

Duralie Coal CCC Meeting

Presentation –
Company Report &
Overview of Activities

February 2020

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1. Progress at the Mine

Mining 2nd Half 2019

- No mining operations were undertaken at Duralie during the second half of 2019.
- Rehabilitation works continued with bulk shaping of the waste emplacement and Rogers road.
- AD1 Decommissioning

1st Half of 2020

- PAF re-handling works is currently out to tender with works scheduled to begin in the first half of 2020.
- AD1 Decommissioning and rehabilitation scheduled for completion.



2. Environmental Reporting & Regulators

Management Area	Project	Status
Reporting	 Duralie Coal Mine Annual Review 2019/20 	 The Duralie Coal Mine 2019/20 Annual Review is due August 2020. The Annual Review will be made available to the CCC and on the Duralie Coal website.
Regulator	 Mining Operations Plan & Rehabilitation Management Plan 	Submitted for approval to the DPI&E in December 2019
	DPI&E Inspection	 Inspection of site scheduled for Wednesday the 29th of January 2020
	Environmental Management Plans	No changes



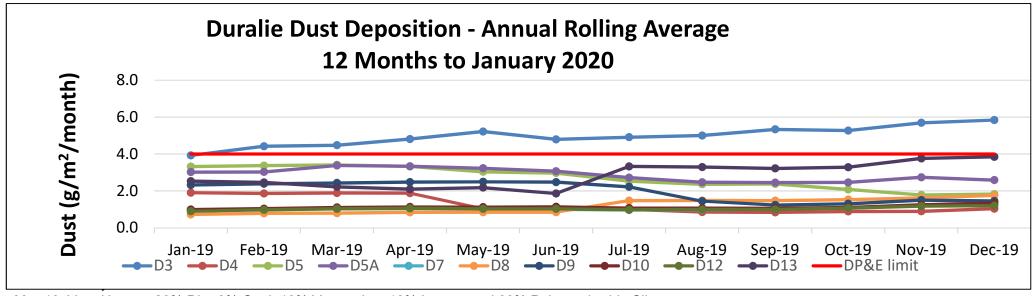
3. Environmental Management Plans & Monitoring



- 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



Mar-19 Very Heavy - 20% Dirt, 0% Coal, 10% Vegetation, 10% Insects and 60% Polysaccharide Slime

Apr-19 Very Heavy - 40% Dirt, 0% Coal, 10% Vegetation, 10% Insects and 40% Polysaccharide Slime

May-19 Very Heavy - 20% Dirt, 80% Polysaccharide Slime

Jun-19 Heavy - 20% Dirt and 80% Polysaccharide Slime

Jul-19 Heavy - 30% Dirt, 0% Coal, 0% Vegetation, 0% Insects and 70% Polysaccharide Slime

Sep-19 Heavy - 20% Dirt and 80% Polysaccharide Slime

Oct-19 Heavy - 30% Dirt and 70% Polysaccharide Slime

Nov-19 Heavy - 60% Dirt, 40% Polysaccharide Slime

Dec-19 Heavy - 60% Dirt, 40% 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.

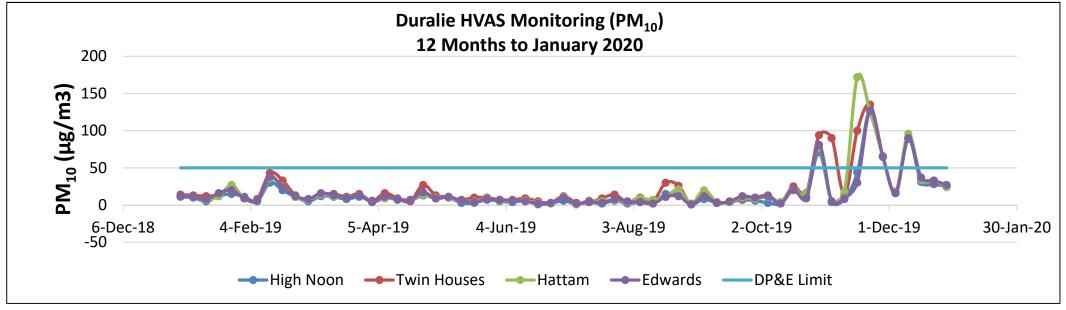
Copper Sludge: Blue-green subhedral to euhedral crystalline salts, commonly precipitated from the copper sulphate algaecide solution.

