

General Purpose Standing Committee No. 5

# **The performance of the NSW Environment Protection Authority**

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## Terms of reference

1. That General Purpose Standing Committee No 5 inquire and report on the performance of the NSW Environment Protection Authority (EPA), and in particular:
  - (a) Measure the EPA's recent performance against its objectives pursuant to section 6 of the [\*Protection of the Environment Administration Act 1991\*](#)
  - (b) That the following cases be considered:
    - (i) land contamination issues at Botany and Hillsdale
    - (ii) EPA investigations and public statements about the effects of coal dust pollution in the Hunter
    - (iii) EPA investigation into ground water contamination in the Pilliga by Santos' coal seam gas exploration
    - (iv) the prosecution of Du Pont (Australia) Ltd for the alleged offence of land pollution in the western Sydney suburb of Girraween
    - (v) the regulation of cruise passenger ships at the White Bay Cruise Terminal at Balmain
    - (vi) the regulation of forestry practices in Royal Camp State Forest
  - (c) Any other related matters.
2. That the committee report by 14 February 2015.<sup>1</sup>

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<sup>1</sup> *Minutes*, Legislative Council, 19 June 2014, p 2618.

## Committee membership

<b>The Hon Robert Brown MLC</b>	Shooters and Fishers Party	<i>Chair</i>
<b>Mr Scot MacDonald MLC</b>	Liberal Party	<i>Deputy Chair</i>
<b>The Hon Rick Colless MLC</b>	The Nationals	
<b>The Hon Greg Donnelly MLC</b>	Australian Labor Party	
<b>Dr Mehreen Faruqi MLC *</b>	The Greens	
<b>The Hon Luke Foley MLC</b>	Australian Labor Party	
<b>The Hon Dr Peter Phelps MLC</b>	Liberal Party	

\*Dr Mehreen Faruqi replaced Mr Jeremy Buckingham as a member of the committee as of 28 July 2014.

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## Chair's foreword

I am pleased to present the committee's report on its inquiry into the performance of the NSW Environment Protection Authority.

The NSW Environment Protection Authority (EPA) is the principal environmental regulator in New South Wales. Throughout the course of this inquiry, the committee received evidence that speaks to the broad and varied functions of the EPA in the performance of its role.

The committee considered a series of case studies, including: land contamination issues at Botany and Hillsdale; coal dust pollution in the Hunter; the response to groundwater contamination in the Pilliga; the prosecution of the Du Pont company for alleged land pollution in the western Sydney suburb of Girraween; the operation of the cruise ship terminal at White Bay; and the regulation of forestry practices in Royal Camp State Forest.

While the committee found that overall the EPA is performing the majority of its functions in keeping with its objectives, there were areas that could be improved. In particular, the committee was concerned about the governance of the EPA, and has recommended that the role of chairperson of the EPA board be independent and separate from the role of Chief Executive Officer.

The committee also considers that, despite the EPA's efforts to build stronger relationships with stakeholders, it needs to improve its communications with local communities. The committee has made several recommendations that seek to address the need for effective communication and extend the role of community consultation committees.

On behalf of the committee, I would like to acknowledge and thank the many people who have contributed to this inquiry. I would also like to thank those who assisted with site visits. I extend my gratitude to my fellow members for their work and contribution, and the committee secretariat for their professional support, in particular Stewart Smith, Jenelle Moore, Elizabeth Parker and Chris Angus.



Hon Robert Brown MLC  
**Chair**

## Executive summary

### Summary of key issues

The NSW Environment Protection Authority (EPA) was originally established in 1991 as an independent agency under the *Protection of the Environment Administration Act 1991 (POEA Act)*. The Act has a particular emphasis on environmental outcomes informed by the principle of ecologically sustainable development (ESD).

Between 2003 and 2012, the EPA's functions were absorbed within larger government agencies with a much broader ambit of legislative responsibilities. As a result, the delivery of the EPA's core functions altered to reflect a shift in environmental priorities from pollution prevention and control to conservation. The committee heard that the EPA's amalgamation into larger government agencies reduced the EPA's public visibility, causing the community and business confusion as to the agency's role.

