

FWP0001242

AUSTAR COAL MINEFORWARD PROGRAM

Saturday 1 July 2023 to Tuesday 30 June 2026





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Summary

DETAIL	
Mine	Austar Coal Mine
Reference	FWP0001242
Forward program commencement date	Saturday 1 July 2023
Forward program end date	Tuesday 30 June 2026
Forward program revision (if applicable)	
Contact	Carly McCormack
Mining leases	ML 1345 (1992), ML 1677 (1992), ML 1283 (1906), ML 1157 (1906), ML 1666 (1992), MPL 23 (1906), MPL 204 (1906), DSL 89 (1901), MPL 233 (1906), MPL 1364 (1906), ML 1851 (1992), ML 1661 (1992), MPL 269 (1906), CCL 752 (1973), ML 1550 (1992), MPL 217 (1906), CML 2 (1992), CCL 728 (1973), ML 1388 (1992)
Project location	Austar Coal Mine Pty Limited
Date of submission	Friday 29 September 2023

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

Austar Coal Mine Pty Limited (Austar), a subsidiary of Yancoal Australia Limited (Yancoal), operates the Austar Coal Mine, an underground coal mine located approximately 10 kilometres (km) southwest of Cessnock in the Lower Hunter Valley in NSW. Austar Coal Mine incorporates the former Pelton, Ellalong, Cessnock No. 1 (Kalingo) and Bellbird South Collieries and includes coal extraction, handling, processing and rail and road transport facilities. Pit top facilities are located on Middle Road, Paxton, and the Coal Handling and Preparation Plant (CHPP) is located at Wollombi Road, Pelton.

On 26 February 2021, a decision was made by the Yancoal board to transition the Austar Coal Mine from care and maintenance to closure. Austar is currently in the closure planning stage with investigations and studies being undertaken to inform the closure process.

Description of surface disturbance activities

Exploration activities

No exploration activities are proposed in the next three years.

Construction activities

No construction activities are proposed in the next three years.

Mining schedule

Mining development method and sequencing and general mine features.

Austar is a closed mine, there will be no mining operations in the next three-year period. All activities will be associated with rehabilitation, closure planning and early works including mine sealing, decommissioning, equipment recovery and demolition.

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

Austar is a closed mine, no additional coarse coal rejects or fine tailings will be generated in the next three year period.

Closure Management Areas (CMAs) 2 Pelton CHPP, 7 Aberdare Extended Emplacement Area and 8 Bellbird Areas 12 and 13 were used for coarse coal rejects and/or fine tailings emplacement areas during operations prior to closure.

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During the Pre-Feasibility Study (PFS) potential feasible options for management of emplacements were developed to concept design and a preferred go forward case identified based on the most feasible means of rehabilitating the emplacements to achieve acceptable environmental outcomes in a timely and cost effective manner.

An inventory of materials available for capping and rehabilitation was also undertaken. Based on the preferred go-forward options, it was identified that sufficient capping material is available on site for emplacement construction, subject to gaining development consent. Growth medium and ameliorants are required to be sourced from external suppliers.

During Feasibility Studies (FS) detailed designs for construction of emplacement areas will be developed which will include the sequencing of emplacements, construction and management requirements.

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

Austar is a closed mine, there is no material processing currently proposed in the next three year period. The Coal Handling and Preparation Plant (CHPP) has been decommissioned.

Conceptual tailings and reject management and capping options have been developed for each CMA with preferred go-forward options identified.

Additional work to be completed in the next stage of mine closure planning to develop detailed designs for construction of emplacement areas which will include the sequencing of emplacements, construction and management requirements.

As part of closure planning, Austar is reviewing options to reprocess or consolidate reject and tailings material. Should this be determined to be a feasible option this will be reported in future forward programs.

Waste disposal and materials handling operations.

General waste management during closure planning will continue to be undertaken by a licensed waste management contractor in accordance with the methodology detailed in the Rehabilitation Management Plan (RMP).

A Waste Management Options Assessment (GHD 2023) has been prepared to compile an inventory of all non-mineral wastes across the site and establish permissible management options for waste materials generated in closure execution.

Waste material will continue to be classified to ensure that the preferred waste disposal or reuse is lawful, and a Waste Management Plan for closure will be developed. The outcomes of these studies will be reported in future forward programs.

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Key production milestones

MATERIAL	UNIT	YEAR 1	YEAR 2	YEAR 3
Stripped topsoil (if applicable)	(m ³)	0	0	4,635
Rock/overburden	(m ³)	0	0	0
Ore	(Mt)	0	0	0
Reject material ¹	(Mt)	0	0	0
Product	(Mt)	0	0	0

6

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 to be undertaken over the next three years will include:

- Year 1: Permanent shaft sealing designs to be completed. Drilling and Geotech assessment for historic shafts and drifts will be undertaken during Year 1.
- Years 1 and 2: Further land contamination assessments.
- Year 3: Refine conceptual final landform designs and develop detailed designs for construction
- Year 3: Refine conceptual capping designs for tailings storage facilities and reject emplacement areas and develop detailed designs for construction.

There are no changes to the previously submitted spatial data for rehabilitation and disturbance for the next three-year period, as all planned works will be undertaken within the current disturbance footprint. No additional rehabilitation areas will progress past the decommissioning phase within the next three years.

Stakeholder consultation

Stakeholder consultation will continue to be undertaken in line with the previous year's consultation activities, including quarterly multi-agency Regulator updates (NSW Resources Regulator, NSW DPE, NSW EPA and Crown Lands), liaison with Cessnock City Council as required, six-monthly Community Consultative Committee meetings. Other consulted parties will include NSW Rural Fire Service and impacted landholders as required.

Rehabilitation studies, risk assessments and/or design work

Austar is currently nearing completion of the PFS stage of mine closure, during which technical studies and site investigations to address closure knowledge gaps have been undertaken.

During PFS stage the following specialist studies have been undertaken to inform the final closure strategy for Austar. PFS is scheduled to be completed in late 2023.

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- groundwater
- surface water
- contamination
- geochemical and materials assessment
- geotechnical assessment
- historic heritage assessment
- subsidence and land stability
- capping strategy
- revegetation strategy
- final land use options assessment study
- landform design trade-off study
- surface infrastructure study
- decommissioning plan
- hazardous materials study and
- demolition study.

Detailed site investigations and assessments were undertaken based on the recommendations of knowledge gap assessments.

The data obtained from the site investigations was used to inform the geotechnical, geochemical, contamination and water studies. The findings of these specialist studies have informed the development of the preferred go-forward rehabilitation and closure designs and strategies to be taken into the next stage of mine closure planning.

During the next stage of mine closure planning, Austar will undertake additional assessments and investigations to address recommendations of the PFS specialist studies, prove the preferred go-forward options and refine the conceptual landform designs and final land use.



Rehabilitation research and trials

RRT NUMBER	PROJECT/TRIAL NAME	OBJECTIVE OF TRIAL/PROJECT	METHODOLOGY	EXPECTED DATE OF COMPLETION	STATUS
RRT0001111	Growth medium trial	Evaluation of composted municipal green waste material as a growth medium, as an alternative to topsoil.	Three rehabilitation trial plots to be established. One plot to have no compost, second plot to have 50mm of composted growth medium and the third plot to have 100mm of composted growth medium. Soil testing will be used to inform amelioration requirements. All three plots will be seeded with key canopy, shrub and groundcover species of the Lower Hunter Spotted Gum Ironbark Forest vegetation community. Ongoing monitoring will inform suitability of compost use as a growth medium.	31 Dec 2025	Not started

Rehabilitation maintenance and corrective actions

The rehabilitation care and maintenance program will be undertaken following the completion of rehabilitation activities to manage rehabilitation areas. The rehabilitation monitoring program outlined in the RMP is used to identify any maintenance actions required. Outcomes of rehabilitation monitoring including recommendations for further works recommended to achieve the specific closure criteria are documented in the annual rehabilitation monitoring report.

In accordance with recommendations from the annual rehabilitation monitoring report, the following rehabilitation maintenance activities are being undertaken or will be scheduled as required:

- Ongoing weed management of the rehabilitation areas at Aberdare Extended Emplacement Area (EEA), Bellbird Areas 12 and 13 and the Cessnock No.1 Colliery/Kalingo Infrastructure Area
- Review of seed mixes for future rehabilitation with the removal of green panic (Megathrysus maximus) Rhodes grass (Chloris gayana) and kikuyu (Cenchrus clandestinus) from any subsequent seeding mixes for grassland areas of vegetation
- Remediation of vehicle damage and dirt bike paths caused by trespassers through rehabilitated areas in the Aberdare EEA
- Ongoing effort to prevent unauthorised access to the site
- Rubbish removal where required.

Recommendations of rehabilitation monitoring and inspections will be implemented throughout the Forward Program as required.

Rehabilitation schedule

Ongoing decommissioning and demolition of redundant infrastructure as part of early works.

Decommissioning will continue in CMA 1, CMA 2, CMA 5 and CMA 6 during Year 1, CMA 4 during Year 2, and pipelines between CMA 4 and CMA 6 in Year 3.

During Year 1 demolition scoping, tender, contractor engagement and hazardous materials stripping will commence.

Progressive assessment and sealing where required of historic exploration boreholes. Approximately 125 boreholes are planned to be assessed and sealed where required in Year 1, 150 boreholes in Year 2, and the remaining balance in Year 3.

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Year 2 demolition will encompass CMA 1, CMA 2, CMA 5 and CMA 6. Programmed demolition activities in all CMA areas excludes any infrastructure with heritage significance. Removal of non-heritage items within heritage curtilages is subject to consultation with Cessnock City Council.

In Year 2 No. 2, 3 and 4 shafts plus West Pelton and Kalingo shafts will be filled and permanently capped. Filling and capping of shafts No. 5 and 6, Aberdare and Bellbird will commence during Year 3.

