



## Environment Protection Authority – UHAQAC Minutes

<b>Today's Meeting Date:</b>	<b>Thursday 22 November 2018 (No 30)</b>	<b>Next meeting date:</b>	<b>Thursday 21 February 2019 (No 31)</b>
<b>Meeting location:</b>	<b>Singleton Civic Centre</b>	<b>Last Meeting Date:</b>	<b>(No 29) Thursday 22 August 2018</b>
<b>Meeting opened at:</b>	<b>10:00am</b>	<b>Meeting closed at:</b>	<b>12:20pm</b>
<b>Convenor</b>	<b>Mitchell Bennett</b>	<b>Minute Taker</b>	<b>Emily Ingram</b>
<b>Present:</b>	<p>John Tate – Chair</p> <p>Dr Craig Dalton – Department of Health (DOH) Representative</p> <p>Cr Danny Thompson – Singleton Shire Council</p> <p>Dr Catherine Chicken – Commerce/Industry Representative</p> <p>Diane Gee – Community Representative</p> <p>Geoff Sharrock – Community Representative</p> <p>Carolyn Obrien - Muswellbrook Shire Council Representative</p> <p>Matthew Parkinson – Power Generation Industry Representative</p> <p>John Watson – Coal Mining Industry Representative</p> <p>Alex Newton - Coal Mining Industry Representative</p> <p>Mayor Wayne Bedggood – Upper Hunter Shire Representative</p> <p>John Krey – Community Representative</p> <p>Heidi Waters – DPE Representative</p> <p>Loredana Warren – Office of Environment and Heritage (OEH)</p> <p>Michael Howat - EPA</p> <p>Mitchell Bennett – EPA</p> <p>Emily Ingram – EPA</p>		
<b>Apologies:</b>	<p>Thomas Green – Community Representative</p> <p>Leah Cook – DPE Representative</p>		

<b>1 Review Minutes and Actions from last meeting Thursday 9 August 2018 (No 29)</b>				
<b>No</b>	<b>Agenda Item</b>	<b>Action</b>	<b>Person Responsible</b>	<b>Completion Date</b>
1.1	Adoption of previous minutes	The text “if on site water capacity is substantially drawn down.” be added to the last paragraph in Section 5.1 at the request of John Watson. The Committee endorsed the minutes with this change.	Emily Ingram	23 August 2018
1.2	<b>Action 1:</b> (from Meeting No: 29) EPA to incorporate committee feedback into Communication Strategy for Air Quality for the Upper Hunter Region.	To be addressed at next meeting.	Emily Ingram	February 2019
1.3	<b>Action 2:</b> (from Meeting No: 29) Send a copy of the presentation titled <i>Diesel Emissions and Health Impacts Dr Craig Dalton Hunter New England Population Health</i> to all committee members.		Emily Ingram	22 November 2018
1.4	<b>Action 3:</b> (from Meeting No: 29) OEH to increase the size of the annual air quality trend information in the seasonal reports.		Loredana Warren	22 November 2018
1.5	<b>Action 4:</b> (from Meeting No: 29) OEH to consider the committee’s feedback on the info-graphic	The Committee’s recommendations are being incorporated in the design, and now new elements will be included based on feedback received during the Upper Hunter Mining Dialogue – Annual Forum.	OEH	Revised draft to be provided to next committee meeting.
1.6	<b>Action 5:</b> (from Meeting No: 29) Review of online videos can be made to assist with the interpretation of results.	Investigate whether interpretation of the air quality reports can be improved for end users. This is likely to be done for the 24 hour rolling average calculation by OEH.	OEH & EPA	Ongoing
1.7	<b>Action 6:</b> (from Meeting No: 29) EPA to update Mr Krey on Operation Dust Patrol.	Action completed.	Mitchell Bennett	22 November 2018
1.8	<b>Action 7:</b> (from Meeting No: 29) Committee Members to complete all relevant forms	All items were completed as required.	Committee members	22 November 2018