Following a significant pollution incident at Kooragang Island in Newcastle in August 2011, an independent review recommended that an independent EPA be re-formed, headed by a Chief Environmental Regulator. The agency was subsequently re-established in February 2012.

### Governance structure

While the EPA functions as an independent statutory authority, it sits within the portfolio of the Minister for the Environment. Under Division 3 of the POEA Act, the Chairperson of the EPA is responsible for the management and control of the agency. The Chairperson reports both to the Minister for the Environment and a separately established EPA Board, which acts as an independent, expertise-based governing board that oversees and monitors the activities of the EPA. The current Chairperson is Mr Barry Buffier, who also holds the position of Chief Executive Officer of the EPA, directing the day to day operations of the agency.

During the course of its inquiry, the committee questioned the complexity of the 'duel-hat' role performed by Mr Buffier, which stands in contrast to that of the Chief Executive Officer (or other equivalent position) of most other New South Wales agencies, in which the CEO participates as a member of the oversight board, but does not hold the position of Chair.

The committee has recommended that the POEA Act be amended to provide for the appointment of a Chairperson of the Board independent of the Chief Executive Officer. The Chief Executive Officer should however remain a member of the Board. The committee has also recommended that, in the interests of effective oversight and in keeping with the provisions that apply to state owned corporations in New South Wales, the Board should enter into performance management agreements with the Chief Executive Officer. The Act currently requires such agreements be made with the minister.

## **The performance of the EPA**

The committee was tasked with reviewing the performance of the EPA against its objectives pursuant to section 6 of the POEA Act, with particular reference to six case studies.

The committee has concluded that the EPA is performing the majority of its functions in keeping with the objectives set out under the *Protection of the Environment Administration Act 1991*. In the period since its re-establishment in 2012, the agency has sought to clarify its role and vision, and has worked to develop a relationship with industry that strikes the right balance between oversight and effective collaboration. The committee believes that the EPA has struck this balance appropriately and professionally. Nevertheless, this inquiry has identified a number of areas in which the either the performance of the EPA was found wanting, or areas for legislative amendment with a view to enhanced governance, oversight and, ultimately, accountability were identified.

The summary below outlines the key issues raised as a result of these case studies and the subsequent conclusions drawn by the committee.

### *Land contamination issues at Botany and Hillsdale*

The Sydney suburbs of Botany and Hillsdale have a long history of industrial production, which in some cases has led to significant land contamination. In the years since a chlor-alkali plant operated by Orica and located at the Botany Industrial Park was demolished and declared a contaminated site in 2007, Orica has been in negotiations with the EPA over remediation measures required at the site. While the EPA has required a range of remedial measures to be undertaken, concerns have been raised by community groups as to the effectiveness of the measures adopted and their associated risk to residents in surrounding areas.

In view of these concerns, in 2013 the EPA engaged a senior chemical engineer, Emeritus Professor Chris Fell AM, to undertake an independent review of the agency's response, the report on which was carefully considered by the committee.

The committee concurs with Professor Fell's assessment that the EPA did not willingly misinform the Botany community or seek to 'cover-up' the results of soil sampling taken in the area. The committee also concurs with Professor Fell's assessment that the EPA has considerable work to do to regain the faith of the community and establish a clearer and more collaborative method of communication. To this end, the committee has recommended that the EPA prioritise the development of a communications and engagement process to consult and inform local residents of the activities of the Independent Review Steering Panel that is overseeing the Orica Mercury Independent Review, and publicly release the result of any testing undertaken. The committee has also recommended that the EPA appoint an independent chair to this Steering Panel, which to date has been chaired by the Chief Environment Regulator of the EPA.

### *Coal dust pollution in the Hunter*

The Hunter Valley Coal Chain is the largest coal export operation in the world. In response to concerns about coal dust pollution in the Hunter region, between 2008 and 2013, the EPA imposed three pollution reduction programs on the Australian Rail Track Corporation (ARTC), which operates the Hunter Valley rail network. As part of this, the ARTC was required to undertake two dust monitoring

studies undertaken at sites within the Hunter Rail Corridor. These studies were carried out by Environ Pty Ltd and Katestone Environmental Pty Ltd.

