

# Duralie Coal CCC Meeting

Presentation –  
Company Report &  
Overview of Activities

May 2022

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# 1. Progress at the Mine

	Total Waste (BCM)	Total ROM Coal (T)
Q4 2021	136,245	136,585

## Mining 4<sup>th</sup> Quarter 2021

- Mining operations were completed at Duralie in the Weismantel pit. Mining Operations ceased on 21<sup>st</sup> December 2021.
- Coal handling and riling is completed and ceased on 21<sup>st</sup> December 2021.
- Rehabilitation works completed including partial bulk shaping and rehandle of the Clareval and Weismantel waste emplacements.

# 2. Environmental Reporting & Regulators

Management Area	Project	Status
Reporting	<ul style="list-style-type: none"> <li>Duralie Coal Mine Annual Review 2022</li> <li>Duralie EPL 11701 Annual Return 2022</li> <li>NPI and NGER reporting 2022</li> </ul>	<ul style="list-style-type: none"> <li>The 2022 Duralie Coal Mine Annual Review is due for completion in September 2022. 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 2022 is due for completion in October 2022. 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 will be lodged with the relevant government agencies.</li> </ul>
Regulator	<ul style="list-style-type: none"> <li>Section 240 Notice – Closure Planning</li> <li>Mining Operations Plan &amp; Rehabilitation Management Plan</li> <li>Environmental Management Plans – revision for closure</li> </ul>	<ul style="list-style-type: none"> <li>The Resource Regulator issued DCPL a Section 240 notice on 31 August 2021 which includes directives for implementing a mine closure planning program and to develop a new rehabilitation management plan including final closure plan.</li> <li>The Rehabilitation Management Plan, including closure plan is due for submission on 30 June 2022.</li> <li>The current MOP establishes the rehabilitation and mine closure activities until December 2021. An extension to the current MOP to 30 June 2022 has been approved to allow for preparation of the new RMP.</li> <li>DCPL has prepared revisions of the Duralie Environmental Management Plans to reflect the current status of the DCM, and to describe anticipated mine closure activities and describe the change to environmental impacts, mitigation measures and monitoring programs at the DCM for the mine closure phase.</li> <li>The revised plans have been progressively submitted to DPIE for approval, approved plans have been made public on the Duralie Coal Website.</li> </ul>

# 3. Environmental Management Plans & Monitoring

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

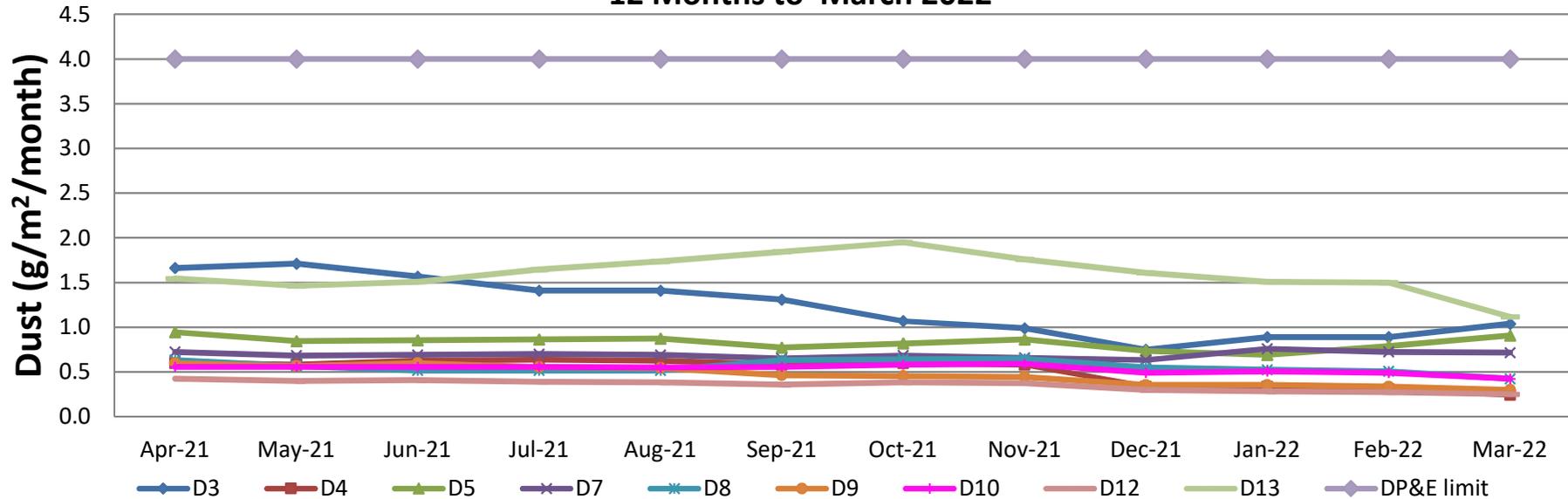


# 3a. Air Quality Management

Management Area	Project	Status
Air quality monitoring	<ul style="list-style-type: none"><li>• Real-time air quality system</li><li>• HVAS &amp; dust gauge monitoring network.</li></ul>	<ul style="list-style-type: none"><li>• The real-time air quality TEOM monitor on Martins Crossing Rd continues to operate.</li><li>• General ambient PM10 dust levels have been very low throughout Summer/Autumn due to increased rainfall.</li><li>• No triggers have been received relating to mining operations.</li></ul>

# 3a. Air Quality Management

Duralie Dust Gauge Monitoring - Annual Rolling Average  
12 Months to March 2022



Jan-21 D13 Heavy deposition. 60% dirt and 40% Polysaccharide slime.

