

Stratford Coal CCC Meeting

Presentation –
Company Report &
Overview of Activities

February 2020

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Acting Environment & Community
Superintendent

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1. Progress at the Mine

Mining 3rd Quarter 2019

- Waste BCM 1,465,656 BCM
- Stratford ROM Coal 406,142 tonnes (Includes Codam)
- Total CHPP product 279,256 tonnes
- Mining in BRN continued during the quarter. Dayshift only.
- Mining in Avon North continued during the quarter. Day and evening shift.
- Mining in the Roseville West Pit continued during the quarter. Dayshift only.
- Construction works for Stratford East continued during the quarter. Dayshift only.
- No mining activities at Duralie. Rehabilitation work only

2. Environmental Reporting & Regulators

Management Area	Project	Status
Reporting	<ul style="list-style-type: none"> Stratford Mining Complex Annual Review 2019 	<ul style="list-style-type: none"> The Stratford Mining Complex 2019 Annual Review is currently being prepared. The AR is due by the end of March 2020. Copies will be made available to the CCC.
Regulator	<ul style="list-style-type: none"> Conditions of Consent – Stratford Water Access Modification Environmental Management Plans Mining Operations Plan & Rehabilitation Management Plan 	<ul style="list-style-type: none"> The NSW Department of Planning, Industry and Environment granted the Stratford Extension Project modification to allow offsite water transfer by a public authority. The Consolidated Consent and the modification are available on the Stratford Coal website. Review required following Consent modification and Annual Return submission. No change

Water Access Modification

Stratford Water Access Modification

- The NSW Department of Planning, Industry and Environment granted the Stratford Extension Project modification to allow offsite water transfer by a public authority.
- This Modification permits Council to access Stratford's surplus mine water for non-potable uses, taking pressure off Council's water supply during the current extreme drought conditions.
- After consultation with the EPA it was determined no amendments of the Stratford EPL 5161 were required.
- Stratford is now approved to construct a new water fill point off Bowens Road, which can then be accessed by Council's road-registered water trucks.
- Note that Council has yet to obtain EPA approval permitting the use of this water.