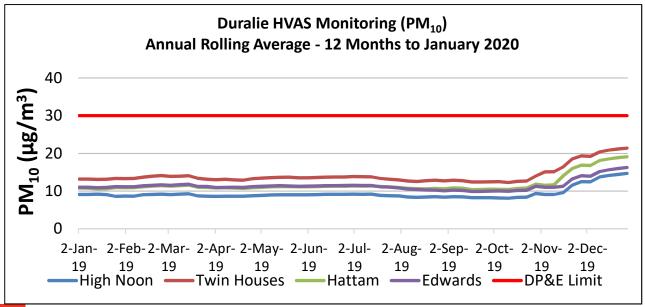
Contamination: Gelatinous material such as bird droppings

- High levels in D3 and D5 due to contamination of multiple samples. Additional site D5A installed for comparison
- Due to frequent contamination of dust gauges the HVAS results should also be used when interpreting results should be used to should also be used when interpreting results should be used to s



3a. Air Quality Management





- All sites below DP&E limit. Typically low results during winter and higher during spring/ summer.
- Minor increasing trend over previous 12 months.
- 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	 Blast activities at the DCM were completed on 17 August 2018. No further blasting is proposed until further notice.

- 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	 Routine quarterly monitoring of operations recommenced in Q4. Noise reports are made available on the Duralie Coal website.
Noise Management Plan	Real-Time Noise Management	 During Q4 2018 operations at the Duralie Mine ceased. In accordance with the revised NMP real-time noise monitoring has now ceased whilst no evening or night-time operations are undertaken.

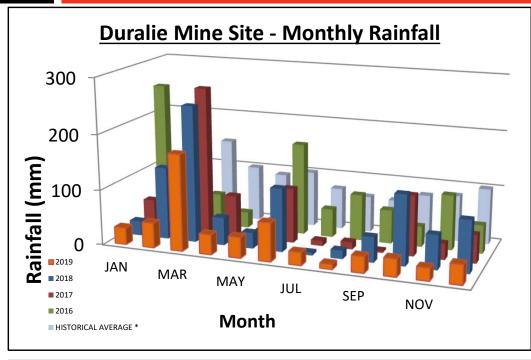


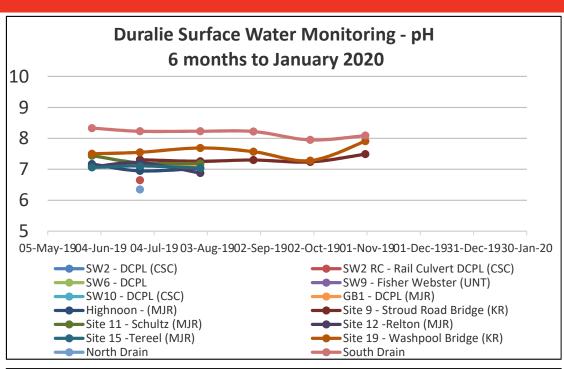
3d. Water Management

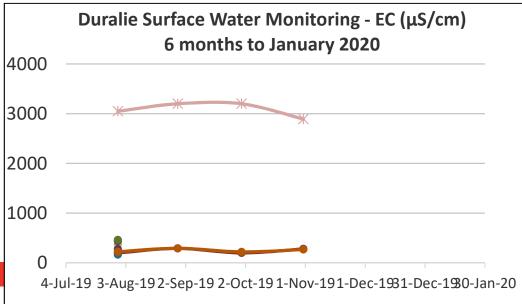
Management Area	Project	Status
Site Water Management	Annual water balance review.	 The 2019 annual site water balance review is currently being prepared. A summary will be included in the Annual Review.
Surface Water	Routine monitoring	 Sporadic and low rainfall conditions persisted through spring/summer 2019/20. Routine surface water monitoring completed. All sites generally within Duralie water quality performance indicators. No obvious trending towards performance indicators.
	• Irrigation	 No irrigation is currently being undertaken in the first flush areas. Irrigation has commenced on the PAF waste emplacement area in anticipation of the PAF rehandling works.
Groundwater	Routine monitoring	 Routine monitoring has been completed and the results continue to indicate consistency with the model trends in the Environmental Assessment.

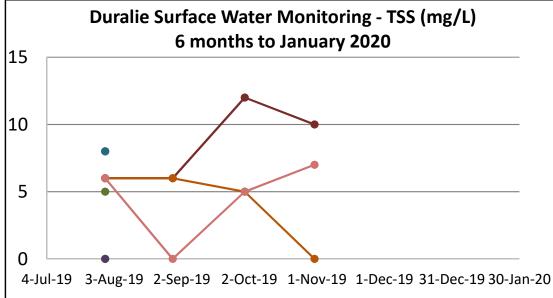


3d. Water Management









3e. Rehabilitation Management

Management Area	Project	Status
Rehabilitated Waste emplacements	Rehabilitation Works	 Rehabilitation of 20ha was commenced during H2 2019, including topsoil spreading, ground preparation and seeding. 20ha of native will be planted in February 2020.
	Rehabilitation maintenance	 Slashing and seeding of areas of poor growth completed on the rehabilitation on the Weismantel waste emplacement. Turkey litter and kikuyu seed application scheduled for H1 2020 for the area of poor growth.



