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 27 February 2019: 9.00 am to 11.45 am

Attending Bill Baxter (Acting Chair) Cameron Archer Carolyn Herhily Ngaire Baker Paul Amidy Sharon Pope Mitchell Bennett Jonathan Deacon Monique Meyer Ken Bray Bob Mackie James Barben Craig Milton	Yancoal Tom Farrell Institute Hunter New England Health Mount Pleasant Operation Glencore Muswellbrook Shire Council NSW Environment Protection Authority BHP Resources Regulator Hunter Valley Water Users Association theresource NSW Minerals Council NSW Minerals Council
Apologies Julie Thomas (Chair) Neil Griffiths Jim Morgan Karen Marler Jo Powells John Watson Nigel Charnock Daniel Lewer Neil Nelson Simon Francis Wendy Bowman Glenda Briggs	Muswellbrook Coal NSW Department of Primary Industries Wybong Action Group / NSW Farmers' Association NSW Environment Protection Authority NSW Department of Primary Industries Glencore Glencore Hunter Land Management Singleton Beef and Land Management Association NSW Department of Primary Industries - Water NSW Mine Watch NSW Department of Primary Industries

1. Welcome and apologies

The Chair welcomed all attendees and noted apologies.

2. Minutes and actions of the previous meeting

The minutes from the previous meeting were accepted and the actions arising were addressed. The Dialogue is seeking an update from Eddie Harris on behalf of DPI Water on the Water Action Reform Plan.

3. Review of 2018 Annual Forum: Project Ideas from Discussion Sessions

Mr. Barben provided an overview of how the discussion would work, noting that the project ideas listed UHMD Joint Environment Working Group Meeting – 12 June 2019 were summarised from those raised by participants at the 2018 Forum Discussion Sessions. The following tables have captured the key projects under each of the themes whereby specific projects were supported for the Dialogue's consideration by the JASC.

AIR QUALITY, EMISSIONS AND HEALTH

Project Idea:

Provide basic air quality information on what numbers the criteria involved in air quality assessments mean, and what to do when the air quality is bad? E.g. stay indoors, close your windows.

Working Group Discussion:

Members noted the air quality fact sheets that provide this information. The EPA was asked as to whether they have any existing information available to leverage for these resources based on actions for the community when air is bad?

The EPA advised that 24 hr. criteria means this data only shows exceedances. The challenge of using monitoring information is that it cannot be relied upon to advise people to act and stay indoors, as the information is too late. They have to know in advance. The EPA has been tweeting to community when high-risk days are predicted. These haven't captured dust storm events from the west. While there are shorter term projections done by sites and OEH for analysis this is not community facing.

Members agreed the Dialogue can include some UHAQMN info in our existing fact sheets. The EPA is happy to work with Dialogue to review and provide information.

The EPA advised that OEH is working on an infographic on Upper Hunter Air Quality. Leanne Graham (formerly of the EPA) is working on this.

Project Idea:

Review of dust risk sources at sites and to examine dust impacts on health. Provide clear information on types and sources of dust, including that dust exists in many areas across NSW, even in those that don't have mining operations.

Working Group Discussion:

Members noted the work already completed in this area, and whether there was some contextual information we can build into information package.

The EPA advised that the UHAQMN Advisory Committee that is working to get some apportionment of mine dust in Upper Hunter. The initial state government funded study in 2012 focused on PM 2.5 only but could not differentiate between soil from a mine and other sources. A later study in Newcastle included coarser PM10 particles as well. There have been calls for another study, however the EPA are focusing efforts into reducing dust in the first place rather than further studies into it. The Dialogue advised that we could consider the need to revisit previous studies to determine any appropriate actions.

Project Idea:

Integrate more air quality information as part of the School Mine Tours process.

Working Group Discussion:

Members noted that this will likely pass this to School Tours Working Group to review.

Project Idea:

Incorporate the Upper Hunter Air Quality Monitoring Network sites into tours and demonstrate how they work and their purpose in regulating air quality.

Working Group Discussion:

The EPA advised that there is a community expectation that if sites trigger a high number that actions will arise. It should be clarified that the EPA uses monitoring as an assistance tool to guide the EPA in determining where to focus their attention, rather than as a regulatory compliance tool. Clarifying this concept to students may help improve general community knowledge them better understand.