Mar-21 D5 Heavy - 50% Insects, 25% Vegetation, 20% Polysaccharide Slime and 5% Dirt.

Jun -21 D4 Heavy - 60% polysaccharide slime, 40% insects D9 Heavy - 20% polysaccharide slime, 40% insects

Aug -21 D3 Very heavy - 30% insects and polysaccharide slime, 20% dirt and vegetation, and <5% coal.

#### 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.

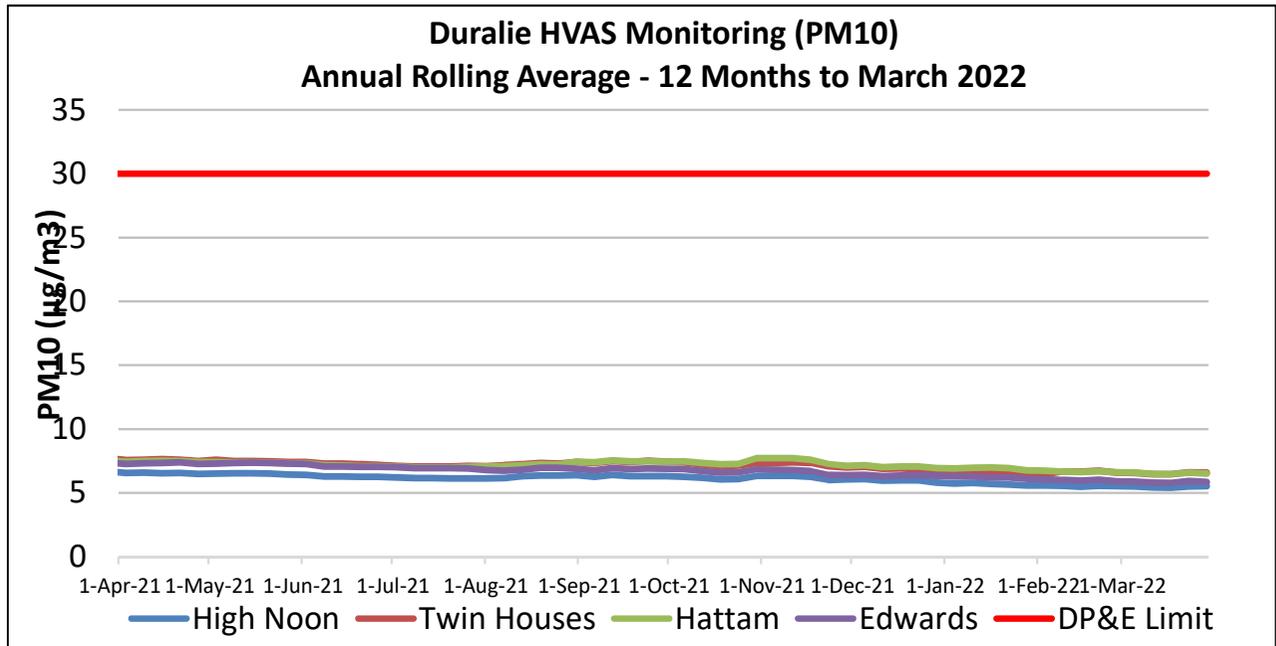
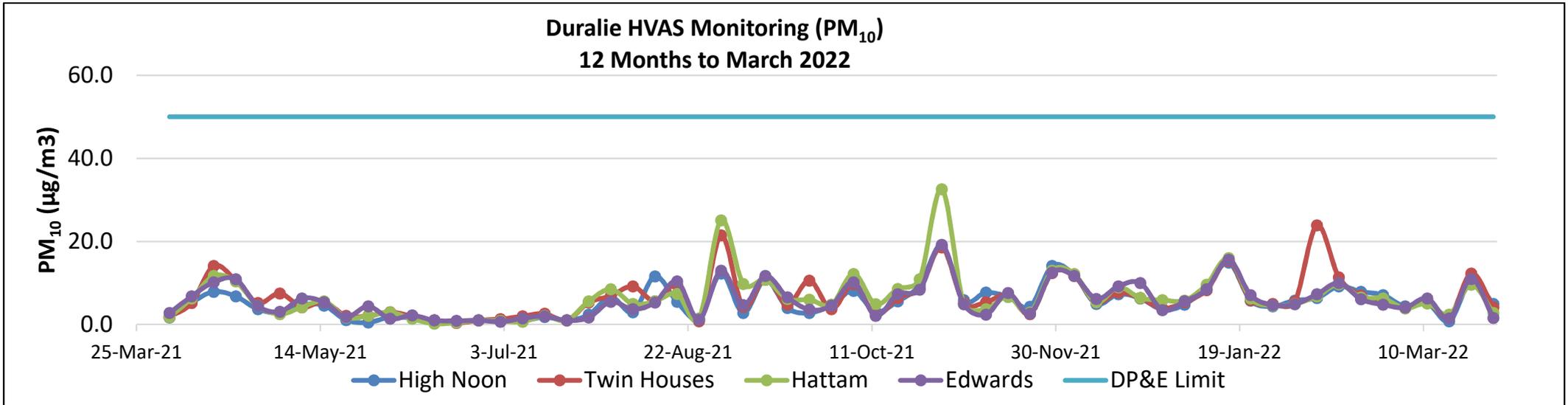
**Copper Sludge:** Blue-green subhedral to euhedral crystalline salts, commonly precipitated from the copper sulphate algacide solution.

