

Minutes of the 12th Meeting of the Maules Creek Coal Community Consultative Committee Draft to be confirmed at next meeting.

Meeting Held: 2nd March 2016, 2.00pm

Venue: Maules Creek Coal Mine, CHPP Boardroom, Therribri Rd, via Boggabri, NSW, 2382

Present: Mr John Turner, Chair for CCC (JT)

Ms Carolyn Nancarrow, Community Rep (CN)

Clr Lloyd Finlay, Narrabri Shire Council (LF)

Dr Kerri Clarke, Sustainable Living Armidale (KC)

Mr Peter Watson, Community Rep (PW)

Mr Craig Simmons, Area Manager Services (CS)

Mr Peter Wilkinson, General Manager - Maules Creek (PWi)

Mr Scott Mitchell, Environmental Superintendent – Maules Creek (SM)

Ms Sally Henry – Maules Creek Coal (SH)

Apologies: Mr Jason Davis, Community Rep (JD)

Mr Wayne Griffiths, Aboriginal Rep (WG)

Observer Nil
Guest Nil

1 Declaration of pecuniary or other interests

JT declared he received a fee for chairing the meeting

2 Confirmation of Last Minutes

JT proposed that the previous minutes be accepted. All in agreement.

3 Business Arising from Previous Minutes

- Environmental Trust Fund;
 - JT explained advised had commenced and that applications will close at the end of April 2016 for the Environmental Trust Fund. Proposed name is "Leards Forest Environmental Trust Incorporated". Joint meeting of the Trust & CCC proposed for the 19th May 2016
 - Enquiry received regarding progress with native seed collection and when results would be available for the CCC? KC expressed concern that some species could be missed if results are only distributed at the end of clearing. CS stated that contractors



conducting the collection will issue a full report at the end of clearing, which will state species, volume collected and availability.

4 Correspondence

- Approved Biodiversity Offset Strategy letter received.
- Letter from the Department of Planning and Environment approving the two new CCC members, Dr Kerri Clarke and Wayne Griffiths.

Questions arising from Correspondence:

Nil questions in relation to correspondence.

5 Company Reports and overview of activities

- PWi advised that the mine was operating well with production at 8.5Mtpa. A 3600 Excavator started in December 2015. Total of six excavators now operating across the site.
- Vegetation clearing programme has commenced during the period of time from mid February until April area to be cleared approx. 320ha, approximately half of this area is grassland.
- Current employee numbers totalled are approx 350. This number includes 53 indigenous & 48 female staff.
- Monitoring & Environmental update provided by CS with monitoring results provided for the
 previous quarter. Property names have been added to the locality map as per CCC request to
 assist identifying the monitoring locations.
- **Noise** no exceedances recorded. Attended monitoring has been carried out two nights a month. KC asked how these dates were chosen? CS replied that dates are chosen randomly by the independent consultants who look at the weather patterns and consultants availability.
- KC requested that monitoring results be supplied to CCC members a week or two prior to the
 meeting so the results could be looked at prior to the meeting, in case there are any questions.
 CS agreed to distribute data prior to the meeting.
- PW requested that wind direction be added to the results tables as a trial for one quarter. CS agreed that this would be possible.
- Discussion was had regarding people living within the zone of affectation. People located within this zone have the right under the project approval to request acquisition of their property. The government has rules and guidelines in place regarding this process. General purchasing price guide of around 1.5 above market value.
- Blasting 119 blast events between Oct-Dec 2015. Maximum decibels 112dB (Limit is 120dB). It was noted that 1 blast monitor incurred a hard drive failure. PW enquired if the damaged hard drive had been repaired. CS advising the hard drive has been repaired and unit is operational.
- Air Quality Dust Deposition Gauges annual average is currently below the criteria.
 - CN asked why in the early morning BC & Tarrawonga look clear and MCC always seems to have a haze around it?



PWi responded – plenty of water is being applied. The dust is inclined to hang in the air on still days. Pictures have been sent to the EPA by WHC in response to the complaints. MCC are moving 1 million cubic meters per week, and this does generate some dust. Extra water is distributed according to weather conditions and visual assessments. MCC are compliant with air quality limits and are undertaking measure to continually reduce dust from the site.

JT suggested that CN ring MCC or the Department when she has concerns with dust.

- KC suggested there could be a cumulative impact from all three mines in relation to dust.
- PW queried dust gauge graph. Is the blue line the initial weight and the red the residual after organic matter etc. is removed? CS took this on notice to provide further information post the meeting. The blue line (insoluble solids) is the insoluble matter that does not dissolve in water and is determined in a laboratory and the red line (ash residue) is the residual after the combustible matter is burnt off.
- High Volume Air Sampler samples taken every 6 days. Dust level increasing slightly as things dry out. (Farming & harvest possible contributors to spike in November 2015, westerly winds recorded at 25km/ph). TEOM at MC hall readings within approval criteria.
- Water Ground water monthly samples consistent readings from previous months.
 No wet weather discharges. Surface water monitoring conducted on dams, creeks & river.
- Rehabilitation nil mine rehabilitation planned for next two years, due to development of out of pit dump.
- **Complaints** summary of the number of complaints was discussed, with full complaint log being located on the WHC website.

6 General Business

A) VPA - Planning Agreement NSC

PW enquired into the transparency of the distribution of VPA funds. Paul Wearne NSC has
advised that details are available from NSC and potentially will be available from the council
website. LF indicated that interest earned from monies paid is generally absorbed by NSC
administration costs.

B) Bushfire Management Plan

- PW enquired about MCC Bushfire Management Plan. MCC have a Bushfire Management Plan which is not currently on the website. CS agreed to put MCC Bushfire Plan on the website.
- LF enquired as to the process to follow in the event of a fire. CS advised to ring emergency services and the local fire brigade as per normal and also to contact MCC.

C) Traffic

• PW thought the Traffic on Therribri Road had increased. CS advised that most employees are bussed to site and some employees may live in the Maules Creek area, however that road is



not to be used as a short cut to Narrabri. CS encouraged members to call MCC if there is unexplained traffic or mine vehicles using the back way to Narrabri and advise vehicle details so this can be addressed on site.

D) Security

- KC spoke of incidents where security has tailed her vehicle on visits to the area. She found this
 behaviour was intimidating. LF also spoke of spotlights being shone at him by security. CS put
 this behaviour down to increased protestors in the area, and security being vigilant.
- E) Blasting NW corner of site (Questions put forward by CN on behalf of nearby property owners)
 - Blast 4/5th Feb "What went wrong". PWi responded EPA received a complaint and it is being investigated. Report is expected to be provided back to the EPA by 14th March 2016.
 - Safety Data Sheets (SDS) have been requested by property owners and have not been received. PWi responded that SDS are for people who handle the explosives prior to the blast. The composition of product changes after blasting. Gas monitors will be in place which will record any drift etc. NOx Fume is visible if it occurs.
 - Property owner feels they have been affected by fume despite MCC assuring them that fume has not been in the area. Numerous studies have been conducted in the Hunter on this subject.
 - "Why are MCC putting an additional monitor in now?" PWi explained that MCC has been requested to install fume monitors as a result of community complaints to DPE and EPA.
 - "What is the worst case scenario, health wise for neighbours?" Attention was drawn to the appendix at the back of the Blast Management Plan for information on health exposure levels referencing publically available guidelines.
 - PW requested data from WHC Monitors to the community and he enquired how the noise data compares to predicted modelling "Can the community have access to results from the gas monitors on site?" MCC to respond next meeting.
 - Further consideration is given by MCC to determine whether blasting proceeds when winds are below 1.5m/s or above 8m/s as stated in the Blast Management Plan.
 - A request for a clause supplied by local resident was tabled to go in the Blast Management Plan with reference to wind direction.

F) Mining & Agriculture

• MCC are willing to put monitors on neighbouring properties if requested. MCC are happy for the audit process to be monitored independently (EPA).

G) Tree Clearing

- Query received regarding vegetation clearing. MCC advised clearing stops when the temperature is over 35C°. Temperature is measured at the onsite meteorological station on the mine site.
- MCC advised that up to 28 ecologists on site at one time, depending on the work load, undertaking daytime and evening surveys. Enquiry tabled regarding source of ecologist. CS advised ecologists are from various locations and are provided by an external consultant
- H) General



- Letter tabled by CN by community member. MCC to review and provide a response to the letter.
- KC enquired about Lawler's Well. CS responded that it is not in this year's mine footprint.
- Joint meeting next quarter between Leards Forest Environmental Trust and the CCC. CCC meeting invitations are sent by email as well as by post.
- CS advised that there will be exploration works north of the project in the A346 on 'Wollondilly'
 that is WHC owned land
- MOP was approved in Feb 2016. Two year MOP which is available for viewing on the website.
- CS distributed documents published by the Department on the draft CCC Committee Guidelines.
- CN put forward a request for MCC to consider supporting local business's in Boggabri where possible.

Next meeting

Time for next meeting: 2pm

Proposed dates for 2016 meetings scheduled below

- 18 May 2016
- 10 August 2016
- 16 November 2016

Combined BTM CCC meeting 19 May 2016

Meeting Closed: 3.50pm

Maules Creek Coal Mine Community Consultative Committee Meeting #12

Environmental Monitoring Report Q4, October -December 2015

Noise Monitoring

Noise monitoring was undertaken at the locations as per the approved noise management plan on the 19th & 20th October, 23rd & 24th November and 7th & 8th December 2015. The measured noise level (LAeq15) attributed to Maules Creek Coal and applicable criteria for each location are shown in the Tables below. The results show that mine operations did not exceed the applicable LAeq15 criteria at any time.

Tables - LAeq, 15minute GENERATED BY MCC AGAINST OPERATIONAL EVENING AND NIGHT NOISE CRITERIA – OCTOBER TO DECEMBER 2015.

October Noise Monitoring - Evening & Night

		Time	Wind Speed	Rainfall	Criterion	Criterion	MCC LAeq	Exceedance
			m/s	mm	dB	Applies 1	dB 2,4	dB 3,4
NM1	20/10/2015	19:19	2	0	35	Yes	IA	Nil
NM1	20/10/2015	19:38	1.9	0	35	Yes	IA	Nil
NM1	19/10/2015	22:59	0.7	0	35	Yes	21	Nil
NM1	19/10/2015	23:16	0.6	0	35	Yes	24	Nil
NM2	19/10/2015	20:31	0.6	0	39	Yes	IA	Nil
NM2	19/10/2015	20:47	0.6	0	39	Yes	IA	Nil
NM2	20/10/2015	22:01	0.6	0	39	Yes	IA	Nil
NM2	20/10/2015	22:17	0.3	0	39	Yes	IA	Nil
NM3	19/10/2015	18:58	1.8	0	35	Yes	IA	Nil
NM3	19/10/2015	19:14	1.1	0	35	Yes	IA	Nil
NM3	20/10/2015	23:32	0.3	0	35	Yes	IA	Nil
NM3	20/10/2015	23:48	0.2	0	35	Yes	IA	Nil
NM4	20/10/2015	20:12	0.3	0	35	Yes	IA	Nil
NM4	20/10/2015	20:28	0.2	0	35	Yes	IA	Nil
NM4	19/10/2015	22:00	0.4	0	35	Yes	15	Nil
NM4	19/10/2015	22:31	0.2	0	35	Yes	NM	Nil
NM5	20/10/2015	18:38	3.7	0	35	No	IA	NA
NM5	20/10/2015	18:54	2.1	0	35	Yes	IA	Nil
NM5	19/10/2015	23:42	0.3	0	35	Yes	24	Nil
NM5	19/10/2015	23:59	0.4	0	35	Yes	22	Nil
NM6	19/10/2015	19:45	0.7	0	35	Yes	IA	Nil
NM6	19/10/2015	20:01	0.4	0	35	Yes	IA	Nil
NM6	20/10/2015	22:47	0.6	0	35	Yes	IA	Nil
NM6	20/10/2015	23:03	0.6	0	35	Yes	IA	Nil

November Noise Monitoring – Evening & Night

		Time	Wind Speed	Rainfall	Criterion	Criterion	MCC LAeq	Exceedance
			m/s	mm	dB	Applies 1	dB 2,4	dB 3,4
NM1	24/11/2015	19:26	1.2	0	35	Yes	IA	Nil
NM1	24/11/2015	19:44	0.9	0	35	Yes	IA	Nil
NM1	23/11/2015	23:01	0.6	0	35	Yes	26	Nil
NM1	23/11/2015	23:19	0.8	0	35	Yes	27	Nil
NM2	23/11/2015	20:25	2.1	0	39	Yes	21	Nil
NM2	23/11/2015	20:43	1.6	0	39	Yes	24	Nil
NM2	24/11/2015	22:05	0.5	0	39	Yes	19	Nil
NM2	24/11/2015	22:22	0.6	0	39	Yes	21	Nil
NM3	23/11/2015	19:30	3.5	0	35	No	IA	NA
NM3	23/11/2015	21:14	1.7	0	35	Yes	24	Nil
NM3	24/11/2015	23:34	0.4	0	35	Yes	23	Nil
NM3	24/11/2015	23:51	0.6	0	35	Yes	21	Nil
NM4	24/11/2015	20:54	0.6	0	35	Yes	IA	Nil
NM4	24/11/2015	21:12	0.4	0	35	Yes	IA	Nil
NM4	23/11/2015	22:09	1	0	35	Yes	27	Nil
NM4	23/11/2015	22:27	1.1	0	35	Yes	29	Nil
NM5	24/11/2015	20:07	0.3	0	35	Yes	IA	Nil
NM5	24/11/2015	20:25	0.3	0	35	Yes	IA	Nil
NM5	23/11/2015	23:46	0.8	0	35	Yes	28	Nil
NM5	24/11/2015	0:04	0.6	0	35	Yes	27	Nil
NM6	23/11/2015	19:57	3.1	0	35	No	IA	NA
NM6	23/11/2015	21:39	1.2	0	35	Yes	20	Nil
NM6	24/11/2015	24/11/2015 22:49		0	35	Yes	IA	Nil
NM6	24/11/2015 23:06		0.5	0	35	Yes	17	Nil

December Noise Monitoring – Evening & Night

		Time	Wind Speed	Rainfall	Criterion	Criterion	MCC LAeq	Exceedance
			m/s	mm	dB	Applies 1	dB 2,4	dB 3,4
NM1	7/12/2015	20:48	1.9	0	35	Yes	IA	Nil
NM1	7/12/2015	21:07	2.5	0	35	Yes	IA	Nil
NM1	7/12/2015	22:44	0.6	0	35	Yes	<20	Nil
NM1	7/12/2015	22:59	1.1	0	35	Yes	<20	Nil
NM2	7/12/2015	19:24	1.2	0	39	Yes	IA	Nil
NM2	7/12/2015	19:40	1.3	0	39	Yes	IA	Nil
NM2	8/12/2015	22:03	1.1	0	39	Yes	<20	Nil
NM2	8/12/2015	22:28	0.8	0	39	Yes	<20	Nil
NM3	7/12/2015	18:11	1.3	0	35	Yes	IA	Nil
NM3	8/12/2015	21:31	0.8	0	35	Yes	IA	Nil
NM3	8/12/2015	23:49	2.8	0	35	Yes	<20	Nil
NM3	9/12/2015	0:05	3.5	0	35	No	<20	NA
NM4	7/12/2015	20:05	1.4	0	35	Yes	IA	Nil
NM4	7/12/2015	20:21	1.1	0	35	Yes	IA	Nil
NM4	7/12/2015	23:44	2.3	0	35	Yes	<20	Nil
NM4	7/12/2015	23:59	2.3	0	35	Yes	IA	Nil
NM5	7/12/2015	21:30	1	0	35	Yes	IA	Nil
NM5	7/12/2015	21:45	0.6	0	35	Yes	IA	Nil
NM5	7/12/2015	22:01	0.3	0	35	Yes	IA	Nil
NM5	7/12/2015	22:16	0.3	0	35	Yes	IA	Nil
NM6	7/12/2015	18:38	2.1	0	35	Yes	IA	Nil
NM6	7/12/2015	18:55	2.2	0	35	Yes	IA	Nil
NM6	8/12/2015	2/2015 22:55		0	35	Yes	IA	Nil
NM6	8/12/2015	8/12/2015 23:10		0	35	Yes	IA	Nil

In addition to the 15 minute average for Day Evening and Night, the Maules Creek Coal (MCC) EPL20221 also has a '1 Minute - Night' criteria (LA1) that applies from 10pm to 7am Monday to Saturday & 10pm 8am Sundays and Public Holidays. The results for the LA1 monitoring are shown below in Table 2. The results show that mine operations did not exceed the applicable LA1 criteria at any time.

Tables – LA1, 1minute GENERATED BY MCC AGAINST OPERATIONAL EVENING NOISE CRITERIA – OCTOBER TO DECEMBER 2015.

October Noise Monitoring - Night

		October						
L	\1 (1min)	Time	Wind Speed	Rainfall	Criterion	Criterion	MCC L _{A1(1min)}	Exceedance
			m/s	mm	dB	Applies	dB	dB 3,4
NM1	19/10/2015	22:59	0.7	0	45	Yes	23	Nil
NM1	19/10/2015	23:16	0.6	0	45	Yes	30	Nil
NM2	20/10/2015	22:01	0.6	0	45	Yes	IA	Nil
NM2	20/10/2015	22:17	0.3	0	45	Yes	IA	Nil
NM3	20/10/2015	23:32	0.3	0	45	Yes	IA	Nil
NM3	20/10/2015	23:48	0.2	0	45	Yes	IA	Nil
NM4	19/10/2015	22:00	0.4	0	45	Yes	17	Nil
NM4	19/10/2015	22:31	0.2	0	45	Yes	NM	Nil
NM5	19/10/2015	23:42	0.3	0	45	Yes	30	Nil
NM5	19/10/2015	23:59	0.4	0	45	Yes	30	Nil
NM6	20/10/2015	22:47	0.6	0	45	Yes	IA	Nil
NM6	20/10/2015	23:03	0.6	0	45	Yes	IA	Nil

November Noise Monitoring - Night

100		November						
LA	1 (1min)	Time	Wind Speed	Rainfall	Criterion	Criterion	MCC L _{A1(1min)}	Exceedance
			m/s	mm	dB	Applies	dB	dB 3,4
NM1	23/11/2015	23:01	0.6	0	45	Yes	32	Nil
NM1	23/11/2015	23:19	0.8	0	45	Yes	34	Nil
NM2	24/11/2015	22:05	0.5	0	45	Yes	26	Nil
NM2	24/11/2015	22:22	0.6	0	45	Yes	27	Nil
NM3	24/11/2015	23:34	0.4	0	45	Yes	27	Nil
NM3	24/11/2015	23:51	0.6	0	45	Yes	25	Nil
NM4	23/11/2015	22:09	1	0	45	Yes	34	Nil
NM4	23/11/2015	22:27	1.1	0	45	Yes	33	Nil
NM5	23/11/2015	23:46	0.8	0	45	Yes	33	Nil
NM5	24/11/2015	0:04	0.6	0	45	Yes	33	Nil
NM6	24/11/2015	22:49	0.3	0	45	Yes	IA	Nil
NM6	24/11/2015	23:06	0.5	0	45	Yes	20	Nil

December Noise Monitoring – Night

	•	December						
LA	1 (1min)	Time	Wind Speed	Rainfall	Criterion	Criterion	MCC L _{A1(1min)}	Exceedance
			m/s	mm	dB	Applies	dB	dB 3,4
NM1	7/12/2015	22:44	0.6	0	45	Yes	<20	Nil
NM1	7/12/2015	22:59	1.1	0	45	Yes	<20	Nil
NM2	8/12/2015	22:03	1.1	0	45	Yes	<20	Nil
NM2	8/12/2015	22:28	0.8	0	45	Yes	<20	Nil
NM3	8/12/2015	23:49	2.8	0	45	Yes	<25	Nil
NM3	9/12/2015	0:05	3.5	0	45	No	<20	NA
NM4	7/12/2015	23:44	2.3	0	45	Yes	<20	Nil
NM4	7/12/2015	23:59	2.3	0	45	Yes	IA	Nil
NM5	7/12/2015	22:01	0.3	0	45	Yes	IA	Nil
NM5	7/12/2015	22:16	0.3	0	45	Yes	IA	Nil
NM6	8/12/2015	22:55	0.9	0	45	Yes	IA	Nil
NM6	8/12/2015	23:10	0.9	0	45	Yes	IA	Nil

Evening LAeq15min Night LAeq15min, Night LA1min

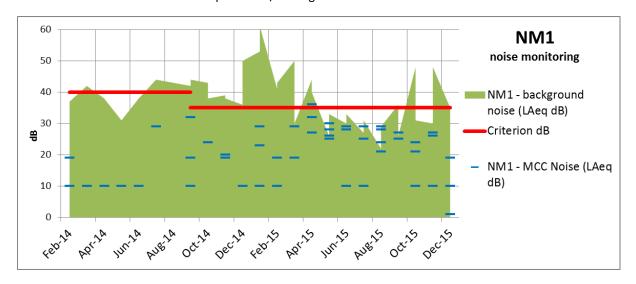
Notes:

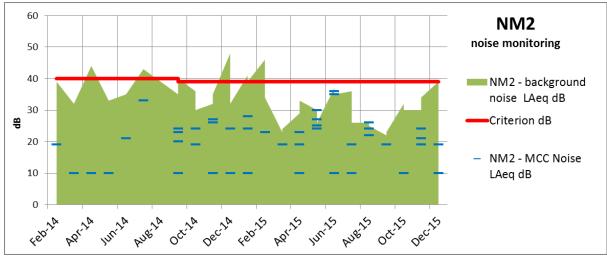
- 1. Noise emission limits do not apply during periods of rainfall or wind speeds greater than 3 metres per second (at 10 metres) as such a No will appear in Criteria Applies Column;
- 2. Estimated or measured LAeq,15minute attributed to Maules Creek Coal (MCC);
- 3. Estimated or measured LA1,1minute attributed to Maules Creek Coal (MCC);
- 4. NA in exceedance column means atmospheric conditions outside those specified in project approval and criterion is not applicable;
- 5. IA Inaudible
- 6. NM Not measurable

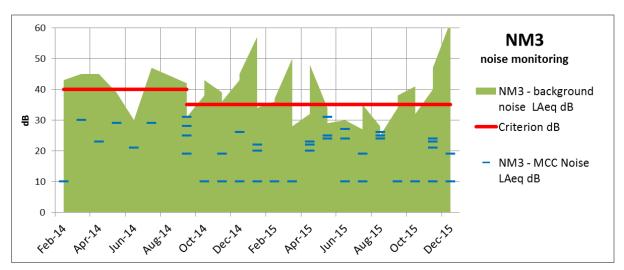
Attended Noise Monitoring

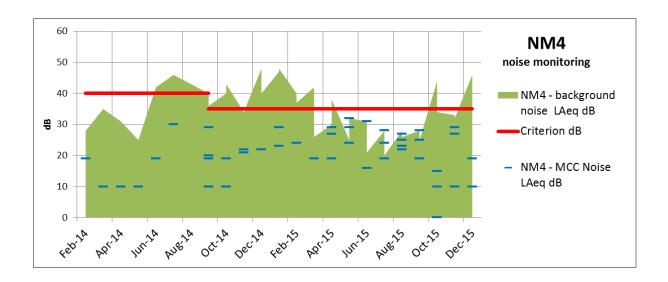
The following six (6) figures below show the 'attended' noise monitoring results recorded since construction began in earnest in January 2014.

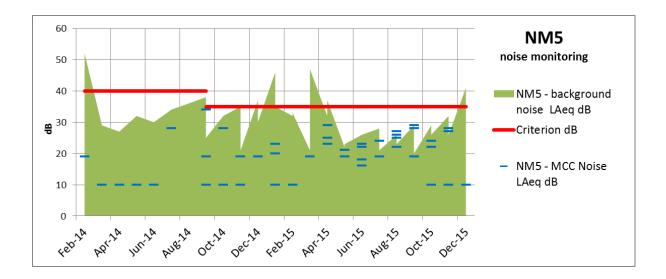
Green shading shows the $LA_{eq\ (15minute)}$ background noise and the blue dash is the portion of the L_{Aeq} likely attributed to the mine according to the sound engineer. The criteria shown in red, was updated to align with the transition from construction to operations / mining.

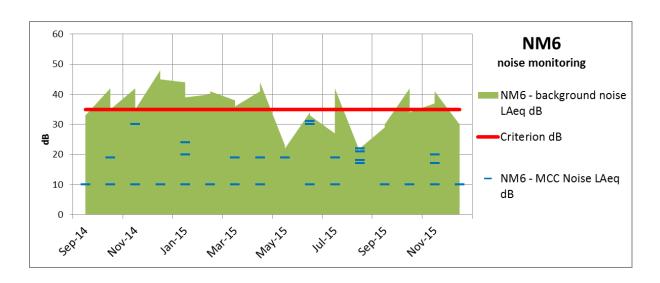












Blast Monitoring

Mine operations commenced in August 2014 and there have been 119 blast events to date (at 31th December 2015). All operational blast events have been within the applicable Noise and Ground Vibration limits set out in the Project Approval.

All blast monitoring results have been within the MCC EPL limits. During December a hardware failure occurred on BM2.

Table - Blast Results Summary Quarter 4 2015

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations	Noise	dB (Lin Peak)	All	28	99.6	112.3	120	No
Blasts	Vibration	mm/s	All	28	0.21	0.71	10	No

Air Quality

Deposited Dust

Table - Deposited Dust Results *

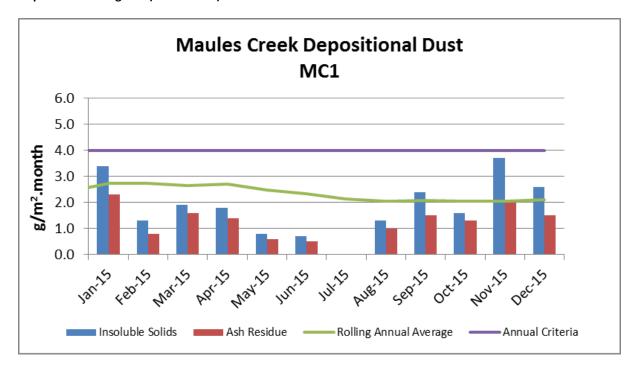
Month	MC1	MC2	MC3	MC4
Jan-15	3.4	2.4	3.2	1.8
Feb-15	1.3	0.7	0.9	1.5
Mar-15	1.9		3.2	1.7
Apr-15	1.8	14.9	2.6	2.0
May-15	0.8	2.1	1.3	0.7
Jun-15	0.7	0.9	0.5	1.2
Jul-15		1.0	0.8	0.8
Aug-15	1.3	0.5	0.5	0.4
Sep-15	2.4	0.6	0.5	0.7
Oct-15	1.6	1.7	0.3	0.4
Nov-15	3.7	3.7	1.4	3.1
Dec-15	2.6	2.0	1.4	2.0
Annual Avg	2.10	2.77	1.38	1.36
Project Avg 2010 - 2015	2.21	2.13	1.59	1.33

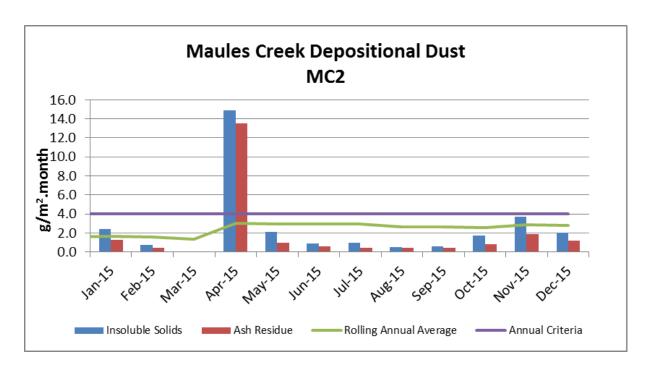
^{*} Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated (insect larvae, bird droppings, vegetation etc.).

