

Notes: Notes of the 32nd Meeting of the Maules Creek Coal Community Consultative Committee
Held at the Boggabri Golf Club

Wednesday 17 February 2021

Members Present: Andrew Garratt (AG) – 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, Libby Laird (LL) – Maules Creek Community Representative

Apologies: Simone Moodie (SMo) – Community Aboriginal Representative, David Paull (DP) – Sustainable Living Armidale (SLA), Lyndell Crowley (LC) – Boggabri Business & Community Progress Association, Darren Swain (DS) - WHC, Debbie Corlet (DC) – Independent Secretary, Corinne Culbert-Rafferty (alternate Independent Secretary)

Independent Chair: David Ross (DR)

Minutes: Jacob Payne (JP)

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
4. Minutes (notes) of the previous meetings – Wed 28 October 2020	DR
5. Correspondence	DR
6. Overview of the mine	RW / AG
7. Environmental monitoring	EB
8. General business	ALL
9. Next Meetings	DR

Agenda Item	Discussion	Action/By Whom
1.	Welcome and Apologies - DR welcomed everyone to the CCC. He observed in particular that not only was the Independent Secretary was an apology but, as of yesterday, so was the alternate. He thanked JP for assisting at short notice.	
2.	Declaration of pecuniary or other interests - DR shared that he is paid a fee to chair these meetings	
3.	Business Arising from the previous minutes - DR advised that the action for Lyndell (LC) to update the Green flyer with contact details is to be kept open	
4.	Confirmation of the minutes of the previous meeting (28 October 2020) - All agreed and approved the previous meeting minutes.	
5.	Correspondence - No correspondence has been received.	
6.	<p>WHC Presentation by Ross Wilson, Emma Bulkeley and Andrew Garrett</p> <p>Company Report & Overview of Activities</p> <ul style="list-style-type: none"> FY21 target production 12Mtpa ROM (Run of Mine) coal. Jan 2021 TRIFR (Total Recordable Injury Frequency Rate 5.45 – Slightly up from last year. <p><u>Health and Safety</u></p> <p>COVID-19 Management:</p> <ul style="list-style-type: none"> 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. <p>COVID-19 Discussion:</p> <p>RW reported on the current measures in place. These included: personnel numbers in light vehicles have been restricted (3 in a Hilux and 4 in a Land cruiser/Prado) as are numbers in employee commuter buses; all people in vehicles to wear mask at all times; and there are random audits of employee buses to ensure compliance.</p> <p>Projects:</p> <ul style="list-style-type: none"> Vehicle hierarchy change management – change from NSW road rules to the Vehicle Hierarchy system. A lighting system is to be implemented on equipment to aid in the flow of traffic <p>Employment:</p>	

- Continued focus on local, indigenous, and female employment with ongoing training programs undertaken. There have been 73 new trainees employed from October to December 2020. 21 were female.

JW – Enquired as to why the total number of employees on site has risen so significantly since the previous meeting. RW and EB explained that additional contractors have been brought on for the various projects on site.

RK – Asked how many people are on site for a typical shift (approximately)

RW - Observed that there are approximately 250 per day shift and less for a night shift.

Air Quality Management:

- Publically available results of TEOM1 available on the EPA website. Annual rolling average for TEOM1 is 7.22 ug/m³ at 31 Dec 2020 (criteria 30ug/m3). Ongoing dust suppressant application across the operation.

Ground Water: Bores are generally consistent with the historical data.

Biodiversity Management

Feral Animal Management:

- 45 out of total 75 pigs trapped were from the Maules Creek offset properties from DEC 2020. 170 out of total 324 baits (1080) taken were from the Maules Creek offset properties

Revegetation and Tree Watering:

- Completed 2020 tree planting program on Maules Offset properties. 60,000 tree seedlings planted over 1100ha. Initial survival checks confirm very high survival – Good season

JW – Enquired as to how long the seedlings are typically watered for?

EB – Seedlings are typically watered regularly throughout summer for a period of 12 weeks.

Weed Control: Targeted seasonal weed control along Riparian areas of green cestrum

Threatened Flora:

- All 34 Pomaderris queenslandica seedlings are surviving – Originally sourced from the Leard Forest population. Additional Pomaderris seed collected in November from Pilliga

Fire Management:

- Completed Annual Fuel Load Assessments. Currently planning 2021 Autumn Ecological Burn Program.

Fencing and Waste Management:

- Mt Lindesay Offsets completed in December. New fencing for Wirradale

Upcoming Works:

- Feral Animal Monitoring and Control Program in March 2021. Planning for Biodiversity Tree Planting Program 2021

	<ul style="list-style-type: none"> Continued seasonal Weed control and Tree watering programs. Commence planning 2021 Autumn ecological burn program. Commence Autumn flora 2021 monitoring. Continue routine threatened flora inspections and programs <p>LL – Asked if the extension for finding the MCCM EPBC offsets has been applied for and approved.</p> <p><u>Project Approval Modifications</u></p> <p>MCC Landform MOD: This was submitted on the 29th of January 2021. Is to be going on exhibition tomorrow Thursday 18 February.</p> <p>MCC Powerline MOD:</p> <ul style="list-style-type: none"> Intend to install and connect electricity to the Roma Bore. This will require a minor modification to the Project Approval PA 10_0138. 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 enable electrification of the pump which is currently powered by a diesel generator <p>EB - MCCM is currently working on this modification.</p> <p>AHS (Autonomous Haulage System) Production to Date – February 2021:</p> <ul style="list-style-type: none"> Twelve (12) EH5000s are now converted for autonomous operation. >35,000 loads hauled autonomously. >4,650,000 bank cubic metres (BCM) of waste moved. >170 personnel trained to work with AHS so far. <p>RW - explained that there is a set of grids identified on a path/map and the trucks stick to those grids. The Operator can take control of the truck at any time.</p> <p>RK – Will there be other equipment converted to autonomous.</p> <p>RW – Not at this stage</p> <p>RK – The concern surround AHS is people losing jobs</p> <p>RW – Although truck drivers will gradually be replaced, operators will be retrained to perform the large variety of ancillary roles required to keep the trucks operational.</p> <p>Community:</p> <ul style="list-style-type: none"> Whitehaven continues to support the local Community with donations and sponsorships. Donations for October to December 2020 is ~\$35,500.00 – increase from last couple of quarters. More information on Sponsorships and Donations can be found at: https://whitehaven.com.au/sustainability/community/donations-sponsorships/. Whitehaven provided sponsorship to the Westpac Rescue Helicopter for \$50,000 as part of the release of the new EX8000 excavator bucket. Whitehaven staff also donated approximately \$43,000 to Westpac. 	<p>ACTION 1 – EB to find out if EPBC extension approved</p> <p>ACTION 2 – EB to notify DR of link for updated Mod once it goes online</p>
--	---	---

	<p>Complaint details:</p> <ul style="list-style-type: none"> Hotline Number – For ALL Whitehaven Sites is 1800WHAVEN (1800 942 836). Received one complaint for the quarter in relation to onsite lighting. <p>JW: Believes that the lights on the western dumps are also affecting his property – Expressed that this is not a formal complaint, just a curiosity. EB: MCCM will identify which lights are interfering with your property and correct the issue (Action assigned).</p> <p>General Discussion:</p> <p>RW – Reported that both Silica and Coal dust levels on site have reduced by approximately 50% over the last 6 months. LL – Why are silica levels high to begin with? RW – This is an industry wide issue that comes with working with material containing silica. It is especially apparent with sedimentary materials which is what we have in the region. LL: Asked RW if topography of mine site might exacerbate onsite dust? RK – What measures are the mine taking to reduce the levels? RW – The only way to prevent the dust is to eliminate it at its source. The primary method for doing this is to saturate the work area so that particles are unable to become airborne. LL – Discussed the fact that this rock from the Tarrawonga mine is being put on roads across the Shire and the silica issue should be a concern to everyone. That silica is an issue also to near neighbours as it blows off the top of the mine site walls when it is windy. RW – No overburden material excavated at MCCM leaves site. LL- agree with RW that it was coming from the Leard Forest mine area.</p>	<p>ACTION 3 - Identify which lights are interfering with JWs property and correct the problem</p>
7.	<p>General Business:</p> <p>LL: Requested information; there is community interest regarding the Hunter to QLD Gas pipeline and how it will affect Maules Creek and the mines offset properties as the pipeline appears to intersect WHC land. A list of questions were provided.</p> <p>EB – In response to the question, “What is the purpose of the addendum in the water management plan?” – It was to allow for the relocation of a Clear Water Dam (CWD) diversion on the western side of the mine and the installation of a clean water system on the eastern side of the mine.</p> <p>DR -- Reminded the group that it has an upcoming site visit to the offsets in May and that he would investigate with DS the feasibility of also including a visit to AHS dispatch.</p> <p>DR – As per CCC guidelines, I am obligated to initiate a conversation with you all to discuss what you would like included in the meetings over the remainder of the year. A group discussion was then held on this. Suggestions that were raised by the CCC included:</p>	

	<ul style="list-style-type: none"> • Discussing the written material they received in the past from Jock Laurie relating to coal operations in the region. Unfortunately this information is no longer being produced. • Invite Resource Regulator to present as objectives have changed and they are doing away with MOP for rehabilitation management plans • Outside input via presentations: More information and a presentation on the silica dust be offered to the community. This could be from MCCM or a WorkSafe NSW representative. <p>DR – Commented that they can accommodate one government representative presentation per joint CCC</p> <p>LL – There appears to be confusion surrounding the environmental trust.</p> <p>RG – Would CCC members be opposed to having their email contact details included in the Green flyer?</p> <p>LL – Recommends having upcoming meeting dates also added so questions can be forwarded to reps.</p> <p>ALL – Agreed to RGs request</p>	<p>ACTION 4 – DR to present on Environmental Trust at May Joint CCC meeting</p> <p>ACTION 5 - RG to update the Green flyer with CCC member email details and upcoming meeting dates</p>
8.	<p>Next meetings:</p> <ul style="list-style-type: none"> • 12th of May with the Joint CCC on 13th of May • 11th of August • 27th of October with the Joint CCC on 28th of October 	<p>ACTION 6 – DR to email upcoming meeting dates to members of the CCC</p>

Meeting Closed: 4:32 pm

Appendix 1: Actions

Page No	Action No	Description	Date Raised
	1	DR to contact the EPA regarding the continuation of NRAQC	17 February 2021
4	2	EB to identify if MCCM have received the extension for the EPBC	17 February 2021
4	3	EB to email DR the link when the modification goes on exhibition	17 February 2021
5	4	EB to Identify which lights are interfering with JWs property and correct the issue	17 February 2021
6	5	DR to present on the environmental trust at the joint CCC meeting in May 2021	17 February 2021
6	6	RG to update the Green flyer with CCC member contact details and upcoming meeting dates	17 February 2021
6	7	DR to email the CCC members the dates for all upcoming 2021 meetings	17 February 2021

Appendix 2: Questions from LL

Re: Hunter Gas Pipeline

1. What is known by WHC of the location of the Hunter to Queensland gas pipeline route, including the revision of the route?
2. Where does it intersect the biodiversity offsets?
3. The route involves clearing a 30m corridor for the pipeline, and from community understanding of maps, in whc's case in the offset country. How much WHC owned country is this? (all mines)
4. What is whc's position on the pipeline? Will it agree to this buffer?
5. Will/has WHC Signed a letter of access/authority?
6. Would you allow forced entry access?

Re: Miscellaneous topics

1. How much Namoi river water was used during 2019/20 water year?
2. What is the height of the Northern embankment?
3. What was the original intent/purpose of the northern embankment and has that changed?
4. Have tyres ever been buried on the MCCM site?
5. What is the role of the addendum to the water management plan?
6. What areas of the mine site does it specifically refer to?

