Minutes:	Minutes of the 25 <sup>th</sup> Meeting of the Maules Creek Coal Community Consultative Committee Held at the Boggabri Golf Club, Gunnedah Road, Boggabri NSW 2382	Wednesday 15 May 2019
Members Present:	Cath Collyer (CC) – Community Representative, Cr Robert Kneale (RK) – Narrabri Shire Council, Darren Swain (DS) – WH WHC, Jack Warnock (JW) – Community Representative, Julie Heiler (JH) – Community Representative (Alternate), Libb Community Representative, Lloyd Finlay (LF) – Narrabri Shire Council, Ross Wilson (RW) – WHC, Steve Eather (SE) – Cor	/ Laird (LL) – Maules Creek
Apologies:	David Paull (DP) – Sustainable Living Armidale, Nigel Wood (NW) – WHC, Simmone Moodie (SMo) – Community Aborig	inal Representative
Observers:	N/A	

Independent Chair: David Ross (DR)

Independent Secretary: Debbie Corlet (DC)

Agen	ida Items	Who to Present	
1.	Apologies	DR	
2.	Declaration of pecuniary or other interests	DR	
3.	Confirmation and Discussion of the minutes of the previous meetings – 13 February 2019	DR	
4.	Business arising from the previous minutes – Action List Distributed	DR	
5.	Correspondence	ALL	
6.	Questions and Answers Session	ALL	
7.	<ul> <li>Company Reports and Overview of Activities:</li> <li>a. Progress at the mine</li> <li>b. Monitoring and environmental performance</li> <li>c. Community complaints and response to complaints</li> <li>d. Information provided to the community and any feedback</li> </ul>		
8.	General Business	ALL	
9.	Next Meeting – 14 August 2019	ALL	

Agenda Item	Discussion	Action/By Whom
1.	Welcome and Apologies – David Paull (replacing Kerri Clarke), Nigel Wood, Simmone Moodie.	
	DR advised that Kerri and Anna had both resigned from the CCC. DR has sent a letter on behalf of the CCC thanking them for their contribution. DR welcomed Ross, Emma and Julie to the CCC.	
2.	<b>Declaration of pecuniary or other interests</b> – DR advised he is paid a fee to chair these meetings as is DC for typing the Minutes.	
3.	<b>Confirmation of the minutes of the previous meetings (13 February 2019)</b> – The CCC endorsed the minutes as an acceptable record of what was discussed.	
4.	Business arising from the previous minutes – DR observed all actions from previous meeting completed.	
	LL – from August CCC minutes – regulatory processing – sound power. Caution was received in 2016 and 2017. LL wanted it to be clarified and put in the minutes. DR noted some of this was discussed in February CCC meeting.	
	Annual Review still hasn't been approved but will be circulated as soon as it has.	
5.	<b>Correspondence</b> – No correspondence received by DR.	
6.	Company Reports and Overview of Activities	
	<ul> <li>March 2019 quarter production figure 1.7Mt. FY19 production target of 11.8Mtpa ROM (Run of Mine) coal.</li> </ul>	
	<ul> <li>Continued focus to improve safety record within the mine.</li> </ul>	
	Health & Safety; Drug and Alcohol Testing Program	
	Employee health programs continued focus on personal health, including Safety Coaching Training for	
	Supervisors, Fatigue Management Focus, Skin Check Program and Health Haven Program.	
	Ongoing Employee Drug and Alcohol testing carried out.	
	All our Supervisors are trained in drug screening and fitness for work assessment processes.	
	Employment	
	<ul> <li>Continued focus on local, indigenous and female employment with ongoing training programs undertaken.</li> <li>There have been 24 new trainees employed from January to March. 1 of these is a new Indigenous trainee.</li> </ul>	
	• There have been 24 new trainees employed from January to March. 1 of these is a new indigenous trainee. Air Quality Management	
	Publically available results of TEOM1 available on the EPA website. Annual rolling average for TEOM1 is 18.6 ug/	
	m <sup>3</sup> at 31 March 2019 (criteria 30ug/m3). Ongoing dust suppressant application across the operation.	
	<ul> <li>Progressive overburden emplacement and bulk shaping on the northern dump.</li> </ul>	
	<ul> <li>MCC air emissions are lower (over 30%) than those modelled in the Environmental Assessment.</li> </ul>	
	Biodiversity Management	
	Feral Animal Management	

Agenda Item	Discussion	Action/By Whom
	<ul> <li>During the most recent routine Whitehaven Offset Area Feral Animal Control program (Feb and Mar 19):</li> <li>50 out of total 129 pigs trapped were from the Maules Creek/ Boggabri area; and</li> <li>32 out of total 111 foxes baited were from the Maules Creek/ Boggabri area.</li> </ul>	
	Weed Management	
	<ul> <li>Broadleaf weed control and Box Thorn were targeted for spraying prior to Xmas. Targeted Tiger Pear spraying has been ongoing for the Southern Offsets.</li> </ul>	
	Revegetation and Monitoring	
	<ul> <li>During the prevailing hot/ dry conditions; resources have been deployed to undertake tree watering of the Maules Offset FY18 revegetation areas to minimise mortality. Now with conditions cooling; Maules Offset FY19 revegetation will commence in May 2019.</li> <li>Autumn ecological monitoring of Maules Offsets was completed in April 2019 including flora surveys in</li> </ul>	
	accordance with the Biodiversity Management Plan.	
	<ul> <li>Biodiversity Management – Upcoming Works:         <ul> <li>Feral animal control in May/ June 2019. Weed spraying/ tree watering ongoing.</li> <li>Undertake FY19 Controlled/ Ecological Burns in Autumn 2019:                 <ul> <li>Roseglass/ Bimbooria 128ha.</li> <li>Kenna 107ha.</li> <li>Olivedene 60ha.</li> <li>Werris Creek 80ha.</li> <li>Undertake FY19 Revegetation Program (Seeding and Tree Planting) starting in May 2019.</li> <li>Demolition of derelict/ obsolete above ground structures ongoing in Autumn 2019.</li> <li>Annual reporting and communication in accordance with Regional Biodiversity Strategy.</li> </ul> </li> </ul> </li> <li>Groundwater Monitoring</li> </ul>	
	Slides presented on groundwater locations and standing water levels.	
	<ul> <li>Water Management         <ul> <li>Current Project Approvals for each of the BTM sites envisage the potential need for mines to share water/ transfer water between sites. The BTM Water Management Strategy reflects this potential requirement. These safeguards ensure that, during prolonged dry spells or periods of drought, security of supply is maintained and therefore hundreds of jobs continue. These arrangements within the BTM Complex are not new.</li> <li>Appropriate water licences are held to accommodate volumes being shared and the process of water trading is overseen by WaterNSW.</li> </ul> </li> <li>High Security Water         <ul> <li>3,000ML High Security (HS) Water Licence held by MCC. HS water licenses in total held by entities such as sporting clubs, mining companies, construction companies, landholders and Government entities.</li> </ul> </li> </ul>	