In CMA 5, the Kalingo Dam will progressively be decommissioned, with 12,000m3 of silt to be removed and a sediment dam constructed in the dam footprint during Year 1. In Year 2, 15,000m3 of dam wall material will be removed. In Year 3 rehabilitation works will commence in the dam. Kalingo Dam is located within a heritage curtilage. Removal of the dam will therefore be subject to consultation with Cessnock City Council.

Subsidence remediation for underground operations

Repair works to sinkholes that have developed in historic shallow mine workings in CML 2, east of Wollombi Road at Bellbird and West Cessnock, will continue to be undertaken.

Progressive mining and rehabilitation statistics

Three-yearly forecast cumulative disturbance and rehabilitation progression

	FORECAST	UNIT	YEAR 1	YEAR 2	YEAR 3
Α	Total surface disturbance footprint	(ha)	210.28	210.28	210.28
В	Total active disturbance	(ha)	150.42	149.02	147.55
P	Total new area of land proposed for active rehabilitation	(ha)	3.89	5.29	6.75

Rehabilitation key performance indicators (KPIs)

FORECAST	UNIT	YEAR 1	YEAR 2	YEAR 3
O Total new active disturbance area	(ha)			
P Total new area of land proposed for active rehabilitation during the reporting period	(ha)	3.89	1.41	1.46

Q Annual rehabilitation to disturbance ratio



Attachment 1 – Reporting Definitions

REPO	ORTING CATEGORY	DEFINITION
Α	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.
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.

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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).
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 <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	Means the NSW Resources Regulator's online portal that lease holders must use (via 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 <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</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	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 <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	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 <i>Protection of the Environment Operations Act 1997</i> .	

² Commonwealth of Australia (DITR), 2007. *Tailings Management*.

AUSTAR COAL MINEFORWARD PROGRAM

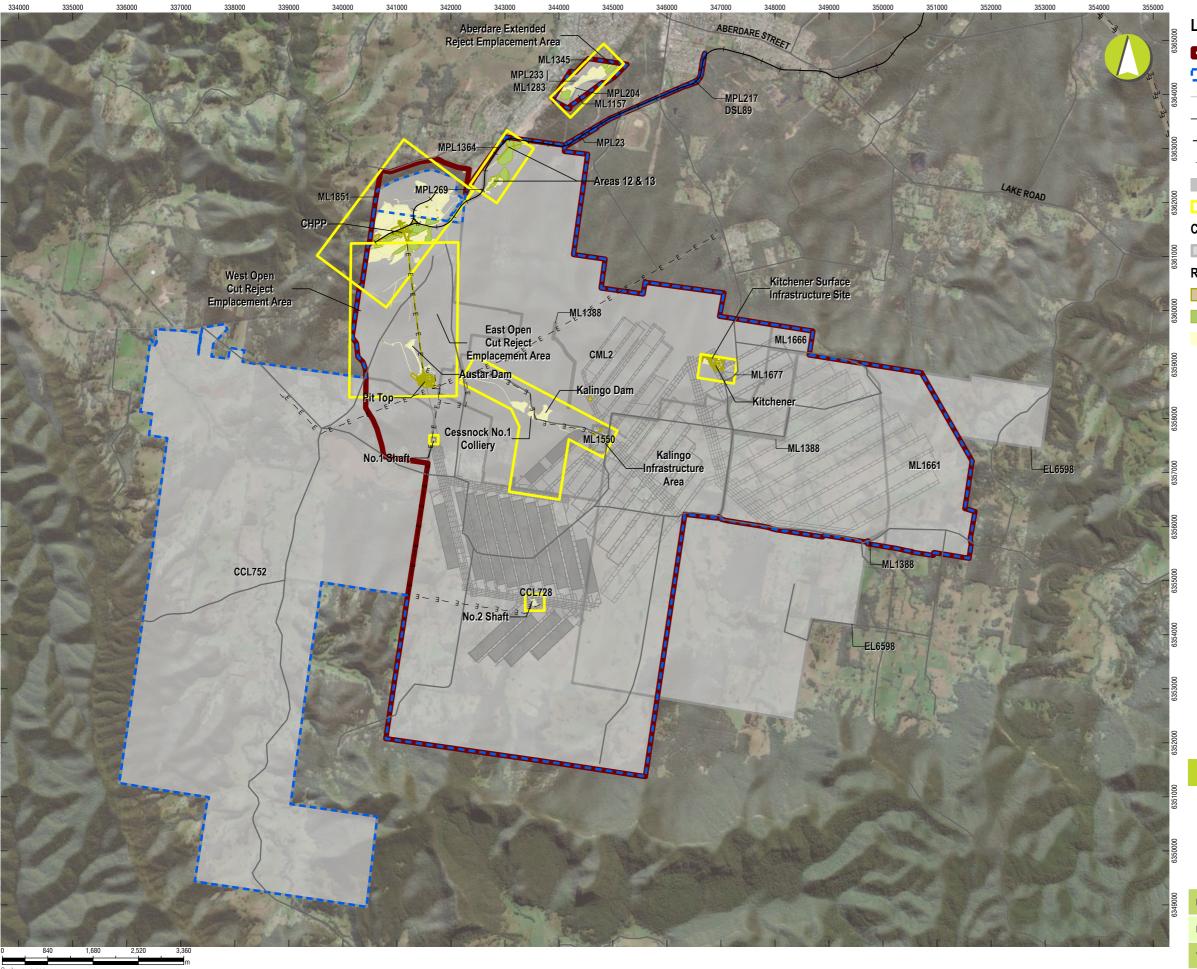
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Attachment 3 - Plans

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Forward Program (LARGE MINE) v2.





Colliery Holding Boundary

— Austar Mine Plan

---- Road

— Railway

− E Electricity Transmission Line

Historic Workings

Inset Boundaries (see detailed figures)

Current Authorisations

Coal - Current Titles

Rehabilitation Phase

Decommissioning

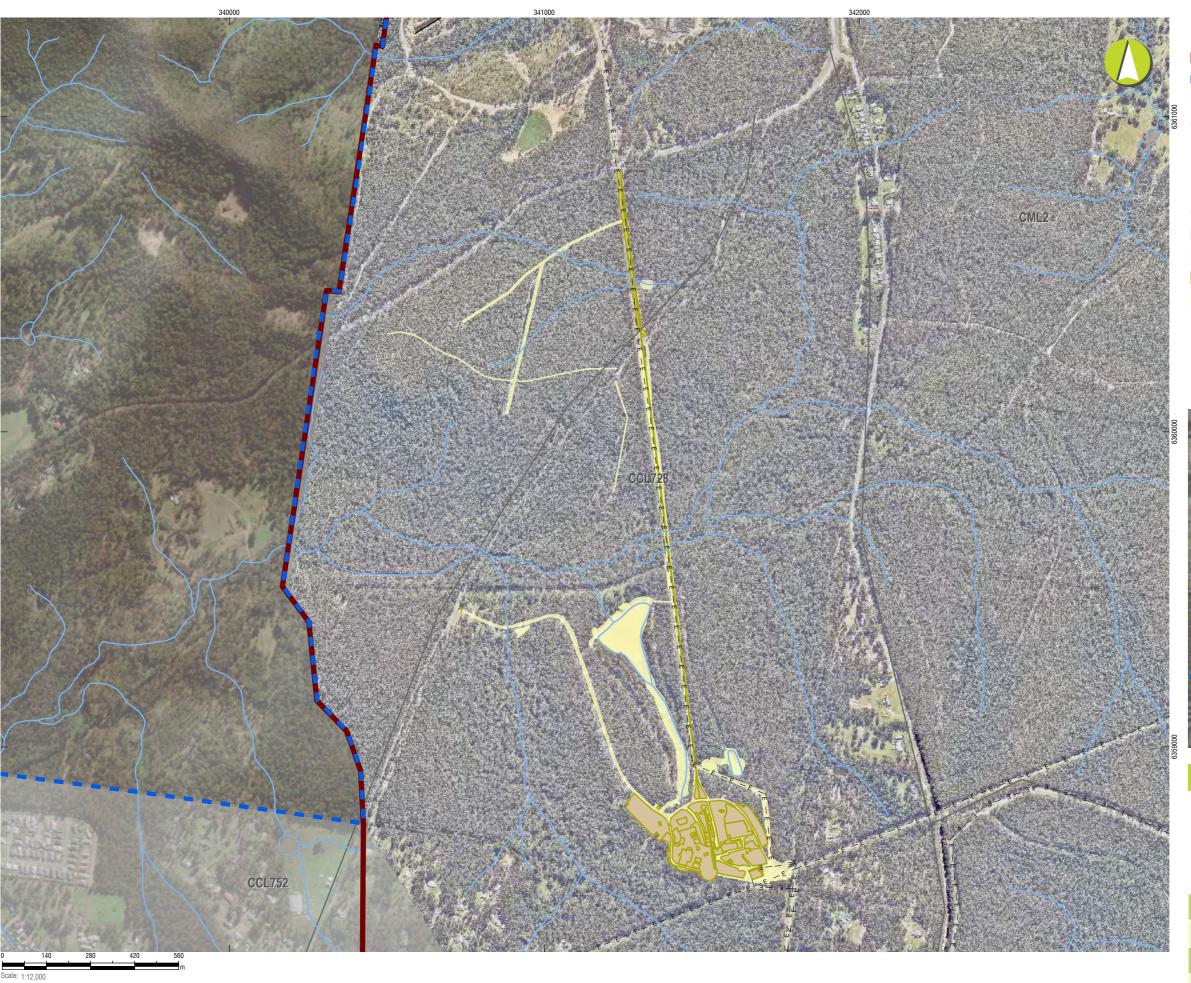
Ecosystem and Land Use Establishment

Previous Disturbance

Austar Coal ARRFP 2023

Mining and Rehabilitation Year 1 - FY 2024

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on file submission
Data theme submission ID No.	2259
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	26/09/2023





