

#### **MEETING No. 45**

## **Newcastle Community Consultative Committee on the Environment (NCCCE)**

## **Meeting Minutes**

Date: 15 February 2017 Time: 5.30 pm

Location: EPA Office, 117 Bull Street, Newcastle West, NSW 2302

**Invitees: Committee Members and Guests/ Presenters** 

NCCCE

John Tate (Chair),

Rick Banyard (Community),

A/Prof Howard Bridgman (Minister's Community Nominee),

Keith Craig (Community),

Dr Craig Dalton (NSW Health),

Michael Dowzer, industry),

Peter Kibble (Industry),

Dr John Mackenzie (Environment),

Paul McMurray (City of Newcastle)

Sherree Woodroffe (Industry)

## **Australian Rail and Track Corporation (ARTC)**

Wayne Johnson, General Manager Customer Service

Nick Godfrey-Smith, Principal Advisor Environment and Community

**CSIRO** Dr Mark Hibberd, Principal Researcher

**Orica** Scott Reid, General Manager, check title of presentation

#### Office of Environment and Heritage (OEH)

Dr Yvonne Scorgie, Senior Research Team Leader

Scott Thompson, Senior Air Quality Monitoring Officer

#### **EPA**

Adam Gilligan, Director North Branch

Karen Marler, Director Hunter

Alethea Morison, Manager Air Policy and Program

Kris Durran, Program Coordinator, Air Policy

Leanne Graham, Programs Officer

**Apologies:** Andrew Baxter (City of Newcastle), Matt Riley (OEH)



Item	Meeting Details			
1	Welcome The Chair welcomed attendees and introduced guest presenters and visitors.			
2	Apologies – Matt Riley			
3	ARTC Overview and update on Hunter rail corridor investigations  Mr Godfrey-Smith presented an overview the ARTC and rail corridor investigations.			
	In November 2015, the ARTC undertook a Pollution Reduction Program (PRP), as part of its Environment Protection Licence. The PRP investigated coal deposition on railway departure roads and assessed the effectiveness of removing coal deposition using vacuuming equipment. The investigation focused on three sites, known to receive higher levels of coal deposition, at Kooragang, Sandgate and Thornton.			
	The study found, first, that deposition rates were highly variable, ranging from 16 to 188 grams per square metre per day (g/m².da), with increased deposition at turning sections of the rail track. Factors contributing to deposition included track geometry and the rocking movement of the train. Unloaded wagons contributed most deposition. Second, vacuuming was complicated logistically, effective, partially, over short distances and unsustainable over longer distances.			
	The ARTC presented the PRP report to the EPA and to the NSW Chief Scientist's investigation of coal deposition in the rail corridor. The ATRC also reported the findings to representatives of the Correct Planning and Consultation for Mayfield Group and to industry stakeholders.			
	The ARTC undertook a further voluntary investigation, using video recording, to identify wagon components that contributed to coal deposition. The study recorded evidence of deposition on the track but was unable to identify the source of the spillage.			
	The ARTC is continuing to work with industry stakeholders through the Industry Steering Group on Rail Corridor Air Quality, chaired by the NSW Mineral's Council. The group includes representatives from the ARTC, the coal terminals, rail providers and coalmines. The group plans to work collaboratively with the NSW Government to understand air corridor air quality and to progress findings of the Chief Scientists Report.			
	The Committee discussed factors potentially contributing to coal loss and the logistics of track vacuuming and testing for lift off of coal from loaded and unloaded wagons. The Committee agreed on the importance of identifying the source of the coal spillage.			
	Action 1: The EPA to provide Committee members with the ARTC's presentation on coal deposition and the vacuuming of rail tracks.			
	The Chair commended the work of the ARTC and thanked Mr Godfrey-Smith and Mr Johnson for the presentation and their attendance at the meeting.			



# 4 Lower Hunter Particle Characterisation Study – Supplementary Report, Quantifying the Coal Particle Component of Airborne Particulate Matter at Stockton

The Chair introduced Dr Hibberd to present an overview of the study and its findings. The Lower Hunter Particle Characterisation Study (LHPCS) included an additional study to investigate coal particles in samples collected at the Stockton air quality monitoring site.