Agenda Item	Discussion	Action/By Whom
	Phased introduction of AHS pending evaluation over the next few years. Supporting employees in affected roles to transition into jobs operating the new technology or be redeployed to Whitehaven's other local mines.	
	<ul> <li>AHS will create new and highly skilled jobs at Maules Creek in haulage systems integration and operation.</li> </ul>	
	<ul> <li>Truck has carted two loads of overburden. No work on autonomous drill rigs or excavators being undertaken.</li> <li>Community</li> </ul>	
	<ul> <li>Complaints details – Noted in Environmental Monitoring Report and on the website.</li> </ul>	
	Whitehaven are advertising for 2020 Graduate Program.	
	Sponsorships and Donations Criteria	
	• WHC regularly considers requests for donations, sponsorship and gifts in kind, which provide benefit in the following areas: Health, Education, Whole of Community, Representative Level Indigenous Sport	
	Check – <a href="http://www.whitehavencoal.com.au/donations-and-sponsorship/">http://www.whitehavencoal.com.au/donations-and-sponsorship/</a>	
	Voluntary Planning Agreement (VPA) Payments and Local Spend	
	<ul> <li>MCCM were required to negotiate a VPA with Narrabri Shire Council (NSC) as per Project Approval. Completed in 2014. Contributions have been paid to Narrabri Shire Council of:</li> </ul>	
	<ul> <li>\$13,425,000 paid in lump sum contributions.</li> <li>Ongoing monthly payments of \$0.075 per saleable coal tonne + CPI – ongoing. (FY19 almost \$600,000</li> </ul>	
	allocated).	
	<ul> <li>Sponsorships and donations have been made to a number of causes, including but not limited to \$35,400 in the Narrabri area community for Jan – Mar and \$68,500 in the Gunnedah area community for Jan – Mar.</li> </ul>	
	<ul> <li>Whitehaven has spent \$1.5 billion in the North West NSW economy since 2013.</li> </ul>	
	General Discussion re the WHC Presentation	
	A discussion was had about whether the northern dump at its final height. It was noted that the dump is still going up. Changed the rehab – strategically dump going forward. The dump is below it's approved height but may be anticipated to get to its approved height with more rolling hills designed into it in order for water to move through it nicely. Darren noted that there had been two air quality exceedances due to regional dust events, which were self reported. Dust minimisation procedures such as shutting down dumps and fleet took place.	
		ACTION 1 – WHC to
	LL asked whether the EPA issued regulatory notices – re dust in the January and February? EB responded that no, MCCM self-reported, letting the EPA know that dust is high and where the dust is coming from.	provide the dates and times of the self
		reporting to EPA.
	LL – Do you know the dates of the self-reporting?	
	A discussion was then held on the obsolete/ derelict houses etc across all the offsets. DS noted that the small number of houses within Offset land containing asbestos and derelict will be demolished or relocated. Most houses are tenanted.	

Agenda Item	Discussion	Action/By Whom
	CC – Re tree planting – how have the trees gone? What is the survival rate? Tarrawonga have – 80 to 85% on mine	
	rehabilitation area.	
	EB – Not sure if we have that information.	
	DS – We haven't planted trees on MCCM rehabilitation area yet however we do on the offsets.	
	Monitoring Locations	
	CC – Do you have a new bore in Maules Creek? Actual bore to get water?	
	DS – Installed an in-pit dewatering bore and a replacement bore on Olivedene.	
	Water Management	
	A discussion was held about MCCM sharing water with Boggabri Coal, from a groundwater bore. MCCM has a bore	
	licence with Boggabri Coal pumping to MCCM. Part of the mine's approvals. DS noted that Boggabri Coal don't pump	
	continually – now they have plenty of water. There is currently no intent to provide water to Tarrawonga.	
	CC: have you put in a new bore in the Northern area in Maules Creek?	
	DS: An inpit dewatering bore. Extracted with bore, not excavator.	
	CC: for water monitoring?	
	DS: Not for water monitoring. We put one in pit. Also, one on Olivedeene. No better than the one we had. So we didn't	
	equip it. A replacement bore for the one we had.	
	JW – Where is Boggabri water being sourced.	
	DS – They have 3 bores – Zone 4 – it'll come out of that zone.	
	JH – Isn't there an embargo?	
	DS – There was an embargo on general security pumping from the river. Applied to the general security not the high	
	security.	
	Darren: We extracted high security water licence-	
	LL: How much water, 500ML?	
	DS: No. a couple of hundred ML.	
	LL: so MCCM extracted 200ML- approximately after recent rain?	
	DS: about.	
	LL – where are you storing it?	
	DS – On site – water dam.	
	Autonomous Haulage	
	Autonomous Haulage	

