## GENERAL PURPOSE STANDING COMMITTEE NO 5 INQUIRY INTO THE PERFORMANCE OF THE ENVIRONMENT PROTECTION AUTHORITY SUPPLEMENTARY QUESTIONS AND ANSWERS 11 DECEMBER 2014

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# FORESTRY – REGULATORY PRACTICES AND STAFFING: QUESTIONS 1, 2, 3

#### Question 1

# Does the EPA consult with the National Parks and Wildlife Service around issuing and monitoring threatened species licenses? What is the process for seeking this advice?

The EPA has responsibility for the administration, regulation and monitoring of the Forestry Corporation of NSW threatened species licences. In executing these responsibilities, the EPA engages with relevant experts from the National Parks and Wildlife Service and the Office of Environment and Heritage more broadly as required.

#### Question 2

# a) Are EPA audits of forestry compliance on public land undertaken announced or unannounced?

The EPA undertakes site inspections, audits and investigations on public native forests. The EPA's audits of the operations of the Forestry Corporation of NSW are unannounced.

# b) How many audits, announced and unannounced, were conducted in Camp State Forest in 2011, 2012, 2013 and 2014?

There were no audits of Royal Camp State Forest during this period, however, an audit scheduled by the EPA for 2012 was overtaken by investigations in 2012 and 2013 into alleged non-compliances. The EPA undertook 6 site inspections of Royal Camp State Forest over 2012-2013.

#### Question 3

#### a) How many compliance staff are there in EPA's Forestry division?

The EPA Forestry Section has 27 permanent staff. Staff are responsible for on ground operational work, specialist investigations, strategic regulation, policy reform and stakeholder engagement. There are 18 staff dedicated to on ground inspection, audit and investigatory work, noting all staff participate in the Forestry Section's compliance program work.

#### b) Please provide a breakdown of staff by location/ region.

The EPA Forestry Section staff are located in 8 different offices across NSW, with permanent staffing located as below:

Coffs Harbour	2	Newcastle	1
Deniliquin	2	Queanbeyan	4
Grafton	5	Sydney	10
Kempsey	2	Taree	1

### FORESTRY – ROYAL CAMP STATE FOREST: QUESTION 4

#### Question 4

# a) The EPA did not directly investigate four of NEFA's complaints but passed them on to other responsible agencies. What follow up did the EPA undertake?

The EPA referred two of the complaints to other agencies, a third complaint was managed by the EPA through a different process, and a fourth complaint was beyond the power of the EPA to investigate. Details are as follows:

- One matter related to the regulation of threatened fish species and was referred to Department of Primary Industries (NSW Fisheries) as the appropriate regulatory authority.
- One matter related to harvesting machinery operating around two streams and a stream crossing and was referred to Forestry Corporation for on ground follow up.
- One matter related to the selection of recruitment trees. In response, the EPA investigated 8.5 hectares of transects in compartment 15 of Royal Camp State Forest. This resulted in the EPA issuing the Forestry Corporation of NSW an official caution for failing to mark and retain hollow-bearing and recruitment trees.
- One matter related to an allegation that the Forestry Corporation of NSW made public statements that misled the public. This allegation was not within the scope of the EPA's investigations since the EPA does not have the authority to investigate complaints that Forestry Corporation have misled the public.

#### b) What is the current status of all four cases?

The EPA has completed its investigations in Royal Camp State Forest. The EPA's investigations over 2012 and 2013 resulted in three penalty notices and an official caution being issued to Forestry Corporation. No further logging has occurred.

## FORESTRY – AREAS UNDER MANAGEMENT: QUESTIONS 5, 6

#### Question 5

#### How many hectares of public land is EPA responsible for regulating for forestry in NSW?

The EPA regulates native forestry on public land in NSW, which covers approximately 1.78 million hectares.

#### **Question 6**

#### How many hectares of private land is EPA responsible for regulating for forestry in NSW?

As of August 2014, the EPA had issued Private Native Forestry Property Vegetation Plans covering 553,463 hectares of these native forests.

### COAL TRAINS – ARTC (1): QUESTION 7

#### Question 7

The HCEC's submission details what they uncovered through the GIPA process. This includes a claim that various EPA officers, NSW Health and OEH were given less than 48 hours, and in some cases less than 2 hours, to review a 60 page technical draft. Can you comment on why the process appears so chaotic and rushed?

The EPA and OEH had previously undertaken a comprehensive review of, and provided comments to Australian Rail Track Corporation's (ARTC) on a draft of the report. Thus the review of the final report was able to be completed in a relatively short space of time to assess the adequacy with which ARTC had addressed the EPA's comments.

