NSW GOVERNMENT

NSW Resources Regulator

FWP0001663

WOODLAWN MINE TARAGO FORWARD PROGRAM

Tuesday 1 July 2025 to Friday 30 June 2028

Summary

DETAIL	
Mine	Woodlawn Mine Tarago
Reference	FWP0001663
Forward program commencement date	Tuesday 1 July 2025
Forward program end date	Friday 30 June 2028
Forward program revision (if applicable)	
Contact	Kiara Crook
Mining leases	S(C&PL)L 20 (1969),
Project location	Tarago Operations Pty Ltd
Date of submission	Monday 28 July 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

Woodlawn Mine is a copper-zinc metalliferous mine that was first operated by Denehurst between 1978 and 1998. Collex (now Veolia) purchased the land and surface rights in 1998 and secured approval to establish a bioreactor in the former open cut void. SML20 was transferred to Tarago Operations Pty Ltd in March 2014. Project Approval (PA07_0143) to recommence underground mining and to reclaim tailings from the historical tailings dams was granted in July 2013. Heron Resources undertook the project development during 2018-2019 and commenced underground mining and tailings reclaim operations in 2019. In March 2020 Heron suspended operations and placed Woodlawn under care and maintenance. In May 2022 Develop Global purchased the mine and carried out a program of underground exploration. Following refurbishment and recommissioning of the existing processing plant mine and process operations recommenced from March 2025 with the first concentrate leaving site in April 2025.

Description of surface disturbance activities

Exploration activities

Exploration activities to further extend the current mine plan will re-commence in FY 25/26. These exploration activities occur within the existing underground mine and surface footprint in order to expand the life of mine for the current underground operation. There are no other exploration activities planned to occur within the mining lease. Activities within other EL's held by DEVLEOP but located outside of the ML are detailed separately.

Construction activities

The only planned construction activity forecast during the reporting period is for a TSF4 Stage 2 lift to be commenced during FY2025/26.

Mining schedule

Mining development method and sequencing and general mine features.

Based on the underground exploration program carried out during 2023 an updated mine plan has been finalised for the resumption of underground mining operations at Woodlawn. Broadly, underground mining will entail extracting hauling ore from underground via the mine

access at the decline box cut to the surface stockpile run-of-mill emplacement area adjacent to the processing plant. Underground stope voids will be backfilled using paste fill.

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

A waste rock emplacement adjacent to TSF4 was established by Heron Resources in 2019/2020 to receive and store reject waste rock from the new underground mining operation. The emplacement covers a surface area of approximately 3ha and is managed under the Woodlawn Waste Rock Management Plan (currently undergoing review). Waste rock is segregated into PAF and NAF material whereby the NAF material will be preferentially re-used for construction including in the TSF4 lift if suitable.

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

Processing activities re-started at Woodlawn in March 2025 with tailings either used as paste backfill in the underground mine or discharged to the newest TSF built by Heron in 2018 (TSF4). TSF4 is approved for two additional lifts which DEVELOP is still reviewing whether just one or both will commence construction in the FY24-25 period. TSF4 is managed in accordance with the operations and maintenance plans which includes a tailings deposition plan. It is noted that there are four legacy TSFs also located on the site which are managed in accordance with their respective operations and maintenance plans.

Waste disposal and materials handling operations.

All putrescible waste is disposed of using a licenced service provider. The service provider has provided skip bins which are placed at convenient locations across site. Hydrocarbons are disposed using a licenced waste oil collector. Scrap metal is sent off site with an approved recycling provider. Separate bins have been provided by a contractor for disposal of paper and cardboard from site for recycling.

Key production milestones

MATERIAL	UNIT	YEAR 1	YEAR 2	YEAR 3
Stripped topsoil (if applicable)	(m^3)	0	0	0
Rock/overburden	(m^3)	426,462	505,179	439,653
Ore	(Mt)	0.83	0.88	0.84
Reject material[1]	(Mt)	0.75	0.75	0.75
Product	(Mt)	0.1	0.1	0.1

