

Notes: Notes of the 29th Meeting of the Maules Creek Coal Community Consultative Committee
Site via Zoom

Wednesday 13 May 2020

Members Present: Andrew Garratt (AG) – WHC, Cr Robert Kneale (RK) – Narrabri Shire Council, Darren Swain (DS) – WHC, David Paull (DP) – Sustainable Living Armidale (SLA), Emma Bulkeley (EB) – WHC, Jack Warnock (JW) – Community Representative, Libby Laird (LL) – Maules Creek Community Representative, Lyndell Crowley (LC) – Boggabri Business & Community Progress Association, Robyn Grover (RG) – Community Representative (Alternate), Ross Wilson (RW) – WHC, Simmone Moodie (SMo) – Community Aboriginal Representative, Steve Eather (SE) – Community Representative

Apologies: N / A

Independent Chair: David Ross (DR)

Independent Secretary: Debbie Corlet (DC)

Agenda Items	Who to Present
1. Introductions and apologies	DR
2. Declaration of pecuniary or other interests	ALL
3. Business arising from the previous minutes – Action List Distributed	DR / DS
4. Minutes (notes) of the previous meetings – Wed 19 February 2020	DR
5. Correspondence	DR
6. Overview of the mine	DS
7. Environmental monitoring	DS / RW / EB
8. General business	ALL
9. Next Meeting – Wednesday 12 August 2020	

Agenda Item	Discussion	Action/By Whom
1.	<p>Welcome and Apologies – No apologies for this meeting.</p> <p>DR welcomed everyone to the second CCC meeting for the year, being held via Zoom.</p>	
2.	<p>Declaration of pecuniary or other interests – DR advised he is paid a fee to chair these meetings as is DC for typing the Minutes. RG has a daughter at Tarrawonga and a grandson at Boggabri Coal. SE has a son at Boggabri Coal. SMO has one at Maules Creek and one at Narrabri Coal.</p>	
3.	<p>Business Arising from the previous minutes – DR advised that there were a couple of actions that came out of our last meeting which Darren, Emma and Ross have provided responses to (Appendix 1).</p> <p>DR – LL had some questions for me “Why does Boggabri still not have a dust monitor” and also that “The Government promised that the Namoi Air Pollution Monitoring scheme would be the same as Upper Hunter – but it is not in real-time. After so long, why? DR will email the response directly to LL. Responses also included in Appendix 1.</p>	ACTION 1 – DR to email the EPA responses to LL
4.	<p>Confirmation of the minutes of the previous meeting (February 2020) –</p> <p>DR observed that LL had some additional comments for inclusion in the notes from the site visit. This were presented to the committee and members were happy for them to be included.</p> <p>EB pointed that that, within the inclusion in the notes, there was a comment that said we could have taken water from the 17 January – I just want to confirm that was actually the date that the embargo was lifted – we did not take water. (EB confirmed that the embargo was lifted on the 17th February).</p> <p>The CCC endorsed the “Notes” from the last meeting as an acceptable record of what was discussed.</p>	
5.	<p>Correspondence – No correspondence has been received.</p>	
6.	<p>WHC Presentation by Darren Swain</p> <p>Company Report & Overview of Activities</p> <ul style="list-style-type: none"> FY20 target production 10.74Mtpa ROM (Run of Mine) coal. Safety record of 4.11 (Total Recordable Injury Frequency Rate (TRIFR) – injuries per million hours worked) at end March, which is down from the December figure of 4.57. <p>Health and Safety – COVID-19 Considerations</p> <ul style="list-style-type: none"> Employee Health and Safety programs continued to focus on. RW described how WHC has incorporated an array of practices to prevent and control COVID-19 cases. This has included, but not limited to: temperature screening prior to boarding buses in town or at security gate; assessment for all visitors allowed to enter site; specific declaration at site log-in every shift; shift-specific focus is social distancing, use of hand sanitizer and cleaning products available for all equipment; and mandatory surgical masks for all bus passengers and vehicle passengers when more than one person located in a vehicle. There have been a lot of initiatives put in place and so far, going well. 	

LL – Have you had any positive tests?

RW – No positives. We’ve had a number of people that have come to us with certain conditions and been advised to socially isolate from everybody else. We go straight into the process of managing those as if they are. Every time we’ve done this so far, we’ve come up with a negative result.

JW – How much has this affected your output – you mentioned a reduced expected tonnage for the year – is that related to some of these issues or the rain you had back in February?

RW – The COVID hasn’t impacted on our business because we’ve been planning for this and going through the process for a number of months now. The weather does have impacts on our production. The wetter it is, the reduced hours we can actually operate the equipment, safely.

Employment

- Continued focus on local, indigenous, and female employment with ongoing training programs undertaken. There have been 26 new trainees employed from January to April 2020. 3 Apprentices were employed – all from the local area. Over 600 people employed on site.

RW reiterated how COVID-19 practices are incorporated into training. This has included having training online and emphasising the need for social distancing.

Air Quality Management

- Publically available results of TEOM1 available on the EPA website. Annual rolling average for TEOM1 is 28.1 ug/m3 at 31 March 2020 (criteria 30ug/m3). Ongoing dust suppressant application across the operation. Progressive overburden emplacement and bulk shaping on the northern dump, with some topsoil spreading in progress.

LL – Revegetation across the northern ends. When are the trees going to go in?

EB – Seeded with tree seed this year and then we’ll see what kind of strike rate we have for that and then trees will be available to planted in that area – probably in March or April 2021. So, the first point will be to seed with the mix of tree seed and see what comes up. There will be between 100 and 200 stems of hectare planted at the beginning of next year depending on strike rate.

Monitoring and Environmental Results

- Monitoring and environmental results provided within the distributed information pack.

DP – Rehabilitation reporting – it would be nice if we could get an overview of what you’ve done so far and how it’s all going all up in the different areas.

EB talked about the rehab that’s been done onsite, but was unable to talk about the offsets. She noted that in regard to the northern overburden emplacement area is the only area of rehab that’s currently been done onsite or has been

done. To date approximately 115 hectares have been topsoiled, and approximately 180 hectares have been reshaped. The plan is to reshape about another 75 hectares before the end of the year which would then have topsoil placed on it. So, the plan is to have 190 hectares of reshaped topsoiled seeded areas completed by 31 December 2020. It was noted that there are several “rock line drains” that have and are being built at the moment in that area. The landform mocks the natural highs and lows of the environment. When it is completed, it will look a lot better than what your traditional rehab will look like.

LL – Are you talking about the red dirt we can see? How deep is the topsoil?

EB - Yes and the topsoil layer is 300mm.

LL - Are you saying that you are doing reshaping to the natural landform? – I don’t remember it being so high or steep? Are you saying that’s what it used to look like?

EB – No a traditional rehab slope would look like you’ve made a loaf of bread – it’s very terraced and looks very unnatural. So, the idea of the “GEO Fluv” landform, generated by an engineering program, is that it’s not that very square loaf like shape. It reshapes the overburden, so it has gullies and tributaries etc so it would mock what a small hill or what something would look like in nature.

LL – I’m registering my disappointment on that fact.

Water

- We are taking steps at all our mines to conserve water and support water security. The primary water source for Maules Creek is a High Security Water Licence drawing upon the Namoi River, however this water source has been severely impacted by the drought. Recent rains have seen the river flow again.

DS – We did draw some water from the High Security Water Licence – whilst the river was running. We didn’t pump all the time but did access some – it was about 270 meg pumped since the last CCC meeting.

Biodiversity Management

- **Feral Animal Management** – During the most recent routine Whitehaven Offset Area Feral Animal Control program (March 2020) the results included: 6 out of total 59 pigs trapped were from the Maules Creek / Boggabri area (very wet); and 28 out of total 156 baits (1,080) taken were from the Maules Creek / Boggabri area.
- **Revegetation** – Undertaken ground preparation for upcoming tree planting program over 600ha.
- **Fire Management** – Continued fire break maintenance program to make sure that we’ve got some good fire breaks in place. About 600 hectares being prepared for the upcoming tree planting program.
- **Monitoring** – Autumn flora monitoring program underway. Redundant Infrastructure Removal. Continued removal of redundant fences from Wirradale and Wongala properties. Still cleaning up those properties for the offset.
- **Upcoming Works** – Feral Animal Monitoring and Control Program in May and June 2020. Commence WHC Biodiversity Tree Planting Program 2020. Winter Bird and Spring 2020 Flora Monitoring. Planning and assessment for 2020 ecological and burn program. Maintenance of Boundary, Heritage and Threatened Species Fences ongoing.

DP – So are you talking about the offsets now? So, 600 hectares in the offset area? Are there any offsets in the forest?
DS – Yes, that’s correct. This Biodiversity Management is all in the offset areas. No offsets in the forest. No, they aren’t planting trees in the forest. Just on our property.

DP – All those issues like weed control and feral animal control – that’s all to do with the offsets? Nothing to do with the Leards Forest?

EB – We undertake feral animal and weed management on the mine lease itself – which is separate to the Biodiversity and separate to what’s done in the offsets?

AHS Movement to Date – April 2020

- **Key Physical Achievements to Date** – Six (6) EH5000s have now operated autonomously (full fleet for Phase 1 and 2). 16,428km travelled autonomously. 2,685 haul cycles (real and test). 1,896 loads hauled autonomously. 250,073bcm (572,979t) of waste hauled.

EB – They are running both on day and night shifts. The current plan is to run them at 60% of what a man truck would run at by June or July. There are 6 AHS trucks running out of a fleet of 56 trucks. About 10%.

DS – There is a lot of work going on to make sure they get it right, because proofing up this part of it is the key and making sure trucks can interact with other equipment - water trucks, the graders, the bulldozers around all this gear.

Community

- Whitehaven had committed to support numerous local events including the Drover Campfire and eIMEx. However due to COVID-19 social distancing these have been postponed or cancelled. Where possible Whitehaven will continue to support the local community through this time. Whitehaven are advertising for 2020 Cadetship Program – Mining Engineering, Electrical Engineering, Mechanical Engineering, Mechatronics, Geology, or Environmental Science. Full details on website – <https://whitehaven.applynow.net.au/jobs/WHC419-2020-cadetship-program>.

Local Spend

- **Sponsorships and donations for January to March 2020 have been made to the** – Tamworth and Region was \$16,500. Narrabri area community was \$21,000. Gunnedah area community was \$88,000 and other areas including Australian Red Cross, Westpac Rescue Helicopter etc was \$160,000. More information on Sponsorships and Donations can be found at – <https://whitehavencoal.com.au/sustainability/community/donations-sponsorships/>.

General Discussion re the WHC Presentation

LL – Just in regard to the complaints – what was the nature of the complaints that have come to WHC or the EPA?

EB – From the EPA – 1 dust complaint and a noise complaint.

