

Notes: Notes of the 31st Meeting of the Maules Creek Coal Community Consultative Committee
Held at the Boggabri Golf Club

Wednesday 28 October 2020

Members Present: Darren Swain (DS) – WHC, Ross Wilson (RW) – WHC, Emma Bulkeley (EB) – WHC, Cr Robert Kneale (RK) – Narrabri Shire Council, Jack Warnock (JW) – Community Representative, Robyn Grover (RG) – Community Representative, Steve Eather (SE) – Community Representative, Julie Heiler (JH) – Community Representative (Boggabri Business & Community Progress Association Alternate).

Apologies: Simone Moodie (SMo) – Community Aboriginal Representative, David Paull (DP) – Sustainable Living Armidale (SLA), Libby Laird (LL) – Maules Creek Community Representative, Ros Druce – Maules Creek Alternate, Lyndell Crowley (LC) – Boggabri Business & Community Progress Association

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 12 August 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 17 February 2021	

Agenda Item	Discussion	Action/By Whom
1.	Welcome and Apologies – DR welcomed everyone to the CCC and helping with the COVID restrictions.	
2.	Declaration of pecuniary or other interests – DR advised he is paid a fee to chair these meetings as is DC for typing the minutes.	
3.	Business Arising from the previous minutes – DR advised that there were a couple of actions that came out of our last meeting that will remain open.	
4.	Confirmation of the minutes of the previous meeting (August 2020) – All agreed and approved the previous meeting minutes.	
5.	Correspondence – No correspondence has been received.	
6.	WHC Presentation by Ross Wilson, Emma Bulkeley and Darren Swain Company Report & Overview of Activities <ul style="list-style-type: none"> • FY21 target production 12Mtpa ROM (Run of Mine) coal. Sept 2020 TRIFR (Total Recordable Injury Frequency Rate 4.74. Health and Safety <ul style="list-style-type: none"> • COVID-19 Management: Continued monitoring of compliance with current COVID-19 preventative measures. Continued monitoring of NSW Public Health Order and WorkSafe Australia. Ensuring our workforce remains informed. Business continuation plan in light of COVID border restrictions. • Projects: Vehicle hierarchy change management – Change from NSW road rules to the Vehicle Hierarchy system. Employment <ul style="list-style-type: none"> • Continued focus on local, indigenous, and female employment with ongoing training programs undertaken. There have been 26 new trainees employed from July to Sept 2020. 15 were female. Air Quality Management <ul style="list-style-type: none"> • Publically available results of TEOM1 available on the EPA website. Annual rolling average for TEOM1 is 23.7 ug/m3 at 30 Sept 2020 (criteria 30ug/m3). Ongoing dust suppressant application across the operation. Biodiversity Management <ul style="list-style-type: none"> • Feral Animal Management – During the most recent routine Whitehaven Offset Area Feral Animal Control program (Sept 2020) the results included: 70 out of total 108 pigs trapped were from the Maules Creek / Boggabri area; and 130 out of total 231 baits (1080) taken were from the Maules Creek / Boggabri area. • Revegetation and Tree Watering – Undertaken tree planting on Teston North, Teston South, Tralee Offsets and commenced routine tree watering program. • Weed Control – Undertaken Spring seasonal weed control on Teston North, Tralee, Teston South, Velyama and Kelso plus Wollondilly and Onavale Offsets. • Biodiversity Management – 	

- **Threatened Flora** – Undertaken routine inspections and planted 34 Pomaderris queenslandica seedlings on Kelso, Teston South, Louenville and Wollondilly Offsets.
- **Fire Management** – Continued fire break maintenance program on Onavale, Wollondilly, Tralee, Teston North, Teston South, Kelso, Velyama, Louenville and Wirradale Offsets.
- **Fencing and Waste Management** – Redundant Infrastructure Removal completed in Onavale, Wollondilly, Tralee, Teston North and Teston South plus Roseglass and Bimbooria Offsets and ongoing for the remainder of offsets.
- **Upcoming Works** – Feral Animal Monitoring and Control Program continue. Complete Biodiversity Tree Planting Program 2020 on Wongala South and Mt Lindesay Offsets. Continued seasonal Weed Control and Tree Watering Programs. Ongoing Fire Break Track Maintenance Program. Commence Spring Flora and Fauna 2020 Monitoring. Commence Annual Fire Hazard Assessment and Fuel Load Monitoring. Continue routine Threatened Flora Inspections and Programs. Ongoing Derelict Infrastructure Removal.
- **Project Approval Modifications**
 - **MCC Landform MOD** – this will be submitted for assessment and comments shortly.
 - **MCC Powerline MOD** – Intend to install and connect electricity to the Roma Bore, requiring a minor modification to the Project Approval PA 10_0138. Key items: The power line will be on Whitehaven owned property within a cleared and currently cropped paddock. Due diligence work has identified no impact to vegetation or archaeology.
- **AHS Production to Date – October 2020**
 - Nine (9) EH5000s are now converted for autonomous operation. >18,000 loads hauled autonomously.
 - >2,350,000 cubic metres of waste moved. >160 personnel trained to work with AHS so far.
- **Community**
- Whitehaven continues to support the local Community with donations and sponsorships. However, due to COVID-19 social distancing many events have been postponed or cancelled and requests for support have been fewer. Where opportunities become available Whitehaven will continue to support the local community through this time. More information on Sponsorships and Donations can be found at – <https://whitehaven.com.au/sustainability/community/donations-sponsorships/>. Complaint details are on the website.
- Sponsorships and donations have been made to the Narrabri area community for July to September which was \$104,000 and Gunnedah area community for same period was \$14,000. Whitehaven
- **New Website** – the website has been updated – <https://whitehavencoal.com.au/>
- **New Hotline Number** – Note the new streamlined Feedback and Complaints Hotline for ALL Whitehaven Sites 1800WHAVEN (1800 942 836).

General Discussion

JH – thanked WHC for the measures taken to keep the community safe. Amazing effort for such a small town that we’ve had no incidences considering the number of people coming in and going.

RW – It has been a big effort by not just us but everyone in the community as well. We have a lot of Regional VIC trucks and the guy at the gate will throw the driver a mask and will tell them that he will sign them in to avoid touching anything. Once they leave, we go to great lengths to then sanitise the area that the truck drivers have been.

A discussion was held about MCCM's plantings as DS advised that the Biodiversity team couldn't be here for this meeting unfortunately. EB observed that the mine started planting during winter with lots of native grasses, Box gum woodland. There were about 50,000 planted with an 80% success rate. Offsets securements to 31 March 2021 and still working towards that. Macro and micro relief in there to make it more natural with more shape.

DS proposed to have the May CCC meeting at the offsets site if people are interested. This was agreed to by members.

JW – Have you had any runoff from the stonework?

EB – It held up really well with the latest storm. Slight erosion but once the seeds grow that will help.

Questions were raised about the autonomous vehicles being used. RW observed that there are a set of grids identified on a pathway / map and the trucks stick to those grids. From a distance the wheel marks are exactly the same for every truck. The Operator can take control of the truck at any time.

RK – Will there be other equipment converted to autonomous.

EB – We are the first on the East Coast to be using autonomous fleets.

DS – Not aware of any discussion about progressing to other equipment like excavators and certainly not aware. We haven't got the trucks all in operation yet.

RK – My concern initially was that autonomous machines will replace people and concerned about workers on site as we want to see more work for people increased but it hasn't showed itself at all to be reduced on jobs yet.

DS – Some will be absorbed because of the lack of staff in the area but people will be trained up and go into other roles as well. DS – It's more about the productivity and about getting trucks working 24/7. I think it's exciting for students in this area. Highly technical skills for our local students.

RW observed that it is definitely going to raise the bar with people coming and getting involved and talking about STEM. Technology such as 3D printers and the level of technology advancement with STEM being offered to kids that they'll be all over this.

SE – It has been the toughest drought in 100 years but have amazing employment at the moment which has kept the Shire going.

DS observed that there was a complaint re blasting which WHC are still working through. New Hotline number is now available for all sites. The Operator will take details for whatever site it is and then contact that site via text and email.

RW – After the Beirut explosion, there was a mining inspection about 3 or 4 weeks ago. They came and looked at the procedures – who is the licenced owner to do the blast but also give advice on changes. Distances need to be considered for blasting in the future.

	<p>RK – Do the mines use ammonium nitrate?</p> <p>RW – We store enough for a week or so and the trucks come from Newcastle regularly to replenish as required and then use it to blast and not have to worry about storing it for too long.</p>	
7.	<p>General Business</p> <p>JH – This CCC seems to be working a lot better now. Everyone is interacting more, and the information is flowing more freely. So, congratulations to everyone and keep being friendly.</p> <p>JW – What are your expectations to have enough water for the following year with your high security licence?</p> <p>EB – There is approximately 1.2 GL of water on site because of the rain events earlier in the year and that'll keep us going for quite a while now.</p> <p>DS – Hugh Morgan is the Group Water and Property Manager and is making sure sites have enough water. At moment, he is advising on managing big storms and impacts on too much water potentially.</p> <p>DS then provided members with a copy of the 2019 Annual Review. How much water we've used on site is on Page 59 (Site Water Balance) which outlines what was used and what was recycled etc.</p> <p>JW – Is there a new bore?</p> <p>DS – Brighton and Olivedene there are 3 bores there. Olivedene is pumped across the road. There is a pipe between Maules Creek and Boggabri Coal which isn't used but is still connected.</p> <p>DR – Discussed that due to COVID there will be no Joint CCC this month and nor will be it held by video conference.</p>	
8.	Next meeting - Wednesday 17 February 2021 at 2:00 pm.	

