

# **Duralie Coal CCC Meeting**

Presentation –
Company Report &
Overview of Activities

February 2021

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Environment & Community Superintendent



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#### **Covid-19 Response**

The impacts of the Covid-19 pandemic has been risk assessed with significant measures undertaken on-site to protect and safeguard the health of our team members and community from infection and to protect our ability to operate our core business. Measures on site include but are not limited to:

- Access restrictions and self declaration
- Social distancing (1.5m and 4m2)
- Maximum occupancy for each room identified
- Body temperature monitoring
- Alternate working arrangements- work from home
- Additional PPE



#### 1. Progress at the Mine

#### 2<sup>nd</sup> Half 2020

- Progressive PAF re-handling works were continued to September 2020. PAF re-handle will recommence in 2021.
- Planning next round of rehabilitation works.
- Planning for recommencement of mining activities in 2021

#### 1st Half 2021

(refer to Duralie Project Update Presentation Feb 2021)

- Mining operations re-commenced at Duralie during in February 2021.
- Blasting scheduled to recommence in February 2021.
- Rehabilitation works are planned to be continued in 2021 with bulk shaping of the waste emplacement.

## 2. Environmental Reporting & Regulators

Management Area	Project	Status
Reporting	Duralie Coal Mine Annual Review 2019/20      Duralie Coal Mine Indonesident	The Duralie Coal Mine 2019/20 Annual Review has been prepared at submitted in September 2020. The Annual Review has been made available to the CCC and on the Duralie Coal website.  A greatly audit undertaken in December 2020 by Ken Helmas of Barnett & May The
	Duralie Coal Mine Independent Environmental Audit	<ul> <li>3-yearly audit undertaken in December 2020 by Ken Holmes of Barnett &amp; May. The audit report is due for submission at the beginning of March 2021. Copies will be made publicly available.</li> </ul>
Regulator	<ul> <li>Mining Operations Plan &amp; Rehabilitation Management Plan</li> </ul>	<ul> <li>The current MOP establishes the rehabilitation and mine closure activities until December 2021. A new MOP will be prepared during 2021 and be provided for consultation with regulatory agencies and the CCC.</li> </ul>
	<ul> <li>Environmental Management Plans</li> </ul>	<ul> <li>A revision of Duralie Environmental Management Plans will be prepared progressively during 2021. The revised plans will reflect the current status of the DCM and the ongoing mining, rehabilitation and mine closure requirements.</li> </ul>
	<ul> <li>Resources Regulator Targeted Assessment Program - Rehabilitation Materials and Soil Management</li> </ul>	<ul> <li>A site inspection was undertaken on 10 September 2020 by the Resources Regulator.</li> <li>The assessment focused on progressive rehabilitation obligations and how rehabilitation materials are managed. No significant issues were identified. Recommendations have been made for a review of the rehabilitation risk assessment and additional monitoring and rehabilitation performance indicators. These items will be addressed in the revision of the MOP.</li> </ul>



#### 3. Environmental Management Plans & Monitoring



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



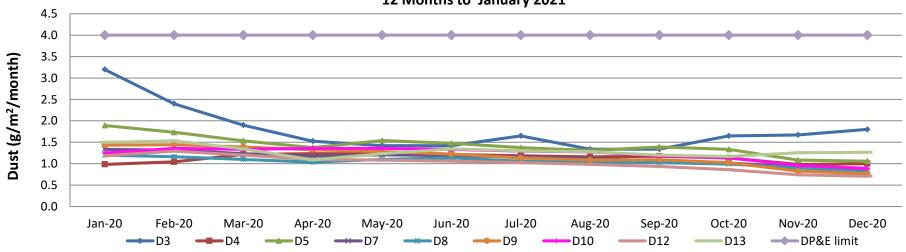
#### **3a. Air Quality Management**

Management Area	Project	Status
Air quality monitoring	Real-time air quality system	<ul> <li>The real-time air quality TEOM monitor on Martins Crossing Rd continues to operate.</li> </ul>
	HVAS & dust gauge monitoring network.	General ambient PM10 dust levels have been very low throughout spring/summer due to increased rainfall



