

Stratford Coal CCC Meeting

Presentation –
Company Report &
Overview of Activities

May 2019

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Environment & Community Superintendent

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1. Progress at the Mine

Mining 1st Quarter 2019

- Waste BCM 1,761,000 BCM
- Stratford ROM Coal 123,600 tonnes (Includes Codam)
- Total CHPP product 57,100 tonnes

*Mining in BRN continued during the quarter. Dayshift only.

*Mining in Avon North continued during the quarter. Day and evening shift.

*Reclaim from the Codam continued.

*No mining activities at Duralie.

2. Environmental Reporting & Regulators

Management Area	Project	Status
Reporting	<ul style="list-style-type: none"> Stratford Mining Complex Annual Review 2018 Commonwealth EPBC Annual Compliance Report 2018 	<ul style="list-style-type: none"> The Stratford Mining Complex 2018 Annual Review has been prepared and submitted to DP&E and other relevant agencies. Copies will be made available to the CCC and on the website following confirmation from DP&E. The EPBC (2011-6176) Approval commenced in 2018. The first annual compliance report was prepared and submitted to the Department of the Environment & Energy on 22 March 2019. The report is available on the Stratford Coal website.
Regulator	<ul style="list-style-type: none"> Stratford East Mining Lease Application Environmental Management Plans Mining Operations Plan & Rehabilitation Management Plan DPE Show Cause Notice – Ground Disturbance 	<ul style="list-style-type: none"> Assessment of the Stratford East MLA552 has been completed and the draft ML conditions have been accepted by SCPL in October 2018. The ML is currently pending grant by the Minister. SCPL is currently preparing revisions of the Environmental Management Plans to incorporate mining in the Roseville West Pit. The revised plans will be available on the Stratford Coal website. SCPL is currently preparing a MOP revision to incorporate mining in the Roseville West Pit. SCPL reported a ground disturbance incident to DPE in November 2018. Following a site inspection by DPE on 20 November 2018 the Department issued SCPL a Show Cause notice. SCPL provided a report to DPE and following this the Department has issued SCPL with an Official Caution.

