

# Stratford Coal CCC Meeting

Presentation –
Company Report &
Overview of Activities

August 2019

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Environment & Community Superintendent



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#### 1. Progress at the Mine

#### Mining 2<sup>nd</sup> Quarter 2019

Waste BCM 1,990,000 BCM

Stratford ROM Coal 207,600 tonnes (Includes Codam)

Total CHPP product 118,600 tonnes

- \*Mining in Avon North continued during the quarter. Day and evening shift.
- \*No reclaim from the Codam area.
- \*No mining activities at Duralie.



<sup>\*</sup>Mining in BRN continued during the quarter. Dayshift only.

# 2. Environmental Reporting & Regulators

Management Area	Project	Status
Reporting	Stratford Mining Complex Annual Review 2018	<ul> <li>The Stratford Mining Complex 2018 Annual Review has been prepared and submitted to DP&amp;E and other relevant agencies. DP&amp;E confirmed acceptance of the Annual Review on 2 July 2019. The Annual Review is available on the Stratford Coal website.</li> </ul>
	Commonwealth EPBC Annual Compliance Report 2018	<ul> <li>The EPBC (2011-6176) Approval commenced in 2018. The first annual compliance report was prepared and submitted to the Department of the Environment &amp; Energy on 22 March 2019. The report is available on the Stratford Coal website.</li> </ul>
Regulator	<ul> <li>Stratford East Mining Lease Application</li> </ul>	ML 1787 was granted by the Minister on 5 June 2019.
	Environmental Management Plans	<ul> <li>SCPL has prepared revisions of the Environmental Management Plans to incorporate mining in the Roseville West Pit.</li> <li>The revised plans were approved by DP&amp;E in July 2019 and are available on the Stratford Coal website.</li> </ul>
	<ul> <li>Mining Operations Plan &amp; Rehabilitation Management Plan</li> </ul>	<ul> <li>SCPL submitted a MOP amendment to incorporate mining in the Roseville West Pit. The MOP was approved by DRG on 16 July 2019.</li> </ul>



#### 3. Environmental Management Plans & Monitoring

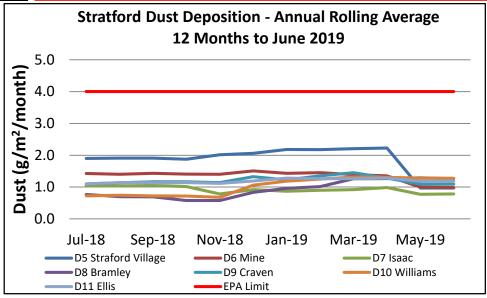
- a) Air Quality Management
- b) Blast Management
- c) Noise Management
- d) Water Management
- e) Rehabilitation Management
- f) Biodiversity Management

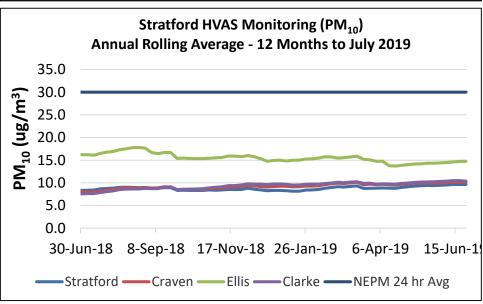
# 3a. Air Quality Management

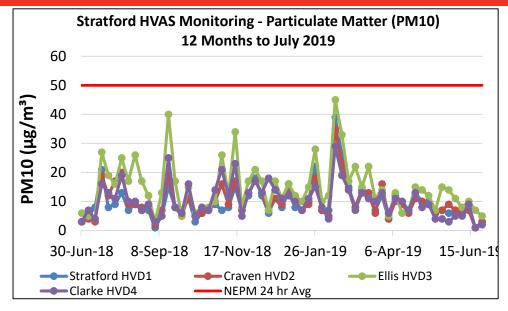
Management Area	Project	Status
Air quality monitoring	Real-time air quality     monitoring	<ul> <li>The TEOM monitors in Stratford and Craven villages continue to operate.</li> <li>SCPL has established alarming and a response protocol for the real-time dust monitoring system.</li> <li>During the period there were no alarms from the TEOM monitors.</li> </ul>



#### 3a. Air Quality Management







- All sites below DP&E limit. Typically low results during winter and higher during spring/summer.
- Flat 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	Blasting activities continued in both the Avon North and BRN open cuts.
	Blast Results	<ul> <li>No blasts exceeded 115dB(L) or 5mm/s during the quarter. For the annual reporting period two blasts have exceed 115dB(L)</li> <li>No blasts recorded any levels of fume during the quarter.</li> </ul>
	Blasting Preparations	<ul> <li>A Road Closure management plan has been prepared and approved by MidCoast Council for road closures during blasting along Wenham Cox Rd.</li> <li>An updated blast notifications register has been prepared.</li> <li>The blast hotline has been re-established.</li> </ul>
Building Inspections	Baseline condition inspections	No further building inspections have been required.