#### 3a. Air Quality Management

#### Duralie Dust Gauge Monitoring - Annual Rolling Average 12 Months to January 2021



Jan-20 D3 Medium - 50% Minerals, 20% Vegetation, 30% Contamination

Apr-20 D13 Deemed contaminated due to high combustible matter and presence of insects

Jun-20 D3 Very Heavy - 10% Dirt, 90% Polysaccharide Slime

Aug-20 D3 Very Heavy - 40% Dirt, 10% insects, 50% Polysaccharide Slime

Sep-20 D3 Heavy - 20% Dirt, 80% Polysaccharide Slime

#### 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.

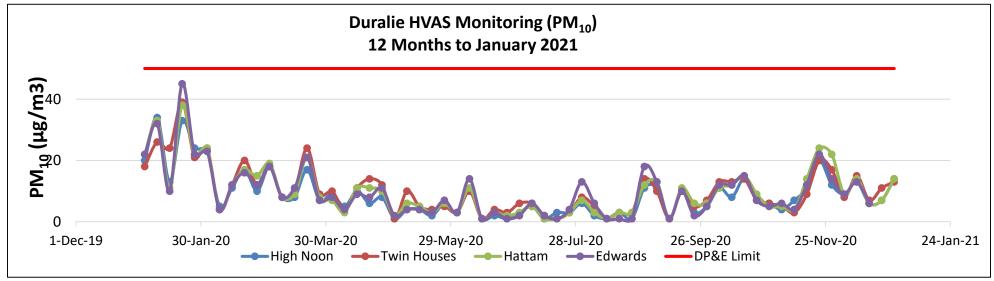
Copper Sludge: Blue-green subhedral to euhedral crystalline salts, commonly precipitated from the copper sulphate algaecide solution.

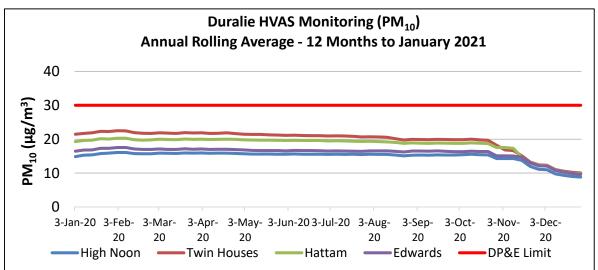
Contamination: Gelatinous material such as bird droppings

- High levels in D3 and D13 due to contamination of multiple samples.
- Due to frequent contamination of dust gauges the HVAS results should also be used when interpreting results.



#### 3a. Air Quality Management





- All sites below DP&E limit. Typically low results during winter and higher during spring/summer.
- Steep decreasing trend during December 2020 due to elimination of bushfire affected results in 2019.
- Multiple high results during January 2020 due to extensive bushfires and poor regional air quality.
- HVAS results provide more reliable data compared to dust deposition results and should be referred to when interpreting dust emissions.



#### **3b. Blast Management**

Management Area	Project	Status
Blasting	Blast monitoring	<ul> <li>Blast activities at the DCM were ceased on 17 August 2018.</li> <li>Blasting is proposed to recommence in Q1 2021. Blasting will be undertaken in discrete periods during 2021 with only a limited number of blasts required.</li> </ul>

- Note: Blast Compliance: No more than 5% of total blasts for annual monitoring period to exceed an overpressure of 115 dBL or ground vibration of 5 mm/s. No blast is to exceed an overpressure of 120 dBL or ground vibration of 10 mm/s.
- Note: Where no trigger is recorded the results indicate <0.22mm/s and <110.0dBL corresponding to the blast monitor settings.