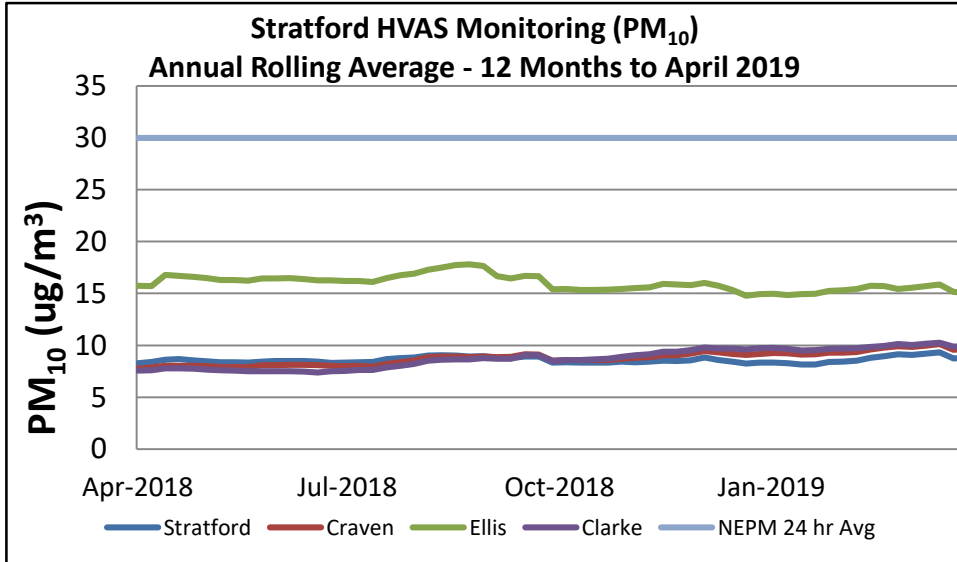
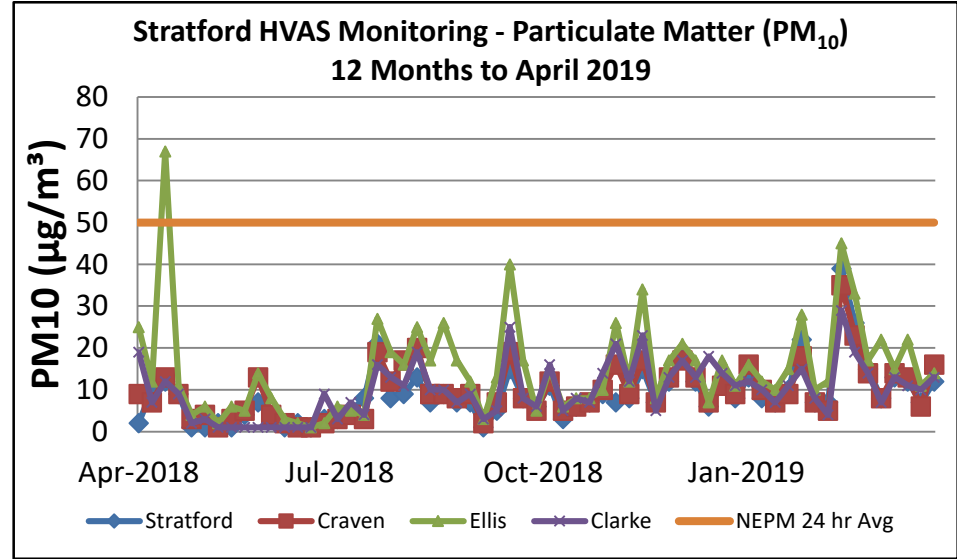
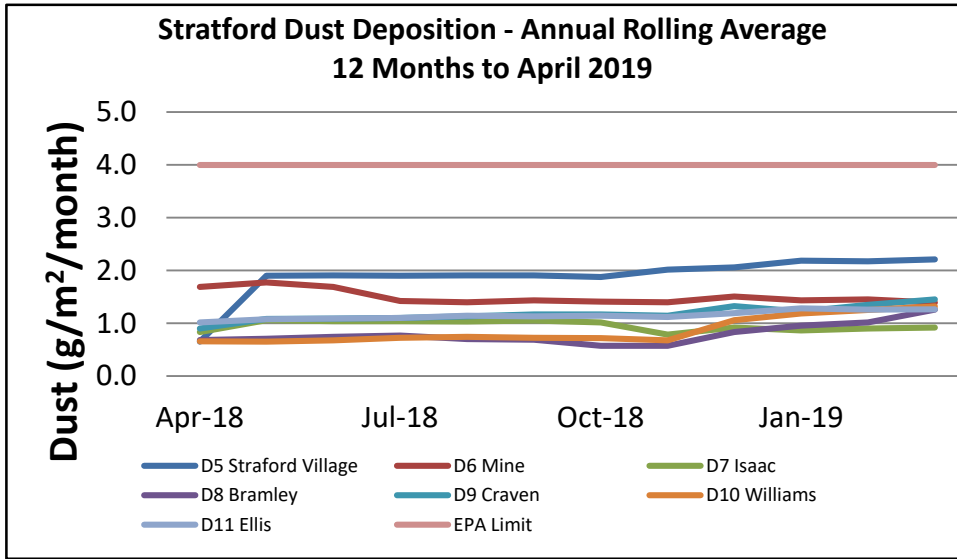
3. Environmental Management Plans & Monitoring

- 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	<ul style="list-style-type: none">Real-time air quality monitoring	<ul style="list-style-type: none">The TEOM monitors in Stratford and Craven villages continue to operate.SCPL has established alarming and a response protocol for the real-time dust monitoring system.During the period all TEOM alarms related to either bushfire smoke or poor regional air quality generally from dry, windy conditions.

3a. Air Quality Management



- All sites below DP&E limit. Typically low results during winter and higher during spring/summer.
- High results at Ellis HVAS monitor on 13-Apr-18 due to a semi-trailer being loaded on a nearby dirt track.
- 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	<ul style="list-style-type: none">• Blast Monitoring• Blast Results	<ul style="list-style-type: none">• Blasting activities continued in both the Avon North and BRN open cuts.• One blast exceeded 115dB(L) and no blasts exceeded 5mm/s during the quarter. For the annual reporting period two blasts have exceed 115dB(L)• Three blasts recorded low levels of fume during the quarter.
	<ul style="list-style-type: none">• Blasting Preparations	<ul style="list-style-type: none">• A Road Closure management plan has been prepared and approved by MidCoast Council for road closures during blasting along Wenham Cox Rd.• An updated blast notifications register has been prepared.• The blast hotline has been re-established.
Building Inspections	<ul style="list-style-type: none">• Baseline condition inspections	<ul style="list-style-type: none">• No further building inspections have been required.