Colliery Holding Boundary

Austar Mine Plan

---- Road

— Railway

− E Electricity Transmission Line

--- Creek lines

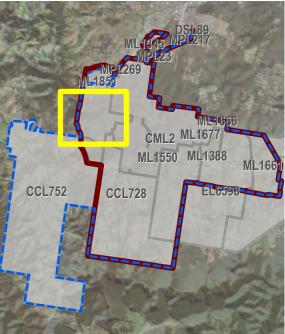
Current Authorisations

Coal - Current Titles

Forecast Area Type - Year 1 (2024)

Decommissioning

Previous Disturbance

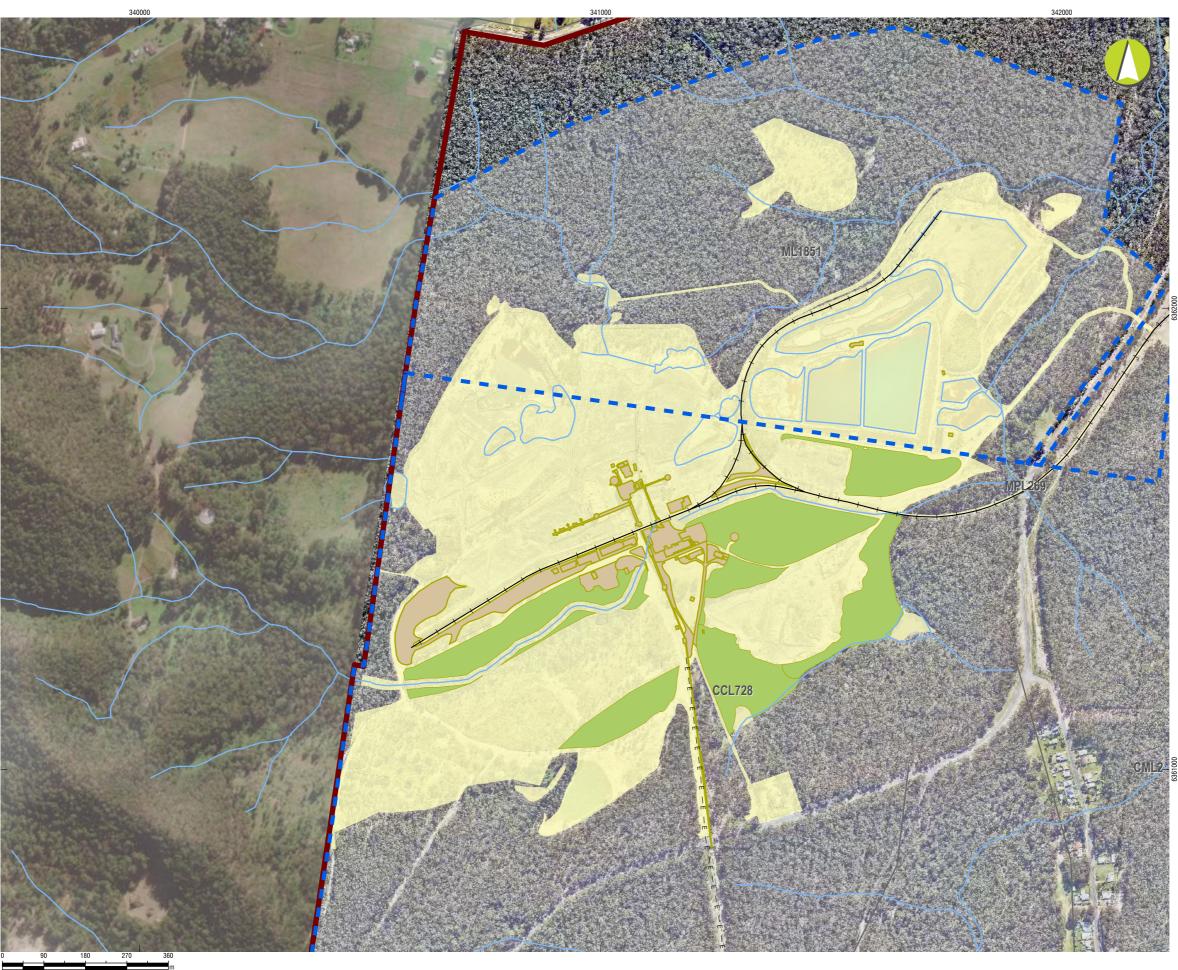


Austar Coal ARRFP 2023

CMA 1 - Austar Pit Top Facilities

Mining and Rehabilitation Year 1 - FY 2024

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	27/09/2023





Colliery Holding Boundary

---- Road

— Railway

− E Electricity Transmission Line

--- Creek lines

Current Authorisations

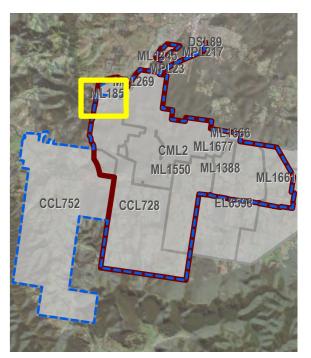
Coal - Current Titles

Forecast Area Type - Year 1 (2024)

Decommissioning

Ecosystem and Land Use Establishment

Previous Disturbance



Austar Coal ARRFP 2023

CMA 2 - Pelton CHPP - Inset 1

Mining and Rehabilitation Year 1 - FY 2024

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	27/09/2023





Colliery Holding Boundary

Austar Mine Plan

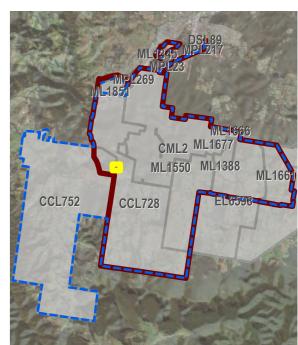
− E Electricity Transmission Line

--- Creek lines

Current Authorisations

Coal - Current Titles

Previous Disturbance



Austar Coal ARRFP 2023

CMA 3 - No.1 Shaft - Inset

Mining and Rehabilitation Year 1 - FY 2024

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	27/09/2023



LEGEND

Project Approval Boundary

Colliery Holding Boundary

Austar Mine Plan

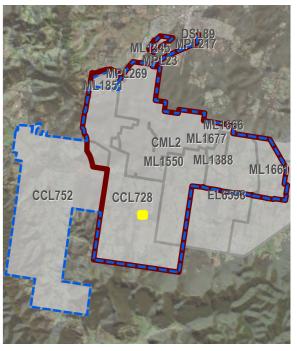
− E Electricity Transmission Line

--- Creek lines

Current Authorisations

Coal - Current Titles

Previous Disturbance



Austar Coal ARRFP 2023

CMA 4 - No.2 Shaft - Inset

Mining and Rehabilitation Year 1 - FY 2024

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	27/09/2023







Colliery Holding Boundary

Austar Mine Plan

---- Road

− E Electricity Transmission Line

--- Creek lines

Historic Workings

Current Authorisations

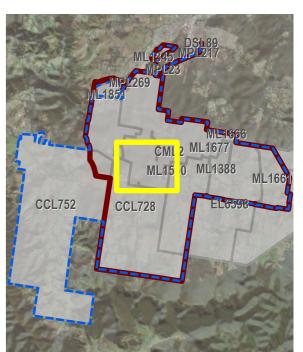
Coal - Current Titles

Forecast Area Type - Year 1 (2024)

Forecast Land Prepared for Rehabilitation (2024)

Decommissioning

Previous Disturbance



Austar Coal ARRFP 2023

CMA 5 - Cessnock No.1 Colliery / Kalingo Infrastructure Area

Mining and Rehabilitation Year 1 - FY 2024

Mine name	Austar Coal Mine	
Plan name		
Year of anticipated relinquishment	TBA on final submission	
Data theme submission ID No.		
Spatial Reference	GDA2020 MGA Zone 56	
Plan date (date created)	27/09/2023	







Colliery Holding Boundary

Austar Mine Plan

---- Road

Creek lines

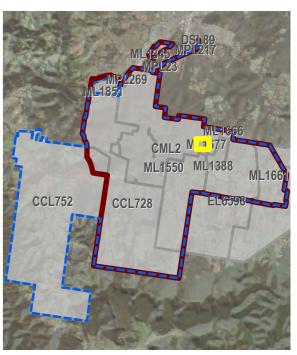
Current Authorisations

Coal - Current Titles

Forecast Area Type - Year 1 (2024)

Decommissioning

Previous Disturbance



Austar Coal ARRFP 2023

CMA 6 - Kitchener Surface Infrastructure Site

Mining and Rehabilitation Year 1 - FY 2024

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	27/09/2023





Colliery Holding Boundary

--- Creek lines

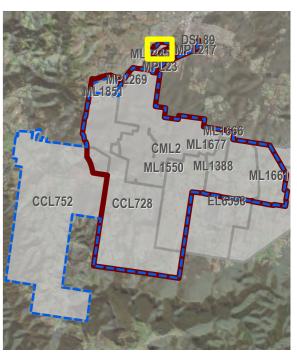
Current Authorisations

Coal - Current Titles

Forecast Area Type - Year 1 (2024)

Ecosystem and Land Use Establishment

Previous Disturbance



Austar Coal ARRFP 2023

CMA 7 - Aberdare Extended Emplacement Area

Mining and Rehabilitation Year 1 - FY 2024

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	27/09/2023





Colliery Holding Boundary

---- Road

— Railway

Creek lines

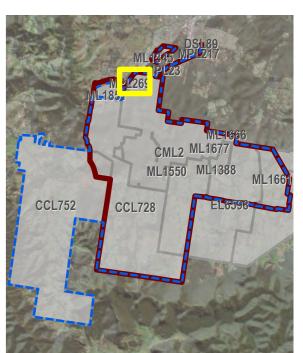
Current Authorisations

Coal - Current Titles

Forecast Area Type - Year 1 (2024)