### COAL TRAINS – CTAG COAL TRAIN POLLUTION SIGNATURE STUDY: QUESTION 8

#### Question 8

# Did EPA ever respond to the CTAG Coal Train Pollution Signature study? If yes, what was EPA's response?

The EPA met with the Coal Terminal Action Group on 5 September 2013 to discuss their findings in detail.

The EPA welcomed the Coal Terminal Action Group's pilot Coal Train Pollution Signature study when it was released in 2013 and also welcomed any future work that may be undertaken by the community to build on the knowledge base regarding this important issue.

The EPA reviewed the report and noted that the findings indicate that dust levels increase in the rail corridor during the movement of loaded and unloaded coal trains. This is consistent with the ARTC study on this issue. However, the CTAG report provided insufficient information to determine whether coal trains are a more significant source of dust than other types of train.

### **REGULATION OF COAL INDUSTRY: QUESTIONS 9, 10**

#### Question 9

In their submission, the NSW Minerals Council has noted an increasing trend of regulatory intervention from the EPA and that it has a financial impact on the industry and questioned whether these initiatives are the best use of the EPA's resources.

#### a) Does the EPA agree with these statements? b) If not, what is your response to this?

Yes. There has been increased regulatory intervention by the EPA in response to the priority given by the EPA in its strategic plan to the improvement of air quality. Normally regulatory intervention does have some financial impact but the EPA looks to interventions with the greatest benefits in absolute terms, relative to the costs, using an evidence-based approach which takes into account the cost of compliance.

The EPA has a range of regulatory tools including pollution reduction programs (PRPs). The coal mining industry has been subject to a series of PRPs as part of the EPA's Dust Stop Program.

Coal mines in the Hunter valley are major contributors of dust and particulate matter. As mining activity has increased in the Hunter Valley it has been necessary to increase our regulatory activity to offset these effects. Particulate emissions can affect community health and amenity. The EPA's regulatory programs around coal mines, including the use of PRPs, are directed at reducing dust emissions.

The Dust Stop Program does lead to further costs to industry, but has resulted in significant reductions in dust from haul roads and other sources. This has a positive community benefit. It is entirely appropriate for the EPA to continue to use all its regulatory tools to drive improved environmental outcomes.

In the case of the dust stop program, all the PRPs were negotiated with industry before being included on the mining companies' environment protection licences.

The EPA will continue to look at all reasonable and feasible measures across its licensed community to improve environmental outcomes.

#### Question 10

#### Does the EPA monitor air emissions around coal storage?

Each of the three coal terminals in Newcastle are subject to environment protection licences that include strict, legally enforceable conditions relating to environmental performance and standards.

The licences for all three terminals include conditions requiring the premises to be maintained in a manner which minimises or prevents the emission of dust. In addition, the coal loader operators are required to monitor particulates, and for two of the terminals, deposited dust. The results of this monitoring are publicly available on the companies' websites. Copies of the licences (licence numbers 601, 1552 and 12693) for the three coal loaders are available on the EPA website at <a href="http://www.epa.nsw.gov.au">www.epa.nsw.gov.au</a>.

EPA officers undertake scheduled and unscheduled inspections of these premises to monitor compliance with licence conditions.

The EPA and the Office of Environment and Heritage (OEH) recently launched an air quality monitoring network in the Newcastle local government area. The network builds on monitoring already being undertaken by OEH in the area and will allow a more strategic approach to air quality monitoring and management in the region. New monitoring stations were opened at Carrington and Mayfield and Stockton The stations will continuously monitor sulphur dioxide, nitrogen oxides, particulate matter of less than 2.5 and 10 micrometres (PM2.5 and PM10). The Stockton station also monitors ammonia.

Importantly, the network provides the community with access to near real-time air quality information, available on the OEH website at:

www.environment.nsw.gov.au/aqms/newcastlelocalmap.htm

The EPA and OEH are also undertaking a particle characterisation study in the Lower Hunter. This study will determine the composition of fine dust particles and their potential sources. The EPA is also conducting a Lower Hunter Dust Deposition Study to look at the composition of coarser dust particles. Data from these studies may be informative in determining if additional controls are required on the coal loading facilities.

### COAL TRAINS – ARTC (2): QUESTION 11

#### Question 11

# What initially prompted the EPA to impose the three separate pollution reduction programs on the ARTC between 2009 and 2013?

In response to increasing community concern regarding particulate emissions from coal trains and our own understanding of air quality issues in the Hunter Valley, a Pollution Reduction Program (PRP) was placed on the Australian Rail Track Corporation's (ARTC) environment protection licence in September 2008.

