Minutes: Minutes of the 27th Meeting of the Maules Creek Coal Community Consultative Committee

Wednesday 30 October 2019

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


Apologies:  David Paull (DP) – Sustainable Living Armidale (SLA), Steve Eather (SE) – Community Representative.

Independent Chair:  David Ross (DR)

Independent Secretary:  Debbie Corlet (DC)

Agenda Items

1. Apologies  DR
2. Declaration of pecuniary or other interests  DR
3. Confirmation and Discussion of the minutes of the previous meetings – 15 May 2019  DR
4. Business arising from the previous minutes – Action List Distributed  DR
5. Correspondence  ALL
6. Questions and Answers Session  ALL
7. Company Reports and Overview of Activities:
   a. Progress at the mine
   b. Monitoring and environmental performance
   c. Community complaints and response to complaints
   d. Information provided to the community and any feedback
8. General Business
   a. Annual review  ALL
9. Next Meeting – Wednesday 19 February 2020  ALL
<table>
<thead>
<tr>
<th>Agenda Item</th>
<th>Discussion</th>
<th>Action/By Whom</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>Welcome and Apologies</strong> – David Paull and Steve Eather.</td>
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<td></td>
<td>DR welcomed everyone to the final meeting for 2019.</td>
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<td>2.</td>
<td><strong>Declaration of pecuniary or other interests</strong> – DR advised he is paid a fee to chair these meetings as is DC for typing the Minutes.</td>
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<td>3.</td>
<td><strong>Confirmation of the minutes of the previous meeting (August 2019)</strong> – The CCC endorsed the minutes as an acceptable record of what was discussed. LL sent through some additional comments for the WHC “Project Approval Conditions” section of the August minutes, which was approved by the CCC.</td>
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<td>4.</td>
<td><strong>Business arising from the previous minutes</strong> – DR observed all actions from previous meeting completed, including action on him to write to Narrabri Shire Council regarding to Environmental Trust. JW – Requested to have the Hydrographs included from February 2019 as discussed at the last meeting. Took hours to get a graph off the bore government monitoring website. Especially with the Section 324 issued in Upper MC above Elfin Crossing. EB will provide members with hydrograph.</td>
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<td>5.</td>
<td><strong>Correspondence</strong> – Email provided by MCCM to the CCC re trucking from Brighton property and down Warners Road up Therribri Road and along the mine access road. Anticipated to ramp up from 1 ML at present to 2 ML through time. Small unsealed section but no properties along there and watering to be carried out to minimise dust. LL – How many trucks per day? DS – About 5 or 6 trucks per day.</td>
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<td>6.</td>
<td><strong>WHC Presentation by Darren Swain</strong> –</td>
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<td><strong>Company Report &amp; Overview of Activities</strong></td>
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<td></td>
<td>● September 2019 quarter production figure 1.96Mt. FY20 target production 12.8Mtpa ROM (Run of Mine) coal. Safety record of 4.66 (Total Recordable Injury Frequency Rate (TRIFR) – injuries per million hours worked) at end of September, which is down from the June figure of 5.83. Continued focus to improve.</td>
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<td><strong>Health, Safety, Drug and Alcohol Programs</strong></td>
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<td></td>
<td>● Employee health and safety programs continued to focus on: Employee health and safety programs continued to focus on: Injury Prevention, Fatigue Management, Annual Skin Checks, Ongoing Mental Health Awareness and Safety Leadership Induction for New Supervisors, Emergency Response Team Training, to name a few.</td>
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<td></td>
<td>● Ongoing Employee Drug and Alcohol testing carried out.</td>
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</table>
Employment
● Continued focus on local, indigenous and female employment with ongoing training programs undertaken.
● There have been 15 new trainees employed from July to September 2019. Over 600 people employed on site.

Air Quality Management
● Annual rolling average for TEOM1 is 20.0 ug/m3 at 30 September 2019 (criteria 30ug/m3).
● Ongoing dust suppressant application across the operation. Progressive overburden emplacement and bulk shaping on the northern dump, with some topsoil spreading in progress.

Monitoring and Environmental Results
● Monitoring and environmental results provided within the distributed information pack.

Groundwater Monitoring
● Slides presented on groundwater locations and standing water levels.

Water Management
● We are taking steps at all our mines to conserve water and support water security. The primary water source for Maules Creek is a high security water licence drawing upon the Namoi River, however this source has been severely impacted by the drought.
● Pipeline – Pipeline constructed from Whitehaven owned Olivedene property and bores to existing river pipeline. Second pipeline will be predominantly buried on Whitehaven owned land and in the Warners and Therribri Roads easements. Pipeline connects Whitehaven owned bores to the existing river pipeline. Proceeding through a range of applicable approvals processes in conjunction with Council and NRAR as required under the Water Management Act.