Agenda Item	Discussion	Action/By Whom
	During the discussions about autonomous haulage, it was noted by MCCM that the use of the vehicles in the future would provide more specialised work and that, with the possibility of Vickery's and Santos projects, there will be plenty of jobs. Only a trial at present with just one truck being used. 2 loads of overburden so far-it is a slow trialling process. Enormous about of complexity involved. There is a separate circuit that is set up. JH – More options for them now. SE – All trucks and machinery will need fitters and mechanics.	
	DS – Because the trucks work more hours – you need more maintenance people to work on them to keep them on the road – electricians, fitters etc.	
	Sponsorships and Donations DR – Any examples of what WHC have sponsored. DS – ANZAC Memorial. I can bring some examples in next CCC. LL – You haven't funded any political campaigns through this federal election, have you?	ACTION 2 – DS to provide examples of whole of community sponsorships
7.	DS – I wouldn't know the answer to this – certainly not at our level. General Business	
	LL – Concerned about the correspondence from Darren – re Country Women's letter to MCCM re Federal EPBC offsets – concerned it was suggested by MCCM that CWA had not done their homework. We asked that the letter be read out and we have been informed that this did not happen – our concern was the offsets – at the time of writing by CWA, MCCM had not been secured. Our organisation had done its homework – there was no extension to the offsets? 12-month extension – is that correct? DS – Correct. LL – Community should be concerned about threatened species. The EPBC offsets are to be like for like. It is about offsetting the best of the best- high quality habitat for these species. There has this week been a UN Report raising the alarm about loss of threatened species world wide because of habitat loss. I know it is not in your interest – once this company has moved on – I don't think that is acceptable to dismiss that in the community. DS responded that WHC appreciate offsets. It is approved. Extension at March 2020. JH – Biodiversity is such a big mess. Offsets in productive agricultural land. I think the whole thing should be revised and back on the table. The forest has gone, and the animals have gone. Parks & Wildlife don't want it. DR – Maybe an issue for DPE. DS – We need to bring the offsets up to a standard and then give it back to the government. Then there is a monetary component – government may need to manage them going forward. We pay them a one-off fee to look after it. JH – They have lost so much. Understand the environmental side of it but it is an agriculture community, but we don't have farmland left.	

Agenda Item	Discussion						
	LL – Our community were happy with the forest where it was originally. We didn't want it moved and to be fair, our community put in substantial submissions ahead of the approval of these mines in relation to these and other issues related to loss of farming communities and the impacts. It must be high quality re biodiversity to start with. DR – (to LL and JH) Comments you've been raising – you are both right – you need a community long term. But biodiversity issues in Australia are becoming huge concerns. It's a higher order issue than MCCM.						
	DS – Handed out a sheet in response to Libby's questions. LL: These questions were tabled ahead of the meeting as requested by David from all community reps. I thought they were to be the contents of General Business for discussion. They are from the Maules Creek community members I represent.						
8.	Next meeting date to be agreed - Next meeting Wednesday 14 August 2019 at 2:00pm.						

Meeting Closed:

3:26pm

**Appendix 1: Actions** 

Page No	Action No	No Description				
6	1	WHC to provide the dates and times of the self-reporting to EPA.	15 May 2019			
6	2	DS to provide examples of whole of community sponsorships	15 May 2019			



## Maules Creek Coal Mine Community Consultative Committee Meeting #25

## Environmental Monitoring Report For the Q1 period, January - March 2019

## **Attended Noise Monitoring**

Attended noise monitoring was undertaken at six locations during January, February and March 2019 by an independent acoustic consultant. The measured noise level (LA<sub>eq 15 minute</sub>) 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 2019.

## **Table 1 - January Noise Monitoring**

Location	Start Date and Time	Wind Speed	Rainfall	Criterion dB	Criterion Applies '	MCCP LAeq dB <sup>2</sup>	Exceedance dB <sup>3</sup>
NM1	14/01/2019 23:00	0.5	0.0	35	Yes	<25	Nil
NM2	15/01/2019 00:00	0.4	0.0	39	Yes	<20	Nil
NIM3	15/01/2019 01:00	0.6	0.0	35	ìes	La	Nil
NB/14	14/01/2019 23:25	0.8	0.0	35	Yes	LA	Nil
NM5	14/01/2019 22:30	0.5	0.0	35	Yes	25	Nil
NIV16	15/01/2019 00:28	0.5	0.0	35	Yes	LA	Nil

#### **Table 2 - February Noise Monitoring**

Location	Start Date and Time	Wind Speed nu's	Rainfall mon	Criterion dB	Criterion Applies <sup>1</sup>	MCCP LAeq dB <sup>2</sup>	Exceedance dB <sup>3</sup>
NM1	06/02/2019 22:30	4.0	(D)	35	No	LA	NA
NIM2	06/02/2019 23:00	43	Ø	39	No	*:30	NA
NM3	07/02/2019 00:00	5.2	C)	35	No	IA	NA
ND44	06/02/2019 23:30	4.6	Ø	35	No	LA	NA
NM5	06/02/2019 22:00	5.0	Ø	35	No	LA	NA
NM6	07/02/2019 00:00	5.2	Ø	35	No	IA	NA

#### Table 3 - March Noise Monitoring

Location	Start Date and Time	Wind Speed m/s	Rainfall mon	Criterion dB	Criterion Applies <sup>1</sup>	MCCP LAeq dB <sup>3</sup>	Exceedance dB <sup>3</sup>
NM1	27/03/2019 22:32	0.5	Ø	35	Yes	IA	Nil
NM2	27/03/2019 23:01	2.5	Ø	39	Yes	<25	Nil
NM3	27/03/2019 23:29	4.4	Ø	35	No	<20	NA
NM4	27/03/2019 23:25	3.9	<b>O</b>	35	No	<20	NA
NM5	27/03/2019 22:01	1.9	Ø	35	Yes	IA	Nil
NM6	27/03/2019 23:51	2.5	Ø	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). Bold results indicate exceedance of criterion.

