# AGENDA

Upper Hunter Mining Dialogue  
**Joint Working Group - Emissions and Health Meeting**  

UHMD Resource Centre, Upstairs of the Town Square Shopping Centre  
Suite 1, 159 John Street, Singleton NSW 2330  
Wednesday 28 March 2018, 2:00 pm to 4:00 pm  

**Teleconference Details**  
Local dial in: 02 8319 9443  
Participant code: 184 629 79 / Organizer code: 628 282 39

| 1. | Welcome and Apologies |
| 2. | Minutes and actions arising of the previous meeting |
| 3. | Presentation: Mitch Bennett, NSW Environment Protection Agency, *Dust Risk Forecasting Scheme* |
| 4. | 2017 UHMD Annual Forum Review | Attachments |
| 5. | 2018 Strategic Discussion |
| 6. | Upper Hunter Air Quality Education Fact Sheets | Attachments |
| 7. | Clearing the Air Video Update |
| 8. | Update on NSW Government Air Quality Initiatives (incl. Clean Air for NSW, and associated activities) |
| 9. | Upper Hunter Air Quality Monitoring Network Update:  
- Five Yearly Review  
- Autumn 2017 Results |
| 10. | Update on communication activities | Attachments |
| 11. | Update on current Dialogue projects |
| 12. | Other Business |
| 13. | Next Meeting / Meeting Close |
1. Welcome and apologies

The Chair welcomed attendees and noted apologies.

2. Minutes and actions of the previous meeting

The minutes from the previous meeting were accepted. Mr. Milton provided an overview of the outstanding action, with the draft air quality fact sheet included on the agenda for consideration and feedback from members.

3. School Mine Tours Program

Mr. Mackie provided an update on the program, noting that tours will be conducted in the coming weeks for the current Year 9 students at Singleton High School to ensure they are captured in the program. Tour guide training will also be taking place. Members asked about the length of tours (they will be 2 to 2.5 hours), and the costs per tour (which are varied depending on the company providing the quote).
4. EPA Dust Risk Forecasting Trial

Mr. Milton provided an update on the limited information available. Members noted it would be good to get an update from an EPA or OEH representative for the next meeting on the various items of work these departments are progressing.

**ACTION:**
- UHMD Secretariat to invite OEH/EPA personnel to present at the next JWG - Emissions & Health meeting.

5. Upper Hunter Air Quality Education Fact Sheet

Members discussed the draft fact sheet provided for comment. Members advised the UHMD secretariat that we need to be careful about how this information is laid out. There is quite a bit of detailed information in the current draft. These important points need to be drawn out. Members suggested including a background on what particulate matter is, and why it is important. The infographic with the hair and particulates was suggested as being an easy to understand image.

The fact sheet should also try and link to other fact-based information to ensure the fact sheet remains as impartial as possible.

The Chair suggested that the fact sheet could involve a multi stage project, in that the first sheet could outline what the air quality is like (i.e. a ‘state of the nation’ type sheet), with a subsequent one outlining what industry is doing to address it, (i.e. Now vs. Future)

Ms. Hale advised that the EPA wood smoke Mythbuster promotional material was very effective, and the UHMD secretariat could look to some of these resources for inspiration.

**ACTION:**
- UHMD Secretariat to redraft fact sheet and present to working group at next meeting.

6. Update on Government Air Quality Initiatives

Mr. Barben provided a brief update on the range of government initiatives associated with Clean Air for NSW. The Chair noted that some of the questions that certain advocacy groups included in the summit asked did not exactly correlate to what was being presented.

7. Upper Hunter Air Quality Monitoring Network Update

Mr. Milton provided a brief update on the UHAQMN noting that the five yearly review findings are yet to be announced, and the Chair advised that a meeting for the Network advisory committee will be coming in a few weeks, which may provide further information.

8. 2017 UHMD Annual Forum

Mr. Barben provided an update on the Forum, strongly encouraging members to attend.

9. Update on communications initiatives

Mr. Mackie provided an overview of the key communication initiatives being undertaken. Members were most interested in the ‘What happens on a dusty day?’ video, which is currently in post-production.

Members agreed that if this video is in a final state close to the Forum, it would be great to launch the video at this event.
10. Update on current UHMD projects

Mr. Barben provided an update on the current projects not covered previously in the Agenda. The Chair felt that a number of projects were starting to wrap up, and there was a need to think about the future direction of the Working Group in terms of emerging trends. Members were encouraged to think about any potential projects the working group might explore in 2018.

The Chair was interested to see what will arise from discussions at the Forum and how this may guide the Working Group in 2018.

11. Other business

Mr. Barben provided a brief update on the Synoptic Plan Review process.

The UHMD secretariat encouraged all members to review the JWG contact list and consider if there are any additional contacts to consider. Ms. Hale suggested contacting Muswellbrook Shire Council and encourage their continued involvement.

ACTION:
- UHMD secretariat to invite Muswellbrook Council to send a representative to future JWG meetings.

12. Next Meeting / Meeting Close

The draft meeting dates for 2018 were discussed. Members were encouraged to review these dates and advise of any foreseeable clashes.

Mr. Hodkinson provided a summary of a number of different projects he has recently been involved in, including work on a heritage project with the Bulga community, which highlights the colonial, convict, and indigenous history of the Bulga region. Mr. Hodkinson is looking for some professional assistance to develop this project further. Ms. Hale suggested contacting her to ensure that appropriate Singleton Council personnel were aware of the project.

Mr. Hodkinson encouraged the UHMD secretariat to review a number of submissions made to VPA’s on exhibition to consider their approaches to environmental impacts. Ms. Hale agreed this may be a way to guide future projects for the working group.

Meeting closed at 3:35 pm
## Actions arising from meeting on UHMD Joint Working Group - Emissions & Health Meeting

**Wednesday 11 October 2017**

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<thead>
<tr>
<th>Action</th>
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<tr>
<td>EPA Dust Risk Forecasting Trial</td>
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<td>UHMD Secretariat to invite OEH/EPA personnel to present at the next JWG - Emissions &amp; Health meeting.</td>
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<tr>
<td>Upper Hunter Air Quality Education Fact Sheet</td>
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<tr>
<td>UHMD Secretariat to redraft fact sheet and present to working group at next meeting. <strong>Note: Included in Agenda item 6</strong></td>
<td>UHMD secretariat</td>
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**FOR INFORMATION / DISCUSSION**
PRESENTATION: MITCH BENNETT, NSW ENVIRONMENT PROTECTION AUTHORITY, EPA DUST RISK FORECASTING SCHEME

Issue

The NSW Government has worked with the mining industry throughout 2017 to develop and implement a dust risk forecasting scheme. A trial for the scheme was undertaken with industry in the Upper Hunter by the EPA in Spring 2017. Mitch Bennett, Head – Strategic Programs Unit - Hunter Region, NSW Environment Protection Authority, will present to the Working Group on the scheme’s progress and EPA and OEH plans and priorities for 2018 with regards to air quality.

Background

The final report of the Upper Hunter Dust Risk Forecasting Scheme Development was delivered to the Environment Protection Agency (EPA) on 15 December 2017. Dr. Yvonne Scorgie from the Office of Environment and Heritage and Emma Coombes from the EPA had previously presented to the Joint Working Group for Emissions & Health regarding an adverse weather investigation project.

The report follows the trial of the Upper Hunter Dust Risk Forecasting Scheme Development in Spring 2017, with results currently being analysed to determine the scheme’s accuracy. The forecast scheme was designed to identify the specific meteorological conditions that cause dust emissions from within the Upper Hunter valley to be the dominant contributor to higher particle (PM10) concentrations in major towns e.g. Singleton. The EPA’s intent was to develop an operational forecasting scheme that would allow dust generating activities to be modified or ceased when the relevant meteorological conditions are anticipated.