Meeting Closed:

3:35 pm

Appendix 1: Actions

Page No	Action No	Description	Date Raised
	1	Community Reps and DR's details to go into the Green Flyer.	13 May 2020
	2	DR to be alerted of when modification goes on exhibition	12 August 2020

Maules Creek Coal Mine

CCC MEETING

BOGGABRI GOLF CLUB

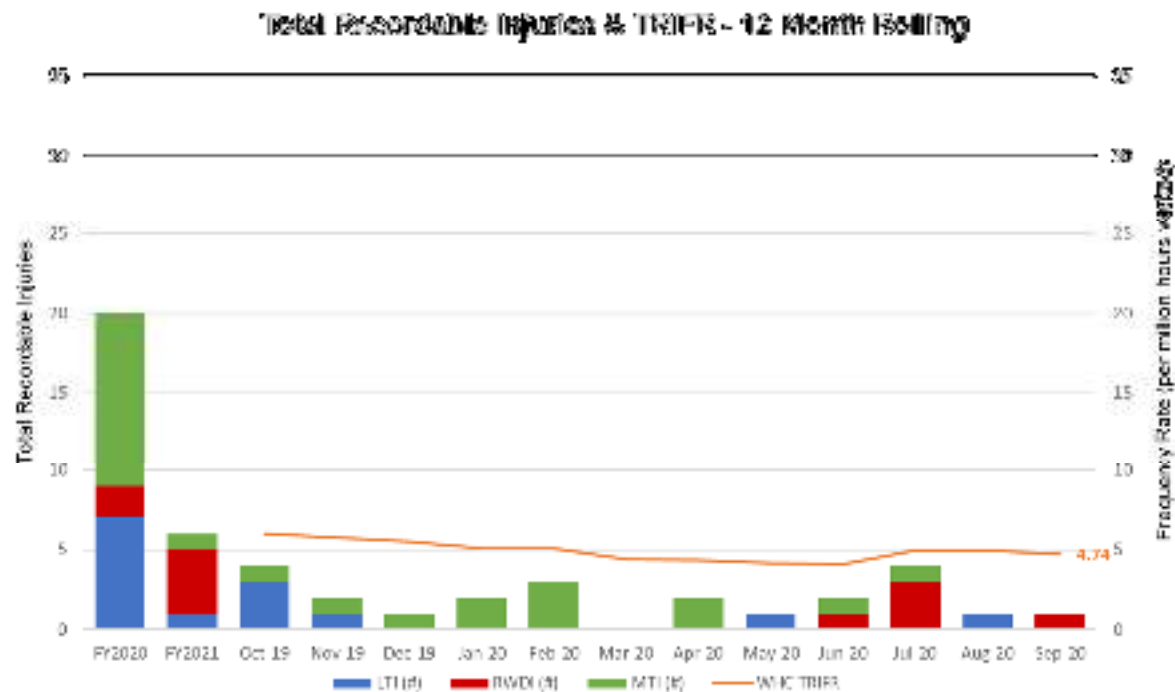
OCTOBER 2020



WHITEHAVEN COAL

Company Report & Overview of Activities

- FY21 target production ~12 Mtpa ROM (Run of Mine) coal.
- September 2020 TRIFR (Recordable injuries per million exposure hours) 4.74.



Health and Safety

COVID-19 Management

- Continued monitoring of compliance with current COVID-19 preventative measures.
- Continued monitoring of NSW Public Health Order and WorkSafe Australia.
- Ensuring our workforce remains informed.
- Business continuation plan in light of COVID boarder restrictions.

Continuous improvement

- Monitoring progress with Health and Safety Improvement Plan.
 - Improvement of control of vehicle interaction and integration of AHS

Projects

- Vehicle hierarchy change management – Change from NSW road rules to vehicle

Hierarchy

Employment

- Continued focus on local, indigenous and female employment with ongoing training programs undertaken.
- There have been 26 new trainees employed from July to September, 15 were female.
- There are now 110 females employed onsite.
- Over 700 people are employed on site.

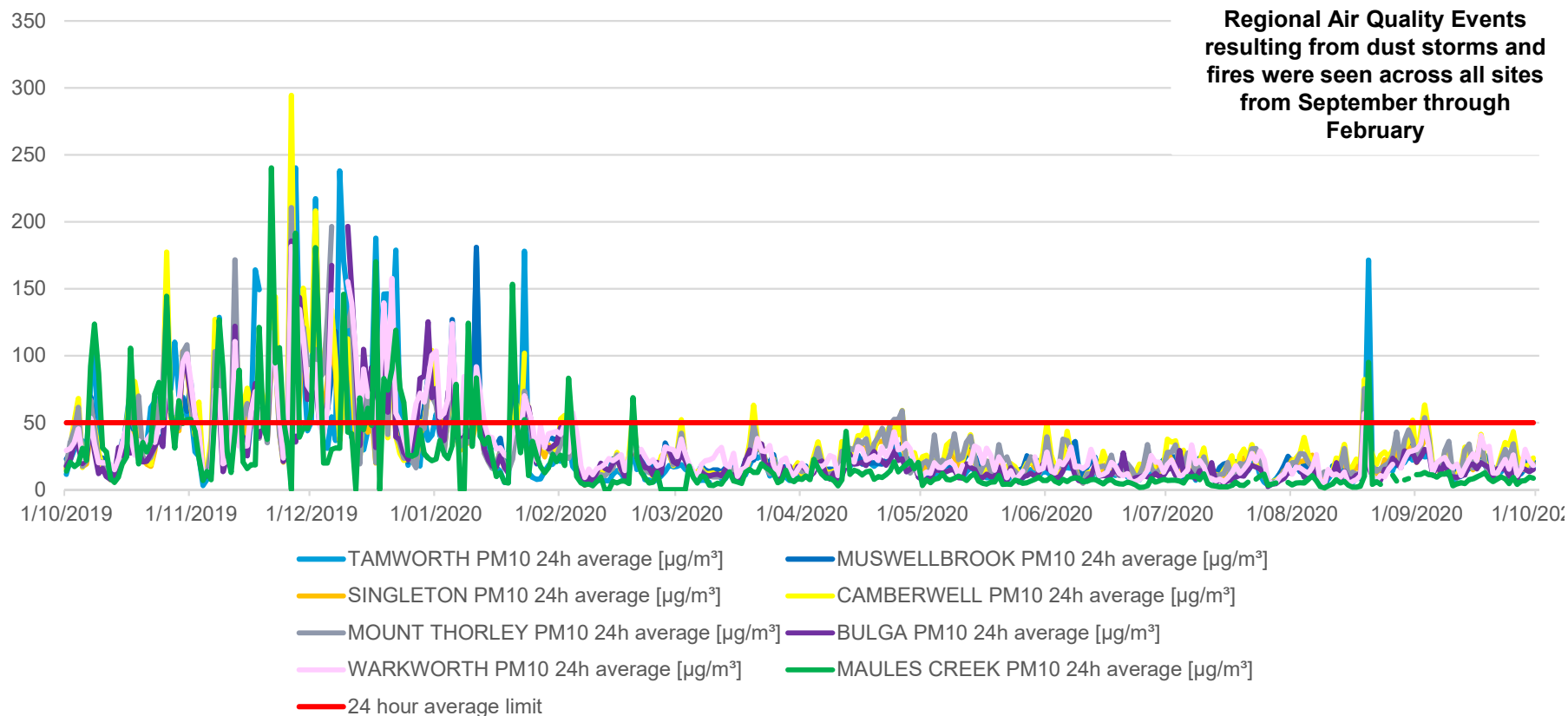
Air quality management

- Publicly available results of TEOM1 available on the EPA website. Annual rolling average for TEOM 1 is 23.7 ug/m³ at 30 September 2020 (criteria 30ug/m³).
- Ongoing dust suppressant application across the operation.
- Progressive overburden emplacement and bulk shaping on the northern dump, with top soil spreading and seeding in progress.



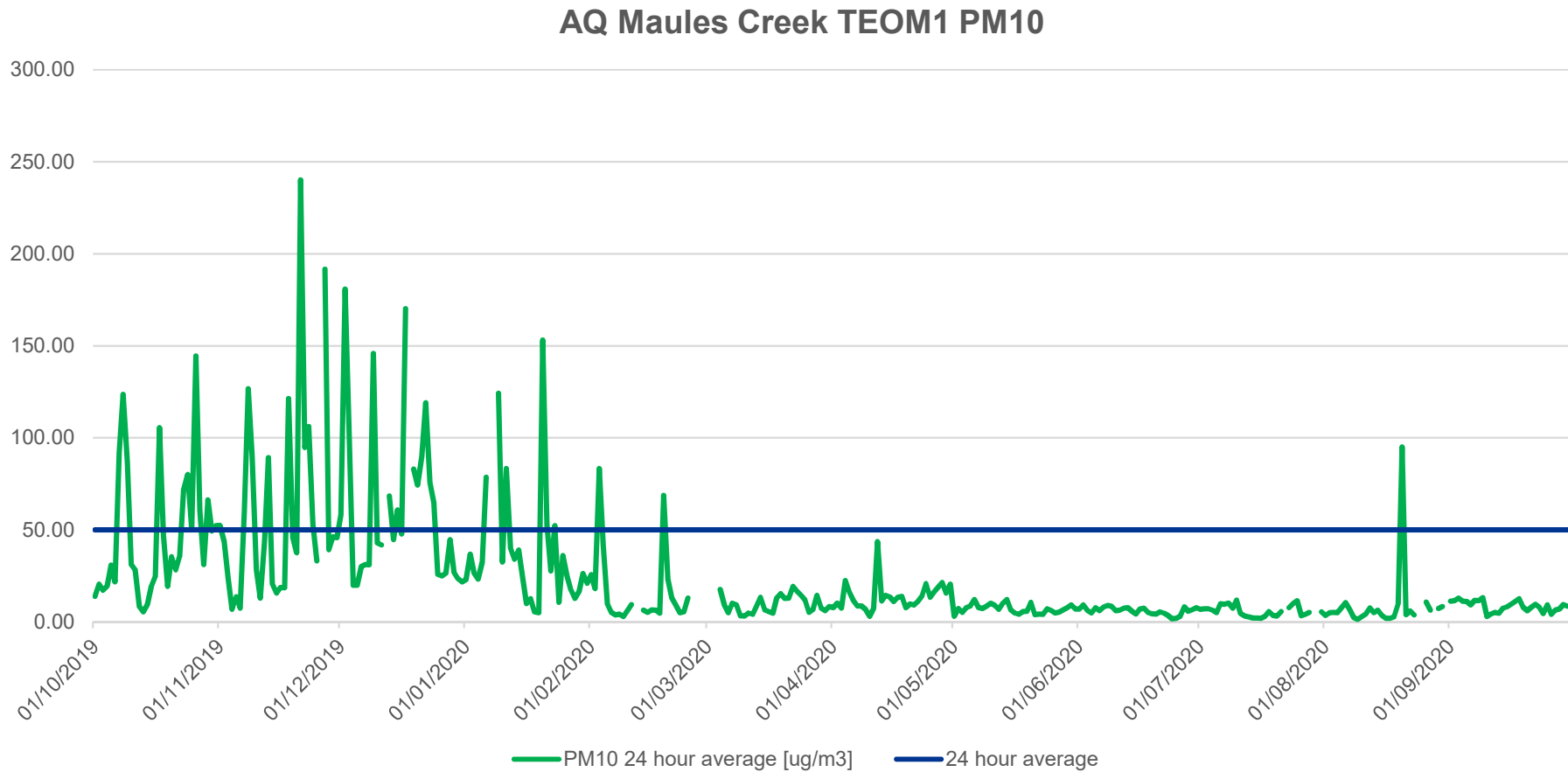
Air Quality Monitoring October 19 – October 20

Regional air quality PM10 comparison



2019 - 2020	TAMWORTH PM10	MUSWELLBROOK PM10	SINGLETON PM10	CAMBERWELL PM10	MOUNT THORLEY PM10	BULGA PM10	WARKWORTH PM10	MAULES CREEK PM10
Annual Average	30	31	28	35	32	27	33	24
Max 24hr Ave	240	231	206	294	211	197	182	240