7.	<p>General Business</p> <p>SE – The fire trails – are they going to be ongoing, so they are kept updated? DS - Yes that's ongoing at this point by LRM.</p> <p>LC – Talked about importance of the general community being aware of who their community representatives are – not just on this but on the other CCC's. Proposed that members' names and contact details be included in the Green Flyer. Members agreed to this. Consideration was given to including the details in Narrabri and Gunnedah media; however, members were not comfortable with this.</p> <p>LL – Interested to know how the clean-up was going along that creek with the little polystyrene balls. Is there any progression on that issue with the release of the water from the broken dam? EB – The clean-up is currently being undertaken – it started the week after Easter, and we've got crews of men out there at the moment removing those balls? The balls are being located visually and blower-vacs used to suck them up.</p> <p>LL – Who did the survey? EB – Maules Creek did part of the survey and then an independent contractor did a survey of the Namoi River and Maules Creek from what I understand.</p> <p>DP – I would like to see an overview of the offset rehabilitation. Like a report card on that. My interest is biodiversity outcomes. Also, with the mine rehabilitation that you are now starting – is that being done according to a Rehabilitation Plan? I assume it would be and can I have a look at that? EB – The Rehabilitation Management Plan is available on our website.</p> <p>Link Mining Operations Plan - Rehabilitation Management Plan</p> <p>LL – Is the Annual Review available? EB – The Annual Review has been submitted to Department of Planning and is currently being reviewed. Once they've reviewed it and come back to us – we'll make that available. That will be back in September.</p> <p>AG – I met some of the CCC members when we did our tour of Maules Creek – so for those who I haven't met yet, my name is Andrew Garrett and joined the company in late January as the General Manager, Community Engagement and I look forward to meeting the members when we can have the face to face meeting.</p>	<p>ACTION 2 – Community Reps and DR's details to go into the Green Flyer</p> <p>ACTION 3 – WHC to organise for biodiversity staff to attend to answer questions on biodiversity.</p>
8.	<p>Next meeting - Wednesday 12 August 2020 hopefully back at the Boggabri Golf Club at 2:00 pm.</p>	

Meeting Closed:

3:15 pm

Appendix 1: Actions

Page No	Action No	Description	Date Raised
2	1	DR to email the EPA responses to LL.	13 May 2020
6	2	Community Reps and DR's details to go into the Green Flyer.	13 May 2020
6	3	WHC to organise for biodiversity staff to attend to answer questions on biodiversity.	13 May 2020



Briefing Note

To:	Maules Creek Coal Mine CCC Members	From:	Maules Creek Coal Mine (MCC)
Date:	13 May 2020	Reference:	Questions MCC CCC May 2020
Subject:	Responses to February 2020 MCC CCC meeting questions		

CCC Member questions regarding	Responses
Question 1. <i>request disclosure of the clean up report for the EPBs</i>	The clean-up is still in progress and no report is currently available.
Question 2. <i>Why does Boqqabri still not have a dust monitor?</i>	David Ross to contact EPA.
Question 3. <i>The govt promised that the Namoi Air Pollution Monitoring scheme would be the same as Upper Hunter - but it is not in real - time. After so long, why?</i>	David Ross to contact EPA.
Question 4. <i>Where is the maules creek mine operating at the moment?</i>	Mining in the approved pit area.
Question 5. a. <i>how close is it to the Fairfax school?</i> b. <i>how close is it to the noise monitor near the hall?</i>	About 8kms to the operational pit. About the same distance to the noise monitor near the Hall.
Question 6. <i>how much water has Whitehaven coal pumped from the Namoi since the last CCC?</i>	~270ML have been pumped since the last CCC meeting on the 19th February 2020.

Maules Creek Coal Mine Community Consultative Committee Meeting #29

Environmental Monitoring Report For the Q1 period, January – March 2020

Attended Noise Monitoring

Attended noise monitoring was undertaken at six locations during January, February and March 2020 by an independent acoustic consultant. The measured noise level (LAeq 15 minute) attributed to Maules Creek Coal Mine (MCCM) and applicable criteria for each location are shown in the tables below.

LAeq, 15minute GENERATED BY MCCM AGAINST OPERATIONAL NIGHT NOISE CRITERIA – JANUARY TO MARCH 2020.

Table 1 - January Noise Monitoring

Location	Start Date and Time	Wind Speed m/s	Rainfall mm	Criterion dB	Criterion Applies ¹	MCCP LAeq dB ²	Exceedance dB ³
NM1	29/01/2020 22:34	1.1	0	35	Yes	IA	Nil
NM2	29/01/2020 23:45	3.0	0	39	Yes	<20	Nil
NM3	29/01/2020 23:30	1.7	0	35	Yes	IA	Nil
NM4	29/01/2020 23:15	0.9	0	35	Yes	IA	Nil
NM5	29/01/2020 22:06	1.3	0	35	Yes	IA	Nil
NM6	30/01/2020 00:14	3.6	0	35	No	IA	NA

Table 2 - February Noise Monitoring

Location	Start Date and Time	Wind Speed m/s	Rainfall mm	Criterion dB	Criterion Applies ¹	MCCP LAeq dB ²	Exceedance dB ³
NM1	17/02/2020 22:30	1.4	0.0	35	Yes	IA	Nil
NM2	17/02/2020 23:17	1.8	0.0	39	Yes	30	Nil
NM3	17/02/2020 23:45	3.3	0.0	35	No	<25	NA
NM4	17/02/2020 22:54	2.2	0.0	35	Yes	IA	Nil
NM5	17/02/2020 22:00	1.1	0.0	35	Yes	IA	Nil
NM6	17/02/2020 23:43	3.3	0.0	35	No	<20	NA

Table 3 - March Noise Monitoring

Location	Start Date and Time	Wind Speed m/s	Rainfall mm	Criterion dB	Criterion Applies ¹	MCCP LAeq dB ²	Exceedance dB ³
NM1	17/03/2020 22:27	4.5	0.0	35	No	IA	NA
NM2	17/03/2020 23:30	3.5	0.0	39	No	25	NA
NM3	17/03/2020 23:45	2.8	0.0	35	Yes	NM	Nil
NM4	17/03/2020 23:00	3.4	0.0	35	No	<25	NA
NM5	17/03/2020 22:00	3.9	0.0	35	No	IA	NA
NM6	17/03/2020 23:56	2.5	0.0	35	Yes	<20	Nil

(1). Noise emission limits do not apply during periods of rainfall or winds greater than 3 metres per second (at a height of 10 metres);

(2). Estimated or measured LAeq,15minute attributed to MCCM;

(3). NA in exceedance column means criterion is not applicable, either due to atmospheric conditions outside those specified in project approval or due to property acquisition by MCC; and

(4). Indicates the application of a 2dB low frequency modifying factor.

IA/NM – Inaudible NM – Not measurable

During Q1 no measurement satisfied the conditions for further assessment when reviewed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry.

Maules Creek Coal (MCC) EPL 20221 also has a '1 Minute - Night' criteria (LA1) that applies from 10pm to 7am Monday to Saturday & 10pm to 8am Sundays and Public Holidays. The results for the LA1 monitoring are shown below. The results show that mine operations did not exceed the applicable LA1 criteria during attended noise monitoring in Q1 2020.

LA1, 1minute GENERATED BY MCC AGAINST OPERATIONAL NIGHT NOISE CRITERIA – January to March 2020.

Table 4 - January Noise Monitoring – Night

Location	Start Date and Time	Wind Speed m/s	Rainfall mm	Criterion dB	Criterion Applies ¹	MCCP LA1,1min dB ²	Exceedance dB ³
NM1	29/01/2020 22:34	1.1	0	45	Yes	IA	Nil
NM2	29/01/2020 23:45	3.0	0	45	Yes	<20	Nil
NM3	29/01/2020 23:30	1.7	0	45	Yes	IA	Nil
NM4	29/01/2020 23:15	0.9	0	45	Yes	IA	Nil
NM5	29/01/2020 22:06	1.3	0	45	Yes	IA	Nil
NM6	30/01/2020 00:14	3.6	0	45	No	IA	NA

Table 5 – February Noise Monitoring – Night

Location	Start Date and Time	Wind Speed m/s	Rainfall mm	Criterion dB	Criterion Applies ¹	MCCP LA1,1min dB ²	Exceedance dB ³
NM1	17/02/2020 22:30	1.4	0.0	45	Yes	IA	Nil
NM2	17/02/2020 23:17	1.8	0.0	45	Yes	35	Nil
NM3	17/02/2020 23:45	3.3	0.0	45	No	<25	NA
NM4	17/02/2020 22:54	2.2	0.0	45	Yes	IA	Nil
NM5	17/02/2020 22:00	1.1	0.0	45	Yes	IA	Nil
NM6	17/02/2020 23:43	3.3	0.0	45	No	<20	NA

Table 6 - March Noise Monitoring – Night

Location	Start Date and Time	Wind Speed m/s	Rainfall mm	Criterion dB	Criterion Applies ¹	MCCP LA1,1min dB ²	Exceedance dB ³
NM1	17/03/2020 22:27	4.5	0.0	45	No	IA	NA
NM2	17/03/2020 23:30	3.5	0.0	45	No	45	NA
NM3	17/03/2020 23:45	2.8	0.0	45	Yes	NM	Nil
NM4	17/03/2020 23:00	3.4	0.0	45	No	26	NA
NM5	17/03/2020 22:00	3.9	0.0	45	No	IA	NA
NM6	17/03/2020 23:56	2.5	0.0	45	Yes	<20	Nil

Notes:

- Noise emission limits do not apply during periods of rainfall or wind speeds greater than 3 metres per second (at 10 metres);
 - Estimated or measured LAeq,15minute attributed to MCCM;
 - Estimated or measured LA1,1minute attributed to MCCM;
 - NA in exceedance column means atmospheric conditions outside those specified in Project Approval and criterion is not applicable.
- IA – Inaudible NM – Not measurable

Wind Direction during Attended Monitoring

Wind direction data is collected from the MCCM Automated Weather Station (AWS). Wind data for the duration of the attended monitoring assessment, recorded at the MCCM AWS is presented in the table below.

Table 7 - Prevailing Wind Direction

Monitoring Date	Prevailing Wind Direction
January	NE
February	SW
March	SE

Blast Monitoring

There were 22 blasts at MCCM during Q1 2020. All blast monitoring results recorded within the reporting period have complied with applicable overpressure and ground vibration limits specified in the respective approvals.

Table 8 - Blast Results Summary Quarter 1 2020

Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Noise	dB (Lin Peak)	All	22	96.7	115.3	120	No
Vibration	mm/s		22	0.16	0.53	10	No

Air Quality

Total Depositional Dust

The 12 monthly rolling annual average remains below the relevant Project Approval criteria of 4gm/m²/month for the respective monitoring points except for at MC4 as shown in the below graph.