**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. Blast Management

Management Area	Project	Status
Blasting	<ul style="list-style-type: none"><li>Blast monitoring</li></ul>	<ul style="list-style-type: none"><li>Blast activities at the DCM were completed on 09/09/2021.</li><li>No further blasting will be undertaken at Duralie Coal Mine, with the exception of any blasting required for rehabilitation work.</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	<ul style="list-style-type: none"> <li>Routine Monitoring</li> <li>Sound Power Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Routine quarterly noise monitoring of operations were continued in Q4 2021, to monitor noise emissions from mining day works.</li> <li>Quarterly monitoring continued during Q4 2021. All results were compliant with noise criteria.</li> <li>Following completion of mining in Q4 2021, routine quarterly monitoring of operations was not required in Q1 2022 at the Duralie Mine.</li> <li>Noise reports are made available on the Duralie Coal website.</li> <li>Sound power monitoring of the mobile plant fleet was undertaken in September 2021.</li> </ul>
Noise Management Plan	<ul style="list-style-type: none"> <li>Real-Time Noise Management</li> </ul>	<ul style="list-style-type: none"> <li>During Q4 2021 operations at the Duralie Mine ceased.</li> <li>In accordance with the revised NMP real-time noise monitoring has now ceased whilst no evening or night-time operations are undertaken.</li> </ul>

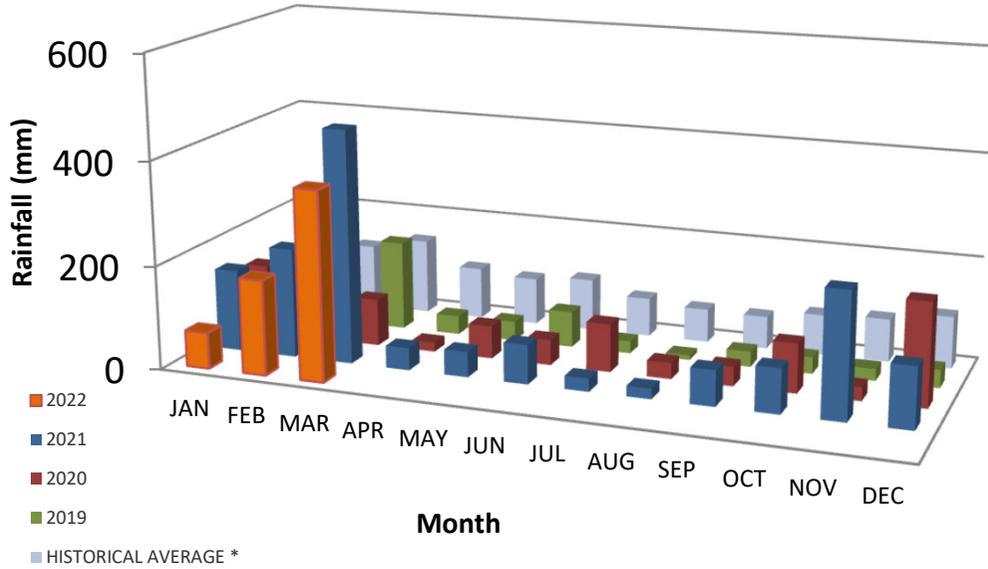
# 3d. Water Management

Management Area	Project	Status
Site Water Management	<ul style="list-style-type: none"> <li>Annual water balance review.</li> </ul>	<ul style="list-style-type: none"> <li>The 2021 annual site water balance has been prepared. A summary has been included in the Annual Review 2021/22 and will be available on the Duralie Coal website.</li> </ul>
Surface Water	<ul style="list-style-type: none"> <li>Routine monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Above average rainfall has been received during Q1 2022.</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>
	<ul style="list-style-type: none"> <li>Macro-invertebrates</li> </ul>	<ul style="list-style-type: none"> <li>Macro-invertebrate monitoring was undertaken in September 2021 and continues to show no identified impacts from the Duralie mining operations on aquatic ecosystems.</li> </ul>
	<ul style="list-style-type: none"> <li>Irrigation</li> </ul>	<ul style="list-style-type: none"> <li>No irrigation has been undertaken in the first flush irrigation areas since 2018.</li> </ul>
Groundwater	<ul style="list-style-type: none"> <li>Routine monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Routine monitoring has been completed and the results continue to indicate consistency with the model trends in the Environmental Assessment.</li> </ul>

