

FWP0001586

HUNTER VALLEY OPERATIONS FORWARD PROGRAM

Wednesday 1 January 2025 to Friday 31 December 2027



Summary

DETAIL

Mine	Hunter Valley Operations
Reference	FWP0001586
Forward program commencement date	Wednesday 1 January 2025
Forward program end date	Friday 31 December 2027
Forward program revision (if applicable)	
Contact	Thomas Scott
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)
Project location	Anotero Pty Limited
Date of submission	Tuesday 1 April 2025

Important

The department may make the information in your program 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 program to be confidential, please communicate this to the department via the message function on this submission within the NSW Resources Regulator Portal.

Three-year forecast – surface disturbance activities

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 a jointly controlled operation 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, 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.

Description of surface disturbance activities

Exploration activities

Exploration drilling will be undertaken within the HVO mining lease areas to obtain further information regarding the resources to be mined as well as define geological and geotechnical information relevant to the mining and construction activities that will be undertaken.

Exploration activities during Year 1 will include up to approximately 35 holes.

Construction activities

Water Management: - Mitchell Pit sediment dams Dam31 and Dam32W - Hunter River Bridge Sumps - North Void TSF barrier wall and levee installation - Newdell Load Point Water management upgrades Infrastructure: - HVCPP Flotation upgrade (additional tanks, conveyor and HV switchroom) - Howick CPP additional flotation tank - Nitrogen plant - Sewerage Treatment Plant upgrade

Mining schedule

Mining development method and sequencing and general mine features.

Mining at HVO involves the following general sequence:

- Pre-stripping the topsoil;
- Removing the overburden (by dragline, shovel and excavators);
- Coal mining (coal extraction by excavators and front-end loaders); and
- Coal transport and processing.

Mining will continue in accordance with current operational practices. Mining is currently carried out by shovels and excavators, supported by loaders, dozers, graders, water trucks and a fleet of dump trucks. Overburden and interburden is either free dug or drilled and blasted, removed using a combination of excavator/front end loaders/dozers and placed in trucks for haulage to out of pit emplacements or refill areas in the pit. During the next three years, open cut resources will be mined in the four main pit areas:

- * West Pit - mining will progress south-eastwards and reach its limit along Lemington Road;
- * Mitchell Pit - mining will initially progress in a south-western direction then in a south-east direction towards Lemington Road;
- * Cheshunt Pits - mining will progress in a westerly and southerly direction; and
- * Riverview Pit - mining will extend southwards towards the Golden Highway.

Mining in the Carrington West Wing has not commenced and is not planned to commence in the next three years.

Areas identified for emplacements, the sequencing of emplacements, construction, and management.

All overburden and interburden material generated from mining operations at HVO is either road hauled to, or directly emplaced by the dragline on current emplacement areas behind the active mining operation. As part of the integration of operations at HVO, mining waste may be transported to any HVO pit for emplacement to achieve the final approved landform.

All mining waste emplacements shall be reshaped as required to construct a final landform. The method and height of emplacement areas shall be in accordance with the final approved landforms and HVO procedures for dumping. D

During the next three years, overburden emplacement will occur in the following main dump areas:

- * West Pit - West Pit North, Central and South dumps will continue to progress in an easterly direction, up to their maximum approved height;
- * Mitchell Pit - the Mitchell Pit dump will be developed to continue south from the Wilton dump;
- * Cheshunt Pit - the Cheshunt dump will continue to move west and be developed along its eastern and northern facing slopes up to its maximum approved height; and
- * Riverview Pit - the Riverview dump will continue to progress to the south behind the active mining area.

Processing infrastructure activities and the location of tailings facilities and schedule for emplacement.

Coal will continue to be processed at the Howick Coal Preparation Plant (HCPP) and Hunter Valley Coal Preparation Plant (HVCPP) during the next three years. Currently active tailings facilities include:

- * Cumnock Void - deposition from HCPP; and
- * Carrington In-pit - deposition from HVCPP.

Dam 6W TSF has currently ceased deposition, however, it may be restarted in the next three years to provide a final top up to assist consolidation prior to capping activities

Other tailings storage facilities that are currently inactive or being capped at HVO include:

- * Central TSF - requires additional tailings deposition prior to capping;
- * Bobs Dump TSF – capping has commenced; and
- * North Void TSF - ongoing implementation of the North Void TSF Management Plan to manage and mitigate any potential impacts from an identified seepage pathway.

Waste disposal and materials handling operations.

Recycling and disposal of waste at HVO focuses on the correct handling, storage, segregation and reuse of materials. Waste will be managed in accordance with the following waste management hierarchy principles:

- Waste avoidance;
- Waste re-use;
- Waste recycling; and
- Waste removal and disposal.