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

Location	Date	Time		: (B1) 32	Ex-Jud 74	ge (B2) 41	Atkin: 74	s (B6) 34	Clarke (Mine-o 743	wned)	Overpressure Site Exceedance <sup>1</sup>	Overpressure "Cumulative Exceedance" 1	Monitor ed Blasts <sup>1</sup>	Fume Rating
		24hr	mm/s	dBL	mm/s	dBL	mm/s	dBL	mm/s	dBL	%			
Avon North	Friday, 1 February 2019	12:19:00	0.25	85.7	0.24	80.8	0.28	104.4	1.18	111.2	4.2%	1	24	Nil
BRN	Tuesday, 5 February 2019	13:42:00	<0.24	<114	<0.24	<114	0.46	107.7	0.25	92.6	4.0%	1	25	Nil
Avon North	Friday, 8 February 2019	12:12:00	0.25	102.1	0.25	102.7	0.42	106.3	2.66	123.6	7.7%	2	26	Nil
BRN	Tuesday, 12 February 2019	13:18:00	<0.24	<114	<0.24	<114	< 0.45	99.1	0.30	92.6	7.4%	2	27	Nil
Avon North	Friday, 15 February 2019	12:09:00	0.32	82.1	0.29	86.8	0.33	105.4	2.22	112.2	7.1%	2	28	Nil
BRN	Tuesday, 19 February 2019	13:13:00	<0.24	<114	0.22	96.3	0.46	101.9	0.34	104.4	6.9%	2	29	Nil
Avon North	Wednesday, 20 February 2019	12:11:00	<0.24	<114	<0.24	<114	< 0.24	<114	1.23	109.5	6.7%	2	30	Nil
Avon North	Thursday, 21 February 2019	12:02:00	<0.24	<114	<0.24	<114	< 0.24	<114	0.49	106.6	6.5%	2	31	Nil
BRN	Wednesday, 27 February 2019	12:16:00	<0.24	<114	<0.24	<114	0.26	97.6	<0.24	<114	6.3%	2	32	Nil
Avon North	Friday, 1 March 2019	12:20:00	0.28	98.4	<0.24	<114	0.35	102.4	0.71	108.3	6.1%	2	33	Nil
BRN	Monday, 4 March 2019	15:00:00	<0.24	<114	<0.24	<114	< 0.24	<114	<0.24	<114	5.9%	2	34	Nil
Avon North	Friday, 8 March 2019	13:01:00	0.23	97.7	<0.24	<114	< 0.24	<114	0.71	109.9	5.7%	2	35	Nil
Avon North	Thursday, 14 March 2019	12:14:00	<0.24	<114	<0.24	<114	0.28	104.0	1.96	111.6	5.6%	2	36	Nil
Avon North	Friday, 22 March 2019	15:26:00	0.26	88.2	0.38	88.7	0.3	100.9	2.20	108.0	5.4%	2	37	2B
Avon North	Friday, 29 March 2019	12:23:00	0.32	90.1	0.45	88.7	0.32	101.9	2.98	112.9	5.3%	2	38	2A
BRN	Monday, 1 April 2019	14:16:00	<0.24	<114	<0.24	<114	0.39	99.7	0.28	96.4	5.1%	2	39	Nil
Avon North	Friday, 5 April 2019	12:07:00	<0.24	<114	<0.24	<114	0.22	103.2	0.50	112.8	5.0%	2	40	Nil
Avon North	Tuesday, 9 April 2019	12:18:00	0.23	94.2	<0.24	<114	0.27	99.1	1.00	108.6	4.9%	2	41	Nil
Avon North	Friday, 12 April 2019	12:14:00	0.27	97.7	0.27	98.8	0.38	82.8	2.20	111.1	4.8%	2	42	Nil
Avon North	Wednesday, 17 April 2019	11:34:00	0.33	90.1	0.54	80.8	0.49	82.8	2.91	112.9	4.7%	2	43	1A
Avon North	Thursday, 2 May 2019	12:14:00	0.37	82.1	0.34	80.8	0.45	105.1	1.81	111.7	4.5%	2	44	Nil

- 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.
- Note: Blast results for Clarke are extrapolated to the next nearest non-mined owned residence.