Ecosystem and Land Use Establishment

Previous Disturbance

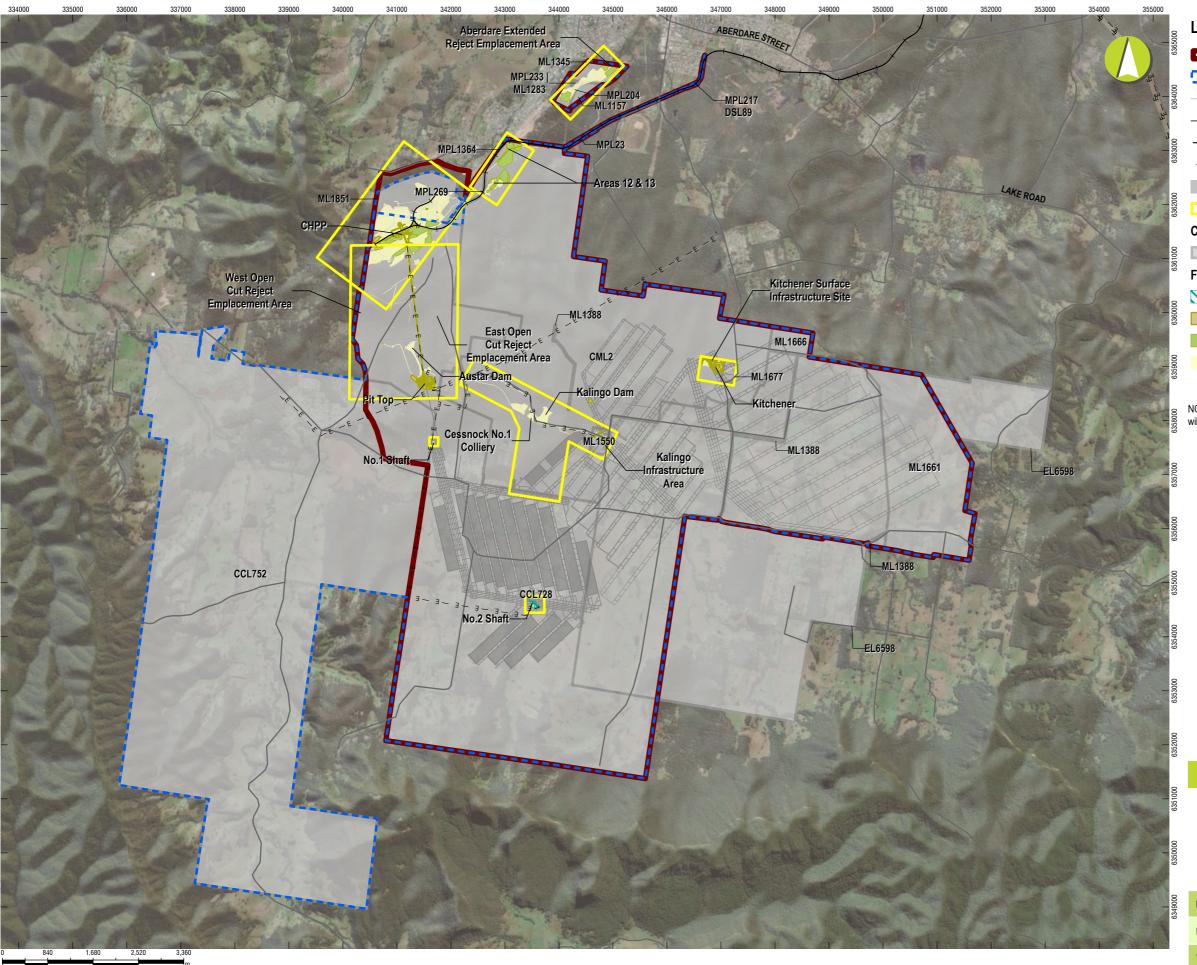


Austar Coal ARRFP 2023

CMA 8 - Bellbird Areas 12 and 13 - Inset

Mining and Rehabilitation Year 1 - FY 2024

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	27/09/2023



。 LEGEND

Project Aproval Boundary

Colliery Holding Boundary

— Austar Mine Plan

---- Road

── Railway

-
■ Electricity Transmission Line

Historic Workings

Inset Boundaries (see detailed figures)

Current Authorisations

Coal - Current Titles

Forecast Area - Year 2 (FY2025)

Forecast Land Prepared for Rehabilitation (FY2025)

Decommissioning

Ecosystem and Land Use Establishment

Previous Disturbance

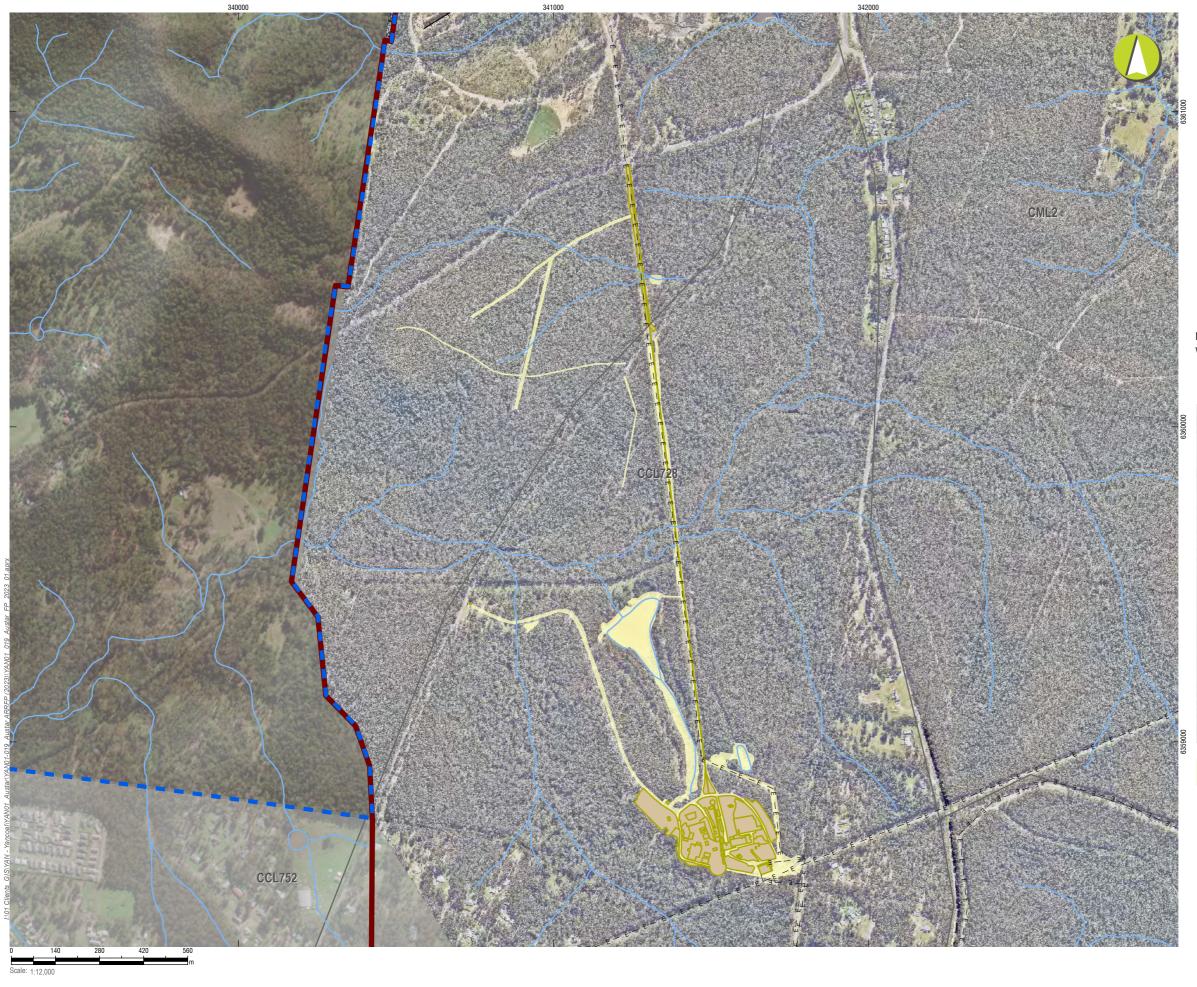
NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.

Austar Coal ARRFP 2023

Mining and Rehabilitation Year 2 - FY 2025

PLAN 2B

Austar Coal Mine
TBA on file submission
2338
GDA2020 MGA Zone 56
26/09/2023



INTEGRATED ENVIRONMENTA MANAGEMENT AUSTRALIA Sheet Size : A3 www.iema.co

LEGEND

Project Approval Boundary

Colliery Holding Boundary

— Austar Mine Plan

---- Road

— Railway

− E Electricity Transmission Line

Creek lines

Current Authorisations

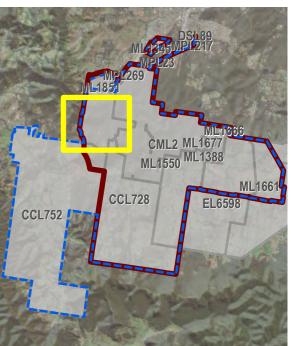
Coal - Current Titles

Forecast Area - Year 2 (FY2025)

Decommissioning

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.