A specialised oil and grease storage facility exists at all active service areas. The bulk oils and grease storage facilities are part of the fuel storage facility and meet Australian Standards. All waste hydrocarbons are collected and then recycled via a licensed waste hydrocarbon disposal company. HVO implements procedures and controls to minimise the potential for land and water contamination from the handling, storage and disposal of hazardous substances. These controls include storage within properly sealed containers and controlled areas, banded for medium to long-term storage requirements. Additional management measures include:

- Inspecting and maintaining equipment and plant, including the conveyor networks regularly to minimise potential for leaks associated with equipment failures;
- Management of identified asbestos at various buildings across HVO in accordance with the Asbestos Management Plan and Register;
- Maintaining the existing bioremediation areas and establishing additional bioremediation areas as required to treat soils contaminated by hydrocarbon spills; and
- Maintaining a Contaminated Sites Register.

Key production milestones

MATERIAL	UNIT	YEAR 1	YEAR 2	YEAR 3
Stripped topsoil (if applicable)	(m ³)	292,800	274,500	292,000
Rock/overburden	(m ³)	107,538,200	111,447,500	115,816,700
Ore	(Mt)	18.63	20.35	21.14
Reject material¹	(Mt)	4.52	4.94	5.11
Product	(Mt)	13.99	14.89	16.42

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

Three-year rehabilitation forecast

Rehabilitation planning schedule

Rehabilitation planning schedule

All areas disturbed as part of the operation will be progressively rehabilitated throughout the life of the mine. Each year HVO prepares a Life of Mine Plan (LOM) which outlines a high level plan for the following five years in regards to disturbance, mining, dumping and rehabilitation activities. Following review and approval of the LOM, an annual budget is prepared for the following calendar year which refines and provides further detail on the next calendar year. This is where rehabilitation planning commences as mining and dumping areas are confirmed. Resources are also allocated to ensure rehabilitation activities (shaping, ground preparation and seeding) can occur in a timely manner. This information is then formalised in an Annual Rehabilitation and Closure Plan which outlines:

- * areas available for rehabilitation;
- * areas of completed rehabilitation (progressed to Ecosystem and Land Use Establishment Phase);
- * areas of proposed disturbance (both new disturbance and rehabilitation disturbance);
- * methodologies for proposed rehabilitation activities;
- * resources required; and
- * rehabilitation maintenance activities.

Stakeholder consultation

HVO has consulted with relevant government agencies during the preparation of the Rehabilitation Management Plan (RMP). Further consultation will be undertaken for any future revisions of the RMP. Ongoing consultation is undertaken with the Community Consultative Committee (CCC). The CCC for HVO provides a forum for important community discussion with community representatives acting as the point of contact to provide feedback between HVO and near neighbours. The CCC is required to meet three times a year and discusses operational plans for the operation including mining progress, proposed disturbance and proposed/completed rehabilitation. Additional consultation will be undertaken with relevant agencies in the next three years regarding the HVO Continuation Project.

Rehabilitation studies, risk assessments and/or design work

HVO has prepared an Operational Mine Closure Plan (OMCP) in line with internal guidelines to document a clear, well planned and executable mine closure process for HVO that will provide for a sustainable post-mining land use and ultimately allow mining tenements to be relinquished. Key components of the OMCP include a mine closure risk assessment (reviewed annually) and a schedule of future studies required to confirm / close knowledge gaps related to specific mine closure aspects. HVO North also has a detailed Final Void Management Plan. Refinement of the final landform drainage design will also continue over the next three years. This is an ongoing process where a conceptual design is prepared, and then updated following

completion of dumping activities. The drainage infrastructure is then constructed and compliance to design is assessed and fed back into the design for the next section of rehabilitation. Additionally, ongoing work is continuing in the next three years in regard to the development of capping and rehabilitation strategies for the following tailings storage facilities:

- * North void TSF;
- * Central TSF; and
- * Dam 6WTSF.

Rehabilitation research and trials

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS
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Rehabilitation maintenance and corrective actions

Rehabilitation maintenance requirements are identified through: * Annual Rehabilitation Walkover assessment; * Annual Rehabilitation Ecological monitoring; * Assessment against the Rehabilitation TARP. All of these assessments include a range of specific maintenance activities for each rehabilitation block, as well as recommendations for improvements to the rehabilitation methodologies (where appropriate). Key maintenance works that are included in the recommendations include: * Weed control works; * Erosion repairs; * Re-seeding of failed areas; * Supplementary planting of target species or stratum missing from the target community; and * Pest animal control. Recommendations and maintenance requirements are then consolidated into a rehabilitation maintenance schedule which lists all required maintenance activities across the site. Maintenance works are also prioritised based on the level of risk to establishment and meeting closure criteria. Implementation is then tracked throughout the year and completed maintenance activities are marked as completed and removed from the schedule.