The report highlights four major achievements arising from this project:

- A comprehensive summary of the multi-year PM10 data from the Upper Hunter air quality monitoring network (UHAQMN) has been provided for the first time since the commencement of the network. The data has identified two distinct air quality (PM10) clusters in the valley, i.e. the south-east (SE) and west-north-west (WNW) air quality subregions.
- An incremental dust risk metric has been established to indicate the impact of the within-valley PM10 emissions primarily on the SE subregion under north-westerly wind conditions. High metric values indicate the elevated level of dust generation from an area of the valley that is dominated by coal mining.
- The relationship between the dust risk metric and a large number of meteorological variables has been explored in an effort to identify a small (minimal) set of parameters that serve to effectively indicate adverse conditions due to impacts from PM10 emissions in the valley.
- An incremental dust risk forecasting scheme has been proposed for dust risk management purposes. The scheme forecasts days with elevated dust risk in the SE subregion under north-westerly wind conditions and includes data collection from BOM or OEH meteorological forecasts, domain knowledge and other information, initial risk screenings, statistical modelling, post processing and the development of a final forecast and action plan.

The report recommends finalising the forecasting scheme for operational use (if deemed appropriate by the EPA), undertaking technology transfer, staff training, and final documentation as required in EPA; and evaluating the forecasting scheme with historical meteorological forecasts and putting the improved (if needed) scheme on operational trial.

The report can be located here: http://www.environment.nsw.gov.au/topics/air/research/current-research/air-quality-forecasting

FOR INFORMATION / DISCUSSION
2017 UHMD ANNUAL FORUM REVIEW

Issue

The 2017 Upper Hunter Mining Dialogue Forum was held 22 November 2017. This provides an opportunity to assess what worked well and what improvements can be made for future Dialogue events.

Background

a. Short Summary of Table Discussions

For the first discussion session, attendees were asked to think about what issues the Dialogue needed to focus on, and once these were identified, how we could best address them?

Each table brainstormed for 10 minutes and identified their top 3 issues relating to mining and its impacts. These top 3 issues were collated, and the top 4 issues were identified. Tables were randomly assigned two issues and asked what could be done to address the issue, which stakeholders would need to be engaged, and what challenges might be faced in addressing this issue.

Attached (Attachment a) is a breakdown of the insights from attendees along the four key themes:

1. Air Quality and health impacts, especially diesel particulate matter
2. Rehabilitation and Land Use Planning
3. Communications and Engagement
4. Economic Diversification and the cyclical nature of industry

b. 2017 Annual Forum - Feedback Survey of Attendees

General feedback from attendees at the Upper Hunter Mining Dialogue’s 2017 Annual Forum was positive. As per previous years, a survey invite was distributed to all registered attendees to complete. A total of 15 responses was received in 2017. This feedback has been attached (Attachment b) for reference.

While the number of respondents is down on previous years, this reflects the fewer registered attendees in 2017. Those that responded provided a range of suggestions and constructive feedback to help plan a better event in 2018.

Recommendation

- Joint Working Group members review the table discussions and survey feedback to consider how the Dialogue’s Forum event can be improved in the future, and how this feedback might inform the Strategic Discussion for 2018 in the next agenda item.

FOR INFORMATION / DISCUSSION
a. Short Summary of Table Discussions from 2017 UHMD Forum

### Issue 1: Air quality and health impacts, especially diesel particulate matter

#### Issue Explained

- Given that 2017 has been a significantly drier than average year, air quality and the impacts that this can have on the environment and the health of the community in which mining activity exists was a high concern of participants.

- Participants were concerned about the cumulative impacts of air quality on health, especially cluster impacts, and increases in diseases exacerbated by dust such as asthma.

- Diesel particulate matter was a significant concern, with many calls for a study to identify actions and outcomes that can be assessed.

- Participants felt that the communication of air quality could be improved, especially making the community aware of the UHAQMN and how it can benefit community.

- Communication and education was a priority, with an encouragement to publish trends over time where possible. There is an opportunity to not just provide information, but to interpret the data so it educates and guides stakeholders.

#### Possible Solutions / Actions to achieve objectives

- A gap analysis of existing studies to assess what difference the Dialogue can make.

- Seek to participate in any existing or proposed studies

- Industry to undertake an inventory of existing larger diesel engines on mine sites and railway lines - regarding their emission standards

- Promote the outcomes of the above actions.

- Maintain a wood smoke impacts education program

- Develop and implement a community forecast issued by OEH similar to Sydney

- Transitional approach - diesel particulates

- Seek to publish and interpret long term air quality trends

- Ensure industry is transparent in their response to adverse weather conditions, in real time.

- Seek to survey the community to understand specific issues in relation to air quality.

- Educate the community on the regulatory criteria, how they are developed, and what they are designed to protect.

- Conduct a study into air quality impacts arising from all sources of PM 2.5.

- Conduct a study into ethanol benefits / alternative fuels.

- Utilise temporary rehabilitation options to decrease dust.

- Ensure industry best practice continues to be observed (i.e. on windy days reduce amount of explosive activities in mines, and water down surfaces to reduce dust).

#### Stakeholders to engage with to drive solutions

- University and other academia - seek advice and help from University of Newcastle to review existing studies, advise of gaps and develop study to assess diesel emission performance against world standards (Newcastle Uni - Centre for Environmental Health and Tom Farrell Institute are likely candidates)

- Original Equipment Manufacturers - OEM’s for diesel machines need to be engaged.

- Community stakeholders, especially those in towns close to mines.

- Local government/councils - Singleton, Muswellbrook, Upper Hunter

- State government departments and regulators such as OEH, EPA, and DPI

- Specialists in air quality

- UHMD industry reps

- Business chambers

- NSW Minerals Council
Key challenges or barriers to success

- Accessing timely and relevant information from studies.
- Alternative researchers than the University of Newcastle, if not available.
- Applying the outcomes of any studies to improve emissions.
- A reluctance from regulators and industry to invest or change.
- Research initiatives regarding dust suppression, air modelling
- Diesel subsidy.
- Changing the default perception of industry that it’s all okay.
- Ensuring an adequate cross section of community participation in survey.
- Time and resources - human and financial - Studies will not be cost effective.

Issue 2  Rehabilitation and land use planning

Issue Explained

- Participants noted that while in the past 12 months there has been considerable progress towards thinking about future land use planning, there is still much work to be done.
- Participants reiterated the need to capture best practice rehabilitation methods from industry, and the need to communicate rehabilitation activities more effectively.
- There is ongoing research into rehabilitation, which will continue to set high standards for industry to aspire to achieve.
- Participants noted the importance of quality and sustainability in the post-mining landscape and having a long-term view as mining sits within the greater ecosystem.
- Participants noted that the need to consider opportunities rather than liabilities in the management of final voids.
- With regards to future land use planning, participants encouraged incorporating greater use of scenario planning and parallel economics (ties in closely with economic diversification).
- Need to build better communication and awareness of the quantity, quality and pace of rehabilitation by Dialogue industry members.

Possible Solutions / Actions to achieve objectives

- The ultimate aim for the community is to have some form of final land use post-mining.
- Consider what opportunities and parameters exist within the Upper Hunter - What can we do? We are playing with long timeframes and unfavourable regulatory constraints.
- Build education on potential land uses post-mining.
- Liaise with regulators to Natural vegetation v. meeting needs of regional growth (food bowl, energy, recreation).
- Consider alternative uses for voids in the context of the region - Newcastle water supply desalination; hydro generation; recreation.
- Work with DRG on their rehab improvement project - the benefits of having a regional view of final landform, land use, voids, rehabilitation vs. disturbance mapping would be useful.
- Progress with renewing Synoptic Plan and implementation of a more dynamic and flexible strategy to direct and guide strategic future post-mine land use - seek to incorporate regional planning incentives for mining companies to investigate alternative land uses.
- Continue progressive rehabilitation across the industry.