The study selected days when meteorology was conducive to coal particles being generated and transported to the Stockton AQMS from coal operations on Kooragang Island and adjacent areas at the Port of Newcastle.

## The study found that:

- Coal particles made up an average of 12% of total suspended particles. This was consistent with the average of 10% coal found in deposited dust in the Lower Hunter Dust Deposition Study; and
- Coal particles made up an average of 10% of particles with diameters of one to 10 micrometres, known as PM<sub>1-10</sub>. This was consistent with finding of the LHPCS that light-absorbing carbon made up an average of 10% of particles known as PM<sub>2.5-10</sub> and that most of this was probably made up of coal particles.
- Coal particles made up to 0.5% of particles with diameters of one to 2.5 micrometres, known as PM<sub>1-2.5</sub>. This indicated that the LHPCS's finding that coal probably made up 4% of the soil factor, was a significant over estimation

Mr Gilligan advised that in response to the study's findings regarding the contribution of fly ash in particle samples, the EPA was investigating dust management at industrial premises that handle fly ash on Kooragang Island.

The Chair asked the committee that the findings were kept confidential until the public release of the report.

The Chair commended the CSIRO and OEH on the study and thanked Dr Hibberd for the presentation.

Action 2. The EPA to inform the Committee of the publication of the Lower Hunter Particle Characterisation Study – Supplementary Report, Quantifying the Coal Particle Component of Airborne Particulate Matter at Stockton.

## 5 Clean Air for NSW – Briefing and feedback opportunity

Ms Morison gave an overview of the Clean Air for NSW Consultation Paper and the actions proposed to improve air quality across NSW. During the public consultation period the EPA received over 130 submissions comprising comments from over 1,000 individual stakeholders. The EPA will review the submissions and confirm that the action in the strategy address community concerns. A Clean Air Summit to be held later in 2017 will report back to the community and to discuss and further define actions.

In response to questions, the EPA clarified that actions in Clean Air for NSW focused on the criteria air pollutants defined in the National Environment Protection (Ambient Air Quality) Measure (Air NEPM) rather than air pollutants such as pesticides. In parallel, the EPA work would continue to work with small communities to improve environmental performance of specific industries in regional areas. A NSW Government review of the NSW air quality monitoring network, to be released in 2017, was expected to identify any priority areas for new monitoring stations.



The Chair deferred to Item 10 the discussion of the Committee's feedback on the Clean Air for NSW.

The Chair commended the EPA on the comprehensive scope of the Clean Air for NSW Consultation Paper and thanked Ms Morison for attending the meeting.

#### 6 Orica – Ammonia Plant Turnaround

Mr Reid presented an overview of Orica's maintenance activities scheduled for the ammonia plant during February to April 2017.

Orica's ammonia plant turnaround involves shutdown of operations and major maintenance works, every six years. The work requires significant investment and up to 400 extra technical specialists on site, to replace, repair and upgrade the plant's equipment.

Orica's preparation for the works included an environmental risk assessment, safety and management plans and an independent review of planned procedures.

Mr Reid described the increased levels of noise, steam and flaring of gases that the community may experience and observe during the maintenance operations.

Mr Reid explained in detail the plant modifications since the accidental release of hexavalent chromium on 8 August 2011. Improvements to procedures would prevent a reoccurrence. Additional actions since 2011 included staff training and annual exercises in emergency response with Fire and Rescue NSW and other agencies.

Orica commenced a comprehensive communications strategy in August 2016 to inform stakeholder of the planned ammonia plant maintenance. Activities included briefings with Orica's Community Reference Group, regulators, elected government representatives and the distribution of community newsletters and calendar letters.

During the turnaround the workers will participate in a safety incentive scheme. For every injury-free day, Orica and its contracting companies will donate money to the scheme. Funds raised will go towards the purchase of new equipment and a sensory play area at the Newcastle Middle School.

Mr Reid provided an update on Orica's other activities relevant to the Committee.