# 3c. Noise Management

Management Area	Project	Status
Monitoring	Monthly Noise Survey	<ul> <li>Monthly attended noise monitoring was undertaken during Q2 2019.</li> <li>No non-compliant results were recorded during the surveys. Reports will be made available on the Stratford Coal website. The next monitoring is scheduled in August 2019.</li> </ul>
Real-Time Noise	Real-Time Noise System	<ul> <li>Real-time noise monitors continue to operate near Stratford village, Craven Village and the Clarke property.</li> <li>The integrated real-time noise management system is operational. The 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>

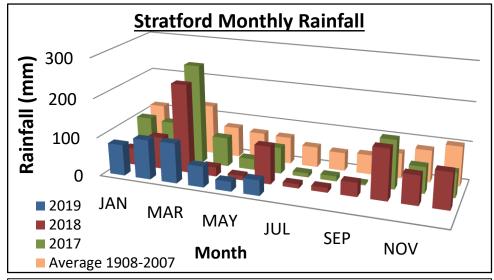


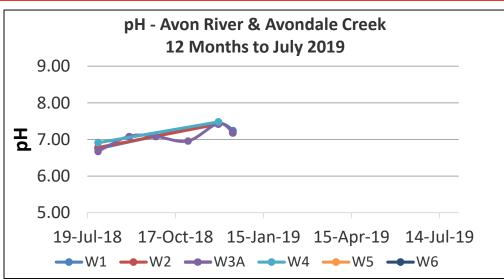
# 3d. Water Management

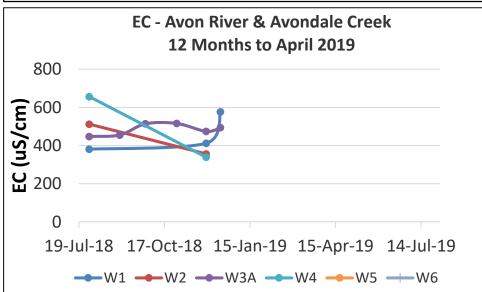
Management Area	Project	Status
Site Water Management	Site Water Balance review	The 2018 annual site water balance review has been completed. A summary is included in the Annual Review.
	Flood Modelling	<ul> <li>Avon North eastern clean water drain construction commenced in February 2019.</li> <li>Preparation of a revised flood model for the Avondale Creek has been completed. The flood model informs the designs of water infrastructure for Avon North including flood bunds and water diversions.</li> </ul>
Water management Structures	Avon North clean     water diversion drain	Avon North eastern clean water drain construction continued during April 2019.
	Main Pit Flood Bund	<ul> <li>The Main Pit Flood Bund construction commenced in May 2019. The flood bund design is based on the updated flood model for the Avondale Creek catchment.</li> </ul>
Surface Water Monitoring	Routine monitoring	<ul> <li>Sporadic and low rainfall conditions persisted through autumn/winter 2019.</li> <li>Routine water sampling continued. All results consistent with the SCM Environmental Assessment predictions. Generally "no flow" conditions have persisted across all sites.</li> </ul>
Groundwater Monitoring	Routine monitoring	<ul> <li>Routine groundwater sampling continued. All results consistent with the SCM Environmental Assessment predictions.</li> </ul>