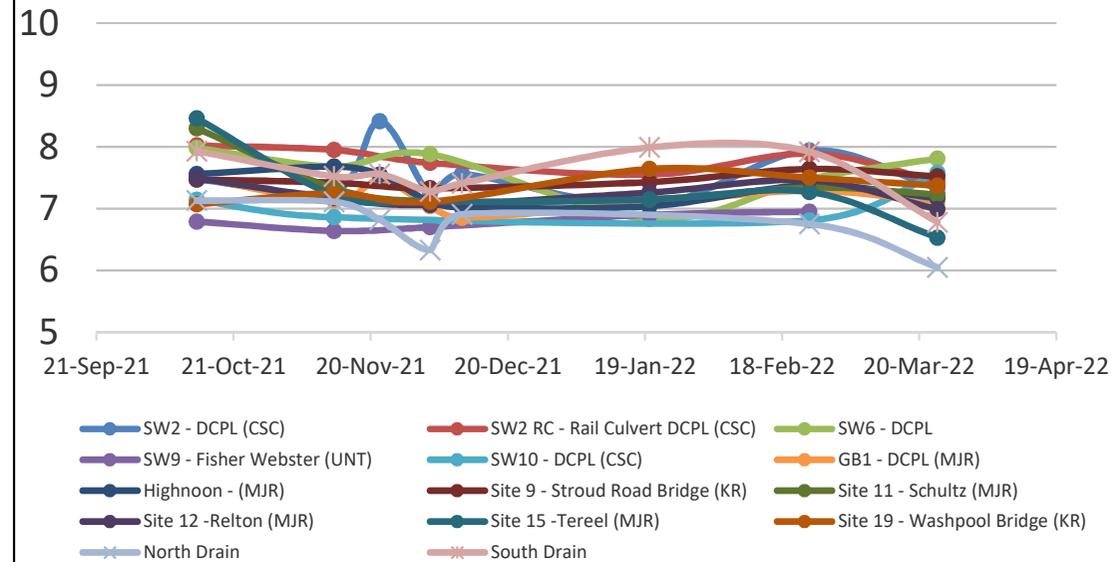


# 3d. Water Management

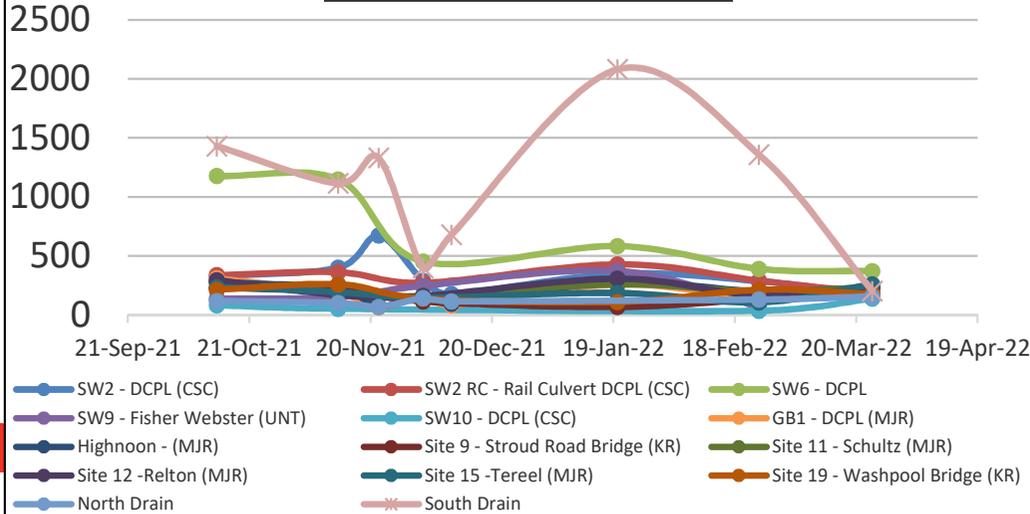
**Duralie Mine Site - Monthly Rainfall**



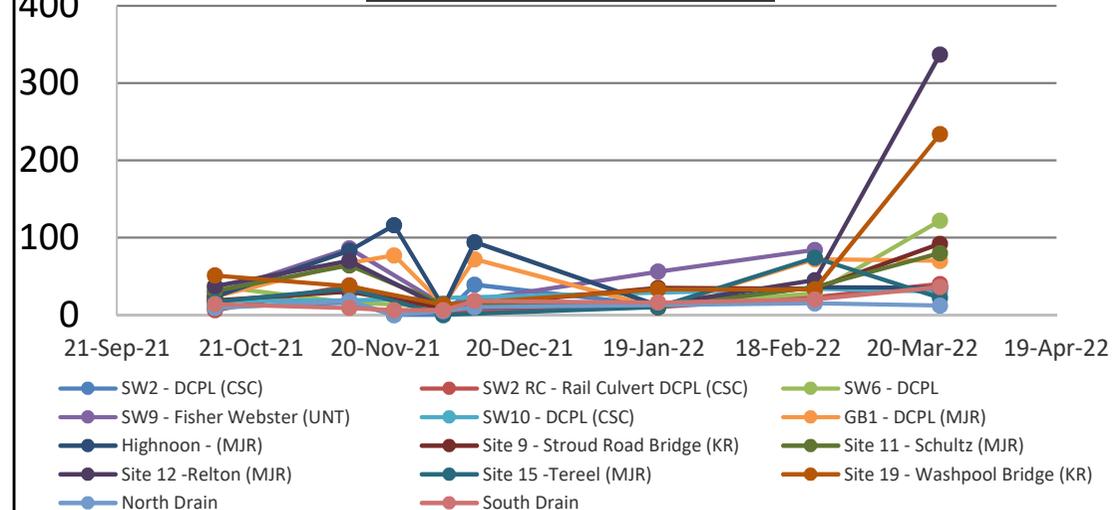
**Duralie Surface Water Monitoring - pH**  
**6 months to March 2022**