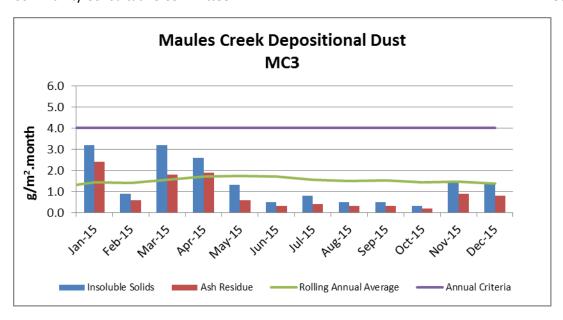
One deposited dust gauge (DDG) result at MC02 Q2 2015 shown in Table above, was above the limit of 4gm/m²/month. MC02 is located at Fairfax Public School – Maules Creek. MC02 was placed out on the 11th March and collected again on the 10th April 2015 for analysis. This sample window also captures the Maules Creek Campdraft held at the Community Hall beside the Fairfax Public School on the weekend of the 28th & 29th March 2015. The elevated dust generated by the Maules Creek Campdraft was also picked up by the Maules Creek Coal PM10 dust monitoring station TEOM1 500m east. All MC02 results since this event have returned to the normal levels below the 4gm/m²/month.

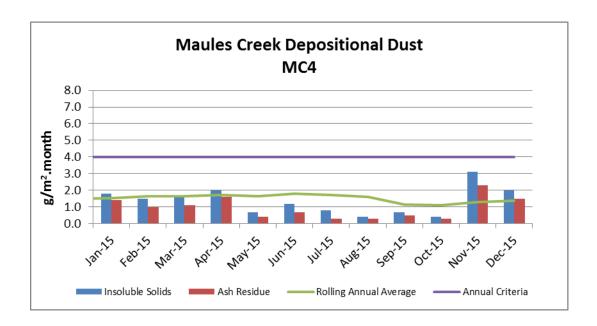
All other results including the Annual Average and Project Averages are below 4gm/m²/month.

Deposited Dust Figures (MC1 - MC4)







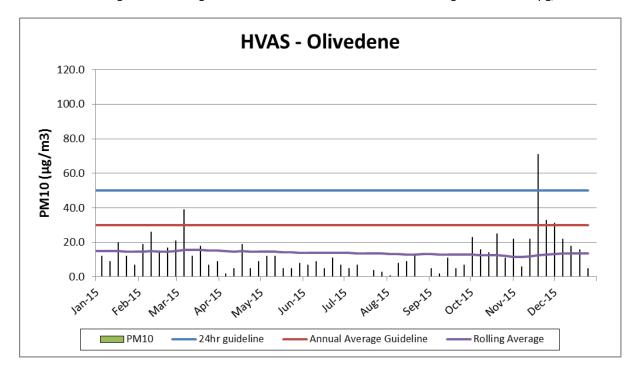


High Volume Air Sampling (HVAS)

The HVAS is located on the 'Olivedene' property on Therribri Road since September 2014. Olivedene is a mine owned property.

On the 19th November 2015, the HVAS recorded a PM10 result of $71\mu\text{g/m3}$ which is above the 24 hour criteria of 50 $\mu\text{g/m3}$. However the annual average remained within the relevant criteria. An investigation revealed that a number of localised farming activities in the vicinity were observed that is likely to have contributed to this reading. In addition, a review of the MCCM AWS showed strong westerly winds at this time, concluding the result was unlikely to be a result of MCC associated activities.

HVAS PM10 Rolling Annual Average results remain well below the Annual Average Guideline 30 μg/m³.

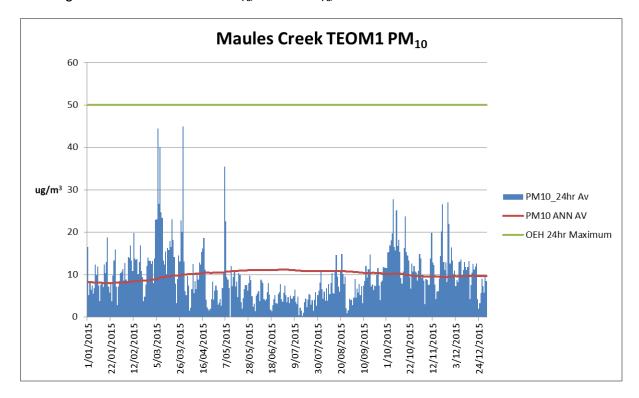


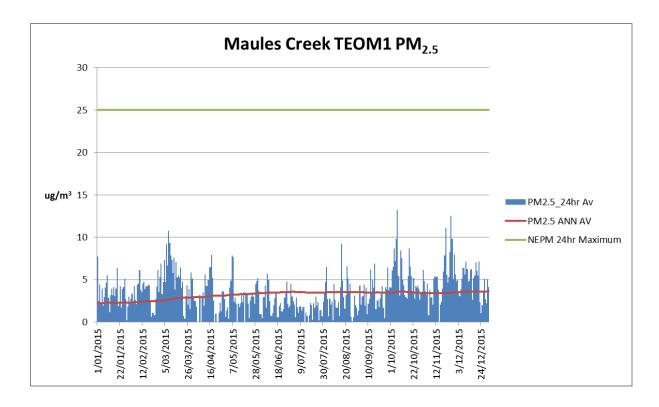
TEOM - PM₁₀ Results

The annual average for PM_{10} results at the Maules Creek Coal TEOM, is significantly below the applicable NEPM / OEH maximum annual average criteria of $30.0\mu g/m^3$ (at 31^{th} December 2015). The PM_{10} results have remained below the criteria since the TEOM was commissioned in November 2011 with exception for the regional dust event of November 15^{th} 2014. The TEOM also captures continuous measurements of PM_{course} , $PM_{2.5}$, and Meteorology which are all available to the mine in real time. The only periods when the TEOM is offline is during scheduled system maintenance and regional power failures.

The following figures show the TEOM particulate matter results (PM₁₀, PM_{2.5}) for the previous 12 months. The two images illustrate that particulate matter 'Annual Averages'

TEOM Figures – Particulate Matter $PM_{10\mu g/m3}$ and $PM_{2.5\mu g/m3}$





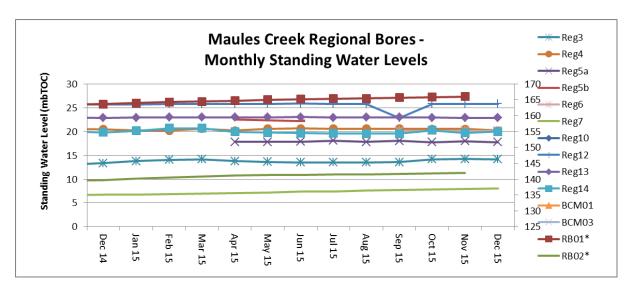
Water Monitoring

Ground Water

Groundwater monitoring results in open / standpipe piezometers show levels to be currently stable. 'RB' and 'Reg' series bores were installed between Q4 2013 and Q1 2014. BCM01, BCM03, Reg10 are shallow bores which have been dry since construction in 2013.

Table 5 - Groundwater Level

SWL	RB01*	RB02*	RB05	Reg3	Reg4	Reg5a	Reg5b	Reg6	Reg7	Reg10	Reg12	Reg13	Reg14	BCM01	ВСМ03
Dec-14	163.67	139.75	56.3	13.36	20.48				6.69		25.64	22.87	19.85		
Jan-15	163.95	140.1	55.83	13.81	20.19				6.76		25.72	22.94	20.14		
Feb-15	164.27	140.47	55.98	14.05	20.23				6.85		25.78	23	20.67		
Mar-15	164.42	140.77	56.5	14.18	20.57				6.93		25.77	22.97	20.67		
Apr-15	164.69	141.19	55.6	13.8	20.23	17.79	22.52		7.04		25.79	22.97	19.95		
May-15	164.99	141.24	56.78	13.6	20.6	17.82			7.19		25.81	22.99	19.77		
Jun-15	165.22	141.35	56.94	13.53	20.64	17.84	22.22		7.35		25.85	23.01	19.65		
Jul-15	165.36	141.44	56.97	13.49	20.58	18.07			7.41		25.8	22.94	19.59		
Aug-15	165.42	141.43	57.08	13.52	20.61	17.83			7.58		25.83	22.99	19.57		
Sep-15	165.68	141.69	57.2	13.54	20.58	18.04		20.13	7.71		22.84	22.96	19.54		
Oct-15	165.87	141.82	57.35	14.17	20.55	17.78		20.16	7.87		25.81	22.93	20.27		
Nov-15	166	141.93	57.4	14.22	20.54	17.96		20.15	7.93		25.8	22.89	19.74		
Dec-15			57.57	14.16	20.18	17.76		20.17	8.03		25.83	22.85	20		



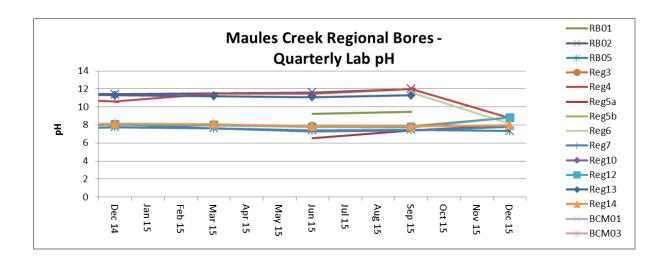
^{*} RB01 & RB02 bore depths are listed on the secondary axis.

Acidity / Alkalinity (pH)

Baseline groundwater conditions are still being established, however, 3 bores RB02a, Reg4 and Reg13 show elevated pH levels (above pH 8.5) this has been determined to be a result of low recharge volumes within these bores since the drilling and installation. The pH levels dropped at Reg 4 and Reg 6 from above 11 to below 9 in the December monitoring campaign. The two deep bores RB01a and RB02a were successfully sampled during the September and December monitoring campaign.

Table – Groundwater Lab pH

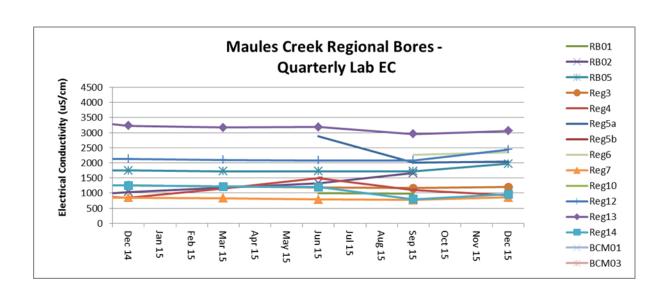
Lab pH	RB01	RB02	RB05	Reg3	Reg4	Reg5a	Reg5b	Reg6	Reg7	Reg10	Reg12	Reg13	Reg14	BCM01	ВСМ03
Dec-14		11.4	7.77	8.05	10.6				8.11		8.04	11.3	8.14		
Mar-15			7.63	7.98	11.5				7.61		7.99	11.2	8.09		
Jun-15	9.26	11.6	7.42	7.91	11.5	6.54			7.31		7.78	11.1	7.85		
Sep-15	9.49	12	7.47	7.84	12	7.4		11.6	7.41		7.76	11.3	7.85		
Dec-15			7.32	8.83	8.77	7.95		8.15	7.79		8.82		7.95		



Electrical Conductivity

Laboratory conductivity (EC) levels are all within historic groundwater EC range of $500_{\mu s/cm}$ to $2500_{\mu s/cm}$ with exception for Reg13.

Lab EC	RB01	RB02	RB05	Reg3	Reg4	Reg5a	Reg5b	Reg6	Reg7	Reg10	Reg12	Reg13	Reg14	BCM01	BCM03
Dec-14		1040	1750	1260	854				853		2130	3230	1250		
Mar-15			1720	1220	1160				834		2100	3170	1220		
Jun-15	999	1330	1720	1190	1500	2890			793		2080	3190	1200		
Sep-15	979	1660	1720	1170	1110	2010		2270	772		2080	2960	797		
Dec-15			1970	1200	925	2040	, and the second	2360	860	, and the second	2440	3060	959		



Wet Weather Discharge Sampling

There were no wet weather discharge events during Q4 2015 (October to December).

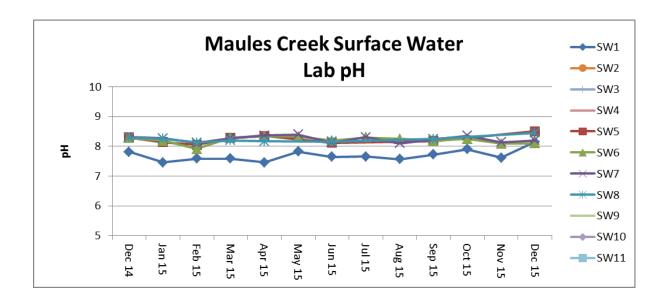
Surface Water - Creeks and Rivers

Routine surface water monitoring is conducted in surrounding Creeks and Rivers on a monthly basis and pH, EC and TSS are shown in the tables and figures below.

Acidity / Alkalinity (pH)

Laboratory pH in creeks and rivers surrounding the project are all trending within the ANZECC acceptable range for Irrigation, Ecosystem Health and Recreation. Back Creek and upper Maules Creek are ephemeral and rarely contain flowing water.

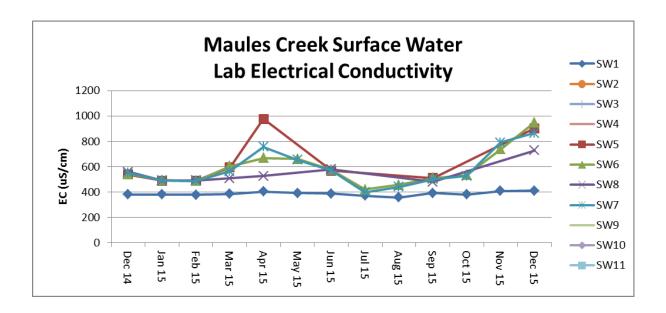
Lab pH	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10	SW11
16/12/2014	7.81				8.3	8.28	8.31	8.3			
14/01/2015	7.46				8.14	8.19	8.27	8.26			
11/02/2015	7.59				8.05	7.91	8.11	8.13			
11/03/2015	7.59				8.28	8.29	8.28	8.2			
14/04/2015	7.46				8.35	8.34	8.37	8.17			
19/05/2015	7.82					8.33	8.4				
11/06/2015	7.65				8.12	8.19	8.12	8.16			
13/07/2015	7.66					8.3	8.31				
25/08/2015	7.57					8.25	8.1				
16/09/2015	7.73				8.18	8.19	8.24	8.25			
12/10/2015	7.9					8.25	8.36				
12/11/2015	7.62					8.09	8.14				
11/12/2015	8.15				8.5	8.1	8.2	8.46			



Electrical Conductivity

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

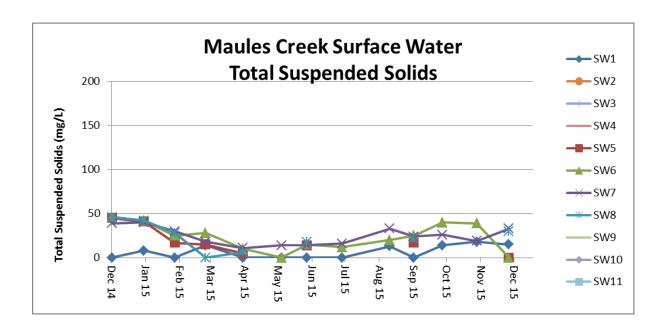
Lab EC	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10	SW11
16/12/2014	381				540	541	554	561			
14/01/2015	382				491	495	492	491			
11/02/2015	379				490	487	489	492			
11/03/2015	386				595	605	564	508			
14/04/2015	404				978	668	756	528			
19/05/2015	394					661	655				
11/06/2015	389				570	577	568	580			
13/07/2015	371					420	401				
25/08/2015	357					458	441				
16/09/2015	393				511	512	502	482			
12/10/2015	381					535	528				
12/11/2015	410					738	792				
11/12/2015	412				902	949	865	730			



Total Suspended Solids (TSS)

Surface TSS trends have remained consistent with SW5, SW6, SW7 and SW8 are also historically variable. SW5 to SW8 are stations along the Namoi River which is subject to regulated / variable flow regimes.

TSS	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10	SW11
16/12/2014	< 5				45	46	39	46			
14/01/2015	8				41	42	40	42			
11/02/2015	<5				17	25	30	28			
11/03/2015	14				15	28	18	<5			
14/04/2015	<5				5	10	11	6			
19/05/2015	<5					<5	14				
11/06/2015	<5				14	15	14	18			
13/07/2015	<5					12	16				
25/08/2015	13					20	33				
16/09/2015	<5				17	25	24	22			
12/10/2015	14					40	26				
12/11/2015	18					39	19				
11/12/2015	15				<5	<5	33	30			



Rehabilitation

Mining commenced in August 2014, as such rehabilitation has been restricted to areas associated with rail and infrastructure areas during this period. Mine rehabilitation trials and research have not yet commenced, but will do so when suitable trial areas are available within the mining areas.

Complaints

For full detail of each Complaint please refer to the Community Complaints Register published on the Whitehaven Coal – Maules Creek website.

https://www.whitehavencoal.com.au/environment/maules creek environmental management.cfm



Minutes of the 13th Meeting of the Maules Creek Coal Community Consultative Committee Draft to be confirmed at next meeting.

Meeting Held: 18 May 2016, 2.00pm

Venue: Maules Creek Coal Mine, CHPP Boardroom, Therribri Rd, via Boggabri, NSW, 2382

Present: Mr John Turner, Chair for CCC (JT)

Ms Carolyn Nancarrow, Community Rep (CN)

Ms Catherine Collyer, Councillor NSC (CC)

Dr Kerri Clarke, Sustainable Living Armidale (KC)

Mr Peter Wilkinson, General Manager - Maules Creek (PWi)

Mr Scott Mitchell, Environmental Superintendent – Maules Creek (SM)

Ms Lexie Frankham, Group Environmental Superintendent (LFk)

Ms Sally Henry - Maules Creek Coal (SH)

Apologies: Mr Jason Davis, Community Rep (JD)

Mr Wayne Griffiths, Aboriginal Rep (WG)

Mr Peter Watson, Community Rep (PW)

Observer Angela Felton (DP&E)

Nina Blynch (DP&E)

Patrick Murphy

Libby Laird

Guest Nil

1 Declaration of pecuniary or other interests

JT declared he received a fee for chairing the meeting

2 Confirmation of Last Minutes

JT proposed that the following amendments be made to the previous minutes.

- Section E page 4/5 dot point 6 Raw Data request. Change to "PW requested data from WHC Monitors to the community and he enquired how the noise data compares to predicted modelling".
- Page 5/5 Dot point 3 name of property to be listed "Wollondilly"



 Vegetation clearing programme had commenced – area to be cleared approx. 320ha, approximately half of this area is grassland. Request to insert period of time to the minutes mid-February to end of April 2016.

Vote to amend the minutes Yes 2 votes, No 2 votes. It was agreed to send the above paragraph to Peter Watson to ask if they are a true reflection of what he was seeking. On receipt of this advice JT will make a decision. WHC to send the letter to PW.

3 Business Arising from Previous Minutes

- Raw data requested by KC. How does it compare with the predicted modelling? SM responded stating data is available through a number of sources that are publically available such as the monthly EPL report, Annual Review on the WHC website and within the CCC packs provided. PWi mentioned published data is the raw data. Advised that unattended noise monitoring results are not required to be reported. PWi advised consideration would be provided to the request for this information and response provided at the next meeting.
- Vegetation clearing programme has commenced area to be cleared approx. 320ha, approximately half of this area is grassland. Please add period of time to the minutes Mid Feb to end of April
- Current employee numbers totalled are approx 350. This number includes 53 indigenous & 48 female staff. KC believes current numbers for females was 53 at previous meeting.
- Could the monitoring results be sent by email in advance of the next meeting rather than by post? Kerri Clarke's new postal address is PO Box 357 URALLA 2358.
- Discussion regarding people living within the zone of affectation. KC raised concerns regarding an alleged breach of confidentiality at the last meeting regarding personal negotiation details discussed.

4 Correspondence

- Letter tabled by KC from landholders PAC conditions of approval.
- JT advised LF provided notice of resignation from the Maules Creek CCC. JT suggested a
 note be sent to LF thanking his contribution to the CCC.
- Invitation to the blast fume information meeting from WHC to local north-west landholders for 29th April. Draft Blast Management Plan (BMP) was provided at the meeting for consultation.
 Comments on the BMP to be provided to WHC.
- Response letter to Julie Heiler from WHC. (Copy to be provided)

Questions arising from Correspondence:

CC asked what the Blast Fume meeting was about. PWi responded.

5 Company Reports and overview of activities



- PWi advised production was going well with production at 8-8.5Mtpa. Good safety performance to date. Maules Creek Coal mine was awarded "Mining Operation of the Year" at the recent NSW Minerals Council awards.
- Current employee numbers totalled are approximately 370 as of today. This number includes 48 indigenous & 54 female staff.
- Environmental monitoring result update for the previous quarter was provided by SM. PWi advised the CCC that CS resigned last month due to personal reasons.
- Noise results no exceedances recorded. CN questioned difference in results between what CCC members had received and what was available on the website. 31/03/16 website shows an exceedance not mentioned on mail out, also again on 19 June 2015. SM explained that there is a written explanation below the table on the mail out providing context. Not considered a valid result. Discussion around the NSW Industrial Noise Policy. WHC do not accept validity, however, they are reporting against the guidelines as requested.
- CN asked that it be noted that the exceedances are a concern to the community. In the eyes of the community these exceedances are considered a regulatory exceedance.
- KC tabled a letter from R. Druce requesting raw data for "Wongalea". This request for raw data is in addition to the request by PW. PWi will consider the request for raw data for "Wongalea" and come back to the CCC. Advice will need to be sought from the appropriate authorities.
- Two documents tabled by CCC members.
 - EPA letter to Roselyn Druce re: EPA Dust Sampling Results January 2016
 - Coal & Organic Petrology Services Report of Dust Samples
- Resident/s on Maules Creek Road, northern side, would like to raise the issue of increasing dust on their properties. Residents have requested MCC to look at ways to reduce the dust.
- KC requested that monitoring results be supplied to CCC members a week or two prior to the
 meeting so the results could be looked at prior to the meeting, in case there are any questions.
 WHC noted these were provided a week prior within post. Will continue to ensure information
 provided to CCC prior to the meeting as requested.
- Last meeting PW requested that wind direction be added to the results tables as a trial for one quarter for noise. CS agreed that this would be possible. SM included within this presentation. Agreement that wind direction results would continue to be provided.
- **Blasting** Request for wind directions to be added to all result tables. WHC will consider this request and advise at the next meeting.
 - KC request that data from the AWS be added to "OZ Forecast" real-time weather data so
 the community can view. WHC to consider this request, however no current requirement
 to undertake this.
- KC enquired about the contract for explosives. PWi explained that this is still out to tender.
- Water similar trends in monitoring results to previous months. WHC advised water storages and status of pumping and water allocation.
- **Complaints** summary of the number of complaints was displayed. Listed complaint consist of both direct complaints to WHC and received via the EPA.



6 General Business

A) Draft Blast Management Plan

- Comments are still being accepted. CC requested an additional 3 weeks to allow for review and additional comments to be submitted. Agreement from WHC for additional 3 week period.
- Comments on the Biodiversity Management Plan, which was provided after the last CCC
 meeting, are now due. Extension of two weeks requested by the CCC. Comments are to be
 provided to WHC. KC Requested 3 weeks be allowed. PWi to consider and decide and advise
 KC tomorrow.
- LF has asked how much consultation WHC has with the community regarding offsets. PWi
 explained that currently this is discussed with the CCC. A copy of the Biodiversity
 Management Plan has been delivered to a landholder within the zone, with another yet to be
 delivered. KC suggested further discussion is required with the community. PWi advised that
 the statutory requirement is to discuss with the CCC only.
- Letter/email tabled from LF Subject relating to MCC Biodiversity Management Plan in relation to the property "Thornfield". A response is requested from MC WHC.
- Submission for the Revised Blast Management Plan form landholders. Tabled for a response from WHC. PWi "Take it on notice WHC will respond". Letter will go with the submission to the department. JT asked the attending department members as a matter of course, will the department respond to the letters of submission? Response: The department will get back to John with a response so it can be tabled and circulated.

B) CCC Member Appointments

- LFk definition of interpretation of the CCC guidelines provided. WHC use the current CCC guidelines not the draft.
- KC suggested a review of attendance for current CCC members and write to those in default.
 The stipulation is for members not to miss more than four consecutive meetings. Rod Wolford has resigned.
- KC suggested WHC advertise for new CCC members and aboriginal representatives. JT provided comment on requirements of committee numbers. PWi responded that WHC would consider this.

Next meeting

Time for next meeting: 2pm

Proposed dates for 2016 meetings scheduled below

- 10 August 2016
- 16 November 2016

Meeting Closed: 3.35pm

Maules Creek Coal Mine Community Consultative Committee Meeting #13

Environmental Monitoring Report Q1, January - March 2016

Noise Monitoring

Noise monitoring was undertaken at the locations as per the approved noise management plan on the 18th & 19th January, 23rd & 24th February and 30th & 31th March 2016. The measured noise level (LAeq15) attributed to Maules Creek Coal and applicable criteria for each location are shown in the Tables below. The results show that mine operations did not exceed the applicable LAeq15 minute criteria at any time.