3b. Blast Management

Location	Date	Time	Isaac (B1) 7432		Ex-Judge (B2) 7441		Atkins (B6) 7434		Clarke (B5) (Mine-owned) 7433		Overpressure Site Exceedance ¹	Overpressure "Cumulative Exceedance" ¹	Monitor ed Blasts ¹	Fume Rating
			24hr	mm/s	dBL	mm/s	dBL	mm/s	dBL	mm/s				
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.



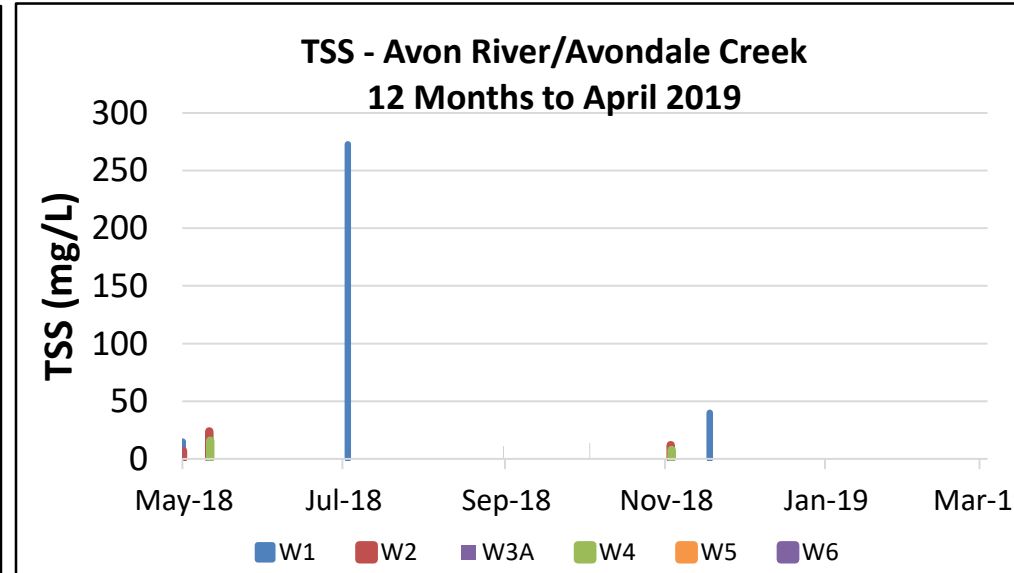
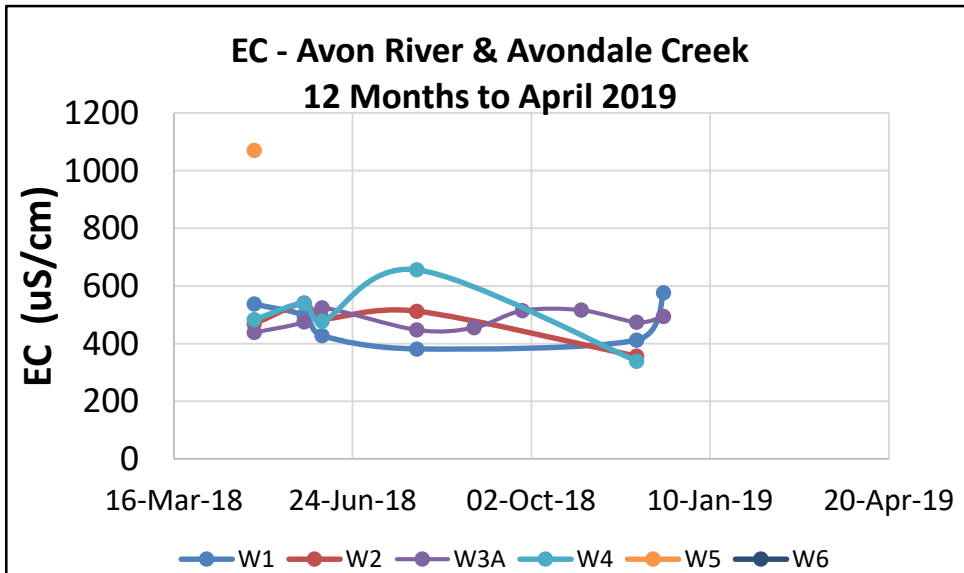
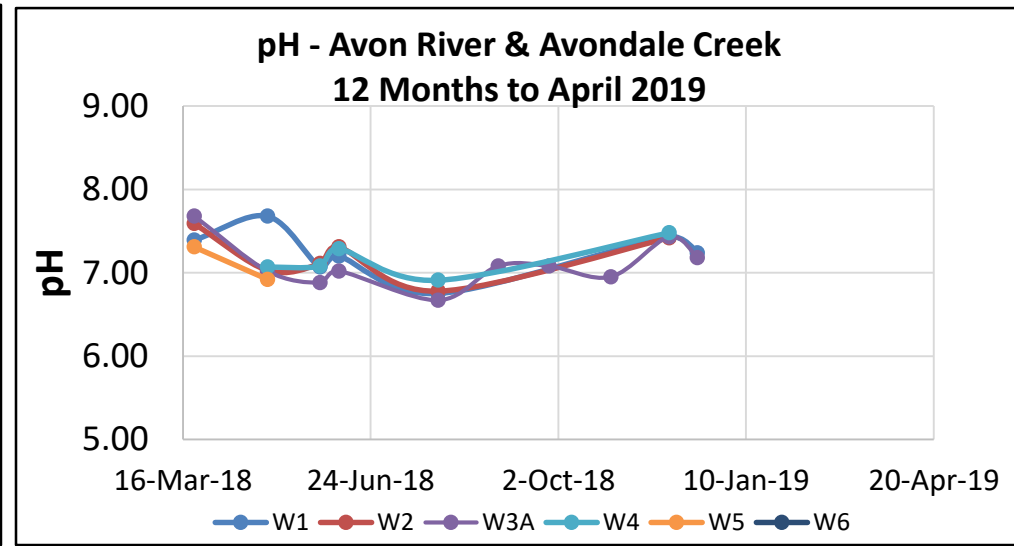
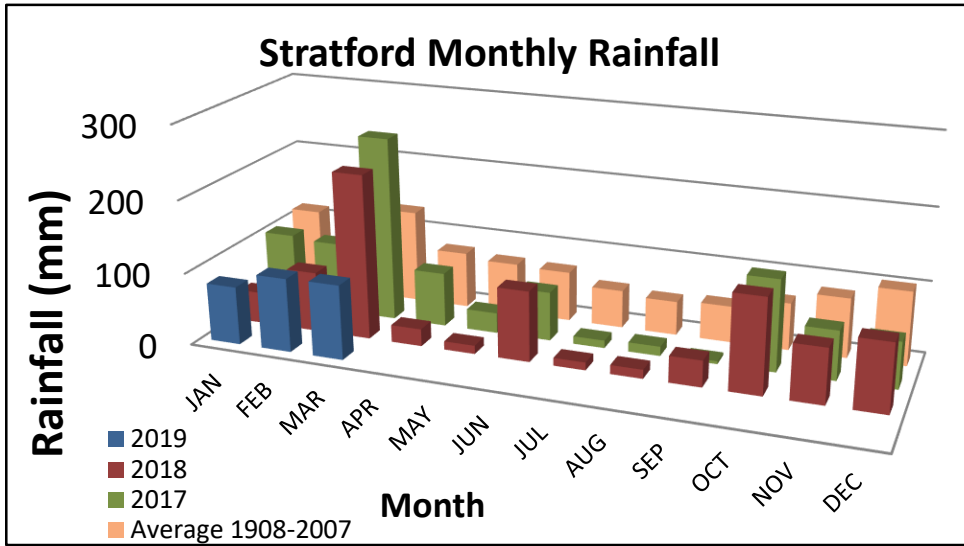
3c. Noise Management

Management Area	Project	Status
Monitoring	<ul style="list-style-type: none">Monthly Noise Survey	<ul style="list-style-type: none">Monthly attended noise monitoring was undertaken during Q1 2019.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 May 2019.
Real-Time Noise	<ul style="list-style-type: none">Real-Time Noise System	<ul style="list-style-type: none">Real-time noise monitors continue to operate near Stratford village, Craven Village and the Clarke property.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.