**Duralie Surface Water Monitoring - EC ( $\mu\text{S}/\text{cm}$ )**  
**6 months to March 2022**



**Duralie Surface Water Monitoring - TSS (mg/L)**  
**6 months to March 2022**



# 3e. Rehabilitation Management

Management Area	Project	Status
Rehabilitated Waste emplacements	<ul style="list-style-type: none"> <li>Rehabilitation Planning</li> <li>Rehabilitation Maintenance</li> </ul>	<ul style="list-style-type: none"> <li>The next stages of rehabilitation will include rehandle and bulk shaping of the Clareval and Weismantel waste emplacement area. Works scheduled to commence Q3 2022.</li> <li>Slashing of the Duralie pasture rehabilitation and removal of Acacia regrowth is scheduled to be completed in Q2 2022.</li> <li>Weed control in the established native rehabilitation is scheduled to be completed in Q2 2022.</li> </ul>
Rehabilitation Monitoring	<ul style="list-style-type: none"> <li>Vegetation Monitoring - Ecosystem Function Analysis</li> </ul>	<ul style="list-style-type: none"> <li>Rehabilitation monitoring was undertaken during April 2022. The final report is currently being prepared and a summary will be included in the Duralie Annual Review.</li> </ul>



Photo: Weismantel waste emplacement area to be rehandled and shaped, Taken November 2021



Photo: Clareval waste emplacement area to be rehandled and shaped, Taken November 2021.



# 3f. Biodiversity Management

Management Area	Project	Status
Biodiversity Offset	<ul style="list-style-type: none"> <li>Revegetation works</li> <li>Vegetation Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Due to above average persistent rainfall, Q2 2022 Duralie planting program has been postponed until Spring 2022. The 2022 planting program is designed to reach target vegetation densities and diversity for each Vegetation Management Unit (VMU).</li> <li>Annual vegetation monitoring within the biodiversity offset and enhancement areas was completed in April 2022. A summary of the monitoring will be included in the DCM Annual Biodiversity Report and the Annual Review 2022. Both reports will be made available on the Duralie website.</li> </ul>



Map: 2022 Proposed planting areas, Duralie Biodiversity Offset.

# 3f. Biodiversity Management

Management Area	Project	Status
Flora/Fauna	<ul style="list-style-type: none"> <li>Nest Box Program</li> </ul>	<ul style="list-style-type: none"> <li>Quarterly Nest box monitoring was undertaken during Q4 2021 and Q1 2022. 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> <li>The Annual monitoring of all nest boxes was undertaken in October 2021.</li> </ul>
Weed Control	<ul style="list-style-type: none"> <li>Weed Spraying Program</li> </ul>	<ul style="list-style-type: none"> <li>Weed spraying has continued in the Duralie Biodiversity Area and Duralie Mining Lease areas throughout Q1 targeting Blackberry, Crofton weed, Tobacco bush, Privet and Lantana.</li> <li>Weed spraying will continue through Autumn while conditions are favourable.</li> </ul>
Fauna	<ul style="list-style-type: none"> <li>Feral Animal Monitoring</li> </ul>	<ul style="list-style-type: none"> <li>A feral animal survey was undertaken in August 2021. The results of the feral animal monitoring will be used to guide the implementation of ongoing feral animal control programs.</li> </ul>



Map: Nest box locations on the Duralie rehabilitation area.

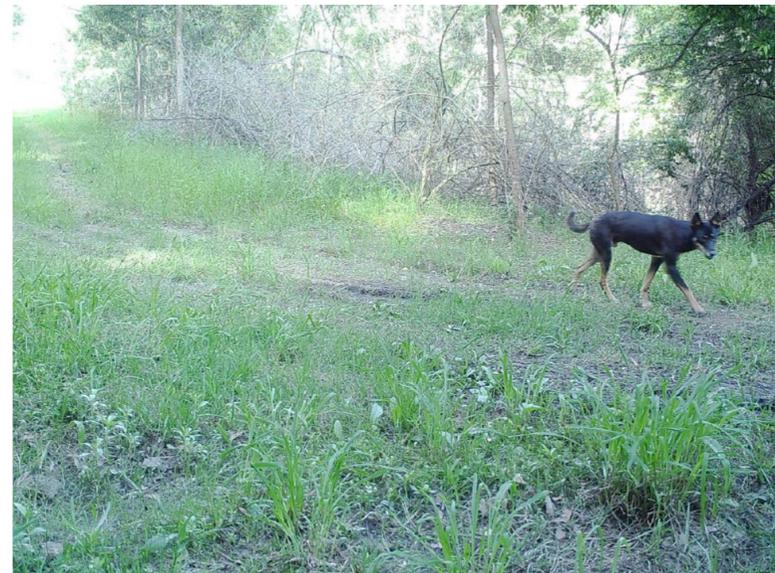


Photo: Wild dogs detected during 2021 wild dog trapping program.