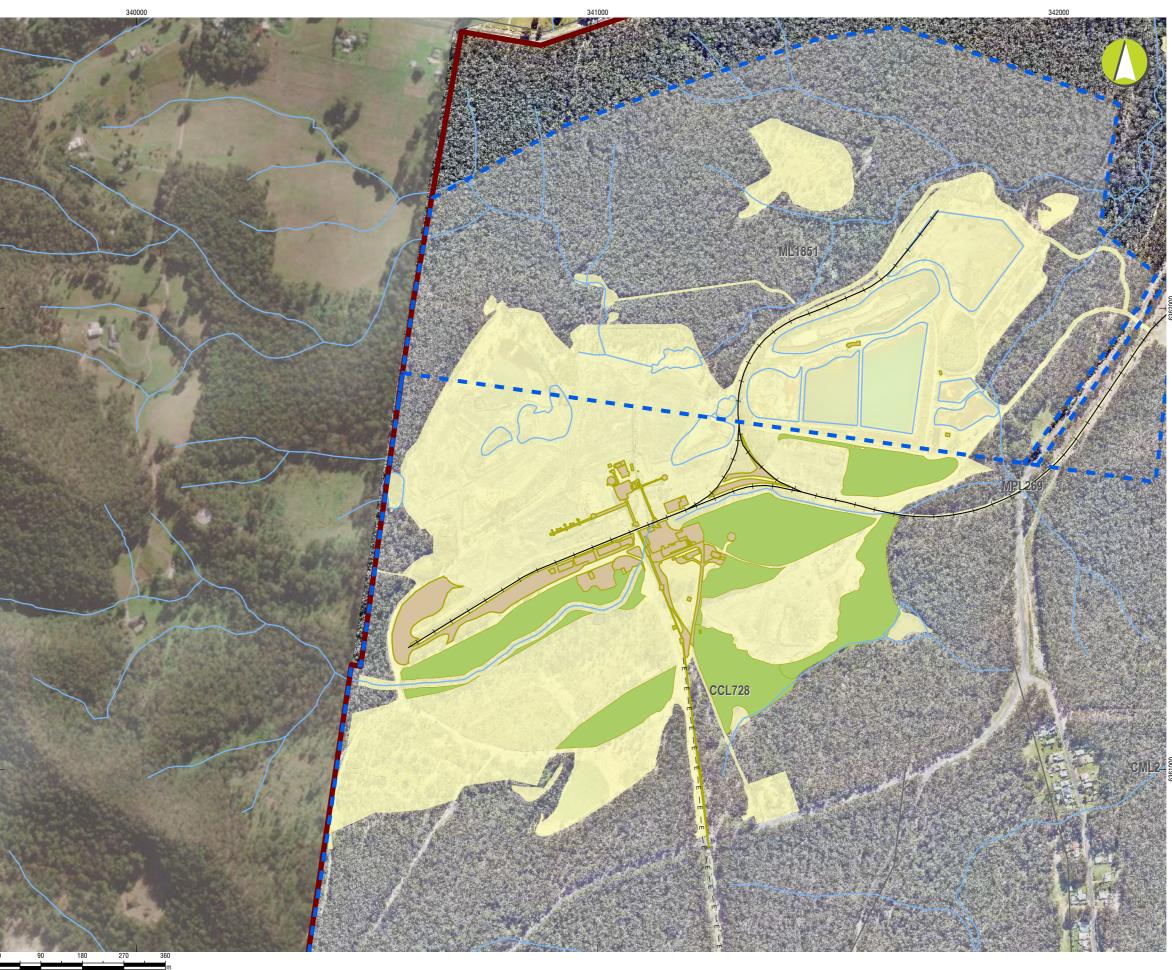
Austar Coal ARRFP 2023

CMA 1 - Austar Pit Top Facilities

Mining and Rehabilitation Year 2 - FY 2025

PLAN 2B

I LAN 2B		
Mine name	Austar Coal Mine	
Plan name		
/ear of anticipated relinquishment	TBA on final submission	
Data theme submission ID No.		
Spatial Reference	GDA2020 MGA Zone 56	
Plan date (date created)	27/09/2023	





LEGEND

Project Approval Boundary

Colliery Holding Boundary

---- Road

— Railway

− E Electricity Transmission Line

Creek lines

Current Authorisations

Coal - Current Titles

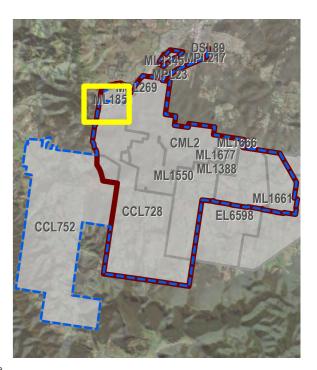
Forecast Area - Year 2 (FY2025)

Decommissioning

Ecosystem and Land Use Establishment

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.



Austar Coal ARRFP 2023

CMA 2 - Pelton CHPP - Inset 1

Mining and Rehabilitation Year 2 - FY 2025

PLAN 2B

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	27/09/2023

Source:





Colliery Holding Boundary

Austar Mine Plan

− E Electricity Transmission Line

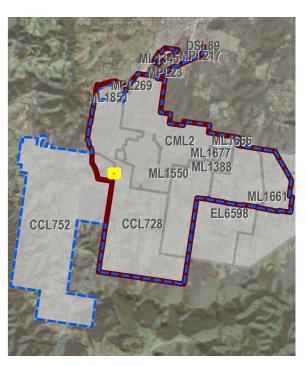
Creek lines

Current Authorisations

Coal - Current Titles

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.



Austar Coal ARRFP 2023

CMA 3 - No.1 Shaft - Inset

Mining and Rehabilitation Year 2 - FY 2025

PLAN 2B

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	27/09/2023



LEGEND

Project Approval Boundary

Colliery Holding Boundary

Austar Mine Plan

− E Electricity Transmission Line

Creek lines

Current Authorisations

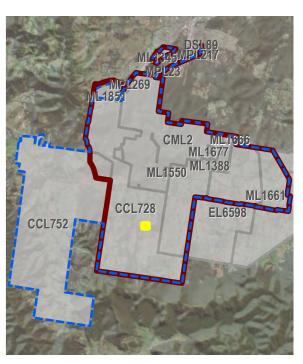
Coal - Current Titles

Forecast Area - Year 2 (FY2025)

Forecast Land Prepared for Rehabilitation (FY2026)

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.



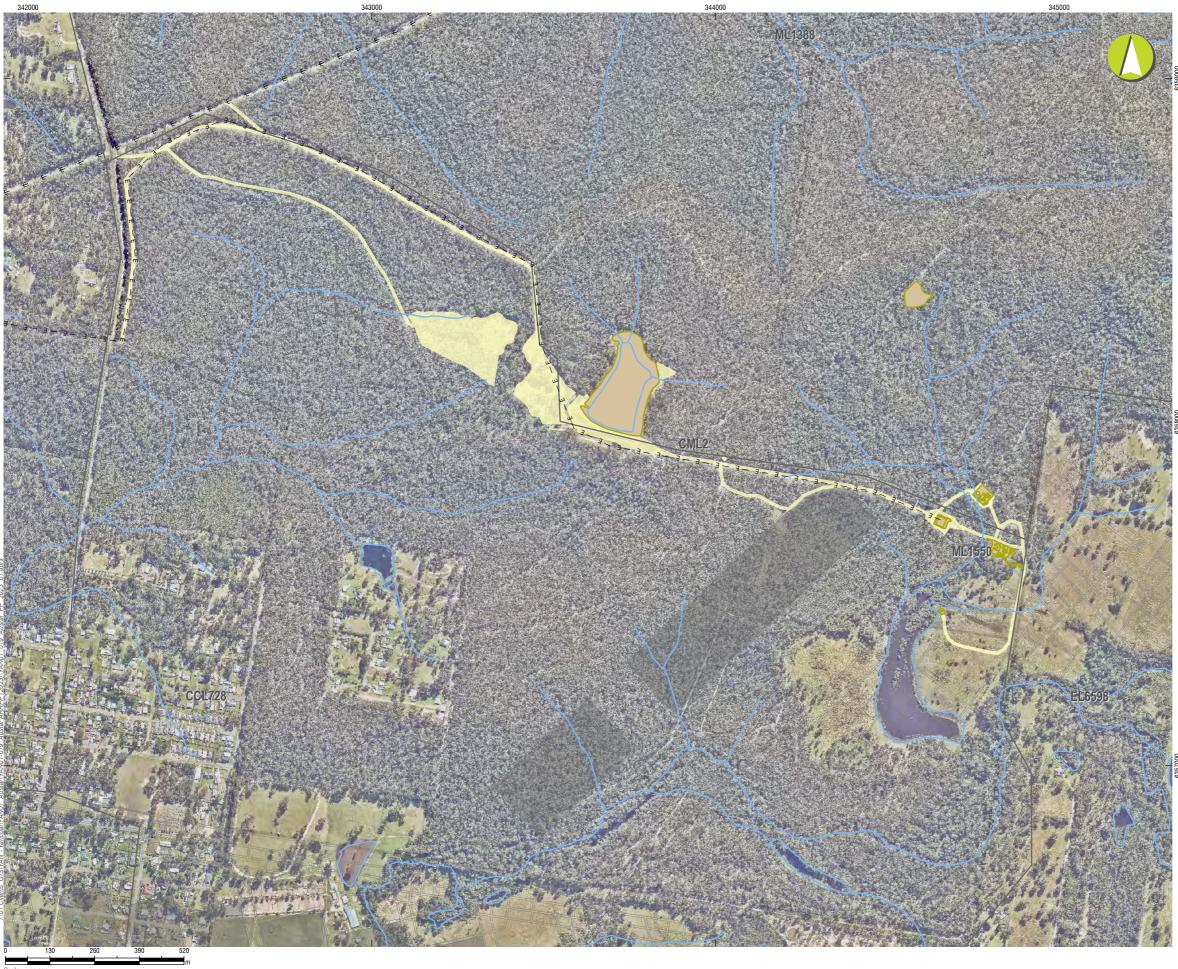
Austar Coal ARRFP 2023

CMA 4 - No.2 Shaft - Inset

Mining and Rehabilitation Year 2 - FY 2025

PLAN 2B

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	27/09/2023



LEGEND

Project Approval Boundary

Colliery Holding Boundary

Austar Mine Plan

---- Road

− E Electricity Transmission Line

Creek lines

Historic Workings

Current Authorisations

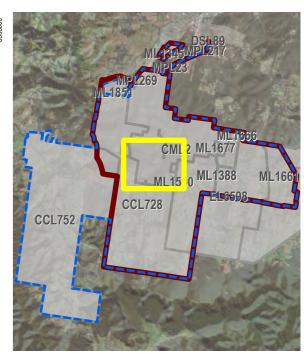
Coal - Current Titles

Forecast Area - Year 2 (FY2025)

Decommissioning

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.