Tables - LAeq, 15minute GENERATED BY MCC AGAINST OPERATIONAL EVENING AND NIGHT NOISE CRITERIA – JANUARY TO MARCH 2016.

January Noise Monitoring - Evening & Night

		Time	Wind Speed	Rainfall	Criterion	Criterion	MCC LAeq	Exceedance
			m/s	mm	dB	Applies 1	dB 2,4	dB 3,4
NM1	19/01/2016	20:48	0.7	0	35	Yes	<20	Nil
NM1	19/01/2016	21:04	0.4	0	35	Yes	<20	Nil
NM1	18/01/2016	22:45	0.6	0	35	Yes	27	Nil
NM1	18/01/2016	23:00	0.5	0	35	Yes	28	Nil
NM2	18/01/2016	20:57	1.1	0	39	Yes	26	Nil
NM2	18/01/2016	21:13	1.4	0	39	Yes	25	Nil
NM2	19/01/2016	22:17	1.2	0	39	Yes	29	Nil
NM2	19/01/2016	22:37	1	0	39	Yes	31	Nil
NM3	18/01/2016	19:30	1.5	0	35	Yes	<30	Nil
NM3	18/01/2016	19:45	1.2	0	35	Yes	<30	Nil
NM3	19/01/2016	23:53	0.4	0	35	Yes	<25	Nil
NM3	20/01/2016	0:09	0.2	0	35	Yes	<25	Nil
NM4	19/01/2016	19:48	1.3	0	35	Yes	<20	Nil
NM4	19/01/2016	20:18	0.2	0	35	Yes	<20	Nil
NM4	18/01/2016	23:32	0.4	0	35	Yes	27	Nil
NM4	18/01/2016	23:48	0.2	0	35	Yes	26	Nil
NM5	19/01/2016	21:28	0.9	0	35	Yes	<20	Nil
NM5	19/01/2016	21:43	0.9	0	35	Yes	<20	Nil
NM5	18/01/2016	22:00	0.7	0	35	Yes	<20	Nil
NM5	18/01/2016	22:16	1	0	35	Yes	<25	Nil
NM6	18/01/2016	20:14	1.3	0	35	Yes	IA	Nil
NM6	18/01/2016	20:29	1.4	0	35	Yes	IA	Nil
NM6	19/01/2016	23:08	0.7	0	35	Yes	IA	Nil
NM6	19/01/2016	23:23	0.3	0	35	Yes	IA	Nil

February Noise Monitoring – Evening & Night

		Time	Wind Speed	Rainfall	Criterion	Criterion	MCC LAeq	Exceedance
			m/s	mm	dB	Applies 1	dB 2,4	dB 3,4
NM1	24/02/2016	20:37	0.2	0	35	Yes	IA	Nil
NM1	24/02/2016	20:54	0.4	0	35	Yes	IA	Nil
NM1	23/02/2016	23:39	0.7	0	35	Yes	26	Nil
NM1	23/02/2016	23:54	0.8	0	35	Yes	24	Nil
NM2	23/02/2016	21:18	0.9	0	39	Yes	26	Nil
NM2	23/02/2016	21:34	0.5	0	39	Yes	34	Nil
NM2	24/02/2016	22:14	0.3	0	39	Yes	IA	Nil
NM2	24/02/2016	22:31	0.2	0	39	Yes	<20	Nil
NM3	23/02/2016	19:49	1.9	0	35	Yes	IA	Nil
NM3	23/02/2016	20:06	1.8	0	35	Yes	IA	Nil
NM3	24/02/2016	23:41	0.6	0	35	Yes	IA	Nil
NM3	24/02/2016	23:57	0.4	0	35	Yes	IA	Nil
NM4	24/02/2016	19:53	1.2	0	35	Yes	IA	Nil
NM4	24/02/2016	20:09	0.4	0	35	Yes	IA	Nil
NM4	23/02/2016	22:15	0.4	0	35	Yes	30	Nil
NM4	23/02/2016	22:31	1.6	0	35	Yes	29	Nil
NM5	24/02/2016	21:26	0.3	0	35	Yes	<20	Nil
NM5	24/02/2016	21:41	0.5	0	35	Yes	<20	Nil
NM5	24/02/2016	0:19	0.7	0	35	Yes	<20	Nil
NM5	24/02/2016	0:34	1.7	0	35	Yes	<20	Nil
NM6	23/02/2016	20:34	2.2	0	35	Yes	IA	Nil
NM6	23/02/2016	20:50	2.5	0	35	Yes	<20	Nil
NM6	24/02/2016	22:58	0.4	0	35	Yes	IA	Nil
NM6	24/02/2016	23:14	0.7	0	35	Yes	IA	Nil

March Noise Monitoring – Evening & Night

		Time	Wind Speed	Rainfall	Criterion	Criterion	MCC LAeq	Exceedance
			m/s	mm	dB	Applies 1	dB 2,4	dB 3,4
NM1	31/03/2016	19:09	1.4	0	35	Yes	IA	Nil
NM1	31/03/2016	19:24	0.3	0	35	Yes	IA	Nil
NM1	30/03/2016	22:51	0.3	0	35	Yes	29	Nil
NM1	30/03/2016	23:10	0.7	0	35	Yes	27	Nil
NM2	31/03/2016	20:43	0.3	0	39	Yes	25	Nil
NM2	31/03/2016	20:59	0.2	0	39	Yes	<25	Nil
NM2	31/03/2016	1:37	1	0	39	Yes	29	Nil
NM2	31/03/2016	1:56	0.6	0	39	Yes	27	Nil
NM3	30/03/2016	19:53	1.6	0	35	Yes	<25	Nil
NM3	30/03/2016	20:08	1.4	0	35	Yes	<25	Nil
NM3	31/03/2016	22:43	0.7	0	35	Yes	<20	Nil
NM3	31/03/2016	22:58	1.1	0	35	Yes	<20	Nil
NM4	31/03/2016	19:53	0.6	0	35	Yes	<25	Nil
NM4	31/03/2016	20:16	0.6	0	35	Yes	<25	Nil
NM4	31/03/2016	0:15	0.4	0	35	Yes	31	Nil
NM4	31/03/2016	0:48	0.2	0	35	Yes	33	Nil
NM5	31/03/2016	18:29	1.9	0	35	Yes	IA	Nil
NM5	31/03/2016	18:44	1.6	0	35	Yes	IA	Nil
NM5	30/03/2016	22:00	0.9	0	35	Yes	29	Nil
NM5	30/03/2016	22:18	0.4	0	35	Yes	<30	Nil
NM6	30/03/2016	20:36	1.1	0	35	Yes	<20	Nil
NM6	30/03/2016	20:52	1.4	0	35	Yes	IA	Nil
NM6	31/03/2016	22:00	0.6	0	35	Yes	<20	Nil
NM6	31/03/2016	22:16	0.7	0	35	Yes	<20	Nil

In addition to the 15 minute average for Day Evening and Night, the Maules Creek Coal (MCC) EPL20221 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 at any time.

Tables – LA1, 1minute GENERATED BY MCC AGAINST OPERATIONAL EVENING NOISE CRITERIA – JANUARY TO MARCH 2016.

January Noise Monitoring - Night

		January						
L,	A1 (1min)	Time	Wind Speed	Rainfall	Criterion	Criterion	MCC L _{A1(1min)}	Exceedance
			m/s	mm	dB	Applies	dB	dB 3,4
NM1	18/01/2016	22:45	0.6	0	45	Yes	32	Nil
NM1	18/01/2016	23:00	0.5	0	45	Yes	35	Nil
NM2	19/01/2016	22:17	1.2	0	45	Yes	36	Nil
NM2	19/01/2016	22:37	1	0	45	Yes	37	Nil
NM3	19/01/2016	23:53	0.4	0	45	Yes	<25	Nil
NM3	20/01/2016	0:09	0.2	0	45	Yes	<25	Nil
NM4	18/01/2016	23:32	0.4	0	45	Yes	32	Nil
NM4	18/01/2016	23:48	0.2	0	45	Yes	34	Nil
NM5	18/01/2016	22:00	0.7	0	45	Yes	<25	Nil
NM5	18/01/2016	22:16	1	0	45	Yes	<25	Nil
NM6	19/01/2016	23:08	0.7	0	45	Yes	IA	Nil
NM6	19/01/2016	23:23	0.3	0	45	Yes	IA	Nil

February Noise Monitoring - Night

		February						
L,	A1 (1min)	Time	Wind Speed	Rainfall	Criterion	Criterion	MCC L _{A1(1min)}	Exceedance
			m/s	mm	dB	Applies	dB	dB 3,4
NM1	23/02/2016	23:39	0.9	0	45	Yes	31	Nil
NM1	23/02/2016	23:54	0.9	0	45	Yes	33	Nil
NM2	24/02/2016	22:14	0.1	0	45	Yes	IA	Nil
NM2	24/02/2016	22:31	0.3	0	45	Yes	<20	Nil
NM3	24/02/2016	23:41	1.1	0	45	Yes	IA	Nil
NM3	24/02/2016	23:57	0.3	0	45	Yes	IA	Nil
NM4	23/02/2016	22:15	0.3	0	45	Yes	36	Nil
NM4	23/02/2016	22:31	1.4	0	45	Yes	34	Nil
NM5	24/02/2016	0:19	0.8	0	45	Yes	29	Nil
NM5	24/02/2016	0:34	0.6	0	45	Yes	<20	Nil
NM6	24/02/2016	22:58	0.6	0	45	Yes	IA	Nil
NM6	24/02/2016	23:14	0.5	0	45	Yes	IA	Nil

March Noise Monitoring - Night

		March						
L,	A1 (1min)	Time	Wind Speed	Rainfall	Criterion	Criterion	MCC L _{A1(1min)}	Exceedance
			m/s	mm	dB	Applies	dB	dB 3,4
NM1	30/03/2016	22:51	0.2	0	45	Yes	35	Nil
NM1	30/03/2016	23:10	0.7	0	45	Yes	31	Nil
NM2	31/03/2016	1:37	1	0	45	Yes	36	Nil
NM2	31/03/2016	1:56	0.5	0	45	Yes	35	Nil
NM3	31/03/2016	22:43	0.5	0	45	Yes	<20	Nil
NM3	31/03/2016	22:58	0.8	0	45	Yes	<20	Nil
NM4	31/03/2016	0:15	0.6	0	45	Yes	40	Nil
NM4	31/03/2016	0:48	0.2	0	45	Yes	39	Nil
NM5	30/03/2016	22:00	0.7	0	45	Yes	34	Nil
NM5	30/03/2016	22:18	0.2	0	45	Yes	36	Nil
NM6	31/03/2016	22:00	1	0	45	Yes	<20	Nil
NM6	31/03/2016	22:16	0.3	0	45	Yes	<20	Nil

Evening LAeq15min Night LAeq15min, Night LA1min

Notes:

- 1. Noise emission limits do not apply during periods of rainfall or wind speeds greater than 3 metres per second (at 10 metres) as such a No will appear in Criteria Applies Column;
- 2. Estimated or measured LAeq,15minute attributed to Maules Creek Coal (MCC);
- 3. Estimated or measured LA1,1minute attributed to Maules Creek Coal (MCC);
- 4. NA in exceedance column means atmospheric conditions outside those specified in project approval and criterion is not applicable;
- 5. IA Inaudible
- 6. NM Not measurable

Two of the twenty-four measurements occurred during periods where:

- operational activities from MCCP were directly measurable (not "inaudible", "not measurable");
- noise levels were within 5 dB of the relevant criterion; and
- where meteorological conditions resulted in criteria applying (in accordance with the project approval).

These two measurements were further analysed for low-frequency noise against relevant 'Industrial Noise Policy' (INP) triggers. Where results in the following table are greater than the applicable low frequency modifying factor triggers due to activities at MCC, a 5 dB modifying factor correction is applied to the measured noise level. MCC is of the view that the prescribed methodology for the application of the low frequency modifying factor is invalid and unsuitable due to the nature of noise attenuation and large differentials between LAeq and LCeq at significant distances. The NSW Industrial Noise Policy requires the penalty to be applied in these instances, irrespective of actual low frequency affectation.

It should be noted that MCCM is currently undertaking an investigation into the cause of the modifying factor adjustment trigger exceedances. In addition, the draft Industrial Noise Guideline contains revised procedures for determining the application of modifying factor adjustments.

Table: LOW FREQUENCY NOISE MODIFYING FACTOR ASSESSMENT - MARCH 2016

		March					
Low Frequency		Time	MCCP only Laeq	Modifying factor correction	MCCP only LAeq with modifying factor correction applied	Criterion	Exceedance
			dB	dB	dB	dB	dB
NM4	31/03/2016	0:15	31	+5(INP)	36	35	1
NM4	31/03/2016	0:48	33	+5(INP)	38	35	3

Wind Direction During Attended Monitoring

Wind direction data is collected from the MCCM AWS. Wind data for the duration of the attended monitoring assessment, recorded at the MCCM AWS is presented in the Table below.

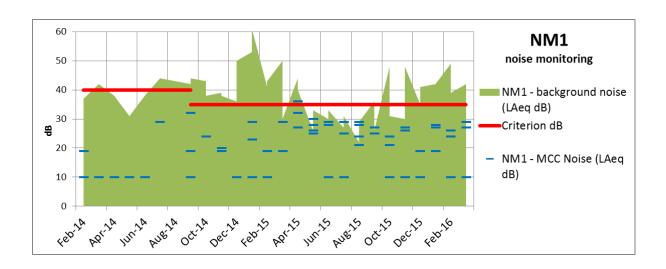
Table: Prevailing Wind Direction

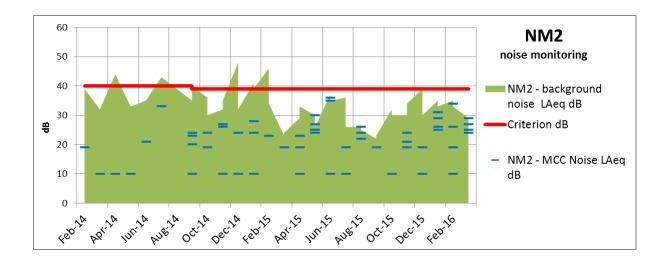
Date	Prevailing Wind Direction
30/3/2016	ESE
31/3/2016	ESE

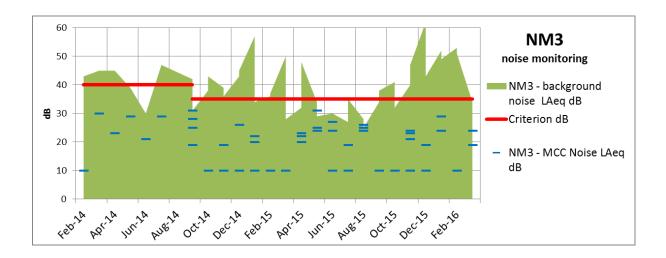
Attended Noise Monitoring

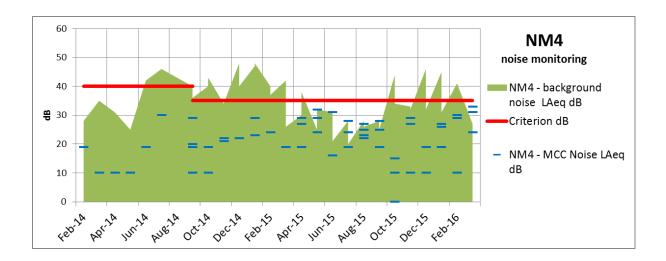
The following six (6) figures below show the 'attended' noise monitoring results recorded since construction began in earnest in January 2014.

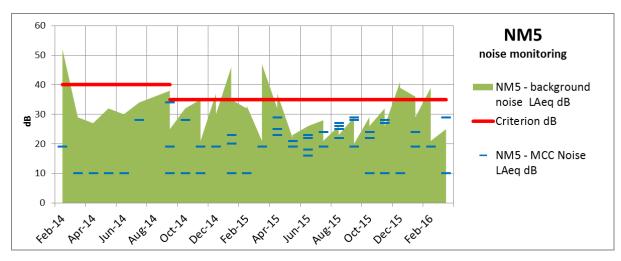
Green shading shows the LA_{eq} (15minute) background noise and the blue dash is the portion of the L_{Aeq} likely attributed to the mine according to the sound engineer. The criteria shown in red, was updated to align with the transition from construction to operations / mining.

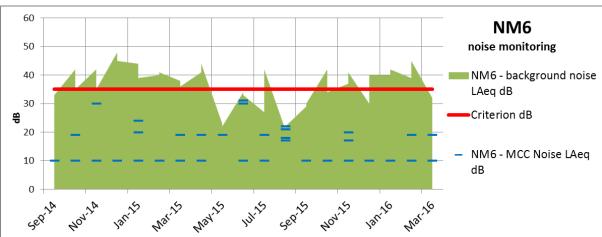












Blast Monitoring

There have been 15 blast events this year (at 31st March 2016). All operational blast events have been within the applicable Noise and Ground Vibration limits set out in the Project Approval.

All blast monitoring results have been within the MCC EPL limits.

Table – Blast Results Summary Quarter 1 2016

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations	Noise	dB (Lin Peak)	All	15	99.64	111.70	120	No
Blasts	Vibration	mm/s	All	15	0.32	1.36	10	No

Air Quality

Deposited Dust

Table - Deposited Dust Results *

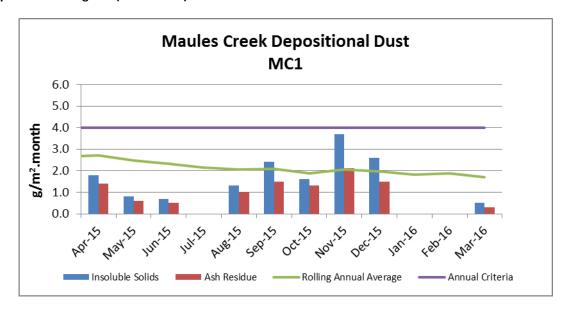
Month	MC1	MC2	MC3	MC4
Apr-15	1.8	14.9	2.6	2.0
May-15	0.8	2.1	1.3	0.7
Jun-15	0.7	0.9	0.5	1.2
Jul-15		1.0	0.8	8.0
Aug-15	1.3	0.5	0.5	0.4
Sep-15	2.4	0.6	0.5	0.7
Oct-15	1.6	1.7	0.3	0.4
Nov-15	3.7	3.7	1.4	3.1
Dec-15	2.6	2.0	1.4	2.0
Jan-16		2.0	0.6	1.2
Feb-16		1.9	0.9	1.1
Mar-16	0.5	1.8	1.0	0.5
Annual Avg	1.71	2.76	0.98	1.18
Project Avg 2010 - 2016	2.21	2.13	1.59	1.33

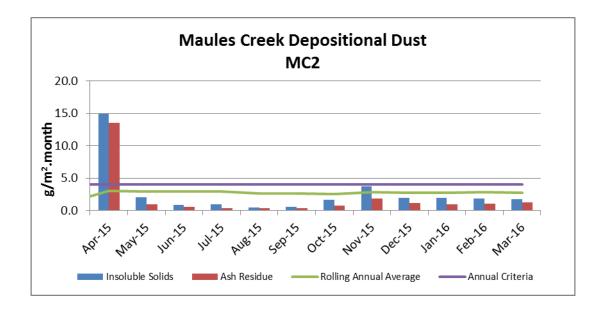
^{*} Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated (insect larvae, bird droppings, vegetation etc.).

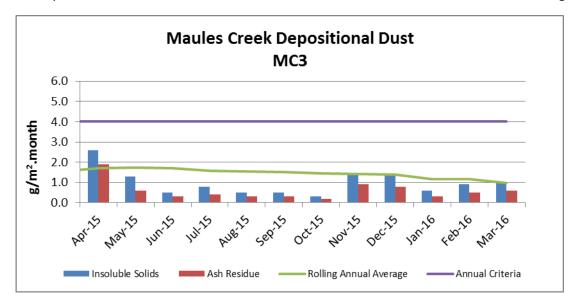
As per previous CCC monitoring reports, the elevated result in April 2015 was attributed to non-mining activities at the camp draft grounds on the 28th & 29th March 2015.

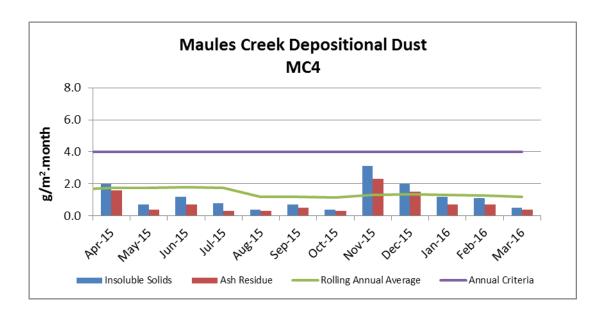
All other results including the Annual Average and Project Averages are below 4gm/m²/month.

Deposited Dust Figures (MC1 – MC4)







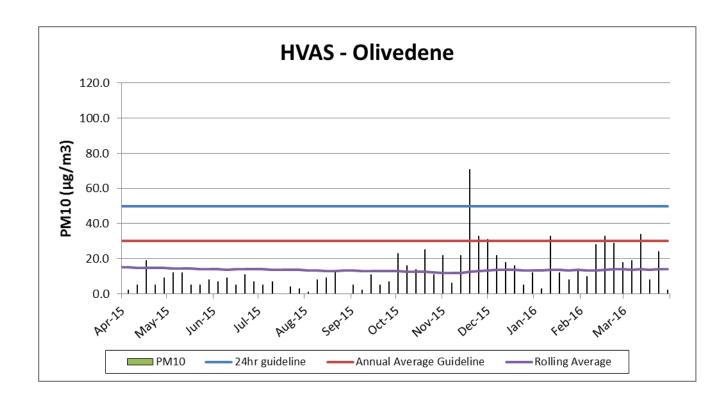


High Volume Air Sampling (HVAS)

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

On the 19th November 2015, the HVAS recorded a PM10 result of $71\mu g/m3$ which is above the 24 hour criteria of 50 $\mu g/m3$. However the annual average remained within the relevant criteria. An investigation revealed that a number of localised farming activities in the vicinity were observed that is likely to have contributed to this reading. In addition, a review of the MCCM AWS showed strong westerly winds at this time, concluding the result was not as a result of MCC associated activities.

HVAS PM10 Rolling Annual Average results remain well below the Annual Average Guideline 30 μg/m³.



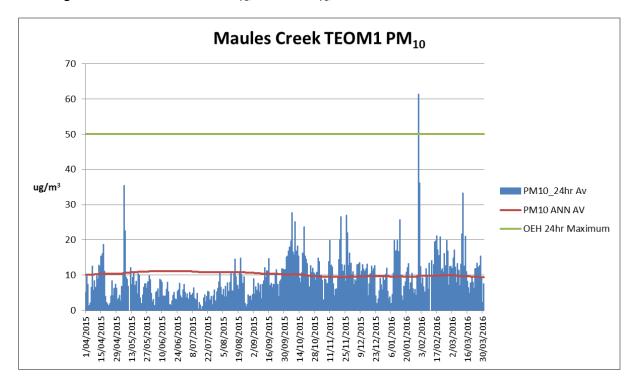
TEOM - PM₁₀ Results

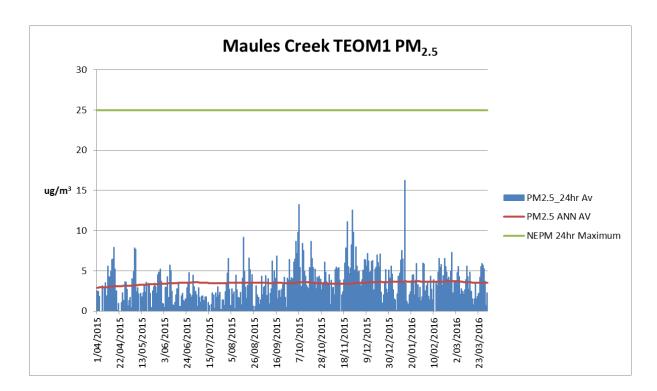
The annual average for PM_{10} results at the Maules Creek Coal TEOM, is significantly below the applicable NEPM / OEH maximum annual average criteria of $30.0 \mu g/m^3$ (at 31^{st} March 2015). The PM_{10} results have remained below this criteria since the TEOM was commissioned in November 2011. The TEOM also captures continuous measurements of PM_{course} , $PM_{2.5}$, and Meteorology which are all available to the mine in real time. The only periods when the TEOM is offline is during scheduled system maintenance and regional power failures.

One result was recorded above the PM_{10} OEH 24-hour maximum criteria of $50\mu g/m3$. On the 31^{st} January 2016, the TEOM recorded a PM_{10} result of $61.35\mu g/m3$. The annual average remained within the relevant criteria. An investigation was undertaken and it was determined the elevated recordings were as a result of a regional dust event and were not as a result of MCC associated activities. These results were similar to regional recordings.

The following figures show the TEOM particulate matter results (PM $_{10}$, PM $_{2.5}$) for the previous 12 months. The two images illustrate that particulate matter 'Annual Averages' remains well below the annual average PM $_{10}$ Criteria of 30 μ g/m3.

TEOM Figures – Particulate Matter $PM_{10\mu g/m3}$ and $PM_{2.5\mu g/m3}$





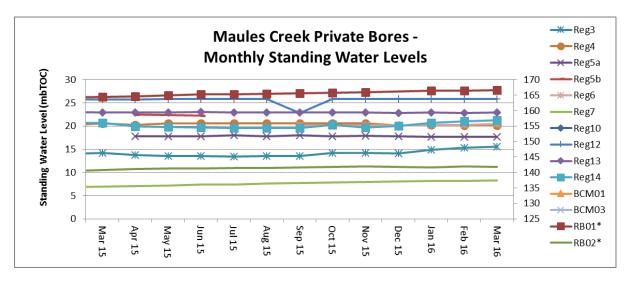
Water Monitoring

Ground Water

Groundwater monitoring results in open / standpipe piezometers show levels to be currently stable. 'RB' and 'Reg' series bores were installed between Q4 2013 and Q1 2014. BCM01, BCM03, Reg10 are shallow bores which have been dry since construction in 2013.