Briefing Note

To: Maules Creek Coal Mine CCC Members

From: Maules Creek Coal Mine (MCC)

Date: 17 February 2021

Reference: Responses to questions MCC CCC February 2021

Subject: Responses to MCC CCC Actions and Questions

Appendix 1. Actions noted during meeting.	Response
Action 2. EB to identify if MCCM have received the extension for the EPBC.	Not at this stage.
Action 3. EB to email DR the link when the modification goes on exhibition	Completed - link provided to CCC Chairman 18 February 2021
Action 4. EB to Identify which lights are interfering with JWs property and correct the issue	Completed.
Appendix 2. CCC Member subsequent questions regarding Re: Hunter Gas Pipeline	Response
Question 1. <i>What is known by WHC of the location of the Hunter to Queensland gas pipeline route, including the revision of the route?</i>	Based on Queensland Hunter Gas Pipeline Environmental Assessment it appears the proposed alignment of the pipeline does not traverse any current MCC Offset Properties. Not relevant to MCC CCC.
Question 2. <i>Where does it intersect the biodiversity offsets?</i>	
Question 3. <i>The route involves clearing a 30m corridor for the pipeline, and from community understanding of maps, in whc's case in offset country. How much WHC owned country is this? (all mines)</i>	
Question 4. <i>What is whc's position on the pipeline? Will it agree to this buffer?</i>	

Briefing Note

Question 5. <i>Will/has WHC Signed a letter of access/authority?</i>	<p>Based on Queensland Hunter Gas Pipeline Environmental Assessment it appears the proposed alignment of the pipeline does not traverse any current MCC Offset Properties. Not relevant to MCC CCC.</p>
Question 6. <i>Would you allow forced entry access?</i>	
Re: Miscellaneous topics	
Question 1. <i>How much Namoi river water was used during 2019/2020 water year?</i>	<p>Website link provided during the last meeting responses below: https://whitehavencoal.com.au/our-business/our-assets/maules-creek-mine/ then scroll down to <u>Annual Reviews</u>. As per Maules Creek Coal Mine 2019 Annual Review - Page 59 275ML was pumped from the Namoi River.</p>
Question 2. <i>What is the height of the Northern embankment?</i>	<p>What is meant by "northern embankment"? Is this referring to the Western out of Pit dump or other?</p>
Question 3. <i>What was the original intent/purpose of the northern embankment and has that changed?</i>	<p>Please provide more information on what is meant by "northern embankment".</p>
Question 4. <i>Have tyres ever been buried on the MCCM site?</i>	<p>On-site disposal of tyres is permissible in NSW under certain circumstances and is a practice observed by industry participants. The EPA is currently reviewing the operation of the regime in NSW to resolve any inconsistencies in approach and provide greater certainty for the mining sector and other stakeholders.</p>
Question 5. <i>What was the purpose of the addendum in the water management plan (WMP)?</i>	<p>The addendum for the WMP was to align the WMP with current mining operations and allow for the management of clean water onsite.</p>
Question 6. <i>What areas of the mine site does it specifically refer to?</i>	<p>This is shown in the Addendum to the Water Management Plan. https://whitehavencoal.com.au/our-business/our-assets/maules-creek-mine/#collapse14 select Environmental Management select Environmental Management Plans, Strategies and Programs scroll to MCC-Water Management Plan Addendum and Figure 1 shows specific areas.</p>

Maules Creek Coal Mine Community Consultative Committee Meeting #32

Environmental Monitoring Report For the Q4 period, October – December 2020

Attended Noise Monitoring

Attended noise monitoring was undertaken at six locations during October, November and December 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 – OCTOBER TO DECEMBER 2020.

Table 1 - October 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	01/10/2020 22:30	1.6	0.0	35	Yes	35	Nil
NM2	01/10/2020 23:30	2.1	0.0	39	Yes	35	Nil
NM3	01/10/2020 23:35	1.3	0.0	35	Yes	1A	Nil
NM4	01/10/2020 23:00	1.7	0.0	35	Yes	<30	Nil
NM5	01/10/2020 22:00	1.2	0.0	35	Yes	<30	Nil
NM6	01/10/2020 23:55	2.8	0.0	35	Yes	<25	Nil

Table 2 - November 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	09/11/2020 22:30	2.2	0.0	35	Yes	23	Nil
NM2	09/11/2020 23:30	1.0	0.0	39	Yes	29	Nil
NM3	09/11/2020 23:30	1.0	0.0	35	Yes	23	Nil
NM4	09/11/2020 23:00	1.5	0.0	35	Yes	25	Nil
NM5	09/11/2020 22:00	3.5	0.0	35	No	1A	NA
NM6	09/11/2020 23:55	0.8	0.0	35	Yes	24	Nil

Table 3 - December 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	08/12/2020 22:30	2.2	0.0	35	Yes	23	Nil
NM2	08/12/2020 23:30	0.9	0.0	39	Yes	31	Nil
NM3	08/12/2020 23:31	0.9	0.0	35	Yes	1A	Nil
NM4	08/12/2020 23:00	1.9	0.0	35	Yes	24	Nil
NM5	08/12/2020 22:00	2.3	0.0	35	Yes	1A	Nil
NM6	08/12/2020 23:55	1.0	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.

1A/NM – Inaudible NM – Not measurable

During Q4 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 Q4 2020.

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

Table 4 - October 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	01/10/2020 22:30	1.6	0.0	45	Yes	37	Nil
NM2	01/10/2020 23:30	2.1	0.0	45	Yes	41	Nil
NM3	01/10/2020 23:35	1.3	0.0	45	Yes	1A	Nil
NM4	01/10/2020 23:00	1.7	0.0	45	Yes	<30	Nil
NM5	01/10/2020 22:00	1.2	0.0	45	Yes	<30	Nil
NM6	01/10/2020 23:55	2.8	0.0	45	Yes	<25	Nil

Table 5 – November 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	09/11/2020 22:30	2.2	0.0	45	Yes	28	Nil
NM2	09/11/2020 23:30	1.0	0.0	45	Yes	34	Nil
NM3	09/11/2020 23:30	1.0	0.0	45	Yes	<25	Nil
NM4	09/11/2020 23:00	1.5	0.0	45	Yes	30	Nil
NM5	09/11/2020 22:00	3.5	0.0	45	No	1A	NA
NM6	09/11/2020 23:55	0.8	0.0	45	Yes	25	Nil

Table 6 - December 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	08/12/2020 22:30	2.2	0.0	45	Yes	28	Nil
NM2	08/12/2020 23:30	0.9	0.0	45	Yes	35	Nil
NM3	08/12/2020 23:31	0.9	0.0	45	Yes	1A	Nil
NM4	08/12/2020 23:00	1.9	0.0	45	Yes	28	Nil
NM5	08/12/2020 22:00	2.3	0.0	45	Yes	1A	Nil
NM6	08/12/2020 23:55	1.0	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.
- 1A – 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
October	S
November	SSE
December	SSE

Blast Monitoring

There were 28 blasts at MCCM during Q4 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 4 2020

Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Noise	dB (Lin Peak)	All	28	96.21	112.7	120	No
Vibration	mm/s		28	0.20	1.05	10	No

Air Quality

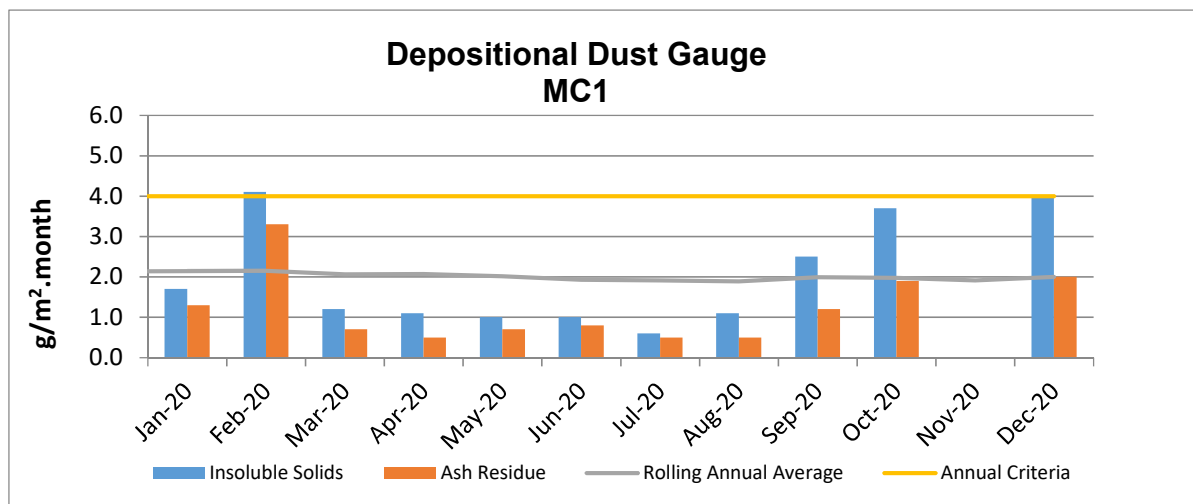
Total Depositional Dust

The 12 monthly rolling annual average remains below the relevant Project Approval criteria of 4g/m²/month for the respective monitoring points.

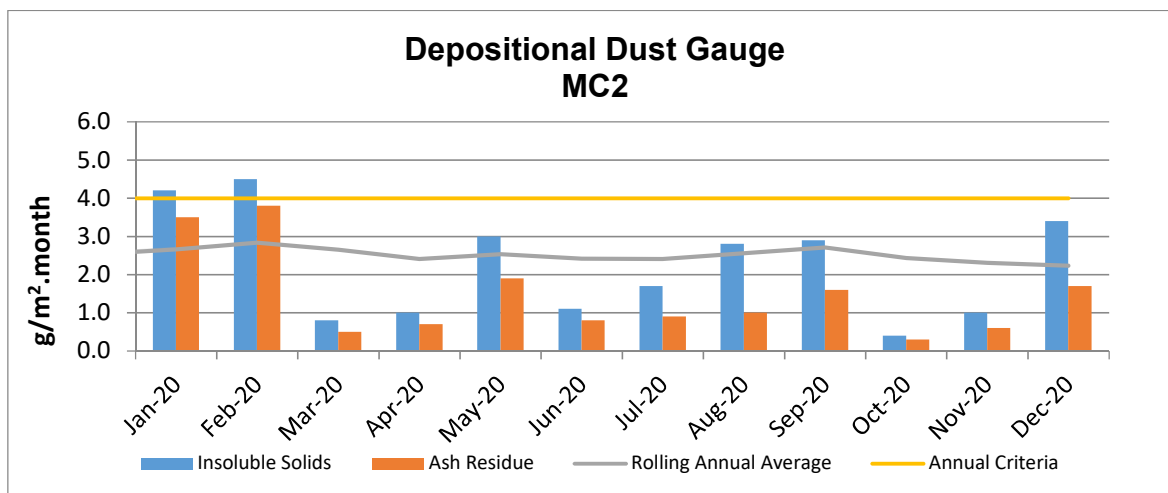
Table 9 – Deposited Dust Gauge Results [g/m²/month]

MONTH	MC1	MC2	MC3	MC4
October -20	3.7	0.4	0.8	1.1
November-20	3.6 ^c	1.0	1.2	1.0
December-20	4.0	3.4	5.1	0.9
12 MONTH ROLLING AVERAGE	2.0	2.2	2.1	2.8

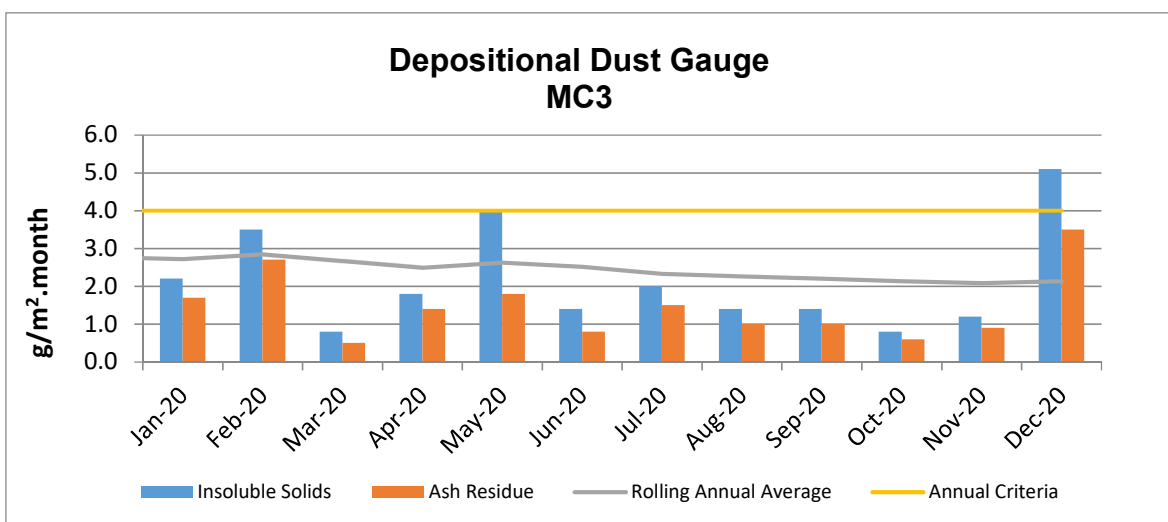
^cAverage contains samples contaminated by bird dropping, decomposed insects or vegetable matter.