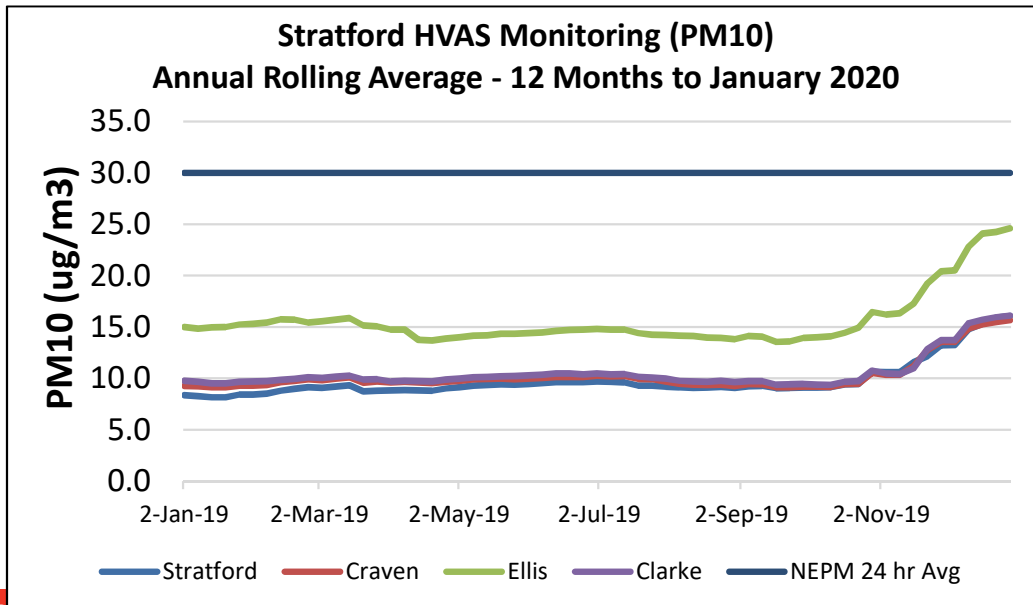
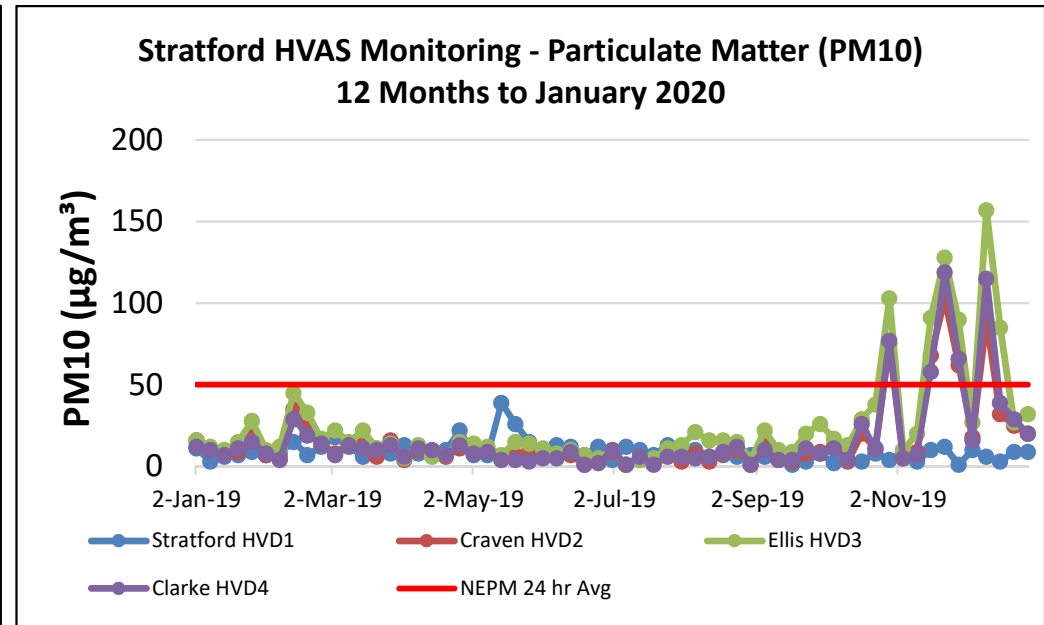
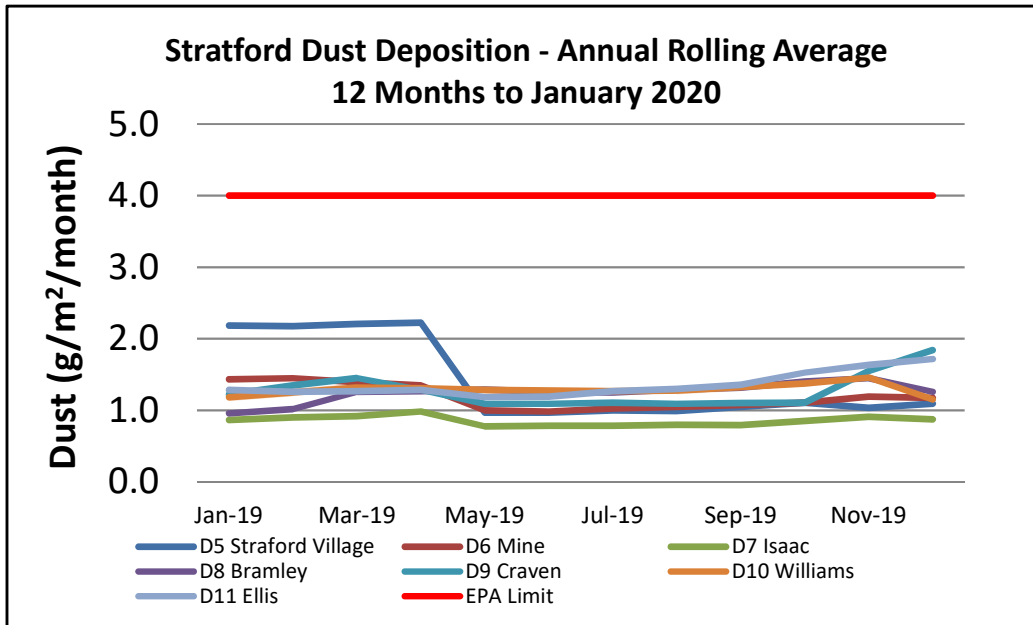
3. Environmental Management Plans & Monitoring

- 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 real-time air quality 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.General ambient PM10 dust levels have been elevated due to ongoing drought conditions. Elevated PM10 levels have also been recorded from smoke during recent bushfires.