Air Quality Monitoring October 19 – October 20



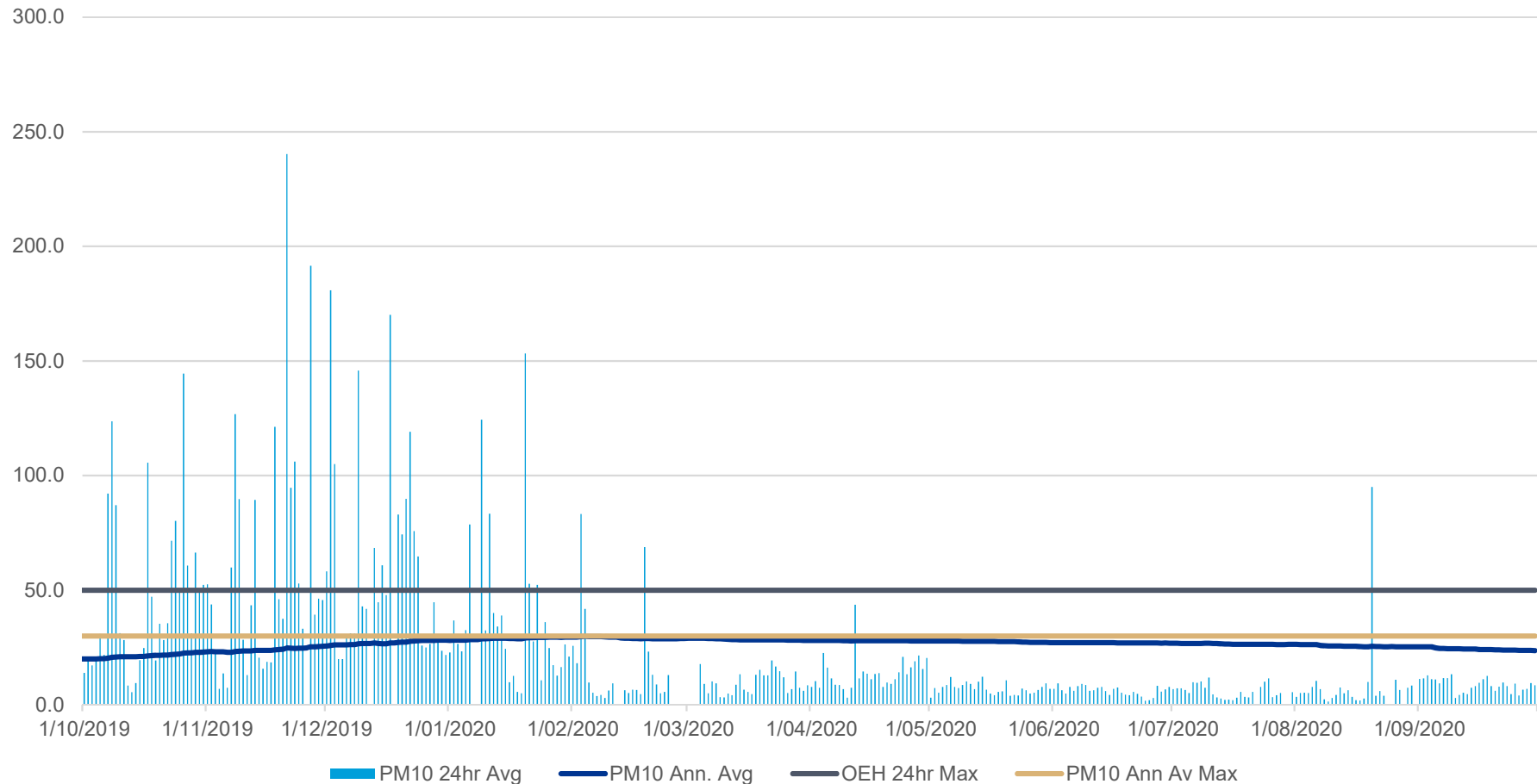
Annual rolling average for TEOM 1 is **23.7 $\mu\text{g}/\text{m}^3$** at 30 September 2020 (criteria 30 $\mu\text{g}/\text{m}^3$). There was one spike above 50 $\mu\text{g}/\text{m}^3$ during Q3 of 2020.

Monitoring and Environmental Results

- Monitoring and environmental results provided within the distributed information pack

TEOM PM10 Results

Maules Creek Coal Mine - TEOM 1 Results

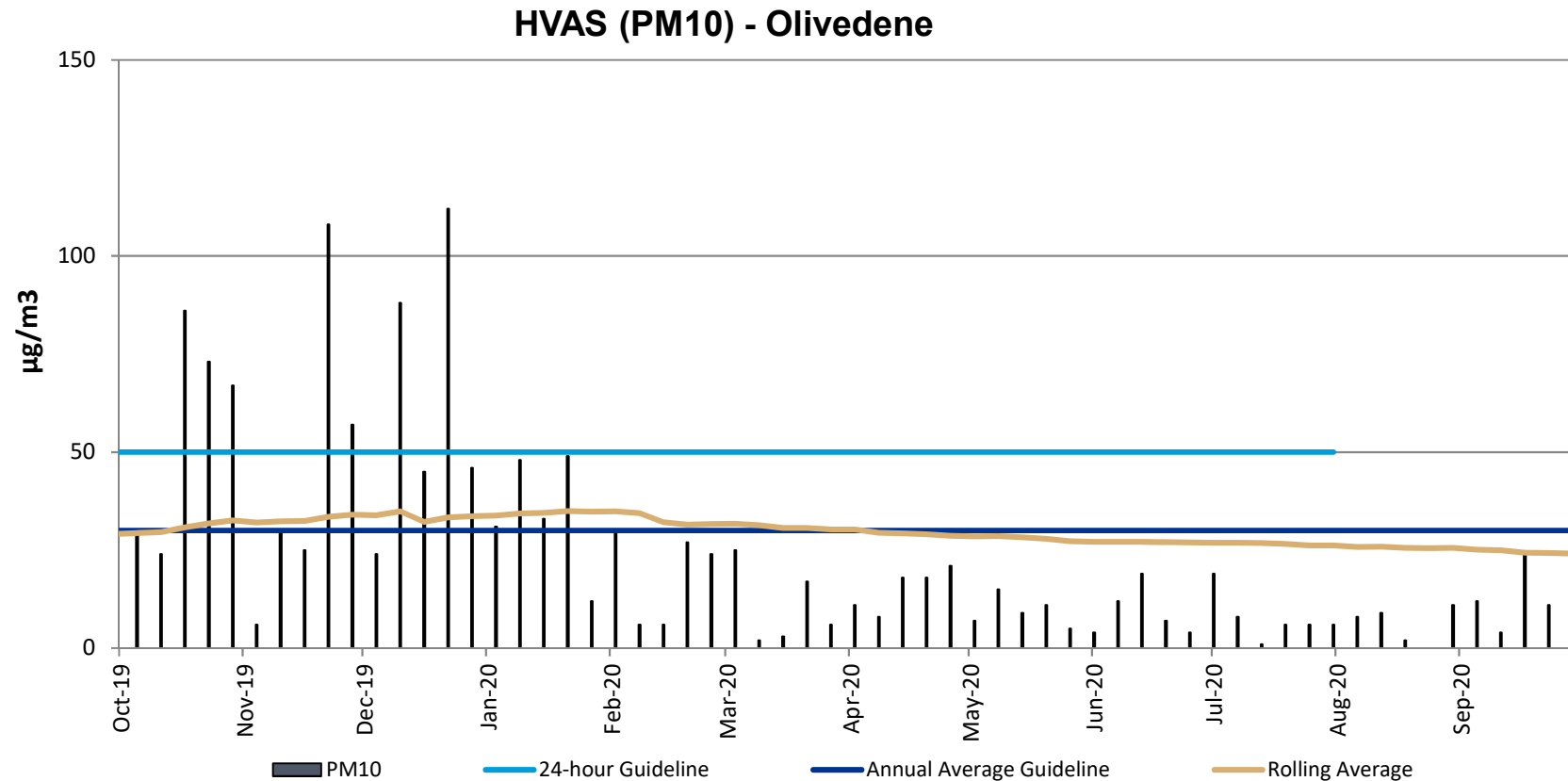


Regional and local dust events due to drought conditions noted in spikes above

CCC MEETING



High Volume Air Sampling (HVAS)



