MINUTES

Upper Hunter Mining Dialogue

Joint Environment Working Group Meeting

UHMD Resource Centre, Upstairs of the Town Square Shopping Centre Suite 1, 159 John Street, Singleton NSW 2330

Wednesday 11 March 2020: 9.00 am to 11.55 am

Attending:

Paul Amidy Glencore

Chloe Annandale MACH Energy (Mount Pleasant Operation)
Mitchell Bennett NSW Environment Protection Authority
Ken Bray Hunter Valley Water Users Association

Glenda Briggs Regional NSW (R.I.A.R.)

Jeff (R.J.) Esdaile Community member

Neville Hodkinson Singleton Shire Healthy Environment Group

Sharon Pope Muswellbrook Shire Council

Lisa Richards BHP

Sarah Roberts Singleton Council

Julie Thomas Muswellbrook Coal Company

Ned Stephenson Glencore

Craig White Bengalla Mining Company (via teleconference)

Peter York Thiess
Bob Mackie theresource

James Barben NSW Minerals Council Craig Milton NSW Minerals Council

Guests:

Justine Cox NSW Department of Primary Industries

Matthew Riley NSW Department of Planning, Industry & Environment (EES)

Apology:

Cameron Archer The University of Newcastle

Bill Baxter Yancoal Nigel Charnock Glencore

Mary-Anne Crawford Singleton Council

Carolyn Herlihy Hunter New England LHD

Peter Jaeger Peabody Energy
Chris Knight The Bloomfield Group
Daniel Lewer Hunter Land Management

Karen Marler NSW Environment Protection Authority

Donna McLaughlin Malabar Coal

Monique Meyer Resources Regulator

Jim Morgan Wybong Action Group / NSW Farmers' Association Neil Nelson Singleton Beef and Land Management Association

Matt Parkinson AGL - Bayswater Power Station

Laurie Perry Wonnarua Nation Aboriginal Corporation

Jo Powells Local Land Services
Chris Quinn The Bloomfield Group

Andrew Reid MACH Energy Mount Pleasant Operation

1. Welcome and apologies

The Chair welcomed members and noted apologies received.

Mr. Amidy served as a temporary Chair for this meeting, following Ms. Thomas' resignation from the position in late-2019. Mr. Barben thanked Ms. Thomas for her commitment to the Working Group and Dialogue more generally and thanked her remaining as a member of the Working Groups.

2. Minutes from Previous Meeting

The minutes from the previous meeting were accepted and a summary of the actions was supported.

3. Presentation: ACARP Rehabilitation Project - Justine Cox (NSW DPI)

Ms. Cox provided members with an overview of the key results and outcomes of an ACARP study supported by the Dialogue's members that is examining the past and present mine rehabilitation to grazing land. Members were overall quite pleased with the results which showed that the soils used in site rehabilitation had produced results that compared more favourably than analogue sites. However, members noted the ongoing drought conditions which had severely impacted site rehabilitation, as well as additional issues with a lack of available and inconsistent historical rehabilitation data and site access. It was positive to see different species being used on different pasture sites.

Ms. Cox opened up discussion to the Working Group about what they see as potential future focus areas related to this research, as the next round of ACARP funding would commence soon. Member discussions have focused on how we can better get mines closer to closure, and the potential for post-mining land holders to over-work rehabilitated pasture land and having this impact industry's rehabilitation efforts. Ms. Cox advised that DPI has a lot of information about grazing management which may be of use.

Members encouraged Ms. Cox to start a dialogue with the Resources Regulator to establish if there is anything they are seeking to better understand. This project has shown that operators can have productive pasture from their soil profile, despite it being former mine land. The wider community may find this difficult to believe, so this research is important to highlight this can be done. Members also noted that sharing such information with the Resources Regulator may also help improve their understanding of difficulties with industry's ability to meet strict closure standards and 'self-sustaining' systems.

Ms. Cox advised that the draft report was prepared in December 2019, with three months to review by industry monitors. The report will be distributed amongst Working Group members once possible.

ACTION:

Dialogue secretariat to distribute the final report to Joint Working Group members.

4. Review of 2019 Forum Outcomes

Mr. Barben provided an overview of the 2019 Forum, noting the discussion sessions had once again provided the Dialogue with useful feedback for consideration at this round of Joint Working Group meetings.

