

# **Duralie Coal CCC Meeting**

Presentation –
Company Report & Overview
of Activities

August 2023

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#### **Table of Contents**

- 1. Agenda Item 7a Progress at the Mine
- 2. Agenda Item 7b Environmental Reporting and Monitoring
- 3. Agenda Item 7c Community Complaints
- 4. Agenda Item 7d Community Programs
- 5. Agenda Item 7e Mine Closure Planning



#### 1. Progress at the Mine

	Total Waste (BCM)	Total ROM Coal (T)
Q1 2023	707,326	0
Q2 2023	467,228	0
Total	1,174,554	0

#### **Bulk Earthworks and Shaping: Jan – June 2023**

- Mining operations at Duralie were completed in December 2021 and the site has transitioned into closure.
- Bulk earthworks and rehabilitation works recommenced in November 2022 and has continued during 2023. Current activities include partial backfilling of Weismantel Pit.
- PAF rehandle and bulk earthworks activities will cease in September 2023.
   Rehabilitation is scheduled to recommence following completion of DCM detailed mine closure plan.

#### 2. Environmental Reporting & Regulators

Management Area	Project	Status
Reporting	<ul> <li>Duralie Coal Mine Annual Review 2023</li> <li>Duralie EPL 11701 Annual Return 2023</li> <li>NPI and NGER reporting 2022</li> </ul>	<ul> <li>The 2023 Duralie Coal Mine Annual Review is due for completion in September 2023.         Once completed the Annual Review will be distributed to the CCC members and placed on the Duralie Coal website.</li> <li>The Duralie EPL 11701 Annual Return 2023 is due for completion in September 2023.         The Annual Return will be made available on the EPA's public register.</li> <li>The NPI and NGER annual reporting requirements for the Duralie Coal Mine are due for completion at the end of the financial year, NPI and NGER data is currently being prepared and will be lodged with the relevant government agencies.</li> </ul>
Regulator	Regulatory Action	<ul> <li>Following an investigation by the Resources Regulator, DCPL was issued a Penalty Infringement Notice in December 2022 for not complying with Section 240 Notice directives to undertake closure planning which was previously issued in August 2021.</li> </ul>
	<ul> <li>Mining Operations Plan &amp; Rehabilitation Management Plan</li> </ul>	<ul> <li>Duralie Coal Mine Rehabilitation Management Plan (RMP) was updated in Q1 2023. The updated RMP is available on the Duralie Coal Website.</li> </ul>
	Environmental Management Plans – revision for closure	<ul> <li>DCPL have completed revisions to the Duralie Environmental Management Plans to reflect the current closure status of the DCM.</li> <li>The revised plans have been progressively submitted to DPIE for approval, all submitted plans have now been approved and have been made public on the Duralie Coal Website.</li> </ul>



#### 3. Environmental Management Plans & Monitoring



- a) Air Quality Management
- b) Noise Management
- c) Water Management
- d) Rehabilitation Management
- e) Biodiversity Management
- f) Mine Closure Planning

