NSW GOVERNMENT

NSW Resources Regulator

FWP0001548

GALONG LIMESTONE MINE FORWARD PROGRAM

Wednesday 1 January 2025 to Friday 31 December 2027

Summary

DETAIL	
Mine	Galong Limestone Mine
Reference	FWP0001548
Forward program commencement date	Wednesday 1 January 2025
Forward program end date	Friday 31 December 2027
Forward program revision (if applicable)	
Contact	Raylene Slade
Mining leases	ML 1496 (1992), ML 1745 (1992)
Project location	Graymont (NSW) Pty Ltd
Date of submission	Wednesday 26 February 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

The Galong limestone mine operates within Mining Lease (ML) 1496 and ML 1745, which covers an area of 160Ha and 43.43Ha respectively. ML 1496 extends over Lots 102 in DP1083781, Lot 139 in DP753593 and Lot 2 in DP1175189, Parish of Bobarra whilst ML 1745 extends over Lot 102 in DP1083781 and Lot 2 in DP1175189. ML 1496 and ML 1745 are located approximately 20km southwest of Boorowa and 40km northwest of Yass. ML 1496 also incorporates approximately one kilometer of Crown Road reserve. The mine produces high-grade limestone products for essential services while supporting vital industrial processes and agricultural needs. Site activities include limestone mining, processing, crushing, screening and sales dispatch. Limestone is extracted from a conventional benched open pit using drill and blast and truck and shovel mining methods. The extracted limestone is then crushed, screened, and sized prior to dispatch. Products include Aglime, Plant feed and kiln feed.

Description of surface disturbance activities

Exploration activities

No major exploration or resource drilling activities are currently scheduled for the Galong mine site. All potential limestone resources within the Galong Mine Lease have been identified.

Construction activities

There are planned construction activities to take place on the Galong site • Mobile Crusher concrete pads • -45mm limestone storage shed • Coal storage

Mining schedule

Mining development method and sequencing and general mine features.

Over the next three years mining will continue to occur within the main pit, concentrating on the northeastern direction of the pit within ML1496. The method of operation of Galong Quarry is explained as follows: •Prior to overburden removal, vegetation is felled and pushed to the extremity of the Site. • Overburden is removed by ripping and/or blasting and transported to the overburden emplacement by haul trucks. The removal of overburden is an essential part of the mining operation as most of the deposit is overlain by Permo-Carboniferous shales and conglomerates. • Limestone is mined from the quarry faces by drilling and blasting. Secondary blasting is minimised by careful blasting design which is

directed to maximising in-situ crushing during the actual blasting process. • Limestone is removed from the face with front end loaders or excavator and transported via 40t dump trucks to either the Mills for Aglime Production or to the Kiln Stockpile. • Any additional out of sized material is transported to the Stockpile for Roadbase • Lime kiln dust (LKD) generated at the Kiln is transported by dump truck to the waste stockpile area

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

The overburden emplacement continues to advance to the north and the construction and management is in accordance with the Rehabilitation Management Plan.

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

The quarrying of limestone at Galong requires the stockpiling of stone at the start and end points of the mining process. A small short-term stockpile is utilized at the mobile crusher located in the northwest corner of the mine footprint. There are three main production stockpile areas. o Aglime Stockpile that feeds the Mill Hopper located south of the Go Line o Kiln Stockpile located at the southern end of the mine footprint that feeds the Kiln o Aglime Stockpile, this is product from the Mills that are stockpiled in preparation for the Aglime season, it is located at the southern end of the mine footprint near the Solar Farm There are 5 GLS (ground limestone -45) stockpiles located near the aglime stockpile and on the western side of the mine footprint. There is also a 10tonne temporary Coal Stockpile located on the North Eastern side of the mine footprint within the overburden area.

Waste disposal and materials handling operations.

Waste oil drums and waste oil, lubricants, degreasers, and general domestic waste are disposed offsite at appropriately licensed facilities. All general waste is disposed in large skip bins that are collected weekly by a licensed provider. There is a large skip bin onsite for all recyclable materials along with a process to manage all scrap metals. Wastewater from showers and sewage are treated through an onsite sewage management system. It is a 7800 liter Aerated Septic Tank system that operates under approval from Hilltops Council, under Section 68 of the Local Government Act, S68 Approval No. OSO2022/0051. Out of specification lime product is stored in the south-eastern corner of the overburden dump. Lime kiln dust is stored in discrete locations within the overburden dump.