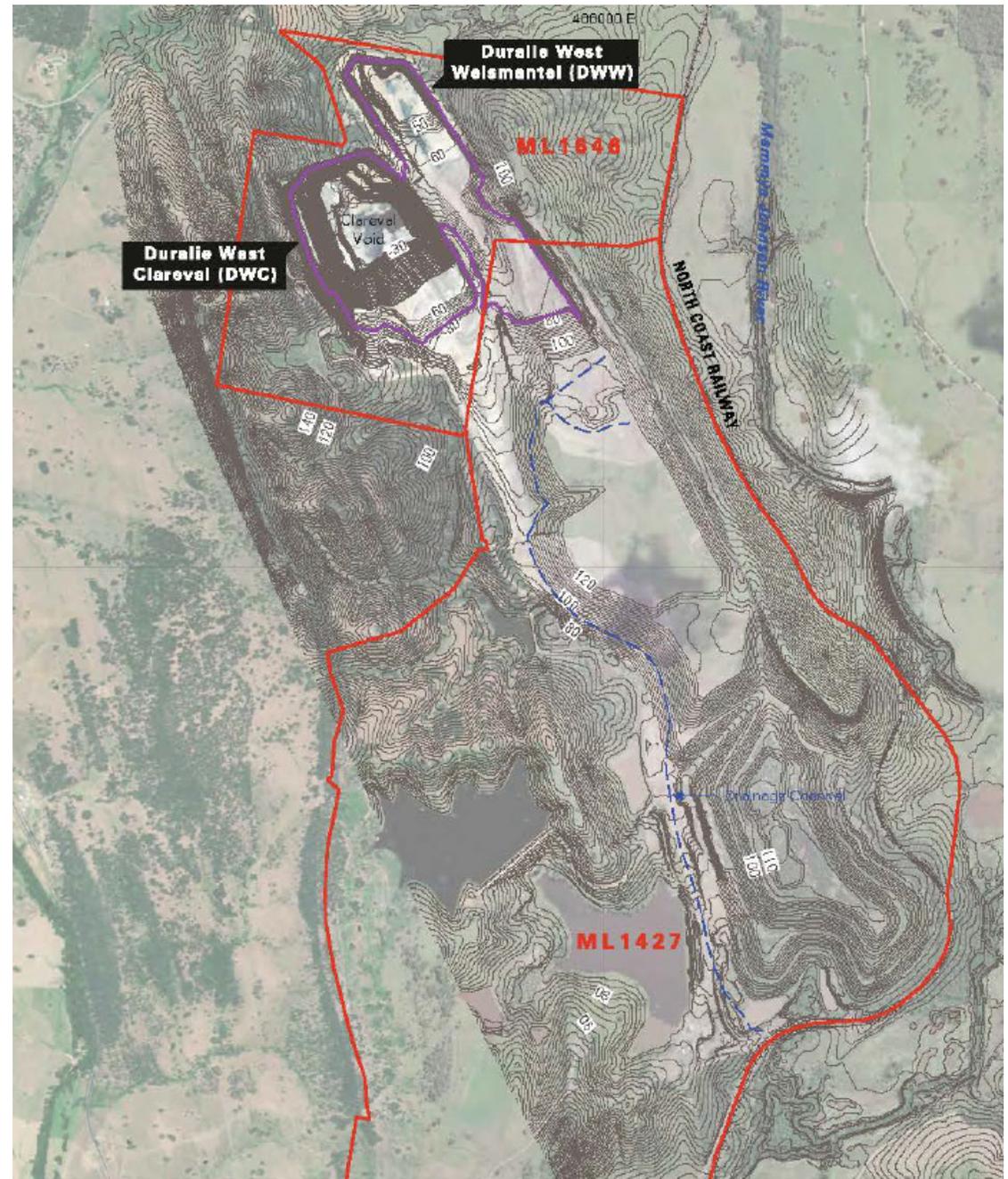
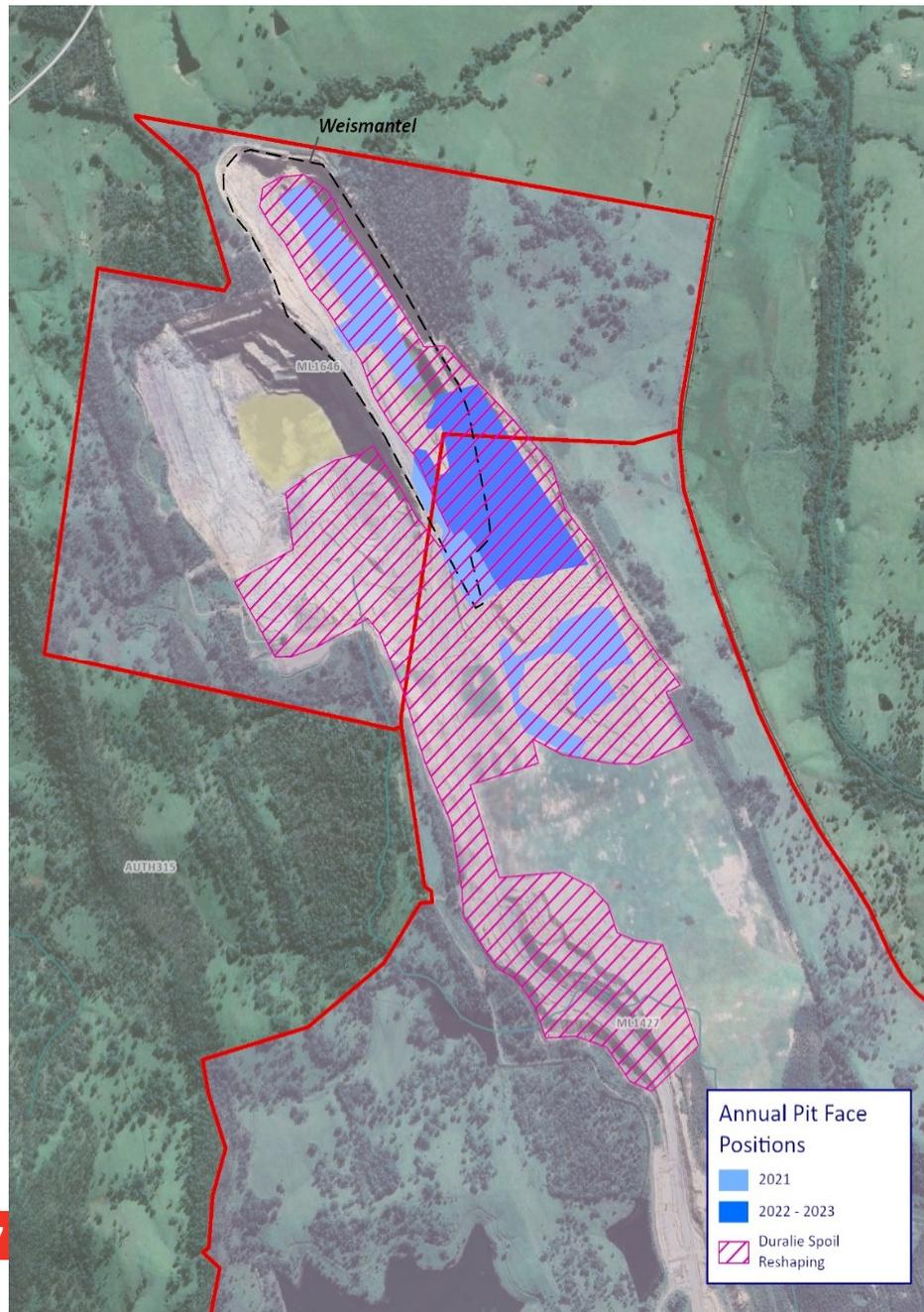
# 3g. Mine Closure