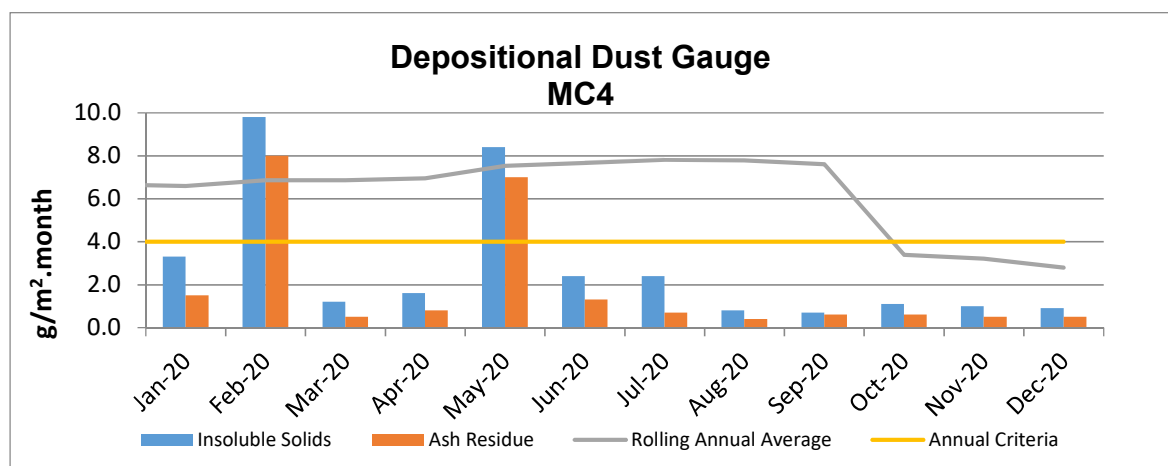
* Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.).



* 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.).



* 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.).

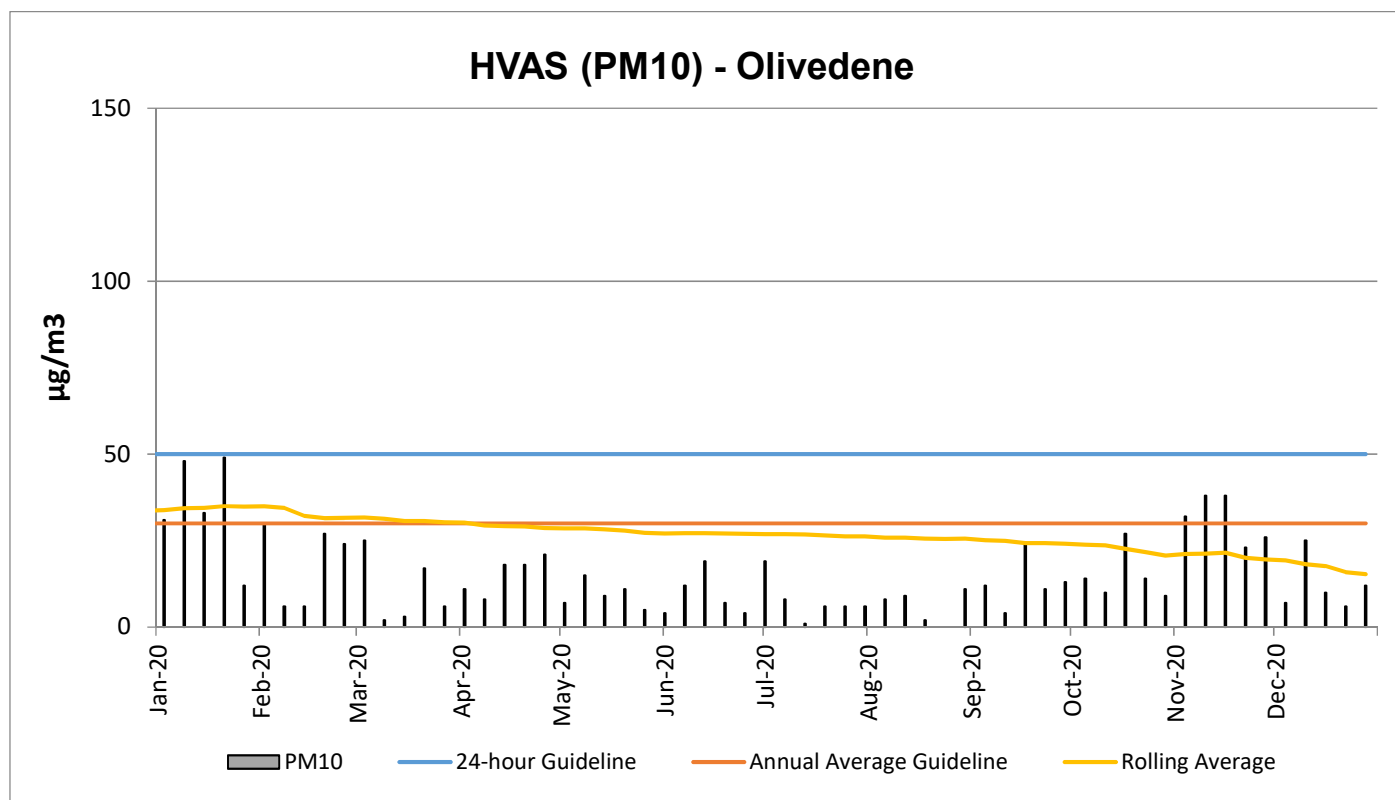


* Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.).

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 $\mu\text{g}/\text{m}^3$.

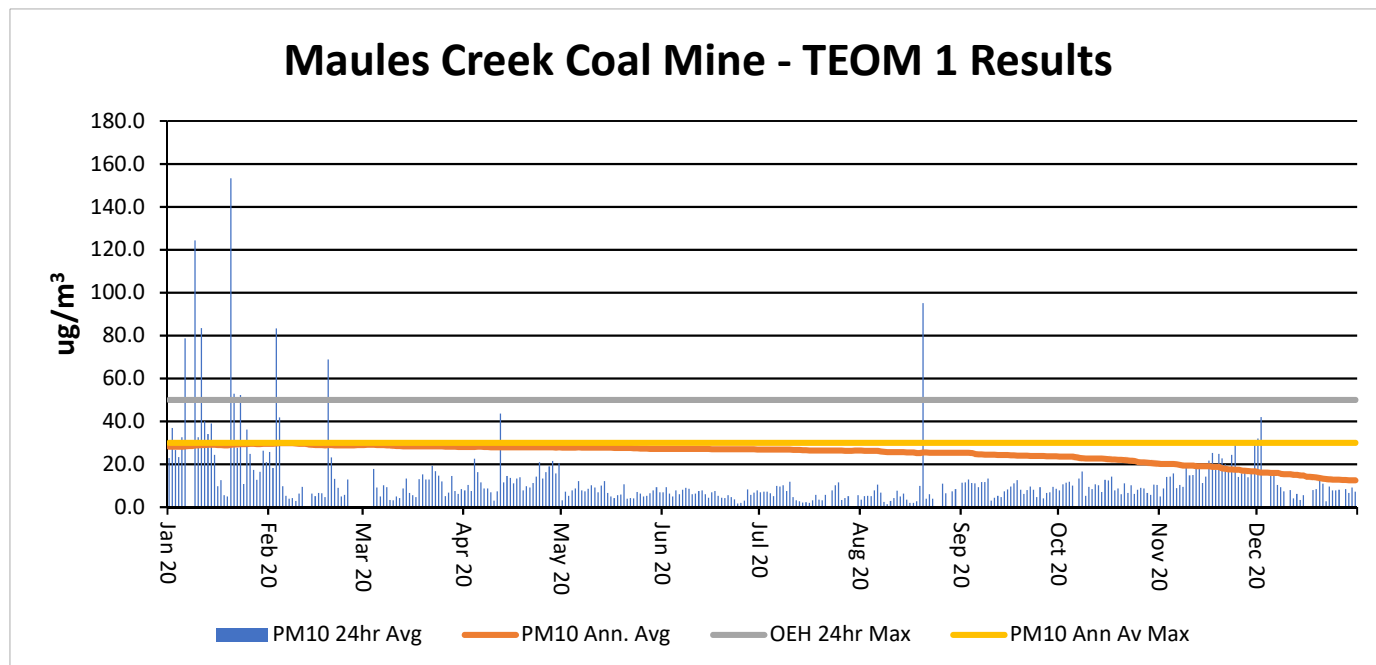
HVAS PM₁₀ Rolling Annual Average during Q4 2020 is **15.3 $\mu\text{g}/\text{m}^3$** , which is below the Annual Average Guideline of 30 $\mu\text{g}/\text{m}^3$.



TEOM - PM₁₀ Results

The annual average for PM₁₀ at the Maules Creek Coal TEOM is **12.5 µg/m³**, which is below the Project Approval annual average criteria of 30µg/m³ as shown in the following figure. There have been no exceedances of the 24 hour average for Q4.

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

Maules Creek Coal Pty Limited ABN 70 140 533 875

Therribri Road, Boggabri NSW 2382 | P 02 6749 7800 | F 02 6749 7899

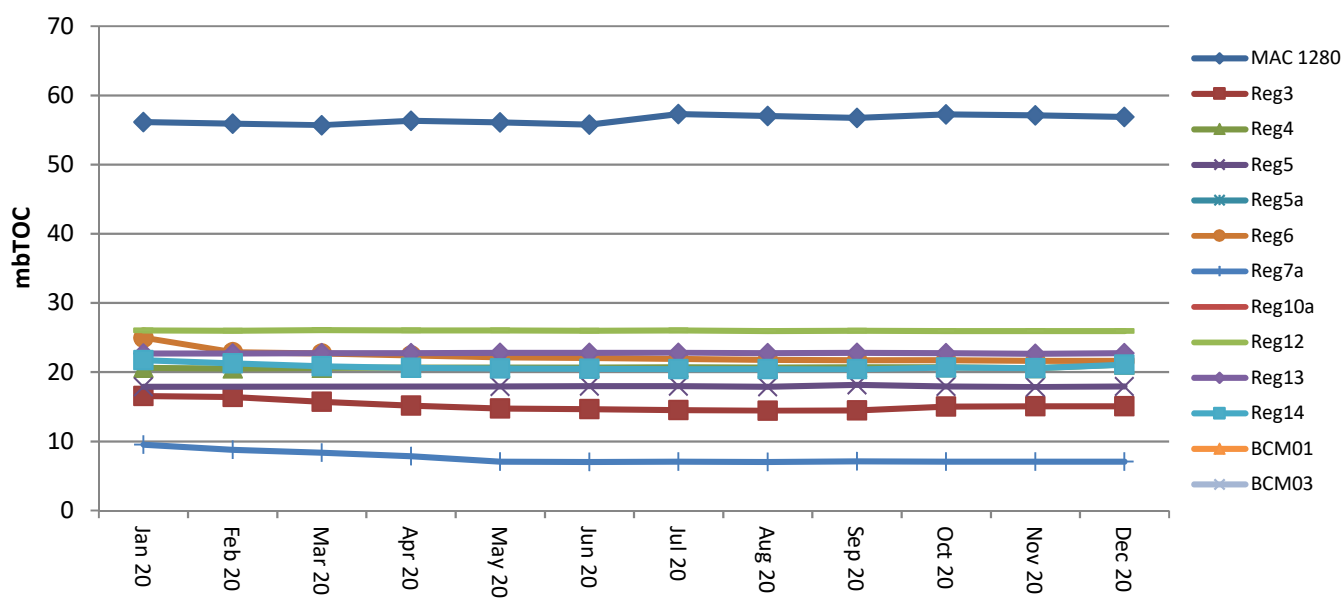
PO Box 56, Boggabri NSW 2382

WHITEHAVENCOAL.COM.AU

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.

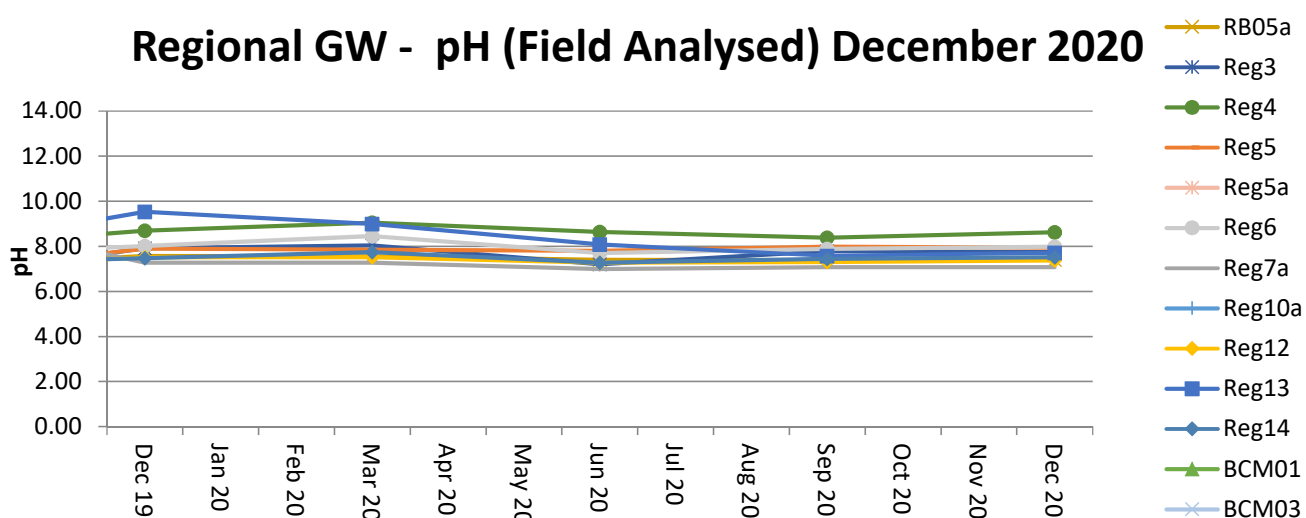
Regional GW - Standing Water Level December 2020