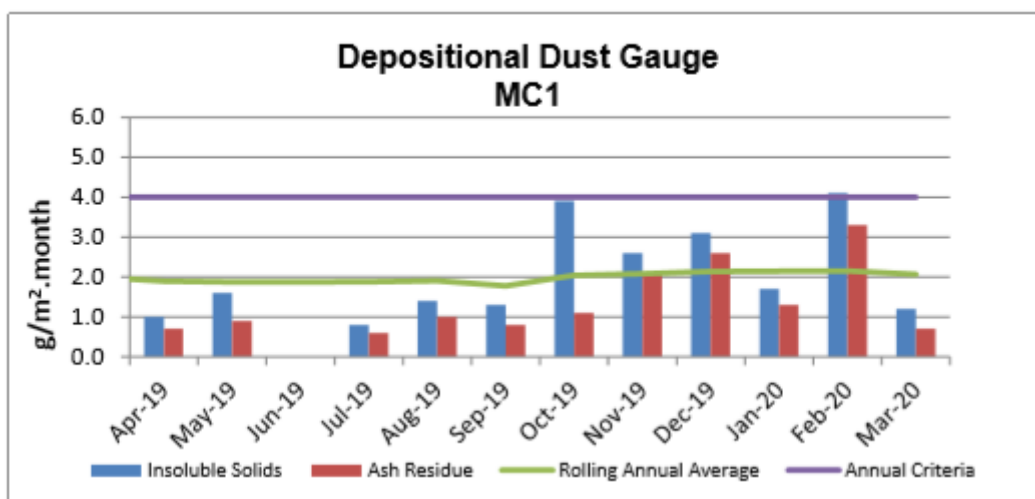
Whilst MC4 was above the 12 month rolling average this was however attributed to a highly contaminated sample during the bushfires and dust storms in October 2019.

February saw increase in monthly deposited matter, these have been attributed to dust storms which presented in conjunction with storm fronts.

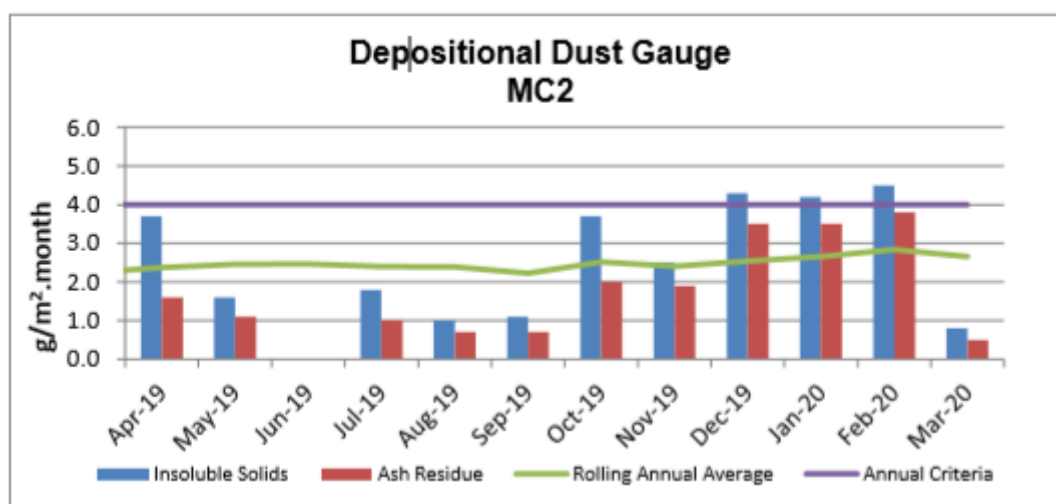
Table 9 – Deposited Dust Gauge Results

MONTH	MC1	MC2	MC3	MC4
January -20	1.7	4.2	2.2	3.3
February-20	4.1	4.5	3.5	9.8
March-20	1.2	0.8	0.8	1.2
12 MONTH ROLLING AVERAGE	2.1	2.7	2.7	6.9

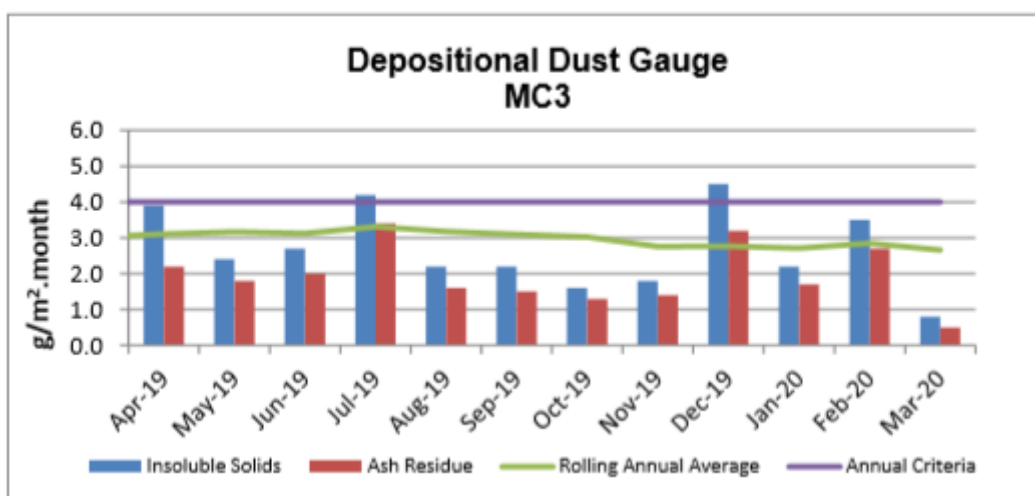
[g/m²/month]



* Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.).

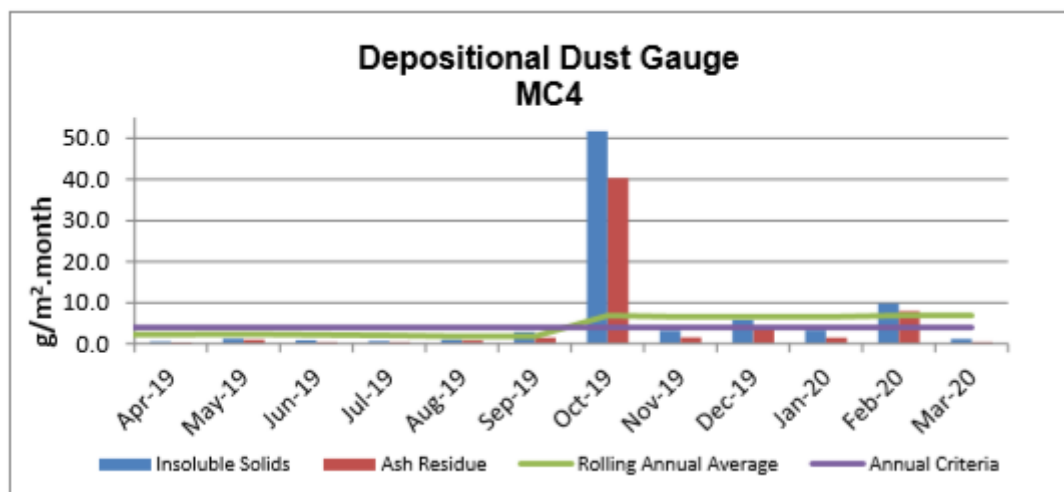


* Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.). ** Exceedances recorded in December were attributed to the regional events



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** Exceedances recorded in December were attributed to the regional events.

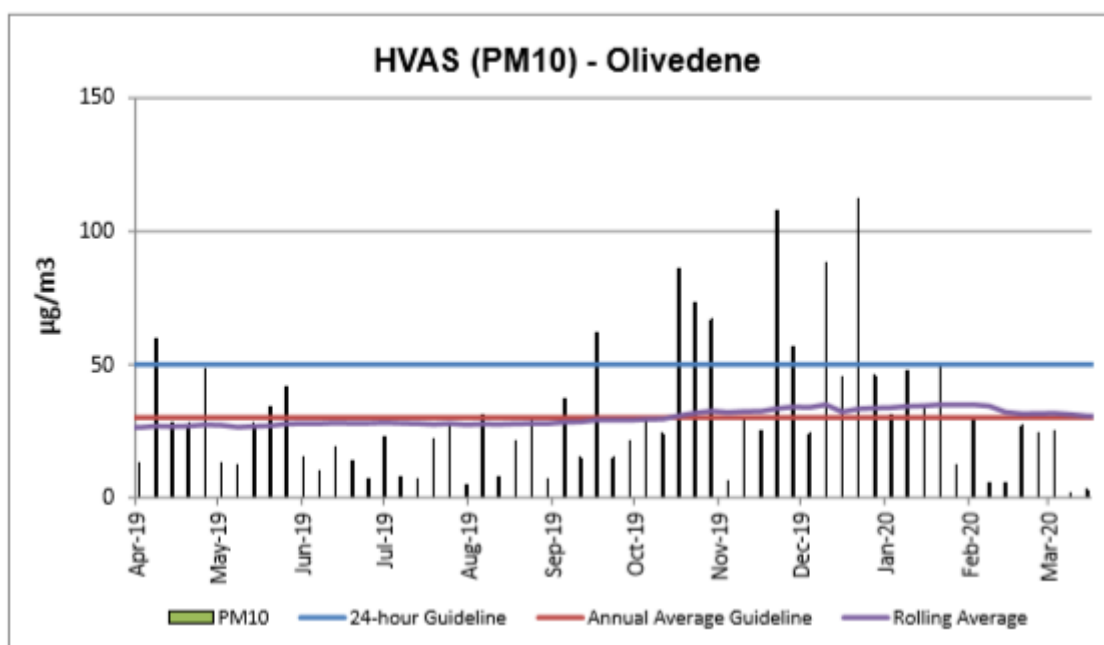


* Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.). ** Exceedances recorded in October were attributed to the regional events and potential contamination.

High Volume Air Sampling (HVAS)

The HVAS monitor is located on the property 'Olivedene,' a mine owned property on Therribri Road. During Q1 there were no exceedances of the 24 hour average of 50 $\mu\text{g}/\text{m}^3$.

HVAS PM₁₀ Rolling Annual Average during Q1 2020 was elevated above the Annual Average Guideline 30 $\mu\text{g}/\text{m}^3$. Recalculations of this figure have been undertaken to remove all extraordinary events as per approval conditions. Recalculated annual averages were below the Annual Average Guideline of 30 $\mu\text{g}/\text{m}^3$.