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Operation Dust Patrol				
No	Agenda Item	Notes	Action/Decision	Status
2.1	Update on Operation Dust Patrol since 1 <sup>st</sup> September 2018.	<p>Mr Howat explained that Operation Dust Patrol is targeted EPA inspections of Upper Hunter coal mines on days predicted to be high dust risk. Since it commenced on the first day of Spring 2018:</p> <ul style="list-style-type: none"> <li>• There were five high-risk days predicted, but PM<sub>10</sub> levels did not increase significantly on those days. This indicates that the Operation was successful.</li> <li>• There was one high-risk day that was not predicted due to minor inaccuracies in the weather forecast.</li> <li>• The EPA inspected mines on all high-risk days that were predicted and issued tweets about the inspections. Poor dust controls at two mines are being investigated following these inspections.</li> </ul> <p>The EPA will review the operation prior to deciding the next steps. A report will be prepared at the conclusion of the operation.</p> <p>In response to a question from Mr Watson about the forecast model, Mr Bennett explained that a “hit” or a “miss” is determined by comparing the model prediction to the monitored data over the corresponding 24 hours.</p> <p>Cr Thompson asked whether Operation Dust Patrol could be made permanent, as he had the impression it would be. Mr Bennett responded that initially the program was being run as a trial to assess its effectiveness and resourcing requirements. Ms Warren noted that Spring was chosen because it usually has the highest particle levels, but this year, high dust levels may continue into summer due to the drought. Generally Upper Hunter air quality is impacted in spring by dust, in summer by bushfire smoke, and in winter by wood heater smoke.</p>	<p><b>Action 1:</b> Send Hunter Valley Dust Risk Forecasting Trail Report to all members</p> <p><b>Action 2:</b> send a copy of Mr Howat’s presentation Operation Dust Patrol Update: Upper Hunter Air Quality Advisory Committee – 22 November 2018.</p>	<p>Complete 4.12 18</p> <p>Complete 4.12 18</p>

		<p>Ms Obrien asked if the models' predictions would be more accurate if they used a shorter time interval. Mr Bennett explained that the models predict dust risk based on weather forecasts for the following day. This gives mines enough notice to plan operations to minimise dust based on the predicted risk level..</p> <p>Dr Chicken highlighted that the models' failure to accurately predict the dust risk on one day undermines the credibility of the scheme. She also noted that there was a dust storm today, with high winds yet the model had identified it would be a low risk day.</p> <p>Mr Watson noted that mines must adjust their operations in response to changing weather conditions. There are limitations with all predictive systems.</p> <p>Ms Warren noted that OEH plans to develop a predictive air quality model for the Hunter.</p>		
<b>Community Perspectives on Hunter Air Quality</b>				
<b>2.2</b>	<b>Agenda Item</b>	<b>Notes</b>	<b>Action/Decision</b>	<b>Status</b>
	<b>Air Quality and living with coal mines: insights from the Bulga community</b>	<ul style="list-style-type: none"> <li>• Mr Krey noted that:</li> <li>• The main objective of air quality management is to protect human health and it is a basic human right to breathe clean air and live in a healthy environment.</li> <li>• Coal mining is the main source of air particles in NSW. PM<sub>10</sub> levels increased at most Upper Hunter sites during the past three years. Annual PM<sub>2.5</sub> is consistently above the benchmark in Muswellbrook and is nearing the benchmark in Singleton.</li> <li>• Mines seem unwilling to accept responsibility for Hunter air quality, Local government should be more vocal in</li> </ul>	<b>Action 3:</b> Send a copy of Mr Krey's presentation to all Committee Members.	Complete 6.12.18