Table 5 - Groundwater Level

SWL	RB01*	RB02*	RB05	Reg3	Reg4	Reg5a	Reg5b	Reg6	Reg7	Reg10	Reg12	Reg13	Reg14	BCM01	BCM03
Apr-15	164.69	141.19	55.6	13.8	20.23	17.79	22.52		7.04		25.79	22.97	19.95		
May-15	164.99	141.24	56.78	13.6	20.6	17.82			7.19		25.81	22.99	19.77		
Jun-15	165.22	141.35	56.94	13.53	20.64	17.84	22.22		7.35		25.85	23.01	19.65		
Jul-15	165.36	141.44	56.97	13.49	20.58	18.07			7.41		25.8	22.94	19.59		
Aug-15	165.42	141.43	57.08	13.52	20.61	17.83			7.58		25.83	22.99	19.57		
Sep-15	165.68	141.69	57.2	13.54	20.58	18.04		20.13	7.71		22.84	22.96	19.54		
Oct-15	165.87	141.82	57.35	14.17	20.55	17.78		20.16	7.87		25.81	22.93	20.27		
Nov-15	166	141.93	57.4	14.22	20.54	17.96		20.15	7.93		25.8	22.89	19.74		
Dec-15			57.57	14.16	20.18	17.76		20.17	8.03		25.83	22.85	20		
Jan-16	166.4	141.66	57.25	14.9	20.21	17.71		20.25	8.15		25.86	22.91	20.76		
Feb-16	166.49	141.94	57.35	15.3	20.13	17.71		20.31	8.22		25.83	22.83	21.04		
Mar-16	166.7	141.85	57.45	15.59	20.17	17.71		20.43	8.29		25.85	22.89	21.24		



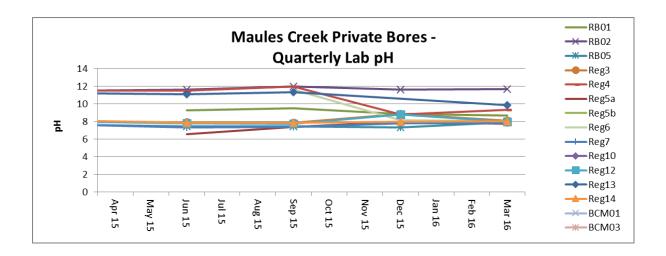
^{*} RB01 & RB02 bore depths are listed on the secondary axis.

Acidity / Alkalinity (pH)

Baseline groundwater conditions are still being established, however, 4 bores RB01, RB02a, Reg4 and Reg13 show elevated pH levels (above pH 8.5) this has been determined to be a result of low recharge volumes within these bores since the drilling and installation.

Table – Groundwater Lab pH

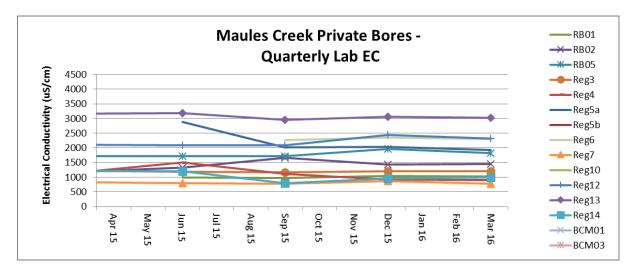
Lab pH	RB01	RB02	RB05	Reg3	Reg4	Reg5a	Reg5b	Reg6	Reg7	Reg10	Reg12	Reg13	Reg14	BCM01	ВСМ03
Mar-15			7.63	7.98	11.5				7.61		7.99	11.2	8.09		
Jun-15	9.26	11.6	7.42	7.91	11.5	6.54			7.31		7.78	11.1	7.85		
Sep-15	9.49	12	7.47	7.84	12	7.4		11.6	7.41		7.76	11.3	7.85		
Dec-15	8.87	11.6	7.32	8.83	8.77	7.95		8.15	7.79		8.82		7.95		
Mar-16	8.68	11.7	7.93	8.12	9.31	7.73		8.05	7.77		7.97	9.83	8.01		



Electrical Conductivity

Laboratory conductivity (EC) levels are all within historic groundwater EC range of $500_{\mu s/cm}$ to $2500_{\mu s/cm}$ with exception for Reg13.

Lab EC	RB01	RB02	RB05	Reg3	Reg4	Reg5a	Reg5b	Reg6	Reg7	Reg10	Reg12	Reg13	Reg14	BCM01	ВСМ03
Mar-15			1720	1220	1160				834		2100	3170	1220		
Jun-15	999	1330	1720	1190	1500	2890			793		2080	3190	1200		
Sep-15	979	1660	1720	1170	1110	2010		2270	772		2080	2960	797		
Dec-15	1040	1430	1970	1200	925	2040		2360	860		2440	3060	959		
Mar-16	1030	1460	1820	1210	896	1930		2300	788		2310	3020	983		



Wet Weather Discharge Sampling

There were no wet weather discharge events during Q1 2013 (January to March).

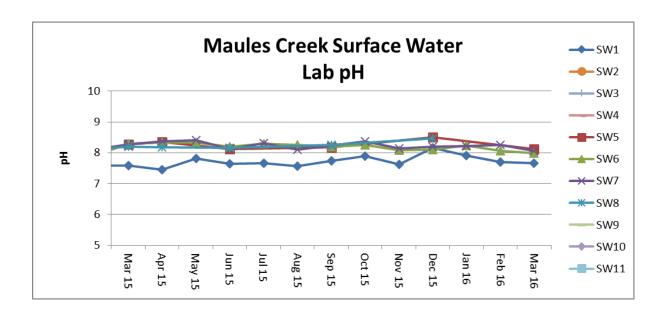
Surface Water - Creeks and Rivers

Routine surface water monitoring is conducted in surrounding Creeks and Rivers on a monthly basis and pH, EC and TSS are shown in the tables and figures below.

Acidity / Alkalinity (pH)

Laboratory pH in creeks and rivers surrounding the project are all trending within the ANZECC acceptable range for Irrigation, Ecosystem Health and Recreation. Back Creek and upper Maules Creek are ephemeral and rarely contain flowing water.

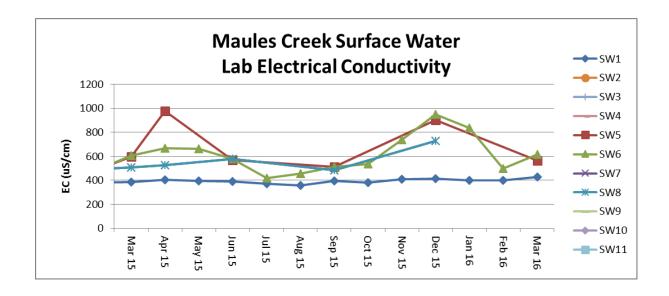
Lab pH	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10	SW11
11/03/2015	386				595	605	564	508			
14/04/2015	404				978	668	756	528			
19/05/2015	394					661	655				
11/06/2015	389				570	577	568	580			
13/07/2015	371					420	401				
25/08/2015	357					458	441				
16/09/2015	393				511	512	502	482			
12/10/2015	381					535	528				
12/11/2015	410					738	792				
11/12/2015	412				902	949	865	730			
8/01/2016	398					838	797				
12/02/2016	401					498	483				
15/03/2016	426				565	615	673				



Electrical Conductivity

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

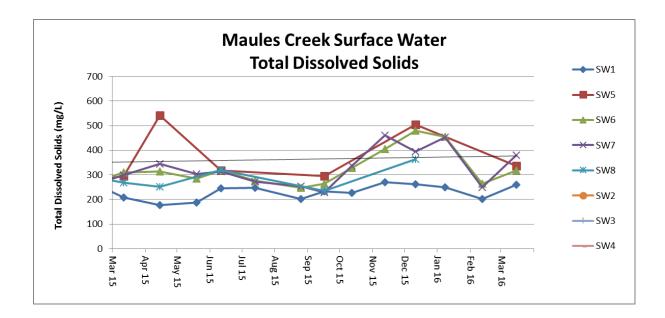
Lab EC	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10	SW11
11/03/2015	386				595	605	564	508			
14/04/2015	404				978	668	756	528			
19/05/2015	394					661	655				
11/06/2015	389				570	577	568	580			
13/07/2015	371					420	401				
25/08/2015	357					458	441				
16/09/2015	393				511	512	502	482			
12/10/2015	381					535	528				
12/11/2015	410					738	792				
11/12/2015	412				902	949	865	730			
8/01/2016	398					838	797				
12/02/2016	401					498	483				
15/03/2016	426				565	615	673				



Total Suspended Solids (TSS)

Surface TSS trends have remained consistent with SW5, SW6, SW7 and SW8 are also historically variable. SW5 to SW8 are stations along the Namoi River which is subject to regulated / variable flow regimes.

TSS	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10	SW11
11/03/2015	14				15	28	18	<5			
14/04/2015	<5				5	10	11	6			
19/05/2015	<5					<5	14				
11/06/2015	<5				14	15	14	18			
13/07/2015	< 5					12	16				
25/08/2015	13					20	33				
16/09/2015	<5				17	25	24	22			
12/10/2015	14					40	26				
12/11/2015	18					39	19				
11/12/2015	15				<5	<5	33	30			
8/01/2016	26					64	67				
12/02/2016	16					25	12				
15/03/2016	37				16	<5	44				



Rehabilitation

Mining commenced in August 2014, as such rehabilitation has been restricted to areas associated with rail and infrastructure areas during this period. Mine rehabilitation trials and research have not yet commenced, but will do so when suitable trial areas are available within the mining areas.

Complaints

For full detail of each Complaint please refer to the Community Complaints Register published on the Whitehaven Coal – Maules Creek website.

Minutes: Minutes of the 14th Meeting of the Maules Creek Coal Community Consultative Committee

Wednesday 14 September 2016

Held at the Boggabri Golf Club, Gunnedah Road, Boggabri NSW 2382

<u>Present</u>: Scott Mitchell – MCCM (SM), Anna Christie – Environmental Rep (AC), Peter Watson – Community (PWa) – Left at 3pm, Carolyn Nancarrow –

Community (CN), Tony Meppem – Narrabri Council (TM), Kirsten Gollogly – Whitehaven Coal (KG), Peter Wilkinson – Whitehaven Coal (PWi), Stephen

O'Donoghue – Department of Planning & Environment (SOD)

Observers: Heidi Watters – Department of Planning & Environment (HW), Libby Laird – Community (LL), Mick Heap – Whitehaven Coal (MH)

Independent Chair for CCC: DR Ross (DR)

Independent Secretary: Debbie Corlet (DC)

Ager	nda Items	Who to Present
1.	Welcome and introductions	DR
2.	Apologies	DR
3.	Declaration of pecuniary or other interests	DR
4.	Confirmation of the minutes of the previous meetings a. Discussion on minutes for March and May 2016 b. Discussion on process for future minutes and their confirmation	DR
5.	Business arising from the previous minutes	DR
6.	Correspondence	All
7.	Company Reports and overview of activities: a. Progress at the mine b. Issues arising from site inspections c. Monitoring and environmental performance d. Community complaints and response to complaints e. BTM Strategy Update f. Information provided to the community and any feedback	PWi and SM
8.	General Business	All
9.	Next Meeting date to be agreed	All

Agenda Item	Discussion	Action/By Whom
1.	Welcome and Introductions	
	DR welcomed everyone to the meeting and then invited all present to introduce themselves.	
2.	Apologies	Action 1 – DR to discuss with JD and WG their future
	Kerri Clarke – Sustainable Living Armidale (KC)	involvement on the CCC – and keep SOD informed
3.	Declaration of pecuniary or other interests	
	DR advised he is paid a fee to chair these meetings. However, as he takes his independence seriously, feedback will be sought from CCC members every two meetings. DR asked what independence meant to the Committee. Various recommendations but generally it was agreed that independence meant: Ensuring respect for all involved without taking sides / controls the room / gives everyone the chance to speak but ensures no one is talking over the top of people. CCC members also believed that DR's role required ensuring all parties answered questions as accurately and succinctly as possible and that actions were followed up.	
	Finally, DR asked what he should expect from them. CCC members agreed that respect for each other was vital.	
4.	Confirmation of the minutes of the previous meetings (March & May 2016)	
	March 2016 Minutes	
	SM – minutes in front of you are the March Minutes including previous CCC comments highlighted in yellow. Request was to insert Section E page 4/5 dot point 6 additional text relating to a raw data request. PWa said that where it says "can the community have access to the gas monitors", he didn't think he talked about "gas" as such – it may have been noise. SM – clarified that the feedback on the March meeting minutes have been captured in the May minutes (copy provided).	
	DR – do Whitehaven make available noise monitors on the property?	

Agenda Item

Discussion Action/By Whom

PWa – monitors are on properties with agreement with the land owners. There needs to be more on the discussion regarding transparency. There is noise on the properties but Whitehaven said they didn't have to report on the noise. Business arising in May minutes – KC must have requested the raw data at the time and how it compares with the previous minutes.

PWi – there was confusion at the last meeting that the statement was made that I had agreed to provide that data but I didn't. So given that – I'm quite comfortable.

PWa – so the answer is no we don't have the data.

PWi – yes that is correct. We don't provide that sort of unattended monitoring data.

PWa – isn't it unattended.

PW – so stuff on the website is unattended.

PWi – no it is attended.

DR – PWa's comments are included in the minutes; are we happy to endorse the March minutes?

AC – time to draw a line and move on.

DR – thank you. The March Minutes 2016 have been endorsed by the Committee.

May 2016 Minutes

DR – (To PWi) I invite you to talk about KC's comments and Whitehaven's response.

PWi – most of the variation is adding in extra words. The point I rejected in the minutes as mentioned above is why I wouldn't accept those minutes. KC's made a point again and again I have never agreed to this and I do object to this being in the minutes. KC can make a statement but I object to that. So it's a question of how that is written up.

PWi – most of it we can agree on but I do have a problem with that.

CN – gas monitors on their property was not actually true. We did have meetings with land owners. So not allowed at all or because we can't have access to the raw data.

Agenda Item

Discussion Action/By Whom

PWi - not aware that was said to us.

AC – we want the monitors but we want to have access to what is being taken on our properties.

AC – the land owners who want monitoring – are saying we have asked countless times but you keep saying things like "you wouldn't understand it, it takes up too much memory, and it's only available internally". If you made this information available to them – it would eliminate a lot of this talk.

PWi – we'll take this on notice – this hasn't been mentioned to me prior to now – I haven't heard that. There is quite a lot of data which we won't provide to the community because we don't think it is appropriate.

CN – Blue Range (201 Ellerslie Road, Maules Creek) had them on their site but Whitehaven took them away in 2014.

PWi – I don't follow what KC stated on the top of Page 5 of her "minute change notes" regarding complaints. A summary of the number of complaints to "add detail"? What we said was the summary of complaints includes complaints that we receive and complaints that we received via the EPA – that's the only complaints we are aware of so this is what we have described. Again what we have said is our list of complaints is what we have received directly and then what the EPA receives and then they advise us. The EPA receive complaints but they don't always advise us.

Action 2 – PW to investigate if a monitor was placed at the property 201 Ellerslie Road, Maules Creek and report back to the next meeting.

Action 3 – DR to organise discussions with PWi and KC to finalise May Minutes before next meeting.

5. Business arising from the previous minutes

DR – there was a request for unattended monitoring?

PWi – we will not provide unattended monitoring.

DR – could the monitoring results be sent via email in advance of these meetings?

PWi – we are better sending out via mail.

It was mentioned that by the time the results were sent to KC's organisation and then actually to her – it took too long by the time she actually it got.

DR – so I understand – do you have a timeframe for sending these monitoring results?

SM – we try to send the week before.

AC – from a practical sense a document such as the Biodiversity Management Plan could be 100s of pages long. KC then just has to scan it in for the members and then send it. Why do you think it is better to print and post it rather than emailing it?

PWi – we thought it was a more formal way to send it out.

DR – as feedback to the meeting – AC has put forward an argument. Have you spoken to the CCC?

PWi – this request was made at the last meeting – the information needs to be out earlier and yes we could but it would be by post.

PWa – is there a reason for this?

PWi – that was our belief. We are happy to think about it again.

PWa – can we get latest data as well? Appreciate you are a business. Latest data is from June – so already old. PWi – these meetings are later than normal. June data we would have collated in August. It wouldn't be ready much earlier than that after the end of the quarter.

Action 4 – PWi to look into sending information electronically rather than by post.

DR –The next meeting is proposed for 16 Nov which will be discussed later on but if you're given more time are you able to deliver the results say 2 weeks earlier?

Action 5 – PWi to confirm if data can be provided to CCC at least 2 weeks earlier.

AC – PWa is immensely important to these meetings but equally important is sourcing an alternate to PW or an additional member. This has been highlighted previously that we need another member. Because of the timing – direct contact with Wayne Griffiths and issues relating to the "Wongalea" property which needs to be addressed at these meetings in relation to Native Title claimants.

PWi – I was aware of some change.

DR – I can confirm that I've attempted to contact Wayne numerous times.

CN - Noise data.

PWi – raw noise data – I think there is some confusion. We provide "attended" monitoring but do not provide unattended monitoring. May have been confusion on what raw data is. We provide this information every quarter but we do not provide unattended.

DR - Residents on Maules Creek Road – requested reduction in dust levels.

PWi – We have ongoing programs to control the dust. The final version of the EPA Recommendations forms our programs and we feel we do a pretty good job. We are under our levels and our forecasted levels.

Action 6 – DR to follow up to ensure a letter was sent to Lloyd Finlay. PWa – it was tabled at the meeting in March or November – a request that no blasting take place when the wind is going in a certain direction – a south east direction as it blows across the land owner's property. That is the reason for the request. It is to get a general idea of the direction of the wind from the blast. Residents are unhappy if the wind is blowing in a certain direction at the time of the blasts going off.

PWi – it used to be the wind was measured at 8 metres per second but our proposal is to measure at 6 metres per second – we believe it will make a difference and an improvement.

AC – mentioned that earlier this year PWa tabled a letter asking for consideration for weather data from the Whitehaven station be provided and that it could be uploaded to OZ Forecast. They allow this – there are a number of privately run companies who do it.

PWi – was it from compliance?

AC – it was from a senior manager. You set up a link from OZ Forecast and members can go straight there and look it up themselves. It would show temperature, wind direction and wind speed.

PWi – we're not prepared to do that.

AC – why would you not be prepared to do this?

PWi – it is our management data.

AC – it would show a lot of goodwill amongst the community.

PWil – we are not prepared to upload it.

PWa – wind data doesn't relate to blasting.

DR – MCC Biodiversity Management Plan – letter or email tabled at last meeting (18 May 2016) in relation to the property Thornfield – was that provided?

PWi – there have been various communications with that land owner.

AC – there are complaints from people in Maules Creek – your response is that you are under the limit but that's it? That doesn't fix it though – there were other events. It's been revealed there was data that was given to the EPA that was false. This needs to be discussed.

PWi– I disagree that we made false communications to the EPA.

AC – I can't see how that can be refuted as I've seen the reports. On numerous dates there were readings in the minus.

SM - we don't believe the data is false.

AC – so there was "minus" dust. How can there be minus dust?

Action 7 – PWi to look into the weather data system which can be uploaded to OZ Forecast.

Action 8 – MCC Biodiversity Management Plan – waiting on Whitehaven to respond. PWi – we have provided data to the EPA – you were right some were technical values. I would rather the EPA speak about this.

DR – do you have a contact in the EPA so we can resolve this?

PWa – did EPA get back to you with answers?

SOD – I don't work for the EPA at the moment but I understand the investigations are ongoing. Best direct to the EPA.

PWa – it could go on for 10 years. Can we ask someone to come to a meeting to report on this?

SOD – get the Chair to speak to the EPA.

PWa - Complaints about blasting. People want to know what is going on. We come to the meetings and we are constantly waiting on feedback with no time frame.

Action 9 – SM to provide DR with EPA contact. DR to obtain GPS coordinates of monitoring apparatus and property names (if this is possible).

6. Correspondence

SM will table Country Women's Association letter received today on the Maules Creek Biodiversity Management Plan - DR thanked LL.

DR – tabled a letter from PWi on additional noise mitigation measures at fixed plant.

PWi – we'll consider this (the CWA letter) as it just came today. In response to the noise one we sent that out to the CCC, every year we test against our approvals and we did have some issues with our fixed plants. Advised it wasn't a big problem. We run compliance testing for average noise levels over 15 minutes and 1 minute – so you can have an instantaneous noise for a second and over 1 minute and 15 minutes it will be averaged out. It is loud – so we are focused on the train loading – have had some improvement – may look at further improvement. 4dB to our closest resident – R Druce. We are focused on the Prep Plant and where it creates the most noise. Shielding that ROM bin should happen in early October now. Prep Plant has significant work to be done to assess noise improvement options. We currently plan to have some improvements completed by the end of this calendar year.

AC - 4dB improvement - how was that calculated?

PWi – experts did testing before and after. This is an instantaneous noise versus our compliance testing which is average noise over 1 minute and 15 minute intervals. 4dB is instantaneous.

AC - is this 10% of the 1 minute.

PWi – in our compliance monitoring requirements – average noise testing over a minute and average noise over 15 minutes. 1-minute level is 45dB and 15-minute average is 35 dB. Within that 15 minutes you can have higher levels and lower levels – so we have looked at how can we drop the top level downs.

AC – so the peaks have dropped 4dB. So over the 15-minute period – there will be many peaks and then the peaks have been averaged. So the train loader has dropped by 4dB.

PWi – they should have.

AC – you have modelled this or actually tested?

PWi – we have actually measured. Now we can reduce this instantaneous noise. We have a model and now we have a measure. In the northwest direction. These are external specialists.

AC – I'm going to be asked to explain it to my community research group – so I need to be clear. The train loader you have been modelling has shown a 4db improvement off the peaks.

PWi – They were designed and then the difference before and after – on site.

AC – you have a 24 hour measuring at Wongalea?

PWi – but that is unattended. In a 15-minute average.

AC – we're talking about the peaks – not the modelling. You could have a look at the data and compare it with what really happens at Wongalea.

PWi – I'm saying you can't see the impact – you won't see that in a 15-minute average.

AC – at Wongalea – what was the noise at that time? When you did that onsite testing that determined you had the 4dB decrease – the data should be able to say "at this time", "on this date", "at the plant" etc.

PWi – our monitor provides 15-minute reporting – it is not detailed like that.

AC – what was the noise level at the comparable time?

PWi – attended monitoring and noise monitoring.

AC – we don't want the 15-minute monitoring – we are looking for the unattended monitoring. To verify the liability – you have the capability of doing it.

PWi – we have an expert come in to do this.

SOD – any modern advantage of data – you can get a lot of data – it depends if they report it.

Action 10 – PWi to look into what types of information / data can be obtained from the monitoring systems.

PWi – it is an automatic monitor.

AC – the noise – this is the first time these issues have been discussed in detail. The particular time of operation we are interested in is 5 / 5:15 in the morning – is anyone monitoring that in the morning?

Action 11 – PWi to investigate noise levels at 5 / 5:15 in the morning.

PWi – nothing specific happens in the morning?

AC – that is a noticeable time that noise is pretty bad. Not a one off – ongoing problem at this time of the morning. PWi – we will investigate.

7. Company reports and overview of activities

PWi – discussed the presentation and gave a brief overview of the operations. Good quarter in terms of production. Awarded Mining Operation of the Year by the Minerals Council and received an award for our Aboriginal employment.

Maules Creek coal is some of the best coal going around. Better than most of the places in the world in regards to quality. Low ash and energy. Marketing team has been successful to ramp up the sales because it is so good. Have put screening around the loading bin. Looking at putting more screening and process in early October in the Prep Plant – looking at screening options there as well and will be in place by the end of the year.

Environmental Audit – waiting on the final review.

SM – The Environmental Information Pack that people have received. Maps in the presentation are reference points to locations.

CN – can the mapping provide property names? We want property names so we can fully understand the maps and locations of the mine(s) to where residents are located.

AC – GPS as well – these maps are too hard to see where things are.

SM – these points are already publically available.

AC – just saying for all of them – could they be? PWa has been asking for 2 years –A PDF you can't blow it up as it becomes blurred and impossible to read.

CN – showed a map that Craig used to give them which included the names of properties owned by Whitehaven.

Action 12 – DR to obtain exact reference numbers for maps (if this is possible).

SM – all these maps are all on the website today. Can extract the page and print to A3.

AC – we need to be able to have them in an A3 because they can't be blown up.

CN – maybe everyone can get a copy of her map.

SM – any questions on the noise data that was received.

TM - Is there any exceedances – low frequency?

SM – there's a requirement to provide a modifying factor to this.

AC - Boggabri noise at Thornfield. Which leads me to ask about the regional noise study? How are you going back to them and saying you are contributing to this noise?

PWi – it was a 31dB – we don't accept this measuring system. When our attended expert monitors that – he can form a view where the noise is coming from and say it is our noise. At other times – very, very occasionally he has commented that it was at night coming from Boggabri – but again very low levels. Can hear at night because there is no other noise.

AC – what is happening with the Regional Noise Plan or Strategy?

SOD – still with the company to provide a final version.

AC – what's the status with that?

SOD – fairly close and nearly ready to be submitted. Probably in a few months.

SOD – the 3 mines are responsible for providing that. Not by department – It is by mines.

SM – then went on to discuss the presentation further and the complaints slide. Plus, provided an update on community activities, period of growth in terms of employment. Workforce survey – great level of satisfaction. Benefits flowing through to the Aboriginal community as well.

New office in Gunnedah – significant value in regards to grants, sponsorships etc.

Acknowledgement for our Aboriginal employment. Maules Creek Coal Mine employs 55 Aboriginal people. NSW Minerals Council Award recognised this.

KG – we entered under the Community and Aboriginal Category – Maules Creek Employment strategy. 11% across the whole group. Target derived from each Council was disproportionate among communities. So targeting to have our workforce across the broader population.

SOD – Stakeholder comments and have received lots of feedback on the Maules Creek Biodiversity Management Plan. AC – a lot of people's feedback – it was really delayed.

Action 13 – PWi and SM to determine if noise strategy can be presented at November meeting.

SOD – AC's submission has been provided to Whitehaven as well. But waiting for KC's.

AC – Don't think we should hold it up any further.

SOD – tabled a snap shot presentation of Leard Forest Regional Biodiversity Strategy. Has a PDF version as well as the hard copy of the strategy?

Action 14 – DR to forward PDF of Leard Forest Regional Biodiversity Strategy to CCC members.

AC – who is asking for more offsets?

SOD - The Commonwealth.

KG – we have until 2018 to secure the offsets with properties. We still have negotiations going through.

AC – can you explain further as to why the Commonwealth are asking for more? SOD – Commonwealth approval – State and Commonwealth – there is a component of grassland to woodland. Commonwealth wants more woodlands.

DR –AC has mentioned concerns. So you are you simply going through the process as required. (KG nods)

AC – one of my questions – how much are you budgeting to bring those grasslands to up to woodlands status? PWi – we're not going to go into our budget.

AC – how much would it cost to re-establish.

PWi – that is a Commercial-in-Confidence for our company.

AC – Commercial-in-Confidence – woodland is of public interest – not private.

DR – is it about the financial budget or it is about the outcomes? When the time is right for Whitehaven on the rehabilitation plan for these properties will you bring those to the CCC?

SOD – There are comprehensive completion criteria. You monitor it and you track it.