Biodiversity Management
● Feral Animal Management – During the most recent Whitehaven Offset Area Feral Animal Control Program (September 2019) the results included: 55 out of total 100 pigs trapped were from the Maules Creek / Boggabri area, and 27 out of total 108 foxes baited were from the Maules Creek / Boggabri area (9% bait take rate).
● Revegetation – Maules Biodiversity Revegetation completed with over 76,000 trees planted. The watering ongoing achieving over 80% survival with damage from Kangaroos biggest issue.
● Fire Management – Annual fire break track maintenance of Biodiversity Offsets underway to maintain zero fuel barriers and good access around Maules Offsets. LRM Fire & Rescue are providing Bushfire Response Service for 2019 / 2020 fire season. Supporting the Rural Fire Service and National Parks & Wildlife Service at the Kaputar Fire.

AHS Movement to date – October 2019. Key Physical Achievements to Date
● Six (6) EH5000s have now operated autonomously (full fleet for Phase 1 and 2). 865km travelled autonomously. 559 haul cycles (real and test). 187 loads hauled autonomously. 24,871bcm (55,839t) of waste hauled autonomously.
Community

- Supporting the Future EDU program in Narrabri Shire in promotion of STEM. Whitehaven are advertising for 2020 Cadetship Program – Mining Engineering, Electrical Engineering, Mechanical Engineering, Mechatronics, Geology or Environmental Science - [https://whitehaven.applynow.net.au/jobs/WHC419-2020-cadetship-program](https://whitehaven.applynow.net.au/jobs/WHC419-2020-cadetship-program)

Sponsorships and Donations Criteria


Local Spend – July to September 2019

- Sponsorships and donations have been made to Tamworth and Region ($14,500), Narrabri area community ($29,200) and Gunnedah area community ($28,700). FY19 Whitehaven spent $1.83 million with local indigenous businesses. $333.9 million with local suppliers and $189.9 million in wages.

General Discussion re the WHC Presentation

JW – With the staff at the Maules site of 600 – does that include contractors?

DS – It doesn’t pick up the Biodiversity workers, but the rehab workers would be included in this number. This 600 is a full-time equivalent.

EB – Email forwarded on Tuesday 29 October 2019 stated a change to the Annual Review. Originally 57 hectares of reshaping and 10 hectares of seeding had been reported, this has been modified to 57 hectares of reshape and 5.58ha of seeding. 30 hectares of reshaping work and no land topsoiled or seeded was required by the approved MOP. 2019 will see 100ha of area topsoiled in anticipation of seeding in 2020.

There was a brief discussion about air quality, observing that there had been four spikes related to regional dust events. High volume air sampling (HVAS) – 24-hour random sample- 30m/g- average criteria is 29.1m/g. HVAS randomly took the sample on a dust event day- the exceedance day was 21/9/19. Exceedance was investigated and found not to be dust generated by the mine.

A discussion was also held on the water – hydrograph slides. GW bores same as regional GW levels from the Government monitoring bores. Rio- different- water level has dropped in it. It is a long way away. There is pumping going on further to the west which may be impacting. MC regional bores- have remained quite stable over last 12 months.

LL – Didn’t all the offsets get burnt- at Wirradale, Lindesay and another property up there?

DS/Emma/Ross – No.

LL – Well according to our fire newsletter update they did.

DS/Emma/Ross – Well some of them- not all.

**ACTION 1** – WHC to organise site visit and meeting for February. Meet at Golf Club
LL – How much has been burnt?
DS – No one can get in there to check.

General comments –
LL – Is that pipeline already going through from Olivedene?
DS – Olivedene is operating. It’s pumping. Second pipeline not because it is not approved. It is buried on our own land.
LL – Not working across the road but working with NRAR and Council. Coming from two properties – Brighton and Roma? Is there water there?
DS – Boggabri Coal did do testing in the area and yes there is water there and it is a good source.
JW – Could we all be emailed all the sets of slides as well please. DR responded that they are always on the website.

JW – Is a visit to the mine still on the tables? DS responded that they are happy to do a tour and meeting at the site.

7. General Business

LL – Are WHC pumping from Zone 11? DS said No. LL asked which zones are being pumped and DS replied Zones 4 and 5 and Porous Rock.
LL – Do you have the data for bore 1280? DS mentioned to look at the back of the Annual Review.
EB - 1280 will be in the Annual Review.
LL – Is there any chance for that to be done every quarter? EB advised that she’ll have to look from her PC as can’t tell from the phone. EB will clarify and report back.

DS also handed out a few papers for the Committee (see Attachment 2).
DR – Advised that he has a requirement to develop an Annual Report under the CCC Guidelines. So has a few questions for the Committee to think about in small groups.
1. What have been the big things discussed this year?
2. Are there some things you’d like to do next year?

After a series of small group discussions, the following points were made by CCC members on what has been good this year:
• Putting in questions early so the community has answers within a few weeks of the CCC meetings has been good.
• Water issues have been the key focus over the last 18 months.
• JW – Reporting of management of biodiversity offset areas – pest control / weed control / planting management etc. RW has been involved over the weekend with fighting the fires – fire management. Find out more about the large areas of offsets and how it affects the community.