Acidity / Alkalinity (pH)

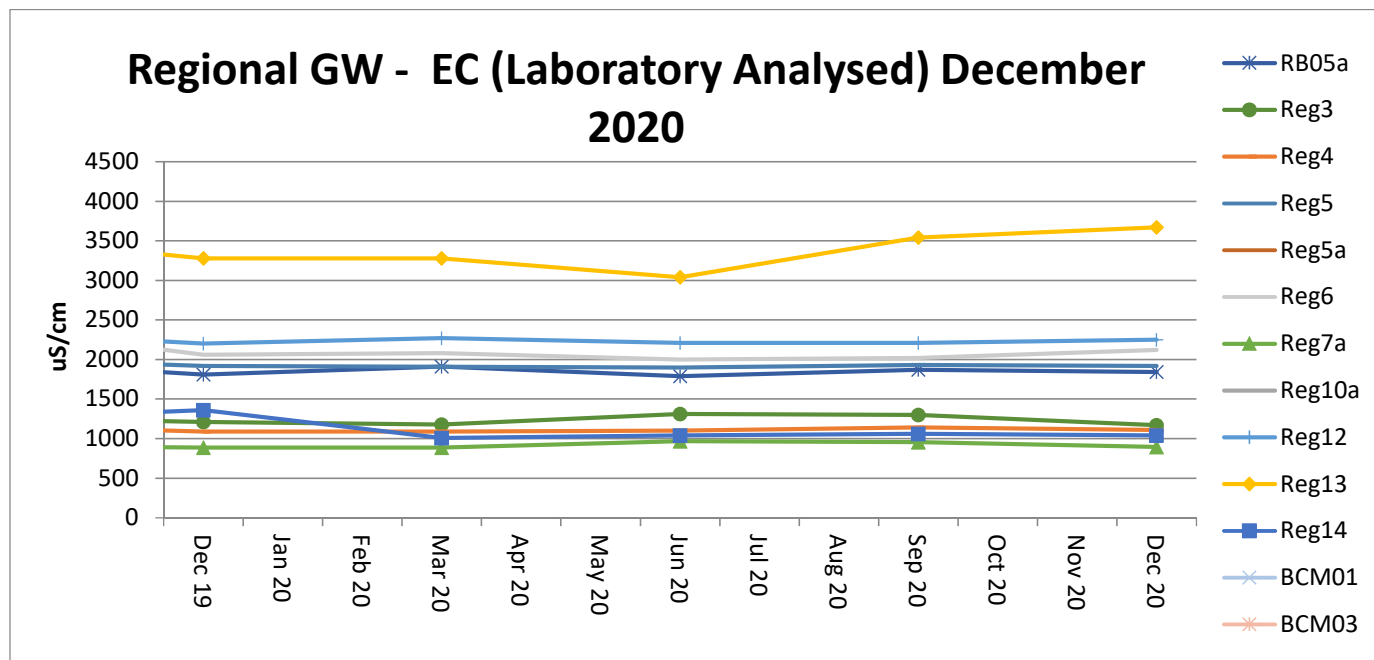
Over the past twelve months pH readings across the regional bores have remained static with very little fluctuation.

Regional GW - pH (Field Analysed) December 2020



Electrical Conductivity

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

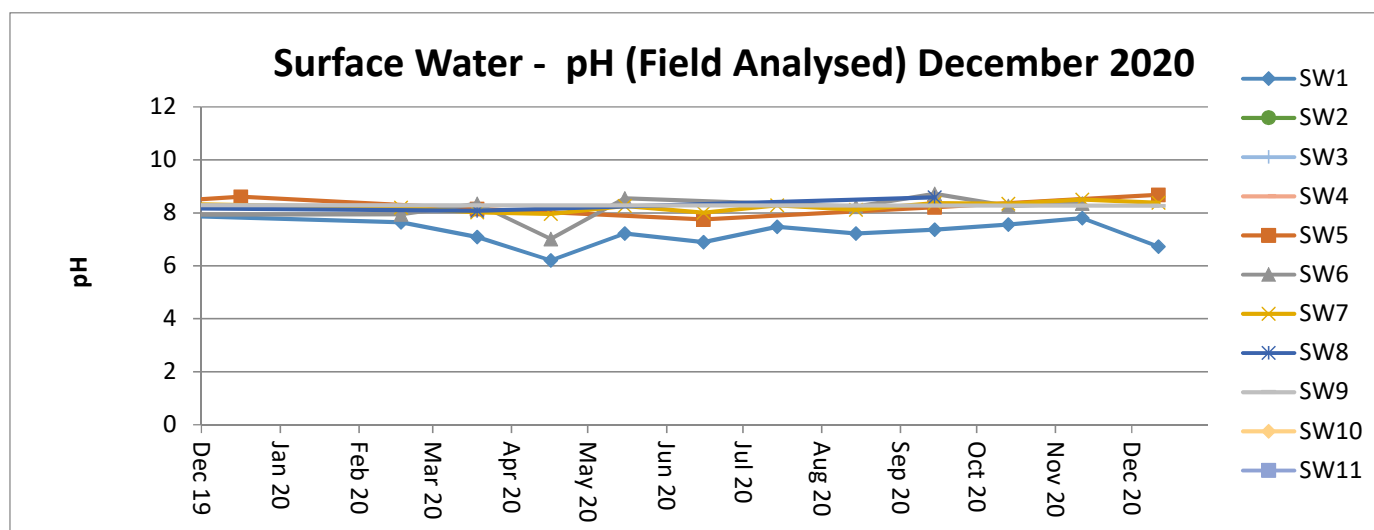


Surface Water – Creeks and Rivers

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 eleven surface water monitoring points, however only six were able to be sampled during the twelve month period.

Acidity / Alkalinity (pH)

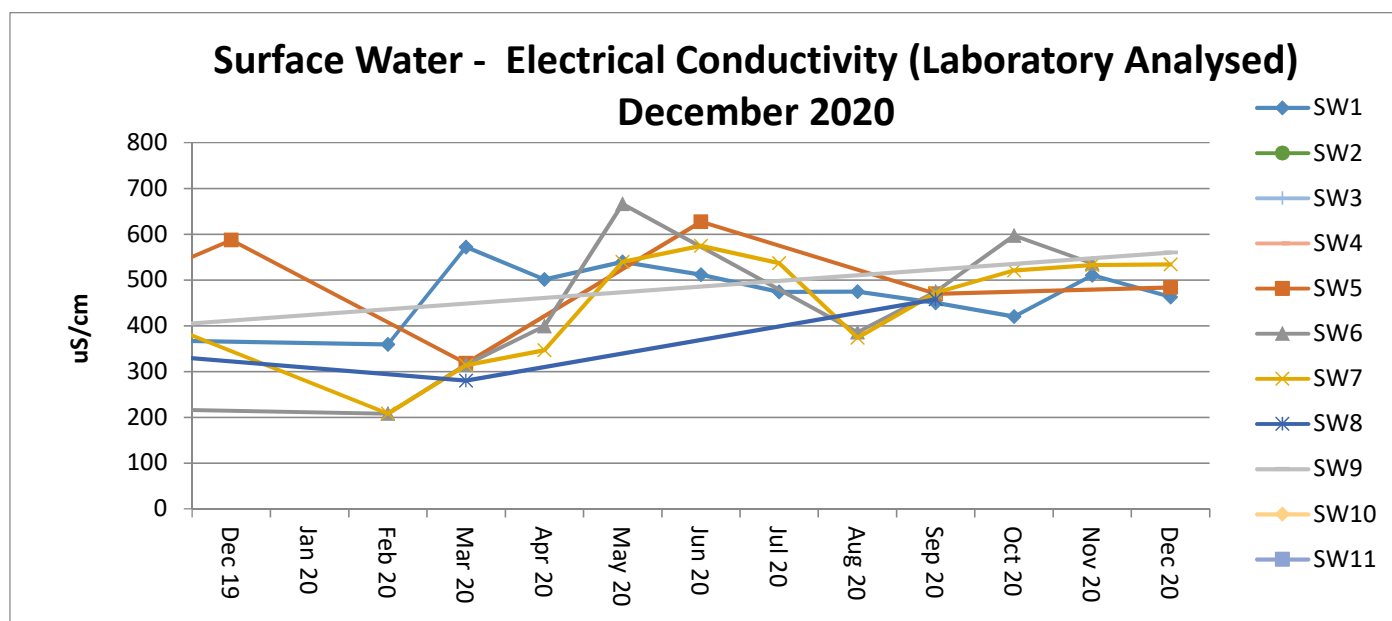
Monitoring results for pH in creeks and rivers surrounding MCCM are all trending within the ANZECC range for Irrigation, Ecosystem Health and Recreation.



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

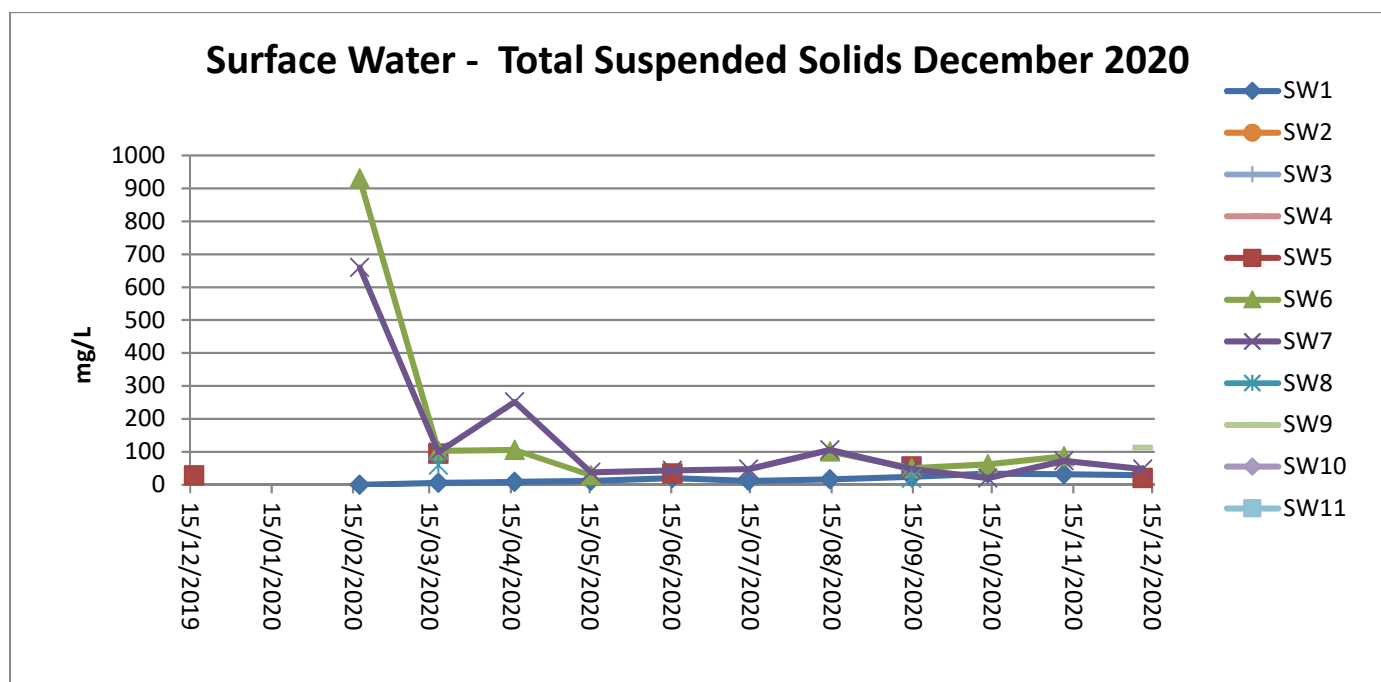
Electrical Conductivity

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.