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

Groundwater monitoring



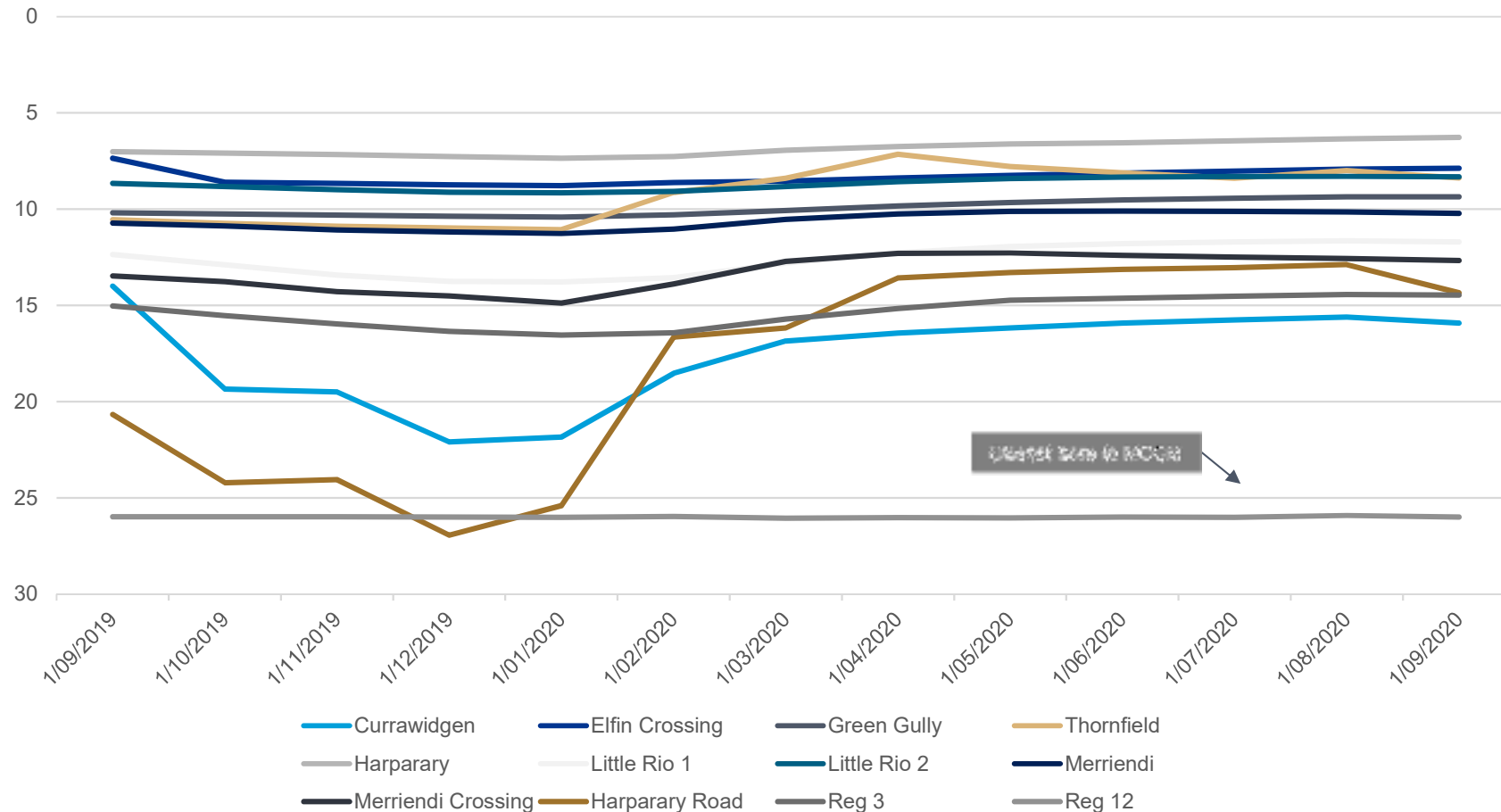
WHITEHAVEN COAL

Monitoring Locations



Groundwater levels

GW Bores SWL Comparison - 12 Months

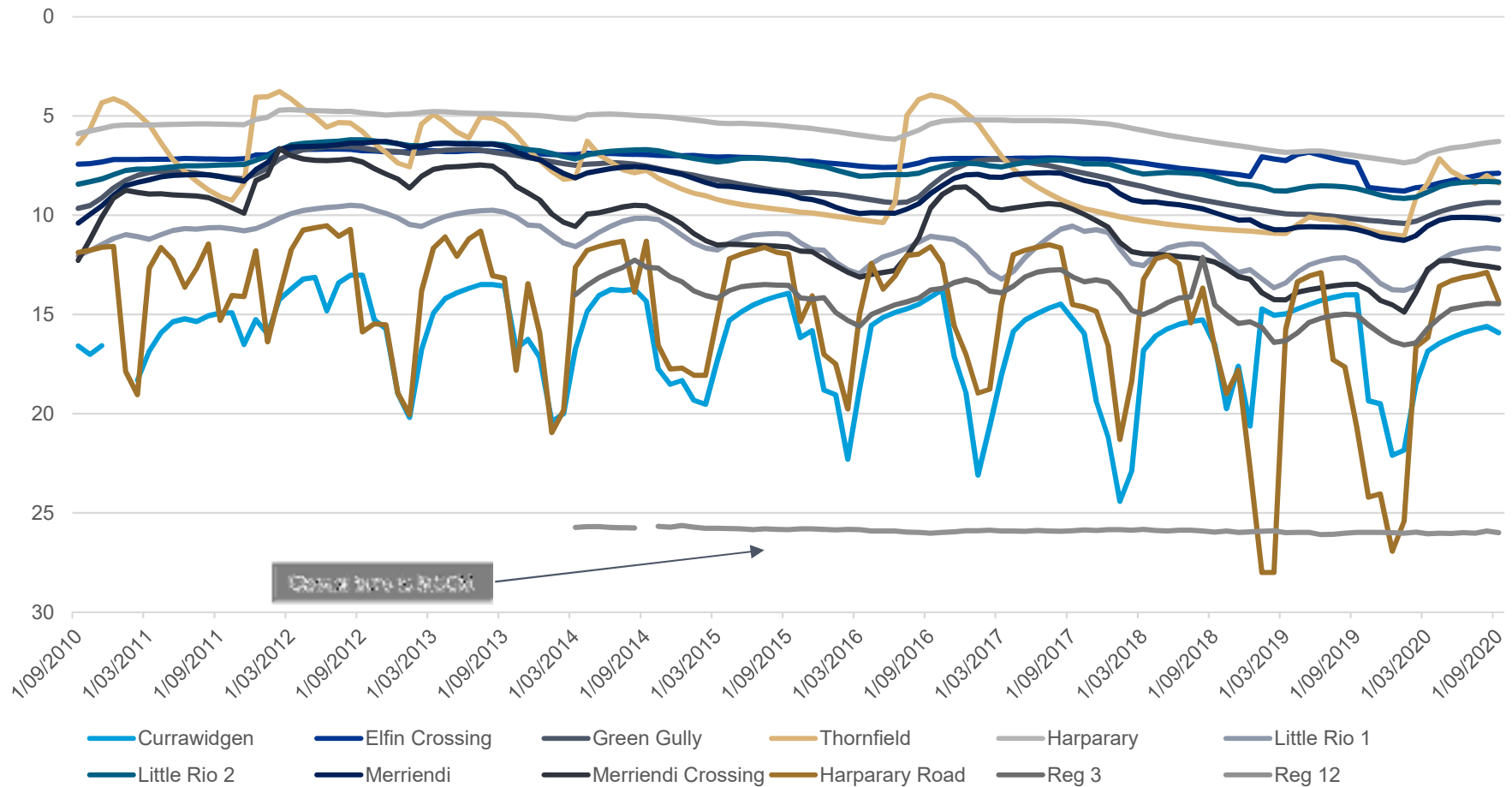


* Note Reg12 and Reg3 both within Boggabri Volcanics

Source: NSW DPI- Water & MCCM monitoring data

Groundwater levels

GW Bores SWL Comparison - 10 Years



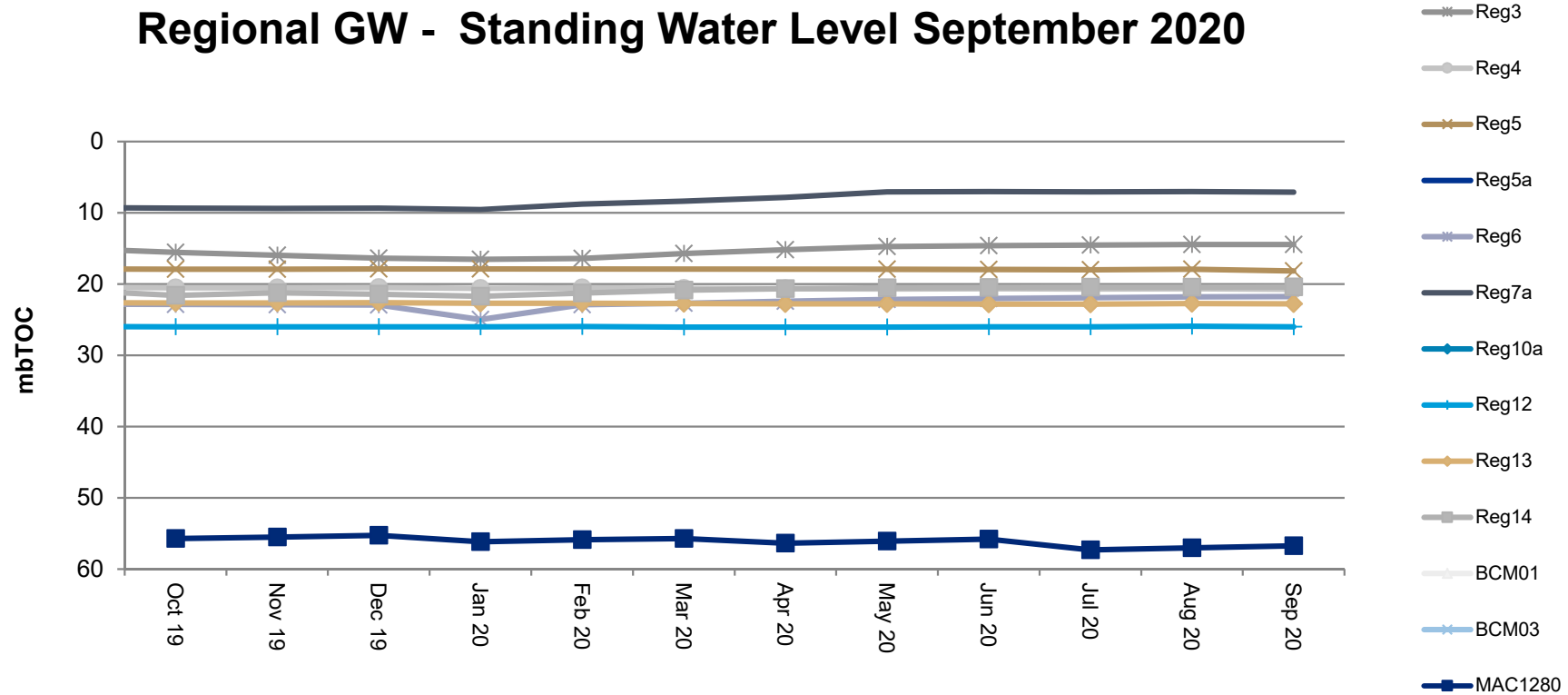
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Source: NSW DPI- Water & MCCM monitoring data

Standing water levels



Standing water levels



Biodiversity Management

Feral Animal Management

- During the most recent routine Whitehaven Offset Area Feral Animal Control program (September 2020) the results included:
 - 70 out of total 108 pigs trapped were from the Maules Creek/Boggabri area
 - 130 out of total 231 baits (1080) taken were from the Maules Creek/Boggabri area.

Revegetation and Tree Watering

- Undertaken tree planting on Teston North, Teston South, Tralee Offsets and commenced routine tree watering program.

Weed Control

- Undertaken Spring seasonal weed control on Teston North, Tralee, Teston South, Velyama and Kelso plus Wollandilly and Onavale Offsets.

Biodiversity Management

Threatened Flora

- Undertaken routine Inspections and planted 34 *Pomaderris queenslandica* seedlings on Kelso, Teston South, Louenville and Wollandilly Offsets.

Fire Management

- Continued fire break maintenance program on Onavale, Wollandilly, Tralee, Teston North, Teston South, Kelso, Velyama, Louenville and Wirradale Offsets.

Fencing and Waste Management

- Redundant Infrastructure Removal completed in Onavale, Wollandilly, Tralee, Teston North and Teston South plus Roseglass and Bimbooria Offsets and ongoing for the remainder of Maules Offsets.



Biodiversity Management

Upcoming works:

- Feral Animal Monitoring and Control Program in November and December 2020.
- Complete Biodiversity Tree Planting Program 2020 on Wongala South and Mt Lindesay Offsets.
- Continued seasonal Weed Control and Tree Watering Programs.
- Ongoing Fire Break Track Maintenance Program.
- Commence Spring Flora and Fauna 2020 Monitoring.
- Commence Annual Fire Hazard Assessment and Fuel Load Monitoring.
- Continue routine Threatened Flora Inspections and Programs.
- Ongoing Derelict Infrastructure Removal.