Air Quality

- Mr. Hodkinson discussed the mismatch between community expectations and the acceptable
 levels of emissions permitted by industry, and that a lot of this discussion is being driven by
 doctors in the area, who are referencing 2008 levels of air quality, in comparison to the Dialogue
 project that extends back to 2013. Mr. Hodkinson encouraged industry to return to the 2008
 levels of air quality.
- Mr. Bennett advised that there is a difference between observations and monitored information we have to deal with each day, and that there is great uncertainty in how to deal with the disconnect between perceptions and observations.
- The Chair noted that air quality concerns often come back to communication. The Dialogue can
 work with EES to get advice on atmospheric pollutants to distribute to stakeholders
- Mr. Riley advised of past work examining the vertical structure of pollution, via one jointly funded monitor that extracts all information about layers using LIDAR. EES will be doing Upper Hunter

- measurements at Merriwa with a ceilometer looking at the inflows into the valley. This will require the sharing of data but would be very helpful in understanding the dynamics of the valley.
- Members discussed a potential action could be to show the community how each site is
 monitoring the issue, with contouring of maps and LIDAR analysis to help guide people through
 what they are seeing. The Dialogue secretariat agreed that there is a potential project to unpack
 the work that is already being developed and would look to discuss further how we may pull
 together a concept around this.
- Members discussed the challenges that the science community is facing in seeking
 acknowledgement of studies and the dismissive nature of those whose opinions do not align
 with the science. Mr. Bennett added that the OEH publication that was recently published was
 based on the Particle Characterisation Study, and that it was designed to be easy to understand
 for general readers, yet still received criticism from activists.

Rehabilitation and Land Management

- Members agreed with the recommendation to promote the results of the latest rehabilitation study as it continues to generate significant interest in the Dialogue.
- Members recommended focusing on temporary measures to minimise dust creation before rehabilitation can fully occur.
- Communications about rehabilitation were discussed as a priority, and the Dialogue secretariat
 agreed that the Dialogue would need to look at other methods of communication to reinforce the
 message that rehabilitation is actually occurring.
- Members agreed that the involvement of the indigenous cultural burning program presentations in the 2019 Working Group meetings was very informative and the right path for the Dialogue to take in looking at other forms of land management. Members recommended keeping engaged with the groups involved for regular updates on their priorities and activities.

Water Quality and Stewardship

- Members agreed the Dialogue secretariat should seek to engage with industry and develop some
 case studies profiling local site water reuse and stewardship initiatives. Given the ongoing
 conditions, it would be good to have resources handy should any further cuts happen to water
 licences in the short-term.
- Members discussed the recommendation to look at water tank studies and whether it is worth revisiting this matter. Members discussed the tank cleaning offered by sites as well as filters and chlorine treatments, noting that it is not a major concern.

5. Presentation - Air Quality - Matthew Riley (NSW DPIE - Environment, Energy and Science)

Mr. Riley provided members with an overview of the recent change to hourly reporting of air quality information. The details of this change and other discussion about recent air quality is contained below:

- The change to hourly reporting was undertaken in response to community requests to shift to
 more timely reporting on air quality, as evidenced from high levels of unique web traffic to the
 DPIE(EES) Air Quality website during the peak of the 2019-20 bushfire season, and the need to
 undertake emergency monitoring during this time.
- While the changes are 'interim' changes, they will be staying due to ongoing community pressure, and will seek to address the lag between poor air quality and reporting of it, by which time the air may be clear.
- NSW is working alongside other governments to ensure greater nationwide consistency, with the intent of these changes being for people to better plan and protect their health. Recent government agencies have met to determine how to best implement enHealth's suggested proposal prior to the next fire season commencing in May/June 2020. COAG Health Council recently sent out a communique advising that all health ministers agree to focus on this.
- 24-hour average is still available to view on the DPIE(EES) website. While the EES can measure and report the basic data, they recognise that external providers can use this data in a more accessible or intuitive way via commercial apps for stakeholders (like transport apps).
- If industry is having issues accessing the data, this should be discussed with EES.
- The recent 'Blown Away' webinar hosted by EES was discussed, with members noting that the forecasting segment was interesting.
- Mr. Hodkinson questioned what information was given to mines over the recent bushfire period.

Mr. Bennett (EPA) advised that each mine has their own rules as to how to operate and at what levels are appropriate. The EPA's review 5 years ago on how mines respond to adverse weather showed there were inconsistencies in mine behaviour and an inability to forecast well in the Upper Hunter. The EPA is working to develop their forecasting to the point where they can advise of adverse weather and mines can allow for modifying operations. Mr. Riley reiterated that forecasting is difficult, with other external factors (dust) impacting the success of modelling.