During the period in which both reports were produced and published, allegations emerged that the EPA had made public statements that were contrary to the findings of the reports, or had altered the findings of the reports to benefit the ARTC and fit within a pre-determined public relations plan prepared by the EPA. The Hunter Community Environment Centre stated that these allegations were corroborated by documents obtained under freedom of information legislation.

The committee has considered the evidence received, and compared the findings made in the various versions of the reports with the comments made publicly by the EPA. The committee did not find any evidence to suggest that alterations to draft reports had sought to do anything other than ensure that the findings accurately reflected the data gathered. In the case of the Katestone report, this conclusion was also corroborated by an independent review undertaken by Professor Louise Ryan, Professor of Statistics at the University of Technology. Nevertheless, the committee considers that it was not unreasonable for residents of the Hunter to express concern upon learning that such significant amendments had been made, as the EPA did not inform the public of the necessity for the amendments or that the reports had not been sufficiently reviewed. The committee believes that it would be prudent for the EPA to acknowledge the need for frank and open dialogue with the community, particularly where the information on which it relies has not been subject to adequate review and assessment.

The committee recommends that the EPA consult with the NSW Chief Scientist and Engineer to review the air quality monitoring strategy in the Upper and Lower Hunter. If the review recommends that coal wagons should be covered and empty wagons be washed, the relevant licences should in turn be amended to give this recommendation effect.

#### *Response to groundwater contamination in the Pilliga*

Santos Pty Ltd operates a coal seam gas facility in the Pilliga Region, approximately 20 kilometres south-west of Narrabri in central New South Wales. Part of the operations include the Bubblewindi Treatment Plant, the central water management facility for the site. Prior to its acquisition by Santos in November 2011, the site was owned by Eastern Star Gas, and during their tenure a number of unauthorised discharges of contaminated water are alleged to have leaked into the Pilliga. When Santos closed the site in December 2011, it undertook an operational review of the facilities and subsequently found a possible small seepage of pond water. In May 2012, Santos forwarded the consultant's findings to the Department of Trade and Investment, Regional Infrastructure and Services (DTIRIS), in their capacity as the then-regulator. DTIRIS also copied the information to the EPA. Further data was forwarded by Santos to DTIRIS and the EPA in March 2013. In February 2013, the government announced that the EPA would replace DTIRIS as environmental regulator for coal seam gas activities. This change took effect in June 2013.

Criticisms of the EPA's response to the leak have centred on several main themes: timeliness; that the EPA's comments to the media and the community did not adequately convey or stress critical information, including that the spill included unsafe trace elements, such as uranium; the inadequacy of the fine applied; and that the EPA failed to apply load limits on pollution from flaring at coal seam gas assessment sites in the Pilliga.

The committee has determined that since the time at which the EPA assumed regulatory responsibilities for coal seam gas, and in the several months prior to that, the EPA did respond to the leak in a timely manner. However, the committee considers the EPA should have been clearer as to when it received notifications, its responsibilities, when those responsibilities commenced and how the agency responded. The committee has also concluded that the EPA could have done more to inform and engage with the community regarding the leak, particularly in ensuring that media updates were more widely disseminated. The committee is pleased to report that the EPA has since introduced new procedures to ensure a consistent approach to the release of information.

The committee has recommended that investigations into pollution incidents be led by independent experts working with the EPA, rather than the coal seam gas company under investigation. The committee has further recommended that the EPA conduct a comprehensive review of the licensing procedure for hazardous chemicals.

*The prosecution of Du Pont for alleged land pollution in Girraween*

Between April and May 2011, the Du Pont (Australia) Pty Ltd factory in the western Sydney suburb of Girraween manufactured two herbicide products called Ally 60 and Ally 75, both of which contained a high proportion of metsulfuron methyl (MSM). From July 2011, the EPA received 112 complaints that hundreds of trees and other plants within one kilometre of the road on which the factory was located had suffered symptoms of dieback.