3a. Air Quality Management



- Increased results in October, November and December attributable to very poor regional air quality due to bush fire smoke.
- 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	<ul style="list-style-type: none"> Blast Monitoring Blast Results 	<ul style="list-style-type: none"> Blasting activities continued in both the Avon North, BRN open cuts with blasting commencing again in Roseville West pit from November. 1 blast exceeded 115dB(L) during the quarter. For the annual reporting period 2.1% of blasts have exceed 115dB(L) (<i>No more than 5% of total blasts allowed to exceed the 115dbl</i>). No blasts exceeded the 5mm/s during the quarter. For the annual reporting period no blasts have exceed 5mm/s. No blasts recorded significant 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, Bowens Rd and Wheatleys In. Blast notifications have continued.
Building Inspections	<ul style="list-style-type: none"> Baseline condition inspections 	<ul style="list-style-type: none"> 4 Building inspections were completed in Q4 2019

3b. Blast Management

Shot #	Location	Date	Time	Isaac (B1) 7432		Ex-Judge (B2) 7441		Atkins (B6) 7434		Clarke (B5) (Mine-owned) 7433 (previously 7377)		Overpressure Site Exceedance ¹	Overpressure "Cumulative Exceedance" ¹	Fume Rating
				mm/s	dBL	mm/s	dBL	mm/s	dBL	mm/s	dBL			
AN090	Avon North	Friday, 4 October 2019	12:34:00	0.28	97.3	<0.24	<114	0.25	95.1	1.77	107.6	0.0%	0	Nil
AN086	Avon North	Thursday, 10 October 2019	12:49:00	<0.24	<114	<0.24	<114	<0.24	<114	0.3	105.8	0.0%	0	Nil
AN095	Avon North	Wednesday, 16 October 2019	12:43:00	<0.24	<114	0.25	79.1	0.34	97.0	2.17	108.5	0.0%	0	Nil
AN096	Avon North	Friday, 18 October 2019	12:31:00	0.23	97.3	<0.24	<114	0.25	98.6	0.86	104.5	0.0%	0	Nil
AN097	Avon North	Friday, 25 October 2019	12:43:00	0.25	86.0	<0.24	<114	0.28	97.8	0.93	111.6	0.0%	0	Nil
AN100	Avon North	Wednesday, 30 October 2019	12:39:00	<0.24	<114	<0.24	<114	<0.24	<114	0.62	100.3	0.0%	0	Nil
AN102	Avon North	Friday, 1 November 2019	12:29:00	0.28	88.5	0.25	85.1	0.24	97.8	1.26	106.8	0.0%	0	Nil
AN099	Avon North	Friday, 8 November 2019	10:21:00	0.22	82.5	<0.24	<114	<0.24	<114	0.67	109.3	0.0%	0	Nil
AN103	Avon North	Friday, 15 November 2019	11:02:00	0.28	86.0	<0.24	<114	0.26	103.0	1.37	111.0	0.0%	0	Nil
AN106	Avon North	Wednesday, 20 November 2019	12:48:00	<0.24	<114	<0.24	<114	<0.24	<114	0.26	103.4	0.0%	0	Nil
RSV283	Roseville West	Thursday, 21 November 2019	12:36:00	0.32	107.1	0.37	107.7	0.39	104.2	<0.24	<114	0.0%	0	Nil
AN104	Avon North	Friday, 22 November 2019	12:50:00	0.32	88.5	<0.24	<114	0.29	100.5	2.88	108.9	0.0%	0	Nil
BRN285	BRN	Wednesday, 27 November 2019	12:45:00	<0.24	<114	<0.24	<114	<0.24	<114	<0.24	<114	0.0%	0	Nil
AN107	Avon North	Friday, 29 November 2019	14:22:00	0.27	93.4	<0.24	<114	<0.24	<114	1.47	112.3	0.0%	0	Nil
AN108	Avon North	Thursday, 5 December 2019	12:54:00	0.31	86.0	0.28	79.1	0.31	100.5	1.08	109.1	0.0%	0	Nil
RSV286	Roseville West	Tuesday, 10 December 2019	12:42:00	0.50	112.3	0.36	116.1	0.31	117.8	0.24	103.8	2.7%	1	Nil
AN108B	Avon North	Friday, 13 December 2019	12:34:00	0.27	82.5	<0.24	<114	<0.24	<114	0.99	107.1	2.6%	1	1A
RSV288	Avon North	Monday, 16 December 2019	12:39:00	0.28	92.0	0.3	99.9	0.43	109.7	<0.24	<114	2.6%	1	Nil
AN111	Avon North	Tuesday, 17 December 2019	12:38:00	<0.24	<114	<0.24	<114	0.24	95.1	0.57	106.8	2.5%	1	Nil
AN112	Avon North	Thursday, 19 December 2019	12:38:00	<0.24	<114	<0.24	<114	<0.24	<114	0.46	104.2	2.4%	1	Nil
AN101B	Avon North	Friday, 10 January 2020	10:10:00	0.24	98.8	<0.24	<114	0.35	96.1	0.81	106.6	2.4%	1	Nil
RSV289	Roseville West	Wednesday, 15 January 2020	10:07:00	0.51	103.3	0.33	102.6	<0.24	<114	<0.24	<114	2.3%	1	Nil
AN113	Avon North	Thursday, 16 January 2020	12:29:00	0.28	82.5	<0.24	<114	0.45	111.9	2.1	111.9	2.3%	1	Nil
RSV290	Roseville West	Tuesday, 21 January 2020	12:45:00	0.32	96.5	0.28	98.1	0.35	96.1	<0.24	<114	2.2%	1	Nil
AN117	Avon North	Wednesday, 22 January 2020	12:42:00	<0.24	<114	<0.24	<114	<0.24	<114	0.64	104.5	2.2%	1	Nil
AN117B - Refire misfire	Avon North	Wednesday, 22 January 2020	13:10:00	0.25	88.5	<0.24	<114	0.33	97.0	0.72	105.8	2.1%	1	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.