ACTION 2 – EB to confirm whether Bore 1280 is monitored – and monitored quarterly?
• JW – Information on water and water monitoring / management / sourcing water that are important from the community’s point of view. Have the reporting on the performance – mine bore monitoring program and the regional bore monitoring.
• Water, Air Quality and Noise – they are all standard Agenda Items and should continue. Happy with the questions and answered been asked. Answers seem to be getting answered now and not dragging on.
• RK – People feel free to be able to ask questions, especially over the last 12 months. Takes a long time for new people coming together and it has settled down really well. I think we’ve gotten better with practice as it was a bit unruly in the beginning. Community have problems with the mine – this is the forum which the questions can be asked. As long as the answers are coming back – then what more can you expect.
• SM – Questions and answers are good as it helps build confidence as well because a member may ask a question and that may trigger another question from someone else.

The following points were made by members on what they’d like to have happen in the CCC next year:
• It has been appreciated having government agencies attend this year. Next 12 months getting government to present on health perspective and what is happening in mining communities would be good. Water perspective – under Water Management Act – how regulation is enforced.
• RW – Site visit maybe once a year to check on progress and see the operation moving.
• SM – Yes, definitely for the site visit. We’ve been to the site as a community but to go as a group would be good.

SM – I am very happy with community programs and procurement process. In (WHC Community) the newsletter we met with Barada Barna people. They came to see how good it is here. They couldn’t believe the programs we had.
EB – Yes, mostly the money stays with the traditional owners. I have worked around there and others get nothing.

LL – Answers in Briefing Notes are available, but they aren’t in the Minutes.
DR – Committed to having Electronic copies of the Briefing Notes with the Minutes – so all included as one document with attachments.

8. **Next meeting date to be agreed** – Next meeting Wednesday 19 February 2020 at 9:00 am, meeting at the Golf Club to be transported to the Maules Creek Mine.

**Note** – everyone to wear safety clothing with long pants and enclosed shoes.
## Appendix 1: Actions

<table>
<thead>
<tr>
<th>Page No</th>
<th>Action No</th>
<th>Description</th>
<th>Date Raised</th>
</tr>
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<tbody>
<tr>
<td>4</td>
<td>1</td>
<td>WHC to organise site visit and meeting for February. Meet at Golf Club</td>
<td>30 October 2019</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
<td>EB to confirm whether Bore 1280 is monitored – and monitored quarterly</td>
<td>30 October 2019</td>
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</table>
## CCC Member questions regarding

**Rehabilitation**

**Question 1.**

A. *WHC to find out about how much planting has been done,*

B. *the watering regime, and*

C. *what works are being undertaken currently at offsets.*

<table>
<thead>
<tr>
<th>Responses</th>
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<tbody>
<tr>
<td>Over 76,000 trees planted to date in 2019 planting season.</td>
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<tr>
<td>Watering is carried out at time of planting then approximately every two weeks.</td>
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<tr>
<td>• Pest control works.</td>
</tr>
<tr>
<td>• Tree planting and watering.</td>
</tr>
<tr>
<td>• Weed control.</td>
</tr>
<tr>
<td>• Habitat augmentation works.</td>
</tr>
<tr>
<td>• Threatened species fencing.</td>
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<tr>
<td>• Fire break maintenance.</td>
</tr>
</tbody>
</table>

**Question 2.** *DS to chase up the plan associated with the slides.*

<table>
<thead>
<tr>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>See attached plan</td>
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<tr>
<td>CCC Member questions regarding</td>
</tr>
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<td>-------------------------------</td>
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</tbody>
</table>
| **Question 1.**  
*What works are being/have been undertaken within some of the offset sites?* | As per correspondence of the 23 sept 2019 via the MCC CCC Chairman  
- Pest control works.  
- Tree planting and watering.  
- Weed control.  
- Habitat augmentation works.  
- Threatened species fencing.  
- Fire break maintenance. |
| **Question 2.**  
*I understand the offsets been mapped by the BCT. Could this be made available to the committee?* | Mapping is yet to be finalised for all offsets. |
| **Question 3.**  
*Given some six years have elapsed since the approval without finalisation of offset arrangements, how is this a ‘timely’ delivery of the offsets as per commonwealth conditions?* | Management of offsets is ongoing and not dependent upon in-perpetuity securement. |
| **Question 4.**  
*Could we receive a brief as to the extent of active regeneration activities, how much area planted and for what purpose and success rates. What is the watering regime?* | As per correspondence of the 23 sept 2019 via the MCC CCC Chairman  
- 76,000 trees planted in 2019 planting season in Biodiversity Offset areas.  
- Watering is carried out at time of planting then approximately every two weeks. |
| **Question 5.**  
*How has Whitehaven responded to the preliminary findings of the consent authority regarding surface water take?* | Whitehaven is reviewing the findings. |
| **Question 6.**  
*Does Whitehaven report Aboriginal artefacts and sites to the government AHIMS database? Could those maps be made available to the committee?* | Yes.  
NSW Office of Environment. AHIMS - Aboriginal Heritage Information Management System.  
This is a Govt database. |
| **Question 7.**  
*There have been a number of ‘miss-fire’s’ at the Whitehaven Coal mine recently, can you explain why this is happening? Is this a safety concern for contractors and mine staff? What causes a miss-fire?* | It is an unfortunate reality, that misfires are part of the blasting business.  
Potentially defective initiating products, ground shift during the blast, fly rock during the blast, human error can all be contributing factors. |
In order to fire a shot, dedicated exclusion zones for people and equipment are in place. Sentries are placed in areas to prevent people entering the blast-controlled area.