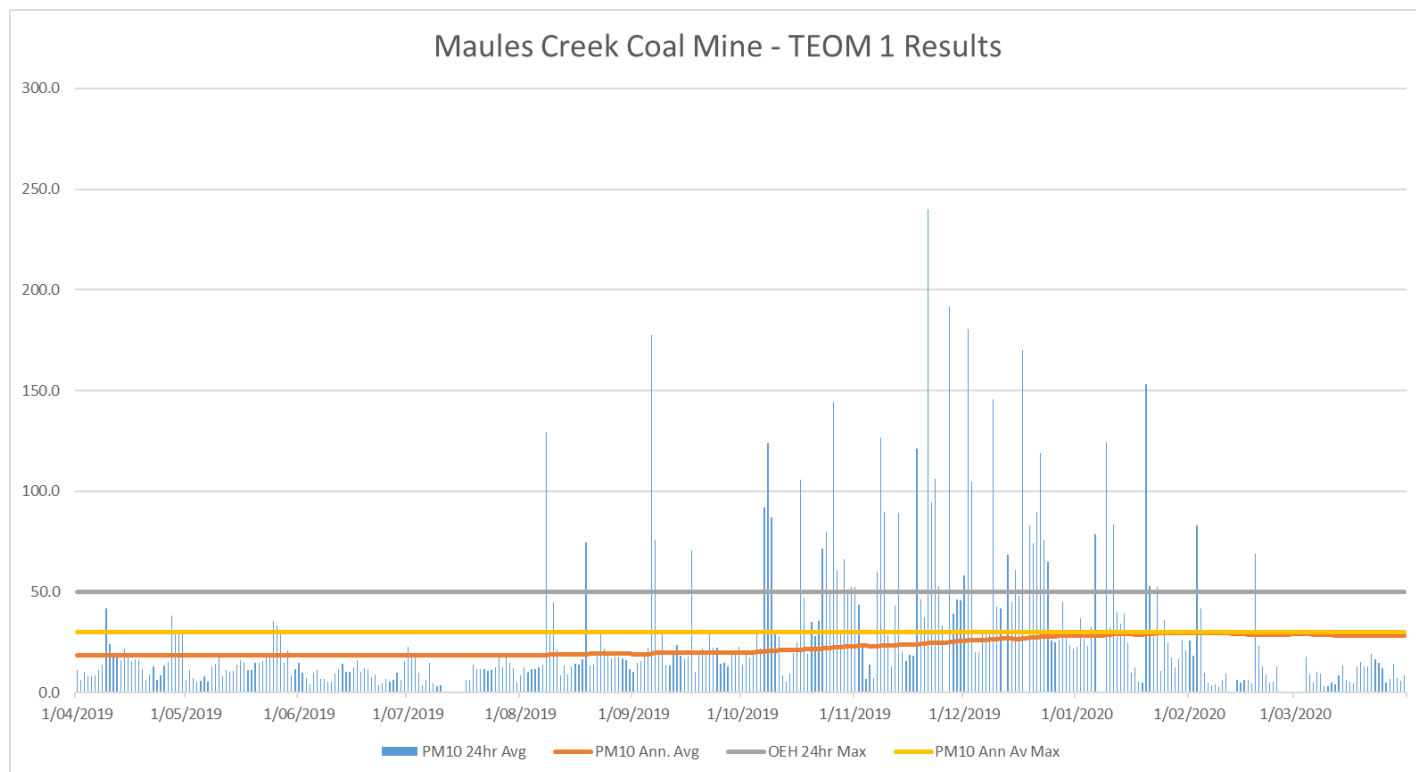


* Exceedances recorded in September, October, November and December were attributed to the regional events and discussed at the February, May, August and October 2019 CCC meetings

TEOM - PM₁₀ Results

The annual average for PM₁₀ at the Maules Creek Coal TEOM is below the Project Approval annual average criteria of 30µg/m³ as shown in the following figure. There have been six exceedances of the 24 hour average for Q1, these have all been attributed to regional air quality events.

TEOM Result Figures – Particulate Matter PM₁₀µg/m³



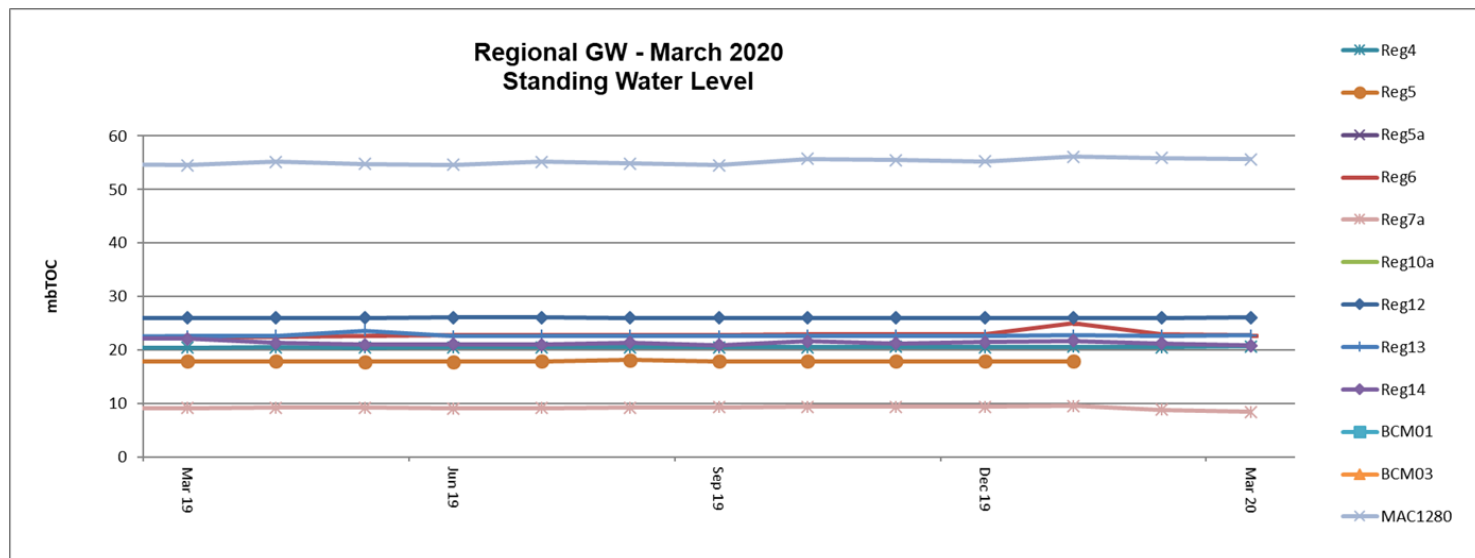
* Blank columns indicate sample periods where there was either power outage, maintenance or other related causes.

** Exceedances of the OEH 24hr Maximum over the past 12 months have been non mine related and have been attributed to regional dust events, all previous exceedances have been discussed at CCC meetings.

Water Monitoring

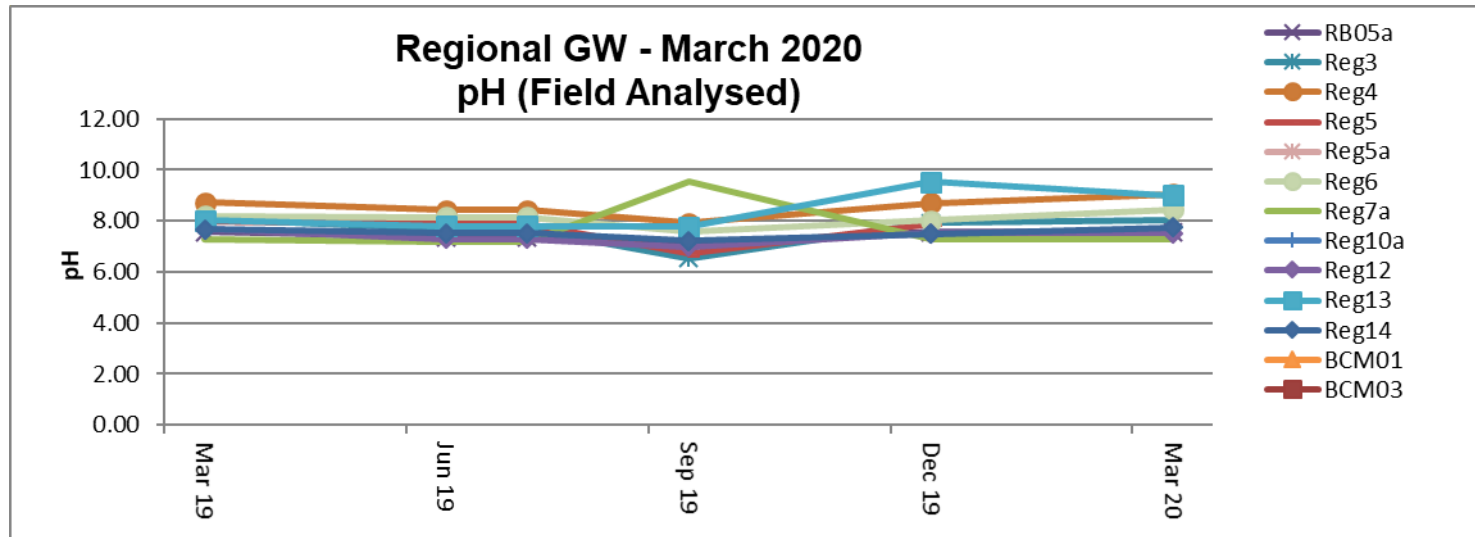
Groundwater

Groundwater monitoring results in open standpipe piezometers show levels to be relatively stable. The Regional bores were installed between Q4, 2013 and Q1, 2014. BCM01, BCM03, Reg10 are shallow bores which have remained dry since construction in 2013.



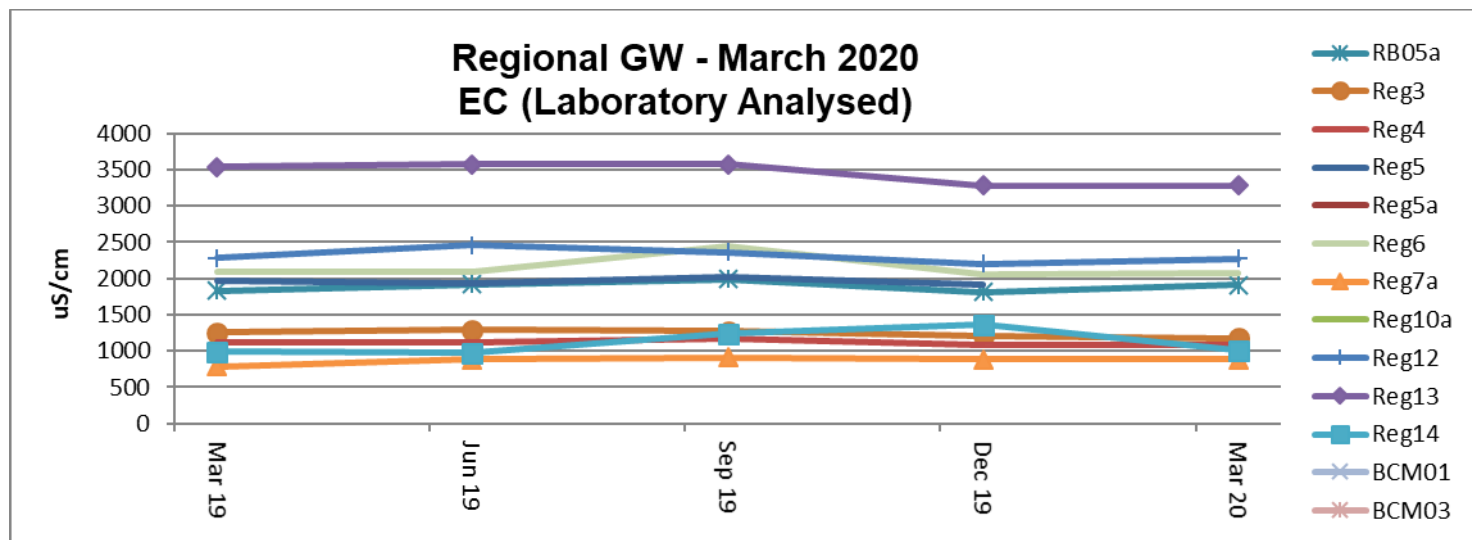
Acidity / Alkalinity (pH)

Over the past twelve months pH readings across the regional bores have remained static with very little fluctuation.