The Dialogue can look at incorporating more Network information into the tours. In terms of visiting a monitoring site as part of a tour, members were not overly supportive as it would add extra time and not add any additional benefits as the tours need to be engaging for students.

Project Idea:

Refinement of forecasts for the broader community.

Working Group Discussion:

Members noted this was not a well-defined action. The EPA noted that it is important to differentiate what is being done in this space by EPA and OEH. EPA is trying to forecast dust risk, not air quality, which OEH covers in their forecast system. The Upper Hunter is not able to use Air Quality modelling yet to make those predictions. Members noted there may not be much value in publicising the Dust Watch program given that it's in its final week of operation in Summer 2019.

Project Idea:

Best practice for dust management in the Hunter Valley - dust handbook.

Working Group Discussion:

The EPA advised that they are seeking to republish the dust handbook following updates that have gone through industry consultation. It will likely be solely electronically based, enabling greater access and sharing of the materials amongst relevant stakeholders. The Dialogue can communicate this progress to stakeholders on the Dialogue website and media and share any links to information once available.

Project Idea:

Investigate link between Merriwa Plateau Air Quality and Mining Dust.

Working Group Discussion:

Members acknowledged the concern about air quality, however, were unsure of the link between Ulan mines and the Merriwa region. The EPA advised that there would be modelling from when mines have been developed in their EA. A Merriwa monitor was deliberately placed in a paddock outside the town to pick up what is coming in the valley from West.

The Dialogue noted that we can look at the EAs for these particular projects. Typical mine dispersion particle modelling would likely drop out before reaching Merriwa from Ulan.

REHABILITATION AND FINAL LAND USE

Project Idea:

Greater investigation of sustainable final land use options. E.g. consideration of pumped hydro, energy hub, floating solar, recreational use (Facebook Posts, based on Final Voids Study). Focus on finding best land uses to offset economic impacts of closure - avoid site by site planning.

Working Group Discussion:

Members noted the Dialogue's continued involvement in the Synoptic Plan review would help fulfil this goal in the long term.

Members supported the Dialogue's proposal to repackage the various Beneficial reuse of voids reports into a more digestible and synthesised format for publishing in the next few months would address this concern.

Members weren't supportive of additional work being done in this space at this time, given the voids present a range of unknown outcomes at this stage. The voids project has started the conversation.

The Resources Regulator has noted the complexity of post-mining land use planning will be a joint effort of stakeholders, industry and government to make this work. Members noted the flexibility needed to achieve outcomes.

Mr. Archer recommended that the government seek to acquire rehabilitated lands and repurpose on a broad scale, which will open up opportunities.

Project Idea:

Ensure detailed industry rehabilitation information is available to share across industry, and with the regulators and the community to increase transparency.

Working Group Discussion:

Members noted that the Dialogue collates and publishes industry rehab data annually on the website. There is an opportunity to make this more visible and promote better across the network, with other work being done in the government space to promote GIS data through the SEED portal.

Project Idea:

Communication of quality rehabilitation case studies/stories to media and community, outlining processes involved in rehabilitation, use via VR headsets to tell story.

Working Group Discussion:

Members noted the Dialogue's action to publish the case studies collected through the booklet that are relevant to the Upper Hunter and promotion across the network. The VR content is being utlised where possible.

The Resources Regulator is preparing communications on the Operational Rehabilitation Reforms, which may be shared by the Dialogue.

Project Idea:

Facilitate use of buffer land/voids to their potential, share information between mines with regulators and community. Better awareness of sites coming up to closure.

Working Group Discussion:

Members agreed that we need to be more active around promoting the use of lands around mines where possible. The Dialogue noted DPC discussions to help facilitate a buffer land prospectus to identify prospective land users' needs, as well as incentivise land available and what it could potentially be used for.

Members agreed it would be worth quantifying some clear industry buffer land use figures by detailing a breakdown of various classifications of non-operational land.

Members discussed buffer lands having limits to what they can feasibly support on the land due to safety regulations, however low impact cattle grazing could be supported.

A definition of buffer land was noted as an integral part of this discussion for industry. It was suggested this may include temporary or future buffer land. The collection of 2018 industry

rehabilitation data can help with this definition and help gain a clearer picture.

Members agreed that highlighting the underutilisation of prime agricultural land that can be utilised in the short-term would open up a range of opportunities for some prospective land users.