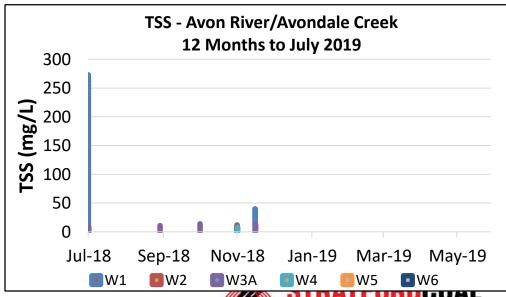


#### 3d. Water Management

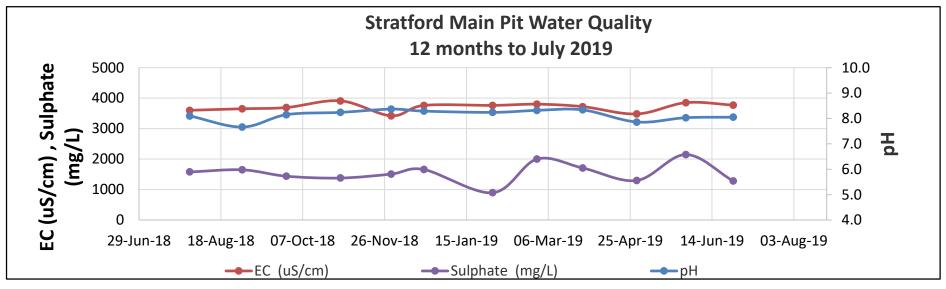


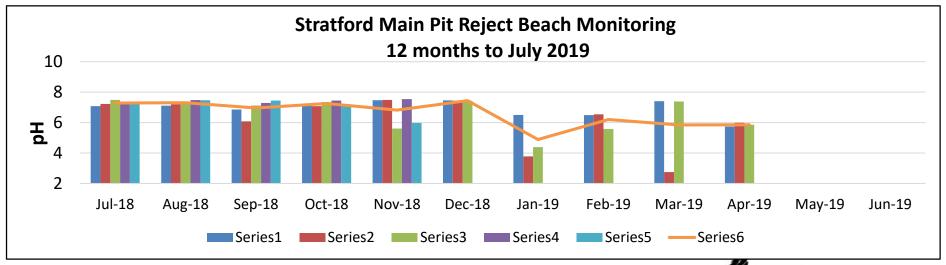






#### 3d. Water Management







# 3e. Rehabilitation Management

Management Area	Project	Status
Rehabilitation Planning	Stratford Main Pit Reject Emplacement	<ul> <li>A detailed strategy for the rehabilitation of the Stratford Main Pit Rejects         Emplacement was prepared during 2 Mar 2019 following a request form DRG.     </li> <li>The rehabilitation strategy will be incorporated into the MOP.</li> </ul>
Rehabilitated Waste Emplacements	<ul> <li>Avon North clean water diversion drain</li> <li>Avon North waste emplacement</li> </ul>	<ul> <li>Rehabilitation of the Avon North clean water diversion and backfilled area was completed in May 2019.</li> <li>Bulk shaping of the Avon North waste emplacement has continued focusing on areas with offsite visual impact. Planting is proposed in spring 2019 with native vegetation.</li> </ul>
Monitoring	<ul> <li>Vegetation Monitoring - Ecosystem Function Analysis</li> </ul>	<ul> <li>Rehabilitation monitoring incorporating landscape function analysis and vegetation dynamics was undertaken during May 2019. The final report is currently being prepared and a summary will be included in the Annual Review.</li> </ul>



Photo: Bulk shaping on the Avon North Waste Emplacement, May 2019.



Photo: Avon North clean water diversion drain and backfilled area, July 2019.



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

Management Area	Project	Status
Biodiversity Management Plan	Long-term security	<ul> <li>SCPL is required to secure the biodiversity offset lands in perpetuity. Public Positive Covenants and Restrictions on the Use of Land were prepared and submitted to DPE in December 2018.</li> <li>The final documents were executed by Yancoal and DP&amp;E in July 2019 and will be registered with LRS.</li> </ul>
Mining Lease	<ul> <li>Habitat Assessments</li> <li>Vegetation Clearance</li> </ul>	<ul> <li>Habitat assessments have been undertaken in the Stratford East and Avon North proposed mining areas in advance of clearing.</li> <li>Due to the delays with granting the Stratford East Mining Lease the mining sequence has been revised to bring Avon North forward and postpone Stratford East.</li> <li>Clearing permits were prepared in preparation for works in the Avon North southern section. The clearing permits address the management of vegetation, fauna, heritage sites and topsoil.</li> <li>No further clearing was undertaken during the previous quarter.</li> </ul>
Access & Livestock	<ul><li>Signage</li><li>Fencing</li></ul>	<ul> <li>Signage installation for the biodiversity conservation areas has been completed.</li> <li>Work has continued to replace and install boundary fencing for the biodiversity offset areas. Fencing completed near Wenham Cox Rd, Wheatley's Lane, Glen Rd and Bucketts Way.</li> </ul>





# **3f. Biodiversity Management**

Management Area	Project	Status
Biodiversity Offset Area	Revegetation     Works	<ul> <li>In 2019 SCPL is proposed to plant approximately 60,000 trees over 150 hectares along the Glen Road area in the Biodiversity Offset.</li> <li>Tubestock planting in the biodiversity offset area commenced in April 2019. Prior to planting ground preparation was undertaken including weed spraying, slashing and ripping.</li> <li>Due to the slow establishment of some shrub species in the nursery approximately 45,000 tubestock were planted in May 2019 and 15,000 have been postponed until Sep 2019.</li> </ul>
Biodiversity Offset Area	<ul> <li>Vegetation         Monitoring     </li> </ul>	<ul> <li>The first round of vegetation monitoring for the biodiversity offset area was undertaken in February 2019. This report will establish the baseline vegetation condition for the ongoing revegetation works in the offset area. A summary of the report will be included in the next Annual Review.</li> </ul>

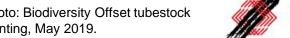


Photo: Biodiversity Offset tubestock planting,

May 2019.