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

Three-year rehabilitation forecast

Rehabilitation planning schedule

Rehabilitation planning schedule

Although attempts were made DEVELOP was not able to receive confirmation of the materials approval status in advance, therefore, was not able to take any pre-emptive actions until the date passed permitting the material that underpinned the current rehabilitation plan. Therefore, given the previous rehabilitation strategy is now not feasible there is a significant amount of desktop work to be done as it relates to rehabilitation. This is primarily underpinned by the Rehabilitation Management Plan which has not yet been finalised, therefore the below is provided indicatively and subject to change: Year 1: Update the rehabilitation management plan given site and material permissibility updates while being aligned with the project approval and environmental assessment. Includes completing consultation. Re-asses the water situation in terms of the necessity and urgency for a water treatment solution or additional evaporation solutions. Determine a schedule of activities in order to fill the identified actions and data gaps highlighted in the RMP and associated risk assessment. Year 2: Progress a water treatment option or evaporation option if determined to be required. Progress with actions as per the schedule completed in Year 1. Likely this will involve further desktop and field works into developing a greater understanding of the Rehabilitated Waste Rock Dump (RWRD) feature. Year 3: Continuation/progression from Year 2.

Stakeholder consultation

The Woodlawn Mine Community Consusltative Committee (CCC) will routinely be briefed on rehabilitation activities.

Rehabilitation studies, risk assessments and/or design work

As per previous. Year 1: Update the rehabilitation management plan given site and material permissibility updates while being aligned with the project approval and environmental assessment. Includes completing consultation. Re-asses the water situation in terms of the necessity and urgency for a water treatment solution or additional evaporation solutions. Determine a schedule of activities in order to fill the identified actions and data gaps highlighted in the RMP and associated risk assessment. Year 2: Progress a water treatment option or evaporation option if determined to be required. Progress with actions as per the schedule completed in Year 1. Likely this will involve further desktop and field works into developing a greater understanding of the Rehabilitated Waste Rock Dump (RWRD) feature. Year 3: Continuation/progression from Year 2.

Rehabilitation research and trials

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS
RRT0001023	**TDN Rehabilitation WOO Trial**	Determine the optimum WOO depth to achieve maximum performance and stability of capping layer, carbon degradation rate of WOO, kinetic performance of alkaline product and WOO and vegetation trials.	Identify optimum mechanical placement methods Kinetic testing using laboratory column trials Monitoring of moisture, oxygen, temperature and landfill gas emissions Piezometric sampling of leachate to determine chemical attributes. Topsoil chemical analysis for vegetation nutrient requirements and WOO interaction. Survey monitoring for stability and suitability of the material as a capping layer.	31 Jul 2025	Cancelled

Rehabilitation maintenance and corrective actions

As per previous. Year 1: Update the rehabilitation management plan given site and material permissibility updates while being aligned with the project approval and environmental assessment. Includes completing consultation. Re-asses the water situation in terms of the necessity and urgency for a water treatment solution or additional evaporation solutions. Determine a schedule of activities in order to fill the identified actions and data gaps highlighted in the RMP and associated risk assessment. Year 2: Progress a water treatment option or evaporation option if determined to be required. Progress with actions as per the schedule completed in Year 1. Likely this will involve further desktop and field works into developing a greater understanding of the Rehabilitated Waste Rock Dump (RWRD) feature. Year 3: Continuation/progression from Year 2.

Rehabilitation schedule

As per previous. The activities in the next FWP reporting period will be focussed on desktop investigations only given the current stage of the site and associated operations. There are no areas of disturbance that can be added to the progressive rehabilitation schedule in the next 3 years due to being required for active operations and/or not having approved plans to facilitate rehabilitation works.

Completion of rehabilitation

There are no plans to lodge an application for rehabilitation completion within the next three years.

Subsidence remediation for underground operations

There are no areas which require subsidence remediation.

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)	289.17	289.17	289.17
B	**Total active disturbance**	(ha)	190.67	186.44	182.21
P	**Total new area of land proposed for active rehabilitation**	(ha)	4.23	8.46	12.69

Rehabilitation key performance indicators (KPIs)

	FORECAST	UNIT	YEAR 1	YEAR 2	YEAR 3
O	**Total new disturbance area during reporting period**	(ha)			
P	**Total new area of land proposed for rehabilitation during the reporting period**	(ha)	4.23	4.23	4.23
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

Plan 2A attachment not provided.

Plan 2B attachment not provided.

Plan 2C attachment not provided.