Industry standard exclusion distances are 500m for people, and 300m for equipment. As part of the firing process, once a blast is fired, it is inspected prior to the release of the area. If a misfire is detected, sentries remain in place, and procedures are followed to rectify. At no time do we place people in harm’s way.

**Question 8.**
*What is the status of the Offset properties, have any been secured in perpetuity?*

Whitehaven are working through the securement process with Govt.

No

**Question 9.**
*(Jack’s question)* - *Would it be possible to receive a report from Whitehaven at the CCC Meeting on October 30th, 2019 outlining the nature of the findings of the Natural Resources Access Regulator (NRAR) to apparent surface water “take” at Maules Creek Mine?*

As per the email of the 8 October 2019 from DS.

“Whitehaven Coal is surprised by the preliminary findings of the Natural Resources Access Regulator (NRAR), which the company is reviewing in detail.

The water management regime in NSW is complex but does set out exemptions in relation to the capture of rainfall that are relied upon by mine operators right around NSW, not just at Maules Creek.

The use of sediment-laden water captured within a disturbed mining area is a commonly accepted industry practice and acknowledged by Government departments and consent authorities as having the practical benefit of ensuring sediment-laden water on disturbed areas of a mine is not released into the downstream environment.

Whitehaven will be reviewing the entirety of NRAR’s preliminary findings and will respond in due course. We note that NRAR will not be making any further comments while the matter is being determined.

Whitehaven acknowledges water is a critical shared resource, particularly at this time of drought, and that acting responsibly in relation to water use is a fundamental obligation for all stakeholders.”

**Question 10.**
*How much longer will surveillance be occurring (sic) on Harparary Road? What data has Wilson Security been instructed to collect?*

Noise monitoring is ongoing on Harparary Road.
Attended Noise Monitoring

Attended noise monitoring was undertaken at six locations during July, August and September 2019 by an independent acoustic consultant. The measured noise level (L$_{Aeq}$ 15 minute) attributed to Maules Creek Coal Mine (MCCM) and applicable criteria for each location are shown in the tables below.

**L$_{Aeq}$, 15 minute GENERATED BY MCCM AGAINST OPERATIONAL NIGHT NOISE CRITERIA – APRIL TO JUNE 2019.**

### Table 1 - July Noise Monitoring

<table>
<thead>
<tr>
<th>Location</th>
<th>Start Date and Time</th>
<th>Wind Speed m/s</th>
<th>Rainfall mm</th>
<th>Criterion dB</th>
<th>Criterion Applies</th>
<th>MCCP L$_{Aeq}$ dB</th>
<th>Exceedance dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>NM1</td>
<td>08/07/2019 22:45</td>
<td>0.2</td>
<td>0.0</td>
<td>35</td>
<td>Yes</td>
<td>&lt;25</td>
<td>Nil</td>
</tr>
<tr>
<td>NM2</td>
<td>08/07/2019 23:45</td>
<td>1.0</td>
<td>0.0</td>
<td>39</td>
<td>Yes</td>
<td>&lt;25</td>
<td>Nil</td>
</tr>
<tr>
<td>NM3</td>
<td>08/07/2019 23:40</td>
<td>1.1</td>
<td>0.0</td>
<td>35</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
</tr>
<tr>
<td>NM4</td>
<td>08/07/2019 23:15</td>
<td>1.3</td>
<td>0.0</td>
<td>35</td>
<td>Yes</td>
<td>22</td>
<td>Nil</td>
</tr>
<tr>
<td>NM5</td>
<td>08/07/2019 22:15</td>
<td>0.8</td>
<td>0.0</td>
<td>35</td>
<td>Yes</td>
<td>&lt;25</td>
<td>Nil</td>
</tr>
<tr>
<td>NM6</td>
<td>09/07/2019 00:13</td>
<td>1.0</td>
<td>0.0</td>
<td>35</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
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</tbody>
</table>