Stakeholders to engage with to drive solutions

- UHMD to continue driving the Upper Hunter community participation in the Synoptic Plan review process.
● Regulators and government departments - including strategic planners in the mix
● Establishing a Think Tank of Industry, Regulators, Community / UHMD and Innovators, such as the University of Newcastle, to have a collective approach to this and not work in silos.
● Industry to include more diversity of roles from missing companies (i.e. more business development roles rather than environment and community roles)
● Community to advise on their long-term vision.
● NGO’s
● Academics - global, national and local to ensure that we have a wide scope of knowledge regarding rehabilitation, voids and closure practices.

Key challenges or barriers to success

● All plans are long term.
● Land uses are constrained during operations and existing approvals encourage limited range of final land uses (i.e. paddocks and bush).
● Communication between regulators and industry.
● Other competing interests.
● Getting ‘buy-in’ from industry.

Issue 3 | Communications and engagement

Issue Explained

● There’s been a drop off in community attendance and involvement in the Dialogue - what are the reasons for this?
● There is a lack of communication with industry employees regarding the Dialogue - they have the potential to become powerful advocates for the UHMD, given they often live and work within the community.
● More engagement between sites, schools and broader community to build open and transparent discussions.
● Overcoming the perception of mining as a negative and promoting coexistence.
● How is the Dialogue relevant to our communities, and how can the initiative be enduring and connected with the community long-term?

Possible Solutions / Actions to achieve objectives

● Communicate all UHMD achievements and what has resulted since it was established, including what has worked well and where improvements can be made.
● Community engagement in relation to planning - Provide UHMD support to facilitate in order to improve future outcomes. Community input to government planning in accordance with recent Environmental Planning Assessment Act amendments.
● Increase engagement with employees and contractors within industry that have a low awareness of the Dialogue.
● Prepare high quality factual information which is digestible, accessible and tailored to varying audiences.
● Use social media more effectively.
● Review all community organisations across the Upper Hunter and prepare a letter and offer to meet with targeted absent community organisations to provide a briefing on the Dialogue (i.e. Upper Hunter Sustainable Farming group)
● Ensure that all stakeholder ideas are respected and acknowledged.
● Continue school mine tours and encourage different teachers to attend each tour to ensure a wide breadth of information across the schools.
● Greater utilisation of mine open days to improve visibility and accessibility to mine sites for community members.
● Advertise projects and activities through local media channels (i.e. Radio, TV, and papers)
● Continue attending local events to interact with people who are not likely to attend UHMD
activities.
- Use other educational programs where relevant and appropriate to support our School Mine Tours, e.g. ME program run by Regional Development Association.

### Stakeholders to engage with to drive solutions

- Community organisations.
- Industry.
- NSWMC Communications Group and Executive Committee.
- Local government/councils
- University of Newcastle (Tom Farrell Institute)
- Mining League Comp org

### Key challenges or barriers to success

- Resources - both financial and human
- Timing - Need to ensure events are timed such that key community members (e.g. small business owners) can participate.
- Overcoming a general lack of interest in the Dialogue - some former members may have had specific concerns.

### Issue 4 Economic diversification and the cyclical nature of industry

#### Issue Explained

- The Upper Hunter needs greater economic diversification to build capacity for a sustainable and resilient regional economy in the event of an industry downturn.
- Industry and community needs to work together to keep opportunities relevant and enduring over time.
- Concern about employment during cycles and post-mining.
- What is the future for mining in Hunter Valley, and what will the Hunter Valley of the future look like?
- What are the barriers to economic diversification and how do we remove these barriers?
- How do we encourage innovative post-mining land uses to contribute to economic diversification?

#### Possible Solutions / Actions to achieve objectives

- Engage in discussions with service industries - seek to remove red tape and review options.
- Encourage fast-tracked reuse of formerly mined land, as well as greater use of buffer land with adequate protections in place for the community and industry.
- Government and industry to consider capacity building support for SMEs.
- Leverage off existing infrastructure - What do we have currently? How can it be used productively in a different way?
- Encourage greater investment.
- Understanding the vision and key drivers.
- Consider use of rehabilitated land for growing fuel for alternate fuels.
- Capitalise on opportunities for tourism expansion (e.g. Eden Project).
- Effective use of VPAs
- Need short, medium and long-term solutions - these have not been identified as part of this discussion.
- More effective government policy to support diversification - e.g. have mine employees trained in other skills so during a downturn they can move into other industries.
● Undertake research to identify future options - Agriculture, Renewables, Technology
● Supporting people who lose their jobs in a downturn

Stakeholders to engage with to drive solutions

● Whole of government, industry and community approach.
● Business chambers, including small business owners.
● Regional Development Australia.
● Government - State and Local - resources for training.
● Young people - seek to uncover creative ideas for the future.
● Industry groups.
● Business leaders - local, national and international.

Key challenges or barriers to success

● Funding - which stakeholders are willing to invest in retraining employees while they’re employed by the mines?
● Clarity of process and the government’s land use framework
● Timeliness of the plan to approach it
● Work / Effort / Time - very long term
● Governance arrangements - who is responsible, how do we do this, what, where, when?
● Ensuring a long-term view and sticking with a vision, but also ensuring adequate flexibility.
● Political will and backing
● Mining is a market driven commodity - some factors are outside the Dialogue’s influence.
● Communication

Other key issues identified:
● Acknowledgement from several participants that the top 3 issues remain as Rehab, Air Quality and Water Quality.
● Some participants queried what the target was of the Dialogue, and how stakeholders can use the Dialogue to better leverage future projects.
● Water Quality was raised by several participants, particularly in relation to the health of the catchment, salinity and pollution.
● Noise pollution and the impact on neighbouring residents was noted as a concern, as was the impacts of erosion and compaction of soil by machinery on the environment.
● The heritage value of the Upper Hunter and the sense of place that it instils in the local community was a concern noted by participants.
2018 STRATEGY DISCUSSION

Issue

A substantive amount of feedback has been received from a variety of stakeholders at the 2017 Forum regarding the future priorities of the Dialogue. This provides a timely opportunity for the Industry Working Group to think strategically about the direction of the Dialogue as we head into 2018.

Background

The Dialogue currently has a number of projects already underway, as outlined below:

- Synoptic Plan Review process - keep the plan focused and on track to deliver a refreshed plan.
- Continuing existing annual projects (i.e. Water Accounting Framework, Rehabilitation Reporting and Principles).
- Implementation of the School Mine Tours Program - full rollout of 2018 schedule.
- Completing the UNSW VR Coal Awareness Project - commenced in December 2017.
- Finalising the updates to Mine Dust and You Fact Sheet and developing an Upper Hunter Air Quality Fact Sheet - initial draft prepared for JWG in September 2017. Feedback received to help redraft and make more engaging to readers.
- Updating Communications plan - 2015/16 Communications plan is out of date. An updated Communications plan has been included for review in agenda item 10.
- Commence new ACARP study into past and present rehabilitation to grazing land.
- Promotion of recently completed projects and results:
  - Hunter River Water Quality Study results
  - Clearing the Air video
  - Beneficial use of voids fact sheets
  - Upper Hunter Grazing Trials - promote the findings of the ACARP study

Recent Joint Advisory Steering Committee and Industry Steering Committee meetings have discussed the Forum outcomes and have considered the direction the Dialogue should take in 2018.