## Mine Closure Progress

- Mining operations, coal handling and rail movements ceased on 31 December 2021.
- Project Approval 08\_0203, ML 1427 and ML 1646 continue to be in force until DCPL rehabilitates the site in accordance with the conditions of the Approval and MLs to the satisfaction of DPIE and the Resources Regulator.
- Duralie PAF rehandle, bulk shaping and rehabilitation recommences September 2022.
- Proposed one crew operating Monday to Friday on day shift only for approx 14 months to achieve final landform.
- New RMP/Closure Plans being prepared for submission to Resources Regulator on 30 June 2022.



# 3g. Mine Closure Planning



# 3g. Mine Closure Planning

Management Area	Project	Status
Mine Closure Planning General	<ul style="list-style-type: none"> <li>Mine Closure Planning Program</li> </ul>	<ul style="list-style-type: none"> <li>DCPL has established a Mine Closure Planning Program in the MOP in Section 8 and Table 13.</li> <li>IEMA was engaged in June 2021 to assist preparing an updated Mine Closure Planning Program.</li> <li>The Mine Closure Planning Program is intended to provide a strategy and a description of all the works required to develop the Final Closure Plan</li> </ul>
Rehabilitation Management Plan	<ul style="list-style-type: none"> <li>Rehabilitation Management Plan, including closure plan</li> </ul>	<ul style="list-style-type: none"> <li>The Duralie Coal Mine Rehabilitation Management Plan, including closure plan is due for submission to the Resources Regulator prior to 30 June 2022.</li> <li>The RMP will be provided for consultation with the CCC.</li> </ul>
Closure Risk Assessment	<ul style="list-style-type: none"> <li>Mine Closure Risk Assessment review</li> </ul>	<ul style="list-style-type: none"> <li>A review of the Duralie Coal Mine Rehabilitation and Mine Closure Risk Assessment was undertaken in August 2021.</li> <li>The outcomes of the risk assessment have been used to develop an updated actions register which forms the basis of the Mine Closure Planning Program.</li> </ul>
Mine Closure Planning General	<ul style="list-style-type: none"> <li>Quarterly regulator progress meetings</li> </ul>	<ul style="list-style-type: none"> <li>The Resources Regulator has requested quarterly meetings to be established between Duralie Coal and the Regulator during the development of the Rehabilitation Management Plan, including closure plan, to provide progressive updates.</li> <li>The next meeting is scheduled in April 2022.</li> </ul>
Environmental Management Plans, Monitoring & Maintenance	<ul style="list-style-type: none"> <li>EMP reviews for closure stage</li> </ul>	<ul style="list-style-type: none"> <li>DCPL has prepared revisions of the Duralie Environmental Management Plans to reflect the current status of the DCM, and to describe anticipated mine closure activities and describe the change to environmental impacts, mitigation measures and monitoring programs at the DCM for the mine closure phase.</li> <li>The revised plans have been progressively approved by DPIE 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 maintenance activities will continue until the specific completion criteria has been met and confirmation has been received from the relevant authority.</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 2020/21.