TM – realistically you could spend \$100,000 and do a bad job or spend \$20,000 and do a great job.

AC – we want to make sure the company has enough provision to restore.

SOD – this comes into the conservation bond which hasn't been done yet.

AC – what is the status of the conservation bond? So it's basically tied to the feds. Once you've got offsets and things change will you then finalise the bond – does that need approval from the feds.

SOD – no the State as a separate one.

AC – well known activity on the offsite.

SM – no approval at this stage.

SOD – area is not part of the mine.

AC – but it is adjacent and it'll be orphaned by the mine. The fact it was intended as it is part of the Prospectus. It is part of the local reserves.

KG – I'd say that is not accurate.

SOD – not accurate either. Approved offsets – that's what we are talking about. It's been approved by the Department and this strategy is approved.

DR – Steve – any other key points?

SOD – strategy study area. Steve continued with his presentation. Weed and pest management is a big issue in this region. Fire management. Working with stakeholders and agriculture.

AC – area 5. That modification – the transport with the bus. The reason that submissions were made by various members of the community. I would have thought that was the very reason for this strategy and before this modification – the modification going ahead but it directly affects this area.

SOD – look at what has been approved.

AC – and other infrastructure. Approved on the basis that there would be a certain limit of traffic.

TM – fly in and fly out. It is currently under assessment.

AC – this is super important because that modification is a "5-fold traffic" of what was envisaged in the approval. It went to Council – and I don't believe it was picked up.

TM – overall it was approved – with 90% of the employees fly in and fly out. That is not 100% accurate about where they live. Council did investigate all of this.

SOD – some landowners would like to see a copy of it. Was nominating a 4-week period. Happy for feedback. Finalise the strategy – getting the endorsements of the OEH. Revision of BTM and then the Stage 3 Review. Mapping across the state – if the bill goes through parliament. Funding for private land owners.

DR – need to move things on.

AC – I have questions but we only have a month to review and respond. This doesn't explain why this is nearly 3 years late. To make a decent submission – where do we find that information from OEH?

DR – if you have concerns – please make sure you put in the submission.

CN – if they want copies – DR will send a copy to the CCC – to farmers / anyone can have a copy of the presentation. Steve – it's not a public submission.

DR – it is to be worked through the CCC.

Action 15– Whitehaven to provide comment on AC's submission to DPE.

CN – can put it out in her green flyer that she puts out every week.

SOD – mapping will also be done. There will be a consultative process for that which will be the 1st half of next year.

CCC Guidelines still not signed off but hopefully in the next few weeks I heard. Hopefully by the next November meeting they'll be endorsed.

DR – any questions or comments about CCC representation. Everyone happy to wait for the next meeting and hopefully the CCC Guidelines will be in by then?

TM – we have to wait until they come in. The Council should have some form in the recommendations of the Chair. The Council is the middle man who represent the community. Extra step can go in the submission.

f. Information Provided to the Community and Any Feedback

SM – Advised there are copies of the annual review.

AC – Biodiversity – the Regional Water Strategy – it is now outstanding? It was due a few years ago. Can you fill us in on what is the problem?

SM – that is firstly incorrect. In our view we do have a Water Management Plan. We have a Site Water Management Plan – they are periodically reviewed. Now that Boggabri application has been approved from our understanding – that will be incorporated into the BTM Strategy.

TM – cumulative in their assessment.

SOD – it is outstanding – it needs to be resolved between the 3 companies. Process water management – ground monitoring is a key part of it.

AC – we've noticed a large number of new white pipes – is this new infrastructure?

PWi – we are updating and changing the pipeline.

AC – to achieve what? Big or small?

PWi – we have a licence to use 3,000 mega litres from the river – if the river is running like now with lots of water, this isn't necessary. Keepit Dam – don't want to open it all the time to us. They will provide us water if they have to - so we pump water in if we have to.

DR – KG, PWi, SM – any upcoming things to be aware of?

PWi – we are expanding – so that's the main thing with housing with Gunnedah and Narrabri.

Agenda Item	Discussion	Action/By Whom
8.	General Business	
	CN – Draft Blasting Plan.	
	SM – have received submissions so thank you. Revised version provided to DP&E for assessment. AC – I have. Mick Roderick from Birdlife Australia notes that a Regent Honeyeater has been observed at Maules Creek. Relative to this corridor – it is of importance because it suggests a flight path between 2 areas and further offsets. Found on or near a commonwealth offset.	Action 16 – AC to provide Mick Roderick's letter. DR to distribute to CCC members.
	AC – mentioned there has been a big change to the Native Title Claimants who have contractual arrangements between Goomeroi and Whitehaven between stock. Appears now that this company may not have the authority to make these. Need to have WG here as the Aboriginal representative.	
	PWi – couple of issues there – recent change in the Native Title Claimants – will take that on notice – and will make comments to DR and the next meeting.	Action 17 – PWi – Native Title Claimants. PWi to take on notice and make
	Action 15 – PWi – Native Title Claimants – make comments to DR and discuss at next meeting.	comments to DR and report back to next meeting.
	AC – who is the Aboriginal rep going to be?	_
	DR will speak to those who haven't attended in a few months to explain and take it from there.	
	TM – I may have someone from Gunnedah – a friend of mine. PWi – we have an Aboriginal Liaison Officer. I'm not the expert.	Action 18 – DR to discuss Aboriginal contacts with TM.

9. Next meeting date to be agreed

The next meeting is to be held on Wednesday 16 November 2016.

Meeting Closed: 4:35pm

Page No	Action No	Description	Date Raised
2	1	DR to discuss with JD and WG their future involvement on the CCC – and keep SOD informed.	14 Sept 2016
4	2	PW to investigate if a monitor was placed at the property 201 Ellerslie Road, Maules Creek and report back to the next meeting.	14 Sept 2016
4	3	DR to organise discussions with PWi and KC to finalise May Minutes before next meeting.	14 Sept 2016
5	4	PWi – to look into sending information electronically rather than by post.	14 Sept 2016
5	5	PWi – to confirm if data can be provided to CCC at least 2 weeks earlier.	14 Sept 2016
5	6	DR to follow up to ensure a letter was sent to Lloyd Finlay.	14 Sept 2016
6	7	PWi – to look into the weather data system which can be uploaded to OZ Forecast.	14 Sept 2016
6	8	MCC Biodiversity Management Plan – waiting on Whitehaven to respond.	14 Sept 2016
7	9	SM to provide DR with EPA contact. DR to obtain GPS coordinates of monitoring apparatus and property names (if this is possible).	14 Sept 2016
8	10	PWi – to look into what types of information / data can be obtained from the monitoring systems.	14 Sept 2016
9	11	PWi to investigate noise levels at 5 / 5:15 in the morning.	14 Sept 2016
9	12	DR to obtain exact reference numbers for maps (if this is possible).	14 Sept 2016
10	13	PWi and SM to determine if noise strategy can be presented at November meeting.	14 Sept 2016
11	14	DR to forward PDF of Leard Forest Regional Biodiversity Strategy to CCC members.	14 Sept 2016
12	15	Whitehaven to provide comment on AC's submission to DPE.	14 Sept 2016
14	16	AC to provide Mick Roderick's letter. DR to distribute to CCC members.	14 Sept 2016
14	17	PWi – Native Title Claimants. PWi to take on notice and make comments to DR and report back to next meeting.	14 Sept 2016
14	18	DR to discuss Aboriginal contacts with TM.	14 Sept 2016

Maules Creek Coal Mine Community Consultative Committee Meeting #14

Environmental Monitoring Report For the Q2 period, April - June 2016

Noise Monitoring

Noise monitoring was undertaken at the six locations, as per the approved Noise Management Plan, on the 19th & 20th April, 11th & 12-13th May and 7th & 8th June 2016 by an independent acoustic consultant. The measured noise level (LAeq15) attributed to Maules Creek Coal Mine (MCCM) and applicable criteria for each location are shown in the tables below. The results show that mine operations did not exceed the applicable LAeq15 minute criteria during attended noise monitoring in Q2 2016.

Tables - LAeq, 15minute GENERATED BY MCC AGAINST OPERATIONAL EVENING AND NIGHT NOISE CRITERIA – APRIL TO JUNE 2016.

April Monitoring - Evening & Night Period

		Time	Wind Speed	Rainfall	Criterion	Criterion	MCC LAeq	Exceedance
			m/s	mm	dB	Applies 1	dB 2,4	dB 3,4
NM1	19/04/2016	19:48	0.6	0	35	Yes	27	Nil
NM1	19/04/2016	20:07	0.1	0	35	Yes	<25	Nil
NM1	20/04/2016	22:41	0.6	0	35	Yes	28	Nil
NM1	20/04/2016	22:59	0.5	0	35	Yes	<25	Nil
NM2	20/04/2016	18:49	1.1	0	39	Yes	<20	Nil
NM2	20/04/2016	19:05	1.3	0	39	Yes	24	Nil
NM2	19/04/2016	23:25	0.7	0	39	Yes	26	Nil
NM2	19/04/2016	23:45	0.6	0	39	Yes	28	Nil
NM3	19/04/2016	18:51	1.5	0	35	Yes	IA	Nil
NM3	19/04/2016	19:07	1.6	0	35	Yes	IA	Nil
NM3	20/04/2016	23:36	0.6	0	35	Yes	<25	Nil
NM3	20/04/2016	23:56	0.6	0	35	Yes	27	Nil
NM4	20/04/2016	19:32	0.7	0	35	Yes	26	Nil
NM4	20/04/2016	19:48	1.5	0	35	Yes	26	Nil
NM4	19/04/2016	22:25	0.5	0	35	Yes	30	Nil
NM4	19/04/2016	22:45	0.5	0	35	Yes	30	Nil
NM5	19/04/2016	20:34	0.3	0	35	Yes	IA	Nil
NM5	19/04/2016	20:50	0.5	0	35	Yes	IA	Nil
NM5	20/04/2016	22:00	0.4	0	35	Yes	IA	Nil
NM5	20/04/2016	22:15	0.8	0	35	Yes	IA	Nil
NM6	20/04/2016	18:04	1.9	0	35	Yes	IA	Nil
NM6	20/04/2016	18:22	1.4	0	35	Yes	IA	Nil
NM6	20/04/2016	0:16	0.9	0	35	Yes	IA	Nil
NM6	20/04/2016	0:32	0.7	0	35	Yes	IA	Nil

May Monitoring – Evening & Night Period

_		Time	Wind Speed	Rainfall	Criterion	Criterion	MCC LAeq	Exceedance
			m/s	mm	dB	Applies 1	dB 2,4	dB 3,4
NM1	12/05/2016	21:11	0.6	0	35	Yes	29	Nil
NM1	12/05/2016	21:28	0.9	0	35	Yes	29	Nil
NM1	11/05/2016	22:03	0.7	0	35	Yes	<25	Nil
NM1	11/05/2016	22:20	0.6	0	35	Yes	25	Nil
NM2	11/05/2016	20:26	4.6	0	39	No	<20	NA
NM2	11/05/2016	20:42	3.9	0	39	No	<20	NA
NM2	12/05/2016	23:10	1.6	0	39	Yes	<20	Nil
NM2	12/05/2016	23:31	0.9	0	39	Yes	IA	Nil
NM3	12/05/2016	19:27	1.8	0	35	Yes	IA	Nil
NM3	12/05/2016	19:11	2.3	0	35	Yes	IA	Nil
NM3	11/05/2016	23:56	0.2	0	35	Yes	IA	Nil
NM3	12/05/2016	0:12	0.3	0	35	Yes	IA	Nil
NM4	11/05/2016	21:16	2.3	0	35	Yes	23	Nil
NM4	11/05/2016	21:34	1.4	0	35	Yes	<25	Nil
NM4	12/05/2016	22:20	1.8	0	35	Yes	29	Nil
NM4	12/05/2016	22:40	2.5	0	35	Yes	28	Nil
NM5	12/05/2016	20:12	0.7	0	35	Yes	29	Nil
NM5	12/05/2016	20:29	0.3	0	35	Yes	31	Nil
NM5	11/05/2016	22:50	0.4	0	35	Yes	26	Nil
NM5	11/05/2016	23:08	0.4	0	35	Yes	27	Nil
NM6	11/05/2016	19:39	4.4	0	35	No	IA	NA
NM6	11/05/2016	19:55	4.3	0	35	No	IA	NA
NM6	13/05/2016	2:19	0.3	0	35	Yes	<20	Nil
NM6	13/05/2016	2:35	0.5	0	35	Yes	<20	Nil

June Monitoring - Evening & Night Period

		Time	Wind Speed	Rainfall	Criterion	Criterion	MCC LAeq	Exceedance
			m/s	mm	dB	Applies 1	dB 2,4	dB 3,4
NM1	8/06/2016	19:21	1.5	0	35	Yes	NM	Nil
NM1	8/06/2016	19:38	0.8	0	35	Yes	IA	Nil
NM1	7/06/2016	22:45	0.3	0	35	Yes	30	Nil
NM1	7/06/2016	23:02	0.4	0	35	Yes	30	Nil
NM2	7/06/2016	19:40	0.9	0	39	Yes	IA	Nil
NM2	7/06/2016	19:56	0.3	0	39	Yes	IA	Nil
NM2	8/06/2016	22:00	1.1	0	39	Yes	27	Nil
NM2	8/06/2016	22:15	0.5	0	39	Yes	26	Nil
NM3	7/06/2016	18:12	3.7	0	35	No	IA	NA
NM3	7/06/2016	18:27	3.4	0	35	No	IA	NA
NM3	8/06/2016	23:29	0.5	0	35	Yes	IA	Nil
NM3	8/06/2016	23:45	0.2	0	35	Yes	IA	Nil
NM4	8/06/2016	20:06	0.9	0	35	Yes	<20	Nil
NM4	8/06/2016	20:22	0.4	0	35	Yes	NM	Nil
NM4	7/06/2016	23:37	0.8	0	35	Yes	27	Nil
NM4	7/06/2016	23:53	0.6	0	35	Yes	28	Nil
NM5	8/06/2016	18:37	0.3	0	35	Yes	<20	Nil
NM5	8/06/2016	18:54	0.6	0	35	Yes	<20	Nil
NM5	7/06/2016	22:00	2	0	35	Yes	29	Nil
NM5	7/06/2016	22:19	0.9	0	35	Yes	28	Nil
NM6	7/06/2016	18:55	2.4	0	35	Yes	IA	Nil
NM6	7/06/2016	19:12	1.7	0	35	Yes	IA	Nil
NM6	8/06/2016	22:43	0.3	0	35	Yes	IA	Nil
NM6	8/06/2016	23:00	0.4	0	35	Yes	IA	Nil

In addition to the 15 minute average for Day, Evening and Night, the Maules Creek Coal (MCC) EPL20221 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 Q2 2016.

Tables – LA1, 1minute GENERATED BY MCC AGAINST OPERATIONAL EVENING NOISE CRITERIA – APRIL TO JUNE 2016.

April Noise Monitoring - Night

		April						
L,	A1 (1min)	Time	Wind Speed	Rainfall	Criterion	Criterion	MCC L _{A1(1min)}	Exceedance
			m/s	mm	dB	Applies	dB	dB 3,4
NM1	20/04/2016	22:41	0.6	0	45	Yes	35	Nil
NM1	20/04/2016	22:59	0.5	0	45	Yes	27	Nil
NM2	19/04/2016	23:25	0.7	0	45	Yes	37	Nil
NM2	19/04/2016	23:45	0.6	0	45	Yes	39	Nil
NM3	20/04/2016	23:36	0.6	0	45	Yes	30	Nil
NM3	20/04/2016	23:56	0.6	0	45	Yes	30	Nil
NM4	19/04/2016	22:25	0.5	0	45	Yes	35	Nil
NM4	19/04/2016	22:45	0.5	0	45	Yes	36	Nil
NM5	20/04/2016	22:00	0.4	0	45	Yes	IA	Nil
NM5	20/04/2016	22:15	0.8	0	45	Yes	IA	Nil
NM6	20/04/2016	0:16	0.9	0	45	Yes	IA	Nil
NM6	20/04/2016	0:32	0.7	0	45	Yes	IA	Nil

May Noise Monitoring - Night

		May						
L,	A1 (1min)	Time	Wind Speed	Rainfall	Criterion	Criterion	MCC L _{A1(1min)}	Exceedance
			m/s	mm	dB	Applies	dB	dB 3,4
NM1	11/05/2016	22:03	0.7	0	45	Yes	<25	Nil
NM1	11/05/2016	22:20	0.6	0	45	Yes	33	Nil
NM2	12/05/2016	23:10	1.6	0	45	Yes	<20	Nil
NM2	12/05/2016	23:31	0.9	0	45	Yes	IA	Nil
NM3	11/05/2016	23:56	0.2	0	45	Yes	IA	Nil
NM3	12/05/2016	0:12	0.3	0	45	Yes	IA	Nil
NM4	12/05/2016	22:20	1.8	0	45	Yes	33	Nil
NM4	12/05/2016	22:40	2.5	0	45	Yes	31	Nil
NM5	11/05/2016	22:50	0.4	0	45	Yes	34	Nil
NM5	11/05/2016	23:08	0.4	0	45	Yes	34	Nil
NM6	13/05/2016	2:19	0.3	0	45	Yes	<20	Nil
NM6	13/05/2016	2:35	0.5	0	45	Yes	<25	Nil

June Noise Monitoring - Night

		June						
L,	A1 (1min)	Time	Wind Speed	Rainfall	Criterion	Criterion	MCC L _{A1(1min)}	Exceedance
			m/s	mm	dB	Applies	dB	dB 3,4
NM1	7/06/2016	22:45	0.3	0	45	Yes	33	Nil
NM1	7/06/2016	23:02	0.4	0	45	Yes	38	Nil
NM2	8/06/2016	22:00	1.1	0	45	Yes	30	Nil
NM2	8/06/2016	22:15	0.5	0	45	Yes	30	Nil
NM3	8/06/2016	23:29	0.5	0	45	Yes	IA	Nil
NM3	8/06/2016	23:45	0.2	0	45	Yes	IA	Nil
NM4	7/06/2016	23:37	0.8	0	45	Yes	32	Nil
NM4	7/06/2016	23:53	0.6	0	45	Yes	34	Nil
NM5	7/06/2016	22:00	2	0	45	Yes	35	Nil
NM5	7/06/2016	22:19	0.9	0	45	Yes	34	Nil
NM6	8/06/2016	22:43	0.3	0	45	Yes	IA	Nil
NM6	8/06/2016	23:00	0.4	0	45	Yes	IA	Nil

Evening LAeq15min Night LAeq15min, Night LA1min

Notes:

- 1. Noise emission limits do not apply during periods of rainfall or wind speeds greater than 3 metres per second (at 10 metres) as such a "No" will appear in Criteria Applies Column;
- 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;
- 5. IA Inaudible
- 6. NM Not measurable

One of the twenty-four measurements recorded across all monitoring sites during May occurred during periods where:

- operational activities from MCCM were directly measurable (not "inaudible", "not measurable");
- noise levels were within 5 dB of the relevant criterion; and
- where meteorological conditions resulted in criteria applying (in accordance with the Project Approval).

This measurement was further analysed for low-frequency noise against relevant 'Industrial Noise Policy' (INP) triggers. Where results in the following table are greater than the applicable low frequency modifying factor triggers due to activities at MCCM, a 5 dB modifying factor correction is applied to the measured noise level consistent with the INP. MCC is of the view that the prescribed methodology for the application of the low frequency modifying factor is unsuitable due to the nature of noise attenuation and large differentials between LAeq and LCeq at significant distances from noise sources. The NSW Industrial Noise Policy requires the penalty to be applied in these instances, irrespective of actual low frequency affectation. In addition, the draft NSW EPA Industrial Noise Guideline contains revised procedures for determining the application of modifying factor adjustments.

Table: LOW FREQUENCY NOISE MODIFYING FACTOR ASSESSMENT - MAY 2016

		March					
Low F	requency	Time	MCCP onlyLaeq	Modifying factor correction	MCCP only LAeq with modifying factor correction applied	Criterion	Exceedance
			dB	dB	dB	dB	dB
NM5	12/05/2016	20:29	31	+5(INP)	36	35	1

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.

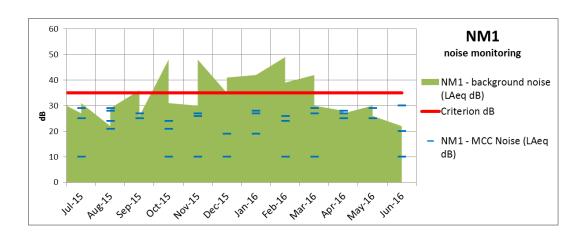
Table: Prevailing Wind Direction

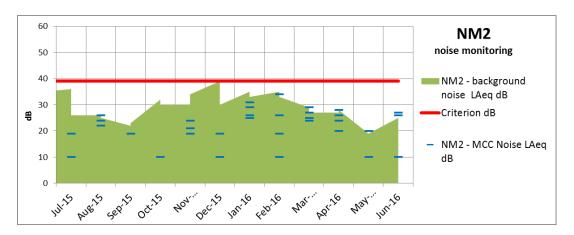
Date	Prevailing Wind Direction
19 th April 2016	SE
20 th April 2016	SE
11 th May 2016	SW
12 th May 2016	SW
7 th June 2016	SW
8 th June 2016	Variable S, SE & SW

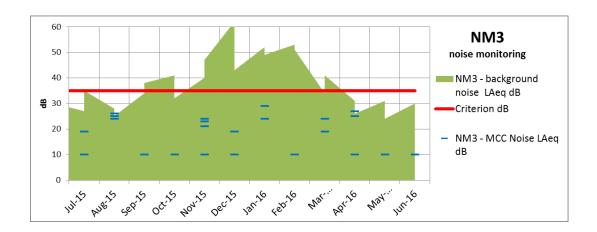
Attended Noise Monitoring

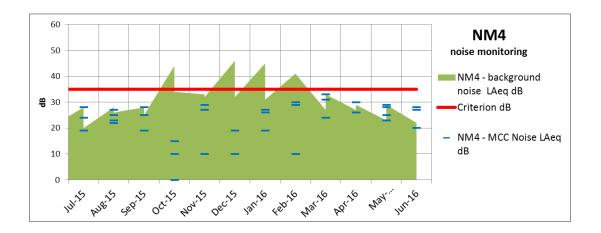
The following six (6) figures below show the 'attended' noise monitoring results recorded over the last twelve (12) months.

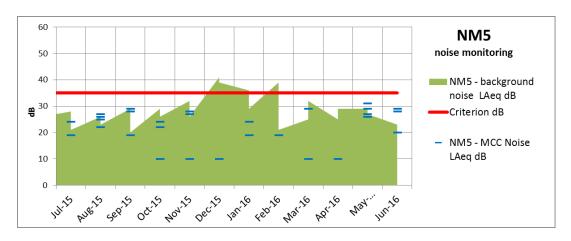
Green shading shows the LA_{eq} (15minute) background noise, the blue dash is the portion of the LA_{eq} considered likely attributable to MCCM according to the acoustic engineer and the red line is the Project Approval criteria.

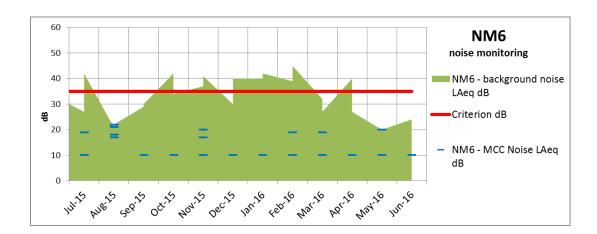












Blast Monitoring

There have been 43 blasts at MCCM to 30th June 2016). All operational blast events have been within the applicable overpressure and ground vibration limits specified in the respective approvals.

All blast monitoring results have been within the MCC EPL limits.

Table - Blast Results Summary Quarter 2 2016

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations	Noise	dB (Lin Peak)	All	21	99.4	108.4	120	No
Blasts	Vibration	mm/s	All	21	0.39	1.11	10	No

Air Quality

Total Depositional Dust

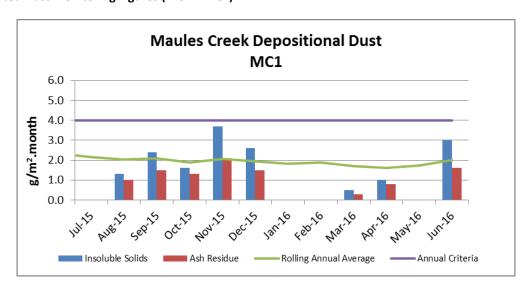
Table - Deposited Dust Monitoring Results *

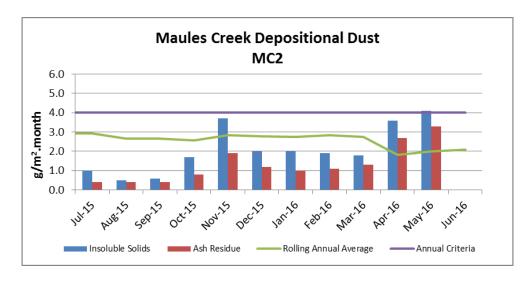
Month	MC1	MC2	MC3	MC4
Jul-15		1.0	0.8	0.8
Aug-15	1.3	0.5	0.5	0.4
Sep-15	2.4	0.6	0.5	0.7
Oct-15	1.6	1.7	0.3	0.4
Nov-15	3.7	3.7	1.4	3.1
Dec-15	2.6	2.0	1.4	2.0
Jan-16		2.0	0.6	1.2
Feb-16		1.9	0.9	1.1
Mar-16	0.5	1.8	1.0	0.5
Apr-16	1.0	3.6	1.3	1.1
May-16		4.1	1.5	2.7
Jun-16	3.0		1.0	1.1
Annual Avg	2.01	2.08	0.93	1.26
Project Avg 2010 - 2016	2.18	2.18	1.54	1.33

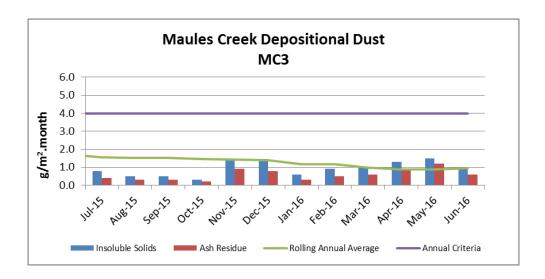
^{*} Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.).

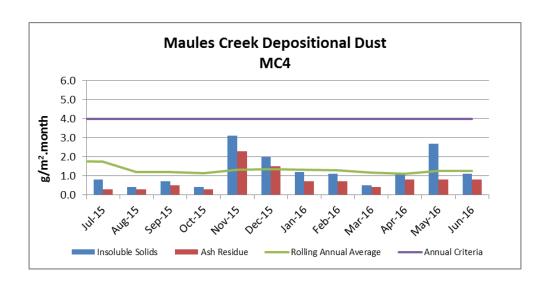
The monthly rolling annual average remains below the relevant Project Approval criteria of 4gm/m²/month, as shown on the graphs below.

