



FWP0001600

# WILPINJONG COAL MINE FORWARD PROGRAM

Wednesday 1 January 2025 to Friday 31 December 2027



# Summary

DETAIL	
Mine	Wilpinjong Coal Mine
Reference	FWP0001600
Forward program commencement date	Wednesday 1 January 2025
Forward program end date	Friday 31 December 2027
Forward program revision (if applicable)	
Contact	James Heesterman
Mining leases	ML 1795 (1992), ML 1846 (1992), ML 1779 (1992), ML 1573 (1992)
Project location	Wilpinjong Coal Pty Ltd
Date of submission	Monday 31 March 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**

Wilpinjong Coal Mine operates under consent SSD-6764 approved in 2017 spanning over 5,600ha. The operation produces thermal coal which is transported by rail to domestic customers for use in electricity generation and to port for export. Open cut mining, coal handling operations and associated mobile equipment movements are undertaken 24hours a day, seven days per week. The Mine also undertakes exploration and prospecting activities across WCPL's explorations licence and mining lease areas for the purposes of geological, geotechnical and hydrogeological investigations. Rehabilitation is conducted progressively as overburden dumps and landforms develop sequential to the advancement of the active mining faces. Rehabilitation of completed landforms has been progressively undertaken since 2008 and has included establishing both woodland and grassland vegetation communities. WCPL is currently reworking pre 2017 rehabilitation areas to conform to SSD6764 prescribed vegetation communities

### Description of surface disturbance activities

#### **Exploration activities**

No exploration activities are forecasted to be undertaken within the mining leases in the next three years.

#### **Construction activities**

Construction on the Mine's major facilities are now complete. Construction and development activities that would progressively occur to support normal mining activities during the LOM include: • Progressive development and augmentation of dams, pumps, pipelines, upcatchment water diversions, drains, water storages and structures, remote infrastructure areas (MIAs), haul roads, light vehicle access roads and services (e.g. electrical and water supply, sewage treatment facilities, site communications, fuel storage and refueling areas), remote crib huts and hard stand areas; • Construction of a second communications tower south of Pit 8 • Construction of tailings facility TD7 (if required); replacement and/or upgrades to fixed and mobile plant; and • Installation or replacement of environmental monitoring equipment required for environmental management plans.

#### **Mining schedule**

Mining development method and sequencing and general mine features.

Open cut mining at WCPL is to be carried out primarily with dozers, loaders, hydraulic excavators, and trucks. The equipment is sized to provide maximum flexibility and minimize coal losses. The indicative rehabilitation and mining schedule and sequence of open cut mining operations will be undertaken in Pits 1, 2, 3, 5, 6, 7, and 8 during the next three years, as shown in Plans 2A to 2C. Conventional open cut mining methods are used at the Mine, with a low strip ratio allowing for relatively rapid pit advance. The general sequence of open cut mining within the nominated pits is as follows: - Vegetation clearance and removal. -Topsoil/subsoil stripping by scrapers and/or dozers, directly placed on rehabilitation or stockpiled. -Drilling and blasting of overburden, with some waste rock 'cast blast' into the adjacent mined-out strip. -Dozer pushing of blasted overburden into the adjacent mined-out strip to expose the target seam, or removal with excavator and haul truck. -Drilling and blasting plus ripping of coal/parting material. -Mining of coal seams by excavator and loading into haul trucks for transport directly to the ROM dump hopper or ROM pads. -Coarse rejects and tailings from the CHPP are selectively placed. -Hauled overburden/interburden/parting material is strategically placed within mine voids and associated waste rock emplacements to develop the final landform. -Progressive landform profiling and rehabilitation of mine voids and waste rock emplacements.