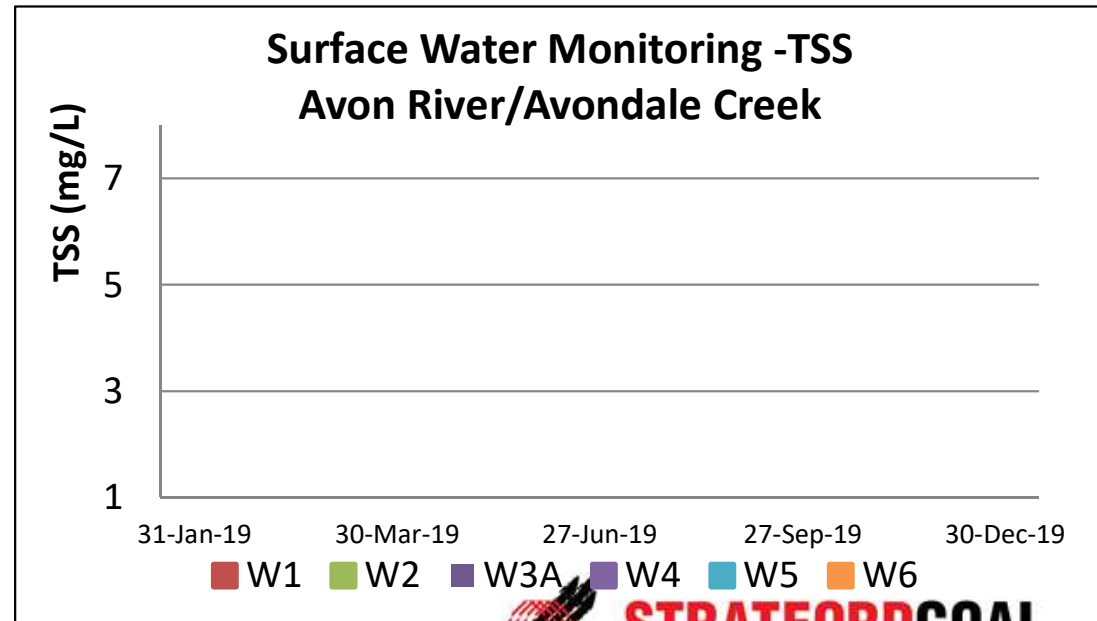
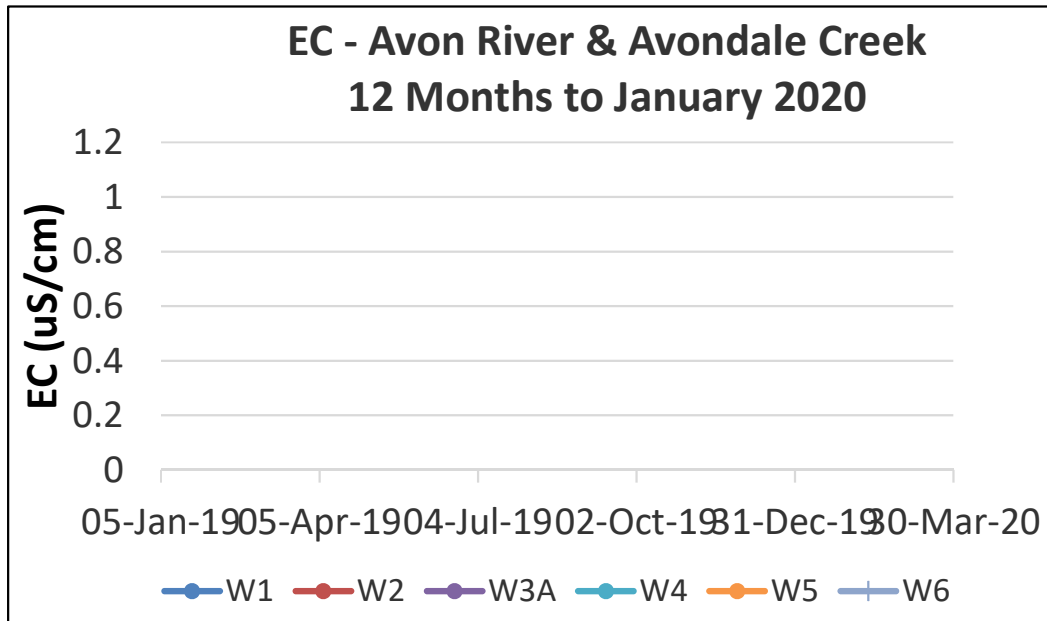