- Members agreed that the Upper Hunter community has an observation issue and there is not a full understanding of what is being seen in the sky. From the 2019 Forum discussions, it is clear that more education needs to be provided. Mr. Riley advised that EES struggled with this at a recent workshop and we are talking about an issue where the risk to individual health is low. Mr. Riley added that it is difficult to communicate to the general population about health, but not cause undue stress, and they are focusing on balanced approaches that make people alert, but not alarmed. Mr. Riley advised that any changes that do come through from EES will have a coordinated communications strategy with appropriate health messages and consistent supporting information.
- Mr. Riley advised that a paper will be released shortly from epidemiologists in the Medical Journal
 of Australia that will point to the bushfire air quality leading to a number of deaths.
- EES no longer communicates air quality is 'good by international standards' and instead now states that NSW is working to meet challenges of air quality management.

ACTION:

 Dialogue secretariat to distribute Mr. Riley's presentation and other EES materials relevant to members.

6. Update on Emissions and Health Projects

Members noted the update on the Dialogue's Emissions and Health-related projects, with the Dialogue secretariat to review the air quality report in the coming weeks and distribute amongst the wider Dialogue working group for comments.

7. Update on Land Management Projects

Members noted the update on the Dialogue's Land management-related projects, with the Dialogue secretariat to reach out to industry for 2019 rehabilitation progress data in the coming weeks.

8. Update on Water Projects

Members noted the update on the Dialogue's Water-related projects, with the Dialogue secretariat to reach out to industry for 2019 water use data in the coming weeks.

9. Update on Communications Activities

Mr. Mackie provided an update on the Dialogue's various communications and engagement activities, including the planning for the 2020 program of school mine tours.

10. Update on Dialogue Working Groups and Committees

Members noted the updates provided.

11. Project Proposal - Neville Hodkinson - Air Quality

Mr. Hodkinson provided a short presentation to members regarding a project proposal submitted to the Dialogue for Working Group consideration. The proposal focuses on improving air quality by minimising dispersion caused by mining operations, and to consider shifting to real-time air quality updates for the region. Mr. Hodkinson advised that he is on two CCCs and had raised these issues previously.

Members discussed the proposal, noting that mines have clear rules for what they need to do to achieve satisfactory air quality on a 12 hour and 24-hour rolling basis.

Ms. Richards provided Mr. Hodkinson with advice regarding BHP's relatively new Dust Control System, which has factored in community feedback and is reviewed periodically. The system includes TEOMs with 10 minute and 15-minute averages, which are able to calculate downstream and upstream in real time.

Alerts are sent to the control room, which sounds production alarms to fleet vehicles which will need to respond and record any actions undertaken to address the identified issue. This system is quite consistent with the proposal from Mr. Hodkinson, and probably largely exists across the other Upper Hunter mine sites, although there may be site variations.

Ms. Thomas advised the need to be realistic about alerts and alarms as well, noting that they are only useful when people react to them, and if there are too many going off constantly, this will likely drive down the urgency to respond. We need to find a balance between alarms that require an urgent response, and alerts that can help monitor situations.

Mr. Stephenson added that HVO has a similar system to BHP's and the issue may be that these systems are happening in isolation on monitors that are not part of the UHAQMN, and the community is therefore unaware of the full extent of planning and controls that sites have in place to monitor and respond to emerging air quality impacts in real-time. Most sites would be watching the UHAQMN monitors as well as others onsite to make decisions about how to respond. Perhaps there may be some way for the UHAQMN to contour this information to provide a more collaborative suite of information.

Mr. Bennett advised that the EPA provides guidance to sites to minimise dust, however they do not stipulate the discharge limits. The EPA is working with EES to determine the conditions that lead to dust to help predict these days.

The Chair recommended that Mr. Hodkinson may benefit from a tour of a site control room (suggestion for Bulga or Glendell) to better understand these systems and what is involved.

ACTION:

- Dialogue secretariat to distribute Mr. Hodkinson's full proposal and supporting information for reference.
- Dialogue secretariat to engage with industry members and Mr. Hodkinson to arrange site control room tour.

12. Other Business

No other business was raised.

13. Next Meeting / Close

The meeting closed at 11:55 AM.

Actions arising from meeting UHMD Land Management and Water Joint Working Group Meeting

Action	Responsibility	Status
Dialogue secretariat to distribute the final report to Joint Working Group members. Report awaiting finalisation. To be distributed to members once finalised.	Dialogue secretariat	In progress
Dialogue secretariat to distribute Mr. Riley's presentation and other EES materials relevant to members.	Dialogue secretariat	Completed
Dialogue secretariat to distribute Mr. Hodkinson's full proposal and supporting information for reference.	Dialogue secretariat	Completed
Dialogue secretariat to engage with industry members and Mr. Hodkinson to arrange a site control room tour. Action currently deferred due to Government COVID-19 advice regarding restrictions. HVO personnel to raise request directly with Mr. Hodkinson at upcoming CCC meeting	Dialogue secretariat	In progress