Further details are provided in Question 15.

### **COAL TRAINS – QUEENSLAND SYSTEM: QUESTION 12**

#### Question 12

# a) Why did the EPA state in its response to the Newcastle Herald in July 2012 that adoption of the QLD system may help to reduce dust?

In its response to the Newcastle Herald on 17 July 2012, the EPA did not say that adoption of the QLD system may help to reduce dust. The EPA in a statement to the Newcastle Herald said:

'Also coal trains move relatively slowly through urban areas and in the Hunter Valley, unlike in Queensland, coal is washed prior to being loaded onto wagons trains and this may help to reduce dust.'

### COAL TRAINS – ARTC (3): QUESTIONS 13, 14, 15, 16

#### Question 13

The EPA submissions states at p184:

"Metford and Mayfield were chosen as the monitoring sites as both locations had the required power supply and capability for recording train pass by-times, as well as experiencing considerable coal and other rail traffic. Trains of all types pass these locations – coal, unloaded coal, freight and passenger – and there is a reasonable concentration of residential areas in the vicinity of those sites". (p184)

However, the EPA subsequently notes that:

"The monitoring was restricted to the Metford location as the pilot program identified a number of limitation with the Mayfield site, specifically that accurate train pass-by times were unable to be attained an had resulted in very approximate particular emission levels in the pilot". (p185)

# a) Why was the Mayfield site originally deemed to be suitable for the study, and then deemed not to be suitable?

The Mayfield site was originally deemed suitable because it has the required power supply, and therefore capability for recording train pass by-times, as well as experiencing considerable coal and other rail traffic. Trains of all types pass this location – loaded coal, unloaded coal, freight and passenger – and there is a reasonable concentration of residential areas in the vicinity of those sites.

For the second monitoring program, the EPA decided not to require Australian Rail Track Corporation's (ARTC) to monitor at the Mayfield location because of a number of limitations with the site identified during the pilot program. These limitations affected the reliability of the results obtained from that site.

One of these limitations was that the Mayfield site did not have a wayside monitor. This reduced the reliability of the Mayfield train movement data set since it was not possible to determine the time taken for a train to pass the monitoring station as the entire train, including locomotives and all wagons, was logged as passing the monitoring point at the same time. Average train speeds and average train lengths for each train type were relied upon to calculate an approximate train pass-by period which affected how the data was interpreted. The limitations of the logging of train pass-by times at the Mayfield site resulted in significant difficulties in relating train pass-by data to particulate concentration data.

Other limitations identified with the Mayfield site included:

- Coal train speeds were relatively low due to proximity to the port; and
- Queuing of trains near the port resulted in a relatively low number of single pass-bys, and therefore a relatively small number of data points could be included in the analysis.

# b) Would the installation of a wayside monitor at the Mayfield site have addressed the difficulties in linking air quality monitoring data to the times at which trains passed the site?

Yes, however there were other limitations with the site which affected the reliability of the results obtained from it, including relatively slow train speeds and a low number of single pass-bys.

Additionally, the primary requirement of the second period of monitoring was for it to occur during the warm dry period over summer. Given the time required to install a wayside monitor, it was not possible for that to be completed in time for the second monitoring program to proceed in the next summer period.

The EPA therefore wanted ARTC to focus on the location likely to provide the most reliable information at the earliest opportunity, which was considered to be Metford. The EPA considered

that the objectives of the PRP could be met with a single optimal monitoring location such as the Metford site.

#### c) Why did the EPA choose not to require that a wayside monitor be installed at the site?

See answer a) above. Independent peer review subsequently found no significant issues with the overarching monitoring methodology.

#### Question 14

On what date in September 2012 was the first report on dust monitoring (by Environ) published on the ARTC's website?

28 September 2012.

#### Question 15

In 2008 the EPA imposed the first PRP on the ARTC. The subsequent report on the data gap analysis was not received until February 2010. Following that report, the second PRP was not imposed on the ARTC until September 2011.

a) What were the reasons for the lengthy periods first in receiving the report from the ARTC, then in responding to that report?

On 30 September 2008 after extensive negotiations with ARTC, the EPA imposed the first PRP in relation to coal dust on ARTC's licence. It required ARTC to submit a work plan to the EPA for approval outlining how appropriate technology will be adopted to significantly reduce coal dust emissions on the NSW ARTC rail network, in conjunction with relevant stakeholders including coal mines and locomotive operators. Given the work anticipated for this PRP, the EPA allowed ARTC until 31 July 2009 to provide the work plan. The work plan was submitted in August 2009 and proposed as a first step that data gap analysis be undertaken by PAE Holmes of a similar study that had recently been conducted by Queensland Rail.