Members noted the prospect of redeveloping any part of a site which is a state significant project is highly difficult and encouraged the Dialogue's continued liaison with the Department of Planning to help facilitate a streamlined process

Yancoal noted their investment in a permanent property optimisation role within the company to manage these issues.

Project Idea:

Develop real life case studies of successful closure pilot sites for mine closure.

Working Group Discussion:

Members noted this would be covered in the Voids, Rehabilitation and Land use reports.

The Resources Regulator noted that closure won't necessarily be captured in the operational reforms, but they are working on another project with Steve Barry (DPE) to gather case studies.

Project Idea:

Detailed assessment of void water quality

Working Group Discussion:

Members noted the study completed in the Beneficial Reuse of Voids projects, and that this can be incorporated into a more accessible format for the community. The Dialogue will seek to publish this in the coming months which should address this concern and start discussions. Members noted the issue identified in the reports of stratification, with some direction provided about future work being needed to develop guidelines about void water sampling. A suggestion was made to look at how Central Queensland spoils water quality may apply to Hunter models.

Project Idea:

Develop guiding principles around final land use options to increase flexibility. Need to find a greater balance between native bushland and agriculture.

Working Group Discussion:

Members noted that guiding principles already exist in development consents based on safe, stable landforms and that this information could be communicated. Mr. Archer encouraged reviewing the Great Eastern Ranges Project.

Project Idea: Communicate EA's/Approvals Process to stakeholders with accessible, clear and usable information to increase awareness.

Working Group Discussion: Members agreed the Dialogue can leverage off the work the Department has completed. The Major Projects website has been updated but it is difficult to navigate and access various materials. The Dialogue advised that we can promote external links to Resources Regulator, DRG, DPE and EPA fact sheets or web pages for all environmental issues through the Dialogue website Resources page. Members encouraged liaising with all key government or agency stakeholders to seek their top issues they'd like to share resources for.

WATER QUALITY AND STEWARDSHIP

Project Idea:

Look at inter-relation of air quality dust, impact on water tanks and climate patterns - could this be used as a predictive measure in doing EIS/EA assessment impacts?

Working Group Discussion:

Members noted the water tank sampling undertaken in Camberwell, where high lead levels were found to be caused by flashing on roofs.

The Dialogue can acknowledge the concern and provide information about it. Unsure of link between climate patterns other than dry weather can lead to dust which settles on roofs and if it rains, this may end up in the water tank. First flush filtration devices can help manage these impacts.

HNEH advised that EISs ask that tanks are taken care of, based on estimated dust levels. HNEH will forward the Camberwell study to the Dialogue for review. This may address the specific issue that was raised and point to any gaps that may require addressing.

Project Idea:

Improve access to the water use data and stewardship of local operations. Outline what companies are doing in terms of stewardship.

Working Group Discussion:

This is published annually through Dialogue website and infographic, which is looking at incorporating trending data. Members noted that there is a gap in knowledge as to what companies are doing in water stewardship. The project captures results, but not what each company is doing in terms of stewardship. The Dialogue noted that we can seek additional information in the 2018 data request, seeking a simple statement on stewardship and how the results have been determined. Builds on issues with community perceptions.

Members encouraged sharing good stories behind the results. Bloomfield noted an example of installing centrifuges to capture water for reuse more quickly.

Members noted that there is misperception of the impact of mines on the Hunter River. The EPA noted they are looking at this through the HRSTS Operations Committee and the impact of other pollution down the river.

Mr. Archer advised he would send historical data to the Dialogue relating to tidal pool, which shows characteristics of Hunter water quality.

Project Idea:

Education on water usage - Outline what water is captured, what is discharged, how water is managed and reused onsite?

Working Group Discussion:

Members noted that the idea of building some contextual information and case studies around WAF project. A lot of this data is provided in each company's individual annual report; however, the Dialogue can play a role in collecting this information to address this concern and dispel some negative perception of the impact of mines on local water systems.

ACTION:

• Dialogue secretariat to include Working Group discussion and recommendations in Steering Committee papers for decision.

4. Review of 2018 Annual Forum: Feedback from Participant Surveys

Members noted the feedback received from participants at the Forum.

5. Synoptic Plan Review Update

Members noted that progress on the Synoptic Plan would be delayed until after the election.