Deposited Dust Monitoring Figures (MC1 – MC4)







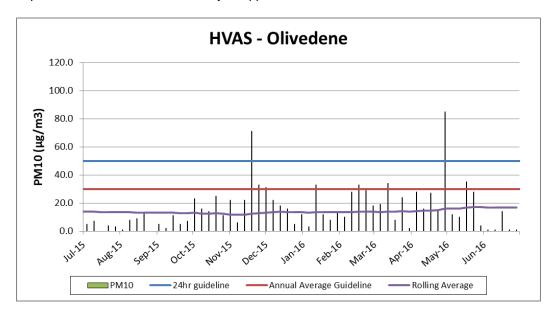


High Volume Air Sampling (HVAS)

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

HVAS PM_{10} Rolling Annual Average results during Q2 2016 remain well below the Annual Average Guideline 30 $\mu g/m^3$.

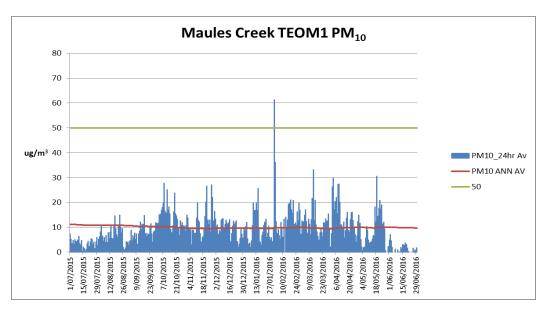
On the 29^{th} April 2016, the HVAS recorded a PM $_{10}$ result of 85 $\mu g/m^3$. An investigation into MCC's meteorological data during the 24 hour sampler period by the HVAS revealed that during the sampling period wind direction was predominantly from the south west, west and north-west. This indicates likely sources were from localised non-mining related activities. Results recorded at all other approved MCCM air quality monitoring sites on that day remained within the relevant Project Approval criteria.



TEOM - PM₁₀ Results

The annual average for PM_{10} results at the Maules Creek Coal TEOM remain significantly below the Project Approval annual average criteria of $30.0\mu g/m^3$ (at 30 June 2016) as illustrated in the following figure. The PM_{10} results have remained below this criteria since the TEOM was commissioned in November 2011.

TEOM Results Figures – Particulate Matter PM_{10μg/m3} and PM_{2.5μg/m3}



Water Monitoring

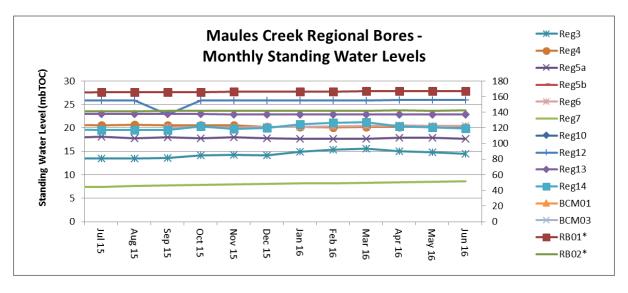
Ground Water

Groundwater monitoring results in open / standpipe piezometers show levels to be currently stable. 'RB' and 'Reg' series bores were installed between Q4 2013 and Q1 2014. BCM01, BCM03, Reg10 are shallow bores which have been dry since construction in 2013.

Table 5 – Groundwater Level

SWL	RB01*	RB02*	RB05	Reg3	Reg4	Reg5a	Reg5b	Reg6	Reg7	Reg10	Reg12	Reg13	Reg14	BCM01	ВСМ03
Jul-15	165.36	141.44	56.97	13.49	20.58	18.07			7.41		25.8	22.94	19.59		
Aug-15	165.42	141.43	57.08	13.52	20.61	17.83			7.58		25.83	22.99	19.57		
Sep-15	165.68	141.69	57.2	13.54	20.58	18.04		20.13	7.71		22.84	22.96	19.54		
Oct-15	165.87	141.82	57.35	14.17	20.55	17.78		20.16	7.87		25.81	22.93	20.27		
Nov-15	166	141.93	57.4	14.22	20.54	17.96		20.15	7.93		25.8	22.89	19.74		
Dec-15			57.57	14.16	20.18	17.76		20.17	8.03		25.83	22.85	20		
Jan-16	166.4	141.66	57.25	14.9	20.21	17.71		20.25	8.15		25.86	22.91	20.76		
Feb-16	166.49	141.94	57.35	15.3	20.13	17.71		20.31	8.22		25.83	22.83	21.04		
Mar-16	166.7	141.85	57.45	15.59	20.17	17.71		20.43	8.29		25.85	22.89	21.24		
Apr-16	166.87	142.14	58.56	15	20.17	17.94		20.52	8.42		25.92	22.89	20.34		
May-16	166.97	142.13	58.62	14.75	20.16	17.92		20.42	8.48		25.91	22.9	20.14		
Jun-16	167.3	142.64	58.82	14.51	20.14	17.64		20.43	8.65		25.92	22.83	19.92		

^{*} Blank cells indicate sample periods where bores were dry.



^{*} RB01 & RB02 bore depths are listed on the secondary axis.

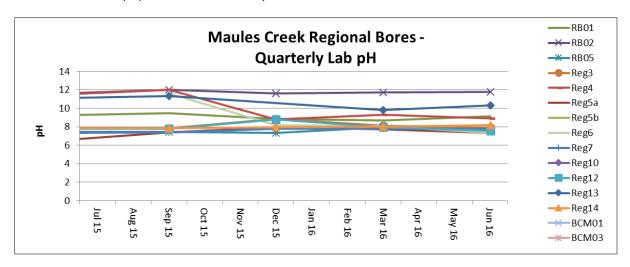
Acidity / Alkalinity (pH)

Baseline groundwater conditions are still being established, however, 4 bores (RB01, RB02a, Reg4 and Reg13) show elevated pH levels (above pH 8.5) this has been determined to be as a result of low recharge volumes within these bores since the drilling and installation.

Groundwater Lab Results pH

Lab pH	RB01	RB02	RB05	Reg3	Reg4	Reg5a	Reg5b	Reg6	Reg7	Reg10	Reg12	Reg13	Reg14	BCM01	BCM03
Sep-15	9.49	12	7.47	7.84	12	7.4		11.6	7.41		7.76	11.3	7.85		
Dec-15	8.87	11.6	7.32	8.83	8.77	7.95		8.15	7.79		8.82		7.95		
Mar-16	8.68	11.7	7.93	8.12	9.31	7.73		8.05	7.77		7.97	9.83	8.01		
Jun-16	9.11	11.8	7.82	7.9	8.88	7.35		7.33	7.77		7.54	10.3	8.15		

st Blank cells indicate sample periods where bores were dry.

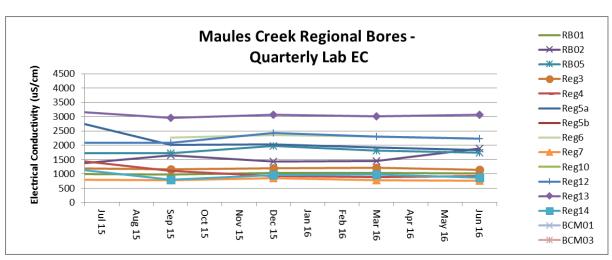


Electrical Conductivity

Laboratory Electrical Conductivity (EC) levels are all within historic groundwater EC range of $500_{\mu\text{s/cm}}$ to $2,500_{\mu\text{s/cm}}$, with exception for Reg13.

Lab EC	RB01	RB02	RB05	Reg3	Reg4	Reg5a	Reg5b	Reg6	Reg7	Reg10	Reg12	Reg13	Reg14	BCM01	BCM03
Sep-15	979	1660	1720	1170	1110	2010		2270	772		2080	2960	797		
Dec-15	1040	1430	1970	1200	925	2040		2360	860		2440	3060	959		
Mar-16	1030	1460	1820	1210	896	1930		2300	788		2310	3020	983		
Jun-16	1010	1890	1740	1150	921	1830		2240	758		2240	3060	871		

^{*} Blank cells indicate sample periods where bores were dry.



Wet Weather Discharge Sampling

There were no wet weather discharge events during Q2 2016 (April to June).

Surface Water - Creeks and Rivers

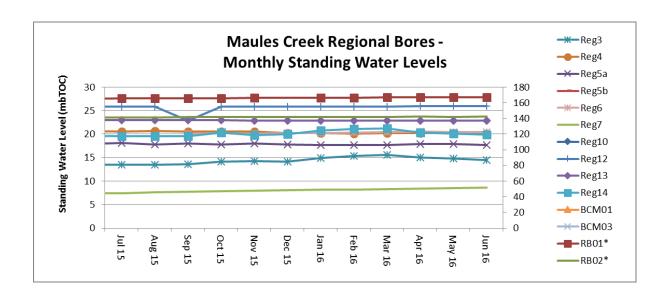
Routine surface water monitoring is conducted in surrounding creeks and rivers on a monthly basis. Results for parameters including pH, EC and Total Suspended Solids (TSS) are shown in the tables and figures below.

Acidity / Alkalinity (pH)

Laboratory pH in creeks and rivers surrounding MCCM are all trending within the ANZECC acceptable range for Irrigation, Ecosystem Health and Recreation. Back Creek and upper Maules Creek are ephemeral systems.

Lab pH	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10	SW11
13/07/2015	7.66					8.3	8.31				
25/08/2015	7.57					8.25	8.1				
16/09/2015	7.73				8.18	8.19	8.24	8.25			
12/10/2015	7.9					8.25	8.36				
12/11/2015	7.62					8.09	8.14				
11/12/2015	8.15				8.5	8.1	8.2	8.46			
8/01/2016	7.92					8.23	8.21				
12/02/2016	7.7					8.07	8.26				
15/03/2016	7.67				8.12	7.99	8.06				
15/04/2016	7.83					8.43	8.35				
16/05/2016	7.72					8.32	8.45				
15/06/2016	7.83				8.3	8.25	8.28	8.29			

 $[\]hbox{* Blank cells indicate sample periods where waterways were dry.}$

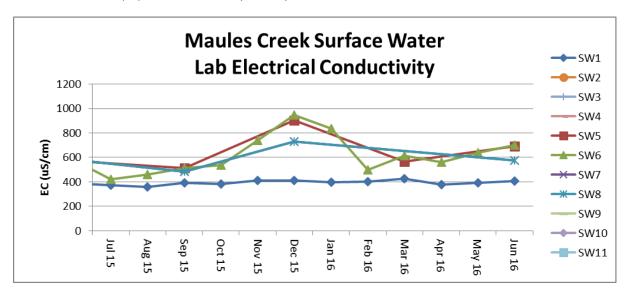


Electrical Conductivity

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

Lab EC	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10	SW11
11/03/2015	386				595	605	564	508			
14/04/2015	404				978	668	756	528			
19/05/2015	394					661	655				
11/06/2015	389				570	577	568	580			
13/07/2015	371					420	401				
25/08/2015	357					458	441				
16/09/2015	393				511	512	502	482			
12/10/2015	381					535	528				
12/11/2015	410					738	792				
11/12/2015	412				902	949	865	730			
8/01/2016	398					838	797				
12/02/2016	401					498	483				
15/03/2016	426				565	615	673				
15/04/2016	380					561	606				
16/05/2016	391					640	638				
15/06/2016	407				691	700	569	574			

^{*} Blank cells indicate sample periods where waterways were dry.

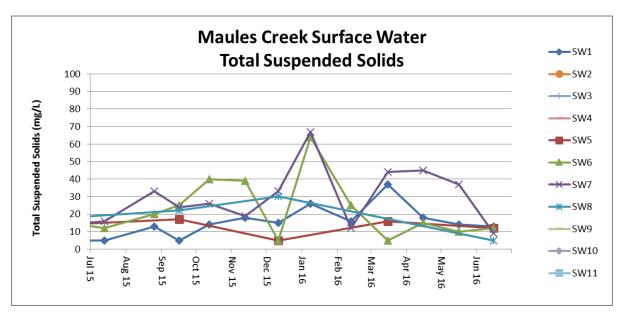


Total Suspended Solids (TSS)

Surface TSS trends have remained consistent with SW5, SW6, SW7 and SW8 are also historically variable. SW5 to SW8 are stations along the Namoi River which is subject to regulated and variable flow regimes.

TSS	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10	SW11
13/07/2015	<5					12	16				
25/08/2015	13					20	33				
16/09/2015	<5				17	25	24	22			
12/10/2015	14					40	26				
12/11/2015	18					39	19				
11/12/2015	15				<5	<5	33	30			
8/01/2016	26					64	67				
12/02/2016	16					25	12				
15/03/2016	37				16	<5	44				
15/04/2016	18					15	45				
16/05/2016	14					10	37				
15/06/2016	13				12	12	9	<5			

^{*} Blank cells indicate sample periods where waterways were dry.



Rehabilitation

No final landform areas are available for rehabilitation since the commencement of mining in August 2014. Rehabilitation has been restricted to areas associated with rail and infrastructure areas during this period.

Community Complaints

Ten complaints were received during Q2 2016. Please refer to the Community Complaints Register published on the Whitehaven Coal Maules Creek website.

Minutes: Minutes of the 15th Meeting of the Maules Creek Coal Community Consultative Committee Wednesday 16 November 2016

Held at the Boggabri Golf Club, Gunnedah Road, Boggabri NSW 2382

Members Present: Jason Davis (JD) and Carolyn Nancarrow (CN) – Community, Lloyd Finlay (LFi) – Narrabri Council, Anna Christie (AC) – Environmental Rep,

Peter Wilkinson (PWi), Darren Swain (DS) and Scott Mitchell (SM) – MCCM

Government Agencies: Steve Cox (SC) – NSW Office of Environment & Heritage, Stephen O'Donoghue (SOD) – NSW Department of Planning & Environment, Lindsay

Fulloon (LFa) and Jessica Creed (JC) - NSW EPA

Observers: Lexie Frankham (LF) and Kirsten Gollogly (KG) – Whitehaven Coal, Libby Laird (LL) - Community

Independent Facilitator / Chair for CCC: David Ross (DR)

<u>Independent Secretary</u>: Debbie Corlet (DC)

Agenda Ite	ems	Who to Present	Who to Present			
1. We	elcome and introductions	DR				
2. Apo	ologies	DR				
3. Dec	claration of pecuniary or other interests	DR				
	nfirmation of the minutes of the previous meetings Discussion on minutes for May 2016	DR				
<i>5.</i> Bus a.	siness arising from the previous minutes Action list distributed	DR				
6. Cor	rrespondence	All				
7. Qu	estions and answers session with EPA and OEH	LFa, SOD & SC				
	mpany Reports and overview of activities: Progress at the mine Issues arising from site inspections Monitoring and environmental performance Community complaints and response to complaints Information provided to the community and any feedback	PWi and SM				
9. Gei	neral Business	ALL				
10. Ne	xt Meeting date to be agreed	ALL				
Agenda Ite	m Discussion	1	Action/By Whom			

1.	Welcome and Introductions by David Ross
	DR thanked everyone for attending the meeting and explained that it was going to be a big meeting today with several people here from the DP&E, EPA and OEH. Everyone was invited to introduce themselves.
2.	Apologies
	Peter Watson.
3.	Declaration of pecuniary or other interests
	David advised he is paid a fee to chair these meetings.
4.	Confirmation of the minutes of the previous meetings (May and September 2016)
	May 2016 Meeting
	This was Action 3 of the May 2016 Minutes – for DR to organise discussions with PWi and KC to finalise the May Minutes before the next meeting. Unfortunately, KC and PWi couldn't come to a resolution in regards to the May 2016 Meeting Minutes even though DR has spoken to both again.
	DR asks that those who were present for the May meeting – are you comfortable with endorsing those May 2016 Minutes? Having spoken to KC, she wanted it expressed that she would not endorse the minutes.
	PWi – Yes, I was comfortable.
	CN – I haven't had a chance to review again. I thought we had reviewed and already discussed the May meeting.
	DR – I'd say those minutes are now closed.
	AC – made a comment that PWi and SM are comfortable with the minutes. It was KC who wasn't comfortable with them but what is the issue?
	DR – there were several issues raised in the May Minutes that a resolution wasn't able to be made but I think it is time to move on.
	DR - so in regards to the September Minutes – several of you are present now at this meeting – are you comfortable with endorsing those minutes.

AC – I made some comments on some small issues which were fixed up. DR - Peter Watson said he was comfortable with the minutes (and I am happy to forward that email to anyone if they wish). PWi – I made a few comments – the style was different. The conversation was different – there were some points missed. AC – we had some detailed conversation with the noise – it's not possible to get every detail. There is going to be detailed conversations here – we are going to talk about specifics and not everything will be taken down. DR – thank you for your comments. Is everyone comfortable with endorsing? There was acceptance from the whole CCCC. 5. Business arising from the previous minutes DR – I've had a conversation with PWi and rather than focus on the actions from the previous minutes at this meeting – Whitehaven were asked to respond to the Actions prior to this meeting and those actions were sent out about a week ago. Thank you PWi for supporting my idea for the CCC. Having the actions sent out before the meetings – means we can have proper discussions at the actual meetings – now and in the future (basically not spend a lot of time discussing all the actions from the previous meeting). DR – There was one action on me to provide a letter to LF but considering he'll be here shortly – I hope everyone is comfortable with the fact I didn't send that letter out. AC – I understood that he resigned from the CCC because he had a conflict of interest – what was it and why doesn't he have it now? DR – will wait for LF to come for a response. DR – all the other actions from that meeting have all been responded too – so I'd like to close them. LL – response to the letter from CWA? DR – The 2 Steve's will talk about that when they speak about NSW Biodiversity Reforms.

LL – having a staff member come out to groundtruth [the biodiversity offsets]?

	DR – yes, they will talk to that.
6.	Correspondence
	DR – I received no correspondence prior to this meeting – do I need to table anything else?
7.	Questions and Answers Session with EPA and OEH
	DR – will hand over now for a conversation with the EPA.
	DR - Lindsay (LFa) and Jessica (JC) thank you for coming – one of the actions from the last CCC meeting was regarding monitoring of dust levels. Would you like to say anything now or does anyone have questions now?
	LFa – more than happy to answer questions and thank you for the invitation to attend today.
	AC – ongoing issues and reporting of air quality monitors by the EPA. Have heard that TEOMs are over-sensitive and they don't work. First question – is this the best available technology? If it's known that they don't work 50% of the time – why is this technology mandated?
	LFa – TEOMs – the air quality monitors are widely accepted technology in Australia and overseas with International Standards. Following Dr Whelan's initial analysis, EPA sought assistance from OEH Climate Science who operate the public air quality monitors throughout NSW to undertake an audit of the Maules Creek monitor. The preliminary findings of the audit are that the monitor is sited and operated in accordance with the relevant current Australian Standards and that the monitor is well maintained.
	AC – is the data published on the EPA website for the Namoi region manually updated?
	LFa – TEOMs do deliver negative values. OEH validate real time data with algorithms to exclude certain data before entering it on the website. The approach we're taking, the EPA publish everything up to negative 10. That's not necessarily suggesting data is invalid. The TEOMs do produce negative values due to factors such as the influence of temperature and humidity.
	Broad sampling – changes the frequency. Other things influence – temperature. So, there can be a difference in the calibration.
	It is widely known about negative results. TEOMs are still the best technology. The Audit process identified small things that can be improved. That relates to deflecting the air conditioning – other minor things like monitoring and

logging.

AC – this doesn't answer my questions. The month of October – there were no readings until about the 20th of the month? Is that right?

LFa – Each spreadsheet provided on the EPA website from January this year onwards only provides one weeks' worth of data. There are 4 to 5 spreadsheets for each month – are you looking at all or one?

AC – I still think that setting up the system that is monitoring only 50% of the time but then fails because of the air quality (being too clean). The levels of PM10 are unusually low – are you aware Dr James Whelan has also surveyed levels of dust around Australia – in Maules Creek and very low levels of dust that don't seem to correlate.

PWi – I don't accept that Anna. These are accurate measures. We have a lot of forest around here. We have only disturbed about 1,000 ha. Winds from the southwest go over forest. Winds from the northwest go over plains and agriculture. The prevailing wind is a southerly.

DR – do you want to respond LFa?

LFa – I know data from the OEH Tamworth monitoring site was examined by Dr Whelan along with others. The period of his analysis – the June to Sept period is during the coldest months of the year when wood heaters are in wide use – wood smoke is also a significant source of particulate matter and may well explain much of the difference between Tamworth and Maules Creek.

AC – In the event of a Namoi air quality network being established, will TEOMs be used?

LFa – TEOMs are internationally accepted technology.

AC – why this particular technology though when it's still not delivering to the community. There may be something else wrong that isn't actually the technology which is causing the problem. Maybe human element?

LFa – EPA has done a number of things in that regard. We have implemented the dust stop programs aimed at dust from coal mines, undertaken aerial surveillance over the mines.

DR – you feel the technology is working and is appropriate?

LFa – yes that's my understanding. TEOMs are the best available technology and they are accepted worldwide.

AC – households / families and the like – we are saying that we are having bronchial problems that we never had before. We are people are taking their children to the doctor in Boggabri and we are having a real escalation of

ACTION 1 - PWi to present at the next meeting – the

breathing problems. You can validate all you like. You must talk to people.

actual data.

PWi – I will dispute that. Dust levels are generally higher when the wind is from the opposite direction, this is a farming area – from agriculture.

AC – one farmer who has been living here for 20 years said the dust used to be red. It's the colour of the dust – we've always had dust and the farmers agree but it is now black. We cannot keep up with the black dust.

PWi – this has been reported and – it is black matter – it is burn off.

LFa – there are so many other environmental issues / factors that people are exposed too that we need to separate the causes. We manage air quality with best practice.

The EPA has commissioned a Best Practice review of dust management at Maules Creek – the final report is due by the end of the year. That will identify if more needs to be done. The MCCM Approvals acknowledge that dust generation up to a level is permitted and this is the basis of acquisition rights.

ACTION 2 – DR to chase up NSW Health Study and where it is at.

AC – do you have discussions with the Department of Health?

LFa – I don't directly.

AC – as an organisation?

emit dust to a certain level.

LFa - not sure.

PWi – Coal Mine Workers are exposed to higher levels on a daily basis than members of the community given their proximity to the source. The health of coal mine workers has been reviewed for generations and generally miners are healthier than the general population.

AC – Referring to the Strategic Regional Lane Use Plan – June 2012, Health were to be the lead of a review. It was to be done by June 2013. Action 7.8 of the NSW Strategic Land Use Management Plan (SLUMP) was to prepare a Development Assessment Guideline for impacts on human health from dust generated by mining and other activities. NSW Health, Environment of Planning an OEH – by June 2013. Was this done? LFa – I'm not sure however you need to understand that the planning consent permits the mine to produce and

DR – Steve and Peter – interesting point about Health Study undertaken at the moment about coal mining.

ACTION 3 - DR to get in touch with LFa to see if a Development Assessment Guideline on Dust was completed by June 2013.

AC – COAG Conference of Ministers – Minister Speakman agreed that they would change the threshold of the safety. Has that been reflected. Not that this will make a difference as this mine is under that threshold.

SOD – roll out of the new standard as a result of that agreement needs to move through the Approved Methods first. Once its locked in, policy documents need to be reviewed to reflect the change – modelling improvements are occurring – the annual average is now 25.

DR – any more questions?

AC – only on noise. Sorry I wasn't able to print enough copies for everyone. Will pass what I have onto DR. Community noise monitoring was undertaken on the same date as some of the MCCM attended noise monitoring and resulted in different conclusions.

PWi – in a nutshell there are some question marks about the community monitoring and I think they require some investigations.

AC – 26 Sept – attended monitoring was conducted by the Global Acoustics and they found that noise was inaudible. However, the community monitoring found that there was significant C weighted noise, with booming and low frequency noises recorded. Don't know if everyone is familiar with these concepts?

30db measured over 15 minutes – that is the assumed minimum of background noise. The true background levels are much lower than 30. On this particular night, they were less than 30 but Black Mountain Road – these levels were recorded. There were considerable levels recorded.

What we are finding is the difference is over 20. What is the significance – low frequency noise – have stated between 20 and 25 and this is evidence of a low frequency problem.

LFa – The limit is 35db – if the monitoring recorded levels less than 30, the fact that the difference between the C and A weighted measurements was greater than 15dB is immaterial, as the application of the 5dB penalty would still have meant the mine compiled. That is the way it is regulated.

CN – do you use the Broner method?

PWi – we use the INP. Not the Broner method.

AC – these charts don't appear to include the 5 decibels But not that I can see on the chart.

PWi – when we do the noise monitoring 15 minutes – but if below 30 they don't.

AC – I'm not saying that these readings are excessive. What I'm saying something is weird – that Global Acoustics are saying it is inaudible but the Community monitoring does not produce the same results.

LFa – is the Community monitoring conducted at the same location?

AC - No.

LFa – Does the Community monitoring use equipment that is band frequency filtering?

AC - No.

LL – As the only resident here, it is noisier than it was before the mine. The infra sound drills into your head at night when you are trying to sleep. It makes you very tired.

LFa – That is not the point, the operation has a consent which permits noise up to a limit.

JD – someone could have been having a party and the music was blasting.

AC – at any given time you know what is going on in that valley.

PWi – we have someone roaming now. Particularly if on a single unit. So, that does happen. Party at the school hall, a tractor – these things affect the noise.

LL - We have noise and have never had any monitoring. The noise is deafening.

AC – there is a fact – the worst-case scenario – you would not have over 35d over 15 minutes.

LFa – where is the data showing that?

AC – it wasn't until I started reading the literature on these low noise assumptions. Can we have on the record – the noise levels were low and then suddenly in June they went up. PWi – I dispute that.

LFa – EPA has required the mine to complete an Independent Mandatory Environmental Audit examining the mines systems and process with respect to managing noise emissions and compliance with the licence noise limits. The draft Audit Report has now been reviewed by the EPA and our comments have been provided back to the Auditor and Whitehaven. Now waiting on the Auditor to respond to comments. I do apologise for the time it has taken. There is a lot of other stuff going on. The challenge has been to keep it going whilst working still. We

ACTION 4 - DR to get in touch with LFa and get a copy of that summary as soon as possible.

expect to receive the next draft of the Audit Report prior to Christmas. We will then need to review it to determine whether our concerns have been appropriately addressed by the Auditor. If they have, the report will be finalised and a summary will be published on the EPA's public register website. It is too early for me to provide further details as the report is still in draft.

AC – we are going to lodge our 2016 report without that? We don't think it is satisfactory – we will not delay any longer.