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

Mined waste rock (including overburden and interburden) would continue to be progressively placed in mine voids behind the advancing open cut operations, once the coal has been removed. A combination of temporary and permanent out-of-pit waste rock emplacements are located adjacent to the open cut mining operations. Mine waste rock emplacements behind the advancing open cut are constructed to approximate the pre-mining topography. The waste rock emplacements would be progressively shaped by dozers for rehabilitation activities. Some of the overburden is also utilised to construct internal walls for the tailings emplacements and visual bunds along select pit boundaries. Final landform levels and topography of the backfilled mine landforms would generally approximate the pre-mining topography, with some variations, and would be designed with an allowance for the long-term settlement of mine overburden. Inert cover will be placed on top of the final landform surface to provide a benign barrier between any overburden that has not completely equilibrated with surface geochemical conditions. Carbonaceous material will be placed at least 2 m below the surface of the backfilled mine void landform and at least 5 m below the surface of the Elevated Waste Rock Emplacement (Pit 2).

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

The coal handling and processing infrastructure has been designed to accommodate the processing of raw coal and the handling of raw and washed product coal. ROM coal can be reclaimed at a rate of up to 1,600 tph from ROM Dump Hopper 1 and up to 1,400 tph from

ROM Dump Hopper 2 to Sizing Station 1 and 2 respectively, via a feeder breaker. The broken coal is then screened, and if oversized, further crushed in separate sizers. Sized coal less than 50 millimetres (mm) is transferred to either a raw coal stockpile or a product coal stockpile. Raw coal is reclaimed from the raw coal stockpiles and is fed to the coal preparation plant at up to 1,400 tph. Sized coal is washed in the raw coal and desliming screens, with fine coal/slimes (less than 0.7 mm) fed to the fine coal circuit, washed medium coal (greater than 0.7 mm and less than 2 mm) fed to the medium coal washing circuit, and washed coal (greater than 2 mm) fed to the coarse coal circuit. The fine coal circuit separates coal fines from slimes and comprises cyclones, spirals, centrifuges, a screen, and a tailings thickener. Tailings would be pumped from the tailings thickener to the tailings filter press, which would dewater the material to allow it to be conveyed to the reject bin. The medium coal and coarse coal circuits comprise dense medium cyclones to separate the coarse rejects from the washed coal. The fine/coarse rejects from the CHPP are then combined for co-disposal as a component of general ROM waste emplacement

Waste disposal and materials handling operations.

Key waste streams at the Mine comprise sewage and wastewater, recyclable and nonrecyclable wastes, and hazardous wastes (hydrocarbons). WCPL has licensed waste management contractors performing the following: On-site waste management, including waste segregation of scrap steel, general waste, recyclables, hydrocarbons, and hazardous Off-site disposal to licensed waste facilities. materials. Off-site recycling to licensed waste centers. Recording and reporting waste volumes. The sewage treatment and disposal facilities at the Mine currently include several sewage treatment and pumping systems that discharge within the rail loop and rehabilitation areas near remote crib huts and the CHPP. These facilities are regularly serviced by a licensed contractor. Various waste materials are collected and sorted for recycling, including paper, cardboard, metals, glass, air filters, oil filters, waste oil, waste grease, oil rags, and hydraulic hoses, by WCPL's licensed waste contractor. Soil material contaminated by hydrocarbons are removed by a licensed waste contractor to an appropriate licensed facility for treatment or transferred to WCPL's onsite bioremediation area for remedial treatment. The bioremediation area is located within the Pit 1 area but scheduled to be relocated. The material is disposed of within active waste emplacement areas only after it has been successfully remediated. Waste hydrocarbons will be collected, stored, and removed by licensed waste transporter



#### **Key production milestones**

MATERIAL	UNIT	YEAR 1	YEAR 2	YEAR 3
Stripped topsoil (if applicable)	(m³)	265,933	296,902	217,009
Rock/overburden	(m³)	42,315,760	40,987,113	42,473,384
Ore	(Mt)	11,757,715	10,228,241	9,915,988
Reject material <sup>1</sup>	(Mt)	2,247,398	2,034,314	1,923,673
Product	(Mt)	9,560,606	8,336,105	7,454,375

<sup>&</sup>lt;sup>1</sup> This includes coarse rejects, tailings and any other wastes resulting from beneficiation.