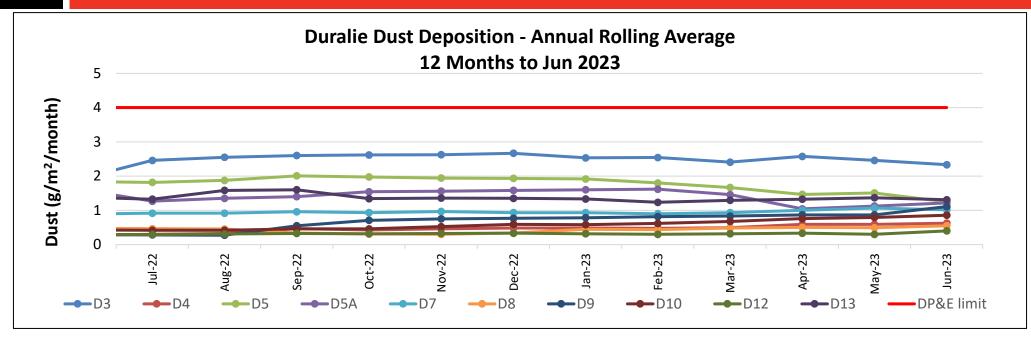


#### **3a. Air Quality Management**

Management Area	Project	Status
Air quality monitoring	<ul> <li>Real-time air quality system</li> <li>HVAS &amp; dust gauge monitoring network.</li> </ul>	<ul> <li>The real-time air quality TEOM monitor on Martins Crossing Rd continues to operate.</li> <li>General ambient PM10 dust levels have been slowly increasing due to decreased rainfall.</li> <li>No triggers have been received relating to bulk earthworks including rehandle and rehabilitation.</li> </ul>



#### 3a. Air Quality Management



Jul-22 D3 Very heavy - 60% dirt, 30% insects and 5% sand and %5 vegetation. Aug-22 D3 Very heavy - 60% polysaccharide slime, 30% vegetation and 10% insects.

#### Guide to Descriptions used by Laboratory

Coal: Black sharp angled grains with glossy conchoidal fractures or dull with cellular features.

Dirt/Minerals: Subhedral to euhedral crystalline grains including fine sand, clay and other fine mineral particulates.

Insects: Whole insects such as spiders, ants, moths or outer parts of insects including wings, legs and exoskeletons.

Vegetation: Plant debris and algae including trichomes, decomposed organic matter and charred particulates showing characteristic cellular plant structures.

Polysaccharide Slime: Slimy gelatinous material including decomposed soft body parts of insects and vegetation.

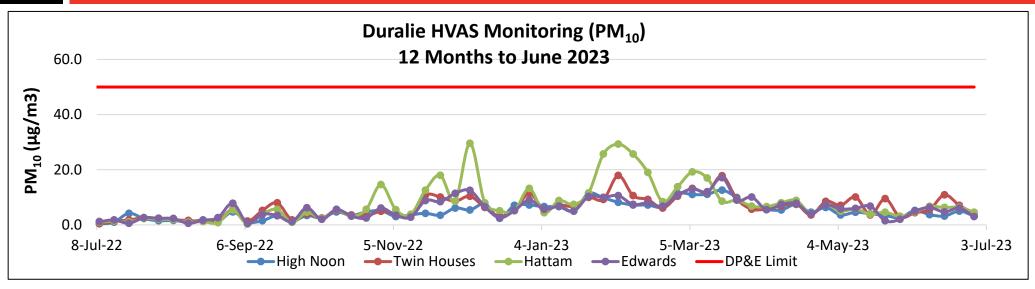
Copper Sludge: Blue-green subhedral to euhedral crystalline salts, commonly precipitated from the copper sulphate algaecide solution.

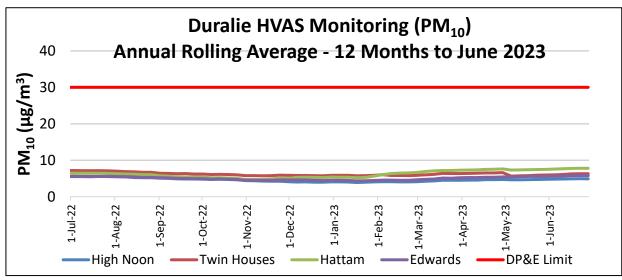
**Contamination:** Gelatinous material such as bird droppings

Due to frequent contamination of dust gauges the HVAS results should also be used when interpreting results.



#### 3a. Air Quality Management





- All sites below DPIE limit. Typically low results during winter and higher during spring/summer.
- HVAS results provide more reliable data compared to dust deposition results and should be referred to when interpreting dust emissions.