#### **3c. Noise Management**

Management Area	Project	Status
Noise Monitoring	Routine Monitoring	<ul> <li>Quarterly monitoring continued during H2 2020. All results were compliant with noise criteria.</li> <li>Noise reports are made available on the Duralie Coal website.</li> <li>Routine quarterly noise monitoring of operations is scheduled to continue in 2021, to monitor noise emissions from mining day works.</li> </ul>
Noise Management Plan	Real-Time Noise Management	<ul> <li>Real-Time Noise Monitoring is planned to recommence in accordance with the Noise Management Plan requirements.</li> <li>The proposed mining day shift (6:30am – 5:00pm) will be operating for up to 1 hour within designated 'night shift' period as defined by EPL 11701.</li> <li>The integrated real-time noise management system analyses monitoring data from the noise units, the weather station and the inversion towers and records times when either the noise criteria is likely to be exceeded or when noise enhancing weather conditions are present. The system will then provide alarms to staff to implement additional noise mitigation measures where required.</li> </ul>

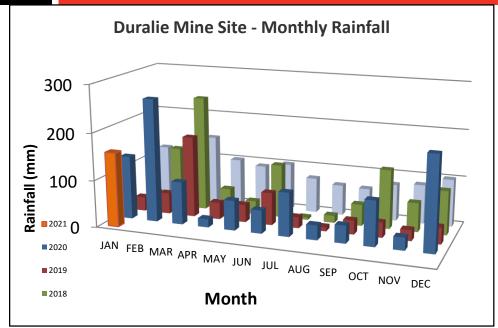


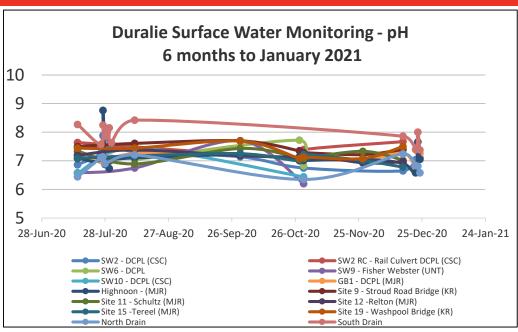
#### **3d. Water Management**

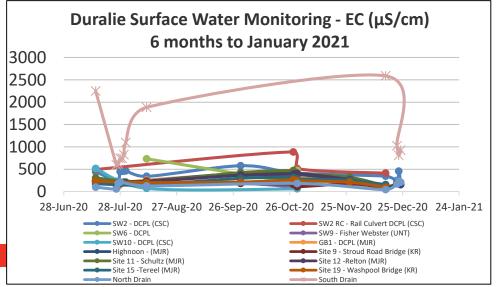
Management Area	Project	Status		
Site Water Management	Annual water balance review.	<ul> <li>The 2020 annual site water balance is currently being prepared. A summary will be included in the Annual Review 2020/21 and will be available on the Duralie Coal website.</li> </ul>		
Surface Water	Routine monitoring	<ul> <li>Above average rainfall has been received during summer 2020/21.</li> <li>Multiple high flow rain events occurred during summer 2020/21.</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	<ul> <li>No irrigation has been undertaken in the first flush irrigation areas since 2018.</li> <li>Irrigation has continued on the PAF waste emplacement area as part of the PAF rehandling works.</li> </ul>		
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>		