Rehabilitation schedule

As per the Rehabilitation planning schedule, an Annual Rehabilitation and Closure Plan is developed based on LOM and budget assessments to ensure all available rehabilitation is completed as soon as practical. Key rehabilitation activities over the next three years include: * West Pit - progressive rehabilitation on the West Central; * Carrington Pit – minor rehabilitation surrounding the East TSF; and * Cheshunt Pit - progressive rehabilitation of the east and north facing dump slopes. It should be noted that the Total New Active Disturbance Area During Reporting Period hectares in this report include rehabilitation disturbance areas. The total new and rehabilitation disturbance areas for the next three years are as follows: * Year 1 – 159.4ha new disturbance and 66.6ha rehabilitation disturbance * Year 2 - 0ha new disturbance and 12.2ha rehabilitation disturbance * Year 3 - 0ha new disturbance and 47.9ha rehabilitation disturbance

Completion of rehabilitation

Not applicable.

Subsidence remediation for underground operations

Not applicable.

Progressive mining and rehabilitation statistics

Three-yearly forecast cumulative disturbance and rehabilitation progression

	FORECAST	UNIT	YEAR 1	YEAR 2	YEAR 3
A1	Total disturbance footprint - surface disturbance	(ha)	7,459.17	7,471.98	7,519.91
B	Total active disturbance	(ha)	4,462.48	4,450.65	4,459.96
P	Total new area of land proposed for active rehabilitation	(ha)	55.62	80.25	118.86

Rehabilitation key performance indicators (KPIs)

	FORECAST	UNIT	YEAR 1	YEAR 2	YEAR 3
O	Total new disturbance area during reporting period	(ha)	225.93	12.8	47.93
P	Total new area of land proposed for rehabilitation during the reporting period	(ha)	55.62	24.63	38.61
Q	Annual rehabilitation to disturbance ratio		0.25	1.92	0.81

Attachment 1 – Reporting Definitions

REPORTING CATEGORY		DEFINITION
A	Total disturbance footprint – surface disturbance	<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>
B	Total active disturbance	<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>
C	Rehabilitation – land preparation	<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>
D	Ecosystem and land use establishment	<p>Includes the area which has been seeded/planted with the target vegetation species for the intended final land use. However, vegetation has not matured to a stage where it can be demonstrated that it will be sustainable for the long term and or require only a maintenance regime consistent with target reference/analogue sites.</p> <p>Typically, rehabilitation areas would be in this phase for at least two years (and usually more) before rehabilitation can be classified as being in the ecosystem and land use development phase. This phase does not apply to infrastructure areas that are being retained as part of final land use for the site.</p>

REPORTING CATEGORY		DEFINITION
O		The area of any new active disturbance that will be created during the next three years, as defined under definition A1 (definition A1 Table 5).
P		The sum of any new rehabilitation to be commenced in the next three years. These areas may be in the phases “Rehabilitation - Land Preparation” or the “Ecosystem & Land Use Establishment” (definitions C & D in Table 5).
Q		The rehabilitation to disturbance ratio (S / R) indicates how many hectares of new rehabilitation are undertaken for each hectare of land disturbed during the three years. A ratio of 1/1 indicates that the area of new rehabilitation and disturbance in that period are the same.

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	Means any persons or bodies who may be affected by the mining operations, including rehabilitation, carried out on the lease land, and includes: <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 – Plans