Key outcomes from the JASC meeting are outline below:

- Members agreed that it would be beneficial for the Dialogue to reflect on what has been achieved to date and current issues that are emerging and to prepare a mission statement articulating the goals, targets, and objectives of the Dialogue. Given that environmental features were a strong focus of the concerns when the Dialogue was originally established, there has been a gradual shift towards economic diversification and post-mining land use, and we need to ensure the Dialogue’s mission statements supports what are the current concerns.
- Members supported the development of a targeted stakeholder engagement plan that identifies various community and interest groups and establishes a timeframe for engagement. Further awareness of the Dialogue from within industry was also highlighted as a priority.
- Members supported further integration and linking of Dialogue and company information and encouraged the Dialogue to use social media and visitor centres to provide information and build awareness of our key projects.
- The Chair encouraged strong attendance of UHMD participants at the next Synoptic Plan Working Group meeting to ensure this process remains on track.
- The Chair encouraged the UHMD secretariat to work closely with industry members to facilitate a smooth collection process of the data for annual water and rehabilitation reporting projects to ensure that information is provided in a timely manner.

ISC members supported the points raised in the JASC meeting, noting in particular:

- There have been a number of great projects undertaken by the Dialogue over successive years. As the UHMD secretariat have successfully developed and implemented activities under the Dialogue’s communications plan, members supported the continued focus on promoting these project outcomes via various information and education materials to community members as a key priority for 2018.
Other business and community organisations in the region have enjoyed success hosting targeted events to secure community attendance, e.g. a business chamber event focused on how businesses can tap into future land use and economic diversification was successful, as community members had a vested interest in the content.

Recommendation:

Joint Working Group members are encouraged to consider the outcomes of the 2017 Forum and other projects already underway, as well as the recommended actions from the JASC and ISC meetings and advise whether the activities identified will help the Dialogue achieve its objectives, or any additional activities may need to be considered.

FOR INFORMATION / DISCUSSION
UPPER HUNTER AIR QUALITY FACT SHEETS

Issue:

In early 2017, the Joint Working Group identified an opportunity to collate Upper Hunter air quality information in the form of a fact sheet to provide to the community and other stakeholders for use.

Background:

At the March 2017 Joint Working Group - Emissions and Health meeting, members identified a lack of readily accessible information regarding air quality in the Upper Hunter that may be provided to respond to queries from community stakeholders regarding poor air quality in the region.

An opportunity arose to provide clear, fact-based information to the community using current, updated and available data from a variety of sources. Working Group members supported the Dialogue producing a fact sheet on air quality in the Upper Hunter for use and distribution across the Dialogue network.

The Upper Hunter Air Quality Fact Sheets build on a 2015 NSW Minerals Council Fact Sheet on Air Quality which contains a significant amount of general Hunter Valley information, including Newcastle and the Lower Hunter.

Please find attached a revised Draft Upper Hunter Air Quality Fact Sheet for review. Feedback previously received from the Working Group has been incorporated in the revised documents, which included:

- Considering the possibility of having two fact sheets: one focusing on explaining issues of air quality and PM emissions; while the other focuses on the actions and initiatives to improve air quality and reduce impacts.
- Linking to external information or data from government-led initiatives where possible.
- Incorporating the infographic comparing PM emissions to the human hair.

The UHMD secretariat is seeking feedback from members on whether the fact sheets address the concerns and fulfil their intended purpose as a relevant resource for community use. If supported, the fact sheets will advance to publishing, be hosted on the Dialogue website, and promoted across the Dialogue network.

Recommendation:

- Joint Working Group members review the Draft Upper Hunter Air Quality Fact Sheet to provide feedback on whether they support the document or if any changes are necessary.

FOR DISCUSSION / DECISION
‘CLEARING THE AIR’ - AIR QUALITY EDUCATION VIDEO UPDATE

Issue

The Dialogue needs to communicate information to the community regarding what happens at a mine on a dusty day to minimise air quality impacts to surrounding communities.

Background

The “Clearing the Air” video (formerly referred to as the “What Happens at a Mine on a Dusty Day video) has been filmed and recently finalised. Members will be shown the video at the meeting.

A subtitled version will be made available online and links will be shared to enable all industry members to link to the video on their own sites. The video will be displayed at the Hunter Coal Festival and other events attended by the Dialogue where possible.

Given that air quality was identified as a major issue within the Upper Hunter at the 2017 Forum, it is a timely opportunity to release and promote the video to community stakeholders.

The Dialogue thanks all involved in the development of the video.

FOR INFORMATION / DISCUSSION
UPDATE ON NSW GOVERNMENT AIR QUALITY INITIATIVES

Issue
The NSW Government is progressing a number of air quality initiatives.

Background
Updates on these key government projects and initiatives to manage emissions are outlined below:

Clean Air for NSW Summit
The last visible progress on the Clean Air for NSW strategy was the Clean Air Summit held in June 2017 and the subsequent publishing of presentations and video footage from the summit (https://www.epa.nsw.gov.au/your-environment/air/clean-air-nsw).

The UHMD secretariat is still working to determine whether the final plan will be a high-level policy framework or contain detailed actions. The EPA is planning to present their approach to the Government for consideration in the first half of 2018.

North West Air Quality Monitoring Network
Following an announcement by Environment Minister Gabrielle Upton at the Clean Air Summit in June 2017, two new air quality monitoring stations have been constructed in Gunnedah and Narrabri and began publicly reporting real-time data in December.

The network provides scientific, timely information to the community about air quality in the region. The addition of further monitoring stations to the network will be considered through the soon-to-be-established Namoi Regional Air Quality Advisory Committee, with the EPA calling for nominations by 26 February 2018.

The data from the first few months of monitoring shows air quality has been good at the Narrabri and Gunnedah monitors, with no exceedances of the daily particulate matter air quality standards and average levels well below other monitoring locations throughout NSW such as Sydney.

Non-road diesel
The EPA has not undertaken any further consultation since the following set of proposals were announced in early 2017:
1. From 2019, new non-road diesel equipment commissioned into service at surface coal mining operations would need to comply with US EPA Tier 4 exhaust emission performance standards, unless otherwise approved in writing by NSW EPA, and
2. A Pollution Reduction Study (PRS) investigating options for emissions reductions from existing non-road mobile diesel equipment fleet used in coal mining surface operations.

The EPA has advised that progress has been on hold while other EPA air policy priorities are progressed. It is expected that the EPA will re-engage with the industry in the coming months.

Load Based Licensing (LBL) Scheme Review
The LBL review is a significant and complex area of reform. The LBL review continues to be subject to ongoing delays as the EPA waits for further direction from the Government as to its priorities over the coming 12 months.

The UHMD secretariat understands that further analysis of the financial impacts on licence holders, as well as cost benefit analysis, is planned. The EPA is aiming to present a proposal paper for Government consideration in the first half of 2018.
Chief Scientist’s review of coal train dust

The Government is yet to respond to the Chief Scientist’s recommendation for additional air quality monitoring around the rail corridor. The Minister’s office advises that any decision will likely be announced as part of a package of measures under the Clean Air for NSW strategy that the government is developing, rather than through ad hoc announcements.

FOR INFORMATION / DISCUSSION
UPPER HUNTER AIR QUALITY MONITORING NETWORK UPDATE

Issue

The Upper Hunter Air Quality Monitoring Network (UHAQMN) regularly provides high-quality, regional air quality monitoring information on the Upper Hunter. The first five-yearly review of the network has just been completed.

Background

The NSW Office of Environment and Heritage (OEH) established the Upper Hunter Air Quality Monitoring Network during 2010 to 2012. The Network consists of 14 monitoring stations located from Merriwa in the north west to Singleton South in the south east. The Network is maintained by OEH, administered by the NSW Environment Protection Authority (EPA) and funded by Upper Hunter mining operators and power industries, in accordance with the Protection of the Environment Operations (General) Regulation 2009 (‘the Regulation’).

The Regulation requires the EPA to review the Network every five years. The first review covers the years of operation between 2012 to 2016. The review sought to determine if the objectives of the monitoring program been met; whether the program is being run efficiently and cost-effectively; whether any improvements that can be made; and any additional matters the program could consider. The review utilised five years of monitoring data collected by the network, as well as findings from an independent audit and stakeholder feedback from community, industry and government agencies.