The investigation into these complaints was one of the largest the EPA had ever undertaken.. Many of the samples taken from the area showed the presence of MSM, with those samples taken closest to Du Pont's factory generally showing the highest levels of the chemical. The EPA determined that other possible causes of the dieback, such as fungi or tree diseases, were unlikely to have caused the types of damage that had occurred.

Following its investigation, in April 2012 the EPA commenced prosecution proceedings against Du Pont in the Land and Environment Court for the alleged offence of land pollution. Du Pont pleaded not guilty to the charge and a trial commenced on 25 June 2013. As there was no direct evidence linking Du Pont to the dieback, the EPA's case had to rely on circumstantial evidence.

Although Du Pont consistently maintained that there had been no emission from its premises to cause the impacts on the trees and other plants in the vicinity of its factory, at a very late stage in proceedings, Du Pont submitted an argument that the EPA could not exclude the possibility that the samples it had collected showing MSM could have been emitted by the factory either prior to, or after, the charge period. The EPA subsequently applied to the Court to extend the charge period, but this application was refused. The EPA was advised that a successful outcome on the original charge was unlikely, and the EPA would be liable for costly legal fees that had already exceeded \$1 million for the two parties. Du Pont agreed that if the EPA withdrew the charge it would not seek a costs order. In view of the legal advice received and the agency's duty to spend public resources responsibly, the EPA withdrew the charge.

*Cruise passenger ships at White Bay*

The White Bay Cruise Terminal is one of Australia's major international and domestic tourism gateways and is owned and operated by Sydney Ports. Approval to relocate the terminal adjacent to the high density inner western Sydney suburb of Balmain was first given in 2011. In 2014 some 101 cruise ships berthed at White Bay, and this number is expected to increase by approximately 20 per cent in the coming years.

The committee received many submissions from concerned residents detailing the impact that the cruise terminal has had on them due to diesel emissions, noise and vibrations from the ships.

Inquiry participants argued that as the state's environmental regulator, the EPA should have done more to ensure that the planning and assessment process for the terminal took into consideration the full and likely impact of the relocation of the terminal to White Bay.

The committee also heard that the EPA's response to over 300 complaints received between November 2013 and June 2014 regarding operations of the terminal had been limited in its effect, largely because the EPA is restricted in its capacity to regulate shipping as it is not the consent authority for the industry, which operates to both an international and a state based regulatory framework. Although noise and pollution from the terminal has impacted on residents, ships have generally operated within the limits set by the project approval, leaving limited opportunity for compliance or enforcement activity.

While the committee is concerned that the EPA failed to anticipate the magnitude of the impacts experienced by residents, the committee acknowledges that the EPA is working within the regulatory parameters set to try to achieve some progress for the residents of Balmain. To facilitate a clearer regulatory role for the EPA, the committee has recommended that the NSW Government amend the *Protection of the Environment Operations Act 1997* to require cruise ship terminals to hold an environment protection licence. The committee has also recommended that the EPA immediately approach the National Environment Protection Council to request a review of the air pollution limits set under the National Environment Protection Measures, which were the point of reference for the pollution limits set under the White Bay project approval. Finally, the committee has recommended that cruise ship operators using White Bay develop noise mitigation strategies, and that the terminal be retrofitted to include ship to shore power.

*The regulation of forestry practices in Royal Camp State Forest*

The Forestry Corporation of NSW's logging operations in Royal Camp State Forest near Casino in northern New South Wales are carried out under the terms and conditions of an Integrated Forestry Operations Approval (IFOA) for the Upper North East Region of the state. The IFOA incorporates an environment protection licence and threatened species licence, for which the EPA is the regulator. In 2012, the North East Forest Alliance (NEFA), a local environment group, alleged that the Forestry Corporation was breaching IFOA threatened species conditions while undertaking forestry activities in certain 'compartments' of the Royal Camp State Forest.