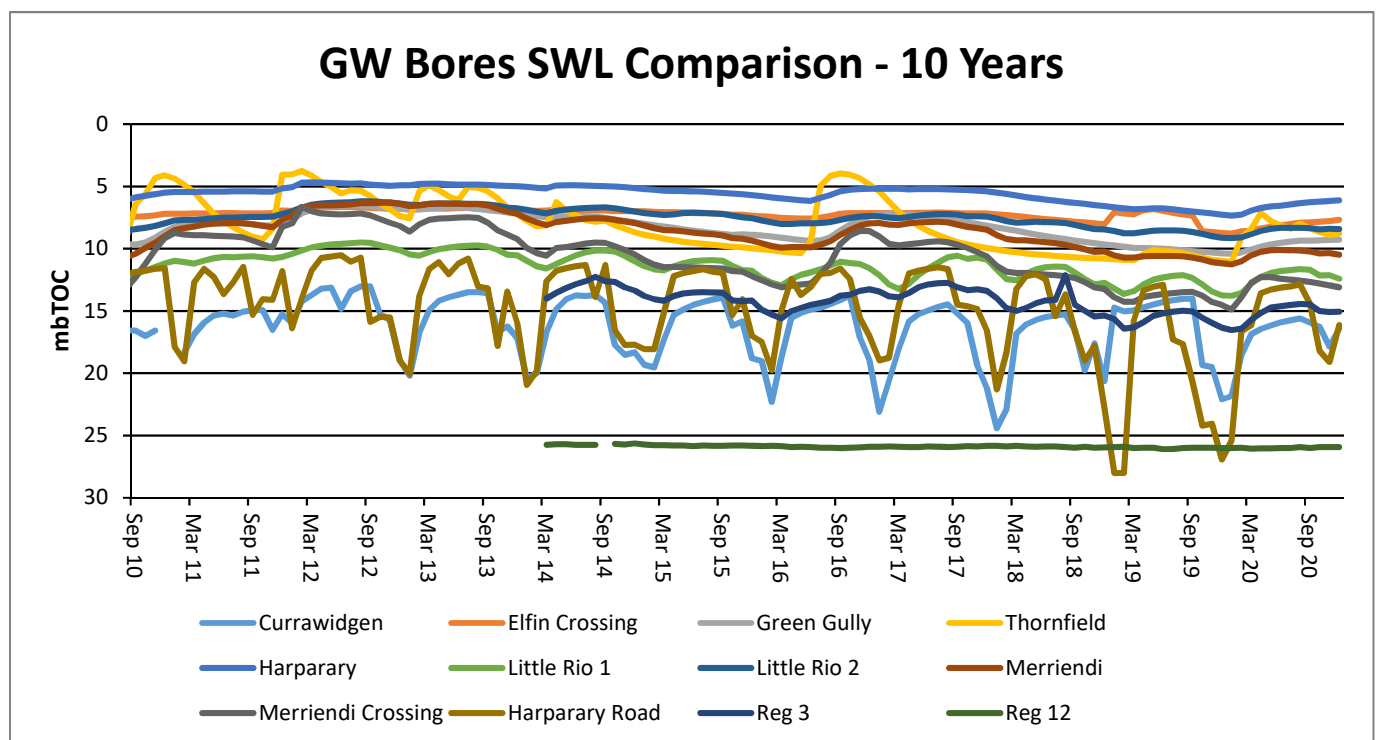
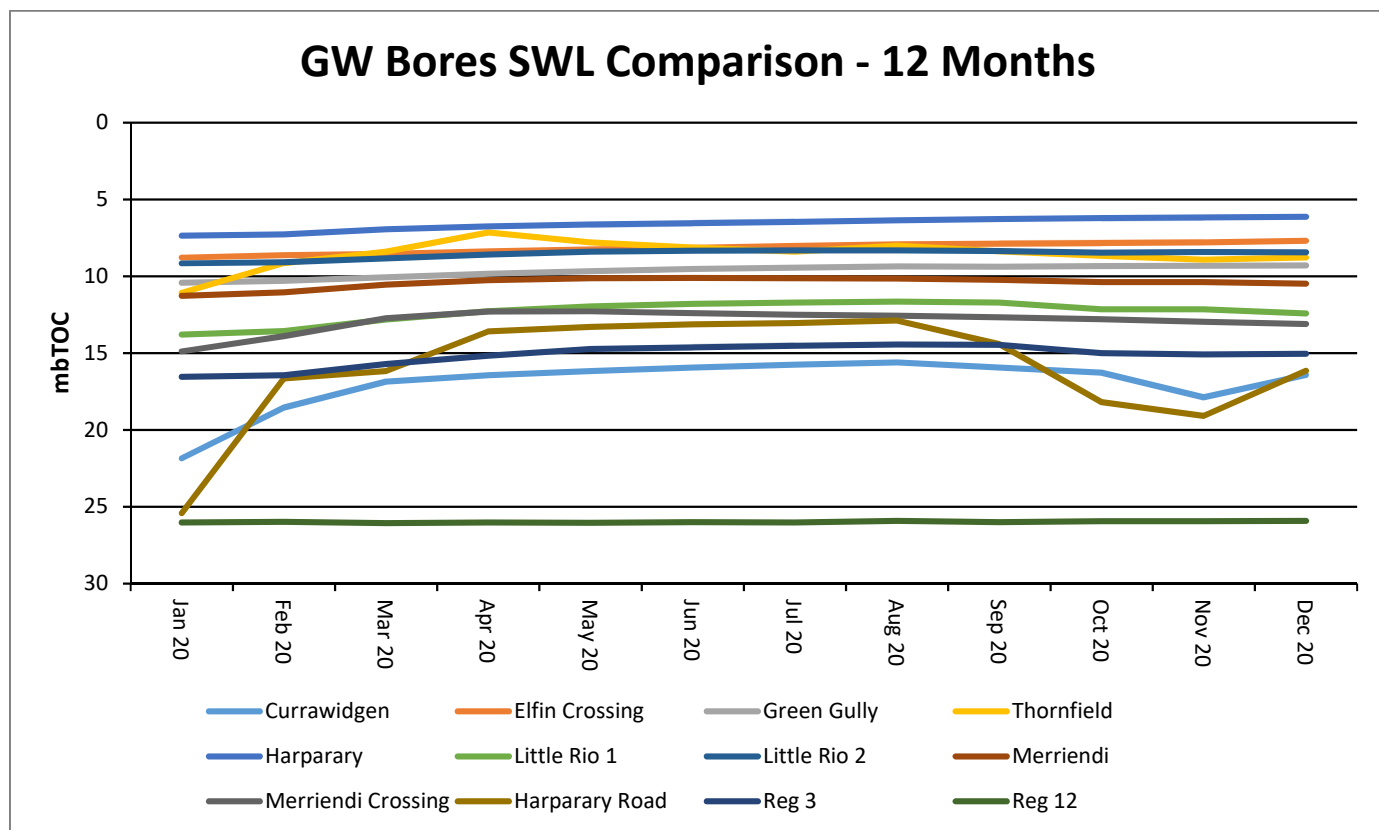
Total Suspended Solids (TSS)

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. 194ha of rehabilitation was completed in 2020.

Feral Animal Management

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

- 45 out of total 75 pigs trapped were from the Maules Creek offset properties
- 170 out of a total 324 baits (1080) taken were from the Maules Creek offset properties

Revegetation

- Completed 2020 tree planting program on Maules Creek offsets properties
- 60,000 tree seedlings planted over 1100ha
- Initial survival checks confirm very high survival – Good season

Weed Control

- Targeted seasonal weed control along Riparian areas for Green Cestrum

Threatened Flora

- All 34 Pomaderris queenslandica seedlings are surviving. Originally sourced from Leard Forest population.
- Additional Pomaderris seed collected in November from Pilliga

Fire Management

- Completed annual Fuel Load Assessments
- Currently planning 2021 Autumn Ecological Burn Program

Fencing and Waste Management

- New fencing for Wirradale & Mt Lindesay offsets completed in December

Community Complaints

- 1 complaint was received during Q4 CY2020.

Date	Method	Category	Nature Of Complaint	MCCM Response
19/11/2020	Phone	Visual Complaint	Complaint received from Landholder regarding lighting impacts	Investigation undertaken into possible source of light, with review of lighting direction and intensity. Lighting plants were adjusted accordingly.

Maules Creek Coal Mine

CCC MEETING

BOGGABRI GOLF CLUB

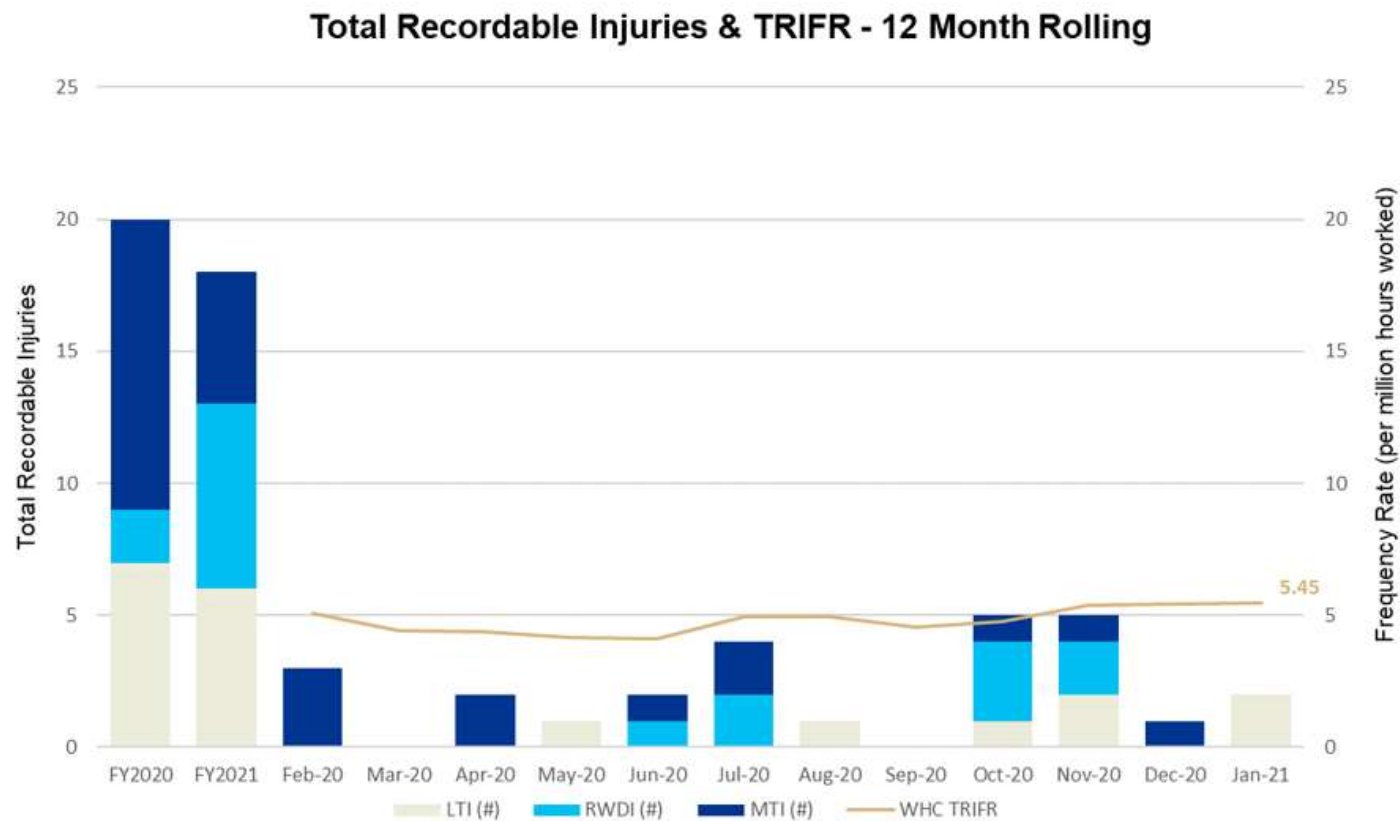
FEBRUARY 2021



WHITEHAVEN COAL

Company Report & Overview of Activities

- FY21 target production ~12 Mtpa ROM (Run of Mine) coal.
- January 2021 TRIFR (Recordable injuries per million exposure hours) 5.45.



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 73 new trainees employed from October to December, 21 were female.
- There are now 143 females employed onsite.
- Over 882 people are employed on site.