#### **3b. Noise Management**

Management Area	Project	Status
Noise Monitoring	<ul><li>Routine Monitoring</li><li>Sound Power Monitoring</li></ul>	<ul> <li>Routine quarterly monitoring recommenced with the recommencement of bulk earth works in November 2022.</li> <li>Noise reports for Q4 2022, Q1 and Q2 2023 are available on the Duralie Coal website.</li> <li>Sound power monitoring of the mobile plant fleet was completed in Q2 2023.</li> </ul>
Noise Management Plan	Real-Time Noise Management	<ul> <li>Real-time noise monitors continue to operate to the North of the operation on Martins Crossing Rd.</li> <li>No noise alerts have been attributed to bulk earthworks including rehandle and rehabilitation.</li> </ul>

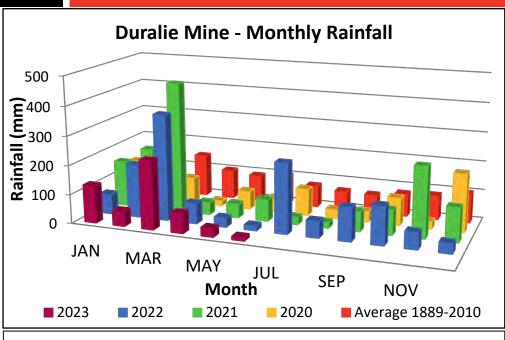


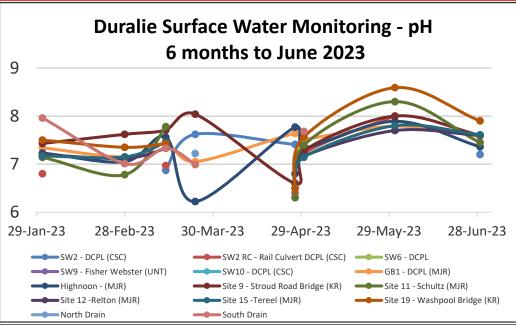
#### **3c. Water Management**

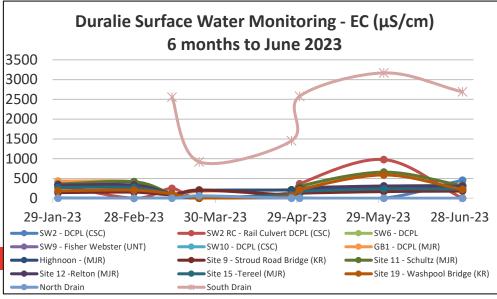
Management Area	Project	Status
Site Water Management	Annual water balance review.	<ul> <li>The 2022 annual site water balance has been prepared. A summary will be included in the Annual Review 2022/23 and will be available on the Duralie Coal website.</li> </ul>
Surface Water	Routine monitoring	<ul> <li>Below average rainfall has been received during 2023.</li> <li>Driest June since 1970 (based on Stroud Post Office Data).</li> <li>Routine and event surface water monitoring has been completed. All sites generally within Duralie water quality performance indicators. No obvious trending towards performance indicators.</li> </ul>
	Irrigation	No irrigation has been undertaken in the first flush irrigation areas since 2018.
Groundwater	Routine monitoring	<ul> <li>Routine monitoring has been completed and the results continue to indicate consistency with the model trends in the Environmental Assessment.</li> </ul>

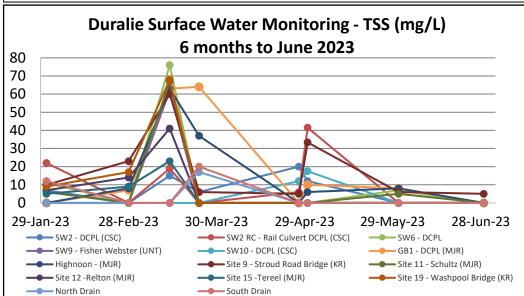


#### 3c. Water Management









#### 3d. Rehabilitation Management

Management Area	Project	Status
Rehabilitated Waste emplacements	Rehabilitation Maintenance	<ul> <li>Slashing of the Duralie pasture rehabilitation and removal of Acacia regrowth is scheduled for September 2023</li> <li>Weed control including hand removal in the established native rehabilitation is scheduled for October 2023.</li> </ul>
Rehabilitation Monitoring	<ul> <li>Vegetation Monitoring - Ecosystem Function Analysis</li> </ul>	<ul> <li>Rehabilitation monitoring was undertaken during May 2023. The report concluded that the revegetation works is on track to establish the desired woodlands and pasture.</li> </ul>



Photo: Weismantel waste emplacement area during rehandle and shaping works, Taken July 2023.