The review concluded that:

- During the first five years of operation, the extensive data collected by the UHAQMN provides a better understanding of the air quality and meteorology within the Upper Hunter region.
- The objectives of the monitoring program are being met with stakeholders being provided with reliable and up-to-date Network data which are regularly assessed against air quality standards, sources of pollution continue to be identified and EPA strategies continue to be developed and implemented to improve air quality in the region.
- The Network runs efficiently and cost-effectively.
- The minimal change in population distribution, emission sources, topography and meteorology since monitoring commenced, validates maintaining the original network design.

Other recommendations for Network improvement include:

- installation of rain gauges at key monitoring sites to further build on the meteorological data and knowledge in the region
- investigation of the potential for an additional PM2.5 particle monitor at the Merriwa monitoring site to better monitor background PM2.5 levels.


Winter 2017 Update

The Winter 2017 update for the Upper Hunter Air Quality Monitoring Network was published on 25 October 2017. The report factors in Upper Hunter air quality for 1 June to 31 August 2017 and found that air quality in the region was generally good over this period. Other major items of note from the quarterly update includes:

- Levels of nitrogen dioxide (NO2) and sulfur dioxide (SO2) were below benchmark concentrations.
- Daily average levels of fine particulate matter PM2.5 (particles less than or equal to 2.5 microns in diameter) were above the 25 μg/m³ (micrograms per cubic metre of air) benchmark on 27 June at Muswellbrook. Elevated levels occurred overnight under cool conditions with calm and
variable winds. The PM2.5 maximum daily average was 31.1 μg/m3.

- Daily average levels of PM10 (particles less than or equal to 10 microns in diameter) were above the 50 μg/m3 benchmark on ten days (7, 26 and 28–31 July and 7, 11 and 15–16 August). Maximum daily PM10 levels on these days ranged from 50.8 to 91.3 μg/m3.
  - There were no days over the benchmark at larger population sites.
  - Singleton NW recorded two days over the PM10 benchmark, Mount Thorley recorded five days and Camberwell recorded eight days.
  - The elevated PM10 particle levels occurred under moderate to fresh northwest winds on at least half these days.
  - There were no major fires on these days in or near the region, although on some days there were small fires within the region.

- The Upper Hunter received below to very much below average rainfall, with lower rainfall levels than the previous three winters. Maximum temperatures were very much above average and minimum temperatures were average. This prolonged dry period has contributed to increased dust particle levels compared to earlier years at some sites in the region during times of elevated wind speeds.


FOR INFORMATION / DISCUSSION
UPDATE ON COMMUNICATIONS ACTIVITIES

Issue

The Upper Hunter Mining Dialogue continued to focus on implementing its communication strategy in 2017.

Background

The focus on communications strategies continued through the busy final quarter of 2017 and will continue in 2018 including attending community engagement events and engaging with the media. Key activities since the previous Industry Working Group meeting includes:

Media/communication plans:

- The “Clearing the Air” video (formerly referred to as the “What Happens at a Mine on a Dusty Day video) has been filmed and recently finalised. Members will be shown the video at the meeting. A filming date for the Virtual Reality video, which is an offshoot of the School Mine Tours Program is being finalised.
- The Dialogue will be on display at the Hunter Coal Festival (April 6-15) including a presentation at the Mining Leaders Lunch on April 6 and an expanded display at the Singleton Community Day on April 7. The Lunch presentation will be aimed at informing industry representatives about the activities of the Dialogue while the Community Day display will focus on engagement with the general community; the Dialogue is also facilitating a display with industry members focusing on rehabilitation aimed at overcoming the community’s knowledge gap of rehabilitation of mined land.
- Following months of liaison by the Dialogue with mine sites and schools, the inaugural School Mine Tours Program was successfully rolled out in the final quarter of 2017 with tours beginning in earnest in October. Nine School Mine Tours were completed for the high school portion of the program and saw 250 students from Singleton High School, Muswellbrook High School, St Catherine’s Catholic College and St Joseph’s High School visit Mt Arthur, Bengalla, Rix’s Creek and Hunter Valley Operations mine sites. All sites did an outstanding job hosting the tours and the program drew very positive comments from students, teachers and the mines themselves. Scheduling for the 29 tours across 13 sites in 2018 has started with the aim of starting in late April. The syllabus-related in school teaching material has been successfully trialled at Singleton High School and will now be peer-reviewed by teachers.
- The Dialogue met with Singleton Shire Council councillors and managers in September; which led to an invitation for the Dialogue to present to a November 16 meeting of the Association of Mining Related Councils. Both presentations were well received.

Recent Media:

- The school mine tours in particular generated very positive coverage in Upper Hunter Fairfax publications and @the Coalface magazine. In particular, the Fairfax titles published coverage on every tour including multiple photos either in their newspapers or on their websites. The articles and photos were also shared with schools for use in their newsletters.
- The Annual Forum generated positive media both before and after the event in the Singleton Argus and @the Coalface. The Dialogue also gained positive promotion from the live broadcast by Radio 2NM at the Annual Forum.
- An article on the filming of the “Clearing the Air” video also appeared in local newspapers.
- The Dialogue is currently trialling branding advertising with Radio 2NM. The 30-second ads are designed to increase knowledge of the UHMD across the Upper Hunter and will continue through to the end of May.

Community Engagement:
To round off its 2017 community engagement activities, the Dialogue attended the Broke Village Fair on September 10, Singleton Show on September 22-23 and the Muswellbrook Christmas Spectacular on December 9. The events generated 44 surveys through interactions with 86 people. During the year community engagement activities generated 171 surveys and 348 interactions. So far in 2018, the Dialogue has attended with its display the BHP Family Day on March 10, generating 9 surveys from 20 interactions and the Upper Hunter Show on March 16-17, collecting 9 surveys from 15 interactions.

Upcoming community events include:

- Hunter Coal Festival April 6-15, 2018
- Tocal Field Days May 4-6, 2018

**UHMD Community Survey Results:**

Attached ([Attachment a](#)) for reference following this update is a summary of the key UHMD community survey results. Over 355 responses have been gathered over 2016 and 2017, and the survey will continue to be undertaken at upcoming events.

**UHMD Communications Plan 2018:**

Attached ([Attachment b](#)) for reference is an updated Dialogue communications plan. The previous communications plan was developed for 2015-16, so this is a timely chance to review what is and what is not working and seek to update the plan to incorporate social media and other emerging communications initiatives into the Dialogue’s activities.

**Recommendation:**

- Joint Working Group members note the Dialogue’s various communications activities and priorities for 2018.

**FOR INFORMATION / DISCUSSION**
Attachment 10a. UHMD Community Survey Results

Key findings:

- The majority of respondents identified jobs and employment as the main benefit of mining in the Upper Hunter. Residents also associated the money and income generated from mining with boosting the economy and growth across the region.
- Respondents felt the best way to increase engagement with the community was to get out amongst the community and actively communicate with residents. Respondents also felt that providing relevant information and education materials would help improve engagement, as well as the industry being seen to be rehabilitating disturbed land.
- 62% of respondents believe that the mining industry co-exists with the community.
- 72% of respondents believe the Dialogue’s priority should be rehabilitation strategies. Other key priorities identified include addressing water and air quality issues and further investigation of voids.
- More than half of the respondents believed that voids could be put to beneficial use, with recreational lakes, water storage, and pumped hydro the main suggestions for use.
- About 3 in 10 people were aware of the Dialogue before completing the survey. This does not factor in the discussions between UHMD and the community at the community events where members do not complete a survey but may be aware of the Dialogue.
- Less than 10% of respondents have accessed the UHMD website.