IA – Inaudible NM – Not measurable



## Maules Creek Coal Mine Community Consultative Committee Environmental Monitoring Q1 2019 Meeting #25

None of the measurements during Q1 satisfied the conditions for further assessment when assessed for the applicability of low frequency modification factors in accordance with the EPA's Noise Policy for Industry. Therefore, no further assessment of modifying factors was needed to be undertaken.

The 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 2019.

## LA1, 1minute GENERATED BY MCC AGAINST OPERATIONAL NIGHT NOISE CRITERIA – JANUARY TO MARCH 2019. Table 4 - January Noise Monitoring – Night

Location	Start Date and Time	Wind Speed m/s	Rainfall mm	Criterion dB	Criterion Applies <sup>1</sup>	MCCP LA1,1min dB <sup>2</sup>	Exceedance dB <sup>3</sup>
NM1	14/01/2019 23:00	0.5	Q.0	45	Yes	<25	NE
NM2	15/01/2019 00:00	0.4	CI.0	45	Yes	<20	Nil
NM3	15/01/2019 01:00	0.6	0.0	45	Yes	IA	NE
NIM64	14/01/2019 23:25	0.8	0.0	45	Yes	IA	Nil
NM5	14,01/2019 22-30	0.5	C.0	45	Yes	30	Nil
NIM6	15/01/2019 00:28	0.5	0.0	45	Yes	IA	Nil

## Table 5 - February Noise Monitoring – Night

Location	Start Date and Time	Wind Speed m/s	Rainfall	Criterion dB	Criterion Applies <sup>1</sup>	MCCP L <sub>A1,1min</sub> dB <sup>2</sup>	Exceedance dB <sup>1</sup>
NIMI	06/02/2019 22:30	4.0	Ø	45	No	IA	NA
NM2	06/02/2019 23:00	4.3	Ø	45	No	<30	NA
NM3	07/02/2019 00:00	5.2	Q.	45	No	IA	NA
NIM14	06/02/2019 23:30	4.6	Ø	45	No	IA	NA
NMS	06/02/2019 22:00	5.0	Ø	45	No	IA	NA
NIM6	07/02/2019 00:00	5.2	<b>O</b>	45	No	IA	NA

## Table 6 - March Noise Monitoring – Night

	Location	Start Date and Time	Wind Speed m/s	Rainfall mm	Criterion. dB	Criterion Applies <sup>1</sup>	MCCP LA1,1min dB <sup>2</sup>	Exceedance dB <sup>-1</sup>
0	NM1	27/03/2019 22:32	0.5	Ø	45	Yes	IA	Nil
1	NM2	27/03/2019 23:01	2.5	Ø	45	Yes	<30	Nil
	NM3	27/03/2019 23:29	4.4	<b>O</b> <sup>1</sup>	45	No	<25	NA
	NM4	27/03/2019 23:25	<mark>-3.9</mark>	Ø	45	No	<20	NA
	NM5	27/03/2019 22:01	1.9	Ø	45	Yes	IA	Nil
	NM6	27/03/2019 23:51	2.5	Ø	45	Yes	<20	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

## 

Maules Creek Coal Mine Community Consultative Committee Environmental Monitoring Q1 2019 Meeting #25

## 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	Not recorded		
February	NE/SE		
March	NE		

## **Blast Monitoring**

There have been 24 blasts at MCCM during Q1 2019. All blast monitoring results recorded within the reporting period have been within the applicable overpressure and ground vibration limits specified in the respective approvals.

## Table 8 - Blast Results Summary Quarter 1 2019

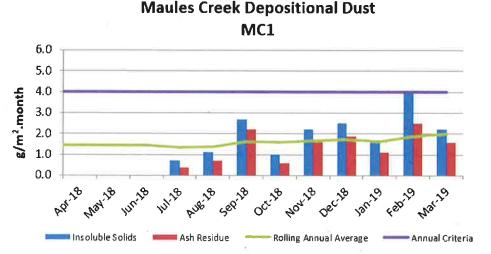
Parameter	Units	Frequency	Number	Average	Мах	100% Limit	Exceedance (Yes / No)
Noise	dB (Lin Peak)	All	24	94.623	106.3	120	No
Vibration	mm/s		24	0.195	1.09	10	No

## Air Quality

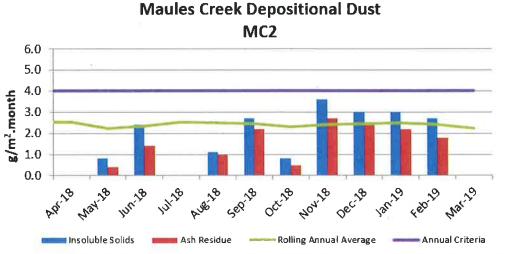
## Total Depositional Dust

The monthly rolling annual average remains below the relevant Project Approval criteria of 4gm/m<sup>2</sup>/month for the respective monitoring points, as shown on the graphs below. Depositional dust at MC1 and MC4 was elevated during January and February 2019 and attributable to dust conditions across the region associated with the drought. This trend is seen across all dust monitoring results.

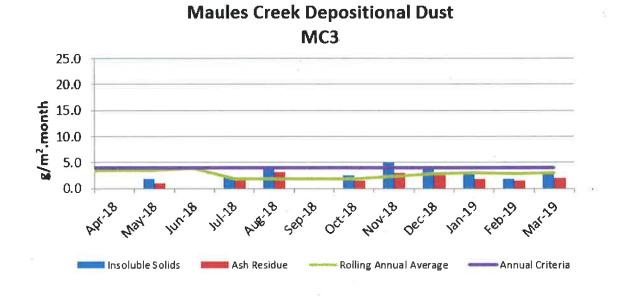
## Deposited Dust Monitoring Figures (MC1 – MC4)



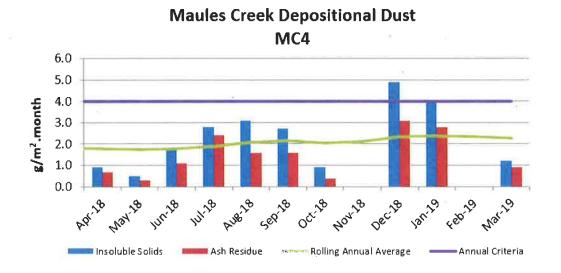
\* Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.).