### Table 2 - August Noise Monitoring

<table>
<thead>
<tr>
<th>Location</th>
<th>Start Date and Time</th>
<th>Wind Speed m/s</th>
<th>Rainfall mm</th>
<th>Criterion dB</th>
<th>Criterion Applies</th>
<th>MCCP L$_{Aeq}$ dB</th>
<th>Exceedance dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>NM1</td>
<td>07/08/2019 22:30</td>
<td>0.8</td>
<td>0.0</td>
<td>35</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
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<tr>
<td>NM2</td>
<td>07/08/2019 23:15</td>
<td>0.4</td>
<td>0.0</td>
<td>39</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
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<tr>
<td>NM3</td>
<td>07/08/2019 23:34</td>
<td>0.3</td>
<td>0.0</td>
<td>35</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
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<td>NM4</td>
<td>07/08/2019 22:52</td>
<td>0.5</td>
<td>0.0</td>
<td>35</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
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<td>NM5</td>
<td>07/08/2019 22:00</td>
<td>0.5</td>
<td>0.0</td>
<td>35</td>
<td>Yes</td>
<td>IA</td>
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<td>NM6</td>
<td>07/08/2019 23:40</td>
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<td>0.0</td>
<td>35</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
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</table>

### Table 3 - September Noise Monitoring

<table>
<thead>
<tr>
<th>Location</th>
<th>Start Date and Time</th>
<th>Wind Speed m/s</th>
<th>Rainfall mm</th>
<th>Criterion dB</th>
<th>Criterion Applies</th>
<th>MCCP L$_{Aeq}$ dB</th>
<th>Exceedance dB</th>
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<tbody>
<tr>
<td>NM1</td>
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<td>1.1</td>
<td>0.0</td>
<td>35</td>
<td>Yes</td>
<td>29</td>
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<tr>
<td>NM1*</td>
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<td>Yes</td>
<td>31</td>
<td>Nil</td>
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<tr>
<td>NM2</td>
<td>24/09/2019 00:15</td>
<td>1.4</td>
<td>0.0</td>
<td>39</td>
<td>Yes</td>
<td>31</td>
<td>Nil</td>
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<tr>
<td>NM3</td>
<td>23/09/2019 23:37</td>
<td>1.3</td>
<td>0.0</td>
<td>35</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
</tr>
<tr>
<td>NM4</td>
<td>23/09/2019 23:45</td>
<td>1.2</td>
<td>0.0</td>
<td>35</td>
<td>Yes</td>
<td>28</td>
<td>Nil</td>
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<td>NM5</td>
<td>23/09/2019 22:15</td>
<td>1.8</td>
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<td>35</td>
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<td>&lt;25</td>
<td>Nil</td>
</tr>
<tr>
<td>NM6</td>
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<td>0.4</td>
<td>0.0</td>
<td>35</td>
<td>Yes</td>
<td>&lt;20</td>
<td>Nil</td>
</tr>
</tbody>
</table>

(1) Noise emission limits do not apply during periods of rainfall or winds greater than 3 metres per second (at a height of 10 metres);
(2) Estimated or measured L$_{Aeq}$, 15 minute attributed to MCCM;
(3) NA in exceedance column means criterion is not applicable, either due to atmospheric conditions outside those specified in project approval or due to property acquisition by MCC; and
(4) Indicates the application of a 2dB low frequency modifying factor.
IA/NM – Inaudible
NM – Not measurable
During Q3 no measurement satisfied conditions for further assessment of low frequency modification factors in accordance with the EPA’s Noise Policy for Industry.

The Maules Creek Coal (MCC) EPL 20221 also has a ‘1 Minute - Night’ criteria (LA1) that applies from 10pm to 7am Monday to Saturday & 10pm to 8am Sundays and Public Holidays. The results for the LA1 monitoring are shown below. There was one exceedance of the applicable LA1 criteria during the September monitoring period. Additional monitoring which was undertaken 15 minutes later showed that MCC noise had returned to compliance levels.

**LA1, 1minute GENERATED BY MCC AGAINST OPERATIONAL NIGHT NOISE CRITERIA – July TO September 2019.**

**Table 4 - July Noise Monitoring – Night**

<table>
<thead>
<tr>
<th>Location</th>
<th>Start Date and Time</th>
<th>Wind Speed m/s</th>
<th>Rainfall mm</th>
<th>Criterion dB</th>
<th>Criterion Applies</th>
<th>MCCP L,1min dB</th>
<th>Exceedance dB</th>
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</thead>
<tbody>
<tr>
<td>NM1</td>
<td>08/07/2019 22:45</td>
<td>0.2</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>33</td>
<td>Nil</td>
</tr>
<tr>
<td>NM2</td>
<td>08/07/2019 23:45</td>
<td>1.0</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>26</td>
<td>Nil</td>
</tr>
<tr>
<td>NM3</td>
<td>08/07/2019 23:40</td>
<td>1.1</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>29</td>
<td>Nil</td>
</tr>
<tr>
<td>NM4</td>
<td>08/07/2019 23:15</td>
<td>1.3</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>28</td>
<td>Nil</td>
</tr>
<tr>
<td>NM5</td>
<td>08/07/2019 22:15</td>
<td>0.8</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
</tr>
<tr>
<td>NM6</td>
<td>09/07/2019 00:13</td>
<td>1.0</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
</tr>
</tbody>
</table>