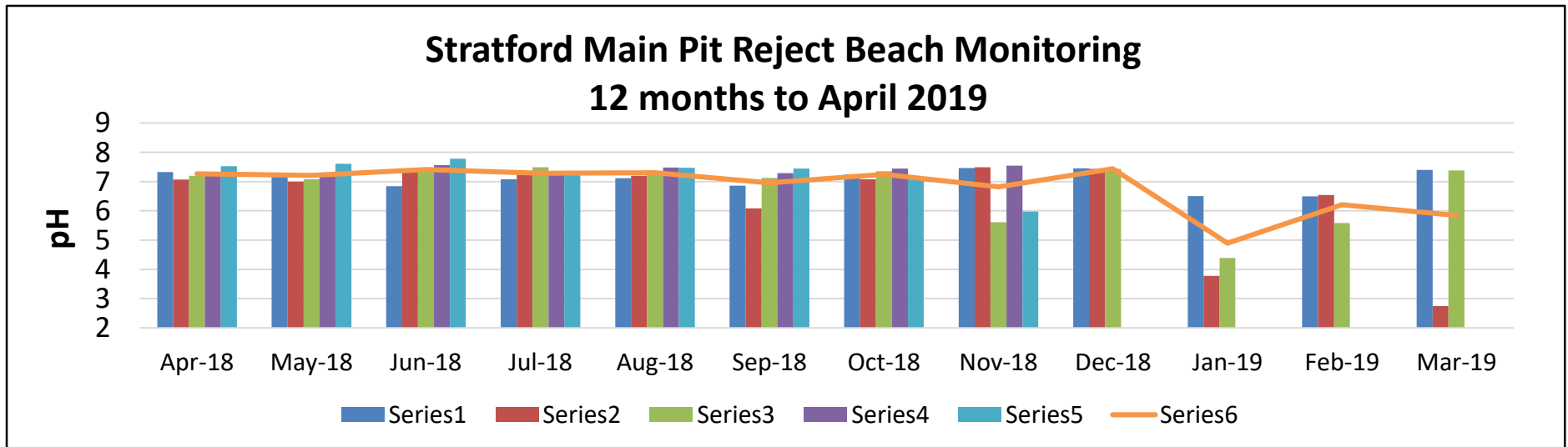
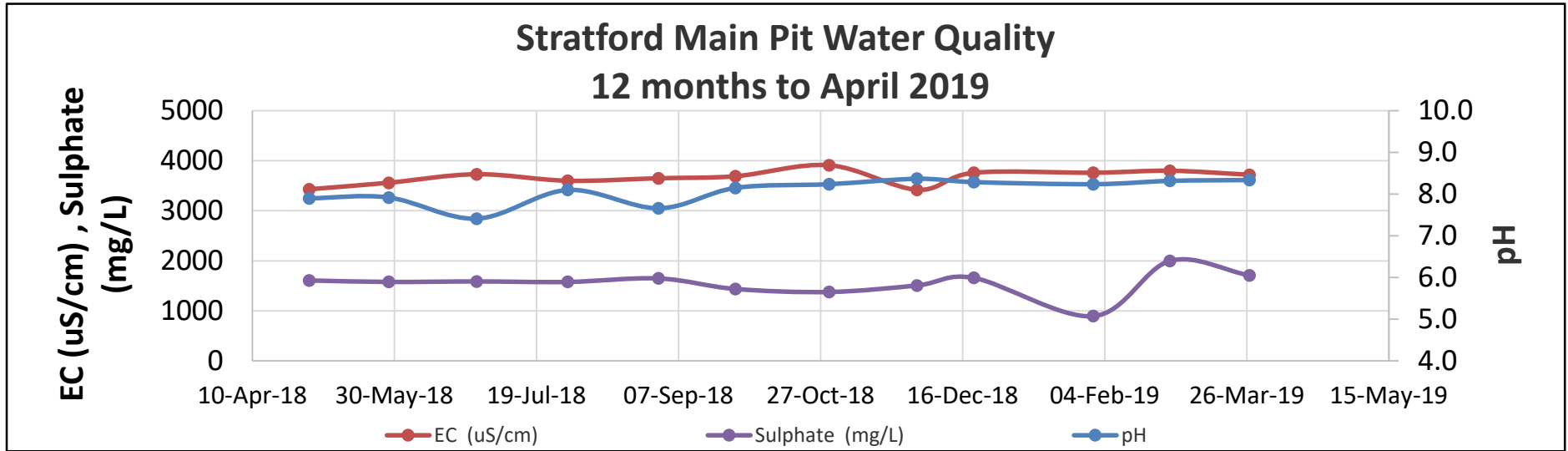
3d. Water Management