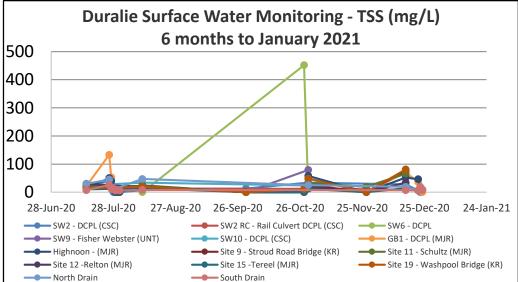


#### 3d. Water Management









#### 3e. Rehabilitation Management

Management Area	Project	Status
Rehabilitated Waste emplacements	Rehabilitation Works	<ul> <li>No rehabilitation works were undertaken during H2 2020.</li> <li>20ha of native rehabilitation was completed in H1 2020 including topsoil spreading and seeding.</li> </ul>
	Rehabilitation maintenance	<ul> <li>Slashing of the Duralie pasture rehabilitation and removal of acacia regrowth was completed in H2 2020. Slashing of the AD1 rehabilitation was also completed.</li> <li>Weed control in the established native rehabilitation was completed in November 2020.</li> </ul>
	Rehabilitation Planning	<ul> <li>Planning is underway for rehabilitation works schedule in 2021. The next stages will include bulk shaping of the Clareval waste emplacement area.</li> </ul>



Photo: Complete rehabilitation at Weismantel waste emplacement and Duralie Haul Rd, taken July 2020.



Photo: Completed rehabilitation at AD1, taken Oct 2020.

### 3e. Rehabilitation Management

Management Area	Project	Status
Dam Decommissioning	Auxiliary Dam 1	<ul> <li>Decommissioning and rehabilitation of AD1 was completed in H1 2020, 20ha of non-native pasture.</li> <li>AD1 Clay core was recovered and has been stockpiled for use for the clay lining in the Coal Shaft Creek Reconstruction.</li> </ul>

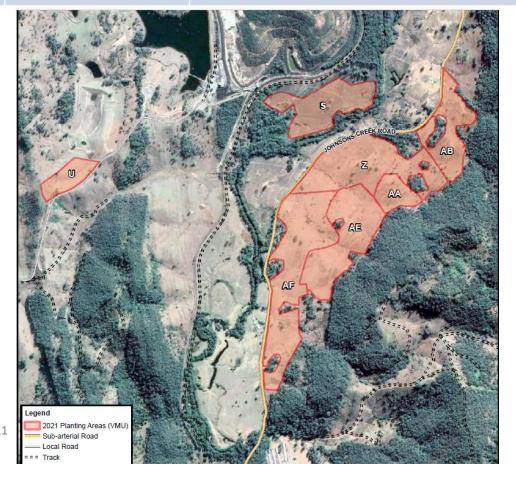


Photo: Shaping and topsoiling completed at Auxiliary Dam 1, Jul 12 February 2021 2020.



### **3f. Biodiversity Management**

Management Area	Project	Status
Biodiversity Offset	Revegetation Planning	Planning has been completed for the revegetation works scheduled in Q1 2021.
	Revegetation works	<ul> <li>Approximately 36,100 native tubestock over 114 hectares on the eastern side of Johnsons Creek Road will be planted during H1 2021 in the biodiversity offset area along Johnsons Creek Road.</li> </ul>



Map: 2021 proposed planting areas Duralie Biodiversity Offset.



#### **3f. Biodiversity Management**

Management Area	Project	Status	
Flora/Fauna	Nest Box Program	<ul> <li>Annual Nest box monitoring was undertaken during November 2020 including the new nest box in the rehabilitation area. A summary of the nest box progress will be included in the next Annual Review. Approximately 90% occupancy in the rehabilitation area in the first 12 months.</li> </ul>	
Pest Control	Wild Dog control program	<ul> <li>Wild dog and fox trapping was completed in November 2020, Trapping efforts covered all Stratford Coal owned properties including biodiversity offsets and Mining Leases. 4 Wild Dogs ar 2 Foxes</li> </ul>	
Weed Control	Weed spraying program	<ul> <li>Weed spraying has recommenced in the Stratford Biodiversity Area and Stratford Mining Lease areas in October. Weed spraying has continued through January and February in the Duralie Biodiversity Offset area targeting Blackberry, Crofton weed, Tobacco bush, Privet and Lantana.</li> </ul>	





Photo: Wild dogs detected during 2020 wild dog trapping program.