Following careful consideration of the proposal, the EPA determined that this would be a useful first step in investigating options for reducing fugitive emissions of coal particles from rail operations in NSW. The EPA required ARTC to refine the work plan and amended ARTC's licence to require the submission of the data gap analysis report to the EPA by 5 February 2010.

A report titled Impacts of *Fugitive Dust from Coal Trains in NSW – Stage 1 Gap Analysis* was submitted by ARTC to EPA in February 2010.

The EPA reviewed the report and met with ARTC to discuss the report findings on 12 May 2010. In order to complete the PRP, the EPA considered that further investigations, to identify and implement all reasonable and feasible dust mitigation measures, were required. The EPA also recognised that many of these actions would require a coordinated approach between ARTC, the coal mines, the rolling stock operators and the port.

The EPA convened a meeting with industry stakeholders in December 2010, including ARTC and the two key rolling stock operators Pacific National and QR National (now Aurizon). At that meeting, all parties agreed that the next stage of investigations should focus on confirming the magnitude of the rail transport coal dust issue.

The EPA then instructed ARTC in writing to provide to the EPA the terms of reference for the next stage of the PRP by March 2011. Up until March 2011, the EPA attended several meetings with ARTC, and their consultants, to negotiate the scope of works and the EPA also granted an extension of time for ARTC to provide the scope of works. However irrespective of these efforts, by May 2011 ARTC had failed to provide a comprehensive proposal for consideration. The EPA

therefore developed its own scope of works and provided a draft PRP to ARTC for comment on 28 July 2011.

After the EPA was unable to obtain agreement from ARTC on the draft PRP, the EPA imposed the PRP on ARTC's licence in September 2011.

# b) Does the EPA consider that the time taken to instigate the first data monitoring study between September 2008 and September 2011 constitutes a timely response to community concerns?

The EPA considers that the time taken to instigate the first data monitoring study was not satisfactory.

The approach of the EPA, where appropriate, is to work cooperatively with licensees since this is usually the best way to achieve efficient and cost-effective environmental outcomes.

This approach was not successful with the ARTC and led to the EPA taking a stronger regulatory approach which achieved improved responses from the ARTC. Negotiations with the ARTC and their consultants had been both extensive and protracted. In addition, coal dust was one of several issues of community concern related to the rail network which the EPA was requiring ARTC to investigate during that period.

The EPA imposed both the first and second PRP's on ARTC's licence following failure to reach agreement with ARTC on their scope. As a result of a stronger regulatory response, the second and third PRPs imposed on ARTC in relation to the coal dust issue, were completed in acceptable timeframes in 2012 and 2013 respectively.

The EPA has taken on board the lessons learned from this experience and they have been included in the matters the EPA has considered in its current review of the rail regulatory framework. As a result of the review, the EPA is proposing amendments to the current rail regulation framework so that both network operators and rolling stock operators require EPLs and therefore each of these entities can be directly regulated by the EPA.

#### Question 16

#### Professor Ryan provided the report on her initial review in September 2013. Why was Professor Ryan not engaged to undertake the subsequent re-analysis she had recommended until late January 2014?

A number of events contributed to the time taken to engage Professor Ryan to undertake the subsequent re-analysis and included availability of key EPA staff, administrative negotiations with the University of Technology Sydney and then an intervening Christmas holiday period.

### **SCIENTIFIC RIGOUR STATEMENT: QUESTIONS 17, 18**

#### Question 17

#### When did the EPA adopt the scientific rigour position developed by the OEH?

The <u>OEH Scientific Rigour Position Statement</u> was developed with input from the EPA, and in July 2013, the Statement was published by OEH and adopted by the EPA. The Statement ensures that all science undertaken or commissioned by the EPA meets globally accepted standards of scientific rigour from start to finish. The Statement is attached for the Committee's reference.

#### Question 18

# Was the scientific rigour position adopted in acknowledgement of failings in the review process applied to the reports produced by the ARTC?

The <u>OEH Scientific Rigour Position Statement</u> was adopted by the EPA in the spirit of continuous improvement that the EPA seeks to apply.

#### Question 19

The EPA notes in its submission that the environment protection licence conditions do not specifically address issues associated with air emissions from locomotives and fugitive dust emissions from wagons. (p 183)

- a. In the EPA's view, should they?
- b. Would it assist the EPA if the licence conditions did address these issues?
- c. Have any steps been taken to update the licences??

EPA's response to Question 19 will be held over to Hearing 4 supplementary questions - approved by Stewart Smith, Director Upper House committees via email with Sarah Low, 4 December, 2014.