Key production milestones

MATERIAL	UNIT	YEAR 1	YEAR 2	YEAR 3
Stripped topsoil (if applicable)	(m^3)	4,660	0	0
Rock/overburden	(m^3)	331,000	341,000	140,000
Ore	(Mt)	0.39	0.4	0.4
Reject material[1]	(Mt)	0	0	0
Product	(Mt)	0.3	0.3	0.3

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

Three-year rehabilitation forecast

Rehabilitation planning schedule

Rehabilitation planning schedule

Rehabilitation planning activities for 2025-27 include: 1. Resolve inconsistencies between Rehabilitation Objectives and the Development Consent with the Resources Regulator. 2. Determine plant species mix options for rehabilitation of native ecosystem final land use areas, for areas identified for rehabilitation in the coming four years (with specialist support as required). 3. Develop a topsoil inventory to document stripped, stockpiled and re-spread resources and review the material balance to make plans to create or acquire additional soil material, if needed.

Stakeholder consultation

Consult with local land services, agronomists or such organisations on recommended native species seed mix.

Rehabilitation studies, risk assessments and/or design work

No rehabilitation studies planned.

NSW Resources Regulator

Rehabilitation research and trials

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS
FWP0001548					

Rehabilitation maintenance and corrective actions

No rehabilitation performance issues or knowledge gaps were identified in the 2022-23 Annual Rehabilitation Report

Rehabilitation schedule

2025: Landforming of batters on the south western side of the overburden dump (OEA_F1 and OEA_F2) will be completed. 2026: Landforming of new batters on the western side of the overburden dump (OEA_F3) will commence. 2027: Landforming of batters on the western side of the overburden dump [OEA_F3) will be completed.

Completion of rehabilitation

No areas will be ready for rehabilitation completion within the next three years.

Subsidence remediation for underground operations

No underground operations at Galong.

Progressive mining and rehabilitation statistics

Three-yearly forecast cumulative disturbance and rehabilitation progression

	FORECAST	UNIT	YEAR 1	YEAR 2	YEAR 3
A	**Total surface disturbance footprint**	(ha)	69.87	69.87	69.87
B	**Total active disturbance**	(ha)	67.38	66.57	66.57
P	**Total new area of land proposed for active rehabilitation**	(ha)	0	0.81	0.81

Rehabilitation key performance indicators (KPIs)

	FORECAST	UNIT	YEAR 1	YEAR 2	YEAR 3
O	**Total new active disturbance area**	(ha)	7.04		
P	**Total new area of land proposed for active rehabilitation during the reporting period**	(ha)		0.81	
Q	**Annual rehabilitation to disturbance ratio**				

Attachment 1 – Reporting Definitions

REPORTING CATEGORY		DEFINITION
A	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.
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.
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.

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	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 – Plans

Plan2A-v2.pdf

Plan2B-v2.pdf

Plan2C-v2.pdf

Galong Limestone Mine, Plan 2A-Mining and Rehabilitation - Year1, 26/2/2025, Id No 6703, 9123





Legend

- Forecast Data Year1
  - Forecast Disturbance
  - Forecast Land Prepared for Rehabilitation
  - Ecosystem and Land Use Establishment
- Project Approval Boundary
- World Imagery
- Low Resolution 15m Imagery
- High Resolution 60cm Imagery
- High Resolution 30cm Imagery
- Citations