Management Area	Project	Status
Site Water Management	<ul style="list-style-type: none">• Site Water Balance• Flood Modelling	<ul style="list-style-type: none">• The 2018 annual site water balance review has been completed. A summary is included in the Annual Review.• Avon North eastern clean water drain construction commenced in February 2019.• 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.
Surface Water Monitoring	<ul style="list-style-type: none">• Routine monitoring	<ul style="list-style-type: none">• Sporadic and low rainfall conditions persisted through summer/autumn 2019.• Routine water sampling continued. All results consistent with the SCM Environmental Assessment predictions. Generally “no flow” conditions have persisted across all sites.
Groundwater Monitoring	<ul style="list-style-type: none">• Routine monitoring	<ul style="list-style-type: none">• Routine groundwater sampling continued. All results consistent with the SCM Environmental Assessment predictions.

3d. Water Management



3d. Water Management



3e. Rehabilitation Management

Management Area	Project	Status
Rehabilitated Waste Emplacements	<ul style="list-style-type: none">Avon North waste emplacement	<ul style="list-style-type: none">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.
	Rehabilitation Maintenance	<ul style="list-style-type: none">Slashing and fertilising has been undertaken on the centre pivot area and codam pasture during May 2019.
Monitoring	<ul style="list-style-type: none">Vegetation Monitoring - Ecosystem Function Analysis	<ul style="list-style-type: none">Rehabilitation monitoring incorporating landscape function analysis and vegetation dynamics is scheduled to be undertaken in May 2019. A summary will be included in the Annual Review.



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

3f. Biodiversity Management

Management Area	Project	Status
Biodiversity Management Plan	<ul style="list-style-type: none"> • Long-term security • Conservation Bond 	<ul style="list-style-type: none"> • 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. • The draft documents were accepted by DPE in April 2019 and SCPL will now lodge these with LRS. • A conservation bond has been prepared for the estimated cost of undertaking the management requirements for the biodiversity offset area. The conservation bond estimate was submitted to DPE in December 2018. DPE confirmed the sum of the bond estimate was satisfactory and a bank guarantee was lodged with DPE in February 2019.
Mining Lease	<ul style="list-style-type: none"> • Habitat Assessments • Vegetation Clearance 	<ul style="list-style-type: none"> • Habitat assessments have been undertaken in the Stratford East and Avon North proposed mining areas in advance of clearing. • 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. • 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. • Clearing commenced in February 2019.
Access & Livestock	<ul style="list-style-type: none"> • Signage • Fencing 	<ul style="list-style-type: none"> • Signage installation for the biodiversity conservation areas has been completed. • 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.

3f. Biodiversity Management

Management Area	Project	Status
Biodiversity Offset Area	<ul style="list-style-type: none"> Revegetation Works 	<ul style="list-style-type: none"> In 2019 SCPL is planning for the planting of approximately 60,000 trees over 150 hectares along the Glen Road area. Tubestock planting in the biodiversity offset area commenced in April 2019. Prior to planting ground preparation was undertaken including weed spraying, slashing and ripping.
Biodiversity Offset Area	<ul style="list-style-type: none"> Vegetation Monitoring 	<ul style="list-style-type: none"> 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.
Weed Management	<ul style="list-style-type: none"> Weed Spraying 	<ul style="list-style-type: none"> Weed spraying in the Stratford biodiversity areas continued until May 2019. The initial focus is in the areas proposed for revegetation in 2019. The main target species are blackberry, wild tobacco, lantana, privet and GPG.