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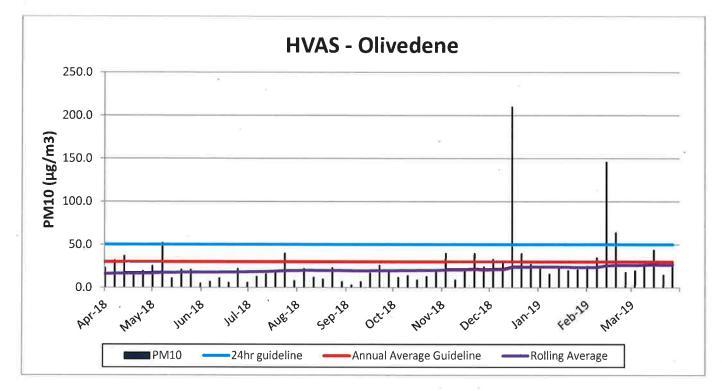


Maules Creek Coal Mine Community Consultative Committee Environmental Monitoring Q1 2019 Meeting #25

## High Volume Air Sampling (HVAS)

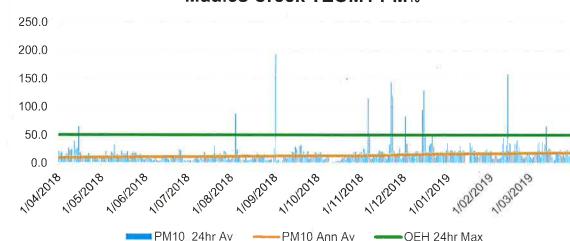
The HVAS monitor is located on the property 'Olivedene,' a mine owned property on Therribri Road.

HVAS PM<sub>10</sub> Rolling Annual Average during Q1 2019 remained below the Annual Average Guideline 30 µg/m<sup>3</sup>. An elevated result was recorded on 13 and 19 February 2019, which was attributed to regional weather conditions.



## TEOM - PM<sub>10</sub> Results

The annual average for PM<sub>10</sub> results at the Maules Creek Coal TEOM remain below the Project Approval annual average criteria of  $30\mu g/m^3$  (at 31 March 2019) as shown in the following figure. The PM<sub>10</sub> average results have remained below this criteria since the TEOM was commissioned in November 2011. On 13 February and 12 March 2019, there were 24 hour average results of 157.9  $\mu g/m^3$  and 65.4  $\mu g/m^3$  respectively which were above the OEH 24hr maximum. These elevated results were not mine related and attributable to regional dust events.



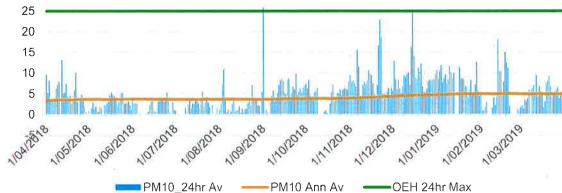
## Maules Creek TEOM1 PM<sub>10</sub>

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

TEOM Result Figures – Particulate Matter PM<sub>10µg/m3</sub> and PM<sub>2.5µg/m3</sub>

30



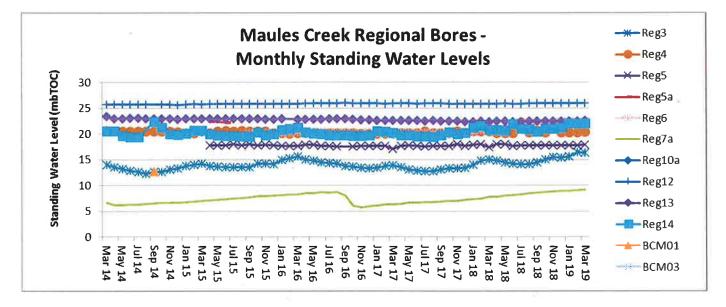


\* Blank columns indicate sample periods where there was either power outage, maintenance or other related causes.

## Water Monitoring

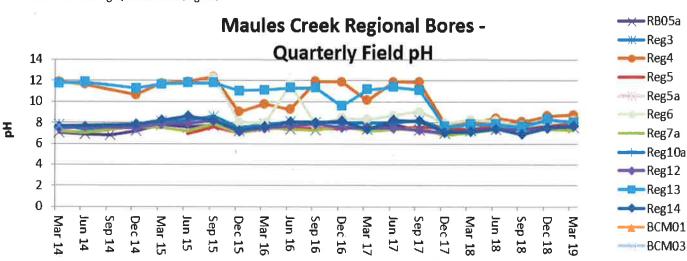
## Groundwater

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.



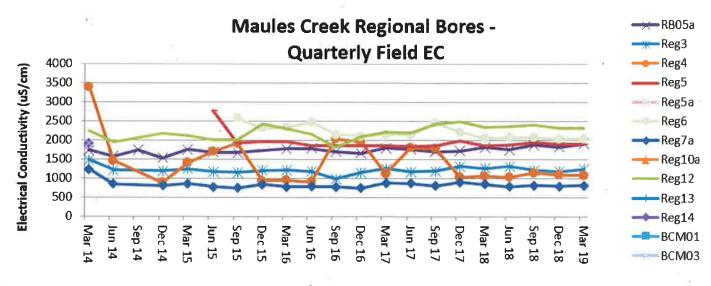
## Acidity / Alkalinity (pH)

Initially bores Reg4 and Reg13 showed elevated pH levels (above pH 8.5) which has been determined to be likely as a result of low recharge volumes and affected by grout within these bores at installation, however for the past 12 months pH levels for both of these bores have stabilised.



## **Electrical Conductivity**

Laboratory Electrical Conductivity (EC) levels are all within historic groundwater EC range of  $500_{\mu s/cm}$  to  $2,500_{\mu s/cm}$ , with the exception of monitoring bore Reg13 which has a historic groundwater EC range of  $2,500_{\mu s/cm}$  to  $4,100_{\mu s/cm}$ .