Management Area	Project	Status
Stakeholder and Community	<ul style="list-style-type: none"> <li>Stakeholder engagement</li> </ul>	<ul style="list-style-type: none"> <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>The Mine Closure Planning Program includes requirements for the development of the following strategies:               <ul style="list-style-type: none"> <li>Stakeholder Consultation Strategy</li> <li>Community Engagement Strategy, including Socio-economic impact assessment</li> <li>Human Resources Strategy</li> </ul> </li> </ul>
Rehabilitated Landforms	<ul style="list-style-type: none"> <li>Landform design and stability</li> </ul>	<ul style="list-style-type: none"> <li>DCPL have finalised the detailed final landform designs for the site.</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 style="list-style-type: none"> <li>Water management and final void water balance</li> </ul>	<ul style="list-style-type: none"> <li>Review of the final void site water balance in Q2 2022 to ensure the balance incorporates the final landform design, surface water inflows and outflows to/from final void.</li> </ul>
	<ul style="list-style-type: none"> <li>Groundwater Model</li> </ul>	<ul style="list-style-type: none"> <li>Post-mining groundwater model verification in Q2 2022 to incorporate final void design. This work is undertaken in conjunction with the final void water balance. Further review work and remodelling is required.</li> </ul>
Rehabilitation Resources	<ul style="list-style-type: none"> <li>Topsoil Resources</li> </ul>	<ul style="list-style-type: none"> <li>A topsoil stockpile update was undertaken in June 2021 to ensure adequate topsoil is available for rehabilitation. The use of topsoil continues to be tracked. The rehabilitation resources register will be updated throughout closure.</li> </ul>
Water Management	<ul style="list-style-type: none"> <li>Mine Water Dams</li> </ul>	<ul style="list-style-type: none"> <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>Dewatering of AD2 to the Clareval void commenced in September 2021.</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
Coal Shaft Creek	<ul style="list-style-type: none"> <li>CSC Reconstruction</li> </ul>	<ul style="list-style-type: none"> <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 prepare 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>
Infrastructure	<ul style="list-style-type: none"> <li>Infrastructure Decommissioning &amp; Demolition Strategy</li> </ul>	<ul style="list-style-type: none"> <li>The mine closure planning program includes consideration for infrastructure decommissioning including:                             <ul style="list-style-type: none"> <li>Identify and remove/demolish all non-active infrastructure which is not required for the remainder of closure activities.</li> <li>Undertake consultation to confirm any alternative use for retained infrastructure (i.e. rail loop, haul roads, access tracks and dams) post-mining.</li> </ul> </li> <li>The further development of the detailed decommissioning and demolition plan will be prepared during the next reporting period and included in the Final Closure Plan.</li> </ul>
Final land use	<ul style="list-style-type: none"> <li>Potential final land-use planning</li> </ul>	<ul style="list-style-type: none"> <li>The target post-mining land uses are defined in the new RMP and shown in Figure 4 of the RMP.</li> </ul>



# 4. Community Complaints

## Duralie Complaint Summary Period: 30/09/2021 - 20/4/2022

Period: 6 Months

Total No. of Complaints: 1 (0 noise, 0 blast, 0 air quality, 1 other)

Total No. of Complainants: 1

Date/Time of Complaint	Complainant Location	Method of Complaint	Nature of Complaint	Investigation/Outcome
24/03/2022 16:37hrs	8.8km South of SCPL CHPP	Community Hotline	Various	<ul style="list-style-type: none"> <li>• Senior Environment &amp; Community Advisor (SECA) returned complainants call at 4:25PM. No answer.</li> <li>• The Complainant returned SECAs call at 4:37PM.</li> <li>• The Complainant listed his concerns to be dust, lighting, noise, blasting, transport of heavy machinery on the Bucketts Way during daylight hours and damage to his property from blasting from both Stratford and Duralie Coal mines.</li> <li>• The Complainant stated that he had contacted the complaints line multiple times and had not received a call back. SECA informed The Complainant that the complaints line has been functioning and all complaints received by the complaints line are forwarded directly to the SECA and no complaints from The Complainant had been received by Stratford Coal or Duralie Coal. SECA advised that he would investigate the call logs of the complaints line and investigate any potential failure of the complaints line process.</li> <li>• SECA requested specific dates for the listed noise, dust and blasting concerns, the complainant said that he had a record and would be able to provide the specific details at a later date.</li> <li>• The complainant stated that cracking had appeared in his home and believed it was due to blasting at Stratford and Duralie Coal. SECA offered to arrange a property investigation to investigate the cracking. Complainant thanked SECA and said he would confer with his wife and respond to the offer of the property investigation.</li> <li>• The complainant further stated that the transport of heavy machinery on the Bucketts Way under police escort, departing Duralie Coal Mine at 11:00am on multiple days is unreasonable and cannot possibly be legal. SECA stated that he is unaware of the legalities of the transport of heavy machinery and would investigate further with the contracting company undertaking the machinery moves.</li> </ul>



# 5. Community Programs

Management Area	Project	Status
Support Programs	Stratford Coal Community Support Program	<ul style="list-style-type: none"> <li>The 2022 Stratford Coal Community Support Program presentation night Was held on Thursday, 24<sup>th</sup> March 2022 at the Avon Valley Inn. Stratford Coal has granted over \$81,000 in funding to support 18 local community organisations across the Gloucester and Stroud region, aiming to make a positive difference to the community.</li> </ul>
	Stratford Coal Education Support Fund	The 2022 Stratford Coal Education Support Fund has been finalised and the grants confirmed at the annual committee meeting in March 2022. In 2022 a total of \$41,000 has been granted to students and local business for 8 x Tertiary courses, 2 x TAFE courses and 7 x Apprenticeships.