6. Update on Emissions and Health Projects

Mitchell Bennett from the NSW Environment Protection Authority joined the meeting to provide an update on current EPA air quality initiatives.

Mr. Bennett updated members on the revised Dust Assessment Handbook, which is due to be released shortly after recent consultation with industry and the collation of new images to depict examples of dust. Feedback from industry centred on a request to provide some context for the images, which have been considered by the EPA. Mr. Bennett also noted that the EPA is steering away from prescribing solutions and would be focused on outcomes. The booklet will be published electronically with some minor amendments, once it clears internal publishing standards. The Dialogue will advise members upon its release.

Mr. Bennett also updated members on the dust risk forecasting project the EPA has been progressing to help identify high-risk dust days. The 2018-19 project will be finishing shortly, with the EPA advising that most mines were doing a good job of controlling dust on difficult days. Members queried why the program focuses on Singleton rather than Muswellbrook, with Mr. Bennett advising that Singleton was the more populated centre, however notifications are sent to Muswellbrook, and the same expectations for control are considered here. Industry members noted that the predictive tool requires sites to modify their scheduled activities, and incorrect predictions can have a large impact on a site's ability to operate. The EPA noted this would form part of the review of the accuracy of the 18/19 program, with results still to be analysed.

Mr. Barben advised Mr. Bennett of the feedback and discussions from the 2018 Forum in relation to air quality, noting that stakeholders were seeking more information on air quality to filter through to the community, and encouraged the EPA to consider the potential to work with Hunter New England Health to deliver messages to the community, given their perceived credibility and independence from the industry. The Dialogue encouraged the EPA to provide some contextual information about Air Quality in the Upper Hunter compared to other regions, such as Sydney. Mr. Bennett noted that one of the challenges with air quality data is the community focus on poor air quality results from monitors deliberately placed near mines to pick up this quality, compared to the results at monitors closer to the general community. Mr. Bennett advised they would be happy to continue working with the Dialogue to help with air quality communications.

7. Update on Land Management Projects

Ms. Meyer provided an update on behalf of the Resources Regulator on the progress of the Operational Rehabilitation Reforms, noting that the submissions had provided 43 specific actions that the RR had accepted. These were focused around simplifying aspects of the Codes, creating an approvals pathway and certification process. The reforms progress will continue following the election.

Mr. Barben noted that the Dialogue would soon seek to collect information on rehabilitation results for 2018 in the coming weeks, to provide an update at the next working group meeting.

8. Update on Water Projects

Mr. Barben provided an update on the HRSTS Study, noting that the Dialogue is currently engaging with a consultant to look at the scope of a further study.

Mr. Barben noted that the Dialogue would soon seek to collect information on water accounting results for 2018 in the coming weeks. Mr. Bray asked industry whether they had any projections on their likely water use for 2018 as yet. Most members advised that they were currently in the process of collating this information and did not have specific numbers to provide yet, although it was generally expected that it would be higher than in wetter years given the continued dry conditions. Other sites advised they have been doing internal company projections for water use across operations for different scenarios including drought conditions.

The Greater Hunter Regional Water Strategy was discussed with Mr. Barben noting that Eddie Harris UHMD Joint Environment Working Group Meeting – 12 June 2019 (Dept of Industry, Water) had recently spoken at a workshop about the strategy and encouraged the Hunter to support the proposal given it has to compete for infrastructure projects against other regions. Members discussed whether reductions in water allocations under the current system could potentially be introduced in the near future.

9. Update on Communications Activities

Mr. Mackie provided an update on recent communications activities, in particular the Dialogue's recent discussions with RDA Hunter on a proposal to include the School Mine Tours in a STEM program. Members supported this as a great opportunity for engagement with the education system with a clear career outcome. Members noted this program has received government backing and is well-resourced to capitalise on the success of the tours program to date.

10. Updates from other Working Groups

Members noted the Working Group updates.

11. Other Business

No other business was discussed.

12. Next Meeting & Close

The meeting closed at 11:50 am

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

Action	Responsibility	Status
DPI Water Availability Projects (Previous Meeting)		
Dialogue secretariat to liaise with DPI Water for an update on 'water availability' projects.	Dialogue secretariat	In progress
Review of 2018 Annual Forum: Project Ideas from Discussion Sessions		
Dialogue secretariat to include Working Group discussion and recommendations in Steering Committee papers for decision.	Dialogue secretariat	Completed