**Table 5 – August Noise Monitoring – Night**

<table>
<thead>
<tr>
<th>Location</th>
<th>Start Date and Time</th>
<th>Wind Speed m/s</th>
<th>Rainfall mm</th>
<th>Criterion dB</th>
<th>Criterion Applies</th>
<th>MCCP L,1min dB</th>
<th>Exceedance dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>NM1</td>
<td>07/08/2019 22:30</td>
<td>0.8</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
</tr>
<tr>
<td>NM2</td>
<td>07/08/2019 23:15</td>
<td>0.4</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
</tr>
<tr>
<td>NM3</td>
<td>07/08/2019 23:34</td>
<td>0.3</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
</tr>
<tr>
<td>NM4</td>
<td>07/08/2019 22:52</td>
<td>0.5</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
</tr>
<tr>
<td>NM5</td>
<td>07/08/2019 22:00</td>
<td>0.5</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
</tr>
<tr>
<td>NM6</td>
<td>07/08/2019 23:40</td>
<td>0.3</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
</tr>
</tbody>
</table>

**Table 6 - September Noise Monitoring – Night**

<table>
<thead>
<tr>
<th>Location</th>
<th>Start Date and Time</th>
<th>Wind Speed m/s</th>
<th>Rainfall mm</th>
<th>Criterion dB</th>
<th>Criterion Applies</th>
<th>MCCP L,1min dB</th>
<th>Exceedance dB</th>
</tr>
</thead>
<tbody>
<tr>
<td>NM1</td>
<td>23/09/2019 22:45</td>
<td>1.1</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>46</td>
<td>1</td>
</tr>
<tr>
<td>NM1&lt;sup&gt;1&lt;/sup&gt;</td>
<td>23/09/2019 23:06</td>
<td>1.7</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>39</td>
<td>Nil</td>
</tr>
<tr>
<td>NM2</td>
<td>24/09/2019 00:15</td>
<td>1.4</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>37</td>
<td>Nil</td>
</tr>
<tr>
<td>NM3</td>
<td>23/09/2019 23:37</td>
<td>1.3</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
</tr>
<tr>
<td>NM4</td>
<td>23/09/2019 23:45</td>
<td>1.2</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>IA</td>
<td>Nil</td>
</tr>
<tr>
<td>NM5</td>
<td>23/09/2019 22:15</td>
<td>1.8</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>39</td>
<td>Nil</td>
</tr>
<tr>
<td>NM6</td>
<td>24/09/2019 00:40</td>
<td>0.4</td>
<td>0.0</td>
<td>45</td>
<td>Yes</td>
<td>&lt;20</td>
<td>Nil</td>
</tr>
</tbody>
</table>

Notes:

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

IA – Inaudible NM – Not measurable
Wind Direction during Attended Monitoring

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

Table 7 - Prevailing Wind Direction

<table>
<thead>
<tr>
<th>Monitoring Date</th>
<th>Prevailing Wind Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>SE</td>
</tr>
<tr>
<td>August</td>
<td>NW</td>
</tr>
<tr>
<td>September</td>
<td>NE</td>
</tr>
</tbody>
</table>

Blast Monitoring

There have been 34 blasts at MCCM during Q3 2019. All blast monitoring results recorded within the reporting period have been within the applicable overpressure and ground vibration limits specified in the respective approvals.

Table 8 - Blast Results Summary Quarter 3 2019

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Frequency</th>
<th>Number</th>
<th>Average</th>
<th>Max</th>
<th>100% Limit</th>
<th>Exceedance (Yes / No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise</td>
<td>dB (Lin Peak)</td>
<td>All</td>
<td>34</td>
<td>91.2</td>
<td>115</td>
<td>120</td>
<td>No</td>
</tr>
<tr>
<td>Vibration</td>
<td>mm/s</td>
<td></td>
<td>34</td>
<td>0.21</td>
<td>0.98</td>
<td>10</td>
<td>No</td>
</tr>
</tbody>
</table>
Air Quality

Total Depositional Dust

The monthly rolling annual average remains below the relevant Project Approval criteria of 4gm/m$^2$/month for the respective monitoring points, as shown on the graphs below.

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

<table>
<thead>
<tr>
<th>MONTH</th>
<th>MC1</th>
<th>MC2</th>
<th>MC3</th>
<th>MC4</th>
</tr>
</thead>
<tbody>
<tr>
<td>July-19</td>
<td>0.8</td>
<td>1.8</td>
<td>4.2</td>
<td>0.7</td>
</tr>
<tr>
<td>August-19</td>
<td>1.4</td>
<td>1.0</td>
<td>2.2</td>
<td>1.0</td>
</tr>
<tr>
<td>September-19</td>
<td>1.3</td>
<td>1.1</td>
<td>2.2</td>
<td>2.9</td>
</tr>
<tr>
<td>12 MONTH ROLLING AVERAGE</td>
<td>1.8</td>
<td>2.2</td>
<td>3.1</td>
<td>1.8</td>
</tr>
</tbody>
</table>

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

** Exceedances recorded in November and December were attributed to the regional events and discussed at the February 2019 CCC meeting.
**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 during Q3 2019 remained below the Annual Average Guideline 30 µg/m$^3$. An elevated result was recorded on 17th September 2019, which was attributed to regional weather conditions.