Austar Coal ARRFP 2023

CMA 5 - Cessnock No.1 Colliery / Kalingo Infrastructure Area

Mining and Rehabilitation Year 2 - FY 2025

PLAN 2B

FLA	N ZD
Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	27/09/2023

INTEGRATED ENVIRONMENTAL MANAGEMENT AUSTRALIA



Project Approval Boundary

Colliery Holding Boundary

Austar Mine Plan

---- Road

Creek lines

Current Authorisations

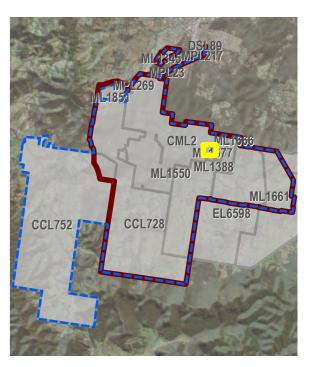
Coal - Current Titles

Forecast Area - Year 2 (FY2025)

Decommissioning

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.



Austar Coal ARRFP 2023

CMA 6 - Kitchener Surface Infrastructure Site

Mining and Rehabilitation Year 2 - FY 2025

PLAN 2B

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	27/09/2023





Colliery Holding Boundary

--- Creek lines

Current Authorisations

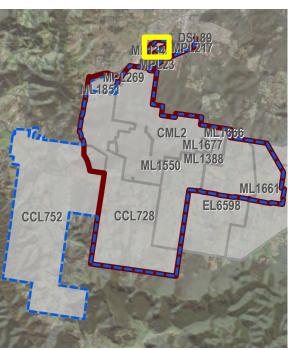
Coal - Current Titles

Forecast Area - Year 2 (FY2025)

Ecosystem and Land Use Establishment

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.



Austar Coal ARRFP 2023

CMA 7 - Aberdare Extended Emplacement Area

Mining and Rehabilitation Year 2 - FY 2025

PLAN 2B

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	27/09/2023





Colliery Holding Boundary

---- Road

— Railway

Creek lines

Current Authorisations

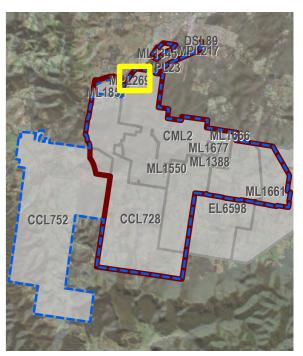
Coal - Current Titles

Forecast Area - Year 2 (FY2025)

Ecosystem and Land Use Establishment

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.



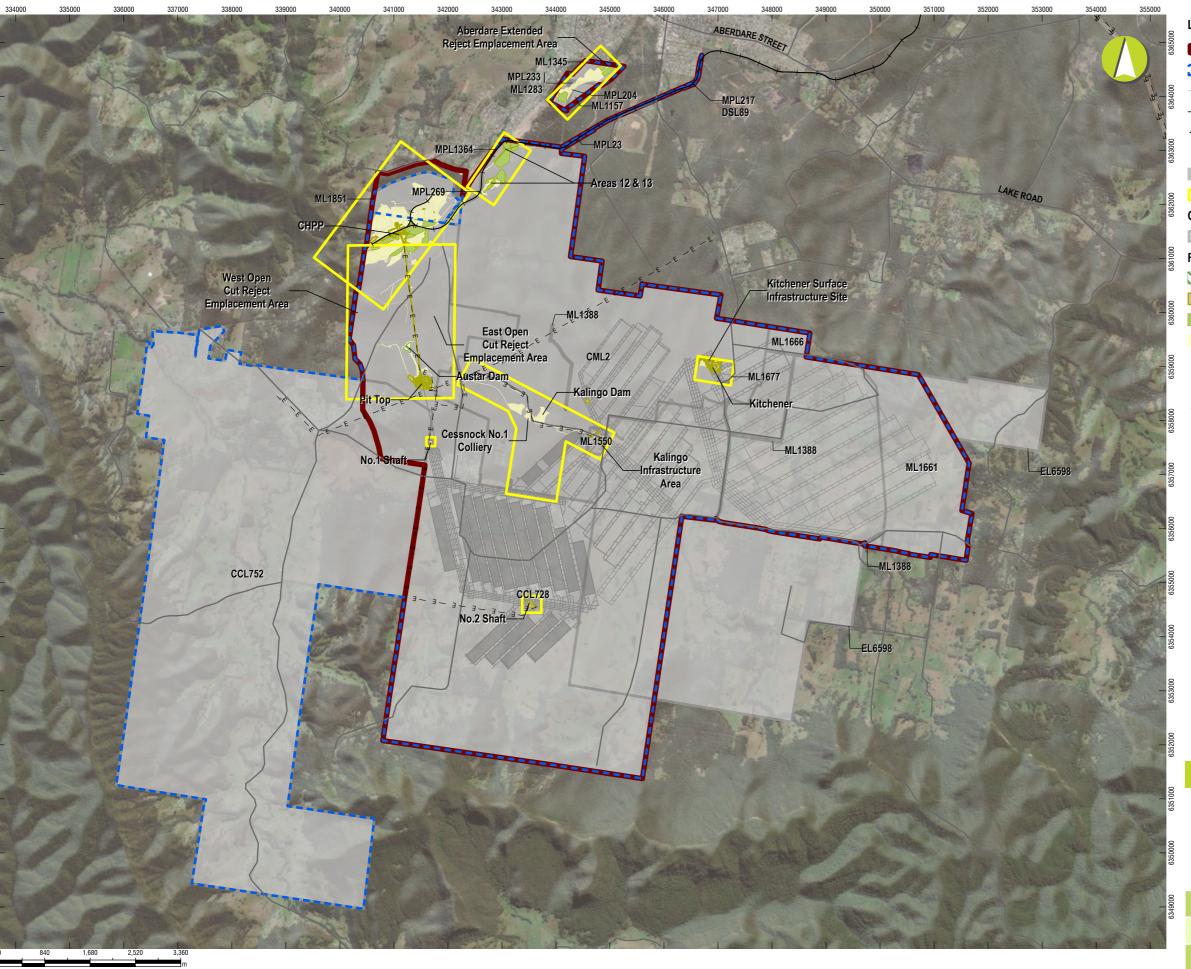
Austar Coal ARRFP 2023

CMA 8 - Bellbird Areas 12 and 13 - Inset

Mining and Rehabilitation Year 2 - FY 2025

PLAN 2B

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	27/09/2023





Project Aproval Boundary

Colliery Holding Boundary

—— Austar Mine Plan

---- Road

— Railway

-
■ Electricity Transmission Line

Historic Workings

Inset Boundaries (see detailed figures)

Current Authorisations

Coal - Current Titles

Forecast Area - Year 3 (FY2026)

Forecast Land Prepared for Rehabilitation (FY2026)

Decommissioning

Ecosystem and Land Use Establishment

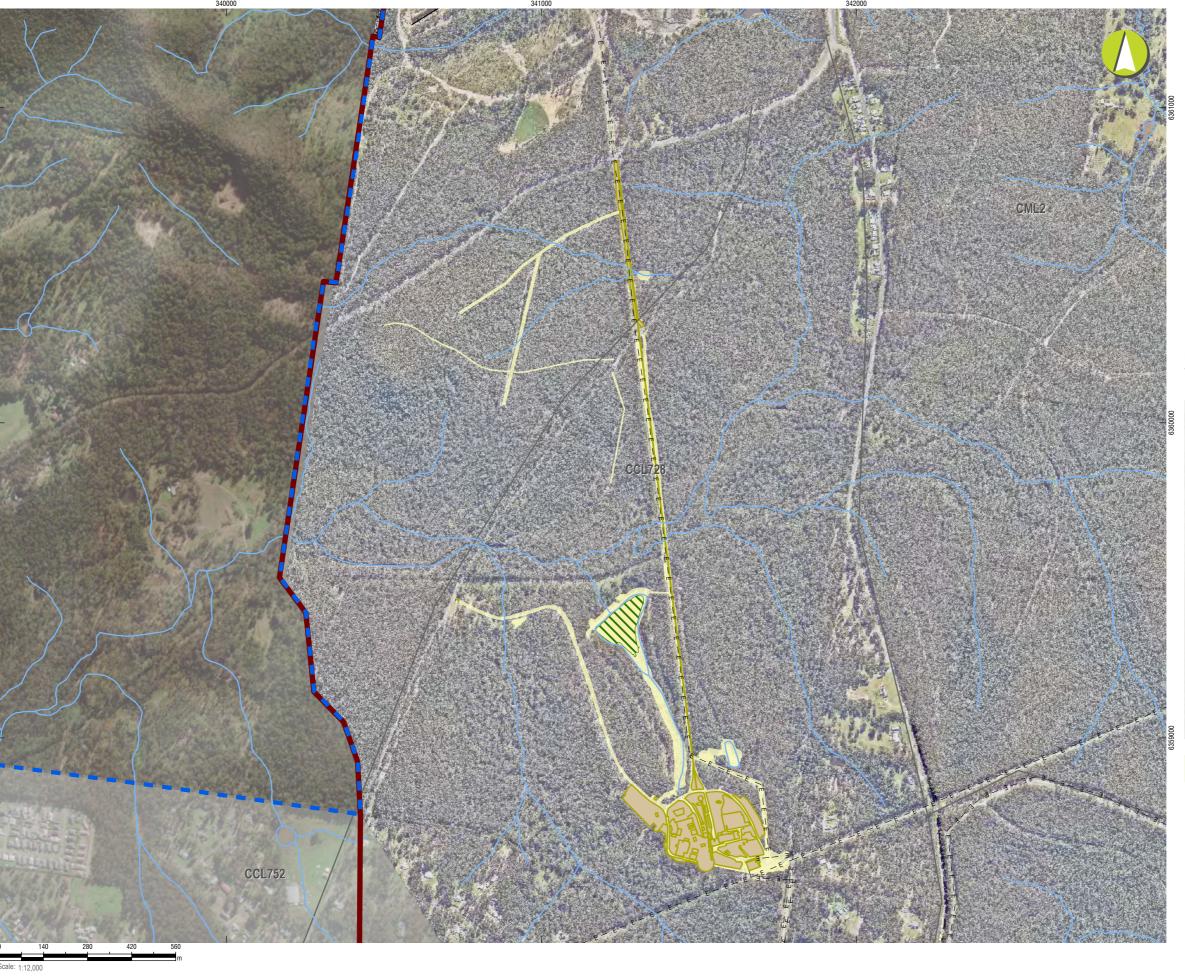
Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.