Photo: Clareval pit and southern waste emplacement area to be shaped, Taken July 2023.



#### **3e. Biodiversity Management**

Management Area	Project	Status
Biodiversity Offset	<ul><li>Revegetation Planning</li><li>Vegetation Monitoring</li></ul>	<ul> <li>3 year revegetation planting and infill plan has been completed. This project will include approximately 10,000 plants planted into 17 vegetation management areas to complete revegetation in the Biodiversity Offsets and Biodiversity Enhancement Areas.</li> <li>Annual vegetation monitoring within the biodiversity offset and enhancement areas was</li> </ul>
	vegetation monitoring	completed in May 2023. The report concluded that planted areas within the planted areas of the biodiversity areas are growing but will require more time to mature to reproductive age.
Tree Screening	<ul> <li>Bucketts Way/Duralie</li> <li>Rd Tree Screen</li> </ul>	• In Q2 2023, 1,200 Native Trees and Shrubs were planted in rural lease property near the corner of The Bucketts Way and Duralie Rd. The trees are planned to aid long term visual amenity from The Bucketts Way.
Weed Control	Weed Spraying     Program	<ul> <li>Weed spraying is due to commence in the Duralie Biodiversity Area and Duralie Mining Lease areas in early Spring targeting Blackberry, Crofton weed, Tobacco bush, Privet and Lantana.</li> </ul>



#### **3e. Biodiversity Management**

Management Area	Project	Status
Fauna	Nest Box Program	The Annual monitoring of all nest boxes is scheduled for October 2023. A summary of the nest box progress will be included in the next Annual Review. Approximately 90% occupancy in the rehabilitation area has continued in the initial years of installations.
Fauna Monitoring and Control	<ul><li>Feral Animal Monitoring</li><li>Feral Animal Control</li></ul>	<ul> <li>A feral animal survey was scheduled to commence in August 2023. The results of the feral animal monitoring report will partially inform control measures for Wild Dogs, Foxes, Feral Cats, and/or European Rabbits to be undertaken as part of DCMs feral animal control works.</li> <li>The DCM feral animal control program targeting feral cats, wild dogs and foxes has been is scheduled for to Spring 2023.</li> </ul>



Photo: Feathertail Glider, Taken March 2023.



Photo: Squirrel Glider leaf Nest, Taken March 2023.



#### **Mine Closure Progress**

- Duralie PAF rehandle works will be finalised in September 2023.
- No current date planned for recommencing rehabilitation.
- Coal handling infrastructure and rail siding removed.
- Site cleanups and removal of redundant equipment has been undertaken.
- Project Approval 08\_0203, ML 1427 and ML 1646 continue to be in force until the site is rehabilitated in accordance with the conditions and to the satisfaction of DPIE and the Resources Regulator.