# Three-year rehabilitation forecast

### Rehabilitation planning schedule

#### **Rehabilitation planning schedule**

The indicative mining and rehabilitation schedule and sequence of open cut mining operations will be undertaken in Pits 1, 2, 3, 5, 6, 7, and 8. The indicative three-year mining sequence and rehabilitation sequence involves primarily the rehabilitation of mine waste rock emplacements as they become available within the overburden emplacement area mining domain. Pit 3 East Start Point is scheduled to be relocated to Pit 8 North within in this period, being the only major infrastructure change. Decommissioning phases will generally involve the relocation of mobile crib huts and other satellite mine infrastructure. WCPL completed a revision to the Rehabilitation Management Plan (RMP) rehabilitation risk assessment on 5th March 2025, involving a team of operational, technical, and environmental staff and specialist consultants with knowledge of, and experience in, WCPL rehabilitation planning and implementation. Table 5 in the RMP presents a mapping of the WCPL control framework analysis to the RMP risk requirements. Actions resulting from the risk assessment will be implemented and/or included into the next update to the RMP. For the three-year plan, it is forecast: 2024 -82.12ha of Ecosystem Establishment, 120.86ha of Landform Development (FSL). 2025 -147.89ha of Ecosystem Establishment, 93.25ha of Landform Development (FSL). 2026 -77.98ha of Ecosystem Establishment, 52.07ha of Landform Development (FSL).

#### Stakeholder consultation

Quarterly meetings with the following key stakeholders groups:- Community ConsultativeCommittee (CCC)- Native Title- Registered Aboriginal Parties Consultative Commitee(RAPCC)Monthly meetings with the local community (open invitation and informal venue)through Have-a-Chat

#### Rehabilitation studies, risk assessments and/or design work

WCPL will continue to update the RMP Rehabilitation Risk Assessment on an annual basis at a minimum, ensuring that a suitable team of operational, technical, and environmental staff, along with specialist consultants who possess knowledge and experience in rehabilitation planning and implementation, are involved in the process. Amelioration Trial: In 2024, WCPL will trial organic ameliorants as an alternative to conventional fertilisers. The intent is to assess the effectiveness of organic materials in improving soil health and microbial stimulation in future rehabilitation areas. Ripping Study: In addition to the current practice of direct topsoil placement, WCPL will conduct a ripping study to investigate the effectiveness of ripping topsoil at various depths on the development and performance of the growth medium. Drone Seeding Trial: WCPL continues the trial to establish its required native vegetation



community through aerial application of native. Building on the success of previous trials, WCPL has purchased its own drone with the goal of further developing a clear methodology for aerial seed, spray and fertiliser application and enhancing the contribution of a drone to the rehabilitation process.

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Rehabilitation research and trials

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RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS
RRT0001033	Ozothamnus tesselatus Rehabilitation	Ozothamnus tesselatus is a threatened species recorded within the Active Mining area. Being a data deficient species, WCPL are conducting seed collection and germination trials	Propagation will be undertaken by WCPL in germination trays with various soils and treatments. As this species produces thistle- type seeds, tube stock is anticipated to be the most appropriate method for propagation.	1 Dec 2025	Ongoing
RRT0001034	Drone Seeding Trial	Evaluate the effectiveness of drone seeding as a method of mine site rehabilitaiton. Also evaluate the efficiency of native seed coating for seeding flowability. Reduce soil compaction	Utilise drones as a form of seeding on rehabilitation. Coat native seeds with various coatings for flowability within the drone seed box. Prepare rehabilitation areas soil with bulk soil ameliorants and tiled seed bed. Apply seed via drone	1 Dec 2025	Ongoing
RRT0001035	Topsoil Amelioration Trial	enhance soil organic matter within the topsoil used for rehabilitation and also stimulate soil biology for native seed germination and soil structure/resilience.	Inoculate native seed with various organic coatings. Use of various organic bulk fertilisers (at various rates) such as vermicast, vermiliquid and composts Land application via bulk spreader/ sprayer with tractor Various integration of materials in or on soil to enhance structure, organic matter and biology.	1 Dec 2025	Ongoing
RRT0001036	Regent Honey Eater Habitat Trial	To create Regent Honeyeater habitat within existing mine rehabilitation areas where rehabilitation is currently under improved	WCPL will commence control of non native species and re seeding to a combination of suitable native plant species as per specific	31 Dec 2030	Ongoing