Project Approval Modifications

MCC Landform MOD – as discussed at the last meeting, this will be submitted for assessment and comments shortly.

MCC Powerline MOD - Intend to install and connect electricity to the Roma Bore. This will require a minor modification to the Project Approval PA 10_0138.

Key items:

- The power line will be on Whitehaven owned property within a cleared and currently cropped paddock.
- Due diligence work has identified no impact to vegetation or archaeology will occur
- Will enable electrification of the pump which is currently powered by a diesel generator.

AHS Production to Date

As of October 2020

- **Nine (9) EH5000s** are now converted for autonomous operation.
- **Ex8000** commences loading AHS fleet in November (currently Ex3600).
- **ANC Fleet** installations continue – AHS enabled equipment list expanding.
- **>18,000** loads hauled autonomously.
- **>2,350,000** cubic metres of waste moved.
- **>160** personnel trained to work with AHS so far.



Community

- Whitehaven continues to support the local Community with donations and sponsorships. However due to Covid-19 social distancing many events continue to be postponed or cancelled and requests for support have been fewer.
- Where opportunities become available Whitehaven will continue to support the local community through this time.
- More information on Sponsorships and Donations can be found at:
<https://whitehavencoal.com.au/sustainability/community/donations-sponsorships/>
- Sponsorships and donations have been made to the:
 - Narrabri area community for July – Sept was ~\$104,000
 - Gunnedah area community for July – Sept was ~\$14,000
- Complaints details – on the website.

New Website

The website has been updated

<https://whitehavencoal.com.au/>

New Hotline Number

Note the new streamlined Feedback and Complaints Hotline for **all** Whitehaven Sites

1800WHAVEN (1800 942836)

Next meeting:

17 February 2021

THANK YOU

www.whitehavencoal.com.au



WHITEHAVEN COAL

Maules Creek Coal Mine Community Consultative Committee Meeting #31

Environmental Monitoring Report For the Q3 period, July – September 2020

Attended Noise Monitoring

Attended noise monitoring was undertaken at six locations during July, August and September 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 – JULY TO SEPTEMBER 2020.

Table 1 - July 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	09/07/2020 00:04	1.4	0	35	Yes	IA	Nil
NM2	08/07/2020 23:35	1.1	0	39	Yes	IA	Nil
NM3	08/07/2020 22:00	2.3	0	35	Yes	<20	Nil
NM4	08/07/2020 23:08	1.5	0	35	Yes	<25	Nil
NM5	09/07/2020 00:35	2.6	0	35	Yes	IA	Nil
NM6	08/07/2020 22:36	3.2	0	35	No	<25	NA

Table 2 - August 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	03/08/2020 22:26	1.6	0.0	35	Yes	IA	Nil
NM2	03/08/2020 23:11	1.9	0.0	39	Yes	IA	Nil
NM3	04/08/2020 00:02	1.3	0.0	35	Yes	IA	Nil
NM4	03/08/2020 22:50	1.1	0.0	35	Yes	IA	Nil
NM5	03/08/2020 22:00	2.1	0.0	35	Yes	<25	Nil
NM6	03/08/2020 23:37	1.5	0.0	35	Yes	IA	Nil

Table 3 - September 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	01/09/2020 22:30	0.6	0	35	Yes	<25	Nil
NM2	01/09/2020 23:30	0.5	0	39	Yes	<20	Nil
NM3	01/09/2020 23:31	0.5	0	35	Yes	IA	Nil
NM4	01/09/2020 23:00	0.5	0	35	Yes	IA	Nil
NM5	01/09/2020 22:00	0.7	0	35	Yes	<20	Nil
NM6	01/09/2020 23:58	0.4	0	35	Yes	IA	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 Q3 no measurements 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 Q3 2020.

LA1, 1minute GENERATED BY MCC AGAINST OPERATIONAL NIGHT NOISE CRITERIA – JULY TO SEPTEMBER 2020.

Table 4 - July 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	09/07/2020 00:04	1.4	0	45	Yes	IA	Nil
NM2	08/07/2020 23:35	1.1	0	45	Yes	IA	Nil
NM3	08/07/2020 22:00	2.3	0	45	Yes	<20	Nil
NM4	08/07/2020 23:08	1.5	0	45	Yes	<25	Nil
NM5	09/07/2020 00:35	2.6	0	45	Yes	IA	Nil
NM6	08/07/2020 22:36	3.2	0	45	No	26	NA

Table 5 – August 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	03/08/2020 22:26	1.6	0.0	45	Yes	IA	Nil
NM2	03/08/2020 23:11	1.9	0.0	45	Yes	IA	Nil
NM3	04/08/2020 00:02	1.3	0.0	45	Yes	IA	Nil
NM4	03/08/2020 22:50	1.1	0.0	45	Yes	IA	Nil
NM5	03/08/2020 22:00	2.1	0.0	45	Yes	29	Nil
NM6	03/08/2020 23:37	1.5	0.0	45	Yes	IA	Nil

Table 6 - September 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	01/09/2020 22:30	0.6	0	45	Yes	<25	Nil
NM2	01/09/2020 23:30	0.5	0	45	Yes	23	Nil
NM3	01/09/2020 23:31	0.5	0	45	Yes	IA	Nil
NM4	01/09/2020 23:00	0.5	0	45	Yes	IA	Nil
NM5	01/09/2020 22:00	0.7	0	45	Yes	22	Nil
NM6	01/09/2020 23:58	0.4	0	45	Yes	IA	Nil

Notes:

1. Noise emission limits do not apply during periods of rainfall or wind speeds greater than 3 metres per second (at 10 metres);
 2. Estimated or measured LAeq,15minute attributed to MCCM;
 3. Estimated or measured LA1,1minute attributed to MCCM;
 4. 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
July	S
August	W
September	SSE

Blast Monitoring

There were 34 blasts at MCCM during Q3 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 3 2020

Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Noise	dB (Lin Peak)	All	34	97.73	116.5	120	No
Vibration	mm/s		34	0.27	4.07	10	No

Air Quality

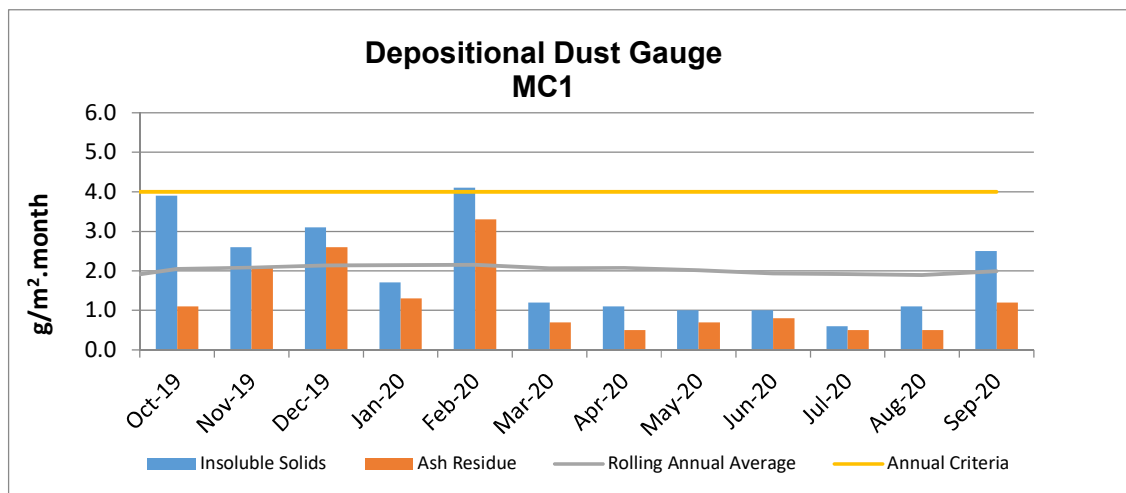
Total Depositional Dust

The 12 monthly rolling annual average remains below the relevant Project Approval criteria of $4\text{g/m}^2/\text{month}$ for the respective monitoring points except for at MC4 as shown in the below graph.

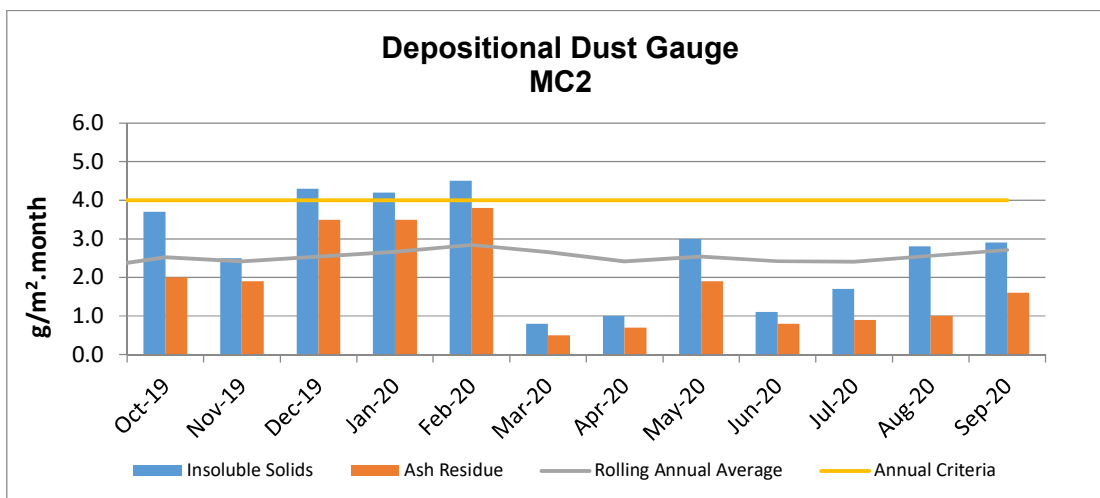
Whilst MC4 was above the 12 month rolling average this was however attributed to a highly contaminated sample during the bushfires and dust storms in October 2019.

