



BENGALLA MINE

COMMUNITY CONSULTATIVE COMMITTEE

Minutes of Meeting No. 133

Location: Bengalla Mining Company Boardroom and Via Microsoft Teams

Date: Wednesday 24th February 2021

Present:

Name	Affiliation
Malcolm Ogg	Chairperson
Jonathan Moore	CCC Member
Cam Halfpenny	Bengalla Mining Company (General Manager)
Craig White	Bengalla Mining Company (Environment Superintendent)
Peter Madden	Bengalla Mining Company (Environmental Advisor)
Fiona Hartin	Bengalla Mining Company (Community Relations Specialist)
Sharon Pope	Muswellbrook Shire Council (MSC) (via Teams)

Meeting opened: 3.15pm

- 1. APOLOGIES:** Llewellyn Bates, Wanaruah LALC
- 2. DECLARATION OF ANY PECUNIARY AND NON-PECUNIARY INTERESTS:**
Nil
- 3. MINUTES OF PREVIOUS MEETING**
Moved by: J Moore Seconded by:
- 4. OTHER BUSINESS ARISING FROM THE MINUTES/ACTION LIST**
Action 1- Review of data from 1 January 2015 Wyndham Arms Road dust gauge and nearest located compliance dust gauges. Incorporate a slide of historical results into the next CCC environmental monitoring presentation. Presentation given by PM. Action Complete
Action 2 - Follow up regarding RFS fire trucks access to Bengalla fire hydrants. Share with the CCC Members photos and actions to date. In progress
Action 3 - Complete the 2020 Annual CCC Report. Complete
Action 4 - Provide copy of Dragline presentation to all CCC members. In progress
- 5. CORRESPONDENCE**
Georgia Pascoe- Wanaruah LALC apologies that there will be no one attending the meeting on behalf of the Wanaruah LALC.
Pre-meeting Summary Papers, Agenda and draft Newsletter emailed or sent to the CCC Members.
Apology from Llewellyn Bates and thank you for the Christmas gift and card
08.02.21 Email from Malcolm Ogg- Submission of the BMC CCC Annual Report for 2020
- 6. REPORTS FROM CCC COMMUNITY REPRESENTATIVES**

Report from Jonathan Moore

- Positive comments from the community on the rehab on the southern mound. There is green up there now. CW to do presentation at the next CCC meeting.
- Equipment has now moved over the western ridge and the equipment has just come up on the north end of the pit. It indicates that Bengalla is on the move.

Report from Llewlyn Bates

- Thank you to Bengalla for the Christmas card and gift.

Report from Malcolm Ogg

- Reported that there have been no applicants for the general committee on the Bengalla CCC
- Malcolm reported on the positive interaction he had as part of the Engineering Scholarship interview process

7. ENVIRONMENTAL MONITORING RESULTS

Environmental monitoring review for November 2020, December 2020, and January 2021 (the Reporting Period).

- Air Quality:
 - Pursuant to Bengalla's short term (24-hour) PM₁₀ criteria (50 µg/m³), 7 elevated results were recorded during the Reporting Period being:
 - 52 µg/m³ at PM10-4 on 10 November 2020. Bengalla increment estimated to be 19.4 µg/m³;
 - 53 µg/m³ at PM10-1 on 28 November 2020. Bengalla increment estimated to be 4.9 µg/m³;
 - 66 µg/m³ at PM10-3 on 28 November 2020. Bengalla increment estimated to be <4.9 µg/m³;
 - 56 µg/m³ at PM10-3 on 10 December 2020. Bengalla increment estimated to be <7.2 µg/m³;
 - 71 µg/m³ at PM10-4 on 10 December 2020. Bengalla increment estimated to be 7.2 µg/m³;
 - 59 µg/m³ at PM10-4 on 21 January 2021. Bengalla increment estimated to be 22.3 µg/m³; and
 - 100 µg/m³ at PM10-4 on 27 January 2021. Bengalla increment estimated to be 30.5 µg/m³.

[JM] Was there anything occurring in the atmosphere or the environment occurring on this day which would contribute?" (to the elevated result on the 28th November 2020).

[PM] This day was characterised by winds that triggered the medium risk wind speed alarm.

[CW] The medium risk wind speed alarm occurred from around 11am until 6pm. BMC had approximately 130 hours of equipment delays on the day primarily due to the wind. Relative to the applicable 24-hour project alone criteria of 50 Bengalla's contribution at the PM10-1 and PM10-3 monitors was 4.9.

The PM10 monitors measure all sources and sometimes the monitor might not be down wind of Bengalla on the day so the monitor may measure an elevated reading however the Bengalla contribution may be small. In broad terms we didn't have dust leaving site and travelling over that monitor in significant quantities.

[JM] "What is going on with the big weather pattern at that time? Unless we can remember it, the story becomes confusing. In December 2020 there was good rainfall, but I cannot remember what happened after that. There may have been some dry time before that which contributed. Wondering why there is an exceptional reading but yet presenting information, but the whole story is not there. I wonder what the weather is doing at that time. There were no bushfires, or drought land west of Muswellbrook and there were northerly winds and we know there is not dust coming in, it leaves us concerned but you are trying to justify that Bengalla's contribution is very small."