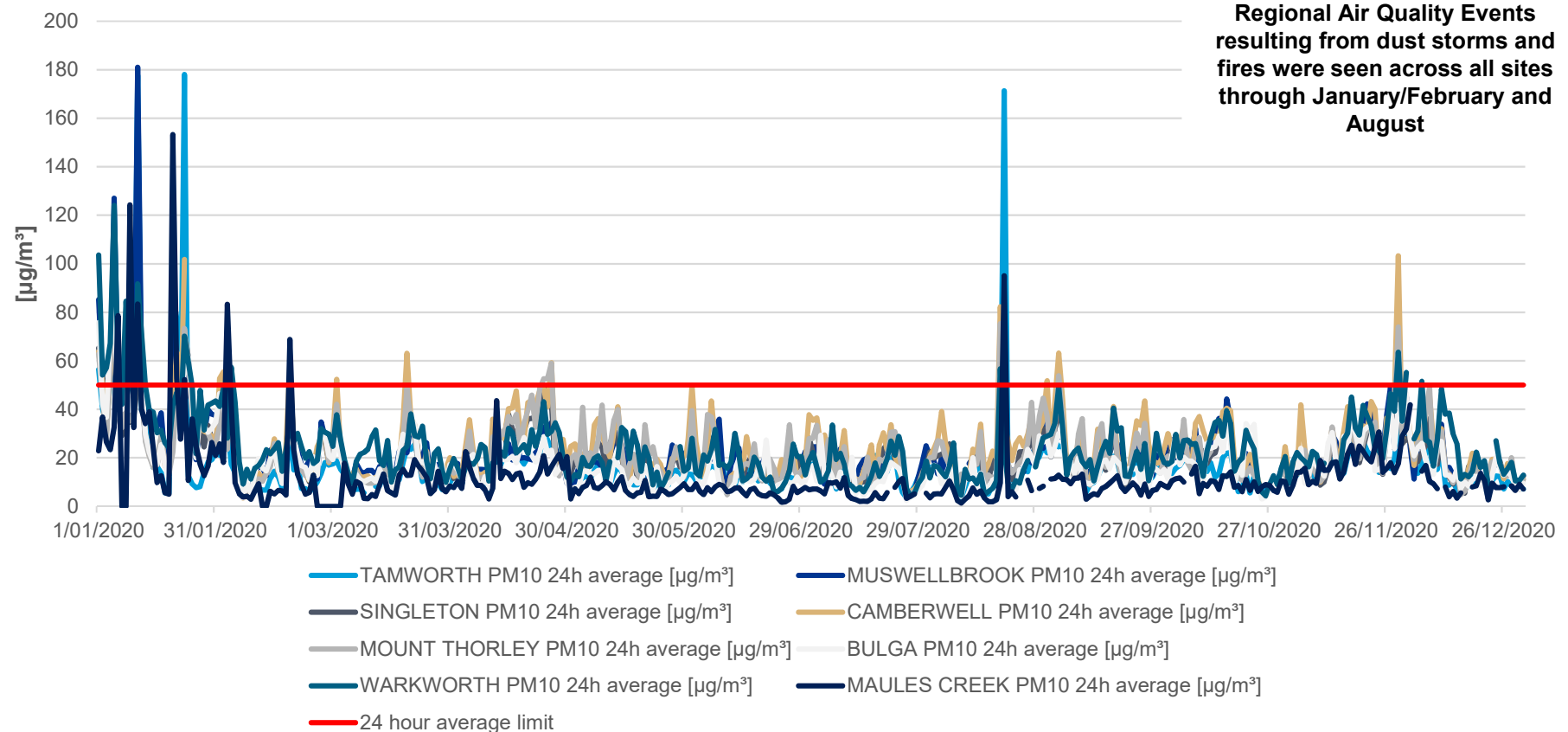
Air quality management

- Publically available results of TEOM1 available on the EPA website. Annual rolling average for TEOM 1 is 12.5 ug/m³ at 31 December 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.



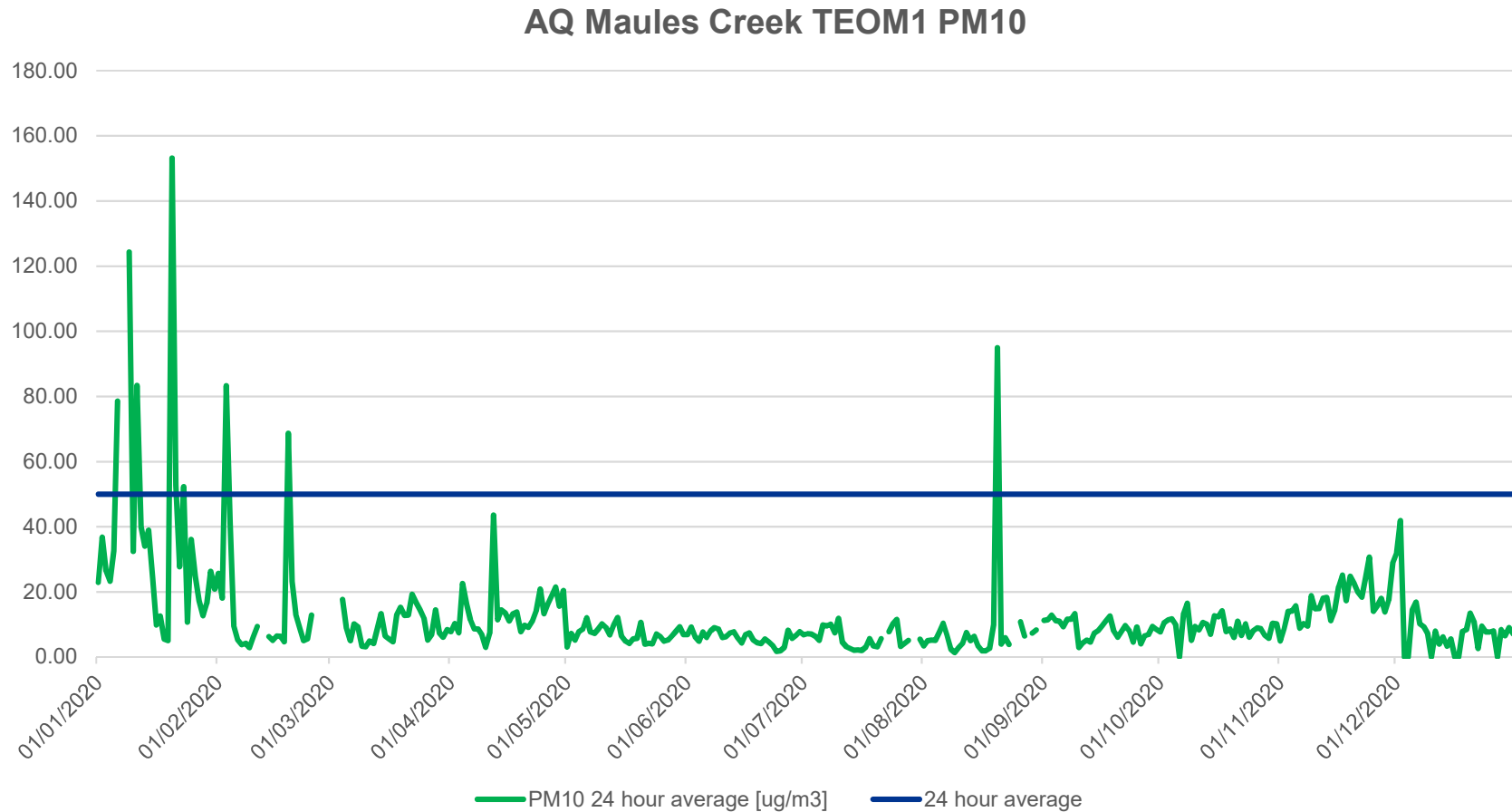
Air Quality Monitoring January 2020 – December 20

Regional air quality PM10 comparison



2020	TAMWORTH PM10	MUSWELLBROOK PM10	SINGLETON PM10	CAMBERWELL PM10	MOUNT THORLEY PM10	BULGA PM10	WARKWORTH PM10	MAULES CREEK PM10
Annual Average	17	22	20	24	22	18	24	12
Max 24hr Ave	178	181	82	103	89	85	124	153

Air Quality Monitoring January 2020 – December 2020

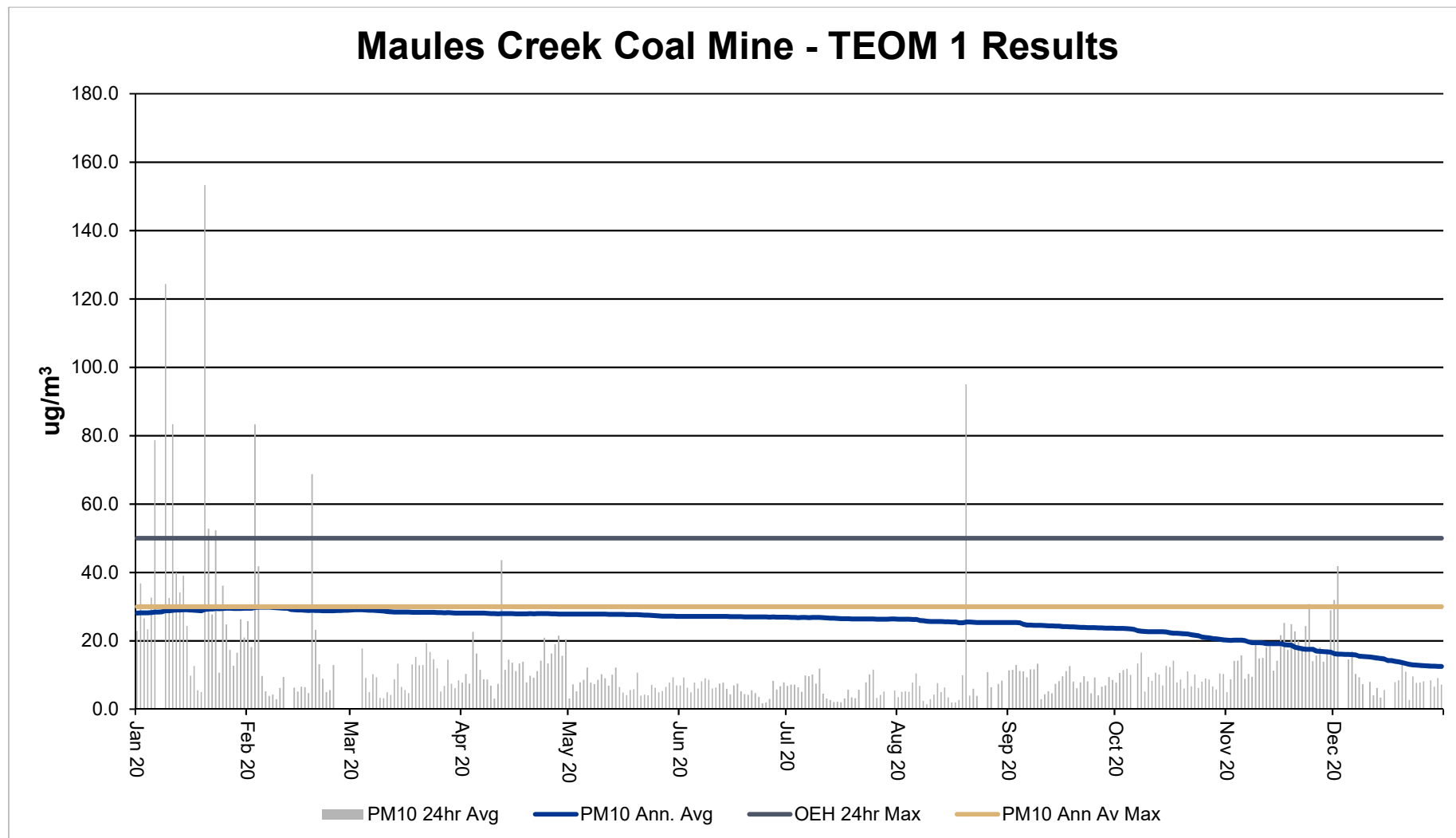


Annual rolling average for TEOM 1 is **7.22 ug/m3** at 31 December 2020 (criteria 30ug/m3). There were no exceedances of 50ug/m3 during Q4 of 2020.

Monitoring and Environmental Results

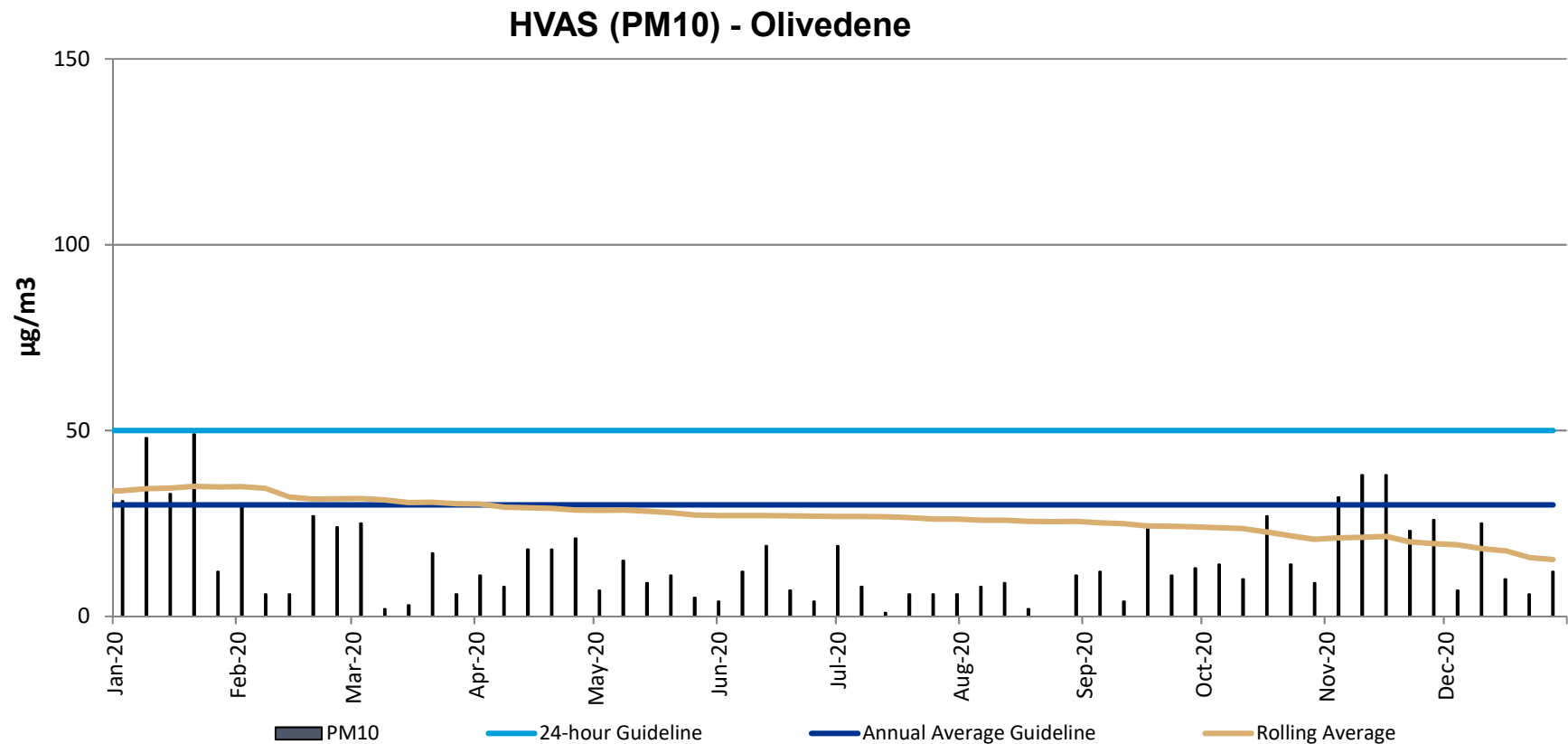
- Monitoring and environmental results provided within the distributed information pack