Plan2A_Year1-North.zip

Plan2B_Year2-North.zip

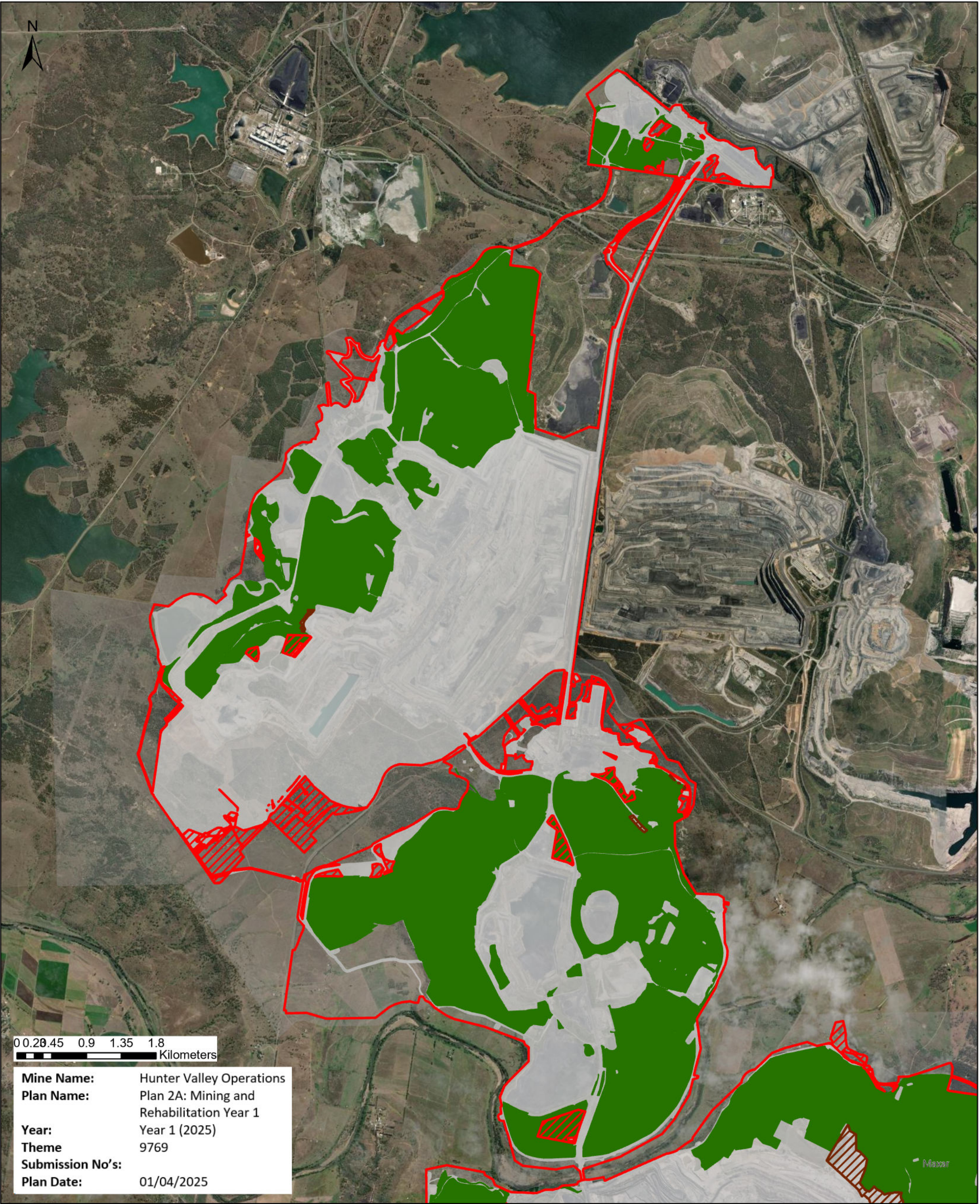
Plan2C_Year3-North.zip

Forward Program (LARGE MINE) v2.5

Hunter Valley Operations

Plan 2A: Mining and Rehabilitation - Year 1 (HVO North)

HUNTER VALLEY OPERATIONS



Legend

- Project Approval Boundary
- Current Authorisations
- Forecast Disturbance
- Forecast Land Prepared for Rehabilitation
- Existing Rehabilitation
- Existing Disturbance

Hunter Valley Operations

Plan 2A: Mining and Rehabilitation - Year 1 (HVO South)