Photo: Biodiversity Offset tubestock planting, May 2019.



# **3f. Biodiversity Management**

Management Area	Project	Status
Squirrel Glider Management	<ul> <li>Squirrel Glider Colony Surveys</li> <li>Squirrel Glider Home Range Surveys</li> <li>Nest box installations</li> </ul>	<ul> <li>Squirrel Glider colony surveys were completed in December 2018. Squirrel Gliders were identified in 5 separate locations.</li> <li>Squirrel Glider home range monitoring was undertaken during March/April 2019 via a trapping and radio tracking program. 8 gliders from 4 colonies were tracked to determine their home ranges. Records of other gliders encountered were also obtained.</li> <li>These studies will guide the ongoing management of glider populations.</li> <li>The second round of radio tracking commenced in July 2019.</li> <li>During May 2019 25 Squirrel Glider boxes were installed surrounding the home ranges identified in the radio tracking program. Monitoring will commence in August 2019.</li> </ul>
Pest Control	<ul> <li>Wild Dog control program</li> </ul>	<ul> <li>Wild dog and fox trapping was recommenced in May 2019 covering all Stratford Coal owned properties including biodiversity offsets and Mining Leases.</li> </ul>

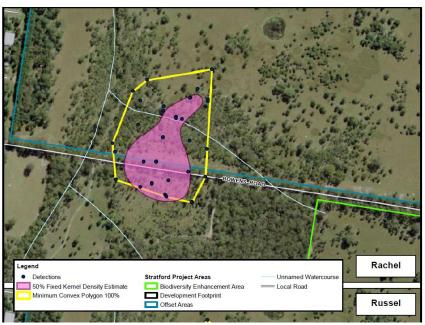




Photo: Squirrel Glider radio tracking program, Feb 2019.



#### 4. Community Complaints - Summary

#### **Stratford Complaint Summary**

Period: 1/04/2019 - 30/06/2019

Period: 3 Months

Total No. of Complaints: 0
Total No. of Complainants: 0

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



# **5. Community Programs**

Management Area	Project	Status
Support Programs	Stratford Coal Community Support Program	<ul> <li>SCPL received a very good response from many community organisations in 2019.</li> <li>A presentation for the recipients of the 2019 Stratford Coal Community Support Program was held at the Bucketts way Motel on 9 April 2019.</li> <li>Since 2010, Stratford Coal has granted over \$552,000 to local community groups.</li> <li>In 2019, over \$85,000 was shared across 22 local community organisations for projects in the areas of education, health, environment, infrastructure, arts, leisure and cultural heritage.</li> </ul>
	Stratford Coal Education Support Fund	<ul> <li>A great response to the Education Support Program for 2019 was received again with a strong round of applicants.</li> <li>The fund is now in its 23rd year and has contributed a total of over \$730,000 including \$29,000 in 2019.</li> <li>A presentation for the 2019 recipients of the Education Support Program was held at the Bucketts Way Motel on 13 March 2019.</li> <li>Support was provided to assist with the costs of education and training for university students, TAFE, apprenticeships and school based traineeships.</li> </ul>





# **5. Community Programs**

Management Area	Project	Status
Community Engagement	Chatham High School Clontarf Academy Site Visit & Tree Planting Day	<ul> <li>During May 2019 the Chatham High School Clontarf Academy was hosted by Stratford Coal for a tour of the operations. The students then took part in the bush regeneration works in the biodiversity offset area planting over 500 tree seedlings.</li> </ul>





Photo: Chatham High School visit to the Stratford Coal Mine, 14 May 2019.



# 5. Community Programs

Management Area	Project	Status
Community Engagement	Stratford Coal Family Day	<ul> <li>Stratford Coal hosted an open day on 25 May 2018 for the family and friends of employees.</li> <li>The day involved mine site tours, preparation plant tours, mining equipment displays, other active displays and information.</li> <li>Approximately 500 people attended over the course of the open day.</li> <li>Stratford Coal is very thankful for the support provided by local community groups: <ul> <li>Gloucester Rotary Club, MidCoast Rural Fire Service, Stroud Community Lodge,</li> <li>Gloucester High School, Gloucester RSL, Gloucester Masonic Lodge</li> </ul> </li> </ul>



Photo: Stratford Coal Family Day, 25 May 2019.