TEOM PM10 Results



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

High Volume Air Sampling (HVAS)



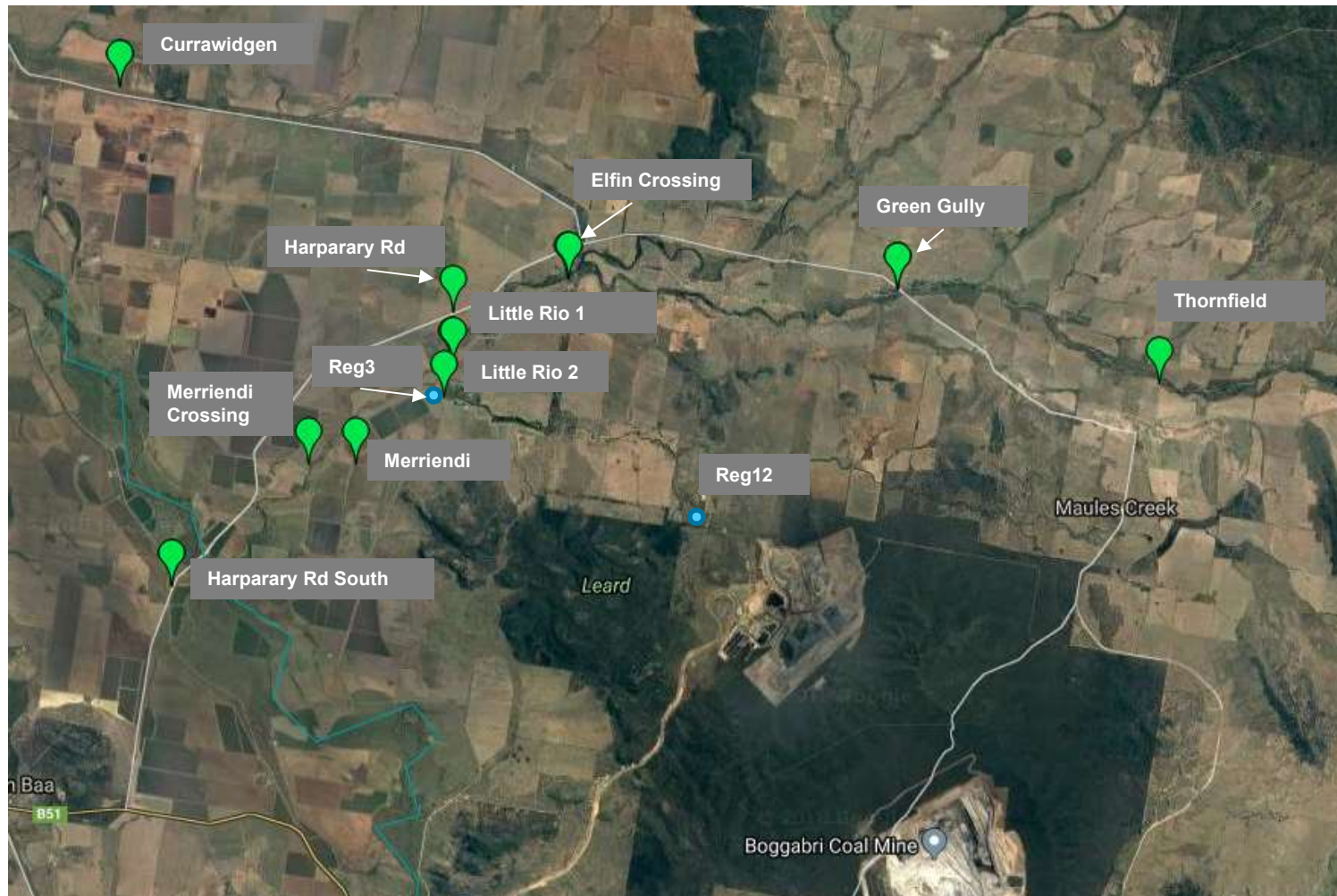
Regional and local dust events due to drought conditions noted in spikes above