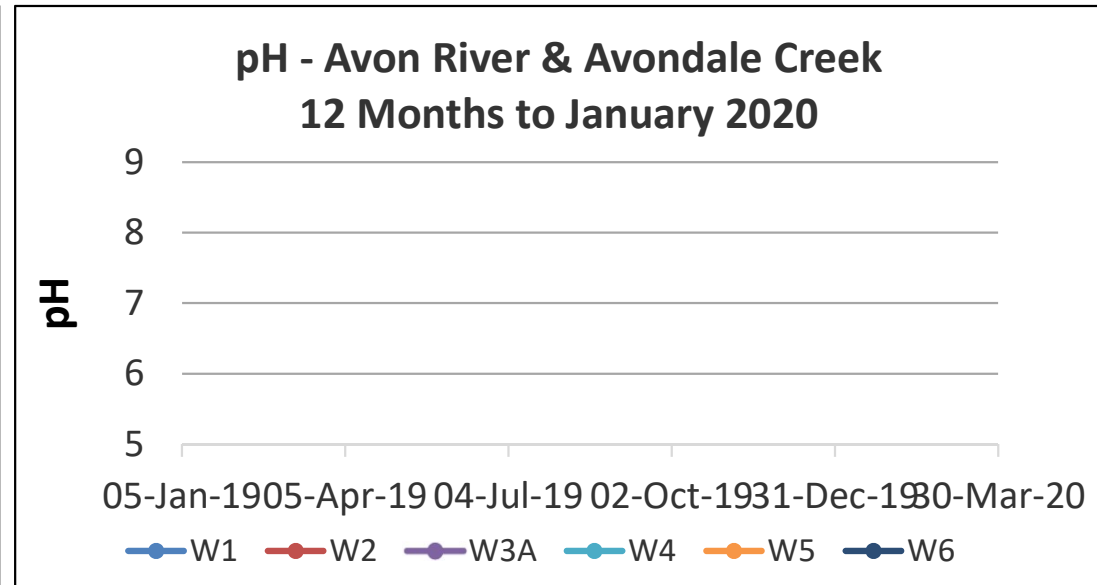
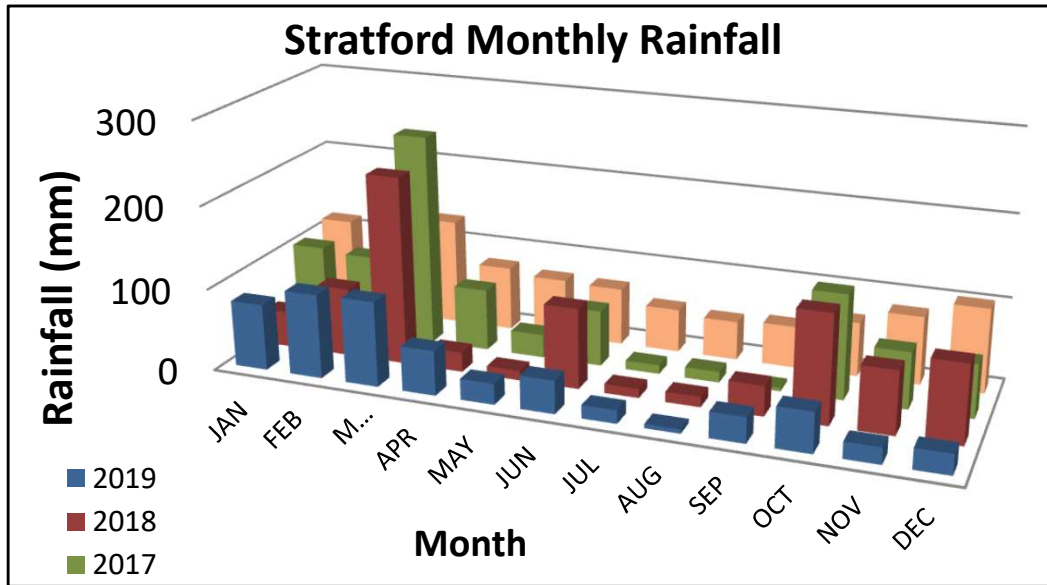
3c. Noise Management