Electrical Conductivity

Laboratory Electrical Conductivity (EC) levels are all within historic groundwater EC range of 500 $\mu\text{S}/\text{cm}$ to 2,500 $\mu\text{S}/\text{cm}$, with the exception of monitoring bore Reg13 which has a historic groundwater EC range of 2,500 $\mu\text{S}/\text{cm}$ to 4,100 $\mu\text{S}/\text{cm}$. Within the last twelve months EC has remained static.

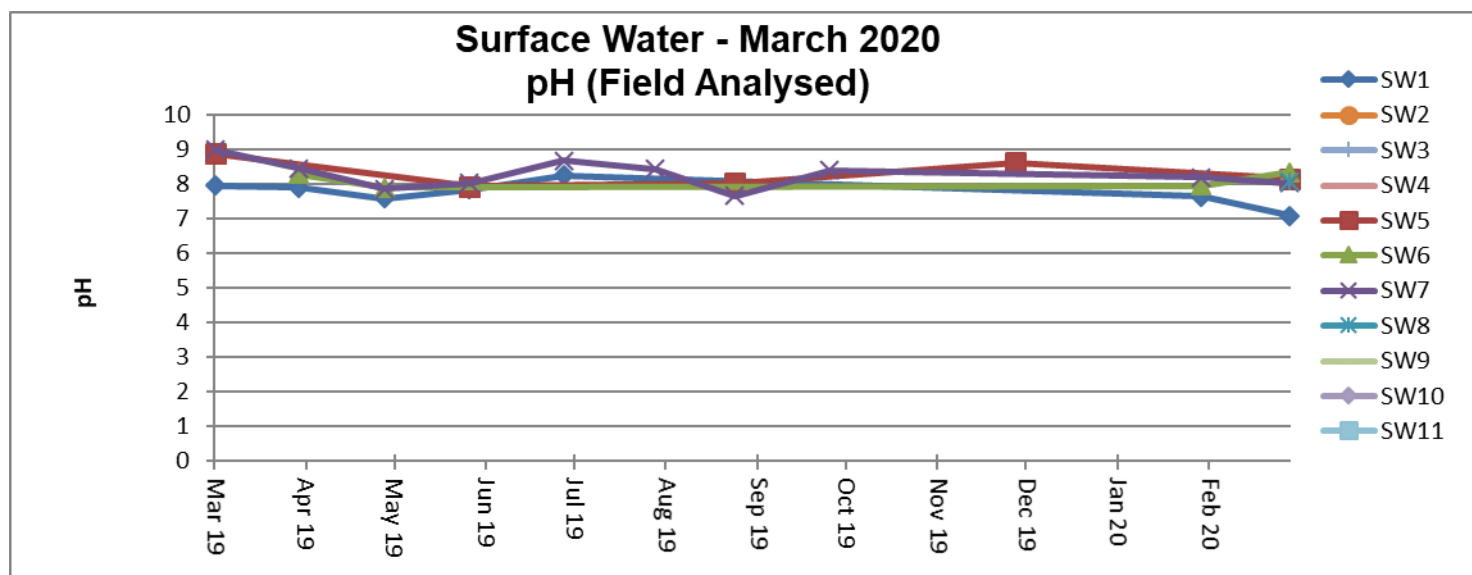


Surface Water – Creeks and Rivers

Routine surface water monitoring is conducted in surrounding creeks and rivers on a monthly basis. Results for parameters including pH, EC and Total Suspended Solids (TSS) are shown in the figures below. There are 11 surface water monitoring points, however only five were able to be sampled during the twelve month period.

Acidity / Alkalinity (pH)

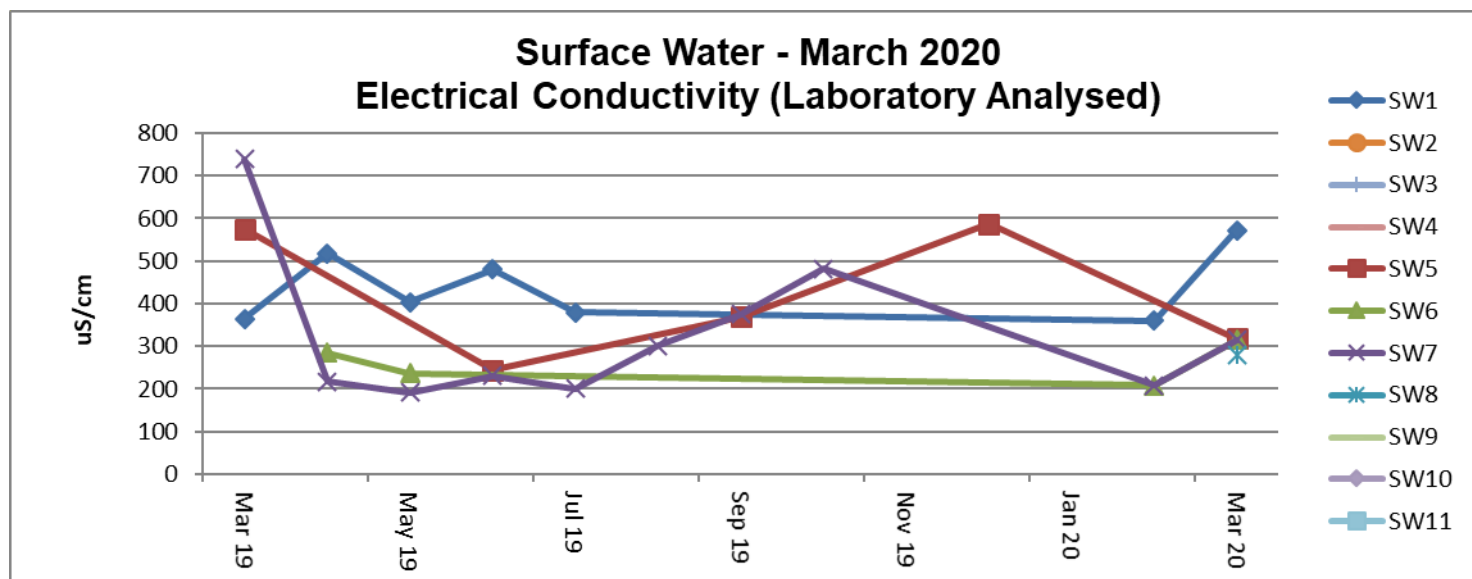
Monitoring results for pH in creeks and rivers surrounding MCCM are all trending within the ANZECC range for Irrigation, Ecosystem Health and Recreation.



*0 values indicate no water to sample due to the creek being dry

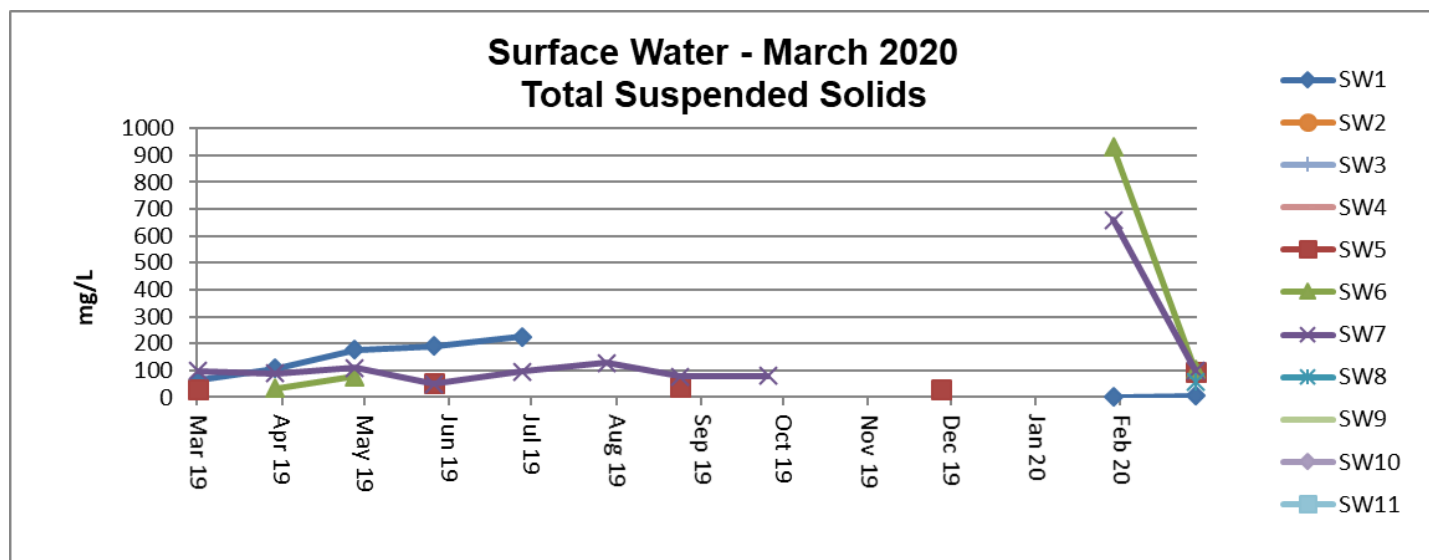
Electrical Conductivity

Surface water EC trends have remained consistent with SW5, SW6, SW7 and SW8 all historically variable. SW5, SW6, SW7 and SW8 are points along the Namoi River which are subject to regulated and variable flow regimes.