		<p>raising concerns about air quality. State government is not trusted to regulate air quality. The Upper Hunter Mining Dialogue has not produced results.</p> <p>OEH's categorisation of air quality is misleading because there is no safe level of particulate matter. Mr Krey suggested that the committee be more active in making recommendations on how to reduce air pollution in the Hunter Valley. He suggested debating and making recommendations on the following issues:</p> <ul style="list-style-type: none"> <li>• Local EPA compliance officers.</li> <li>• Using drones for mine surveillance.</li> <li>• Mine and power station expansion.</li> <li>• Complaint responses.</li> <li>• Involvement of mining representatives to recommend ways to reduce pollution.</li> <li>• Increased mine rehabilitation.</li> <li>• Back-filling mine voids.</li> </ul> <p>Cr Thompson asked how EPA officers assess dust from mining activities in the field.</p> <p>Mr Bennett explained that EPA observe if the mines are using best practice dust controls. In future, continuous particle monitoring by mines may be able to be used to check whether mines are emitting unacceptable levels of dust, but this is still being developed.</p> <p>Cr Bedggood stated that he was impressed with Mr Krey's presentation and agreed that the committee should take a more proactive approach with air quality management.</p> <p>Mr Thompson agreed that the Committee has an opportunity to work towards the goals identified by Mr Krey.</p>		
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Mining Perspectives on Managing Dust				
2.3	Agenda Item	Notes	Action/Decision	Status
	Mining perspective on managing dust	<p>Mr Watson explained that:</p> <ul style="list-style-type: none"> <li>• Glencore operates mines throughout NSW and Queensland, including the Hunter Valley and makes a significant contribution to the Australian economy</li> <li>• In 2010, Glencore developed an Air Quality Improvement Strategy that helped it to respond to the requirements of the EPA's Dust Stop Program.</li> <li>• Air quality improvement strategies developed in Australia are being used as a model for mines around the world.</li> <li>• Air quality management is an integral part of mine planning and operations. Examples include: <ul style="list-style-type: none"> <li>○ Having alternate overburden dumps that can be used during adverse weather conditions</li> <li>○ Minimising travel distances for water carts to refill.</li> <li>○ Budgeting for changes to operations during adverse weather.</li> <li>○ Scheduling water cart servicing to avoid adverse weather.</li> <li>○ Using coarse gravel in blast hole stemming to reduce dust from blasting.</li> <li>○ Using dust models to plan operations.</li> <li>○ Ensuring that watercarts operate from early in the morning if adverse weather is predicted.</li> <li>○ Progressive mine rehabilitation.</li> </ul> </li> <li>• Glencore engages with the community and local small businesses through the Upper Hunter Mining Dialogue.</li> </ul> <p>Ms Waters advised the committee that DPE had recently conducted unannounced night-time mine dust inspections.</p>		

		Dr Dalton clarified that the DoH are not involved in setting conditions of rental agreements that allow residents to accept health risks associated with air pollution. Mr Krey stated that to lease a house in areas of high air pollution in Bulga there is a waiver that families are asked to sign.		
<b>Winter 2018 Air Quality Report</b>				
<b>2.4</b>	<b>Agenda Item</b>	<b>Notes</b>	<b>Action/Decision</b>	<b>Status</b>
	Upper Hunter Air Quality Monitoring Network Winter 2018	<p>Ms Warren presented OEH's report on the Upper Hunter Air Quality Monitoring Network during winter 2018. During winter 2018:</p> <ul style="list-style-type: none"> <li>• The Upper Hunter had below to very much below average rainfall and very much above average temperatures. Rainfall was similar to winter 2017 and drier than the winters of 2015 and 2016.</li> <li>• There were no days over the NO<sub>2</sub> &amp; SO<sub>2</sub> benchmark</li> <li>• There were two days over the PM<sub>2.5</sub> benchmark at Muswellbrook, likely due to wood smoke</li> </ul> <p>: 29 days over the PM<sub>10</sub> benchmark was more than previous winters.</p> <ul style="list-style-type: none"> <li>• Dry and warm conditions continued, with local and long-range dust transport. Most of NSW continued to be drought affected, with the rural NSW DustWatch program reporting the highest dust on record during July and the dustiest August since 2005.</li> <li>• The most extensive events were on 18–19 July and 4 August. These were exceptional events due to long-range dust: <ul style="list-style-type: none"> <li>• On 18 July there were 25 NSW sites over the benchmark, due to a dust storm from the SA/VIC Mallee region.</li> <li>• On 4 August there were 16 NSW sites over the benchmark in the Upper Hunter, Namoi and Lower Hunter, with dust from western NSW.</li> </ul> </li> <li>• Larger population sites were over the PM<sub>10</sub> benchmark on 18 July (Muswellbrook/Singleton), 19 July</li> </ul>		