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 Q4 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 February 2020.
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.

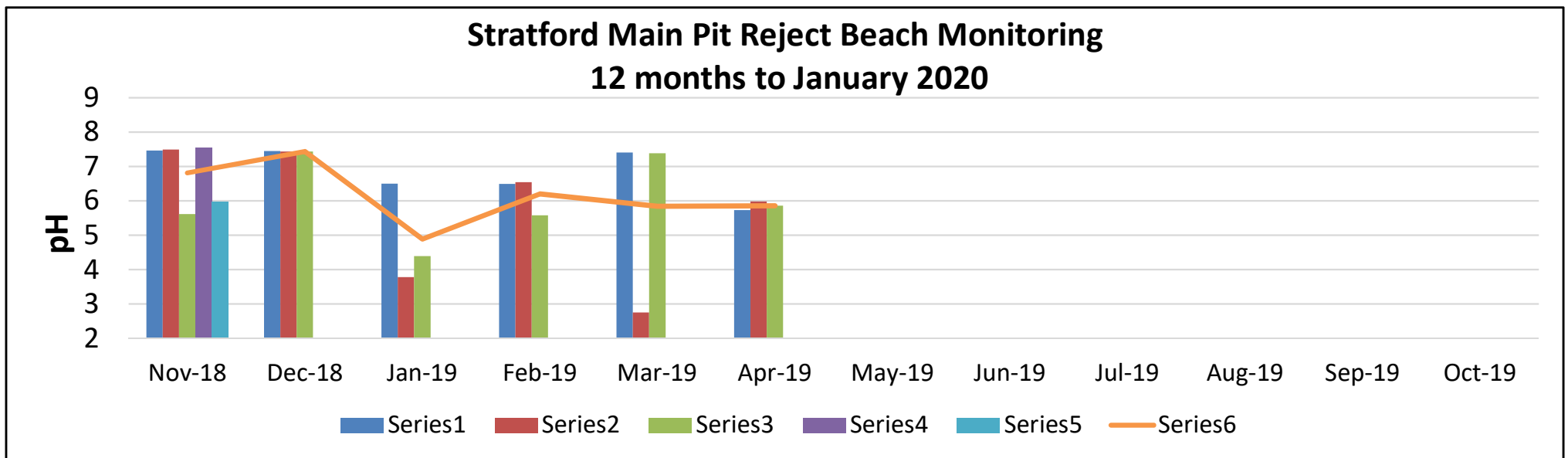
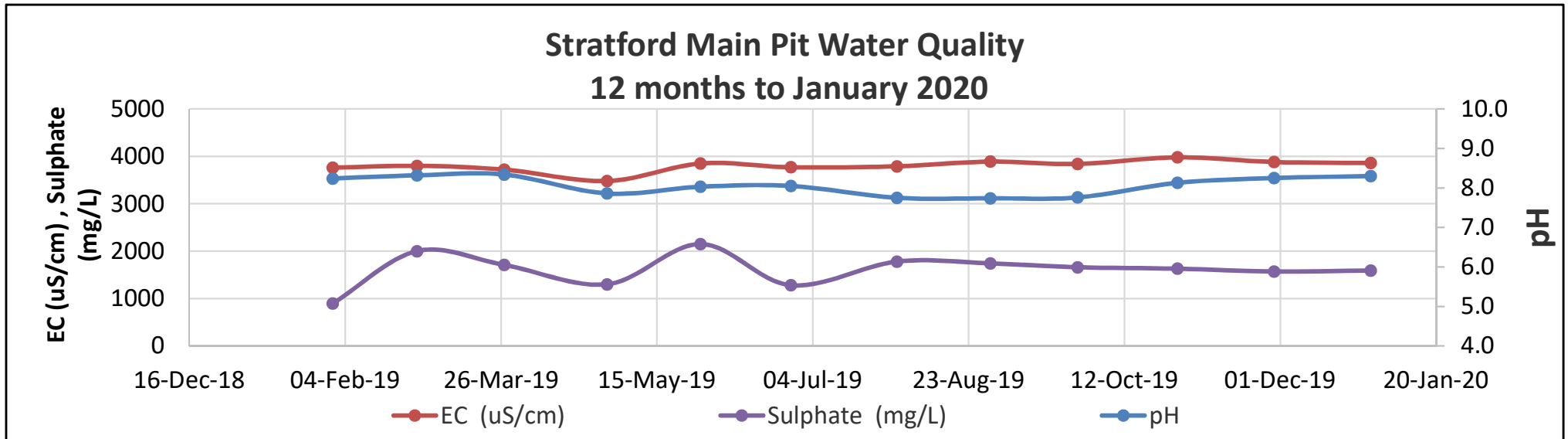
3d. Water Management

