UPPER HUNTER AIR QUALITY ADVISORY COMMITTEE (UHAQAC)

MEETING MINUTES – Meeting 17

Date: 30 July 2015 **Time:** 10:00am – 12 noon

File: EF13/5718, DOC15/494410-02

Meeting Location: Singleton Civic Centre Auditorium Foyer Meeting Room

In attendance: John Tate (Chairperson), Cr Wayne Bedggood, Scott Brooks, Morgana Gidley-Baird, Cr Hollee Jenkins, Lyn MacBain, Geoffrey Sharrock, Andrew Speechly Wendy Wales and John Watson.

Office of Environment and Heritage (OEH): Alan Betts.

Environment Protection Authority (EPA): Mitchell Bennett, Adam Gilligan, Leanne Graham

Apologies: Dr Craig Dalton, Dr Catherine Chicken, Muswellbrook Council representative.

Absent: John Krey

Agenda Item:

1. Acknowledgement of Country

2. Welcome and Introductions

Mr Tate welcomed attendees and introduced Ms Morgana Gidley-Baird, the new member representing the power generation industries in the Upper Hunter.

3. Apologies (see above)

Mr Tate noted that Muswellbrook Shire Council apologised for the delay in appointing a new representative.

4. Previous Meeting Minutes and Actions

The Committee members agreed to adopt the minutes of the meeting of 30 April 2015 out of session via email, pending amendments in Item 7 to clarify research findings on the mortality rate associated with long term exposure to $PM_{2.5}$.

5. Community Feedback

Ms MacBain participated in a stakeholder survey for the EPA's Wood Smoke Reduction Project. The project seeks community input to identify cultural issues influencing the use of domestic wood heaters in the Upper Hunter and advice on how to convey the health issues associated with wood heaters.

6. Network Performance Report and Seasonal Analysis Autumn 2015

Mr Betts presented the Upper Hunter Air Quality Monitoring Network seasonal report for autumn 2015. Mr Betts noted the new simplified format.

Key points included:

- From 1 March 2015 to 31 May 2015, the air quality in the Upper Hunter was generally good.
- There were no days above the benchmark concentrations for $PM_{2.5}$ particles, nitrogen dioxide (NO_2) and sulfur dioxide (SO_2).
- Daily average PM_{10} particle levels were above the benchmark on three days;
- All sites recorded levels above the benchmark on 6 May during a state-wide dust event originating from the Victorian Mallee and southern NSW regions ; and
- Camberwell, a smaller community site, also recorded elevated levels on two other days, mainly overnight with light variable winds and cold conditions.

The results reflected that during autumn 2015 the Upper Hunter experienced rainfall at levels above average to very much above average. Wind roses showed the typically predominant north-west to south-east flows along the Hunter Valley.

The report included analysis of weather patterns associated with the dust storm on 6 May 2015. Strong winds associated with a cold front transported dust into the Hunter from dry areas of Victoria and southern NSW.

OEH will publish the new simplified format of the quarterly air quality report on its web site.

ACTION 1: EPA/OEH to notify Committee members of the publication of *Air Quality in the Upper Hunter: Autumn 2015* on the OEH website.

ACTION 2: EPA to use the introductory paragraph from the draft report *Air Quality in the Upper Hunter: Autumn 2015* as an information source for a media statement announcing the publication of the report.

ACTION 3: EPA in liaison with OEH to notify Committee members of the release of the media statement and to provide a copy.

The Chair noted the report and thanked Mr Betts.

7. EPA update on progress toward optimising coal mine operated air quality monitoring for better dust management

Mr Bennett noted that the wind roses in the *Air Quality in the Upper Hunter: Autumn 2015* showed the predominant northwest - southwest direction of prevailing air flows along the valley. The EPA is working with mines to locate mine-operated air quality monitoring instruments in a northwest - southwest alignment, upwind and down with of mining activity, to monitor the contribution of the mining activity to dust levels. Mining sites with steep terrain or lack of power supply may present problems for locating monitors. The EPA will continue working with individual mines to locate monitors appropriately. In 2016, the EPA will update the mines' environment protection licences to record the new monitoring locations.