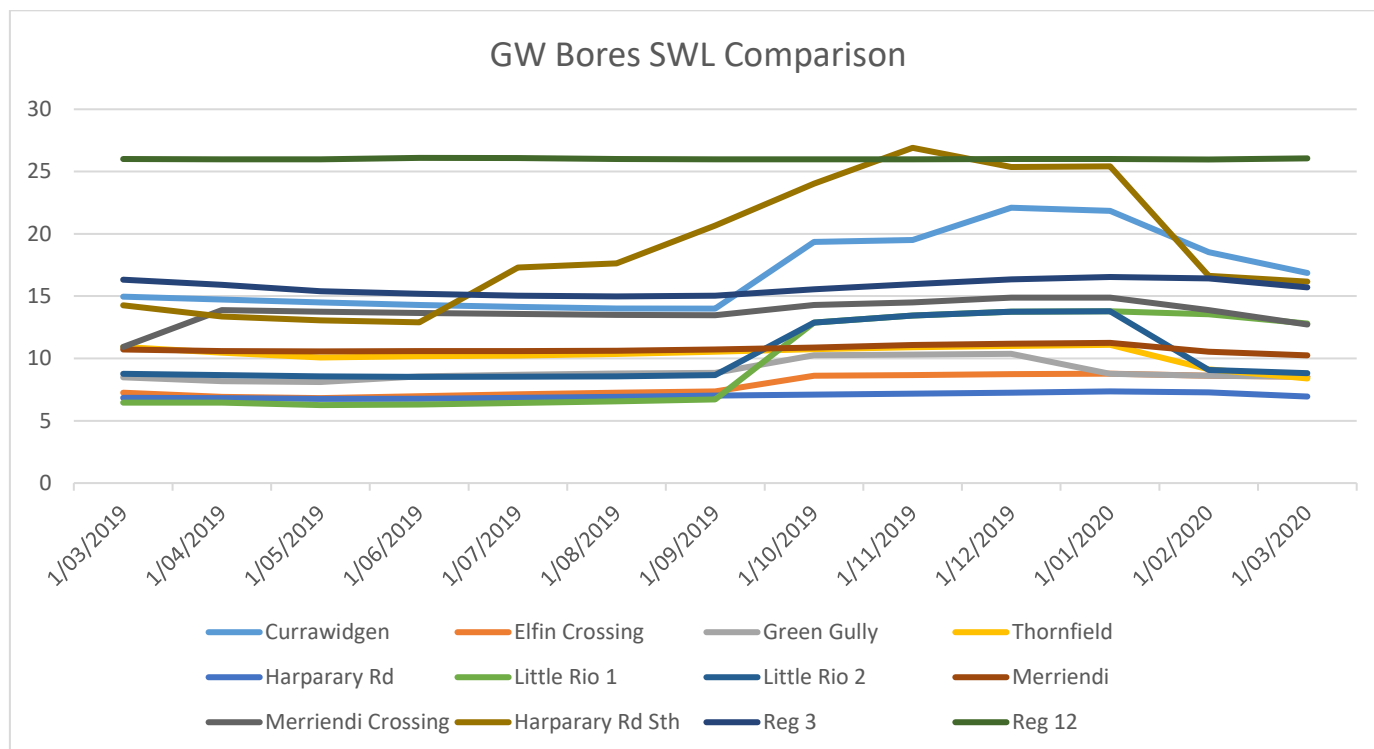
Total Suspended Solids (TSS)

Surface water TSS trends have remained generally consistent with historical results. SW5, SW6, SW7 and SW8 are historically variable as they are located along the Namoi River which is subject to regulated and variable flow regimes. There were elevated levels of TSS in Q1 due to significant rainfall events.



Regional Groundwater monitoring

Maules Creek Coal Mine monitors regional bores across the region.



Rehabilitation

Rehabilitation works are ongoing, bulk reshape and topsoiling is currently being completed.

Feral Animal Management

During the most recent routine Whitehaven Offset Area Feral Animal Control program (March 2020) the results included:

- 6 out of total 59 pigs trapped were from the Maules Creek/Boggabri area; and
- 28 out of a total 156 fox baits (1080) taken were from the Maules/Boggabri area.

Revegetation

- Undertaken ground preparation for upcoming tree planting program of over 600ha on the Maules Creek Offset areas.

Fire Management

- The fire break maintenance program has continued following the wet weather.

Community Complaints

- 3 complaints were received during Q1 CY2020. Please refer to the Community Complaints Register on the Whitehaven Coal Maules Creek website.

Maules Creek Coal Mine

CCC MEETING

VIA VIDEO AND TELECONFERENCE

MAY 2020



WHITEHAVEN COAL

Company Report & Overview of Activities

- FY20 target production 10.74Mtpa ROM (Run of Mine) coal.
- Safety record of 4.11 (Total Recordable Injury Frequency Rate (TRIFR) - injuries per million hours worked) at end March, which is down from the December figure of 4.57.
- Continued focus to improve.



Health and Safety – Covid19 considerations

— Employee Health and Safety programs continued to focus on:

- Temperature screening prior to boarding buses in town or at Security Gate
- Approval application process for all Visitors to site.
- COVID-19 Fitness for Work Assessment for all Visitors allowed to enter site
- Specific declaration at site log-in every shift
- Pre-start communications
- COVID 19 shift specific focus ie Social distancing
- Hand Sanitiser
- Cleaning product available for all equipment
- A designated First Aid transport bus with a Perspex seal separating driver compartment from the seating area
- Social distancing – pre-starts increased and max numbers in pre-start rooms, spots on ground at all high traffic locations, limited seating in crib rooms, more buses so less persons per bus
- Mandatory surgical masks for all bus passengers and vehicle passengers when more than one person located in a vehicle
- Mandatory face masks if social distancing is not possible when undertaking work tasks
- Prominently displayed posters outlining hygiene, social distancing and COVID precautions
- Foot pedal hand washing stations

Employment

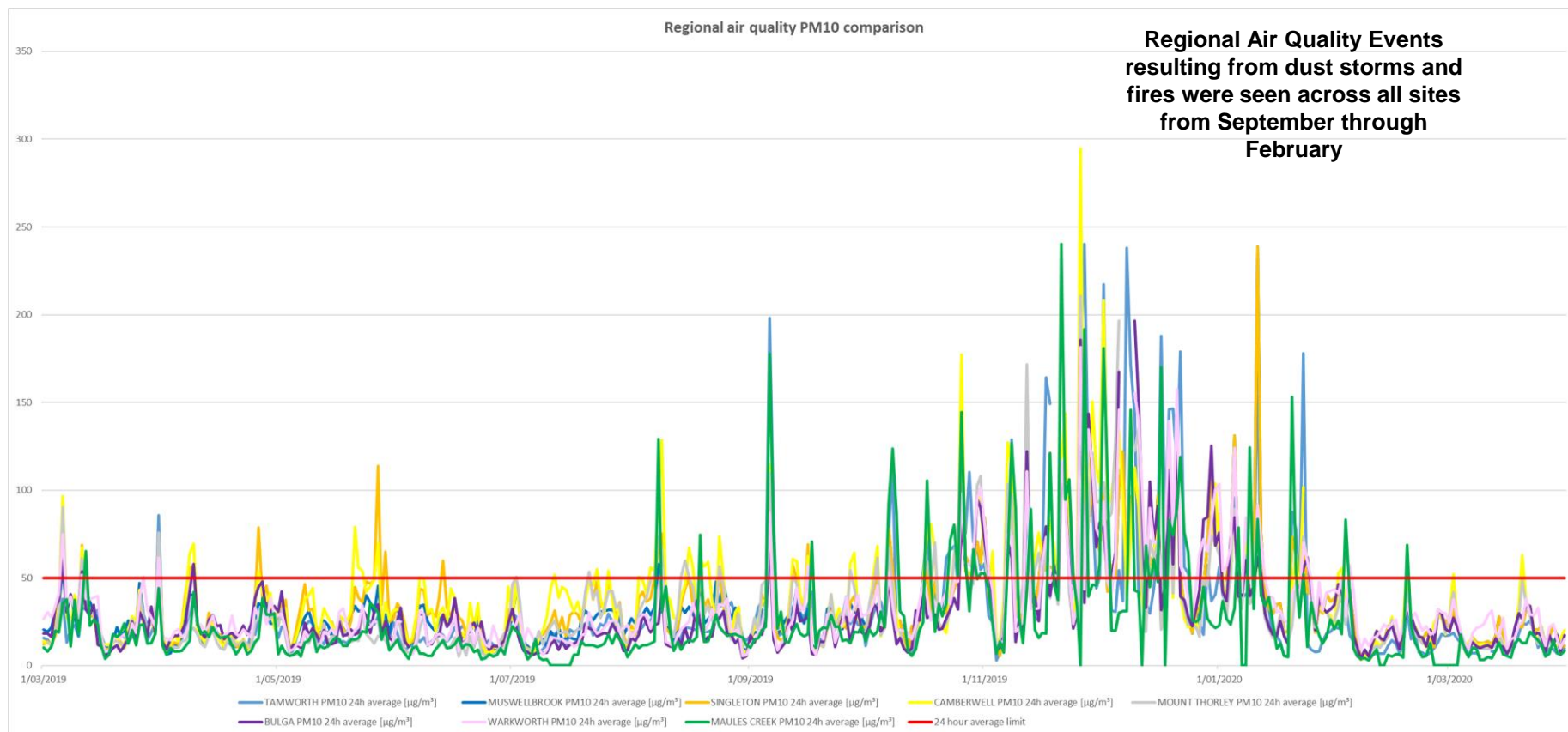
- Continued focus on local, indigenous and female employment with ongoing training programs undertaken.
- There have been 26 new trainees employed from January to April.
- 3 Apprentices were employed all from the local area.
- Over 600 people employed on site

Air quality management

- Publically available results of TEOM1 available on the EPA website. Annual rolling average for TEOM 1 is 28.1 ug/m³ at 31 March 2020 (criteria 30ug/m³).
- Ongoing dust suppressant application across the operation.
- Progressive overburden emplacement and bulk shaping on the northern dump, with some top soil spreading in progress.

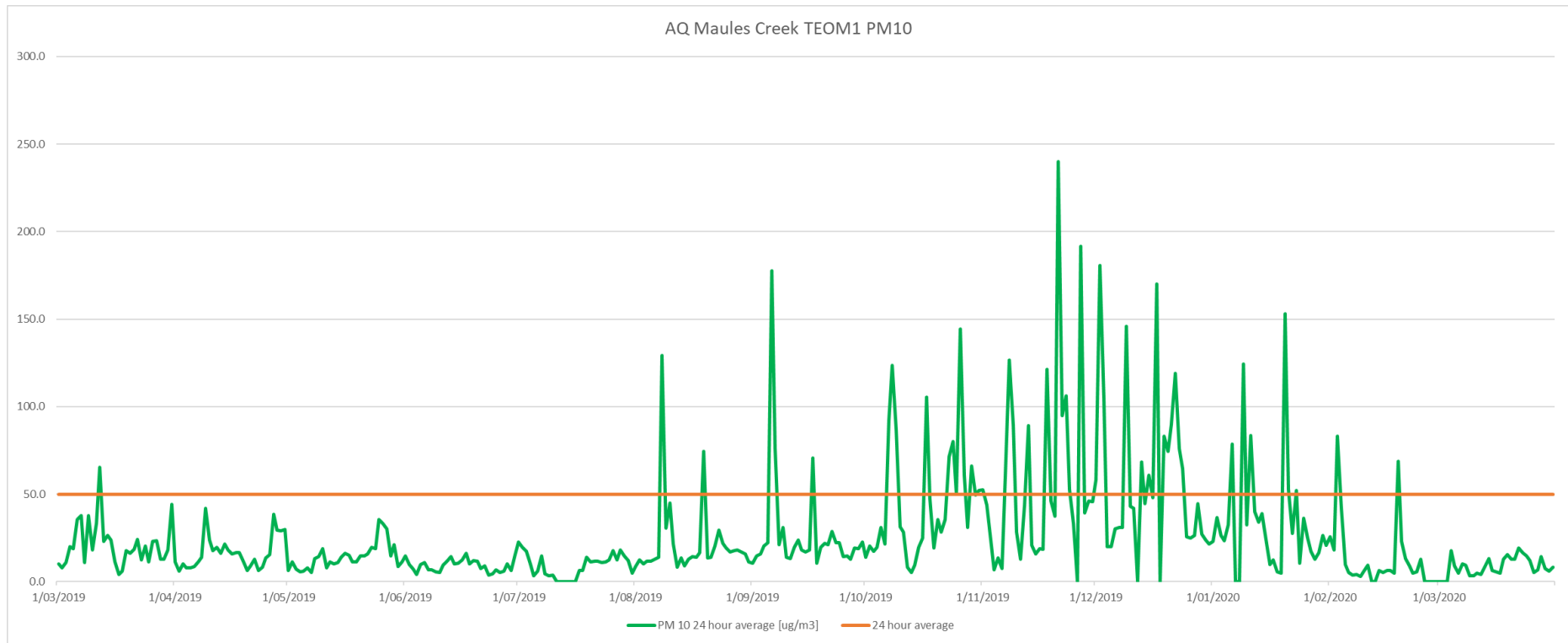


Air Quality Monitoring May 2019 – April 2020



2019 - 2020	TAMWORTH PM10	MUSWELLBROOK PM10	SINGLETON PM10	CAMBERWELL PM10	MOUNT THORLEY PM10	BULGA PM10	WARKWORTH PM10	MAULES CREEK PM10
Annual Average	21	26	25	31	27	21	26	23.3
Max 24hr Ave	240	245	245	294	231	197	182	61