HUNTER VALLEY OPERATIONS



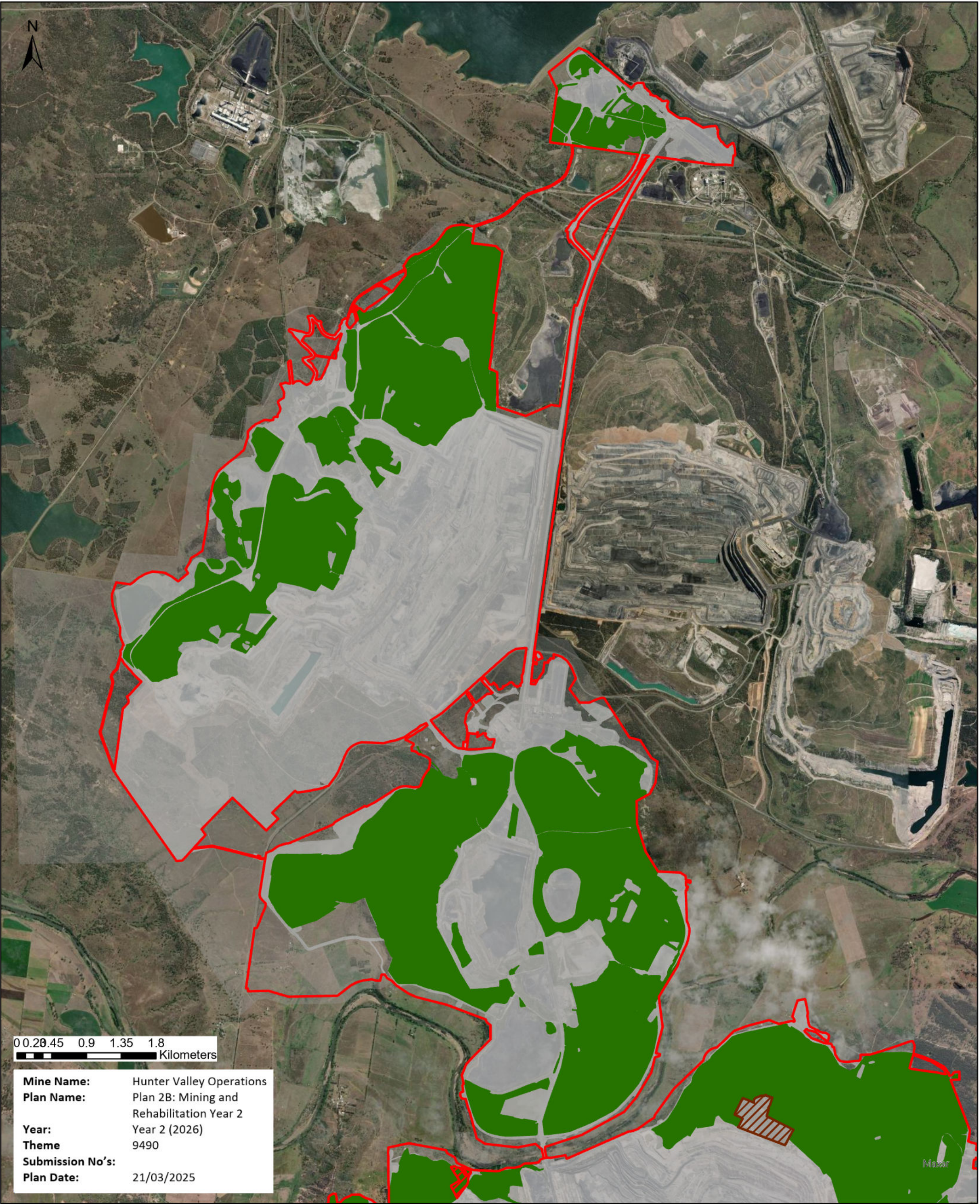
Legend

Project Approval Boundary	Forecast Land Prepared for Rehabilitation
Current Authorisations	Current Rehabilitation
Forecast Disturbance	Current Disturbance

Hunter Valley Operations

Plan 2B: Mining and Rehabilitation - Year 2 (HVO North)