Photo: Bulk shaping and topsoiling at Weismantel waste emplacement and Duralie Haul Rd, taken Jan 2020.



Photo: Bulk shaping and topsoiling at Weismantel waste emplacement and Duralie Haul Rd, taken Jan 2020.

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3e. Rehabilitation Management

Management Area	Project	Status
Dam Decommissioning	Auxiliary Dam 1	 Decommissioning and rehabilitation of AD1 is proposed to commenced in October 2019 Clay has been recovered and is being stockpiled for use for the clay lining in the Coal Shaft Creek Reconstruction.



Photo: shaping and topsoiling partially completed at Auxiliary Dam 1, Jan 2020.



3f. Biodiversity Management

Management Area	Project	Status
ВМР	 Biodiversity Management Plan revision 	 A revision of the Biodiversity Management Plan has been prepared following the first 5 years of implementation. A summary of the biodiversity offset works completed and the changes to the BMP is included in the Annual Biodiversity Report.
Biodiversity Offset	Revegetation works	15,000 tubestock are scheduled to be planted in April 2020.







3f. Biodiversity Management

Management Area	Project	Status	
Flora/Fauna	Nest Box Program	 Annual monitoring of nest boxes is scheduled to be undertaken in February 2020. A summary of the nest box progress will be included in the next Annual Review. 	
Pest Control	Wild Dog control program	 Wild dog and fox trapping concluded in November 2019, covering all Stratford Coal owned properties including biodiversity offsets and Mining Leases. Further trapping of Wild Dogs and Wild Cat is scheduled for Q1 2020 	
Access & Livestock	Fencing	 Work has continued to replace and install boundary fencing for the biodiversity offset areas to exclude livestock in locations where fencing is in disrepair. Fences lost as a result of 2019 bushfires are scheduled for repair Q1 2020 	
Bushfire Management	Bushfire Management	 Slashing of all access tracks and fire breaks was completed in September 2019. Fire within the Biodiversity Offset November 2019 Yancoal worked to provide access for RFS to establish emergency containment line and provided access to water (AD2) for water bombing. Provided emergency notification to tenants along Johnson Creek Road 	









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15 19 February 2020

3g. Mine Closure Planning

Note: *Refer to Duralie Mining Operations Plan & Rehabilitation Management Plan Table 14 Mine Closure Planning Schedule.

*Further detail on mine closure planning progress is included in the Annual Review 2018.

	Management Project Status	
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	 Landform design and stability 	 DCPL have continued to prepare the detailed final landform designs for the waste emplacement areas. Preparation of a geotechnical assessment and specifications for the final void design have continued to ensure the long-term void is safe and stable.
Final Voids	 Water management and final void water balance 	 Review of the final void site water balance has commenced to ensure the balance incorporates the final landform design, surface water inflows and outflows to/from final void.
	 Groundwater Model 	• Post-mining groundwater model verification has commenced to incorporate final void design. This work is undertaken in conjunction with the final void water balance.
Rehabilitation Resources	Topsoil Resources	• A topsoil stockpile update was undertaken in July 2019 to ensure adequate topsoil is available for rehabilitation. The use of topsoil continues to be tracked.
Water Management	Mine Water Dams	 Preparation of a strategy for decommissioning of the mine water dams has commenced. DCPL has engaged an independent dams engineer to assist with preparing plans for the decommissioning the of the prescribed dams Auxiliary Dam 1 has been dewatered and decommissioning and rehabilitation will be completed in the Q1 2020. Preparations have commenced for pumping mine water to the Clareval void.
Coal Shaft Creek	CSC reconstruction	 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. A consultant has been engaged to prepared the detailed design for the reconstruction of Coal Shaft Creek. Removal of the ROM coal stockpile in the CSC corridor has been completed. Bulk shaping of the final creek landform has commenced.
Final land use	Potential final land-use planning	Draft plan prepared in 2017.

4. Community Complaints

Duralie Complaint Summary

Period: 31/06/2019 - 31/01/2020

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	 The application period for the 2020 Stratford Coal Community Support Program is closed. Applications have been reviewed with the outcomes announced in February 2020.
	Stratford Coal Education Support Fund	 The Stratford Coal Education Support Fund will be running again during 2020 and applications are available from Gloucester High School or the MidCoast Council Gloucester office. The Education Support Fund Committee have revised and formalised a written guideline for the program to ensure ongoing transparency and consistency in the implementation of the program.