Demographic information:

- **Survey period:** 2016-2017
- **Total respondents:** 355 (51.3% in 2016, 28.7% in 2017)
- **Gender:** Males: 59.7%; Females: 39.2%; Rather not say: 1.1%
- **Age:** Persons under the age of 40: 30.4%; Persons aged 40 to 59: 31.0%, Persons aged 60 or older: 37.8%.
- **Primary Location:** Upper Hunter residents: 31.3%; Other Hunter Valley residents (primarily Lower Hunter/Newcastle): 45.1%; Rest of NSW (primarily Sydney or Central Coast): 23.1%.
- **Main survey collection events:** Tocal Field Days: 65.1% over 2016 and 2017; Singleton Shows, Upper Hunter Show and HSEC Conference also rated highly.
- **Relationship to the Upper Hunter:** Live/Work in Upper Hunter: 41%; Do not live/work in Upper Hunter: 41%; Live only: 12%; Work only: 6%.

How does mining benefit the Upper Hunter? (322 respondents)

This was an open response question. Clear themes were apparent from a number of responses, which enabled the responses to be grouped into the key themes as outlined in the table below. Many responses contained multiple themes.

The clear benefit from mining identified by respondents was through the creation of jobs and employment in the region, with close to 74% of responses referencing this as a benefit. The next two themes identified are closely linked, with money & income, and the growth of the economy reported by 24% and 20% of respondents respectively. Other major benefits identified included community support through sponsorship and grants, as well as the provision of community services such as hospitals, schools and transport to name a few.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Count</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Jobs &amp; Employment</td>
<td>238</td>
<td>73.9%</td>
</tr>
<tr>
<td>2 Money &amp; Income (incl. Exports)</td>
<td>78</td>
<td>24.2%</td>
</tr>
<tr>
<td>3 Boost Economy and Growth</td>
<td>63</td>
<td>19.6%</td>
</tr>
<tr>
<td>4 Sponsorship &amp; Grants</td>
<td>39</td>
<td>12.1%</td>
</tr>
</tbody>
</table>
Notes:
- Both males and females recognised the importance of jobs and employment derived from mining. Females were more likely to report the benefits of mining as boosting the economy, providing sponsorship and grants, and providing energy and resources than their male counterparts. Males are more likely to recognise the money and income, community services and provision of infrastructure.
- All age groups recognised the importance of jobs and employment. However, those under 40 were more likely to report benefits for the local economy and growth, as well a rehabilitation and land use relative to the older groups. Those 60 and over were more likely to report infrastructure provision as a benefit of mining than other groups.
- Similarly, all locations reported jobs and employment as recognised as the key benefit. Upper Hunter respondents reported sponsorship and grants as a key benefit, while those outside the Hunter indicated that infrastructure provision, rehabilitation and energy and resources were key benefits of mining.

How can the mining industry improve engagement? (292 respondents)

As with the previous question, this was open response. Responses were grouped into readily identifiable themes where possible. Responses could contain multiple themes. The most common responses given were to actively talk, communicate and discuss issues with the community to improve engagement (21%). The next most popular responses were to provide information and data to the community to help educate (17%), as well as advertising and publicising what work is being done. Respondents further suggested that rehabilitating the land and managing environmental impacts such as dust, noise and visual amenity would improve engagement. A high number of respondents also suggested the industry act honestly and transparently by attending community events and field days. Close to 9% of respondents indicated that the industry was already interacting well with the local communities.
<table>
<thead>
<tr>
<th>No.</th>
<th>Suggestion</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Already interacting well</td>
<td>25</td>
<td>8.6%</td>
</tr>
<tr>
<td>10</td>
<td>Collaboration and innovation</td>
<td>22</td>
<td>7.5%</td>
</tr>
<tr>
<td>11</td>
<td>Employ locals</td>
<td>16</td>
<td>5.5%</td>
</tr>
<tr>
<td>12</td>
<td>Open Days and Mine Tourism</td>
<td>16</td>
<td>5.5%</td>
</tr>
<tr>
<td>13</td>
<td>School visits</td>
<td>10</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

Note:
- The top suggestion for improving community from females was to rehabilitate land, whereas actively communicating and talking with the community was the most common theme identified by male respondents, with both genders also recognising the importance of providing information. Females were more likely to identify the management of environmental impacts as a key challenge to engagement, while males were more likely to suggest that industry act honestly and transparently than females did.
- All age groups strongly believed in actively communicating and discussing issues directly with the community would improve engagement. Respondents aged under 40 reported that community events and field days would provide the best opportunity for engagement, while those aged between 40 and 60 believed sharing information to educate the community would provide the best results.
- Those in the Upper Hunter were more likely to report the rehabilitation of land as the best opportunity to improve engagement with the community. Upper Hunter residents also reported acting transparently and supporting the community through sponsorship as more effective than the other age groups did. Those outside the Upper Hunter reflected the main results.

Do you believe that mining positively co-exists with its community in the Upper Hunter? If not, is there anything that the mining industry could do to work towards coexistence? (327 responses)

Over 62% of respondents indicated they believed the mining industry coexists with the local community. Just 6% of respondents expressly indicated no, or a negative response. Over 17% of comments were either comments, or suggestions to improve co-existence. 8% of respondents indicated mixed belief of coexistence.

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
<th>Percent</th>
<th>Sample comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>203</td>
<td>62.1%</td>
<td>Yes, I believe mining co-exists with community by offering employment to local towns and rehab after mine is finished.</td>
</tr>
<tr>
<td>Mixed</td>
<td>27</td>
<td>8.3%</td>
<td>Yes and no. Improve attitude towards entitlement of use of natural resources</td>
</tr>
<tr>
<td>Negative</td>
<td>21</td>
<td>6.4%</td>
<td>No. It needs to realise that it is not the be all and end all and that it is only here for a short term.</td>
</tr>
<tr>
<td>Comment / Suggestion only</td>
<td>57</td>
<td>17.4%</td>
<td>More face to face collaboration with the community to enable them to find out information first hand</td>
</tr>
<tr>
<td>Unsure</td>
<td>19</td>
<td>5.8%</td>
<td>Unsure - Not familiar enough with this particular area.</td>
</tr>
</tbody>
</table>

Notes:
- The amount of support for positively coexisting was generally consistent around the early to mid-60% to 65% mark for most major shows where a significant number of surveys were collected (i.e. over 25 or more). The lowest figure of support comes from Tocal Field Days in 2017 where only 48% of respondents reported they believed mining positively coexists with the community.
- The support for coexistence is not limited to gender, with roughly the same number of female...
respondents believing the industry positively coexists

- Respondents under 40 generally had a more positive view of coexistence with 71% of respondents indicating they believed mining coexisted positively with local communities. The 40 to 59 age brackets mirrored the total results, and while the majority of those 60 believed mining positively coexists, they were less positive with only 53% of respondents indicating a positive response.
- Those respondents who indicated they were from the Upper Hunter were more likely to respond that mining positively coexists with the local community than those residing outside the region, with close to two thirds of responses.

What priorities should the Dialogue focus on? (164 responses)

Members were given six priority areas and could select multiple choices as priorities, as well as add their own options. Rehabilitation strategies is the key priority the Dialogue should be focusing on, as reported by 72% of respondents. The other main priorities identified were addressing water quality issues (55%), air quality issues (48%) and voids (45%).