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RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS
		pasture and trees from previous Development Consent.	BVT assemblages and local reference site assemblages. Tree areas will to be thinned or transformed from a mixed assemblage to specific BVT. Pasture Areas to be sprayed out, tilled and resown with specific BVT mixes.		
RRT0001037	Topsoil Depths and Seed Volume Trials	Implement various topsoil depths to determine optimum growth medium conditions for seeding and evaluate seed mix volumes/rates	Install various depths of soil and evaluate germination and plant establishment resilience over time. Altering seed spreading volumes (with consideration of seed viability) in areas and determine efficiency or replication of reference site densities and assemblages	31 Dec 2025	Ongoing
RRT0001038	Fire Management Trial	To investigate the effectiveness of fire as a tool for reducing exotic pasture cover and assisting with regeneration of native ground cover	In 2017 a controlled hazard reduction burn was conducted by RFS and site personnel. Ecologists engaged to evaluate the effectiveness of fire to control non native pasture species and allow natives species to germinate and establish.	1 Aug 2022	Complete
RRT0001084	Landform Study	Evaluation of fill volumes, erosion, stability and flood modelling ensuring micro-relief and natural water flow for the	CAD review of existing landforms and environmental modelling	31 Dec 2025	Ongoing

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RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS
		reinstatement of drainage lines throughout the operations rehabilitation			
RRT0001151	Pit 1 South Drone Seeding Trial	The objective was to rehabilitate 6.93ha of land in Pit 1 South using drone seeding for HU732 and HU824 vegetation types, assessing the effectiveness of drone applications in challenging terrain.	The rehabilitation method for the 6.93ha of Pit 1 South. The land was cleared and prepared for the HU732 and HU824 Biometric Vegetation Types. An XAG 100 drone was used for seeding, ideal for steep slopes and boggy topsoil. Native grass seed was pre-coated and mixed with a cereal cover crop to improve flowability. This approach is part of an ongoing trial to evaluate the effectiveness of drone seeding in rehabilitation.	31 Dec 2025	Ongoing

### Rehabilitation maintenance and corrective actions

Subsequent to ecological monitoring undertaken in 2024, discrete rehabilitation areas have triggered a TARP response derived from low recorded biometrics. The metrics of native ground cover grasses and shrubs, along with exotic cover and overstory regeneration in specific biodiversity monitoring plots were typically low in the initial stages of ecosystem development and ecosystem establishment. Through vegetation succession, it is expected some of these metrics will improve in time. WCPL have ordered approximately 10,000 plants which conform to a White Box Shrubby Woodland criteria, to be planted appropriately on underperforming rehabilitation in late Spring of 2025. WCPL is committed to reworking existing in-situ rehabilitation to specific Biometric Vegetation Types (BVTs) following the approval of the Wilpinjong Extension Project (WEP) and granting of Development Consent (SSD 6764) in 2017. Areas initially rehabilitated to Project Approval (PA05-0021) requirements, such as areas as improved pastures and mixed species woodlands, are in the process of being converted to specific BVT communities as listed in the RMP by the end of mine life. Initial trials have been undertaken to progress the challenging task of transitioning existing woodland species to the WEP BVT communities and will continue to progress towards a definitive transition process.