The EPA is investigating how to reduce the number of days in Singleton with particle levels over the criterion of 50 µg/m^3. The EPA's analysis of network data for Singleton suggested that days with levels above 50 µg/m^3 occurred during adverse weather conditions, usually with temperatures above 27 °C. Dust may also be transported into the valley from outside the region. The EPA is investigating methods to predict dust levels in Singleton, with a view to requiring mines to modify operations to reduce dust on days predicted to have elevated particle levels. For example, mines may be required to demonstrate consideration of temperature and wind direction when planning daily mining activities.

The Chair thanked Mr Bennett and commended the cooperation between the EPA and the mines.

8. General Business

Ms MacBain enquired about dust control during high wind periods, particularly on unvegetated areas and where mining activity has ceased. Mr Bennett advised that EPA's dust buster program will increase surveillance during spring, when weather conditions are conducive to high dust levels. A new requirement of the EPA's Dust Stop program requires mines to measure areas exposed to wind erosion. Mr Brooks added that the mines' management plans require dust control of the total site not only the areas of active mining.

The Chair asked how the committee could increase its general knowledge of mine site rehabilitation.

Mr Bedggood advised that the NSW Minerals Council operated mine tours for the public to see dust mitigation practices. Mr Watson offered to organise a mine inspection in conjunction with a Committee meeting.

ACTION 4: EPA in liaison with the Committee's coal industry representatives to organise a mine inspection during the next meeting Committee on 29 October 2015.

The Chair advised of the publication of the EPA's Lower Hunter Dust Deposition Study six-month interim report. The EPA commissioned the 12-month study in response to community concern about levels of black dust in Newcastle. The study measured dust levels from 12 dust deposition gauges located in suburbs from which most dust complaints to the EPA have been received, as well as at residences close to the rail corridor and coal stockpiles. Additional samples were collected in Petri dishes and as brush samples for compositional analysis.

Key findings of the six-month interim dust deposition report included:

- The six-month averages for dust levels were below the criterion of 4 grams per square metre per month, which is as an annual average for an acceptable level of deposited dust
- Soil or rock dust comprised the greatest proportion of the samples, an average of 73%
- Coal composition averaged 6% and ranged from nil to 20% in samples. One brush sample from Wickham comprised 20 % coal, one Petri dish sample from Stockton comprised 15% coal, collected during 40 km/hr north-westerly winds.
- Salt composition averaged approximately 4% and soot composition averaged 2%.
- Samples also comprised traces of rubber and plant and insect debris.

The EPA noted that the results demonstrated that black dust is not 100% coal dust.

The EPA also noted that the dust deposition study focused on visible dust, while the concurrent Lower Hunter Particle Characterisation Study focuses on inhalable PM_{10} and $PM_{2.5}$. The EPA expects to receive the final reports for both studies in early 2016.

ACTION 5: EPA to email Committee members the link to the Lower Hunter Dust Deposition Study six-month interim report on the EPA web site.

Mr Watson attended a public workshop at the University of Newcastle, on Friday 24 July 2015, held as part of the 11th Annual Australian and New Zealand Aerosol Assembly. The workshop included presentations on the Lower Hunter dust and particle characterisation studies as well as a presentation by Dr Craig Dalton and an overview of the EPA's dust stop program by Ms Emma Coombs. Mr Watson commended the debate between the various stakeholders on air quality issues in Newcastle.

The EPA reminded the Committee that its two year period of tenure expires in November 2015. The EPA will advertise publically for community representatives and invite nominations from other stakeholder groups. Current members were eligible to re-apply and were encouraged to express their interest with their respective stakeholder groups.

The last meeting of the current Committee will be held on 29 October 2015, at a mine venue to be advised.

The Chair thanked Committee members for their contribution and participation.

Meeting closed at 11:50 am.

Next meeting date: 29 October 2015.
Minutes for review by: John Tate (Chair).