- Orica submitted to the Department of Planning the Environmental Impact Statement for the Arsenic Remediation Program to address groundwater contamination. Following a 30-day public exhibition of the plan, Orica expects construction works to commence in May or June.
- ANSTO completed the particle characterisation PM2.5 samples collected during winter at Stockton in 2016 and 2015. CSIRO will undertake additional analysis.
   Orica is investigating technologies to reduce ammonium nitrate emissions. Orica expects a final report will be available by December 2017.
- Orica presented a time series graph and summary annual data for ammonia concentrations recorded at Stockton monitoring station, for 2013 to 2016.

The Chair commended Orica's improved environmental performance and community engagement since 2011 and thanked Mr Reid for the presentation.

Action 3. The EPA to distribute, to the Committee, Orica's presentation on the ammonia plant maintenance operation.



# 7 Air Quality in NSW: Spring 2016

Mr Thompson presented the Newcastle air quality newsletter for spring 2016. Air quality in Newcastle and the Lower Hunter from 1 September to 30 November 2016 was generally good in terms of the NSW Air Quality Index.

On all days, levels of nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>) and ammonia (NH<sub>3</sub>) were all below benchmark concentrations.

Particle levels were above the benchmark of  $25 \,\mu g/m^3$  for  $PM_{2.5}$  (particles less than or equal to 2.5 micrometres in diameter) on one day and above the benchmark of  $50 \,\mu g/m^3$  for  $PM_{10}$  (particles less than or equal to 21 micrometres in diameter) on 11 days.

Large bushfires in the Port Stephens and Cessnock areas resulted in a widespread particle event on 7 and 8 November 2016. All sites recorded levels above the  $PM_{2.5}$  benchmark on 7 November 2016. Levels were above the  $PM_{10}$  benchmark at all sites, except Beresfield, on 7 November 2016. Mayfield. Newcastle and Wallsend recorded daily average  $PM_{10}$  levels ranging from 65.5 to 89.1  $\mu g/m^3$  on 7 November 2016. Carrington and Stockton recorded daily average  $PM_{10}$  above the benchmark on 7 and 8 November, with maximum daily averages at these sites of 95.4 and 108.1  $\mu g/m^3$ , respectively.

Stockton recorded levels over the  $PM_{10}$  benchmark on the remaining nine days, with maximum values ranging from 52.1 to 64.6  $\mu$ g/m³ and averaging 57.8  $\mu$ g/m³. On these days, winds were predominantly onshore. Stockton particle levels are influenced by sea salt from onshore winds, which prevail more frequently as conditions warm during spring. On 26 and 27 October 2016, elevated  $PM_{10}$  levels occurred overnight during light northwest winds. On these days, large fires in the Great Lakes region, approximately 30 kilometres north-northeast, may have influenced particle levels in the Lower Hunter.

Particle levels were similar to, or lower than, levels recorded in spring in previous years. Winds were predominantly from the northwest during spring 2016, with less variability than previous spring seasons.

In response to questions, Mr Thompson explained that the OEH produces daily windrose diagrams based on one-minute average data for wind speed and direction.

Committee members endorsed the report and noted that the results build an interesting record over time.

The Chair thanked Mr Thompson for the presentation.

## 8 Minutes from Previous Meeting (19 October 2016)

The Committee endorsed an amendment to the draft previous minutes, proposed by Ms Woodroffe, and adopted the minutes as a true and accurate record.

# 9 Actions Arising from Previous Meetings summary

Meeting No.44 (19Oct16) Recommendations 1 to 3. Progressing. The EPA apologised for the delay in publishing the Lower Hunter River Health Monitoring Program.

Action 4. The EPA will inform the Committee about the publication of the Lower Hunter River Health Monitoring Program when more information becomes available.



Meeting No.44 (19Oct16) Action 1. Update 15/02/17. Analysis by CSIRO continues, to characterise particles in PM<sub>2.5</sub> samples, collected during winter at Stockton in 2016 and 2015, and to compare results with samples from 2014. Orica expects to present the final report to the EPA by December 2017.