*Exceedances recorded in December, February and April were attributed to the regional events and discussed at the February and May 2019 CCC meetings.*
TEOM - PM$_{10}$ Results

The annual average for PM$_{10}$ results at the Maules Creek Coal TEOM remain below the Project Approval annual average criteria of 30µg/m$^3$ (at 30 September 2019) as shown in the following figure. The PM$_{10}$ annual average results have remained below this criteria since the TEOM was commissioned in November 2011. There have been five exceedances of the 24 hour average for Q3, these have all been attributed to regional dust events.

TEOM Result Figures – Particulate Matter PM$_{10\mu g/m^3}$ and PM$_{2.5\mu g/m^3}$

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

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

**Groundwater**

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

![Maules Creek Regional Bores- Monthly Standing Water Levels](image1)

**Acidity / Alkalinity (pH)**

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

![Maules Creek Regional Bores - pH](image2)
Electrical Conductivity

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

Wet Weather Discharge Sampling

During Q3 there were no discharge events.

Surface Water – Creeks and Rivers

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

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

![Maules Creek Surface Water - pH](chart)

Electrical Conductivity

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

![Maules Creek Surface Water - Electrical Conductivity](chart)
Total Suspended Solids (TSS)

Surface water TSS trends have remained generally consistent with historical results. SW5, SW6, SW7 and SW8 are historically variable as they are located along the Namoi River which is subject to regulated and variable flow regimes. There were no elevated levels of TSS in Q2.

Rehabilitation

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

Feral Animal Management

During the most recent routine Whitehaven Offset Area Feral Animal Control program (September 2019) the results included:

- 55 out of total 100 pigs trapped were from the Maules Creek/Boggabri area; and
- 27 out of total 108 foxes baited were from the Maules Creek/Boggabri area (9% bait take rate).

Revegetation

- Maules Creek Biodiversity revegetation completed with over 76,000 trees planted
- Tree watering ongoing achieving over 80% survival rate with damage from kangaroos the biggest issue

Fire Management

- Annual fire break track maintenance of Biodiversity Offsets underway to maintain zero fuel barriers and good access around Maules Offsets;
- Engaged LRM Fire & Rescue to provide Bushfire Response Service for 2019/2020 fire season
Maules Creek Coal Mine

CCC MEETING
Agenda

– Apologies

– Declaration of pecuniary or other interests

– Confirmation of minutes of the previous meetings

– Business arising from the previous minutes

– Correspondence

– Overview of activities

– General Business
Business arising from previous minutes

– Please refer to the previous minutes
Company Report & Overview of Activities

– September 2019 quarter production figure 1.96Mt.

– FY20 target production 12.8Mtpa ROM (Run of Mine) coal.

– Safety record of 4.66 (Total Recordable Injury Frequency Rate (TRIFR) - injuries per million hours worked) at end September, which is down from the June figure of 5.83. Continued focus to improve.
Health and Safety

– Employee health and safety programs continued to focus on:
  - Healthhaven Hub and annual challenge
  - Movement for Improvement – Injury Prevention
  - Ongoing Fitness for Work Promotions including Fatigue Management
  - Annual Skin Checks and Flu Vaccination Program
  - Ongoing Mental Health Awareness and Employee Assistance Program
  - Hygiene Monitoring Program
  - First Aid Training
  - Incident Investigation Training
  - Safety Leadership Induction for New Supervisors
  - Emergency Response Team Training
  - Open Cut Examiner Training
  - Workplace Trainer / Assessor Training
  - Safehaven Conference
Drug and Alcohol Testing Program

– Ongoing Employee Drug and Alcohol testing carried out.

– Our program of testing includes:
  - Random testing (conducted by an independent company)
  - Blanket testing (everyone on site as requested)
  - For Cause testing e.g. after an incident

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

– Continued focus on local, indigenous and female employment with ongoing training programs undertaken.
– There have been 15 new trainees employed from July to September.
– Over 600 people employed on site
Air quality management

– Publically available results of TEOM1 available on the EPA website. Annual rolling average for TEOM 1 is 20.0 ug/m³ at 30 September 2019 (criteria 30ug/m³).

– Ongoing dust suppressant application across the operation.