Management Area	Project	Status
Water management Structures	<ul style="list-style-type: none"> • Avon North Pit Flood Bund • Stratford East clean water drain • Stratford East PAF Cell 	<ul style="list-style-type: none"> • The Avon Pit North Pit Flood Bund is currently under construction. The flood bund design is based on the updated flood model for the Avondale Creek catchment. • The Stratford East clean water drain construction due for completion Q1 2020. • A design has been prepared ready for submission to the EPA for approval.
Surface Water Monitoring	<ul style="list-style-type: none"> • Routine monitoring 	<ul style="list-style-type: none"> • Sporadic and low rainfall conditions persisted through spring/summer 2019/2020. • Routine water sampling continued. • An event sampling conducted on 19/01/20 with 27.4mm recorded in 24hours. • Generally “no flow” conditions have persisted across all sites since December 2018. • All results consistent with the SCM Environmental Assessment predictions.
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



*Reject Beach monitoring has been ceased due to inundation with water.
i.e. no exposed reject material.

3e. Rehabilitation Management

Management Area	Project	Status
Rehabilitated Waste Emplacements	<ul style="list-style-type: none"> Avon North waste emplacement BRN 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. Topsoil spreading has commenced and will be followed by ground preparation and seeding in February 2020. Native Tree Seed supply for the 20ha of rehabilitation at Avon North has been received. Bulk shaping of the northern facing batters has commenced. Topsoil spreading and seeding will be undertaken in February 2020.
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 for May 2020.



Photo: Bulk shaping on the Avon North Waste Emplacement, January 2020.