HUNTER VALLEY OPERATIONS



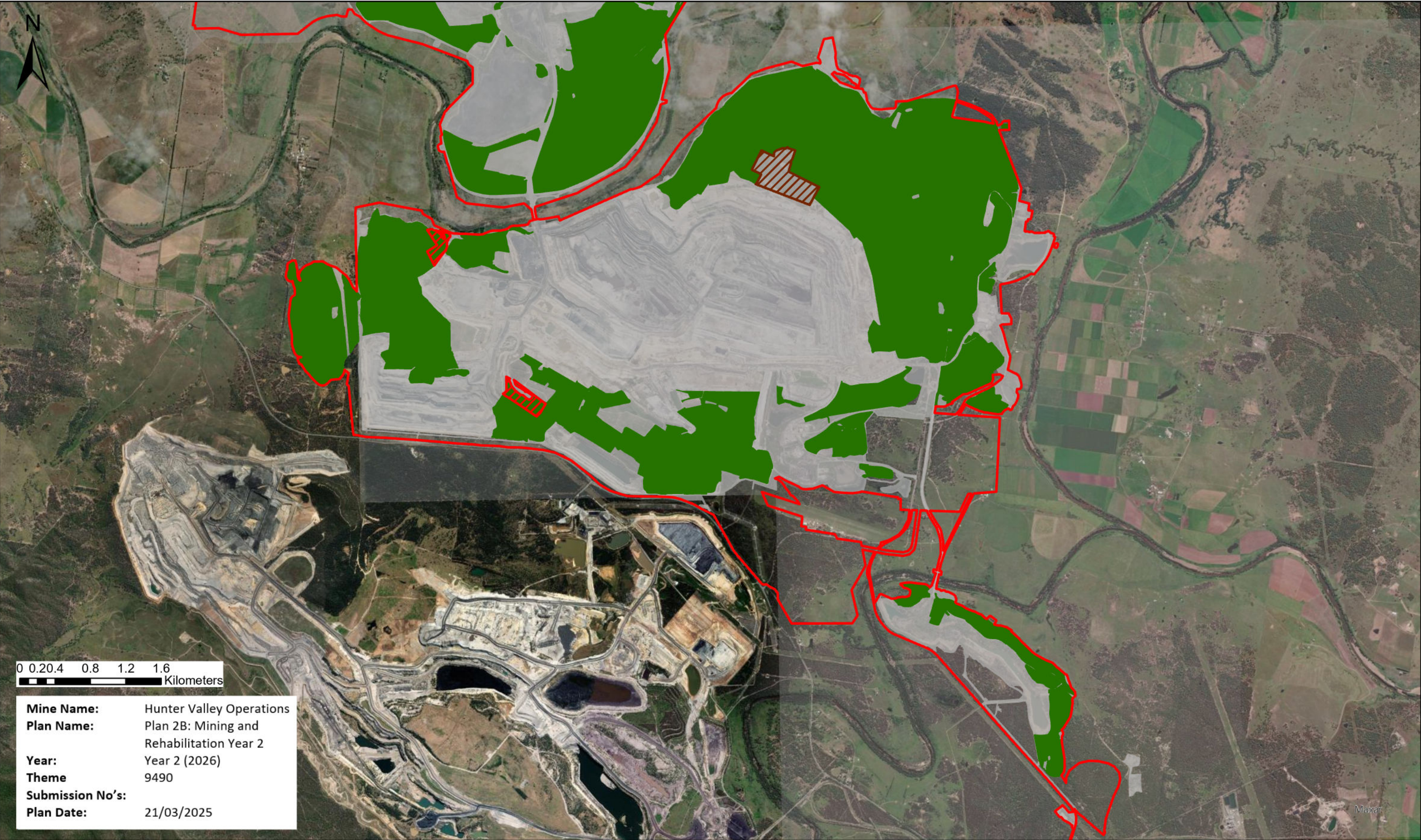
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- Project Approval Boundary
- Forecast Land Prepared for Rehabilitation
- Current Authorisations
- Current Rehabilitation
- Forecast Disturbance
- Current Disturbance