– Progressive overburden emplacement and bulk shaping on the northern dump, with some top soil spreading in progress.
Annual rolling average for TEOM 1 is 20.0 ug/m³ at 30 September 2019 (criteria 30ug/m³). There were four spikes above 50ug/m³ during Q3 of 2019.
Monitoring and Environmental Results

- Monitoring and environmental results provided within the distributed information pack
Regional and local dust events due to drought conditions noted in spikes above
High Volume Air Sampling (HVAS)

The exceedance recorded on 17th September 2019 was investigated and found to be not mine related.
Groundwater monitoring
Monitoring Locations

- Currawidgen
- Thornfield
- Green Gully
- Elfin Crossing
- Merriendi Crossing
- Harparary Rd
- Reg3
- Little Rio 1
- Little Rio 2
- Reg12
- Harparary Rd South
- Little Rio 2
- Merriendi
- Maulee Creek
- Boggabri Coal Mine
Groundwater levels

GW SWL Comparison 2018 - 2019

*Note Reg12 and Reg3 both within Boggabri Volcanics

Source: NSW DPI - Water & MCCM monitoring data
Standing water levels
Standing water levels

Maules Creek Regional Bores - Monthly Standing Water Levels

Standing Water Level (mbTOC)

- RB05a
- Reg3
- Reg4
- Reg5
- Reg5a
- Reg6
- Reg7a
- Reg10a
- Reg12
- Reg13
- Reg14
- BCM01
- BCM03

CCC MEETING
Water

- Severe drought conditions in the area are putting pressure on local water users.

- We are taking steps at all our mines to conserve water and support water security.

- As previously noted we are looking at options to ensure water security at Maules Creek.

- Our focus is on ensuring the supply at the Maules Creek mine and we have put plans in place to achieve this.

- The primary water source for Maules Creek is a high security water licence drawing upon the Namoi River, however this water source has been severely impacted by the drought.
Water

Trucking

- Email sent advising of upcoming trucking of water to MCC being carried out. This trucking has now started.

Pipeline

- Pipeline constructed from Whitehaven owned Olivedene property and bores to existing river pipeline.

- Second pipeline will be predominantly buried on Whitehaven owned land and in the Warners and Therribri Roads easements. This pipeline connects Whitehaven owned bores to the existing river pipeline.

- We are proceeding through a range of applicable approvals processes in conjunction with Council and NSW water regulation authorities in relation to this option, including relevant approvals under the Water Management Act (WMA).
Feral Animal Management

– During the most recent routine Whitehaven Offset Area Feral Animal Control program (September 2019) the results included:

• 55 out of total 100 pigs trapped were from the Maules Creek/Boggabri area; and
• 27 out of total 108 foxes baited were from the Maules Creek/Boggabri area (9% bait take rate).

Revegetation

• Maules Biodiversity Revegetation completed with over 76,000 trees planted;
• Tree watering ongoing achieving over 80% survival with damage from Kangaroos biggest issue;

Fire Management

• Annual fire break track maintenance of Biodiversity Offsets underway to maintain zero fuel barriers and good access around Maules Offsets;
• LRM Fire & Rescue are providing Bushfire Response Service for 2019/2020 fire season. Supporting the Rural Fire Service and National Parks & Wildlife Service at the Kaputar Fire;
Biodiversity Management

Upcoming works:

- Feral Animal Control Program in November 2019;
- Tree Watering ongoing;
- Complete annual Fire Break Track Maintenance Program;
- Demolition of remaining Derelict/Obsolete above ground Structures ongoing;
- Annual Flora and Fauna Monitoring in November 2019;
- Annual Fire Hazard and Fuel Load Assessments;
- Maintenance of Boundary, Heritage and Threatened Species Fences ongoing.
AHS movement to date – October 2019
KEY PHYSICAL ACHIEVEMENTS TO DATE

– Six (6) EH5000s have now operated autonomously (full fleet for Phase 1 & 2);
– 865km travelled autonomously;
– 559 haul cycles (real and test);
– 187 loads hauled autonomously;
– 24,871bcm (55,839t) of waste hauled autonomously;
Community

- Supporting the Future EDU program in Narrabri Shire in promotion of STEM.
- Narrabri Business Chamber visited site.
- Complaints details – on the website.
- Work experience program proposed again at MCC this year.
- Whitehaven are advertising for 2020 Cadetship Program
  • Mining Engineering, Electrical Engineering, Mechanical Engineering, Mechatronics, Geology, or Environmental Science.

https://whitehaven.applynow.net.au/jobs/WHC419-2020-cadetship-program
Sponsorships and Donations criteria

- WHC regularly considers requests for donations, sponsorship and gifts in kind, which provide benefit in the following areas:
  - Health,
  - Education,
  - Whole of Community Benefit,
  - Representative Level Indigenous Sport

Local spend

– Sponsorships and donations have been made to the:

  • Tamworth and Region for July – Sept was ~$14,500
  • Narrabri area community for July – Sept was ~$29,200, and
  • Gunnedah area community for July – Sept ~$28,700

– FY19 Whitehaven spent

  • $1.83 million with local indigenous businesses
  • $333.9 million with local suppliers
  • $189.9 million in wages
Next meeting –

Feb 2020
THANK YOU

www.whitehavencoal.com.au