DR – we still have a few things to sort through – still waiting on the Health Study.

LFa – it's a process to go through the document and it needs to be thorough and until it is done – it would be irresponsible of us to release it.

CN – what are the enforceable limits of dust – Murphy's Blue Range – does he have acquisition rights?

LFa – more of a question for Steve – the project approval establishes acquisition rights and air quality limits.

SOD – except for the properties identified – the noise limits don't apply.

AC – is Blue Range in the acquisitions zone?

SOD – yes, it is in the acquisition zone.

DR – Steve Cox (SC) is here to answer questions on NSW Biodiversity reforms and offsets.

SC – Biodiversity Reform process and how it might relate to CCC – I'm a messenger on the NSW Bio reforms – it's a policy – various Acts and Amendments – new Bill Biodiversity Conservation Act.

June 2016 released – June / July consultation period. Around the state. I attended a few of those with local Councils.

Timeline – June / July – 7,000 submissions on the draft – LLS Act and Biodiversity Conservation Act before Parliament last week and will come into force mid next year July 2017. Wide range of reforms are mapping products – 2 mapping relevant to today – the blue and yellow map is the first – which does require an approval process if landholder wishes to clear land.

They will be a part of the Policy in 2017 – specified review period – land owners to indicate any challenges they may have – blue should be yellow or vice versa. There will be consultation on a wider level. Even after that

ACTION 5 – DR to obtain LFa's details for people to be able to discuss. review period – will be ongoing opportunity for the property owners to seek reviews of the map.

The second mapping product – is the priority investment area mapping – NSW wide – conservation within NSW – will be a tool to identify potential offset or conservation investment areas.

Landowners – mapped in that area – they can seek some conservation funding for parts of their properties – but only if they want to. Landowners – fears under the maps – nothing will happen unless the landowner wants to clear something or is interested in seeking funding to manage conservation areas on their property – then it isn't relevant to them.

Regulation maps will be available in July – only some of the PIA maps are likely to be ready in July.

DR – respond to ground-truthing issue.

SC – NSW mapping goes on – its relatively high level first stage map identifying priority investment areas. These areas require ground truthing – areas mapped with a high conservation potential for investment will need to be confirmed on the ground.

With regard to the Regional Biodiversity Strategy (RBS), OEH did some preliminary maps – but regional PIA maps are effectively the same products and we didn't want to endorse a regional product when a State-wide product was coming out. It would supersede any regional map. We made a decision not to continue with that map.

AC - who is we?

SC - OEH in consultation with DP&E.

AC – not the RBS Steering Committee? What about the ground-truthing?

LL – our community has pointed it out time and time again – you keep bringing in new rules so you never have to answer any questions.

AC – when are you going to come and groundtruth? The current offsets are irrelevant because they are going to change?

SOD – The MCCM offset package has been endorsed and approved by the Department. Blue Range isn't a part of the NSW offset package for MCCM.

AC – I don't think this is a good use of this Committee (discussion on NSW biodiversity reforms) needs to be

escalated to another forum. Last 3 years to be included in the biodiversity discussion – never any minutes – never been discussed with the community. Concerted efforts by the Department to not provide maps.

SOD – The strategies in position.

AC – RBS Stage 1 Scoping Report – I couldn't find it in the minutes – when was the June 2015 draft scoping report given to this group?

SOD – scoping – that was before consultation.

AC – nonetheless – it was never provided.

SOD – The RBS Stage 2 Strategy Report was provided at the last CCC meeting.

AC – years have passed. It's an insult to the community and how you keep making us pay.

SOD – you've got the documents.

AC – you've (DP&E) refused to give us maps – everything is expensive.

SOD – Explained the reasons at the last meeting.

DR – closed this discussion.

8. Company reports and overview of activities

Progress at the mine

SM gave a brief update. The 10.5 Mtpa ramp up at Maules Creek on schedule for the second half of FY 2017.

Staff breakdown – sorry we don't that this time. However, we have 430 staff at the moment. By January 2017 10.5 million tonnes.

PWi – we've continued to employ Aboriginal people at 13-14% and we have 15% women.

JD – what's the process to employ?

PWi – if you've got someone – send me a note. We have a training program that they go through – people are

employed through Programmed as well. They go through training programs first – it may take 2 or 3 weeks to get onto a big truck. The trainees are monitored closely and over time as they gain experience.

PWi – if you have someone who is interested I'd be happy to pass the names on. I leave it to the trainers to make the assessment. It's not a job for everyone – it's a very large company and things can go astray as there are a lot of procedures. We have trained a lot of young people.

Monitoring and Environmental Performance

Monitoring and environmental results. Please refer to the separate hand out.

PWi – we can bring printed copies to the meetings.

SM – the actual results have been printed out. You asked for electronic versions though – so no we didn't print out copies as this is what the CCC wanted.

CN – I have a copy of a map that Craig had given us – it had the property names and only numbers. So, I brought a spare copy – it's got all the properties and where they are.

SM – property ownership would have changed by now.

AC – Regarding a nearby property did you have attended monitoring?

SM – yes it has been – it was a separate map.

AC – in 2016 Maules Creek Licence Annual Return – attended noise monitoring had been going on at the wrong location?

Blast monitoring – there was one peak blast overpressure (dBL) result at monitoring unit BM1, located on mine owned land, which recorded above the overpressure limit of 120dB during the reporting period in July.

TM on the web – 24 hour criteria is showing that. High volume sampling also had low results. Wet period over the last 3 months. Surface and ground water are pretty consistent – dropped lightly over 3 months.

Community Complaints and Response to Complaints

Summary of the complaints for the last few months.

Action 6 – PWi and SM to report at next meeting about the attended noise monitoring going to the wrong address.

Action 7 - CCC to print monitoring information off for next CCC meeting.

AC – can I talk about the complaints. Are complaints sent to you directly or to the EPA? PWi – both complaints that we have received directly and complaints that the EPA have passed onto us. AC – I just discovered that there is a hotline to use for day and night. PWi – we are investigating to have that hotline improved. AC - I didn't even know. PWi – been there from the beginning. There is a complaint number. AC – who do I ring at night?? PWi – **1800 MAULES** is the 24-hour hotline number. Action 8 - 1800 MAULES to be sent to residents via post CN – was it always working. PWi – we did have a technical issue a few weeks ago. AC – can we not do a letterbox drop to all residents – this is the number to call. KG – we have done that. AC – from my experience – just print off and go with the mail – here's the number – put it on your fridge. PWi – we will give it consideration and come back to the next meeting with a decision. **Information Provided to the Community and any Feedback** Nothing for this one. **Community Sponsorship**

We had a family day with approximately 360 attending and a public day with about 300 people attending. A lot of people say "this is not what we expected" – people were saying "where was the dust".

This is something we'll do every year now. Boggabri Spring Fair – which was successful – so thank you for the

	opportunity to attend.		
	DR – anything else to add.		
	AC – notification from 2 properties – they didn't receive a letter. Do you have a letter or only certain properties get a letter?		
	PWi – not aware.		
	SM – we did respond to one.		
	AC – to provide details later – Peter and Scott what about the properties which didn't receive a letter?		
	SM – we have provided that this year – where have occurred.		
9.	General Business		
	CN – Julie Heiler – provided information about three (3) blasts on Friday 28 October at 11am, 1pm and 3pm – Tarrawonga didn't blast on that day. Maules Creek did blast on that day at 1pm. She felt something at 3. The weather condition was wet – blast should not have occurred. The conditions weren't right to blast on that day – so why did you blast?	Action 9 – PWi to table weather data for Friday 28 th October Action 10 – CN to provid	
	PWi – we disagree – we thought it was OK to blast – so we did.	DR with documentatio	
	AC – Graeme Leys, a nearby property owner, reported that their windows were shaking. It was a Friday and because of that I think it would be a good idea to put a monitor outside.		
	SM – we showed the page with the "Monitoring and Environmental Performance Blast Monitoring Locations".		
	AC – I don't know where they are. These people are directly due north and they are saying they had blast vibrations.	Action 11 – copy of the letter to be sent to PWi and SM by DR so they ca	
	PWi – can I say again – we are licenced to produce some noise and dust.	respond.	
	AC – shaking windows – could be causing structural damage. Please provide the weather data for this day??		
	AC – did you get a complaint for that day?		

PWi – we have already responded to the EPA in detail on that blast. They got a complaint and asked us to explain. There was a complaint on that day.

PWi – we've sent the report to the EPA.

AC – get the environmental data – what is the best practice – it's not unusual for a major infrastructure project – there needs to be a vibration sensor in place.

DR – (to CN) what did Julie want?

CN – Look at not having blasts within 2 hours of each other. We know you have set your blast schedule.

PWi – We schedule for 1pm and other mines schedule for different times. I don't think within 2 hours is unreasonable.

CN -Julie spoke to SM about noise – but Julie is yet to receive a response.

SM – I've spoken to her over the phone. I don't recall additional data being required. It was a one-off scenario – I haven't been made aware of this – I think it was roughly March.

CN – I don't feel she's been addressed. Her son was in hospital with pneumonia and the doctor said it could be dust.

DR - Environmental Trust has been operating for a couple of years – they had their first round of funding in May this year. Members of the Trust have another round of funding coming up soon. We meet tomorrow for that purpose.

AC - who is on the trust?

DR – two (2) from each CCC. SM, DS, LFi and council representation. DR – I just wanted to keep you in the loop.

Going to jump out of General Business for the moment and ask LFi about declaring any conflict of interest.

LFi – I did work for the DPI. That's probably it at this point in time.

AC – do you have a conflict of interest?

LFi – that is my business.

AC – if you had a conflict previously what's changed.

LFi – I don't feel it is an issue now.

DR – do you think it will be resolved.

AC – if there is a conflict that you needed to resign previously and you're saying the conflict still exists – until it is resolved?

LFi – It is my business.

AC – I had a call from Peter Watson – expressing confusion about who was his alternate. He thought he had 2 alternates. We really need to urgently work this out. What happens with appointing an alternate?

DR – CCC Guidelines were finalised and formerly published late yesterday – so I haven't had a time to review them completely.

DR – will impact representation on the CCC – I gather Peter Watson will be resigning. We only have a few community reps on the CCC. When people resign, we need to fill those positions. CCC Guidelines – you'll get a copy of these and we'll talk about them in greater depth at the next CCC. There is a requirement in the Guidelines for everyone to sign a Code of Conduct.

SOD – it spells out the process on having alternates. A replacement can be through advertisements in consultation with the Chair. If someone resigns we need to find someone straight away.

DR – with Christmas coming up – we will talk to Peter and Scott in regards to advertising to get people in place for the next meeting.

AC – the Aboriginal member hasn't turned up again today? He has been absent from something like five meetings now.

DR – I haven't heard from him. However, I have tried contacting him even this week. It is a matter that I have also sought advice from NSC. Note your concerns and will be chasing up.

JD – (to DR) you need to make sure it (CCC) doesn't become a protest group and they take over. We aren't here to protest – we are here for the community.

Action 12 – DR to forward everyone a copy of the CCC Guidelines.

Action 13 – Code of Conduct to be added to next Agenda.

DR – in response it would be fair to say we need to have diverse members, representative of the entire community.

JD – having people close to the community – Boggabri township.

DR – trying to get people interested.

CN – the biggest issue is the time.

JD – I run a business – I give my own time. I'm turning up out of the goodness of my heart – so I don't want it to be a waste of time. Talk about one thing and go around in circles.

DR – General Business

CN – I want to talk to Whitehaven – regarding Pat. You put on the report that he rejected that he didn't want monitors on his property. As trying to work this out – if you take it away – it could help to solve this situation? Also, we need to discuss the limits. He doesn't have limits on his property.

PWi – measurement points – help protect Pat.

AC – the gist isn't that the point?

AC – so Paul isn't correct? So, let's find out how it was worded? What Paul Flynn said about the conditions.

CN – this is what is on the website – in response to the Australian Story?

CN – he has limits exceeded 35 – but we've found this to not be true.

PWi – this is correct.

CN – I don't think so. We are trying to resolve this (regarding issues raised with respect to Mr Murphy) and it must be sorted out.

PWi – we aren't in denial.

CN – there is denial. He asked for dust monitors but you say he's refused to have monitors.

PWi – we have a noise monitor and a dust monitor very close to his residence.

Action 14 – PWi to report

AC – where is it? PWi – on a property we own very close to Pats. It is unattended though.	back next meeting re dust monitors on Pat's property
CN – I have emails between Pat and Tim Muldoon– saying he doesn't want to stay at the property.	
PWi – if you read the full context?	
DR – (to CN) out of this do you want to provide me something so Whitehaven can respond?	Action 15 – CN to send to
AC – this is not just about Pat Murphy – this is about voluntary land acquisitions policy. The mine will expand to the north – so there will be other people who will be on the front line. We're talking about 2 or 3 property own now who will be affected. I think it is deplorable – I've heard the term vilification.	DR documentation for
PWi – we'll dispute that term.	
AC – CWA letter – was that closed off? That was part of the action.	
DR - LL and DR had a chat about this a few weeks ago. The response was to get the 2 Steve's to talk about it to	day. Action 16 – Whitehaven to respond to CWA letter
AC – the company should respond.	
LL – I need a response. I've been told by the Department of Planning that we have to submit a letter and have been asked to work with you (the CCC). We want certainty about this project – but that's not us. The government that lives here.	ent
LL – we've been told to work with these people as a consulted group and we need this. Our community are concerned about this project. We are not happy. We have been asking respectively for a very long time – we p up the money and we've done the studies. It is very frightening to hear it is going to bring in a whole wave of legislation. Can you work with us as well?	ut
SOD – an assessment was done – there was an approval process. Through the federal government.	
LL – did you involve us?	
SOD – the mapping is about the future. We have a valid process.	
LL – you never see what we see. You left us out of the process. We would like to work with them. I'm giving the an opportunity to work with us – why won't they meet us half way.	em

	DS – could we do at the RSL Club. [Agreement from CCC]	
	The next meeting is to be held on Wednesday 15 February at 2pm. DR advised that it is best to hold the meetings every 3 months.	
9.	Next meeting date to be agreed	
	Then you are most welcome to email me feedback at any time.	
	DR – feedback or thoughts on how I can improve on being as independent as possible? I take the independence very seriously.	
	DR – regional noise, regional water and regional dust then. Any more to discuss before the next meeting?	
	CN – cumulative effects from the 3 mines.	0
	AC – the level of communication between the CCCs and Whitehaven – the roads. Absence of cumulative noise strategy and dust. That should be a focus.	Action 17 – everyone to think about what they'd like to get out of the combined CCC meetings.
	(To CCC) Next combined CCC meeting—what do you want to focus on? I gather the last one wasn't fantastic. If it is going to be more strategic meeting. Is there something else you want to get out of it?	A.15 47
	DR – suggestion to have 2 environmental combined CCC meetings a year. I understand the community say this will provide real value rather than just one every 12 months.	
	PWi – DS will be our main contact. SM will provide the data.	
	DR – I was talking to Tarrawonga – around the issue of combined CCC. PWi and SM, this is for your info.	
	DR – will ask Whitehaven to respond.	

UPDATE:

In the days after the meeting had been closed, DR received emails from AC and LFa that are of note:

AC wanted to extend an apology for misleading the meeting concerning the complaint of blast impacts by a nearby farmer. She mistakenly thought the complaint was the same day as the other blast complaints on the 28th October. In fact, the complaint about blast impacts when they felt the windows of their home rattling was Thursday,6th October.

LFa noted that a response to the complainant would be provided shortly.

Page No	Action No	Description	Date Raised
6	1	PWi to present at the next meeting – the actual data.	16 Nov 16
6	2	DR to chase up NSW Health Study and where it is at.	16 Nov 16
6	3	ACTION 3 - DR to get in touch with LFa to see if a Development Assessment Guideline on Dust was completed by June 2013.	16 Nov 16
8	4	DR to get in touch with LFa and get a copy of that summary as soon as possible.	16 Nov 16
9	5	DR to obtain LFa's details for people to be able to discuss.	16 Nov 16
12	6	PWi and SM to report at next meeting about the attended noise monitoring going to the wrong address	16 Nov 16
12	7	CCC to print report off monitoring report themselves for the next CCC meeting.	16 Nov 16
13	8	1800 MAULES to be sent to residents via post.	16 Nov 16
14	9	PWi to table weather data for Friday 28 October 2016.	16 Nov 16
14	10	CN to provide DR with documentation	16 Nov 16
15	11	Copy of the Letter sent to PWi and SM by DR – so they can respond.	16 Nov 16
16	12	DR to forward to everyone a copy of the CCC Guidelines.	16 Nov 16
16	13	Code of Conduct to be added to the next Agenda.	16 Nov 16
18	14	PWi to report back next meeting re dust monitors on Pat's property.	16 Nov 16
18	15	CN to send to DR documentation for Whitehaven to respond to.	16 Nov 16
18	16	Whitehaven to respond to CWA letter	16 Nov 16
19	17	Everyone to think about what they'd like to get out of the combined CCC Meeting.	16 Nov 16

Maules Creek Coal Mine Community Consultative Committee Meeting #15

Environmental Monitoring Report For the Q3 period, July – September 2016

Noise Monitoring

Noise monitoring was undertaken at the six locations, as per the approved Noise Management Plan, on the 18th & 19th July, 15th & 16th August and the 26th, 27th & 28th September 2016 by an independent acoustic consultant. The measured noise level (LAeq15) attributed to Maules Creek Coal Mine (MCCM) and applicable criteria for each location are shown in the tables below. The results show that mine operations did not exceed the applicable LAeq15 minute criteria during attended noise monitoring in Q3 2016.

Tables - LAeq, 15minute GENERATED BY MCC AGAINST OPERATIONAL EVENING AND NIGHT NOISE CRITERIA – JULY TO SEPTEMBER 2016.

July Monitoring - Evening & Night Period

		Time	Wind Speed	Rainfall	Criterion	Criterion	MCC LAeq	Exceedance
			m/s	mm	dB	Applies 1	dB ^{2,4}	dB ^{3,4}
NM1	18/07/2016	20:19	0.3	0	35	Yes	27	Nil
NM1	18/07/2016	20:34	0.4	0	35	Yes	25	Nil
NM1	19/07/2016	23:03	0.9	0	35	Yes	<20	Nil
NM1	19/07/2016	23:18	0.8	0	35	Yes	<20	Nil
NM2	19/07/2016	21:16	0.3	0	39	Yes	24	Nil
NM2	19/07/2016	21:39	0.3	0	39	Yes	26	Nil
NM2	18/07/2016	22:00	0.7	0	39	Yes	25	Nil
NM2	18/07/2016	22:15	0.9	0	39	Yes	27	Nil
NM3	19/07/2016	19:40	0.5	0	35	Yes	<20	Nil
имз	19/07/2016	19:56	0.3	0	35	Yes	<20	Nil
NM3	18/07/2016	23:23	0.3	0	35	Yes	IA	Nil
NM3	18/07/2016	23:39	0.4	0	35	Yes	<20	Nil
NM4	18/07/2016	21:03	0.5	0	35	Yes	24	Nil
NM4	18/07/2016	21:19	0.4	0	35	Yes	25	Nil
NM4	19/07/2016	22:04	0.7	0	35	Yes	25	Nil
NM4	19/07/2016	22:33	1	0	35	Yes	21	Nil
NM5	18/07/2016	19:39	0.2	0	35	Yes	<20	Nil
NM5	18/07/2016	19:54	0.4	0	35	Yes	21	Nil
NM5	19/07/2016	23:44	0.4	0	35	Yes	21	Nil
NM5	19/07/2016	23:59	0.4	0	35	Yes	20	Nil
NM6	19/07/2016	20:22	0.6	0	35	Yes	IA	Nil
NM6	19/07/2016	20:37	0.7	0	35	Yes	IA	Nil
NM6	18/07/2016	22:41	0.5	0	35	Yes	IA	Nil
NM6	18/07/2016	22:57	0.4	0	35	Yes	IA	Nil

August Monitoring – Evening & Night Period

		Time	Wind Speed	Rainfall	Criterion	Criterion	MCC LAeq	
			m/s	mm	dB	Applies 1	dB ^{2,4}	dB 3,4
NM1	16/08/2016	20:22	1.2	0	35	Yes	28	Nil
NM1	16/08/2016	20:39	0.6	0	35	Yes	29	Nil
NM1	15/08/2016	23:04	0.6	0	35	Yes	27	Nil
NM1	15/08/2016	23:24	0.6	0	35	Yes	25	Nil
NM2	15/08/2016	21:04	0.4	0	39	Yes	32	Nil
NM2	15/08/2016	21:22	0.5	0	39	Yes	32	Nil
NM2	16/08/2016	22:10	0.6	0	39	Yes	30	Nil
NM2	16/08/2016	22:26	0.3	0	39	Yes	30	Nil
NM3	15/08/2016	19:33	0.5	0	35	Yes	IA	Nil
NM3	15/08/2016	19:50	1.5	0	35	Yes	IA	Nil
NM3	16/08/2016	23:41	0.4	0	35	Yes	IA	Nil
NM3	16/08/2016	23:57	0.4	0	35	Yes	IA	Nil
NM4	16/08/2016	21:11	0.8	0	35	Yes	31	Nil
NM4	16/08/2016	21:39	0.3	0	35	Yes	29	Nil
NM4	15/08/2016	22:00	0.2	0	35	Yes	32	Nil
NM4	15/08/2016	22:30	0.6	0	35	Yes	28	Nil
NM5	16/08/2016	19:40	1	0	35	Yes	27	Nil
NM5	16/08/2016	19:57	1.5	0	35	Yes	<20	Nil
NM5	15/08/2016	23:50	0.6	0	35	Yes	<20	Nil
NM5	16/08/2016	0:06	0.9	0	35	Yes	IA	Nil
NM6	15/08/2016	20:19	1.1	0	35	Yes	<20	Nil
NM6	15/08/2016	20:36	0.6	0	35	Yes	<25	Nil
NM6	16/08/2016	22:56	0.6	0	35	Yes	<20	Nil
NM6	16/08/2016	23:12	0.4	0	35	Yes	<20	Nil

September Monitoring - Evening & Night Period

		Time	Wind Speed	Rainfall	Criterion	Criterion	MCC LAeq	
			m/s	mm	dB ³	Applies 1	dB ^{2,4}	dB 4,5
NM1	27/09/2016	18:49	2	0	35	Yes	<25	Nil
NM1	27/09/2016	19:06	3.1	0	35	No	<25	NA
NM1	26/09/2016	22:42	0.8	0	35	Yes	<30	Nil
NM1	26/09/2016	22:58	0.9	0	35	Yes	<30	Nil
NM2	26/09/2016	18:49	3	0	39	Yes	IA	Nil
NM2	26/09/2016	19:06	3.1	0	39	No	IA	NA
NM2	27/09/2016	23:22	0.3	0	39	Yes	30	Nil
NM2	27/09/2016	23:39	0.3	0	39	Yes	30	Nil
NM3	27/09/2016	20:05	2.6	0	35	Yes	IA	Nil
NM3	27/09/2016	20:23	2.1	0	35	Yes	IA	Nil
NM3	26/09/2016	23:57	0.7	0	35	Yes	IA	Nil
NM3	27/09/2016	0:14	0.4	0	35	Yes	IA	Nil
NM4	26/09/2016	18:05	3.6	0	NA	No	IA	NA
NM4	26/09/2016	18:21	3.3	0	NA	No	<20	NA
NM4	27/09/2016	22:00	0.8	0	NA	Yes	30	NA
NM4	27/09/2016	22:15	0.4	0	NA	Yes	31	NA
NM5	27/09/2016	18:00	1.4	0	35	Yes	27	Nil
NM5	27/09/2016	18:22	1	0	35	Yes	25	Nil
NM5	26/09/2016	22:00	0.4	0	35	Yes	<20	Nil
NM5	26/09/2016	22:16	0.7	0	35	Yes	<20	Nil
NM6	26/09/2016	19:36	1.9	0	35	Yes	IA	Nil
NM6	26/09/2016	19:53	2.1	0	35	Yes	IA	Nil
NM6	28/09/2016	0:06	0.3	0	35	Yes	IA	Nil
NM6	28/09/2016	0:22	0.5	0	35	Yes	IA	Nil

In addition to the 15 minute average for Day, Evening and Night, the Maules Creek Coal (MCC) EPL20221 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 2016.

Tables – LA1, 1minute GENERATED BY MCC AGAINST OPERATIONAL EVENING NOISE CRITERIA – JULY TO SEPTEMBER 2016.

July Monitoring - Evening & Night Period

		July						
L _{A1 (1min)}		Time	Wind Speed	Rainfall	Criterion	Criterion	MCC L _{A1(1min)}	Exceedance
			m/s	mm	dB	Applies	dB	dB 3,4
NM1	19/07/2016	23:03	0.9	0	45	Yes	35	Nil
NM1	19/07/2016	23:18	0.8	0	45	Yes	24	Nil
NM2	18/07/2016	22:00	0.7	0	45	Yes	33	Nil
NM2	18/07/2016	22:15	0.9	0	45	Yes	35	Nil
NM3	18/07/2016	23:23	0.3	0	45	Yes	IA	Nil
NM3	18/07/2016	23:39	0.4	0	45	Yes	<20	Nil
NM4	19/07/2016	22:04	0.7	0	45	Yes	31	Nil
NM4	19/07/2016	22:33	1	0	45	Yes	32	Nil
NM5	19/07/2016	23:44	0.4	0	45	Yes	25	Nil
NM5	19/07/2016	23:59	0.4	0	45	Yes	25	Nil
NM6	18/07/2016	22:41	0.5	0	45	Yes	IA	Nil
NM6	18/07/2016	22:57	0.4	0	45	Yes	IA	Nil

August Noise Monitoring - Night

		August						
L	\1 (1min)	Time	Wind Speed	Rainfall	Criterion	Criterion	MCC LA1(1min)	Exceedance
			m/s	mm	dB	Applies	dB	dB 3,4
NM1	15/08/2016	23:04	0.6	0	45	Yes	37	Nil
NM1	15/08/2016	23:24	0.6	0	45	Yes	31	Nil
NM2	16/08/2016	22:10	0.6	0	45	Yes	38	Nil
NM2	16/08/2016	22:26	0.3	0	45	Yes	41	Nil
NM3	16/08/2016	23:41	0.4	0	45	Yes	IA	Nil
NM3	16/08/2016	23:57	0.4	0	45	Yes	IA	Nil
NM4	15/08/2016	22:00	0.2	0	45	Yes	35	Nil
NM4	15/08/2016	22:30	0.6	0	45	Yes	33	Nil
NM5	15/08/2016	23:50	0.6	0	45	Yes	<20	Nil
NM5	16/08/2016	0:06	0.9	0	45	Yes	IA	Nil
NM6	16/08/2016	22:56	0.6	0	45	Yes	<20	Nil
NM6	16/08/2016	23:12	0.4	0	45	Yes	<25	Ni

September Noise Monitoring - Night

		September							
L	(1min)	Time	Wind Speed	Rainfall	Criterion	Criterion	MCC L _{A1(1min)}	Exceedance	
			m/s	mm	dB ³	Applies 1	dB 2,4	dB 4,5	
NM1	26/09/2016	22:42	0.8	0	45	Yes	33	Nil	
NM1	26/09/2016	22:58	0.9	0	45	Yes	35	Nil	
NM2	27/09/2016	23:22	0.3	0	45	Yes	33	Nil	
NM2	27/09/2016	23:39	0.3	0	45	Yes	35	Nil	
NM3	26/09/2016	23:57	0.7	0	45	Yes	IA	Nil	
NM3	27/09/2016	0:14	0.4	0	45	Yes	IA	Nil	
NM4	27/09/2016	22:00	0.8	0	NA	Yes	38	Nil	
NM4	27/09/2016	22:15	0.4	0	NA	Yes	37	Nil	
NM5	26/09/2016	22:00	0.4	0	45	Yes	<20	Nil	
NM5	26/09/2016	22:16	0.7	0	45	Yes	<20	Nil	
NM6	28/09/2016	0:06	0.3	0	45	Yes	IA	Nil	
NM6	28/09/2016	0:22	0.5	0	45	Yes	IA	Nil	

Evening LAeq15min Night LAeq15min, Night LA1min

Notes:

- Noise emission limits do not apply during periods of rainfall or wind speeds greater than 3 metres per second (at 10 metres).
 NM4 is at mine owned land and results have been provided for informational purposes. As such a "No" will appear in Criteria Applies Column;
- 2. Estimated or measured LAeq, 15 minute 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. Since September 2016;
- 5. IA Inaudible
- 6. NM Not measurable

Two of the twenty-four measurements recorded across all monitoring sites during August occurred during periods where:

- operational activities from MCCM were directly measurable (not "inaudible", "not measurable");
- · noise levels were within 5 dB of the relevant criterion; and
- where meteorological conditions resulted in criteria applying (in accordance with the Project Approval).