## Wet Weather Discharge Sampling

Between 1<sup>st</sup> January and 31<sup>st</sup> March 2019, Maules Creek Coal AWS recorded 129.6 mm of rainfall. There were two rainfall events that exceeded the 38.4mm value over a consecutive 5 day period during Q1 2019. There were no wet weather discharge events during Q1 2019.

Note: As per wording of condition L2.5 of EPL20221, 38.4mm equates to the 5 day 90 percentile rainfall for the Gunnedah region.

## Surface Water – Creeks and Rivers

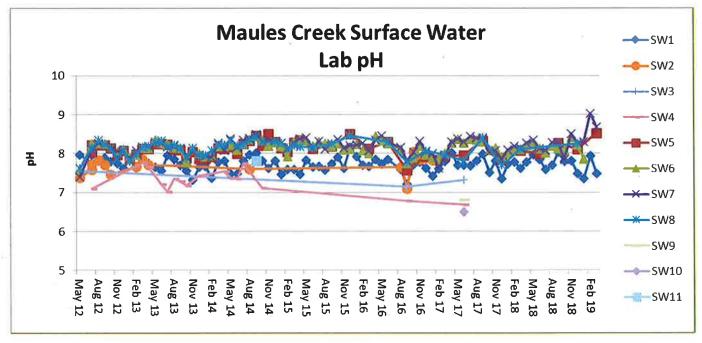
Routine surface water monitoring is conducted in surrounding creeks and rivers on a monthly basis. Results for parameters including pH, EC and Total Suspended Solids (TSS) are shown in the figures below.

## 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.

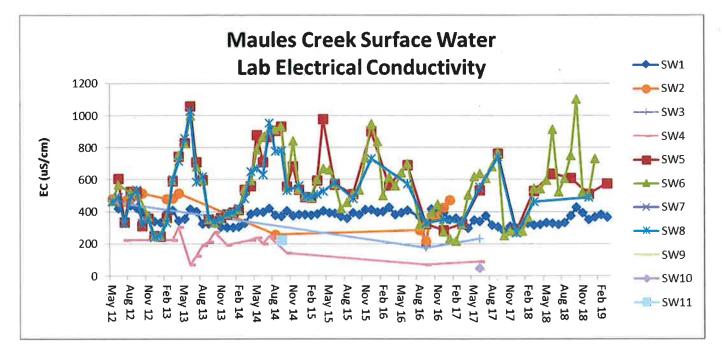
WHITEHAVEN COAL





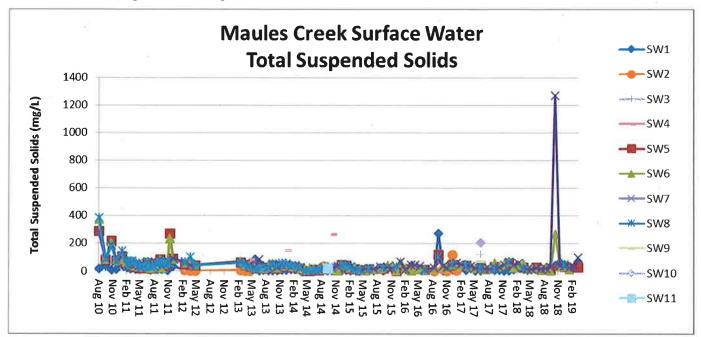
## **Electrical Conductivity**

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 is 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. Elevated levels of TSS are likely due to a release of dam water into the Namoi River during November.



## **Rehabilitation**

The rehabilitation phase of bulk shaping of the lower benches on the northern and western out of pit dumps is ongoing. At the end of March 2019 approximately 78.9 hectares of bulk reshaping had been completed.

## Feral Animal Management

During the most recent routine Whitehaven Offset Area Feral Animal Control program February and March 2019) the results included: 50 pigs trapped and 32 foxes baited were from the Maules Creek/Boggabri area.

## Weed Management

Broadleaf weed control of revegetation areas and Box Thorn were targeted for spraying prior to Xmas. Targeted Tiger Pear spraying has been ongoing for the Southern Offsets otherwise resources have been utilised for tree watering.

## Revegetation

During the prevailing hot/dry conditions; resources have been deployed to undertake tree watering of the Maules Offset FY18 revegetation areas to minimise mortality given the unknown duration of the current climatic/weather patterns.

Now with conditions cooling; Maules Offset FY19 revegetation will commence in May 2019.

## Monitoring

Autumn ecological monitoring of Maules Offsets was completed in April 2019 including flora surveys in accordance with the Biodiversity Management Plan.

HITEHAVEN COAL

# **Maules Creek Coal Mine**

## **CCC MEETING**

**BOGGABRI GOLF CLUB** MAY 2019



# Agenda

- Apologies
- Declaration of pecuniary or other interests
- Confirmation of minutes of the previous meetings
- Business arising from the previous minutes
- Correspondence
- Overview of activities
- General Business



# **Business arising from previous minutes**

- Please refer to the previous minutes



# **Company Report & Overview of Activities**

- March 2019 quarter production figure 1.7Mt.
- FY19 production target of 11.8Mtpa ROM (Run of Mine) coal.
- Safety record of 8.84 (Total Recordable Injury Frequency Rate (TRIFR) injuries per million hours worked) at end March, which is down from the December figure of 9.17.
   Continued focus to improve.





# **Health and Safety**

- Employee health programs continued focus on personal health:

- Safety coaching training for supervisors.
- Fatigue management focus continued.
- Skin Check program.



# **Drug and Alcohol Testing Program**

- Ongoing Employee Drug and Alcohol testing carried out.

- Our program of testing includes:

Random testing (conducted by an independent company)

- Blanket testing (everyone on site as requested)
- > For Cause testing e.g. after an incident

 All of our Supervisors are trained in drug screening and fitness for work assessment processes.