Notes

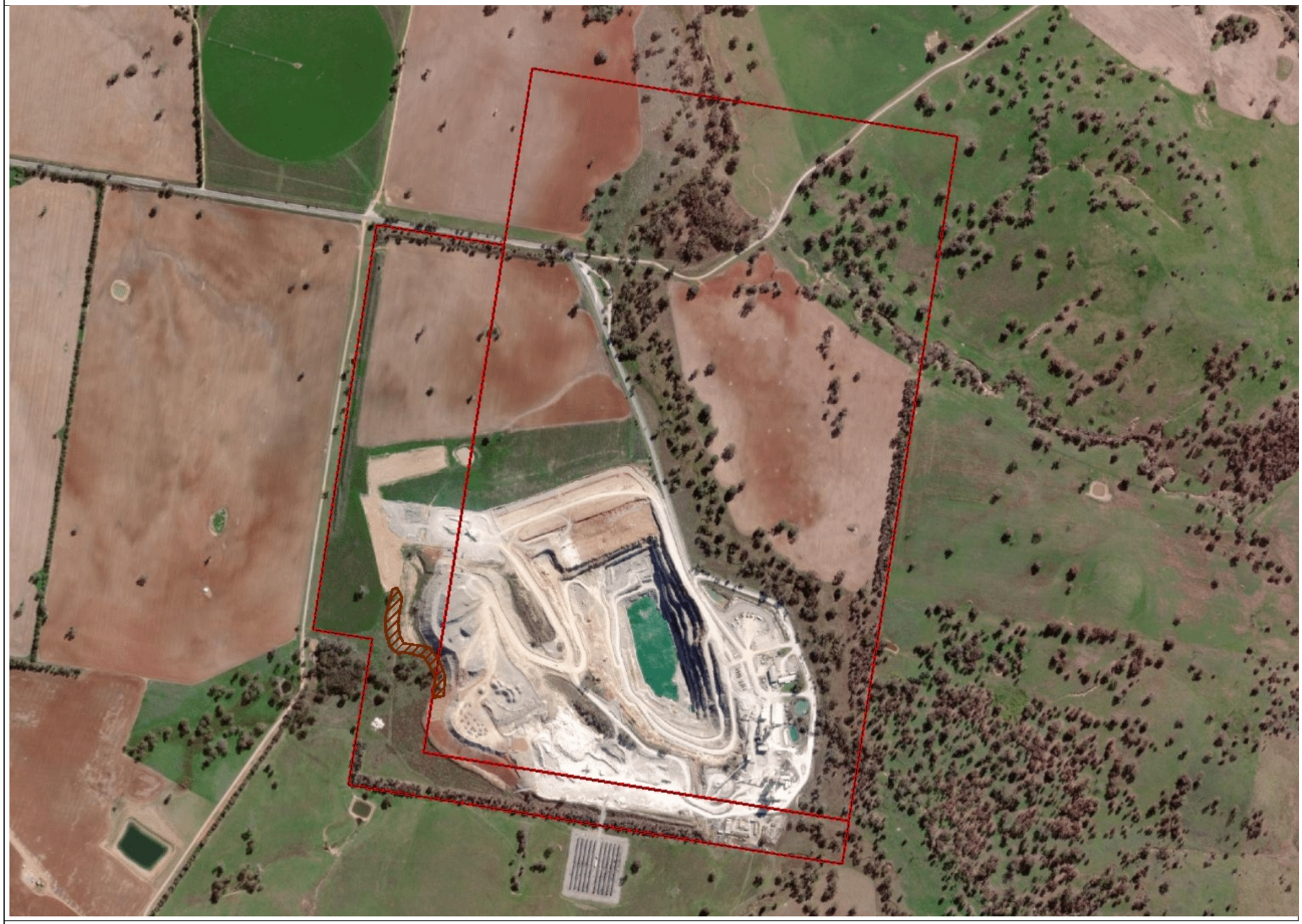
543.2 0 271.58 543.2 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere

© DRE

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

Galong Limestone Mine, Plan 2B-Mining and Rehabilitation - Year2, 26/2/2025, Id No 6703, 9124





Legend

- Forecast Data Year2
  - Forecast Disturbance
  - Forecast Land Prepared for Rehabilitation
  - Ecosystem and Land Use Establishment
- Project Approval Boundary
- World Imagery
- Low Resolution 15m Imagery
- High Resolution 60cm Imagery
- High Resolution 30cm Imagery
- Citations