Table 9 – Deposited Dust Gauge Results [$\text{g/m}^2/\text{month}$]

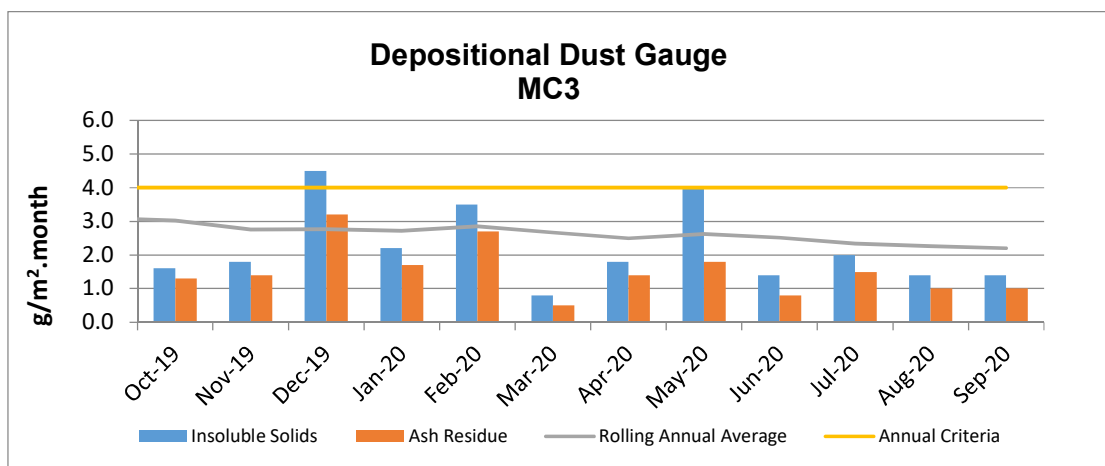
MONTH	MC1	MC2	MC3	MC4
July -20	0.6	1.7	2.0	2.4
August-20	1.1	2.8	1.4	0.8
September-20	2.5	2.9	1.4	0.7
12 MONTH ROLLING AVERAGE	2.0	2.7	2.2	7.6



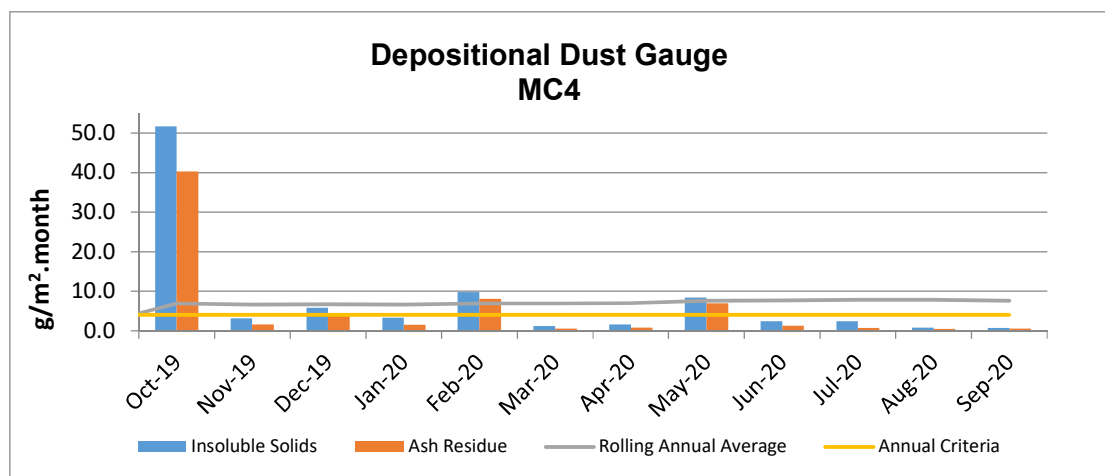
* Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.).



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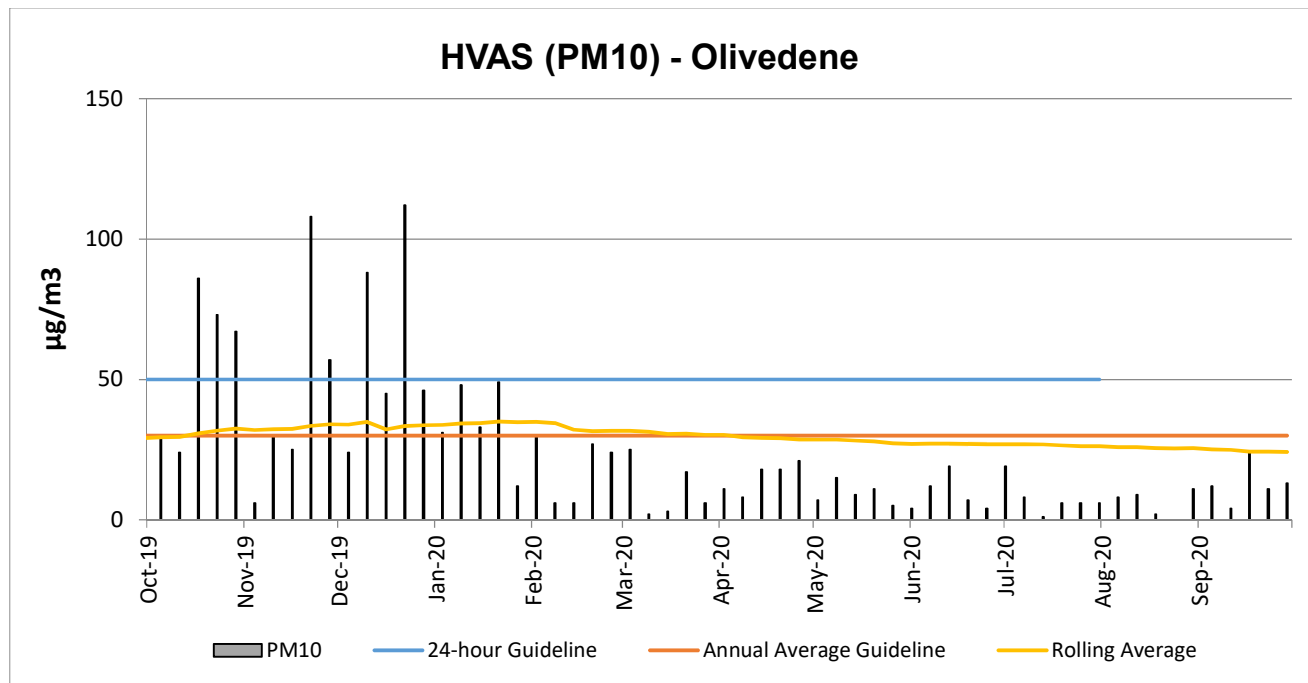


* Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.).

High Volume Air Sampling (HVAS)

The HVAS monitor is located on the property 'Olivedene,' a mine owned property on Therribri Road. During 2020 there have been no exceedances of the 24 hour average of 50 $\mu\text{g}/\text{m}^3$.

HVAS PM₁₀ Rolling Annual Average during Q2 2020 is **24.1 $\mu\text{g}/\text{m}^3$** , which is below the Annual Average Guideline of 30 $\mu\text{g}/\text{m}^3$.

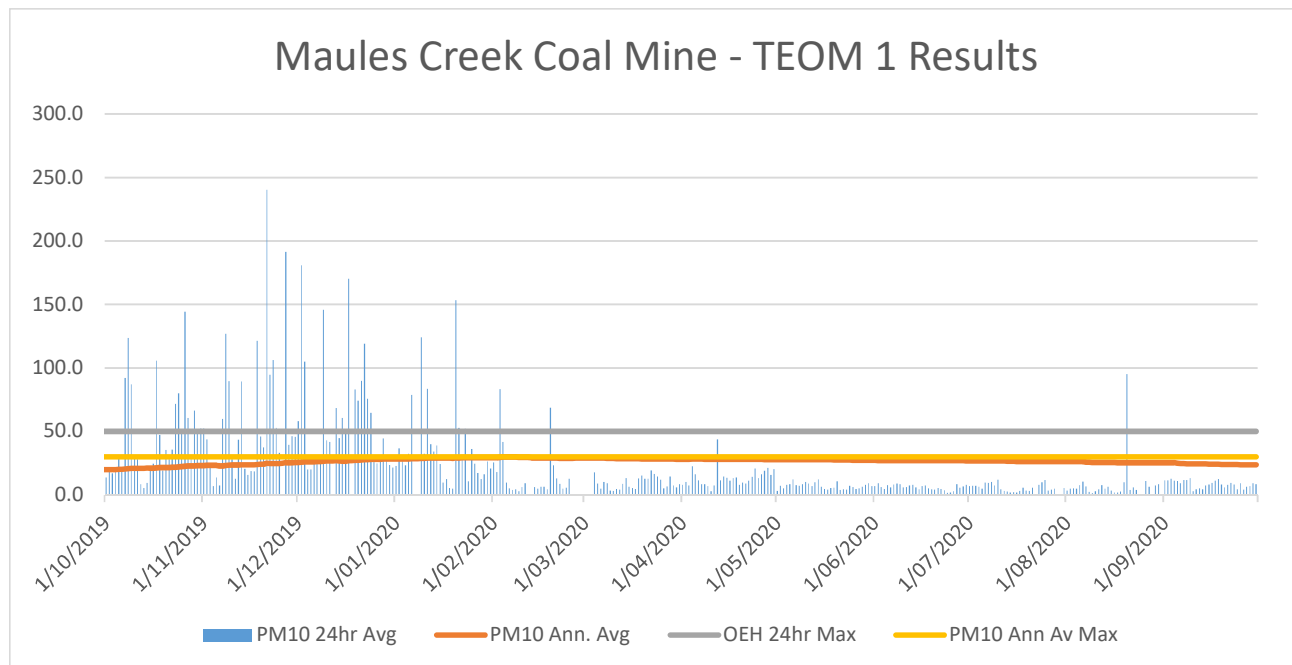


* Exceedances recorded in September, October, November and December were attributed to the regional events and discussed at the August and October 2019 meetings.

TEOM - PM₁₀ Results

The annual average for PM₁₀ at the Maules Creek Coal TEOM is **23.7 µg/m³**, which is below the Project Approval annual average criteria of 30µg/m³ as shown in the following figure. There has been one exceedances of the 24 hour average for Q3.