# **Employment**

- Continued focus on local, indigenous and female employment with ongoing training programs undertaken.
- There have been 24 new trainees employed from Jan to March.
- 1 of these is a new Indigenous trainee

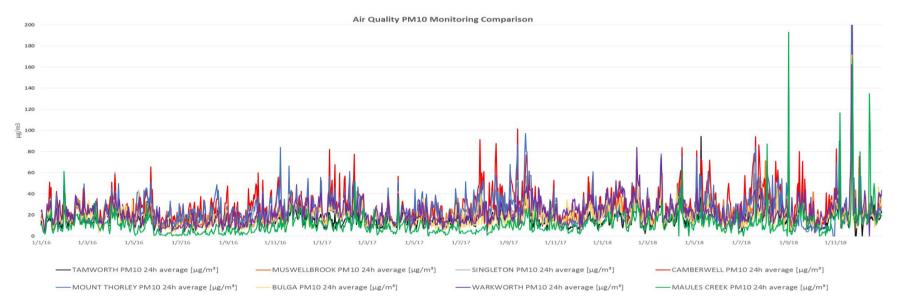


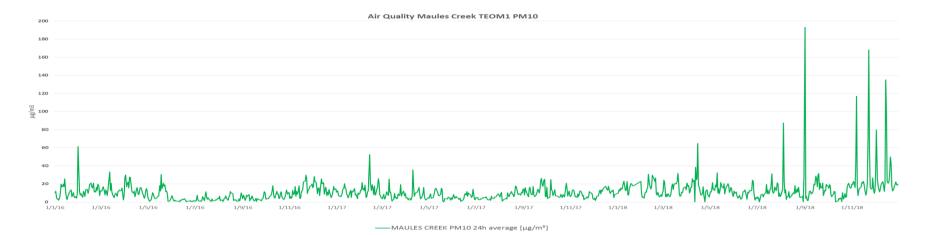
# Air quality management

- Publically available results of TEOM1 available on the EPA website. Annual rolling average for TEOM 1 is 16.7 ug/m3 at 31 March 2019 (criteria 30 ug/m3).
- Increased dust suppressant application across the operation.
- Progressive overburden emplacement and bulk shaping on the northern dump.
- MCC air emissions are lower (over 30%) than those modelled in the Environmental Assessment.



# Air Quality Monitoring Jan 2016 – March 2019





Annual rolling average for TEOM 1 is 16.7 ug/m3 at 31 December 2018 (criteria 30ug/m3). The nine spikes above 50ug/m3 were either due to regional dust events or bushfires.

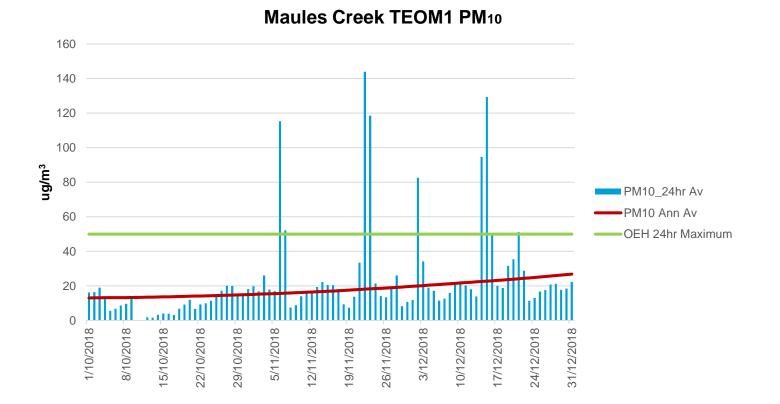


# **Monitoring and Environmental Results**

 Monitoring and environmental results previously provided within the distributed information pack



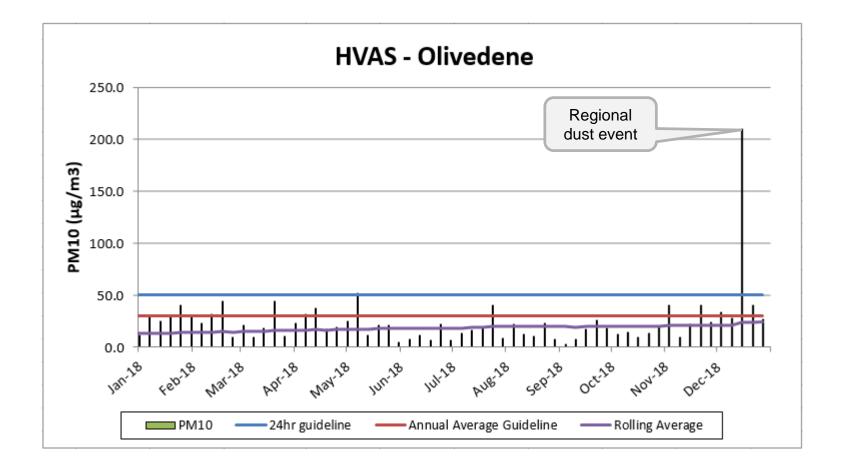
# **TEOM PM10 Results**



Regional and local dust events due to drought conditions noted above



# High Volume Air Sampling (HVAS)





# **Biodiversity Management**

## **Feral Animal Management**

- During the most recent routine Whitehaven Offset Area Feral Animal Control program (November and December 2018) the results included:
  - **16** pigs from the Maules Creek Offsets; and
  - 25 Foxes.

## Weed Management

• Broadleaf weed control of revegetation areas and Green Cestrum along riparian areas plus Box Thorn were targeted for spraying prior to Xmas. Targeted Tiger Pear spraying has been ongoing for the Southern Offsets.

## Revegetation

• During the prevailing hot/dry conditions; resources have been deployed to undertake tree watering of the Maules Offset.

## Monitoring

• Annual ecological monitoring of Maules Offsets was completed in November 2018 including flora and fauna surveys in accordance with the Biodiversity Management Plan.