Groundwater monitoring

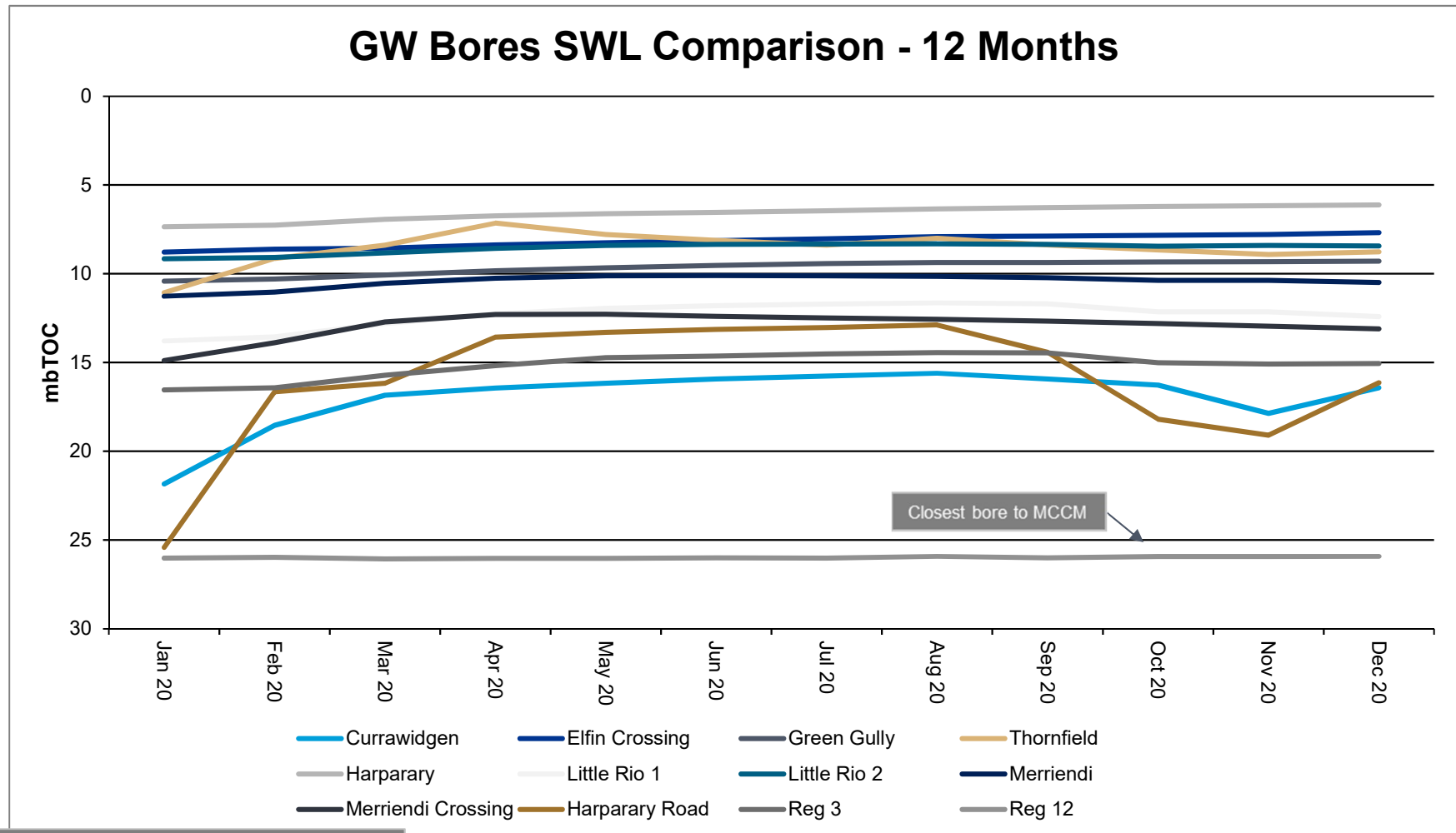


WHITEHAVEN COAL

Monitoring Locations



Groundwater levels

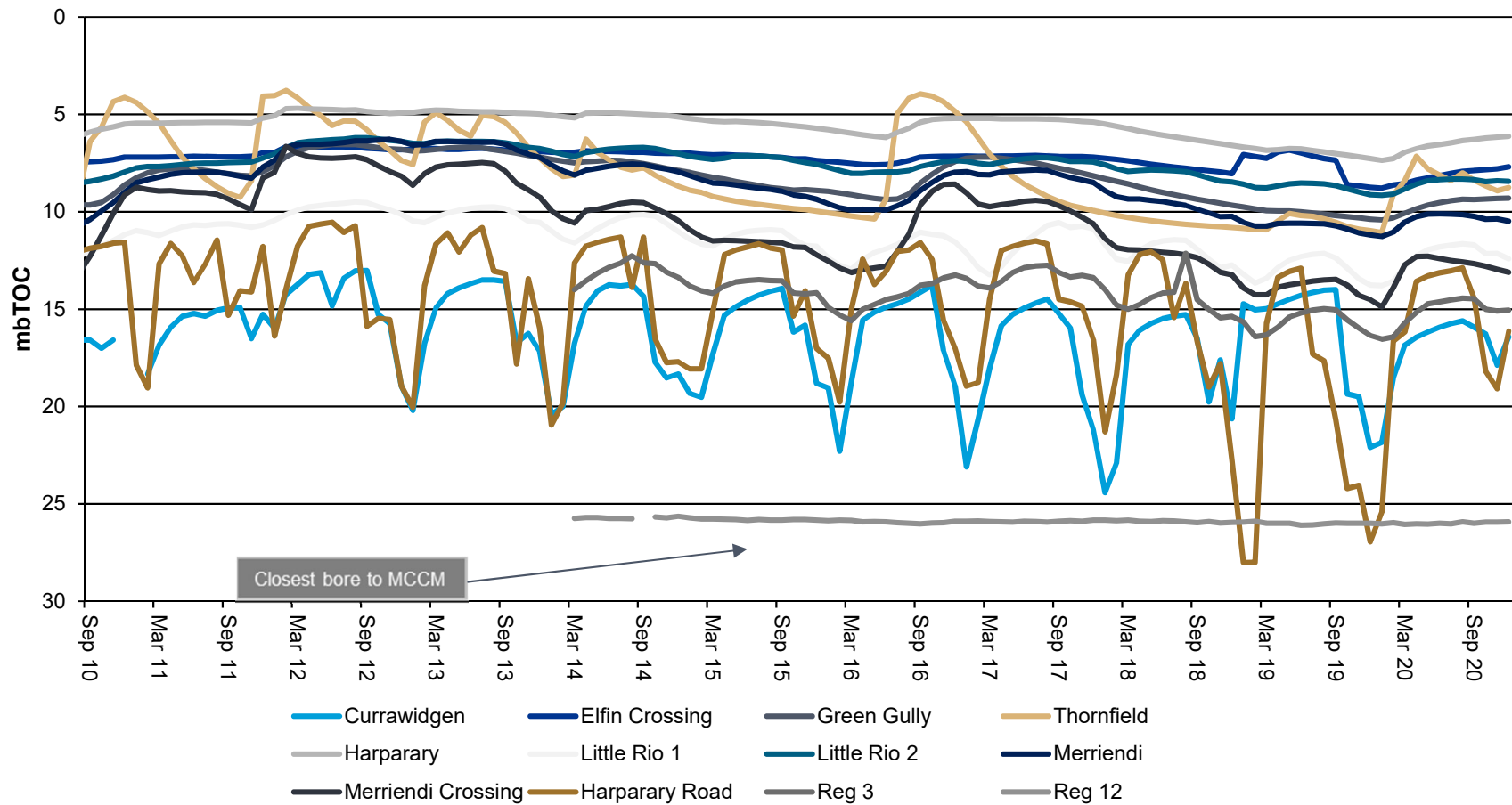


* Note Reg12 and Reg3 both within Boggabri Volcanics

Source: NSW DPI- Water & MCCM monitoring data

Groundwater levels

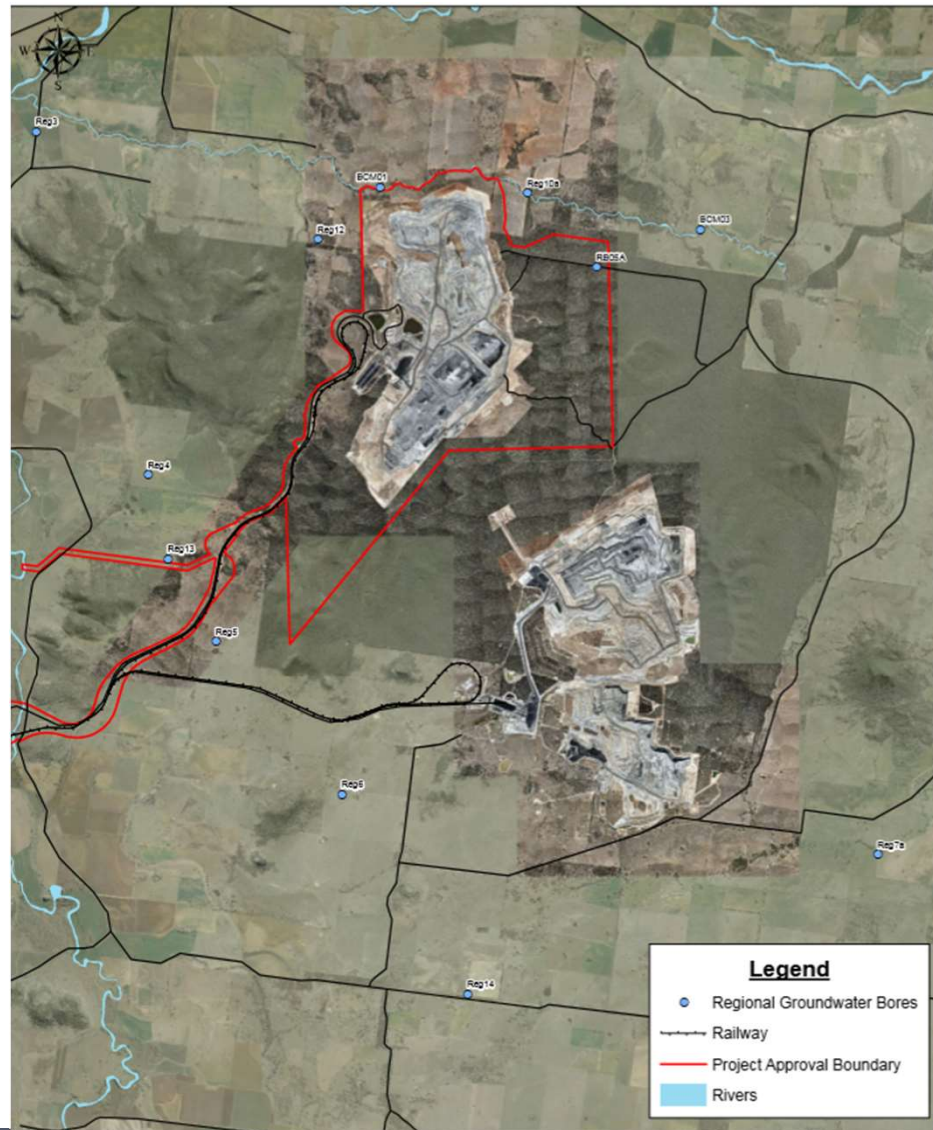
GW Bores SWL Comparison - 10 Years



* Note Reg12 and Reg3 both within Boggabri Volcanics

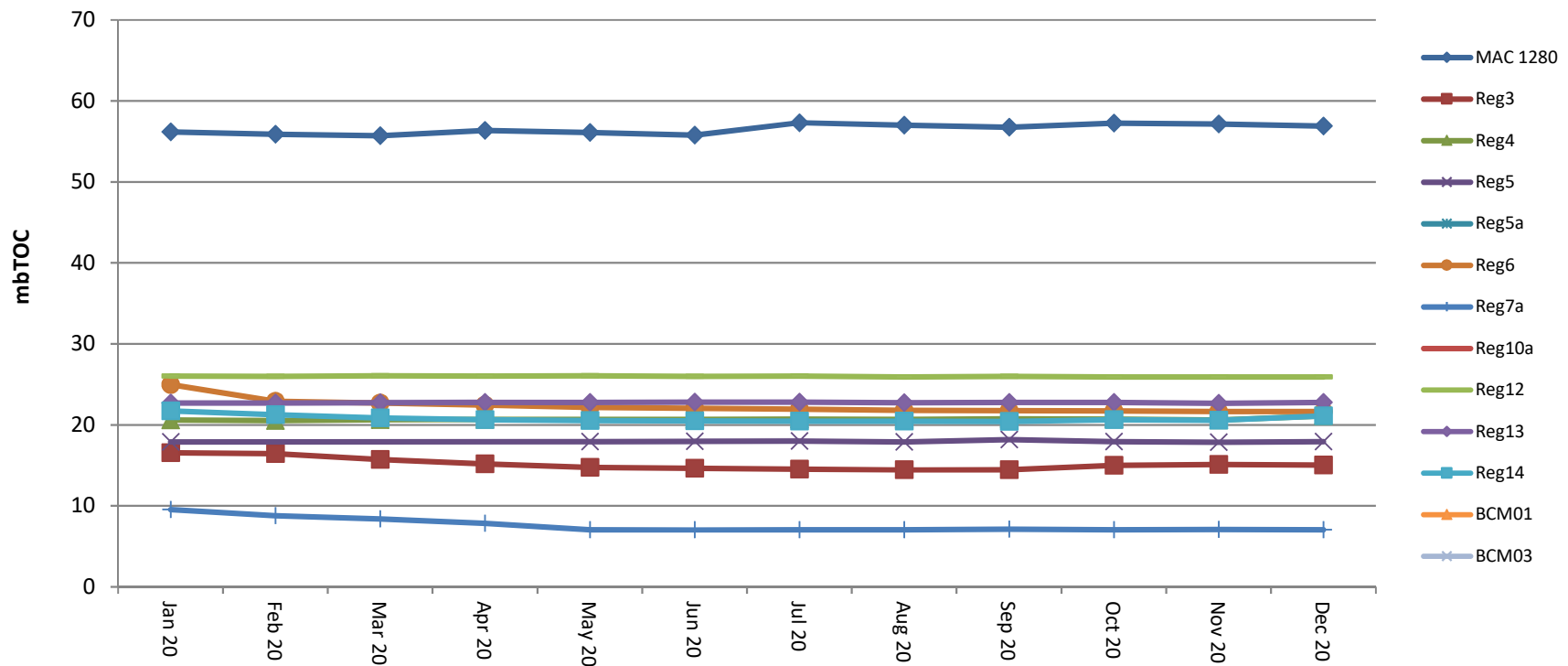
Source: NSW DPI- Water & MCCM monitoring data

Standing water levels



Standing water levels

Regional GW - Standing Water Level December 2020



Biodiversity Management

Feral Animal Management

- During the most recent routine Whitehaven Offset Area Feral Animal Control program (December 2020) the results included:
 - 45 out of total 75 pigs trapped were from the Maules Offset properties
 - 170 out of total 324 baits (1080) taken were from the Maules Offsets properties.

Revegetation and Tree Watering

- Completed 2020 tree planting program on Maules Offset properties;
- 60,000 tree seedlings planted over 1100ha;
- Initial survival checks confirm very high survival – good season;

Weed Control

- Targeted seasonal weed control along Riparian areas for Green Cestrum.



White Box 3 months old

Wongalea South

Biodiversity Management

Threatened Flora

- All 34 *Pomaderris queenslandica* seedlings are surviving original sourced from Leard Forest population.
- Additional *Pomaderris* seed collected in November from Pilliga.



Fire Management

- Completed Annual Fuel Load Assessments.
- Currently planning 2021 Autumn Ecological Burn Program.

Fencing and Waste Management

- New fencing for Wirradale & Mt Lindesay Offsets completed in December



Biodiversity Management

Upcoming works:

- Feral Animal Monitoring and Control Program in March 2021.
- Planning for Biodiversity Tree Planting Program 2021.
- Continued seasonal Weed Control and Tree Watering Programs.
- Commence planning 2021 Autumn Ecological Burn Program.
- Commence Autumn Flora 2021 Monitoring.
- Continue routine Threatened Flora Inspections and Programs.

Project Approval Modifications

MCC Landform MOD – This was submitted on the 29th January 2021. Currently being advertised in local newspapers.

This will be on exhibition from the 18th February 2021

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

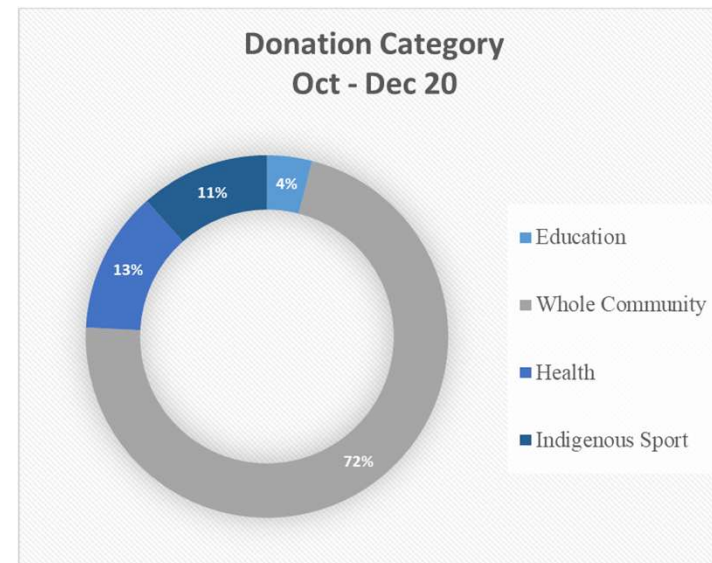
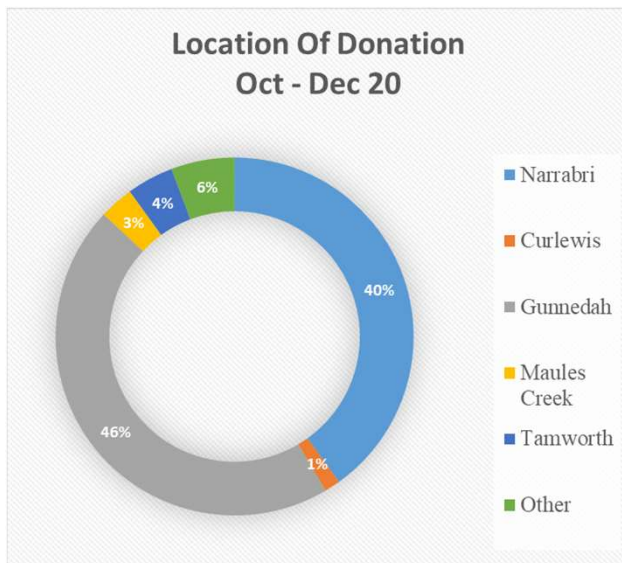
As of February 2021

- **Twelve (12) EH5000s** are now converted for autonomous operation.
- **Ex8000** commenced loading AHS fleet in November.
- **ANC Fleet** installations continue – AHS enabled equipment list expanding.
- **>35,000** loads hauled autonomously.
- **>4,650,000** cubic metres of waste moved.
- **>170** personnel trained to work with AHS so far.



Community

- Whitehaven continues to support the local Community with donations and sponsorships.
- More information on Sponsorships and Donations can be found at:
<https://whitehavencoal.com.au/sustainability/community/donations-sponsorships/>
- Donations for Oct – Dec 2020 ~ \$35,500



Community

- Whitehaven provided sponsorship to the Westpac Rescue Helicopter for \$50,000 as part of the release of the new EX8000 excavator bucket. This is over and above the sponsorship figures noted above.



Community

- Feedback and Complaints for all Whitehaven sites can be made to:

1800 WHAVEN (1800 942836)

- Each Whitehaven site has a site specific feedback email address. Maules Creek email address is: MaulesCreekCoal@whitehavencoal.com.au

- Complaints details:

MAULES CREEK COAL MINE Q4 2020 Community Complaints Register				
Date received	Method	Category	Nature of Complaint	MCCM Response
19/11/2020	phone	Visual Impact	Complaint received from Landholder regarding lighting impacts	Investigation undertaken into possible source of light, with review of lighting direction and intensity. Lighting plants were adjusted accordingly.

Next meeting:

To be scheduled

THANK YOU

www.whitehavencoal.com.au



WHITEHAVEN COAL