Austar Coal ARRFP 2023

Mining and Rehabilitation Year 3 - FY 2026

Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on file submission
Data theme submission ID No.	6196
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	28/09/2023



Project Approval Boundary

Colliery Holding Boundary

— Austar Mine Plan

---- Road

— Railway

− E Electricity Transmission Line

Creek lines

Current Authorisations

Coal - Current Titles

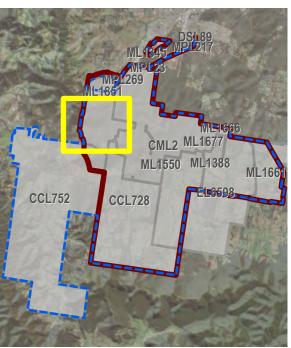
Forecast Area - Year 3 (FY2026)

Forecast Land Prepared for Rehabilitation (FY2026)

Decommissioning

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.

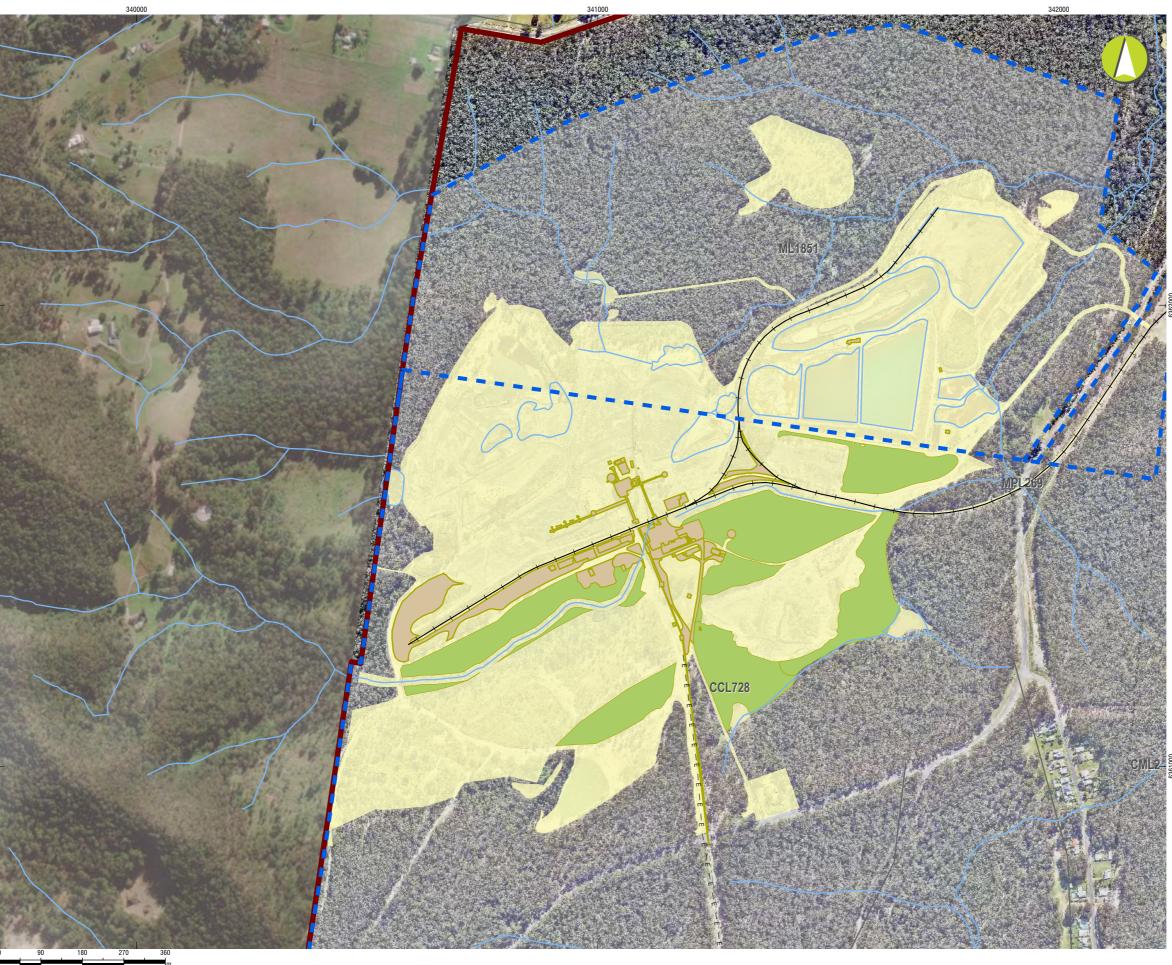


Austar Coal ARRFP 2023

CMA 1 - Austar Pit Top Facilities

Mining and Rehabilitation Year 3 - FY 2026

FLA	N 20
Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	6196
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	28/09/2023





Project Approval Boundary

Colliery Holding Boundary

---- Road

— Railway

-
■ Electricity Transmission Line

Creek lines

Current Authorisations

Coal - Current Titles

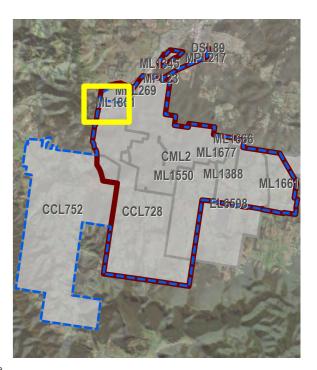
Forecast Area - Year 3 (FY2026)

Decommissioning

Ecosystem and Land Use Establishment

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.



Austar Coal ARRFP 2023

CMA 2 - Pelton CHPP - Inset 1

Mining and Rehabilitation Year 3 - FY 2026

I LAN 20		
Mine name	Austar Coal Mine	
Plan name		
Year of anticipated relinquishment	TBA on final submission	
Data theme submission ID No.	6196	
Spatial Reference	GDA2020 MGA Zone 56	
Plan date (date created)	28/09/2023	





Colliery Holding Boundary

Austar Mine Plan

− E Electricity Transmission Line

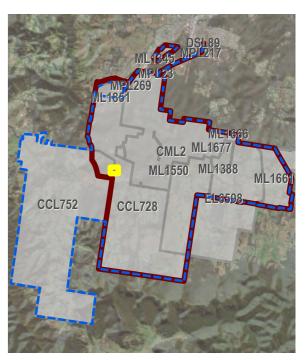
Creek lines

Current Authorisations

Coal - Current Titles

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.



Austar Coal ARRFP 2023

CMA 3 - No.1 Shaft - Inset

Mining and Rehabilitation Year 3 - FY 2026

I EAN 29		
Mine name	Austar Coal Mine	
Plan name		
Year of anticipated relinquishment	TBA on final submission	
Data theme submission ID No.	6196	
Spatial Reference	GDA2020 MGA Zone 56	
Plan date (date created)	28/09/2023	



Project Approval Boundary

Colliery Holding Boundary

Austar Mine Plan

− E Electricity Transmission Line

Creek lines

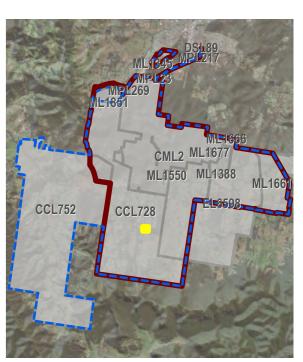
Current Authorisations

Coal - Current Titles

Forecast Area - Year 3 (FY2026)

Decommissioning

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.