Conveyor removal



TLO bin removal



Duralie Rail and Sleepers removed



Steel recycling

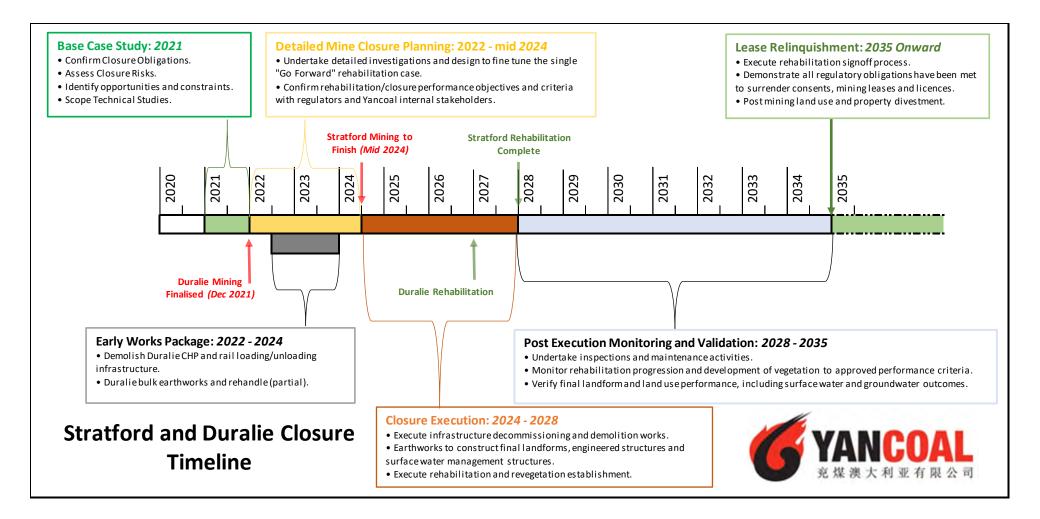


**Duralie Rail Siding** 



**Scrap Cutting** 







Management Area	Project	Status
Mine Closure Planning General	Detailed Mine     Closure Planning     Program	<ul> <li>DCPL Mine Closure Planning studies are ongoing with current completion expected in the first half of 2024.</li> <li>Closure studies duration and iterations to optimise landform outcomes have been greater than previously anticipated.</li> <li>These studies will inform closure works.</li> <li>Earthworks and rehabilitation activities planned for approximately 3 years.</li> </ul>
Rehabilitation Management Plan	<ul> <li>Rehabilitation         Management Plan,         including closure         plan     </li> </ul>	<ul> <li>The RMP is available on the Duralie Coal website.</li> <li>Final landform rehabilitation plans have been submitted to the Resources Regulator.</li> <li>Yancoal and the Resources Regulator acknowledge that the currently proposed landforms may change as the closure planning program evolves.</li> </ul>
Regulator Engagement	<ul> <li>Quarterly regulator progress meetings</li> </ul>	<ul> <li>Quarterly meetings with the Resources Regulator have continued between Duralie Coal and the Regulator to provide progressive updates on the status of closure planning at Duralie Coal.</li> </ul>
Environmental Management Plans, Monitoring & Maintenance	EMP reviews for closure stage	<ul> <li>DCPL prepared revisions of the Duralie Environmental Management Plans to reflect the current status of the DCM, and to describe anticipated mine closure activities.</li> <li>The revised plans have been approved by DPE and are publicly available on the Duralie Coal website.</li> <li>DCPL will refine its monitoring and maintenance programs in consultation with the relevant government agencies during the mine closure planning phase.</li> <li>Post-closure monitoring and maintenance activities will continue until the specific completion criteria has been met and confirmation has been received from the relevant authority.</li> </ul>



Project	Status
Stakeholder engagement strategy	<ul> <li>Communications with the community consultative committee (CCC) have been established regarding mine closure planning. This presentation will continue to be updated to provide relevant information through the CCC forum.</li> <li>Workforce updates are on-going.</li> <li>A Community Liaison position has been created to assist with stakeholder engagement. Recruitment is in progress.</li> </ul>
Mine Closure Risk     Assessment review	<ul> <li>The Mine Closure Risk Assessment is now attached as an appendix to the RMP.</li> <li>A mid-point risk assessment has been undertaken for the various aspects of closure. The risk assessment will be reviewed and updated again prior to the Closure plan being completed.</li> <li>A post closure public safety risk assessment has been undertaken.</li> <li>Outcomes are used to inform closure project requirements.</li> </ul>
<ul> <li>Landform design and stability</li> </ul>	<ul> <li>Landform designs are presented in the RMP.</li> <li>Preparation of a geotechnical assessment and specifications for the final void design have continued to ensure the long-term void is safe and stable.</li> <li>Further landform refinement will be undertaken as part of the on-going mine closure planning.</li> <li>Detailed design of landforms and drainage are expected to be finalised by mid 2024.</li> </ul>
Water management and final void water balance	<ul> <li>Water management and water modelling is progressively being revised as part of the Mine closure plans, such as creek diversion designs, construction and rehabilitation sequencing.</li> <li>Further modelling and assessment is required to ensure the final landform design achieves suitable outcomes in relation to final void spill risk, waste emplacement seepage and potential for acid rock drainage.</li> <li>Drilling is being undertaken to provide additional geochemical information on waste characterisation for final void and waste emplacement studies.</li> <li>This work is iterative and ongoing and will form an important part of the closure program.</li> </ul>
	<ul> <li>Stakeholder engagement strategy</li> <li>Mine Closure Risk Assessment review</li> <li>Landform design and stability</li> <li>Water management and final void water</li> </ul>