Photo: Biodiversity Offset preparation for tubestock planting, Mar 2019.



Photo: Tubestock ready for planting, Apr 2019.

3f. Biodiversity Management

Management Area	Project	Status
Squirrel Glider Management	<ul style="list-style-type: none"> Squirrel Glider Colony Surveys Squirrel Glider Home Range Surveys Nest box installations 	<ul style="list-style-type: none"> Squirrel Glider colony surveys were completed in December 2018. Squirrel Gliders were identified in 5 separate locations. 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. These studies will guide the ongoing management of glider populations. The second round of radio tracking will commence in June 2019. During May 2019 25 Squirrel Glider boxes were installed surrounding the home ranges identified in the radio tracking program.
Pest Control	<ul style="list-style-type: none"> Wild Dog control program 	<ul style="list-style-type: none"> Wild dog and fox trapping is recommenced in May 2019 covering all Stratford Coal owned properties including biodiversity offsets and Mining Leases.



Photo: Squirrel Glider radio tracking, Feb 2019.



Photo: Squirrel Glider nest box installations, May 2019.



4. Community Complaints - Summary

Stratford Complaint Summary

Period: 1/2/2019 - 30/4/2019

Period: 3 Months

Total No. of Complaints: 2

Total No. of Complainants: 1

Date/Time of Complaint	Complainant Location	Method of Complaint	Nature of Complaint	Investigation/Outcome
8/02/2019 13:00hrs	Approx. 2.5km west of source (4.5kms from blast)	Direct to mobile.	Blast Overpressure	<p>Complaint: "Blast overpressure was noticeable at residence and caused windows to shake."</p> <ul style="list-style-type: none"> The complaint was made directly to the E&C Supt. mobile. MP advised a blast had been fired at 12:11pm on 08/02/2018. MP advised the overpressure and ground vibration results at the monitor in closest proximity to the complaints residence were compliant, however the results were higher than previous blasts. The complainant advised this was the first blast they had noticed and didn't want this to become the norm as had previously been experienced from the Stratford operations. MP advised SCPL was currently refining designs for blast patterns in the Avon North pit where complex geological structures have been identified to minimise potential impacts from overpressure and ground vibration.
15/02/2019 12:30hrs	Approx. 2.5km west of source (4.5kms from blast)	Direct to mobile.	Blast Overpressure	<p>Complaint: "Blast overpressure from Stratford mine caused the windows on the house to shake again"</p> <ul style="list-style-type: none"> The complaint was made directly to the E&C Supt. mobile. MP advised a blast had been fired at 12:09pm on 15/02/2018. MP advised the overpressure and ground vibration results at the monitor in closest proximity to the complainants residence were well below compliance levels (Stratford Village monitor 0.29mm/s, 86.8dB(L)). MP and the complainant discussed the blasting operations at the Stratford Mine. MP discussed the blast criteria and the potential impacts and on residents. The complainant advised the blasting was an inconvenience and if the levels increase it would become unacceptable. MP advised the measures which are undertaken in blast design to reduce the offsite impacts as much as practicable. MP stated the feedback from the community is useful to further improve blasting and the information is conveyed with the drill and blast engineer.

5. Community Programs

Management Area	Project	Status
Support Programs	Stratford Coal Community Support Program	<ul style="list-style-type: none"> • SCPL received a very good response from many community organisations in 2019. • A presentation for the recipients of the 2019 Stratford Coal Community Support Program was held at the Bucketts way Motel on 9 April 2019. • Since 2010, Stratford Coal has granted over \$552,000 to local community groups. • 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.
	<ul style="list-style-type: none"> • Stratford Coal Education Support Fund 	<ul style="list-style-type: none"> • A great response to the Education Support Program for 2019 was received again with a strong round of applicants. • The fund is now in its 23rd year and has contributed a total of over \$730,000 including \$29,000 in 2019. • A presentation for the 2019 recipients of the Education Support Program was held at the Bucketts Way Motel on 13 March 2019. • Support was provided to assist with the costs of education and training for university students, TAFE, apprenticeships and school based traineeships.



Photo: Stratford Coal Education Support Fund presentation night, 13 March 2019.