#### **3g. Mine Closure Planning**

Note: \*Refer to Duralie Mining Operations Plan & Rehabilitation Management Plan Table 13 Mine Closure Planning Schedule. \*Further detail on mine closure planning progress is included in the Annual Review 2019/20.

Management Area	Project	Status		
Mine Closure Planning General	Stakeholder engagement	• 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.		
Rehabilitated Landforms	<ul> <li>Landform design and stability</li> </ul>	<ul> <li>DCPL have continued to prepare the detailed final landform designs for the waste emplacement areas.</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> </ul>		
Final Voids	<ul> <li>Water management and final void water balance</li> </ul>	<ul> <li>Review of the final void site water balance completed in Q4 2020 to ensure the balance incorporates the final landform design, surface water inflows and outflows to/from final void.</li> <li>Further review work is required.</li> </ul>		
	<ul> <li>Groundwater Model</li> </ul>	• Post-mining groundwater model verification completed in Q4 2020 to incorporate final void design. This work was undertaken in conjunction with the final void water balance.		
Rehabilitation Resources	Topsoil Resources	• A topsoil stockpile update was undertaken in July 2020 to ensure adequate topsoil is available for rehabilitation. The use of topsoil continues to be tracked.		
Water Management	Mine Water Dams	<ul> <li>Preparation of a strategy for decommissioning of the mine water dams was completed in February 2021. DCPL has engaged an independent dams engineer to assist with preparing plans for the decommissioning of the prescribed 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>Preparations have commenced for pumping mine water to the Clareval void.</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. A conceptual Coal Shaft Creek Reconstruction Plan was prepared in 2012.</li> <li>A consultant has been engaged to prepared the detailed design for the reconstruction of Coal Shaft Creek.</li> <li>Removal of the ROM coal stockpile in the CSC corridor has been completed. Bulk shaping of the final creek landform has commenced.</li> </ul>		

#### **3g. Mine Closure Planning**

Note: \*Refer to Duralie Mining Operations Plan & Rehabilitation Management Plan Table 13 Mine Closure Planning Schedule. \*Further detail on mine closure planning progress is included in the Annual Review 2019/20.

Management Area	Project	Status
Environmental Management Plans	EMP reviews for closure stage	<ul> <li>During 2021 the EMPs will be progressively reviewed and updated as required, to reflect the current stage of operations and the ongoing rehabilitation and mine closure requirements.</li> <li>Identify post-closure environmental monitoring and maintenance requirements.</li> <li>Prepare detailed performance and completion criteria for mine closure.</li> </ul>
Final land use	Potential final land-use planning	Draft plan prepared in 2017.



### 4. Community Complaints

#### **Duralie Complaint Summary**

Period: 01/06/2020 - 31/1/2021

Period: 6 Months

Total No. of Complaints: 0 (0 noise, 0 blast, 0 air quality, 0 other)

Total No. of Complainants: 0

Date/Time of Complaint	Complainant Location	Method of Complaint	Nature of Complaint	Investigation/Outcome



### 5. Community Programs

Management Area	Project	Status
Support Programs	Stratford Coal Community Support Program	<ul> <li>The application period for the Stratford Coal Community Support Program for 2021 has now closed. A review of the applications is currently being undertaken and notification to the successful applicants is expected in February 2021.</li> </ul>
	Stratford Coal Education Support Fund	<ul> <li>The Stratford Coal Education Support Fund will be running again during 2021 and applications are available from Gloucester High School or the MidCoast Council Gloucester office.</li> <li>The Education Support Fund Committee have formalised a written guideline for the program to ensure ongoing transparency and consistency in the implementation of the program.</li> <li>The 2021 Stratford Coal Education Support Fund applications closed on 30 January 2021. The committee will review all applications and successful applicants will be notified in Q1 2021.</li> </ul>



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

#### Yancoal Community Support Program call for applications

Stratford Coal is a proud and active member of the local community. Yancoal's 2021 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 6th November 2020