[CW] The Bengalla contribution can be determined with some accuracy because we know which direction the wind is coming from and BMC have monitors upwind and downwind.

[JM] So where is the dust coming from?

[CW] Dust comes from multiple sources, some localised activity, for example, the school. running the mower around the school monitor which may result in higher readings for dust.

[JM] If I was an investigator for December 10 and there is a spike. What is the lag in that from you getting the information?

[CW] We have a range of compliance and real time monitors. What we are presenting is the compliance 6-day run monitor results. So, these monitor results are not real time. The second component to dust monitoring is the real time monitoring that generate a trigger alarm under certain conditions. Bengalla's operations relative to dust are modified primarily with respect to the wind speed alarm.

[JM] If there is an exceedance on a particular day then if there is a summary made on that day of wind speed, wind direction and other contributing factors and if that is then shown it would be more convincing of why there is an exceedance and why Bengalla's contribution is only this much. Otherwise we are being presented the information and it is too easy to then say there is something else that happened that brought it up. There are only 2 occasions and we need to know why.

[CW] BMC receives predictive forecasting each day for the next 48 hours that focusses on predicted noise and dust impacts so the operation can prepare according to the weather. Monitoring occurs in real time and for compliance. Real time monitoring wind speed alarms have certain triggers that are listed in the approved Air Quality Management Plan. The monitoring that we are showing you here on the graphs is the compliance monitoring that are run every six days. On a run day and the monitor draws air in and dust for PM10 is collected. The consultant collects the physical dust in the monitor and analyses the Bengalla increment. Sometimes you find that you get different coloured dust and then you know that something else is going on. If the total dust measured is above 50 micrograms for PM10, BMC notifies the Department. If the total dust measured is under 50 then the dust measurement is compliant with the criteria in the Consent. Bengalla conducts compliance monitoring each year every 6 days and what we have found and we have had this independently reviewed, since 2015 under the Consent we have not had a run day at a compliance monitor where Bengalla have exceeded the 50 micrograms for PM10 Project alone. In the new air quality system certain monitors will be compliance with results received in real time. At Bengalla there is a strong focus on dust management, though we always strive to do better.

[JM] We have always pushed for the greater information on what is happening. We asked for it a few years ago. We don't want to know that there has just been an exceedance when we don't know what you do. Well now you are actually explaining it very well to us. We can see that you are acting on the weather, making decisions, and really making decisions to try and reduce the dust and we really appreciate that you have given us the information. My point is that if there is only 2 exceedances that I am trying to get some more information on what else contributed to the weather on that day. Because then you are telling us that Bengalla's contribution was only this much and that was my only point. I am interested to know where is the dust coming from? I Fully understand when there is a drought or bushfires there is more dust. But when we have north westerly winds the air is fairly clean. We are very aware of wind direction. We have lots of information about management on the day. But after your investigation you are told that Bengalla's contribution was this much, and MtP will be doing the same. Because MtP will be telling us on certain occasions when we investigated ours was only this much. But as a community we are left with what more can we ask? You need to acknowledge it is only with information we are able to better understand. The community will struggle to understand that mining companies even with an exceedance indicated by a statement that they are still only contributing a small amount. It needs to be explained and the community need to see if there are exceedances in dust that they can understand when you tell us that a particular mines contribution is only a small one.

[MO] The next step is convincing the public of that and that is the bigger issue

[CW] The best tool available to analyse valley dust is the monitoring network being the Upper Hunter Air Quality Monitoring Network. Monitoring data from this network is publicly available. That would be the next level of analysis. When we had the drought, we were looking at background levels across the state. We will go back and look at what further information we can provide. To your point what else is going on. Was there rain on the day, what was the weather doing, what were we doing, what are the other things that contribute to that being a high day.

[JM] In response to report on operational delays. Just so that we understand, see how you say that all 16 dozers operated, and you lost so many hours, so are they working and then who tells them they have to stop or stand down?

[CW] In terms of the triggers there are 3 components. A wind speed alarm occurs that generates an email, text message and a Modular notification to certain responsible people, a range of managers, mining superintendents and operational staff. Upon receipt of a wind speed trigger alarm the operation requires review and modification according to the AQMP. Typically what happens is dispatch will call the OCE, and the OCE, determines, for example, relocation of trucks from the top of the dump to lower down, that area has to be inspected from a safety point of view to make sure there are no problems with that, and then they have to institute the action and redirect the trucks or stop diggers .

[JM] So for an example a dozer do they generally then have to just park up?

[CW] Yes if not relocated according to the AQMP.

[JM] And do the men and women just wait with the machinery do they or do they go to their crib?

[CW] Depending on the time of day, they might go and have an early lunch.

[PM] Also depending on the type of alarm, on this day it was a medium risk alarm, so that means that certain operations are in pit, so essentially below the natural surface level, so this equipment is not required to shut down. So that is why the information is presented so it shows that we didn't have to stop operations for a medium wind speed alarm.