3f. Biodiversity Management

Management Area	Project	Status
Mining Lease Areas	<ul style="list-style-type: none">Vegetation Clearance	<ul style="list-style-type: none">Clearing permits were prepared for works in Stratford East and Avon North. The clearing permits address the management of vegetation, fauna trapping and spotter-catcher work, heritage sites and topsoil.The final stages of clearing for Avon North was commenced in January 2020.Stratford East Stage 1 clearing completed



Photo: Brushtail Phascogale Caught during Trapping and relocation program at Avon North

3f. Biodiversity Management

Management Area	Project	Status
Biodiversity Offset Area	<ul style="list-style-type: none"> Revegetation Works 	<ul style="list-style-type: none"> Tubestock planting in the biodiversity offset area will commence in March 2020, ground preparations began January 2020. Approximately 45 000 tube stocks are to be planted .
Biodiversity Offset Area	<ul style="list-style-type: none"> Vegetation Monitoring Nest Box Monitoring 	<ul style="list-style-type: none"> 2020 vegetation monitoring is scheduled for February 2020. Nest box monitoring in the Stratford biodiversity offset was undertaken during January. The results will be included in the 2020 Annual Review.



Photo: Nest Box Monitoring in Avon North Biodiversity Area, Jan 2020.

3f. Biodiversity Management

Management Area	Project	Status
Nest Box Program	<ul style="list-style-type: none">Nest Box Installation	<ul style="list-style-type: none">78 Nest boxes are scheduled to be installed in the Stratford Biodiversity Area and Biodiversity Enhancement Area in February 2020. 60 of these boxes are to specifically target the Squirrel glider and 18 of these boxes are designed to target other arboreal fauna.
Pest Control	<ul style="list-style-type: none">Wild Dog control program	<ul style="list-style-type: none">Wild dog and fox trapping was completed 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.



Photo: Nest box in the biodiversity area, May 2019.

4. Community Complaints - Summary

Stratford Complaint Summary

Period: 31/10/2019 - 31/01/2020

Period: 3 Months

Total No. of Complaints: 2

Total No. of Complainants: 2

Date/Time of Complaint	Complainant Location	Method of Complaint	Nature of Complaint	Investigation/Outcome
10/12/2019 12:50hrs	Approx. 2.5km west of source (2.5kms from blast)	Direct to mobile.	Blast Overpressure	<p>Complaint: "Blast overpressure from Stratford mine caused the windows on the house to shake. Blast was larger than others previously."</p> <ul style="list-style-type: none"> • MP advised a blast had been fired at 12:42pm on 10/12/2019. MP advised he would follow-up with blast monitoring results and any comments from the blast crew. • The overpressure and ground vibration results at the monitor in closest proximity to the complainants residence were >115dB(L) overpressure. MP advised an internal review of the blast would be undertaken and it appeared loss of containment of one drill hole had occurred causing a spike in overpressure. • MP and the complainant discussed the blasting operations at the Stratford Mine. The complainant advised they had previously had issues with blasting and it was unacceptable for this to start again. MP advised Stratford Coal take all efforts in blast design to reduce the overpressure and ground vibration as much as is feasible. • The complainant advised they would not put up with blasting at these levels. It was causing damage and was not acceptable to expect people to live under these conditions. MP advised there are processes available under the Development Consent to have either building inspections or investigations undertaken by independent personnel at the request of landowners. • MP advised the measures which are undertaken in blast design to reduce the offsite impacts as much as practicable and information is conveyed to the drill and blast engineer.
10/12/2019 12:50hrs	Stratford Village, Approx. 1.8km west of source	Community hotline.	Blast Overpressure	<p>Complaint: "Blasting today is unacceptable. Going to report to authorities. Call back Immediately."</p> <ul style="list-style-type: none"> • Complainant stated the mine was breaking the law and was contravening the Act. The complainant stated he was going to report it to the EPA. . • MP advised a blast had been fired at 12:42pm on 10/12/2019. The overpressure and ground vibration results at the monitor in closest proximity to the complainant's residence were >115dB(L) overpressure. MP advised an internal review of the blast would be undertaken and it appeared loss of containment of one drill hole had occurred causing a spike in overpressure. MP advised the blast remained within compliance criteria. • The complainant continued to discuss unacceptable noise and dust from the mine. • MP advised SCPL would continue to minimise its impacts as far as reasonably possible.

5. Community Programs

Management Area	Project	Status
Support Programs	Stratford Coal Community Support Program	<ul style="list-style-type: none">• The application period for the 2020 Stratford Coal Community Support Program is closed.• Applications have been reviewed with the outcomes announced in February 2020.
	<ul style="list-style-type: none">• Stratford Coal Education Support Fund	<ul style="list-style-type: none">• 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.