This measurement was further analysed for low-frequency noise against relevant 'Industrial Noise Policy' (INP) triggers. Where results in the following table are greater than the applicable 'Industrial Noise Policy' (INP), or 'Broner' low frequency modifying factor triggers due to activities at MCC, a 5 dB modifying factor correction is applied to the measured noise level.

Table: LOW FREQUENCY BRONER & INP ASSESSMENT – AUGUST 2016

Low F	requency	Time	MCCP onlyLaeq	Modifying factor correction	MCCP only LAeq with modifying factor correction applied	Criterion	Exceedance
NM4	16/08/2016	21:11	31	+5 (INP)	36	35	1
NM4	15/08/2016	22:00	32	+5 (INP)	37	35	2

MCC is of the view that the prescribed methodology for the application of the low frequency modifying factor is unsuitable due to the nature of noise attenuation and large differentials between LAeq and LCeq at significant distances from noise sources. The NSW Industrial Noise Policy requires the factor to be applied in these instances, irrespective of actual low frequency affectation. In addition, the draft NSW EPA Industrial Noise Guideline contains revised procedures for determining the application of modifying factor adjustments.

The EPA has recently published the Draft Industrial Noise Guideline (dING). Low frequency results for relevant measurements were assessed using the dING methodology. Noise levels with modifying factor triggers complied during all relevant measurements.

Table: LOW FREQUENCY dING ASSESSMENT - AUGUST 2016

Low Frequency dING		Time	MCCP onlyLaeq	Modifying factor	Site only LAeq with modifying factor correction applied (1)	Criterion	Exceedance
NM4	16/08/2016	21:11	31	0	31	35	No
NM4	15/08/2016	22:00	32	0	32	35	No

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.

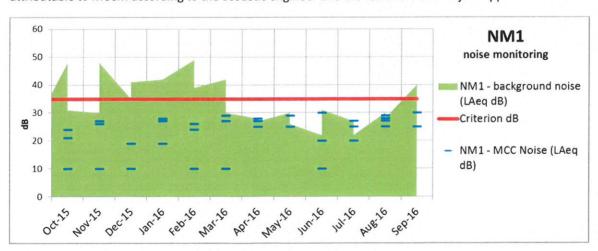
Table: Prevailing Wind Direction

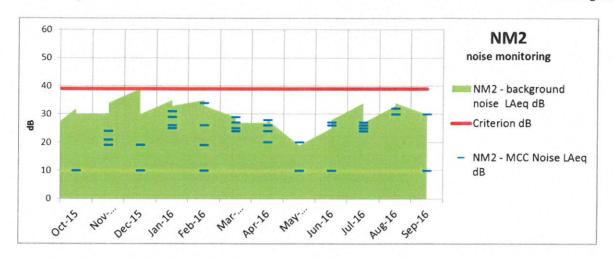
Date	Prevailing Wind Direction
18 th June 2016	SE
19 th June 2016	SW
15 th August 2016	E & SE
L6 th August 2016	Variable NE, E & SE
26 th September 2016	SW
27 th September 2016	SW

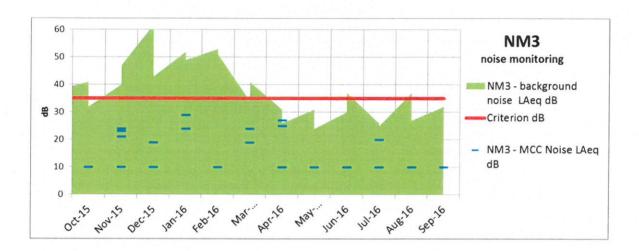
Attended Noise Monitoring

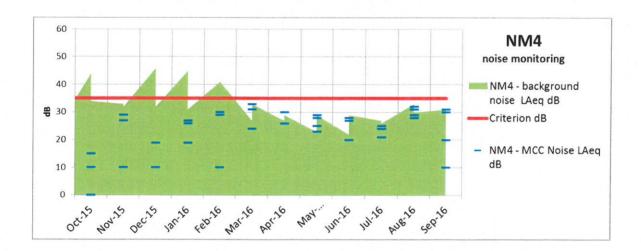
The following six (6) figures below show the 'attended' noise monitoring results recorded over the last twelve (12) months.

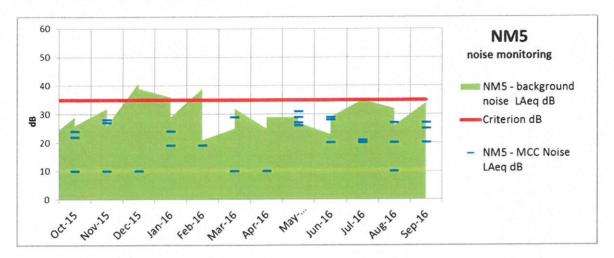
Green shading shows the LA_{eq (15 minute)} background noise, the blue dash is the portion of the L_{Aeq} considered likely attributable to MCCM according to the acoustic engineer and the red line is the Project Approval criteria.













Blast Monitoring

There have been 68 blasts at MCCM to 30th September 2016.

There has been one peak blast overpressure (dBL) result at monitoring unit BM1, located on mine owned land, which was recorded above the overpressure limit of 120dB during the reporting period in July. MCC continues to maintain compliance within the allowable exceedance threshold of 5% of the total number of blasts above 115dBL for airblast overpressure for a 12 month period as conditioned in Table 7 of PA10_013.

All blast monitoring results have been within the MCC EPL 20221 M7.4 blast monitoring criteria for monitoring points BM2 and BM3.

Table – Blast Results Summary Quarter 3 2016

Location	Parameter	Units	Frequency	Number	Average	Max	100% Limit	Exceedance (Yes / No)
Operations	Noise	dB (Lin Peak)	All	25	96.58	128.4	120	No*
Blasts	Vibration	mm/s	All	25	0.24	1.00	10	No

^{*} BM1 location result of 128.4dBL is not considered an exceedance as this is located on mine owned land.

Air Quality

Total Depositional Dust

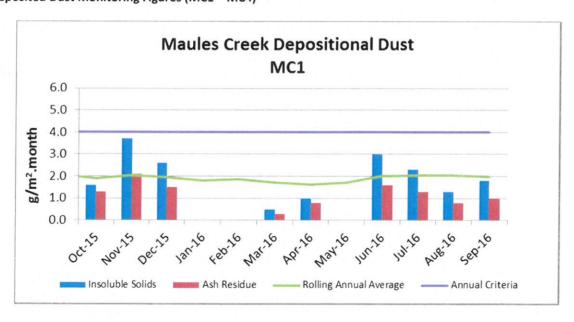
Table - Deposited Dust Monitoring Results *

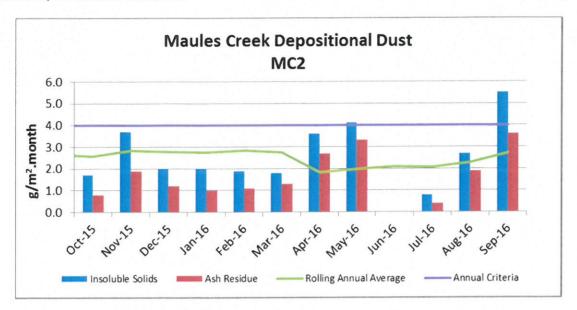
Month	MC1	MC2	MC3	MC4
Oct-15	1.6	1.7	0.3	0.4
Nov-15	3.7	3.7	1.4	3.1
Dec-15	2.6	2.0	1.4	2.0
Jan-16		2.0	0.6	1.2
Feb-16		1.9	0.9	1.1
Mar-16	0.5	1.8	1.0	0.5
Apr-16	1.0	3.6	1.3	1.1
May-16		4.1	1.5	2.7
Jun-16	3.0		1.0	1.1
Jul-16	2.3	0.8	0.6	0.4
Aug-16	1.3	2.7	1.0	0.9
Sep-16	1.8	5.5	1.0	0.9
Annual Avg	1.98	2.71	1.00	1.28
Project Avg 2010 - 2016	2.16	2.23	1.51	1.30

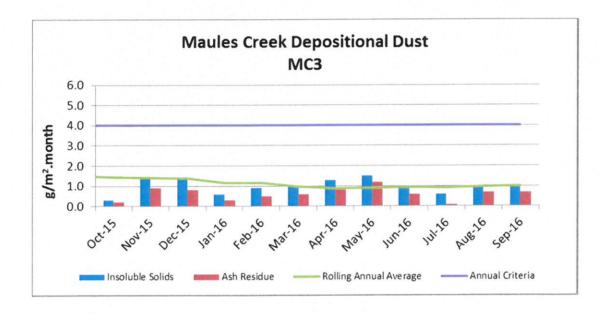
^{*} Blank cells indicate sample periods where the sample has been contaminated and excluded from the results tables due to contaminated material (insect larvae, bird droppings, vegetation etc.).

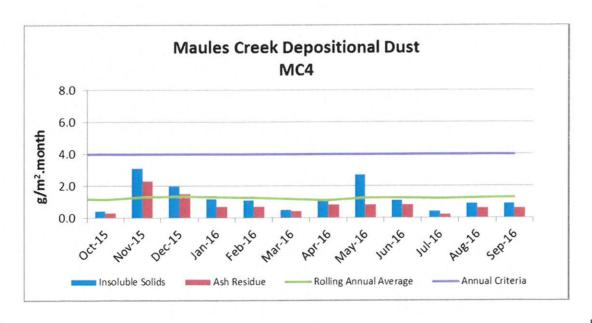
The monthly rolling annual average remains below the relevant Project Approval criteria of 4gm/m²/month, as shown on the graphs below.

Deposited Dust Monitoring Figures (MC1 - MC4)







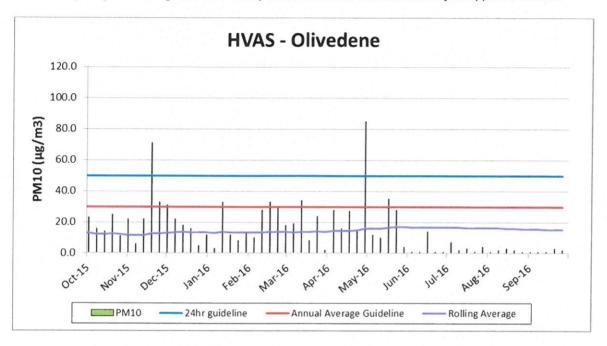


High Volume Air Sampling (HVAS)

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

HVAS PM $_{10}$ Rolling Annual Average results during Q3 2016 remain well below the Annual Average Guideline 30 $\mu g/m^3$.

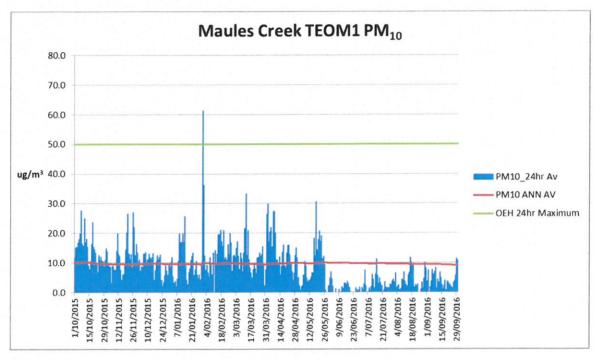
As previously reported, on the 29^{th} April 2016, the HVAS recorded a PM_{10} result of $85~\mu g/m^3$. An investigation indicated likely sources were from localised non-mining related activities. Results recorded at all other approved MCCM air quality monitoring sites on that day remained within the relevant Project Approval criteria.

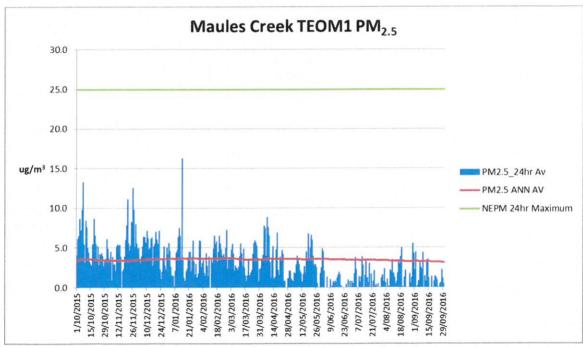


TEOM - PM₁₀ Results

The annual average for PM_{10} results at the Maules Creek Coal TEOM remain significantly below the Project Approval annual average criteria of $30.0\mu g/m^3$ (at 30 September 2016) as illustrated in the following figure. The PM_{10} results have remained below this criteria since the TEOM was commissioned in November 2011.

TEOM Results Figures - Particulate Matter PM_{10μg/m3} and PM_{2.5μg/m3}





Water Monitoring

Ground Water

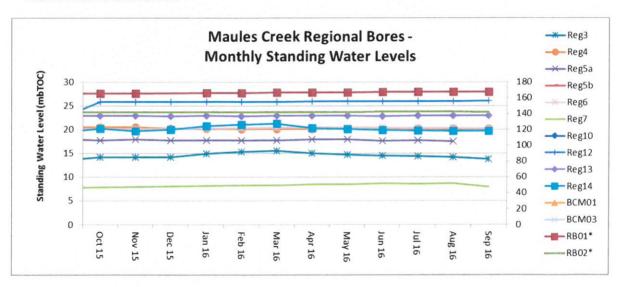
Groundwater monitoring results in open / standpipe piezometers show levels to be currently stable. 'RB' and 'Reg' series bores were installed between Q4 2013 and Q1 2014. BCM01, BCM03, Reg10 are shallow bores which have been dry since construction in 2013.

Table 5 - Groundwater Level

SWL	RB01*	RB02*	RB05	Reg3	Reg4	Reg5a	Reg5b	Reg6	Reg7	Reg10	Reg12	Reg13	Reg14	ВСМ01	всм03
Jul-15	165.36	141.44	56.97	13.49	20.58	18.07			7.41		25.8	22.94	19.59		
Aug-15	165.42	141.43	57.08	13.52	20.61	17.83			7.58		25.83	22.99	19.57		
Sep-15	165.68	141.69	57.2	13.54	20.58	18.04		20.13	7.71		22.84	22.96	19.54		
Oct-15	165.87	141.82	57.35	14.17	20.55	17.78		20.16	7.87		25.81	22.93	20.27		
Nov-15	166	141.93	57.4	14.22	20.54	17.96		20.15	7.93		25.8	22.89	19.74		
Dec-15			57.57	14.16	20.18	17.76		20.17	8.03		25.83	22.85	20		
Jan-16	166.4	141.66	57.25	14.9	20.21	17.71		20.25	8.15		25.86	22.91	20.76		
Feb-16	166.49	141.94	57.35	15.3	20.13	17.71		20.31	8.22		25.83	22.83	21.04		
Mar-16	166.7	141.85	57.45	15.59	20.17	17.71		20.43	8.29		25.85	22.89	21.24		
Apr-16	166.87	142.14	58.56	15	20.17	17.94		20.52	8.42		25.92	22.89	20.34		
May-16	166.97	142.13	58.62	14.75	20.16	17.92		20.42	8.48		25.91	22.9	20.14		
Jun-16	167.3	142.64	58.82	14.51	20.14	17.64		20.43	8.65		25.92	22.83	19.92		
Jul-16	167.35	142.51	58.41	14.37	20.19	17.7		20.33	8.62		25.97	22.92	19.79		
Aug-16	167.59	142.72	58.5	14.18	20.2	17.52		20.29	8.7		25.99	22.95	19.75		
Sep-16	167.64	141.85	58.62	13.77	20.2	**	**	20.27	7.96		26.02	22.93	19.75		

Blank cells indicate sample periods where bores were dry.

^{**} Tracks were too wet to access bores



^{*} RB01 & RB02 bore depths are listed on the secondary axis.

Acidity / Alkalinity (pH)

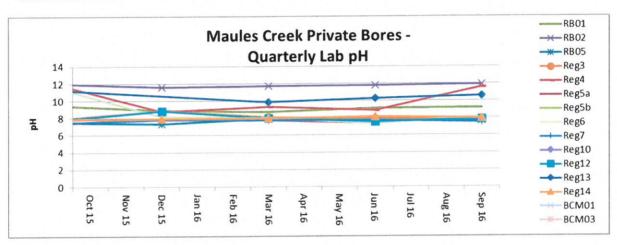
Baseline groundwater conditions are still being established, however, 4 bores (RB01, RB02a, Reg4 and Reg13) show elevated pH levels (above pH 8.5) this has been determined to be as a result of low recharge volumes within these bores since the drilling and installation.

Groundwater Lab Results pH

Lab pH	RB01	RB02	RB05	Reg3	Reg4	Reg5a	Reg5b	Reg6	Reg7	Reg10	Reg12	Reg13	Reg14	BCM01	BCM03
Dec-15	8.87	11.6	7.32	8.83	8.77	7.95		8.15	7.79		8.82		7.95		
Mar-16	8.68	11.7	7.93	8.12	9.31	7.73		8.05	7.77		7.97	9.83	8.01		
Jun-16	9.11	11.8	7.82	7.9	8.88	7.35		7.33	7.77		7.54	10.3	8.15		
Sep-16	9.17	11.9	7.68	7.9	11.6	**	**	8.16	7.49		7.89	10.6	7.96		

Blank cells indicate sample periods where bores were dry.

^{**} Tracks were too wet to access bores



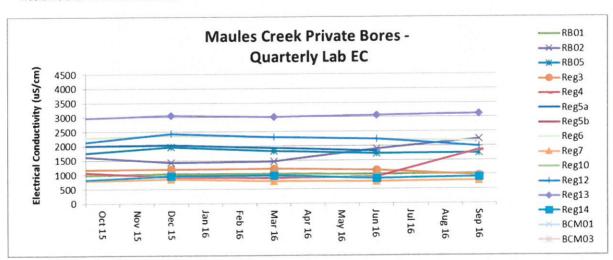
Electrical Conductivity

Laboratory Electrical Conductivity (EC) levels are all within historic groundwater EC range of $500_{\mu s/cm}$ to $2,500_{\mu s/cm}$, with exception for Reg13.

Lab EC	RB01	RB02	RB05	Reg3	Reg4	Reg5a	Reg5b	Reg6	Reg7	Reg10	Reg12	Reg13	Reg14	BCM01	BCM03
Dec-15	1040	1430	1970	1200	925	2040		2360	860		2440	3060	959		
Mar-16	1030	1460	1820	1210	896	1930		2300	788		2310	3020	983		
Jun-16	1010	1890	1740	1150	921	1830		2240	758		2240	3060	871		
Sep-16	1040	2240	1760	986	1860	**	**	2160	790		1980	3130	921		

Blank cells indicate sample periods where bores were dry.

^{**} Tracks were too wet to access bores.



Wet Weather Discharge Sampling

Between 1st August and 30th September 2016, Maules Creek Coal AWS recorded 236.2mm of rainfall. Rainfall levels exceeded the 38.4mm over a consecutive 5 day period three times during this period. L2.5 of EPL20221 provides that 38.4mm equates to the 5 day 90 percentile rainfall for the Gunnedah region.

All results were within the criteria prescribed by L2.4 and L2.5 as detailed in the result tables below.

EPL ID	Date	Parameter	Units	Criteria	Min Value	Max Value
9	- 3/8/16	TSS	mg/L	n/a*	34	77
(SD9)	- Daily 23 to 27/8/16	Oil & Grease	mg/L	10	<5	<5
(309)		рН	pН	6.5-8.5	7.49	8.03
0	-Daily 14 to 16/9/16	TSS	mg/L	n/a*	8	22
9 (SD9)		Oil & Grease	mg/L	10	<5	<5
(303)		рН	рН	6.5-8.5	7.7	8.4

^{*} In accordance with EPL 20221 L2.5 TSS concentration limits may be exceeded for water discharged as a result of rainfall exceeding 38.4mm in a consecutive 5 day period

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 tables and figures below.

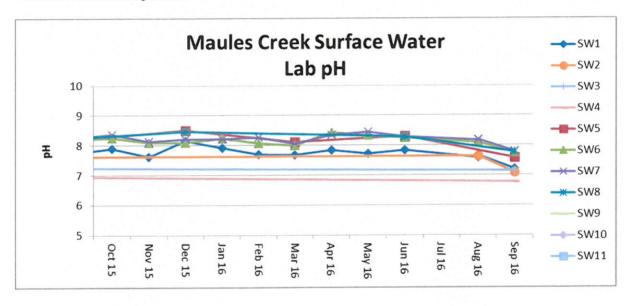
Acidity / Alkalinity (pH)

Laboratory pH in creeks and rivers surrounding MCCM are all trending within the ANZECC acceptable range for Irrigation, Ecosystem Health and Recreation. Back Creek and upper Maules Creek are ephemeral systems.

Lab pH	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10	SW11
12/10/2015	7.9					8.25	8.36				
12/11/2015	7.62					8.09	8.14				
11/12/2015	8.15				8.5	8.1	8.2	8.46			
8/01/2016	7.92					8.23	8.21				
12/02/2016	7.7					8.07	8.26				
15/03/2016	7.67	71.77			8.12	7.99	8.06				
15/04/2016	7.83	7 11 1				8.43	8.35				
16/05/2016	7.72					8.32	8.45				
15/06/2016	7.83				8.3	8.25	8.28	8.29			
15/08/2016	7.58	7.64				8.1	8.16				
22/08/2016	7.66					8.1	8.19				
14/09/2016	7.2	7.09	7.15	6.78	7.57	7.75	7.8	7.77	*	*	*

Blank cells indicate sample periods where waterways were dry.

^{*}Too wet to access monitoring locations



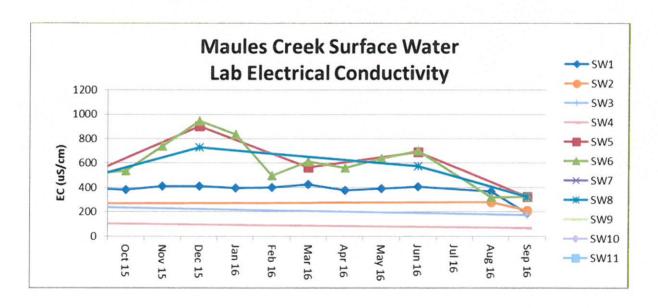
Electrical Conductivity

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

Lab EC	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10	SW11
11/03/2015	386				595	605	564	508			
14/04/2015	404				978	668	756	528			
19/05/2015	394					661	655				
11/06/2015	389				570	577	568	580			
13/07/2015	371					420	401			17125	
25/08/2015	357					458	441				
16/09/2015	393				511	512	502	482			
12/10/2015	381					535	528				
12/11/2015	410					738	792				
11/12/2015	412				902	949	865	730			
8/01/2016	398					838	797				
12/02/2016	401					498	483				
15/03/2016	426				565	615	673				H. Marie
15/04/2016	380					561	606				
16/05/2016	391					640	638				
15/06/2016	407				691	700	569	574			

Blank cells indicate sample periods where waterways were dry.

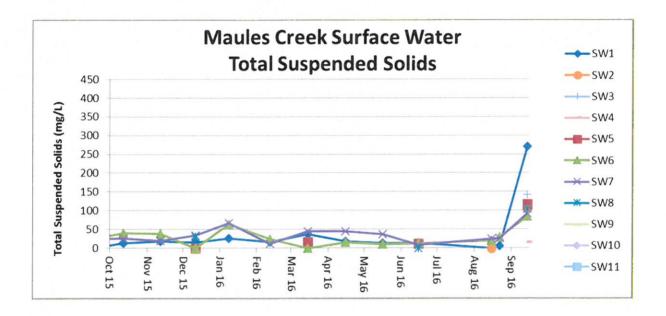
^{*}Too wet to access monitoring locations



Total Suspended Solids (TSS)

Significantly higher than average rainfall was recorded in August and September. Elevated TSS results recorded along the Namoi River correlate to periods of high flow and flooding. 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.

TSS	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10	SW11
12/10/2015	14					40	26				
12/11/2015	18					39	19				
11/12/2015	15				<5	<5	33	30			
8/01/2016	26					64	67				
12/02/2016	16					25	12				
15/03/2016	37				16	<5	44				
15/04/2016	18					15	45				
16/05/2016	14					10	37				
15/06/2016	13				12	12	9	<5			
15/08/2016	<5	<5				20	24				
22/08/2016	5					29	26				
14/09/2016	270	104	142	16	117	84	91	105			



Rehabilitation

No final landform areas are available for rehabilitation since the commencement of mining in August 2014. Rehabilitation has been restricted to areas associated with rail and infrastructure areas during this period.

Community Complaints

15 complaints were received during Q3 2016. Please refer to the Community Complaints Register published on the Whitehaven Coal Maules Creek website.

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