<table>
<thead>
<tr>
<th>Rank</th>
<th>Priority</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rehabilitation strategies</td>
<td>118</td>
<td>72.0%</td>
</tr>
<tr>
<td>2</td>
<td>Water Quality issues</td>
<td>90</td>
<td>54.9%</td>
</tr>
<tr>
<td>3</td>
<td>Air quality issues</td>
<td>79</td>
<td>48.2%</td>
</tr>
<tr>
<td>4</td>
<td>Development of voids</td>
<td>73</td>
<td>44.5%</td>
</tr>
<tr>
<td>5</td>
<td>Research</td>
<td>47</td>
<td>28.7%</td>
</tr>
<tr>
<td>6</td>
<td>Noise reduction</td>
<td>30</td>
<td>18.3%</td>
</tr>
</tbody>
</table>

Notes:
- Females were more likely to list air quality and rehabilitation strategies as priority issues than males were. Males reported priority issues of voids, noise reduction and research at a higher percentage than females.
- 80% of Upper Hunter respondents believed the Dialogue should focus on Rehabilitation strategies. Further 65% of respondents believed that air quality was a priority.
- Those aged over 40 were more likely to see water quality issues as a priority than those aged under 40. However, respondents under 40 reported less priority issues (2.3 per respondent) rather than those aged 40 to 59 (2.8 issues) and over 60 (2.9 issues)

Do you believe final voids can be put to beneficial use? If so, how? (147 respondents)

Just over half responses were simple yes/no responses, with a lot more open response style answers allowing respondents to provide their thoughts or comments on voids and how they may be used. Over half of respondents believed that mine voids could be put to a beneficial use once mining ceases. Only 6% of respondents responded negatively. 12% of respondents were unsure and would require more information. 28% of respondents answered with suggestions for various beneficial end uses for voids, indicating that some of these respondents do in fact believe voids can be put to beneficial use.

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>75</td>
<td>51.02%</td>
</tr>
<tr>
<td>Mixed</td>
<td>3</td>
<td>2.04%</td>
</tr>
</tbody>
</table>

UHMD Joint Working Group - Emissions and Health - 28 March 2018
Notes:
- Males were more likely be answer positively than females with 54% of males believing that voids could be used beneficially compared to 44% of women.
- There was a slight variation between the different age groups, with those aged 40 to 59, with the highest percentage of positive answers at 53%. Around 52% of respondents over 60 answered positively, with close to 48% of those under 40 believing voids could be used beneficially.
- In terms of location, respondents from the Upper Hunter returned the fewest yes responses with 39%. However, 44% of responses from Upper Hunter respondents were suggestions (a far higher rate than the other locations), which could suggest these respondents have thought more about voids and offered more complex responses than a simple yes/no response. Two thirds of Other Hunter residents answered positively, with around 48% of the rest of NSW respondents answering positively.

Before today, were you aware of the Upper Hunter Mining Dialogue? If so how did you hear about the Upper Hunter Mining Dialogue? (337 responses)

Just under a third of respondents are aware of the Upper Hunter Mining Dialogue prior to competing their survey. The figure varies from event to event but has remained consistent at around the 30% mark since the community surveys began in 2016. There have been an increasing number of ‘Unsure’ responses in 2017, which may suggest that people may be aware of the Dialogue in some capacity, although not strongly enough to answer firmly as ‘Yes’.

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>106</td>
<td>31.5%</td>
</tr>
<tr>
<td>No</td>
<td>220</td>
<td>65.3%</td>
</tr>
<tr>
<td>Unsure</td>
<td>11</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level of Dialogue awareness by show</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tocal Field Days 2016 (n=149)</td>
<td>29.5%</td>
</tr>
<tr>
<td>Singleton Show 2016 (n=22)</td>
<td>36.4%</td>
</tr>
<tr>
<td>Upper Hunter Show 2017 (n=20)</td>
<td>25.0%</td>
</tr>
<tr>
<td>Tom Farrell Institute Conference 2017 (n=11)</td>
<td>63.6%</td>
</tr>
<tr>
<td>Cessnock Show 2017 (n=4)</td>
<td>25.0%</td>
</tr>
<tr>
<td>Tocal Field Days 2017 (n=66)</td>
<td>22.7%</td>
</tr>
<tr>
<td>HSEC Conference 2017 (n=21)</td>
<td>38.1%</td>
</tr>
<tr>
<td>Broke Village Fair 2017 (n=8)</td>
<td>25.0%</td>
</tr>
</tbody>
</table>
Singleton Show 2017 (n=30) 50.0%
Muswellbrook Christmas Spectacular (n=6) 16.7%

Notes:
- 31% of both males and females were aware of the Dialogue before the time of their survey.
- Older respondents were more likely to have been aware of the Dialogue prior to completing their survey. 35% of respondents aged over 60 were aware of the Dialogue compared to 33% of the 40 to 59 age bracket, and just 27% of those aged under 40.
- Almost 45% of Upper Hunter residents surveyed were aware of the Dialogue before completing their survey. Respondents outside the Upper Hunter had similar rates of awareness with just one in four Other Hunter respondents and the rest of NSW respondents indicating they were aware of the Dialogue.

Have you ever accessed the Upper Hunter Mining Dialogue website for information? (163 respondents)

This question was introduced in 2017. Less than one in ten people surveyed had accessed the Dialogue website. Those under 40 years of age were more likely to access the Dialogue website, with 11%. One in every six Upper Hunter resident surveyed had accessed the Dialogue website. Shows with the highest number of positive responses included the Tom Farrell Institute Conference, Singleton Show and the Upper Hunter Show.

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>14</td>
<td>8.6%</td>
</tr>
<tr>
<td>No</td>
<td>145</td>
<td>89.0%</td>
</tr>
<tr>
<td>Unsure</td>
<td>4</td>
<td>2.5%</td>
</tr>
</tbody>
</table>
Attachment 10b. Communications Plan 2018

Upper Hunter Mining Dialogue Communications Plan 2018

Background

An in-depth Communications Plan was developed in 2015/2016 and its implementation has delivered some major success including a growing knowledge/recognition of the Upper Hunter Mining Dialogue and its activities within the general community. The Dialogue’s research through surveys conducted at community engagement events indicates about 30% of people surveyed are aware of the UHMD. While this is an improvement from the Dialogue’s research starting point in 2015, an obvious gap in the community’s knowledge remains. Likewise, the Dialogue’s research has identified a similar issue within the mining industry itself. This refresh of the communications plan aims to expand activities designed to increase the knowledge of the UHMD in both the community and mining industry sectors. This communications plan is designed to operate over 2018/19 and will be reviewed quarterly to ensure key outcomes are being achieved.

Your feedback on the draft Communications Plan is welcomed.

Events

During the past two years, the Dialogue has been on display at local community events and shows. The attendance at events has allowed The Dialogue to successfully engage directly with members of the community and has become a key segment of the overall communications plan. The Dialogue’s 2018 events schedule includes:

- Upper Hunter Show – March 16&17
- Hunter Coal Festival – April 7
- Tocal Field Days – May 4-6
- NSWMC Conference – August 6&7
- Broke Village Fair – September 9
- Singleton Show – September 21-23
- Muswellbrook Christmas Spectacular - December (Date TBC)

The Dialogue display consists of educational posters and handouts explaining the activities of the UHMD and highlighting current projects. Collateral is regularly updated to ensure all information is as current as possible. The Dialogue’s communications team also conducts surveys at the events and actively interacts with community members. In 2017, the Dialogue interacted with 348 people and collected 171 surveys at local events. Our 2017 surveys reveal the biggest issue of concern for community members is rehabilitation – people do not understand it and how it is regulated, and many don’t believe it happens. To counter this, the Dialogue with assistance from rehabilitation experts from industry partners, will expand its display at the Hunter Coal Festival to include an interactive section designed to educate people on rehabilitation.