[CH] So the supervisor and the dispatchers are accountable to make sure we take appropriate action. So for the whole day if Bengalla was at a wind speed of less than 5.6m per second and if we had an all source exceedance on that day I would have been happy for the operation to run as this approach is in within our Consent conditions, further the guys, at times will take further steps and will shut down equipment when wind speed alarms have not occurred. However, the community may be experiencing 52 micrograms which is above the 24-hour Project alone criteria, so we want to minimise our impacts on the community.

- Pursuant to Bengalla's annual PM₁₀ criteria (25 µg/m³), at the end of the averaging period (2020 calendar year):
 - PM10-1 read 25.7 µg/m³;
 - PM10-3 read 26.5 µg/m³; and
 - PM10-4 read 32.0 µg/m³.
- Pursuant to Bengalla's annual Total Suspended Particulates criteria (90 µg/m³) at the end of the averaging period (2020 calendar year):
 - HV6 read 96.5 µg/m³.

[CW] BMC have inspected this monitor location and there is nothing obvious other than vegetation to be trimmed. My sense is that there is a developing issue we need to understand which is likely, mining moving closer to the monitor. HV6 is 1.3km from the Moore's House. That monitor is close to the 2039 high wall and increased readings at those locations is not unexpected. My sense is that the cumulative readings are increasing at this point. That is why the new monitor location will be more representative of the nearest house.

[JM] You not going to take this away?

[CW] We have sought to remove this one.

[JM] That is crazy. It needs to be there. It has all this information already. Even though it is telling you what you are predicting it would it is still relevant information.

[CW] Well as the mine is closer the information becomes less meaningful.

[JM] It becomes very meaningful to nearest neighbours surely.

[CW] Well this monitor is 1.3kms from your house. The monitor that we are putting in is on the corner of Wybong Road and Bengalla Link Road. That will be more representative of your house and Brads House.

[JM] I still think it is a shame to be removing monitors when they start giving you exceedances. You have all of this data leading up to it which was indicating your modelling. And I think there is every reason to leave it even though it is going to be giving you, it is still relevant information.

[CW] The condition relates to monitor the project increment or the cumulative annual criteria at the residence. So, what we are seeking to do is put the monitor closer to the nearest residence. I think that monitor will be more meaningful, and it will give us better results in terms of how we

run the mine. That is how the industry does it. As the mine moves the monitoring network needs to move. Putting a monitor between Mt Pleasant and Bengalla Mine is a little bit meaningless as it will just read high.

- Pursuant to Bengalla's annual Total Deposited Dust criteria ($4 \text{ g/m}^2/\text{m}$) at the end of the averaging period (2020 calendar year):
 - D20 read $4.5 \text{ g/m}^2/\text{m}$.
- Pursuant to Bengalla's annual Particulate matter $<2.5 \mu\text{g}$ criteria ($8 \mu\text{g/m}^3$) at the end of the averaging period (2020 calendar year):
 - The DPIE "Muswellbrook" monitor read $9.3 \mu\text{g/m}^3$.
- Noise Management:
 - For the reporting period, Bengalla complied with all noise criteria at all monitoring locations.
- Blast Monitoring:
 - Bengalla was compliant with the blast criteria.
- Water Usage:
 - Rainfall received during the Reporting Period was below the long-term average for November and above the long-term average for December and January.
 - Total rainfall for 2020= 792mm.
 - BMC did not discharge to the Hunter River during the reporting period.
 - BMC has extracted 455 megalitres of water in the 2020/2021 water year (as at 22 February 2021).

[JM] So where is rainfall monitored?

[PM] At the Bengalla weather station located north of the Hunter River near the racecourse towards the end of Logues Lane.

- Progressive Rehabilitation:
 - During 2020 BMC has completed new rehabilitation of approximately 15.3 hectares of new High-Density Woody Vegetation (HDWV) and approximately 5.7Ha of new pasture. Further approximately 60 hectares of HDWV over existing rehabilitation was installed.
- Complaints:
 - During the reporting period 13 complaints received.
- Environmental incidents: 0
 - During the reporting period Bengalla had 13 internal reportable events being the elevated air quality readings.

8. COMMUNITY REPORT

Community slides presented including a summary of the community partnerships and community events. Events are kicking off including Upper Hunter Show, Energy Expo, Muswellbrook Art Prize, UHMD School Mines tours, Work Experience, Careers Day at Muswellbrook High School.

9. CCC NEWSLETTER IDEAS

Continue with articles on Bengalla and the community.

Next meeting to be held on Wednesday 26th May 2021 at 3.00pm

Meeting closed at 4:45pm

Attachments:

- Meeting Presentation slides

ACTION LIST

Meeting No. 133 – Wednesday 24th February 2021

ITEM NO.	ITEM	ACTION BY
1	Follow up on new representative for the Wanaruah LALC	FH
2	Present a summary of last year's rehabilitation on the southern mound	CW
3	Provide CCC presentation to all CCC members (from November meeting)	FH