TEOM Result Figures – Particulate Matter PM₁₀µg/m³



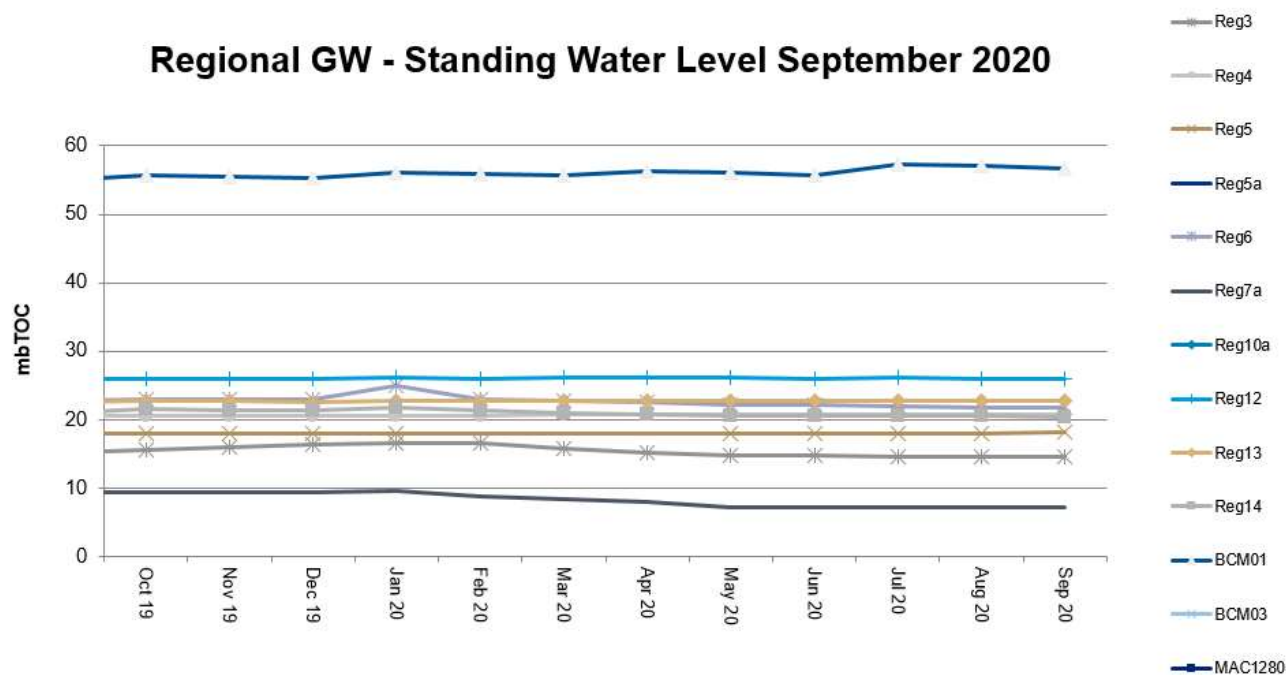
* Blank columns indicate sample periods where there was either power outage, maintenance or other related causes.

** 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

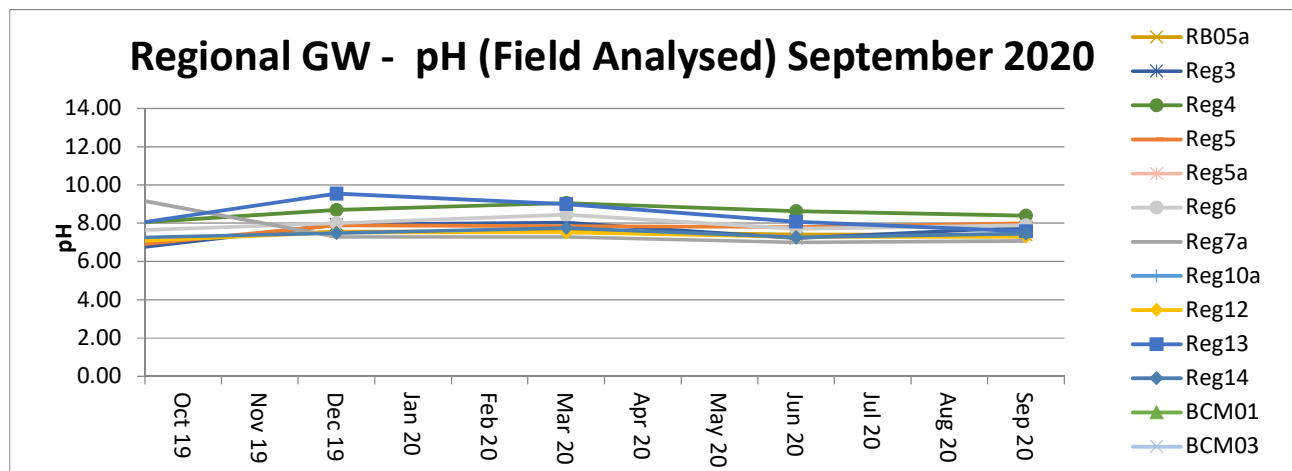
Groundwater

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.



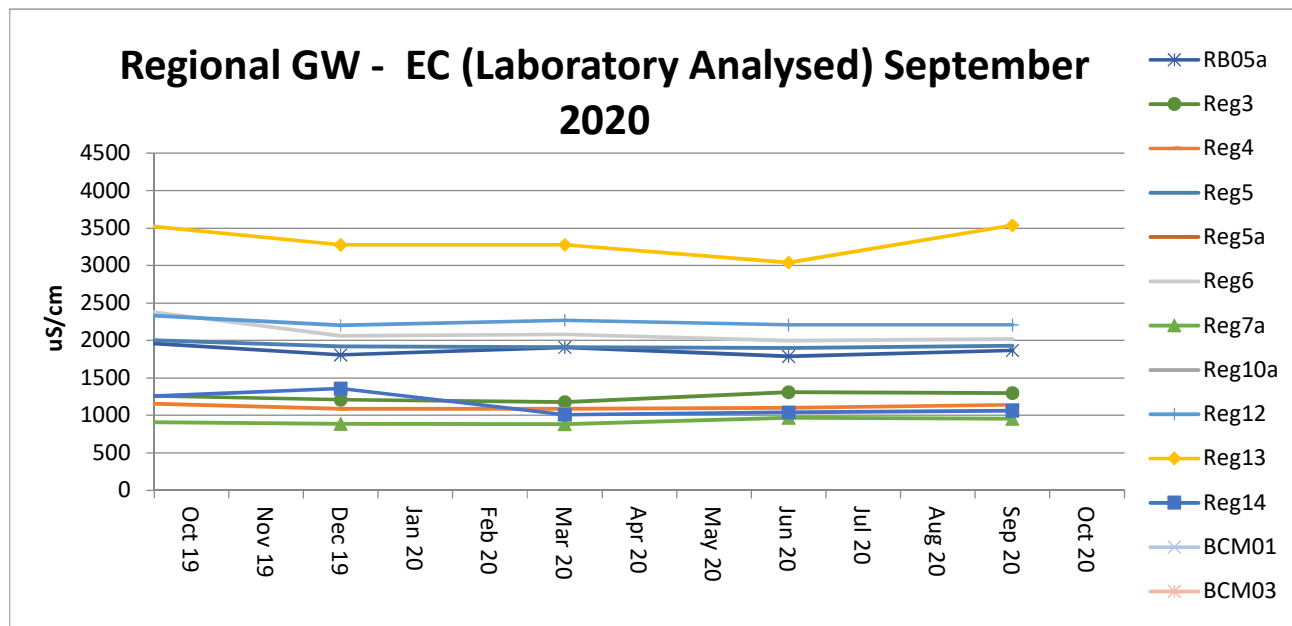
Acidity / Alkalinity (pH)

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.

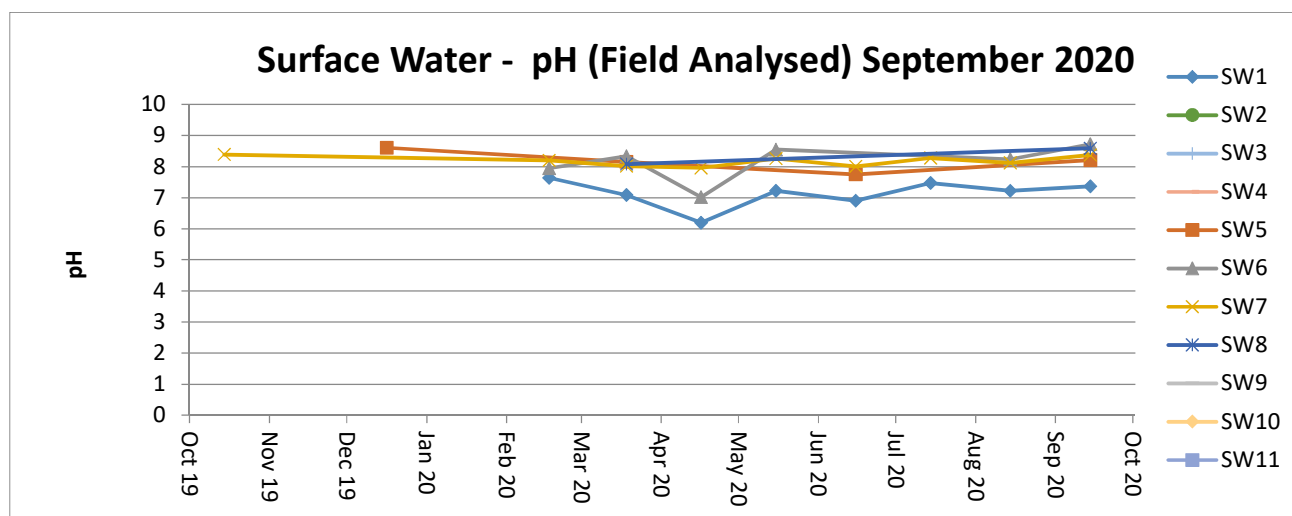


Surface Water – Creeks and Rivers

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)

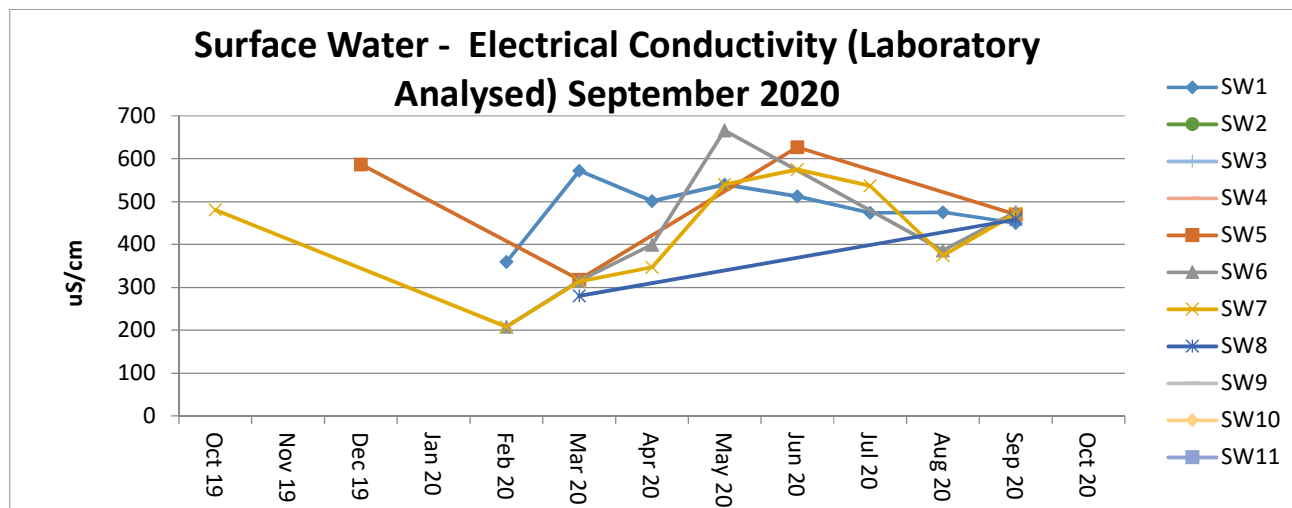
Monitoring results for pH in creeks and rivers surrounding MCCM are all trending within the ANZECC range for Irrigation, Ecosystem Health and Recreation.