Community Engagement and Involvement

Local groups will be further targeted for briefings by the Dialogue. The Dialogue has developed good relationships with local groups and will expand its reach through guest speakers/presentations to local organisations through the development of an engagement plan which identifies key stakeholders to brief them on the Dialogue and seek genuine involvement. Groups to be targeted may include:

- Hunter Thoroughbred Breeders Association
- Rotary and Lions Clubs
- Hunter Environment Lobby
- Chambers of Commerce
- Community Consultative Committees (CCC’s)
- Hunter Valley Wine & Tourism Alliance
- School P&C meetings
School Mines Tour Program

The first instalment of the School Mines Tour Program was rolled out in the final quarter of 2017 with about 250 Year 9 students visiting four mine sites over nine separate tours to Rix’s Creek, Bengalla, Hunter Valley Operations and Mt Arthur. A full year of tours will see an estimated 1000 Year 5 and Year 9 students from 19 schools across the Singleton/Muswellbrook LGAs tour 13 different mine sites representing all Dialogue industry partners. Participating mines and schools are:

- Mangoola/Denman Primary and St Joseph’s Primary Denman
- Muswellbrook Coal/Muswellbrook Christian School
- Ravensworth/St James Primary and Aberdeen Public
- Liddell/South Muswellbrook Primary
- Glendell/Australian Christian School Singleton and Mt Pleasant Primary
- Hunter Valley Operations/St Catherine’s High School
- Mt Owen/King Street Primary
- Rix’s Creek/Singleton High School
- Bulga/Singleton Public Primary
- Mount Thorley Warkworth/Singleton Heights Primary
- Wambo/Broke, Milbrodale, Jerry’s Plains and Kirkton public schools (combined)
- Mt Arthur/Muswellbrook High School
- Bengalla/St Joseph’s High School

The Dialogue is responsible for arranging the schedule for the School Mines Tours after liaising with the mines and schools to ensure suitable dates and organising the buses. Based on school/class sizes, most mines will host two tours in the year ahead, however, Bengalla, Mt Arthur and will host three tours and Rix’s Creek has agreed to four tours due to these sites hosting the larger high school classes. The tours educate students and teachers on all aspects of coal mining and detail both the benefits and impacts of mining. Employees of the mining companies act as the tour guides after training by the Dialogue to ensure consistency of messaging across all sites. Messaging and “how to” packages for the mines and the schools have been developed by a working group consisting of industry, education, community and local government representatives. In class teaching material to suit the Year 9 geography syllabus has also been developed and trialled. It is planned to introduce this into the curriculum in 2018. It is also planned to develop material to suit the primary school syllabus.

Production of a virtual reality video is also planned as part of the School Mines Tour Program. The Dialogue is partnering with the University of NSW to produce the video which will allow students to “tour” a mine site via 3D video. The VR video will also be used as part of the events community engagement display where practicable.

Industry Engagement

As well as educating the general community about the Dialogue, it is imperative mining industry employees are also aware of our activities. It is proposed a quarterly newsletter will be developed and shared electronically with all Dialogue partners/participants for distribution through their websites/social media platforms. Posters detailing the Dialogue’s activities will also be distributed to industry partner sites for display in cribs and meeting rooms. The Dialogue will also be the subject of a presentation at the Mining Leaders Lunch on April 6, as part of the Hunter Coal Festival. In front of a largely industry-based audience, the presentation will detail the Dialogue’s aims, background and strategies and be followed by short live interviews with Dialogue community and industry members who will explain the benefits of the Dialogue from the community and industry perspectives.

Media

- **Newspapers** - News articles and photographs are distributed to local newspapers monthly or as needed. Outlets include Hunter Fairfax publications and industry magazine @thecoalface – all of which willingly accept the provided media releases and generally give good coverage including inclusion on the Fairfax websites. Relationships with journalists/editors are maintained.
- **Radio** - The Dialogue is trialling a paid advertising program with Radio 2NM. The advertisements give a brief message about the Dialogue and seek to drive listeners to our website. 2NM/Power FM and ABC Radio are also used for on air interviews.
- **Television** - Reporting of Dialogue activities/projects is event and news specific. Opportunities will be pursued as they arise – past TV reports include the 2017 release of the water accounting
framework numbers and a Landline feature on the Grazing Trials.

- **Social media** – the Dialogue will investigate opportunities to promote on the Facebook and Twitter platforms. The most efficient method of doing this would be to push our messaging through partners' existing websites and Facebook and Twitter feeds.

- **Video** – the “Clearing the Air” video detailing the Dialogue's Weather Forecasting Project will be distributed for use on websites and be featured, where possible, at Dialogue presentations and community engagement activities.

**Upper Hunter Mining Dialogue Resource Centre**

The Resource Centre provides a physical presence and anchor for the Dialogue and hosts its working group and committee meetings. Its meeting facilities and “hot desks” are utilised regularly by industry partners and community groups.
UPDATE ON CURRENT DIALOGUE PROJECTS

Dialogue projects:

*Weather Forecasting Project video*

The ‘Clearing the Air’ video has been finalised and will be shown at the meeting. More information is contained in Agenda item 7.

*Community Air Quality Forecast Alert*

The final report of the *Upper Hunter Dust Risk Forecasting Scheme* is contained in Agenda item 3, and Mitch Bennett from the EPA will provide an update.

*Upper Hunter Air Quality Fact Sheet*

Please see Agenda item 6 for more information regarding the air quality fact sheet.

*Update of Mine Dust and You Fact Sheet*

NSWMC has engaged Pacific Environment to recommend updates to the NSW Health Fact Sheet *Mine Dust and You* in light of new evidence regarding the health impacts of particulate matter and the new national health standards for particulate matter. Industry input was also sought in preparing the update. A final version of the reviewed fact sheet has recently been prepared. NSWMC is engaging with NSW Health and the EPA on the recommended updates.

FOR INFORMATION
OTHER BUSINESS

Synoptic Plan Review Process

The Synoptic Plan review made considerable progress in 2017, following the 2016 Annual Dialogue Forum commitment from the NSW Department of Planning to review the long overdue document. A workshop was successfully held in June 2017 with a variety of stakeholders. Following the workshop, two working groups were established to drive this process and determine the next steps. The UHMD secretariat is involved with both the core working group and the wider stakeholder advisory group.

At the 2017 Forum, Steve Wills, Director - Hunter, of the Department of Premier & Cabinet presented an update on the progress made in the review process so far, and facilitated a feedback session to discuss the workshop outcomes and alignment with other projects or programs, and identify delivery timeframes.

The next steps identified included:

- Endorse alignment of objectives with programs at local Council and State level.
- Commence projects to achieve/deliver agreed objectives.
- Develop and communicate project governance structure, including timeframes and milestones.
- Undertake a data inventory of what exists, what is underway, what is needed
- Ongoing stakeholder engagement and communication reporting on progress
- Identify future projects and opportunities to achieve/deliver agreed objectives - ongoing.

The next meeting of the Working Group is yet to be advised, however, the UHMD secretariat will strongly encourage the Dialogue’s community participants involvement in the meeting to ensure it is well represented by a range of stakeholders.

Upper Hunter Economic Diversification Project

Limited progress has been made in relation to this project. The DPC officer leading this project has since moved into another position and there is no indication for when the next stakeholder meeting will be. The UHMD secretariat will remain engaged with DPC on this project and advise of any developments.

Membership of the JWG - Emissions & Health (Contact list as of 21 March 2018)

The UHMD Secretariat is currently updating our contact lists to ensure we have the most accurate and current lists available. If JWG members could please advise of any updates or other organisations we should be targeting, please contact the UHMD secretariat.

Industry
- Dominic Brown: Yancoal
- John Watson: Glencore
- Julie Thomas: Muswellbrook Coal
- Peter Jaeger: Peabody Energy
- Phillip Brown: Yancoal
- Sarah Withell: BHP
- Genelle Scotts: Bengalla Mining Company
- Ngaire Baker: Mach Energy

Community / Other organisations
- TBC: Hunter Thoroughbred Breeders Association
- Ben Harrison: Department of Planning
- Karen Marler: EPA
- Matt Parkinson: AGL
- Melinda Hale: Singleton Council
- Neville Hodkinson: Singleton Shire Healthy Environment Group
- Simon Francis: DPI Water
NEXT MEETING / MEETING CLOSE

The next Joint Working Group meeting dates are as follows:

- Wednesday 27 June 2018
- Wednesday 26 September 2018