Management Area	Project	Status
Water Management	Mine Water Dams	<ul> <li>Dam engineers have prepared draft plans for reducing the size and decommissioning of the declared dams.         Consultation with NSW Dam Safety is ongoing.     </li> <li>Auxiliary Dam 1 has been dewatered and decommissioning and rehabilitation was completed in Q1 2020.</li> <li>Dewatering of AD2 to the Clareval void is ongoing in preparation for future decommissioning works.</li> </ul>
Coal Shaft Creek	CSC Reconstruction	<ul> <li>Re-construction of the lower reaches of Coal Shaft Creek is required following the completion of mining activities.</li> <li>A conceptual Coal Shaft Creek Reconstruction Plan was prepared in 2012.</li> <li>An updated draft design has been prepared. The design will be subject to review and integration with the broader closure plan prior to finalisation.</li> <li>Coal Shaft Creek reconstruction and decommissioning of the dams requires further regulatory approvals. These approvals are expected to be finalised in 2024 with works to follow.</li> </ul>
Infrastructure	<ul> <li>Infrastructure         Decommissioning         &amp; Demolition         Strategy</li> </ul>	<ul> <li>Hazmat, contamination and other supporting studies for the removal of infrastructure and other assets have been undertaken.</li> <li>The majority of coal handling facilities have been demolished and recycled or sold where possible.</li> <li>Staged decommissioning and demolition planning is in progress. Infrastructure will be progressively decommissioned where not required to support closure and rehabilitation works.</li> </ul>
Final land use	Potential final land-use planning	• The target post-mining land uses for previously disturbed mining land are defined in the new RMP and shown in Figure 4 of the RMP.



#### **4. Community Complaints**

No complaints received by the Duralie Coal Mine in Q1 and Q2 2023.



#### **5. Community Programs**

Management Area	Project	Status
Support Programs	Stratford Coal Community Support Program	<ul> <li>Applications for the 2024 Community Support Program will re-open on 14 August 2023.</li> <li>The CSP is a voluntary initiative and Yancoal has decided to continue with this program until bulk works and rehabilitation are completed at Stratford and Duralie. As such the CSP is expected to run until approximately 2028, although is rehabilitation timeline is subject to change.</li> </ul>
	Stratford Coal Education Support Fund	<ul> <li>The Stratford Coal Education Support Fund applications closed on 31 January 2023.</li> <li>The 2023 ESF has been finalised and grants confirmed in March 2023. In 2023, a total of \$36,500 has been granted to students and local businesses supporting 11 x Tertiary courses, 4 x TAFE courses and 2 x Apprenticeships.</li> </ul>



#### NEED FUNDING TO HELP IMPROVE OUR LOCAL COMMUNITY?

#### Yancoal Community Support Program call for applications

Stratford Duralie Coal Mine is a proud and active member of the Local community. Yancoal's 2024 Community Support Program offers community groups the opportunity to apply for funding to support projects, events and initiatives that help make a genuine positive difference to Gloucester, Stroud and District.

If you have a project or idea with the potential to benefit others across the areas of health, community, environment, arts, culture, education or training, please visit: www.stratfordcoal.com.au or www.duraliecoal.com.au

Applications close on 30th September 2023

