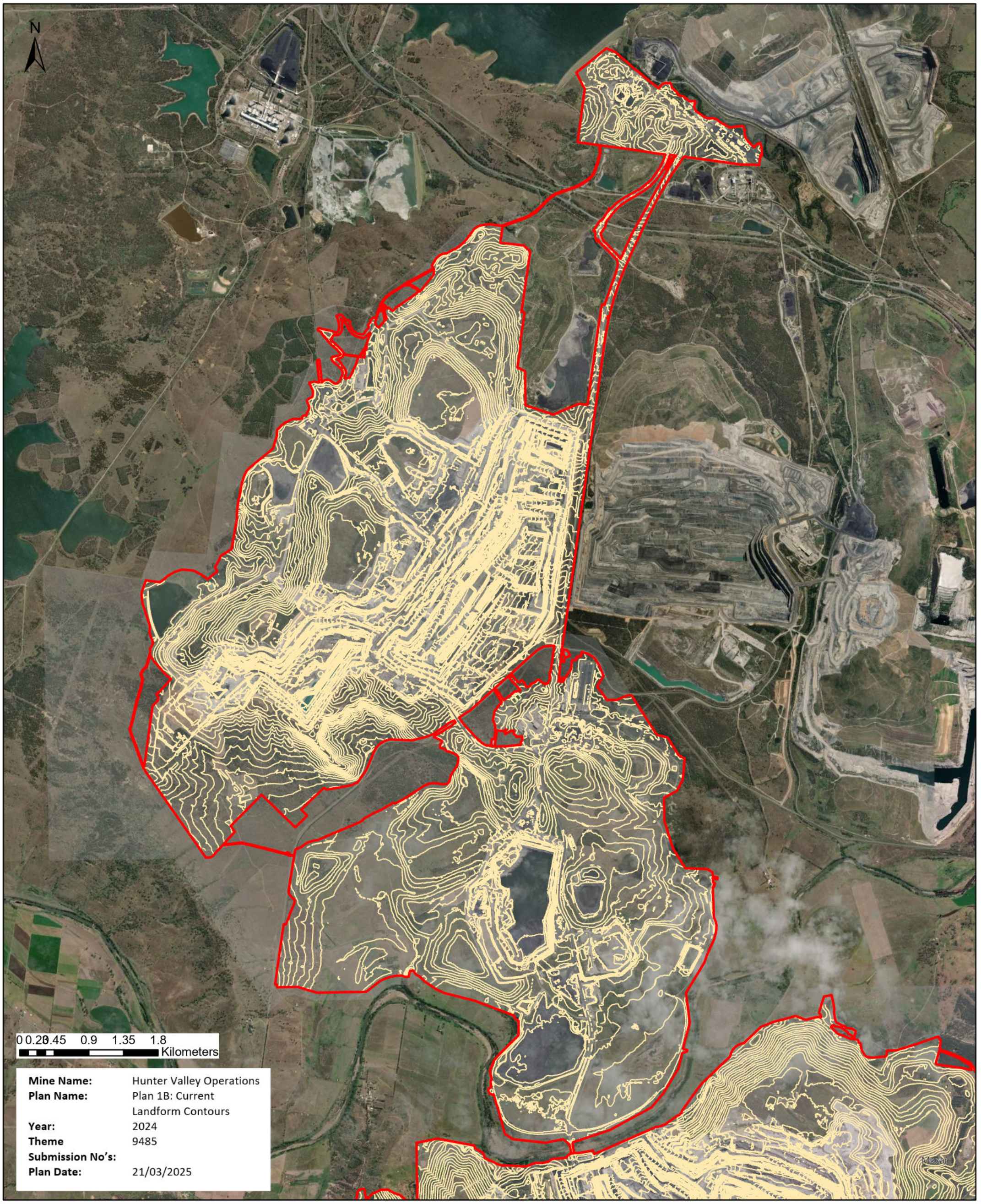
Rehabilitation Phase

- Ecosystem and Land Use Establishment
- Ecosystem and Land Use Development

Hunter Valley Operations

Plan 1B - Current Landform Contours (HVO South)

HUNTER VALLEY OPERATIONS



Legend

- Project Approval Boundary
- Current Authorisations
- Current Contours

Hunter Valley Operations

Plan 1B - Current Landform Contours (HVO South)

HUNTER VALLEY OPERATIONS

Legend

- Project Approval Boundary
- Current Authorisations
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