		(Singleton), 20 July (Muswellbrook) and 2 August (Muswellbrook) <ul style="list-style-type: none"> <li>• 18–20 July: Long range and local dust</li> <li>• 2 August: Elevated levels in early morning under light W to SW winds (no source identified)</li> </ul>		
	<b>Committee Protocols</b>			
<b>2.5</b>	<b>Agenda Item</b>	<b>Notes</b>	<b>Action/Decision</b>	<b>Status</b>
	Committee Protocols discussion – when technical advice is sought	Mr Tate introduced the Committee Protocols and explained that it could benefit the Committee to ensure a streamlined approach for requesting new items for the Committee to discuss; and explain how technical advice can be requested from the EPA.  Mr Tate suggested the Committee Protocols be adopted for a six month trial.	<b>Action 4:</b> Adopt Committee Protocols for a six month trial period.	<b>Complete</b>
	<b>Meeting Schedule for 2019</b>			
<b>2.6</b>	<b>Agenda Item</b>	<b>Notes</b>	<b>Action/Decision</b>	<b>Status</b>
	Discussion on what the meeting schedule will be for 2019 – considering OEH reporting requirements	Ms Warren proposed that committee meetings be held in the third week of the month on a Thursday, during February, May, July and October	<b>Action 5: Schedule</b> 2019 UHAQAC meetings for: 21/2/19; 23/5/19; 25/7/19; and 24/10/19	<b>Complete</b>



	General Business			
2.7	Agenda Item	Notes	Action/Decision	Status
		<p>Mr Sharrock noted the significant amount of data collected since the Upper Hunter Air Quality Monitoring Network was established. He called for forecasting of air quality for the Hunter region similar to forecasting available for Sydney.</p> <p>Dr Chicken agreed that this would be a good outcome for the community.</p> <p>Ms Warren to investigate state government work on air quality forecasting.</p>	<b>Action 6:</b> OEH to report on Upper Hunter air quality forecasting	
		<p>Cr Bedggood encouraged the committee to take action on the issues raised by Mr Krey.</p> <p>Dr Chicken praised Mr Krey for highlighting the issues the community is facing.</p> <p>Ms Obrien suggested that as well as dust, the community should be advocating on other mine related issues.</p> <p>Cr Thompson stated World Health Organisation (WHO) SO<sub>2</sub> standards should be adopted and used as triggers.</p>	<b>Action 7:</b> OEH to report on WHO SO <sub>2</sub> standards.	
		<p>Mr Tate stated he wanted to see more work done on mining rehabilitation because this can have a big impact on dust generation.</p>	<b>Action 8:</b> Arrange a presentation on mine rehabilitation successes and innovation	
		<p>Ms Warren advised that OEH and EPA recently attended the Upper Hunter Mining Dialogue Annual Forum at Muswellbrook. From discussions with the community at this forum, she identified other key pieces of information that should be included in the info-graphic that OEH is developing on Upper Hunter air quality.</p> <p>These include:</p> <ul style="list-style-type: none"> <li>• Where can air quality data be found?</li> <li>• What health advice is available for each air quality category?</li> <li>• What does the air quality monitoring network do?</li> </ul>		

		<p>The info-graphic will need to be widely distributed once completed. This could include mining newsletters, Upper Hunter Mining Dialogue media platforms, local doctor surgeries and libraries.</p> <p>Dr Dalton reiterated his suggestion that the content be tested on a cross-section of the committee before being released to ensure the messaging is clear, easy to understand and relevant.</p>		
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