Notes

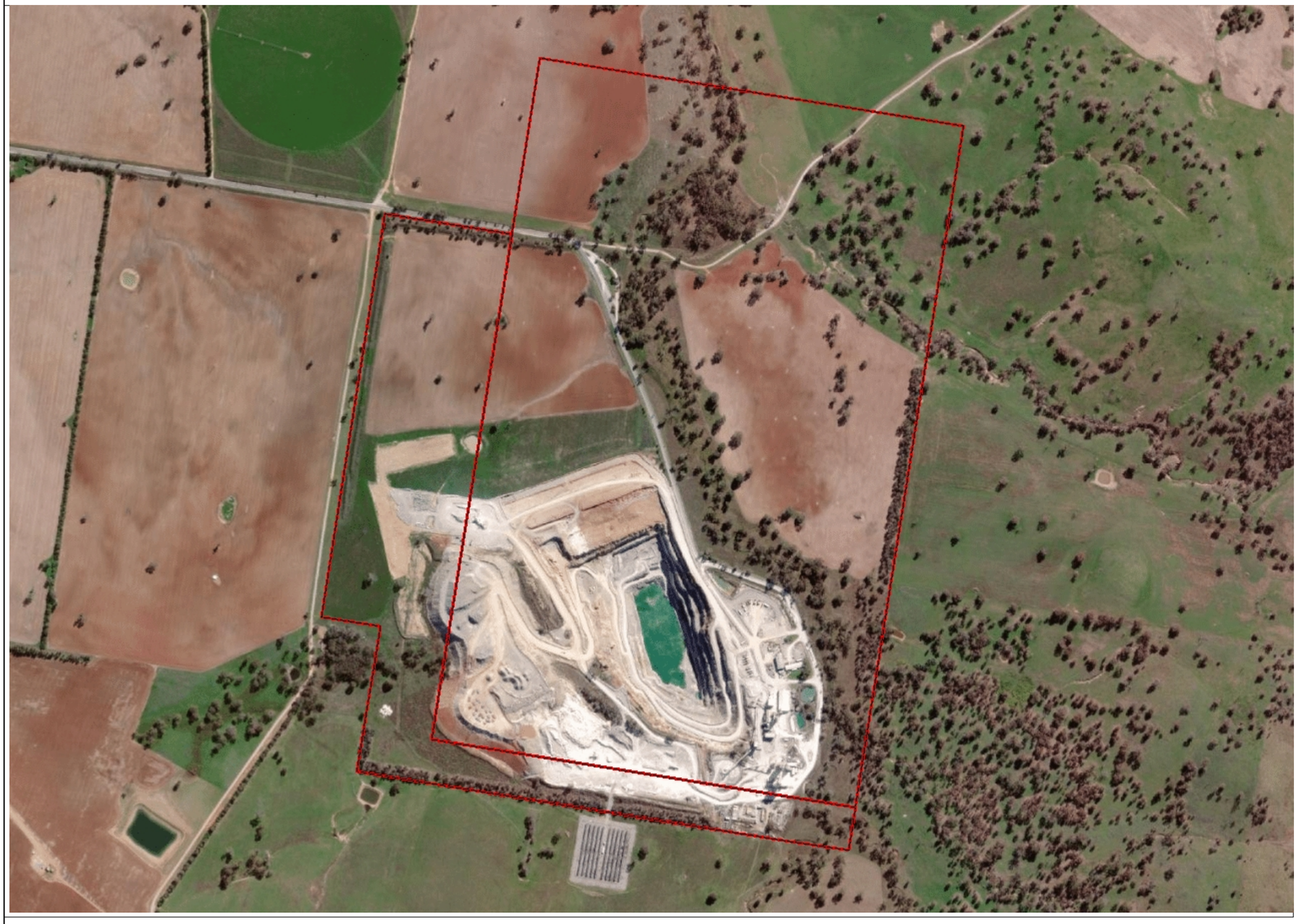
543.2 0 271.58 543.2 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere

© DRE

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

Galong Limestone Mine, Plan 2C-Mining and Rehabilitation - Year2, 26/2/2025, Id No 6703, 9125





Legend

Forecast Data Year3

- Forecast Disturbance
- Forecast Land Prepared for Rehabilitation
- Ecosystem and Land Use Establishment

Project Approval Boundary

World Imagery

Low Resolution 15m Imagery

High Resolution 60cm Imagery

High Resolution 30cm Imagery

Citations

Notes

543.2 0 271.58 543.2 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere

© DRE

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS MAP IS NOT TO BE USED FOR NAVIGATION

Regional NSW

Open Cut Summary Rehabilitation Cost Estimation

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

Mine Name: Galong Limestone Mine

Lease(s): ML 1496 & ML1745

Authorisation Owner: Graymont (NSW) Pty Ltd

Mine Operator: Graymont (NSW) Pty Ltd

Term of RCE:

Current Security: $6,170,000 **Date of Last Security Deposit Review:** 10/11/2024

Mine Contact: Wayne Trenning

Position: Plant Manager

Address: Lot 342 Eubindal Road
Galong NSW

Phone: 02 6380 5102 **Email:** wayne.trenning@graymont.com

Domain		Security Deposit
Domain 1: Infrastructure		$3,055,711
Domain 2: Tailings & Rejects		$419,270
Domain 3: Overburden & Waste		$472,802
Domain 4: Active Mine & Voids		$515,726
Domain 5: Management Activities		$282,500
Subtotal (Domains and Sundry Items)		**$4,746,010**
Contingency	10%	$474,601
Post Closure Environmental Monitoring	10%	$474,601
Project Management and Surveying	10%	$474,601
Total Security Deposit for the Mining Project (excl. of GST)		**$6,169,813**

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 Registration Form, Summary Report and calculation pages are to be printed and attached as an appendix the AEMR or MOP.

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.

Derick Korte
Company Respresentative's Name

17/2/2025
Date

Director
Company Representative's Role / Responsibility

Signature