### Rehabilitation schedule

Open cut mining at WCPL is carried out primarily with dozers, loaders, hydraulic excavators, and trucks. The equipment is sized to provide maximum flexibility and minimise coal losses. The indicative mining and rehabilitation schedule and sequence of open cut mining operations will be undertaken in Pits 1, 2, 3, 5, 6, 7, and 8 during the next three years. To minimise the area of disturbance at any one time, rehabilitation occurs progressively at the Mine as ancillary disturbance areas and final mine landforms become available for revegetation. The mine waste rock emplacements behind the advancing open cut are constructed to approximate the pre-mining topography or the final landform approved by Development Consent (SSD-6764). Mine waste rock emplacements are shaped by dozers prior to the commencement of rehabilitation activities, i.e., re-profiling, reapplication of topsoil/subsoil (best practice of direct topsoil placement where practicable), soil amelioration, timber deposition and spreading, and revegetation activities (Section 6.2.3 of the RMP).

## Completion of rehabilitation

### Subsidence remediation for underground operations





# 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)	2,985.35	3,239.66	3,362.22
В	Total active disturbance	(ha)	1,626.63	1,663.23	1,601.43
Ρ	Total new area of land proposed for active rehabilitation	(ha)	237.78	455.48	639.85

### Rehabilitation key performance indicators (KPIs)

	FORECAST	UNIT	YEAR 1	YEAR 2	YEAR 3
0	Total new disturbance area during reporting period	(ha)	302.3	254.3	122.57
Ρ	Total new area of land proposed for rehabilitation during the reporting period	(ha)	237.78	217.7	184.37
Q	Annual rehabilitation to disturbance ratio		0.79	0.86	1.5

# Attachment 1 – Reporting Definitions

REPO	ORTING CATEGORY	DEFINITION
<ul> <li>A Total disturbance footprint</li> <li>– surface disturbance</li> </ul>		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.
В	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).
С	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
0	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).
Ρ	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 <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	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	<ul> <li>Means the NSW Resources Regulator's online portal that lease holders must use (via a registered account) to: <ul> <li>upload rehabilitation geographical information system (GIS) spatial data</li> <li>develop rehabilitation GIS spatial data (using online tracing functions)</li> <li>generate rehabilitation plans and rehabilitation statistics using the map viewer and Rehabilitation Key Performance Indicator functionalities.</li> </ul> </li> <li>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.</li> </ul>
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 Mining Act 1992.
Native vegetation	Has the same meaning as that term under section 60B of the <i>Local Land Services Act</i> 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	<ul> <li>The stages and sequences of actions required to rehabilitate disturbed land to achieve the final land use. The phases of rehabilitation are:</li> <li>active mining</li> <li>decommissioning</li> <li>landform Establishment</li> <li>growth medium development</li> <li>ecosystem and land use establishment</li> <li>ecosystem and land use development.</li> </ul>
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 <i>Form ESF2 Rehabilitation completion and/or review of rehabilitation cost estimate</i> 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	<ul> <li>Means any persons or bodies who may be affected by the mining operations, including rehabilitation, carried out on the lease land, and includes:</li> <li>the relevant development consent authority</li> <li>the local council</li> <li>the relevant landholder(s)</li> <li>community consultative committee (if required under the development consent) or equivalent consultative group</li> <li>affected land holder(s)</li> <li>government agencies relevant to the final land use</li> <li>affected infrastructure authorities (electricity, telecommunications, water, pipeline, road, rail authorities)</li> <li>local Aboriginal communities, and</li> <li>any other person or body determined by the Minister to be a relevant stakeholder in relation to a mining lease.</li> </ul>
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 <sup>2</sup> .
Waste	Has the same meaning as that term under the <i>Protection of the Environment Operations Act 1997</i> .

<sup>&</sup>lt;sup>2</sup> Commonwealth of Australia (DITR), 2007. *Tailings Management*.



# Attachment 3 – Plans

- 2A Mining and Rehabilitation Year 1.pdf
- 2B Mining and Rehabilitation Year 2.pdf
- 2C Mining and Rehabilitation Year 3.pdf

Forward Program (LARGE MINE) v2.5