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

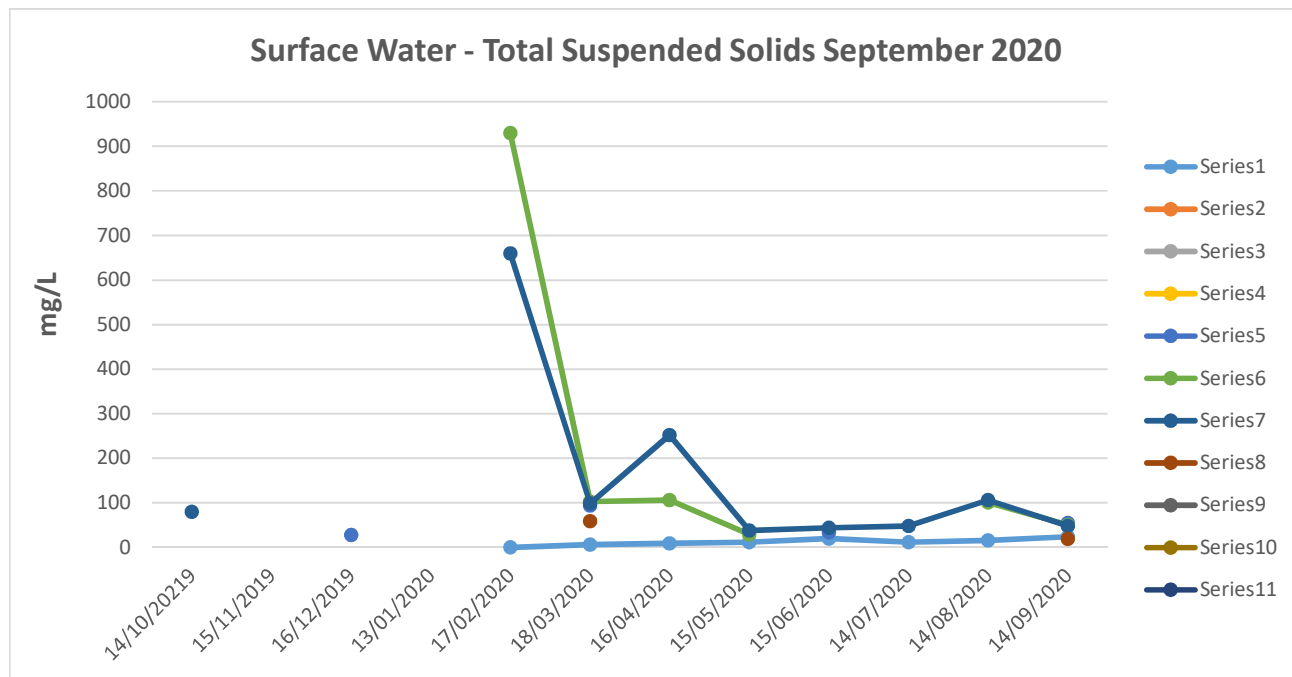
Electrical Conductivity

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.



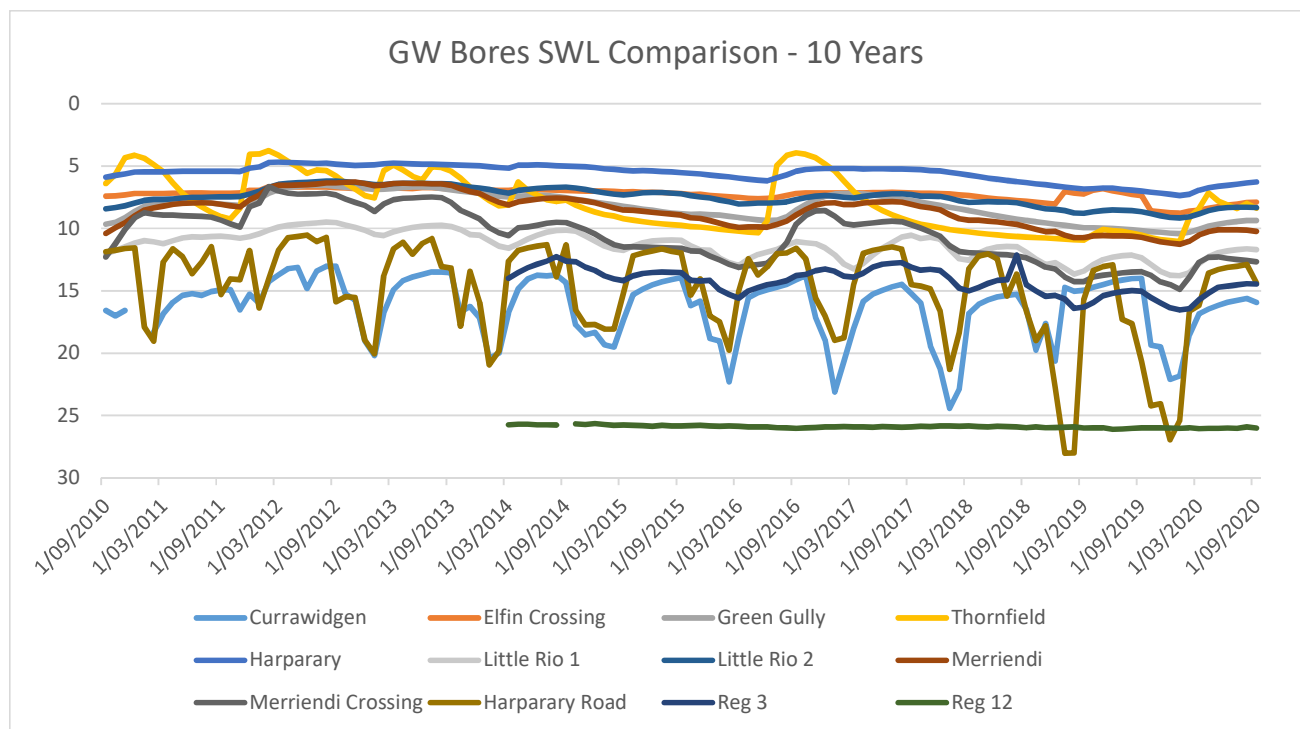
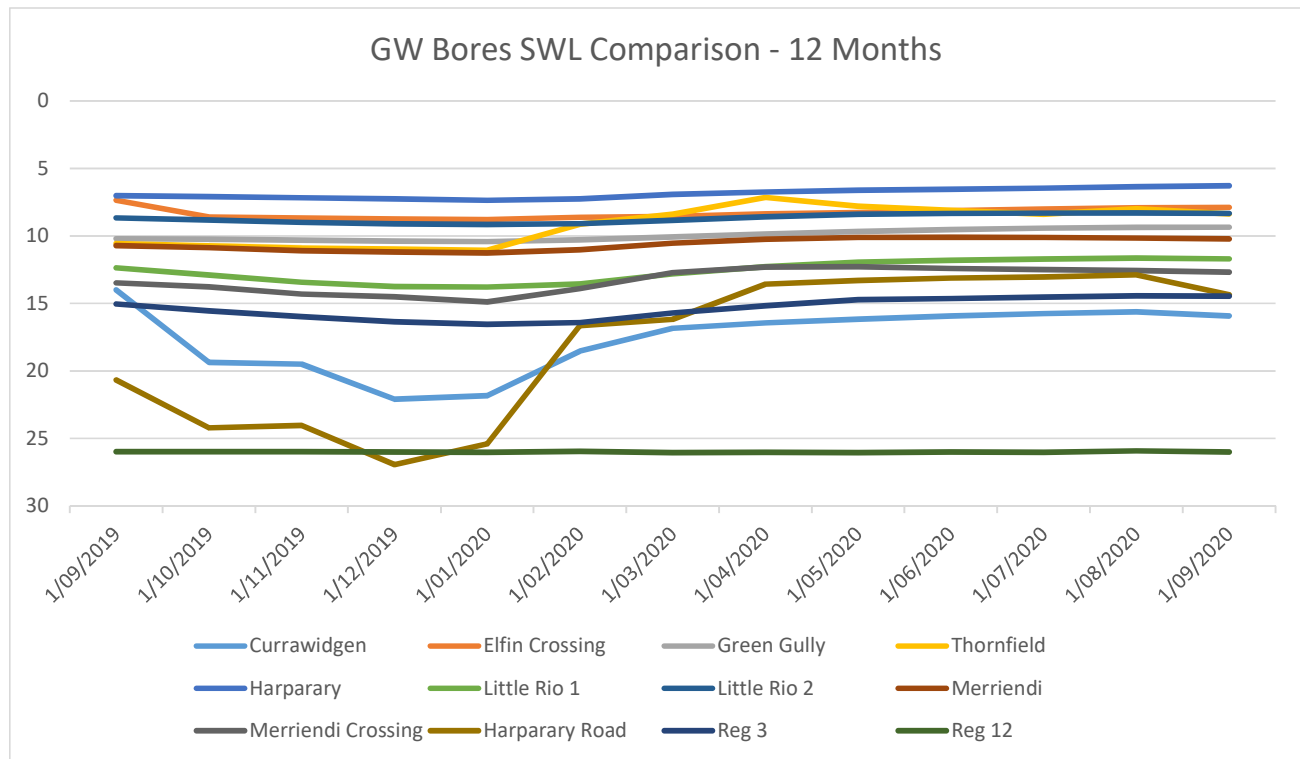
Total Suspended Solids (TSS)

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 (September 2020) the results included:

- 70 out of total 108 pigs trapped were from the Maules Creek/Boggabri area; and
- 130 out of a total 231 fox baits (1080) taken were from the Maules/Boggabri area.

Revegetation

- Undertaken tree planting on Teston North, Teston South, Tralee Offsets and commenced routine tree watering program.

Weed Control

- Undertaken spring seasonal weed control on Teston North, Tralee, Teston South, Velyama and Kelso plus Wollandilly and Onavale Offsets.

Threatened Flora

- Undertaken routine Inspections and planted 34 Pomaderris queenslandica seedlings on Kelso, Teston South, Louenville and Wollandilly Offsets.

Fire Management

- Continued fire break maintenance program on Onavale, Wollandilly, Tralee, Teston North, Teston South, Kelso, Velyama, Louenville and Wirradale Offsets.

Fencing and Waste Management

- Redundant Infrastructure Removal completed in Onavale, Wollandilly, Tralee, Teston North and Teston South plus Roseglass and Bimbooria Offsets and ongoing for the remainder of Maules Offsets.

Community Complaints

- 4 complaints were received during Q3 CY2020. Please refer to the Community Complaints Register on the Whitehaven Coal Maules Creek website.