Hunter Valley Operations

Plan 2B: Mining and Rehabilitation - Year 2 (HVO South)

HUNTER VALLEY OPERATIONS



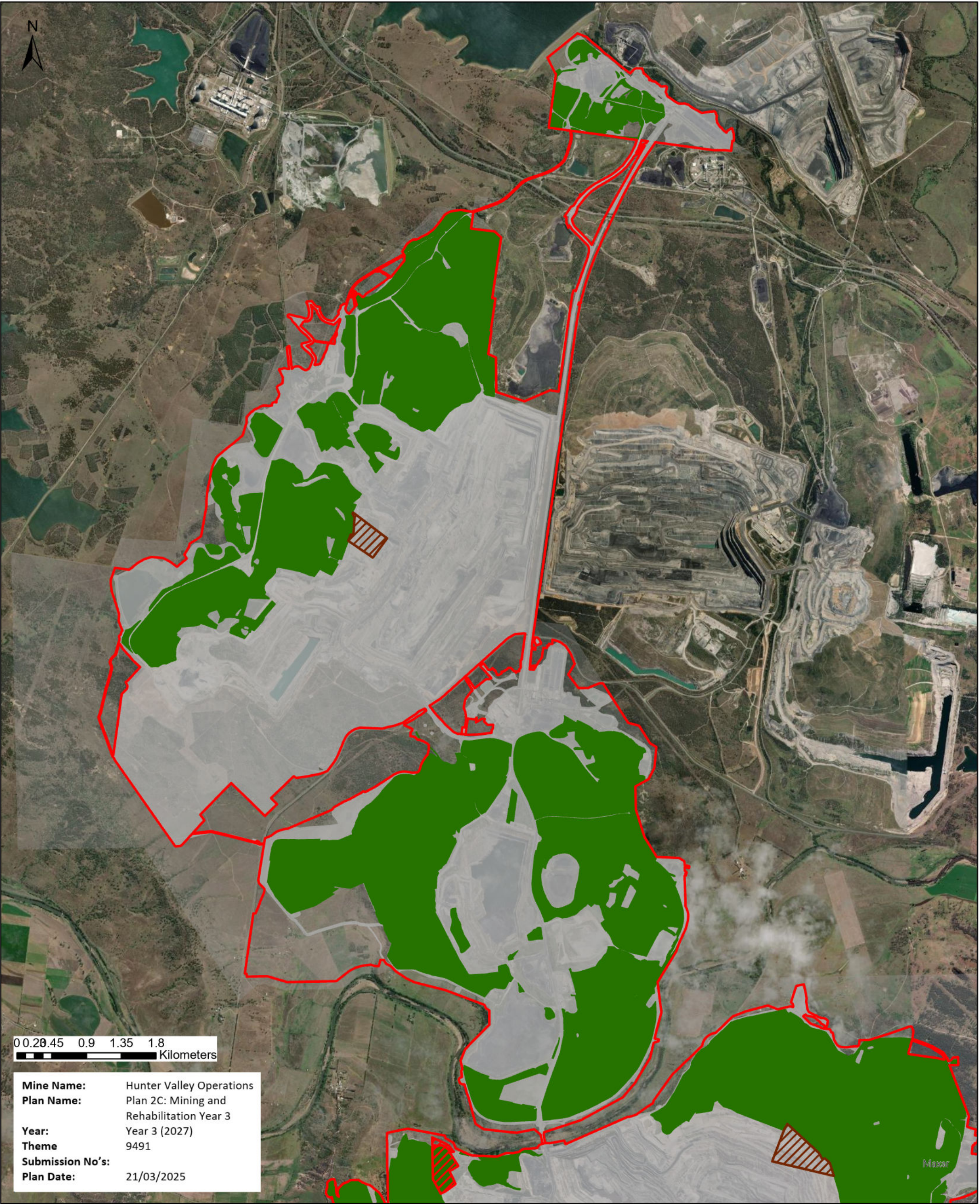
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Project Approval Boundary	Forecast Land Prepared for Rehabilitation
Current Authorisations	Current Disturbance
Forecast Disturbance	Current Rehabilitation