Air Quality Monitoring May 2019 – April 2020

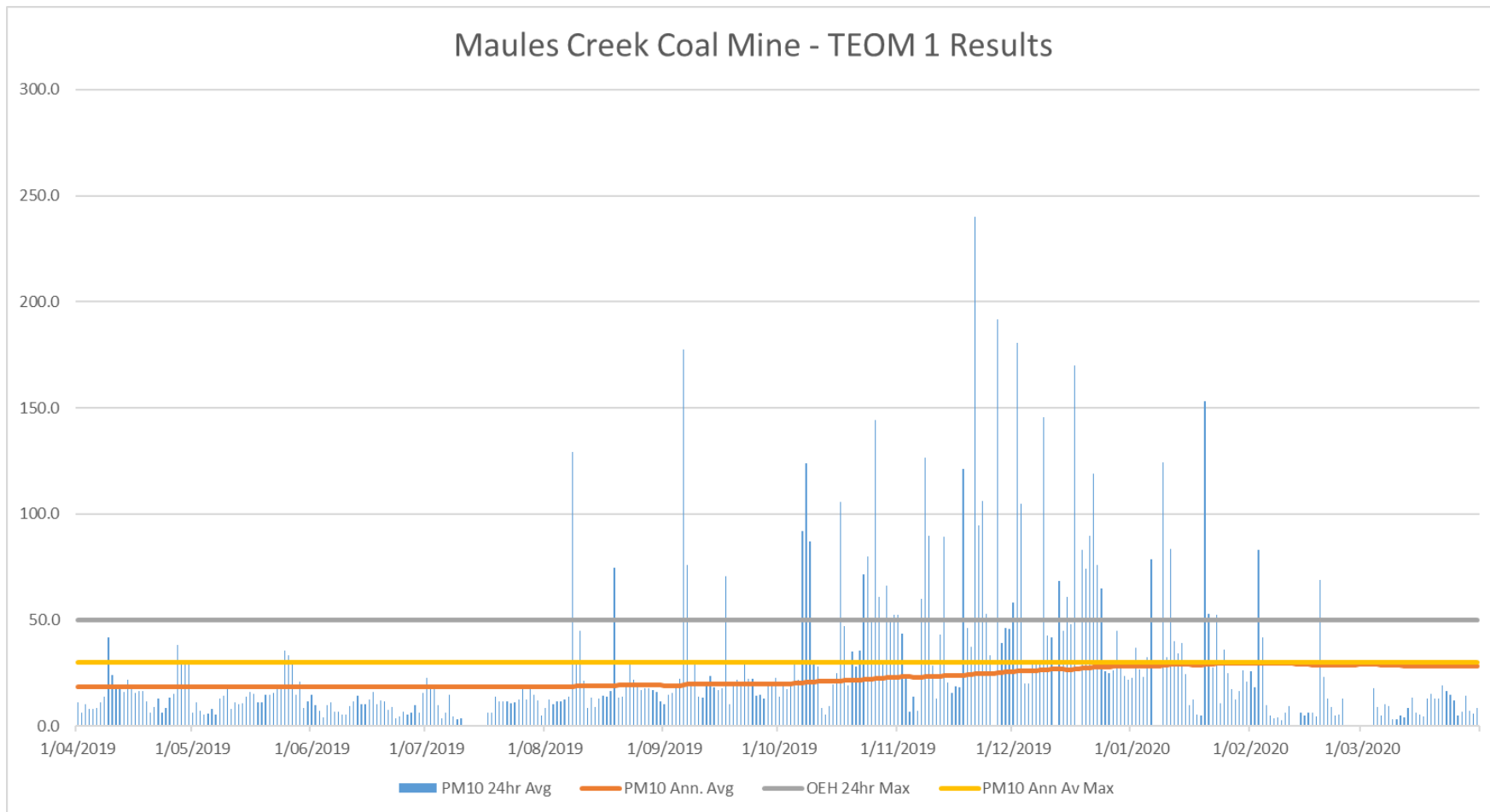


Annual rolling average for TEOM 1 is 28.1 ug/m3 at 30 March 2020 (criteria 30ug/m3). There were 15 spikes above 50ug/m3 during Q4 of 2019 and 6 spike in Q1 2020 these were all attributable to regional air quality events.

Monitoring and Environmental Results

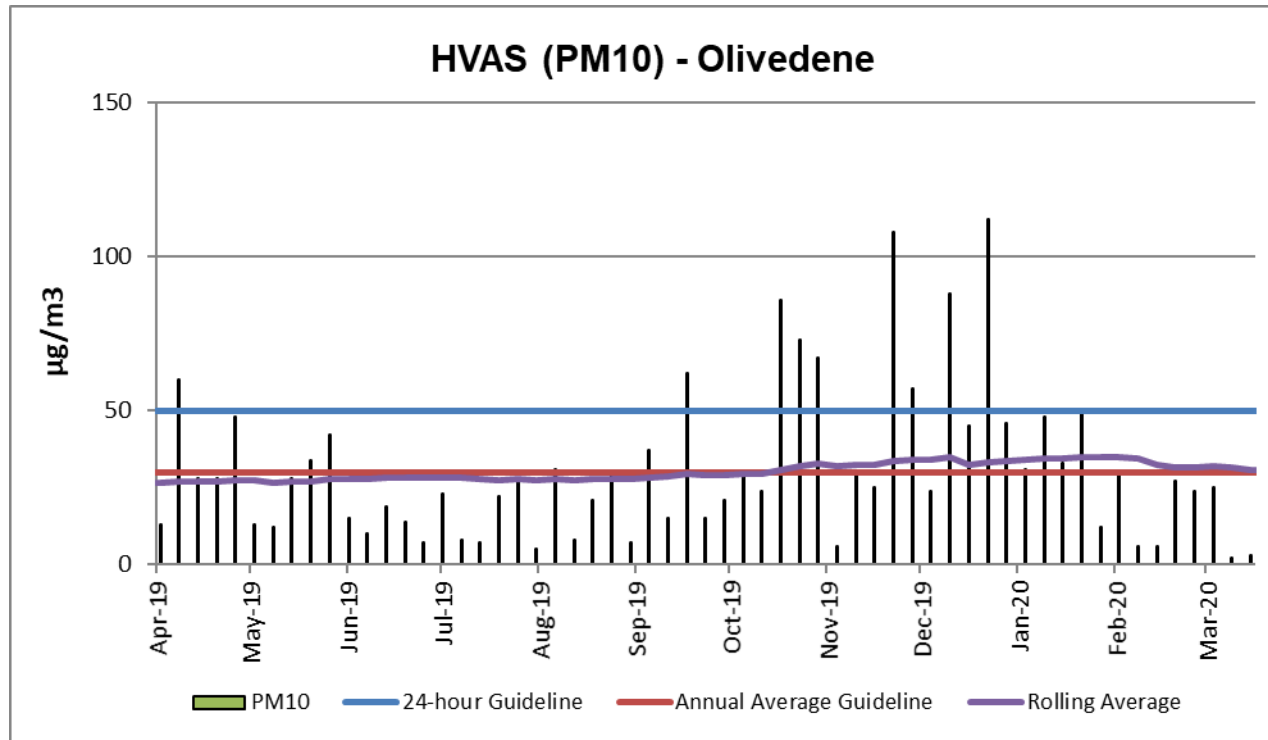
- Monitoring and environmental results provided within the distributed information pack

TEOM PM10 Results



Regional and local dust events due to drought conditions noted in spikes above

High Volume Air Sampling (HVAS)