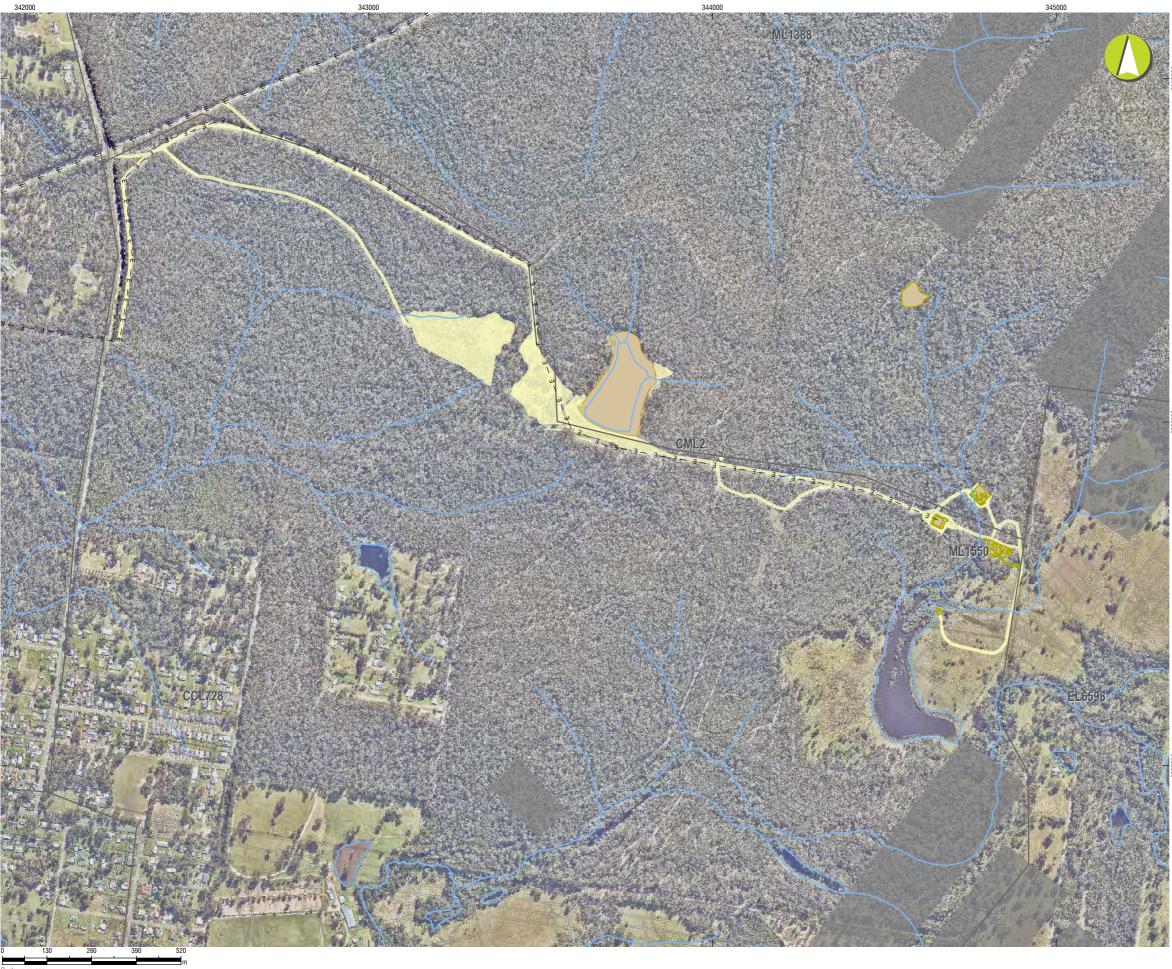


Austar Coal ARRFP 2023

CMA 4 - No.2 Shaft - Inset

Mining and Rehabilitation Year 3 - FY 2026

I LAN 20		
Mine name	Austar Coal Mine	
Plan name		
Year of anticipated relinquishment	TBA on final submission	
Data theme submission ID No.	6196	
Spatial Reference	GDA2020 MGA Zone 56	
Plan date (date created)	26/09/2023	





Colliery Holding Boundary

Austar Mine Plan

---- Road

-
■ Electricity Transmission Line

Creek lines

Completed workings

Current Authorisations

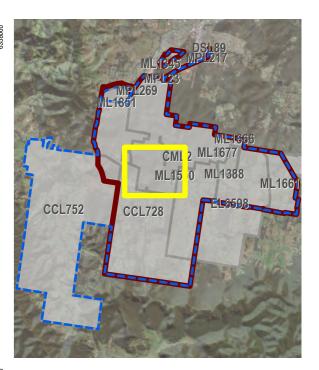
Coal - Current Titles

Forecast Area - Year 3 (FY2026)

Decommissioning

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.



Austar Coal ARRFP 2023

CMA 5 - Cessnock No.1 Colliery / Kalingo Infrastructure Area

Mining and Rehabilitation Year 3 - FY 2026

I LAN 20		
Mine name	Austar Coal Mine	
Plan name		
Year of anticipated relinquishment	TBA on final submission	
Data theme submission ID No.	6196	
Spatial Reference	GDA2020 MGA Zone 56	
Plan date (date created)	28/09/2023	





Colliery Holding Boundary

Austar Mine Plan

---- Road

Creek lines

Completed workings

Current Authorisations

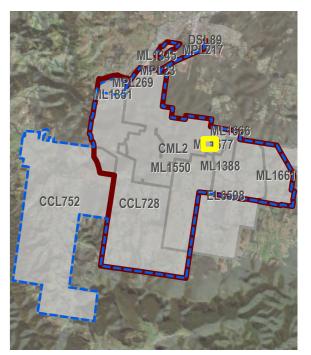
Coal - Current Titles

Forecast Area - Year 3 (FY2026)

Decommissioning

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.



Austar Coal ARRFP 2023

CMA 6 - Kitchener Surface Infrastructure Site

Mining and Rehabilitation Year 3 - FY 2026

	1 20
Mine name	Austar Coal Mine
Plan name	
Year of anticipated relinquishment	TBA on final submission
Data theme submission ID No.	6196
Spatial Reference	GDA2020 MGA Zone 56
Plan date (date created)	28/09/2023





Colliery Holding Boundary

--- Creek lines

Current Authorisations

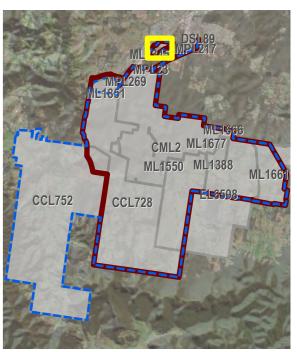
Coal - Current Titles

Forecast Area - Year 3 (FY2026)

Ecosystem and Land Use Establishment

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.

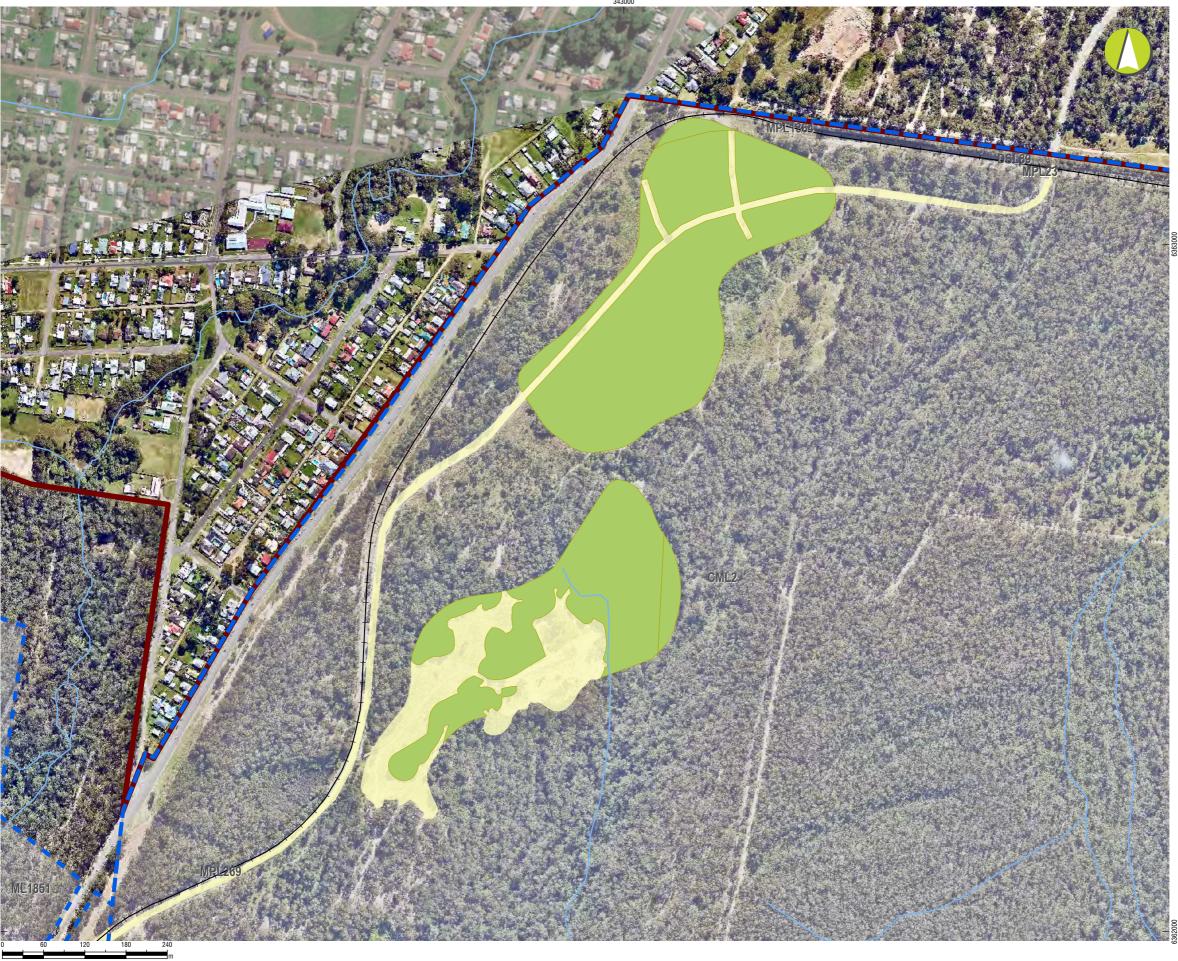


Austar Coal ARRFP 2023

CMA 7 - Aberdare Extended Emplacement Area

Mining and Rehabilitation Year 3 - FY 2026

I LAN 20		
Mine name	Austar Coal Mine	
Plan name		
Year of anticipated relinquishment	TBA on final submission	
Data theme submission ID No.	6196	
Spatial Reference	GDA2020 MGA Zone 56	
Plan date (date created)	28/09/2023	



Project Approval Boundary

Colliery Holding Boundary

---- Road

— Railway

Creek lines

Current Authorisations

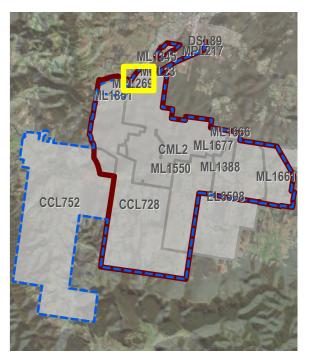
Coal - Current Titles

Forecast Area - Year 3 (FY2026)

Ecosystem and Land Use Establishment

Previous Disturbance

NOTE: All land prepared for rehabilitation occurred in Forecast Year 1 will continue to be prepared within the subsequent forward program years.



Austar Coal ARRFP 2023

CMA 8 - Bellbird Areas 12 and 13 - Inset

Mining and Rehabilitation Year 3 - FY 2026

I LAN 20		
Mine name	Austar Coal Mine	
Plan name		
Year of anticipated relinquishment	TBA on final submission	
Data theme submission ID No.	6196	
Spatial Reference	GDA2020 MGA Zone 56	
Plan date (date created)	28/09/2023	