# **Biodiversity Offset Revegetation**





# **Biodiversity Management**

## Upcoming works:

- Feral animal control in March 2019;
- Weed spraying ongoing;
- Planning for FY19 Controlled/Ecological Burns in Autumn 2019;
- Planning for FY19 Revegetation Program in late Autumn 2019;
- o General fencing occurring on Ferndale & Teston North;
- Vegetation monitoring to be undertaken in Autumn 2019;
- Annual reporting and communication in accordance with Regional Biodiversity Strategy;



# Groundwater monitoring



# **Monitoring Locations**

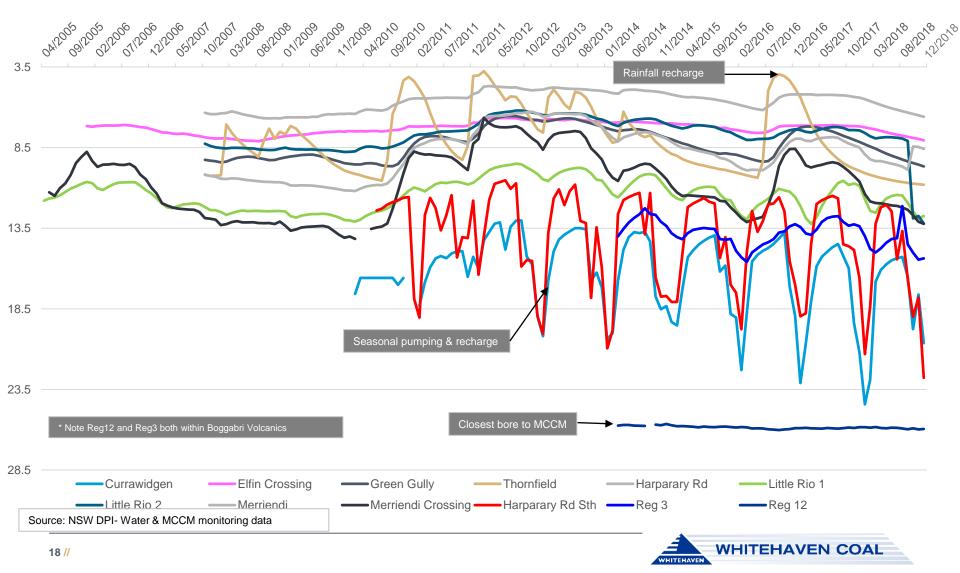




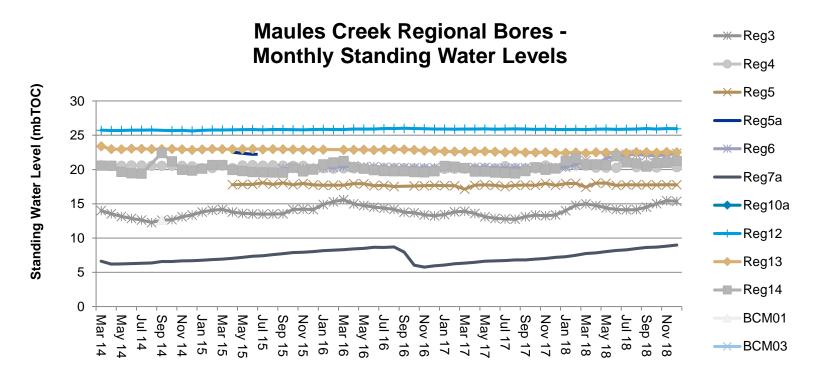
# **Groundwater levels**

134 mm rainfall Jan – Mar. 2019

GW bores SWL comparison



# **Standing water levels**





# Water

- Project approvals require water sharing between mines
- BTM Water Strategy contemplates this
- Appropriate water licenses are held to accommodate this water being extracted
- Water sharing agreement in place between BC and MCC.



# **High Security Water**

- 3,000ML High Security Water Licence held by MCC
- WaterNSW contacted MCC after the last rain event to say water may be coming down river if wanting to access water.
- 11 HS water licences in total held by sporting clubs, mining companies, construction company, landholders and Govt entities. They all had access to the last flows as per their licence.



# **Autonomous Haulage**

- Phased introduction of AHS pending evaluation over the next few years
- Supporting employees in affected roles to transition into jobs operating the new technology or be redeployed to Whitehaven's other local mines
- AHS will create new and highly skilled jobs at Maules Creek in haulage systems integration and operation
- Truck has carted one load of overburden



# Community

- Complaints details Noted in Environmental Monitoring Report and on the website.
- Supporting the Future EDU program in Narrabri Shire in promotion of STEM.
- Whitehaven are advertising for Cadetships 2020.
- Requesting suggestions of suitable Infrastructure Projects in the NSC and GSC areas. Ideally they would target Health, Education or whole of Community benefit as per Whitehaven sponsorship programs.

Link to Donation form



# Voluntary Planning Agreement (VPA) Payments

- MCCM were required to negotiate a VPA with Narrabri Shire Council (NSC) as per Project Approval. Completed in 2014.
- Contributions have been paid to Narrabri Shire Council of;

> **<u>\$13,425,000</u>** paid in lump sum contributions.

Ongoing monthly payments \$0.075 per saleable coal tonne + CPI – ongoing.
(FY19 almost \$600,000 allocated)



# Local spend

- Sponsorships and donations have been made to the:
  - Tamworth and Region (including Westpac Rescue Helicopter) for Jan Mar was ~\$64,830 including \$10,000 for regional Indigenous Art & Literacy Program
  - Narrabri area community for Jan Mar was ~\$35,400, and
  - Gunnedah area community for Jan Mar ~\$68,500
  - Ongoing VPA payments to Narrabri Shire Council.
  - Donations are targeted at Health, Education and Community Enhancement.
- Whitehaven has spent \$1.5 billion in the North West NSW economy since 2013.
- Whitehaven Vendors now have improved payment terms of 21 days.



# Next meeting –

August 2019



# THANK YOU

www.whitehavencoal.com.au



SR 17 Narrabri 35