Action 5. The EPA will report to the Committee by December 2017, the results of the particle characterisation for PM2.5 samples, collected at Stockton in winter 2015 and 2016.

Meeting No.44 (19Oct16) Action 2. Ongoing. The EPA will present to the Committee at the next meeting, the estimated costs for the operation of the Newcastle Local Air Quality Monitoring Network in the financial year 2017-2018.

Action 6. The EPA to present to the Committee at the next meeting, the budget forecast for the operation of the Newcastle Local Air Quality Monitoring Network for 2017-2018.

Meeting No.44 (19Oct16) Action 3. Progressing. The EPA received the report on the Stakeholder Survey 2016-2017.

Action 7. The EPA will brief the Committee on the EPA's Stakeholder Survey 2016-2017, at the next meeting.

Meeting No.44 (19Oct16) Action 4. Completed 27/10/16. The EPA circulated to the Committee the link to recommended levels of maximum intake of seafood from the Williamtown area.

Meeting No.44 (19Oct16) Action 5. Completed 15/02/17. The ARTC gave a briefing to the Committee about investigations to reduce fugitive coal emissions in the Hunter rail corridor (refer to Item 3).

## 10 Community Feedback

The Chair invited Committee members to comment on the Clean Air for NSW Consultation Paper.

Committee members commended the proposal to act on the review of studies of coal dust emissions in the NSW coal chain, undertaken by the NSW Chief Scientist.

One Committee member questioned how the proposed action to strengthen the mine rehabilitation framework would improve air quality. The EPA noted that the action would complement the EPA's work with coalmines to reduce dust emissions by rehabilitating areas exposed to wind erosion.

One Committee member noted that the paper lacked actions to address air pollution sources in the tourism industry, including aircraft emissions.

A/Prof Bridgman advised his comments were incorporated into a submission from the Clean Air Society for Australia and New Zealand.

The Committee agreed that, first, the paper provided a comprehensive framework for evidenced-based decision making on air quality management. Second, a cost benefit analysis of proposed actions was missing from the paper. Third, the success of a strategy to improve air quality depended on adequate funding of the EPA to implement actions.



The Chair thanked the Committee members for their contributions and commended members' on their participation.

Action 8. Committee members will provide comments on Clean Air for NSW Consultation Paper by email to the EPA by Friday 17 February 2017.

#### 11 General Business

The EPA advised that it was considering the detail of the report on soil contamination in the Newcastle area, by Macquarie University. Blood testing of vulnerable groups in Lake Macquarie, by the Hunter New England Health, found low blood lead levels, suggesting minimum exposure to lead in the environment.

Action 9: The EPA will inform the Committee about action to address soil contamination in the Newcastle, as more information becomes available.

**12 Next Meeting:** 17 May 2017

Meeting close: 7:50 pm

ACTION ITEM LOG NCCCE MEETING NO. 45, 15 February 2017	DUE	RESP
Action 1. The EPA will provide Committee members with the ARTC's reports on coal deposition and the vacuuming of rail tracks.	ASAP	EPA
Action 2. The EPA to inform the Committee of the publication of the Lower Hunter Particle Characterisation Study – Supplementary Report, Quantifying the Coal Component in Airborne Particulate Matter at Stockton.		
<b>Action 3.</b> The EPA will distribute to the Committee Orica's presentation on the ammonia plant maintenance operation.	ASAP	EPA
<b>Action 4</b> . The EPA will inform the Committee about the publication of the Lower Hunter River Health Monitoring Program when more information becomes available.	ASAP	EPA
<b>Action 5.</b> The EPA will report to the Committee by December 2017, the results of the particle characterisation for PM <sub>2.5</sub> samples, collected at Stockton in winter 2015 and 2016.	December 2017	EPA
Action 6. The EPA to present to the Committee at the next meeting, the budget forecast for the operation of the Newcastle Local Air Quality Monitoring Network for 2017-2018.	17/05/17	EPA
Action 7. The EPA will brief the Committee on the EPA's Stakeholder Survey 2016-2017, at the next meeting,	17/05/17	EPA



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