Regional and local dust events due to drought conditions noted in spikes above

Groundwater monitoring

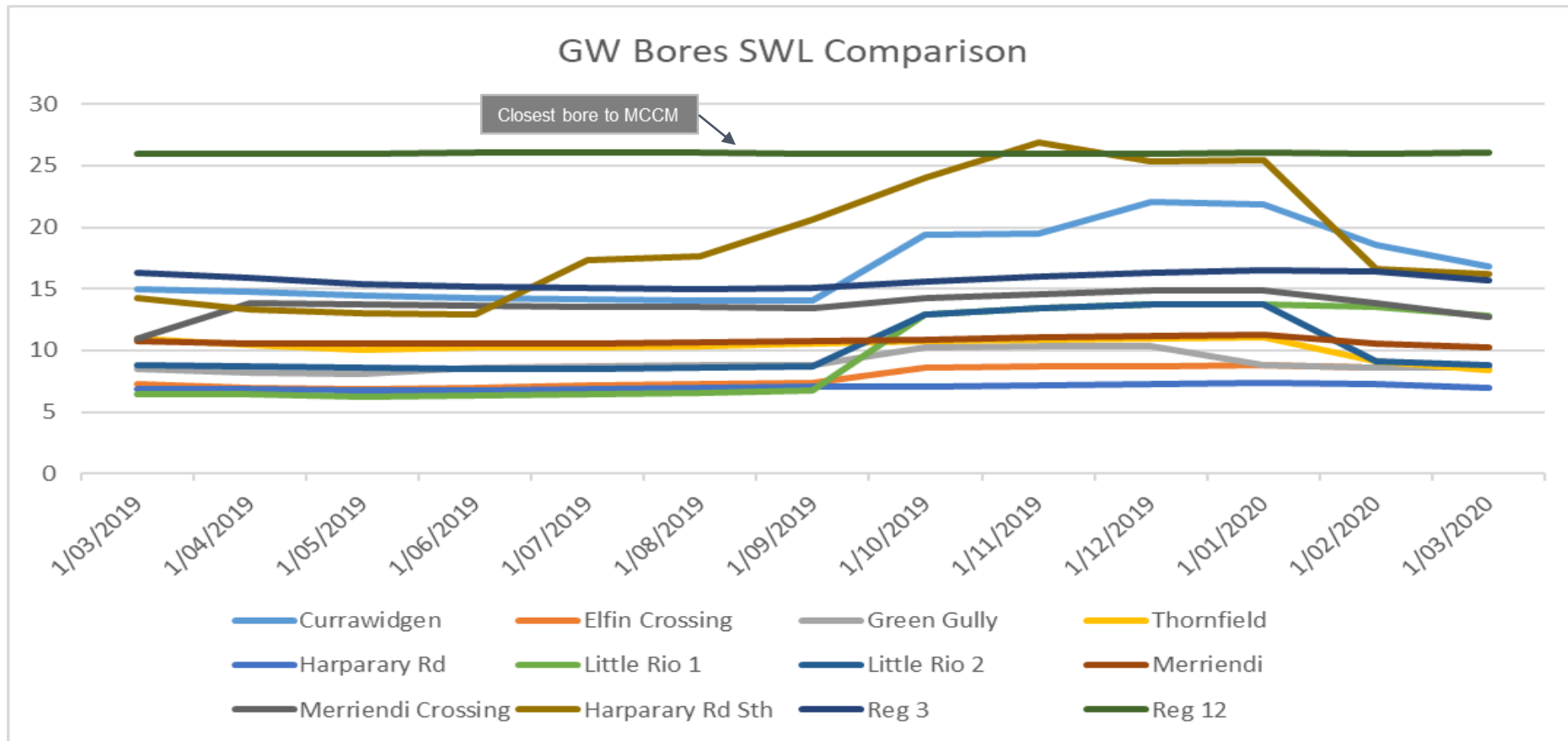


WHITEHAVEN COAL

Monitoring Locations



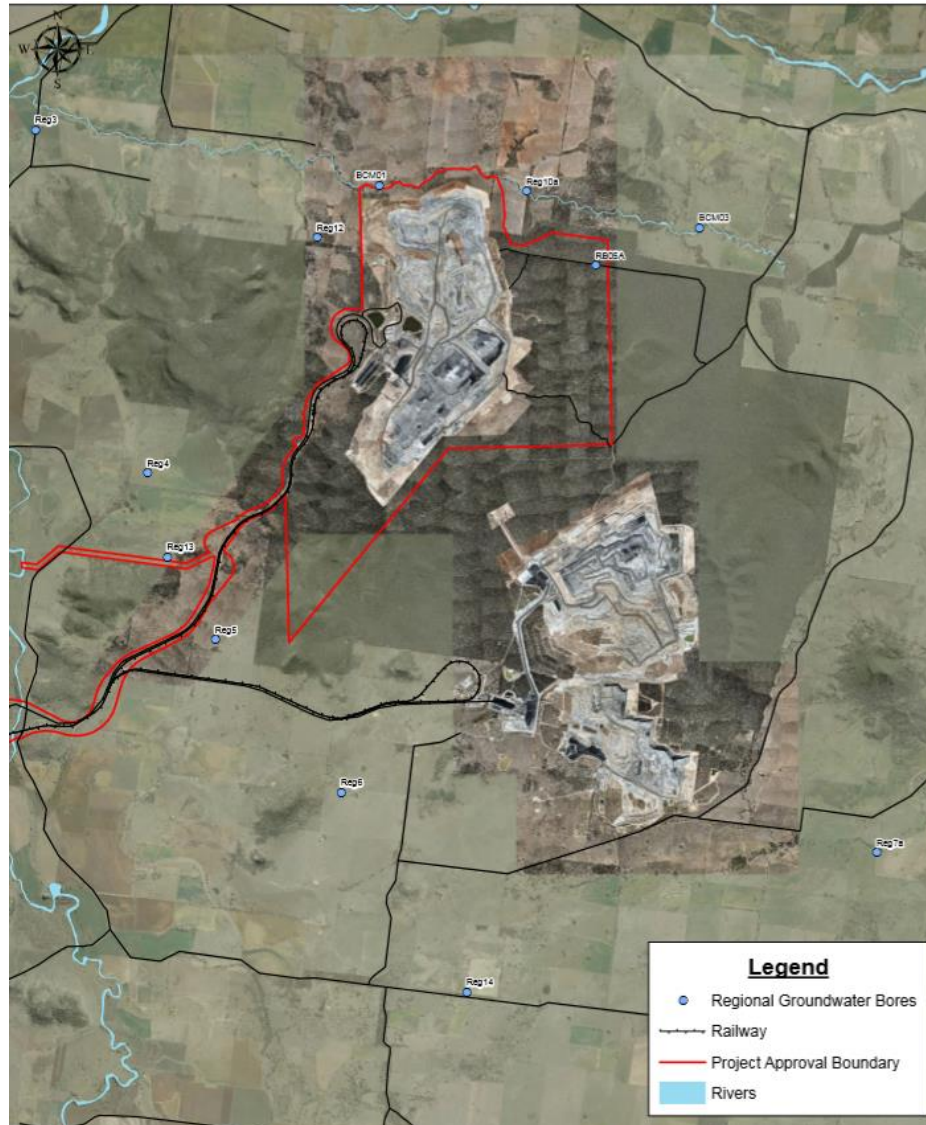
Groundwater levels



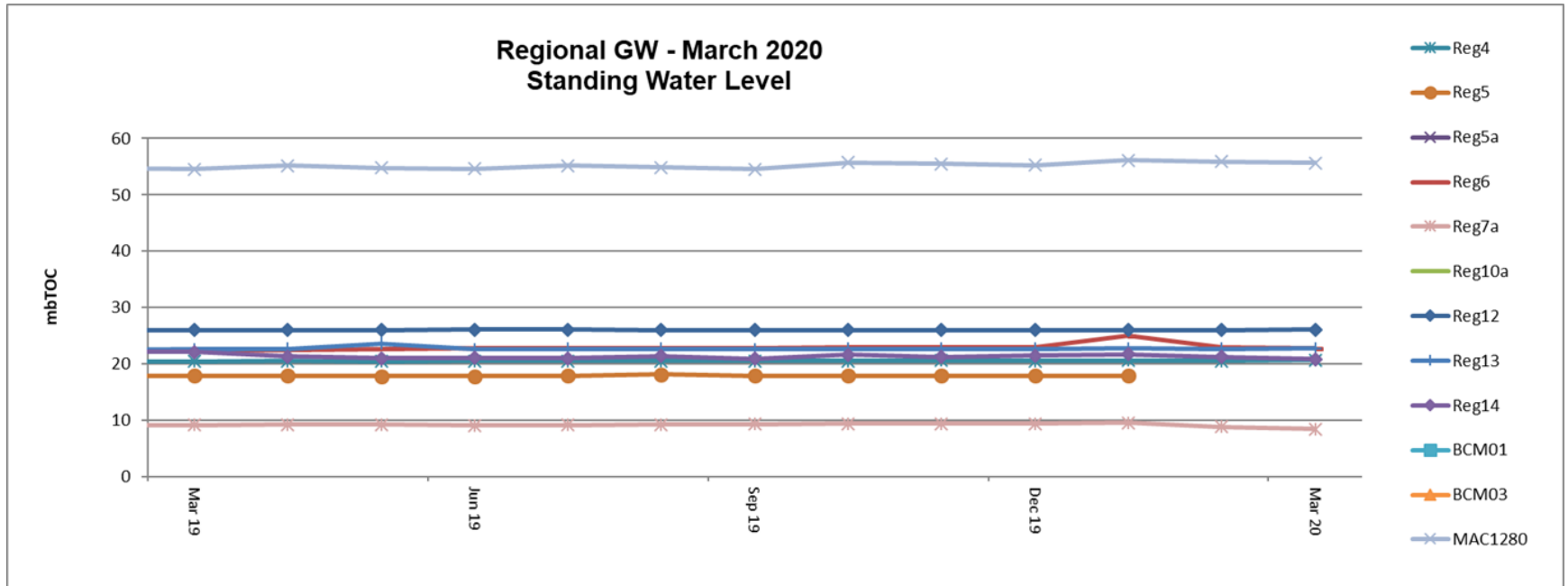
* Note Reg12 and Reg3 both within Boggabri Volcanics

Source: NSW DPI- Water & MCCM monitoring data

Standing water levels



Standing water levels



Water

- We are taking steps at all our mines to conserve water and support water security.
- The primary water source for Maules Creek is a High Security water licence drawing upon the Namoi River, however this water source has been severely impacted by the drought. Recent rains have seen the river flow again.

Biodiversity Management

Feral Animal Management

- During the most recent routine Whitehaven Offset Area Feral Animal Control program (March 2020) the results included:
 - 6 out of total 59 pigs trapped were from the Maules Creek/Boggabri area (very wet); and
 - 28 out of total 156 baits (1080) taken were from the Maules Creek/Boggabri area.

Revegetation

- Undertaken ground preparation for upcoming tree planting program over 600ha;

Fire Management

- Continued fire break maintenance program following wet weather;

Monitoring

- Autumn flora monitoring program underway.
- Redundant Infrastructure Removal
- Continued removal of redundant fences from Wirradale and Wongala properties.

Biodiversity Management

Upcoming works:

- Feral Animal Monitoring and Control Program in May and June 2020;
- Commence WHC Biodiversity Tree Planting Program 2020;
- Complete Fire Break Track Maintenance Program;
- Winter Bird and Spring 2020 Flora Monitoring;
- Planning and assessment for 2020 ecological and HR burn program;
- Maintenance of Boundary, Heritage and Threatened Species Fences ongoing;
- Finalise removal of redundant fences from Wirradale and Mt Lindsay.

AHS movement to date – April 2020

KEY PHYSICAL ACHIEVEMENTS TO DATE

- Six (6) EH5000s have now operated autonomously (full fleet for Phase 1 & 2);
- 16,428km travelled autonomously;
- 2,685 haul cycles (real and test);
- 1,896 loads hauled autonomously;
- 250,073bcm (572,979t) of waste hauled



Community

- Whitehaven had committed to support numerous local events including the Drover Campfire and eIMEx. However due to Covid-19 social distancing these have been postponed or cancelled. Where possible Whitehaven will continue to support the local community through this time .
- Complaints details – on the website.
- Whitehaven are advertising for 2020 Cadetship Program
 - Mining Engineering, Electrical Engineering, Mechanical Engineering, Mechatronics, Geology, or Environmental Science.

<https://whitehaven.applynow.net.au/jobs/WHC419-2020-cadetship-program>

Local spend

— Sponsorships and donations have been made to the:

- Tamworth and Region for Jan – Mar was ~\$16,500
- Narrabri area community for Jan – Mar was ~\$21,000
- Gunnedah area community for Jan – Mar ~\$88,000, and
- Other areas including Australian Red Cross, Westpac Rescue Helicopter etc. ~\$160k

— More information on Sponsorships and Donations can be found at:

<https://whitehavencoal.com.au/sustainability/community/donations-sponsorships/>

Next meeting –

Aug 2020

SR 17 Narrabri 35

17 Maules Ck SR 11 Boggabri 18

THANK YOU

www.whitehavencoal.com.au



WHITEHAVEN COAL