Hunter Valley Operations

Plan 2C: Mining and Rehabilitation - Year 3 (HVO North)

HUNTER VALLEY OPERATIONS



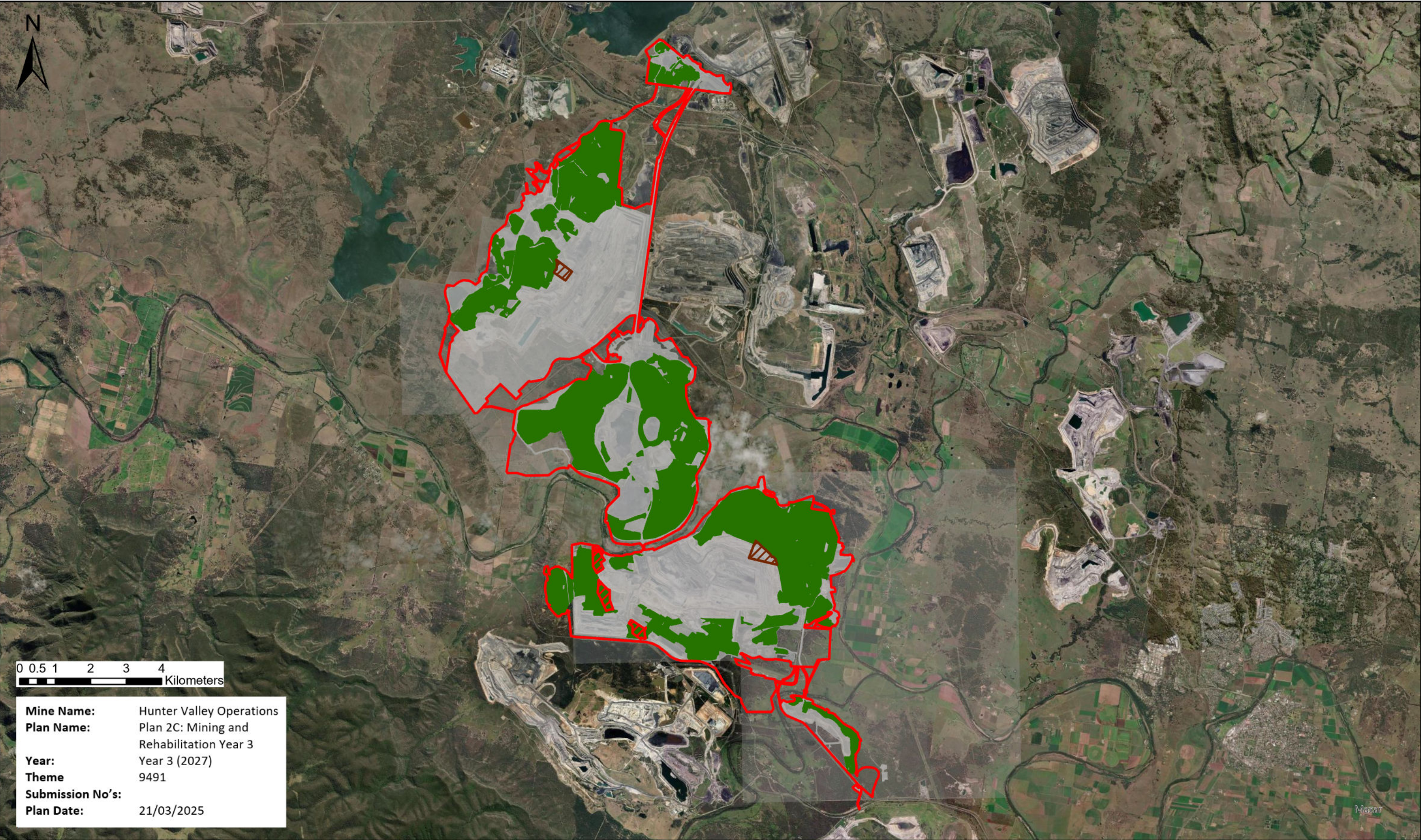
Legend

- Project Approval Boundary
- Forecast Land Prepared for Rehabilitation
- Current Authorisations
- Current Rehabilitation
- Forecast Disturbance
- Current Disturbance

Hunter Valley Operations

Plan 2A: Mining and Rehabilitation - Year 1 (HVO South)

HUNTER VALLEY OPERATIONS



Legend

- | | |
|---------------------------|---|
| Project Approval Boundary | Forecast Land Prepared for Rehabilitation |
| Current Authorisations | Current Disturbance |
| Forecast Disturbance | Current Rehabilitation |



Open Cut Summary Rehabilitation Cost Estimation

Note: Sections of this page are automatically filled in from the registration page

Mine Name:	HVO North		
Lease(s):	CL584, CL359, CL360, CCL755, CML4, ML1474, ML1359, ML1482, ML1500, ML1526, ML1560, ML158		
Authorisation Owner:	Jointly held by Coal & Allied Operations Pty Ltd & Anotero Pty Limited		
Term of RCE:	12 months		
Current Security:	\$180,656,231	Date of Last Security Deposit Review:	31/03/2024
Mine Contact:	Ben de Somer		

Domain		Security Deposit
Domain 1: Infrastructure		\$60,098,860
Domain 2: Tailings & Rejects		\$37,587,064
Domain 3: Overburden & Waste		\$30,468,045
Domain 4: Active Mine & Voids		\$9,283,082
Domain 5: Management Activities		\$7,820,765
Subtotal (Domains and Sundry Items)		\$145,257,816
Contingency	10%	\$14,525,782
Post Closure Environmental Monitoring	10%	\$14,525,782
Project Management and Surveying	10%	\$14,525,782
Total Security Deposit for the Mining Project (excl. of GST)		\$188,835,161

Note: GST is not included in the above calculation or as part of rehabilitation security deposits required by the Department.

- ☐ Alterations have been made to unit prices within this spreadsheet. (Attach a separate sheet providing details of changes).
- ☐ The proposed rehabilitation design is generally consistent with the development consent for the project.

This mine security calculation has been estimated using the best available information at the time.
It is a true and accurate reflection of the total rehabilitation liability held by this mine.

Company Representative's Name

Date

Company Representative's Role / Responsibility

Signature



Open Cut Summary Rehabilitation Cost Estimation

Note: Sections of this page are automatically filled in from the registration page

Mine Name:	Hunter Valley Operations - HVO South (Includes Cheshunt, Riverview and Lemington South)		
Lease(s):	CCL714, CL327, CL398, ML1465, ML1634, ML1682, ML1734, ML1753, ML1810		
Authorisation Owner:	Jointly held by Coal & Allied Operations Pty Ltd & Anotero Pty Limited		
Term of RCE:	12 months		
Current Security:	\$61,255,069	Date of Last Security Deposit Review:	31/03/2024
Mine Contact:	Ben de Somer		

Domain		Security Deposit
Domain 1: Infrastructure		\$14,012,567
Domain 2: Tailings & Rejects		
Domain 3: Overburden & Waste		\$37,376,942
Domain 4: Active Mine & Voids		\$7,349,288
Domain 5: Management Activities		\$675,000
Subtotal (Domains and Sundry Items)		\$59,413,797
Contingency	10%	\$5,941,380
Post Closure Environmental Monitoring	10%	\$5,941,380
Project Management and Surveying	10%	\$5,941,380
Total Security Deposit for the Mining Project (excl. of GST)		\$77,237,936

Note: GST is not included in the above calculation or as part of rehabilitation security deposits required by the Department.

- ☐ Alterations have been made to unit prices within this spreadsheet. (Attach a separate sheet providing details of changes).
- ☐ The proposed rehabilitation design is generally consistent with the development consent for the project.

This mine security calculation has been estimated using the best available information at the time.
It is a true and accurate reflection of the total rehabilitation liability held by this mine.

Company Representative's Name

Date

Company Representative's Role / Responsibility

Signature