The committee heard that the terms in which the forestry licence is drafted are subjective and confusing, and often open to differing interpretations. The committee considers that the complaints lodged by NEFA highlight the need for a clearer and more efficient regulatory system and notes the EPA's efforts to rewrite the new integrated forestry approvals, the draft of which will be available for public comment in the coming months.

The EPA has acknowledged that their response to NEFA's allegations was not always of the standard that the community should expect from the regulator, and the committee is concerned that the incidents concerning the Royal Camp State Forest highlight once again the need for the EPA to communicate more effectively with stakeholders, particularly during periods in which investigations are being undertaken and levels of concern are high. The committee has reiterated its call for the EPA to make effective stakeholder engagement a greater priority.

In view of the vast geographical area that falls within the regulatory responsibilities of the EPA, and the limited number of staff currently available to carry out these duties, the committee has also recommended that the NSW Government allocate significant additional funds to the EPA to further train staff and to facilitate the appointment of additional personnel to the Forestry Division.

Finally, the committee supports the suggestion recently made by the EPA Board that the penalty for threatened species breaches be lifted from \$300 to \$15,000. This will better equip the EPA to take action against breaches without resorting to prosecutory action, which can be costly and subject to lengthy delays and unpredictable outcomes.

#### *Other recommendations*

Much of the evidence received from inquiry participants made reference to failings in the EPA's communication and engagement with stakeholders. While much of the work done by the EPA to improve stakeholder engagements has been both positive and effective, the committee believes that the EPA could do better. The committee heard that the Newcastle Community Consultation Committee has been a good example of a successful community outreach program. The committee has therefore recommended that the EPA, as part of its public engagement and communication strategy, make greater use of community consultation committees where appropriate, and ensure that they are transparently evaluated and engender genuine participation.

The committee has also recommended that the EPA be adequately resourced to clear the backlog of contaminated sites awaiting assessment, develop systems to ensure contaminated lands are assessed in a more timely manner, and take immediate steps to refine and enhance stringent internal protocols and procedures to ensure timely communication of all pollution incidents.

## Summary of recommendations

- Recommendation 1** **12**  
That the NSW Government amend the *Protection of the Environment Administration Act 1991* to provide for the appointment of a chairperson of the board independent of the Chief Executive Officer of the NSW Environment Protection Authority.
- Recommendation 2** **12**  
That the NSW Government amend the *Protection of the Environment Administration Act 1991* so that the Governor, on the recommendation of the portfolio Minister, and with the concurrence of the board, appoint the Chief Executive Officer of the NSW Environment Protection Authority.
- Recommendation 3** **12**  
That the NSW Government amend the *Protection of the Environment Administration Act 1991* to provide that the board of the Environment Protection Authority has a performance management agreement with the Chief Executive Officer.
- Recommendation 4** **28**  
That the NSW Environment Protection Authority appoint an independent chair to the Independent Review Steering Panel overseeing the Orica Mercury Independent Review.
- Recommendation 5** **29**  
That the NSW Environment Protection Authority prioritise the development of a communications and engagement process to consult and inform local residents of the activities of the Independent Review Steering Panel overseeing the Orica Mercury Independent Review and publicly release the results of any testing undertaken.
- Recommendation 6** **47**  
That the NSW Environment Protection Authority consult with the new Chief Scientist and Engineer to review the air quality monitoring strategy in the Upper and Lower Hunter, including a survey of international data and policy responses to the issue, and request recommendations to devise a monitoring network that will assist with any knowledge gaps and strengthen the confidence of the community. The response from the NSW Environment Protection Authority should include its advice on the method of funding this monitoring network.
- Recommendation 7** **47**  
That, in the event that the Chief Scientist recommends that all coal trains be fully covered and all empty wagons be washed to reduce coal dust emissions, the NSW Environment Protection Authority amend the relevant licences to adopt the Chief Scientist's recommendation.
- Recommendation 8** **56**  
That, in consideration of the high level of community concern about the health and environmental impacts of the coal seam gas industry, investigations into significant pollution incidents should be led by independent experts working with the NSW Environment Protection Authority, not the coal seam gas company under investigation.
- Recommendation 9** **59**  
That the NSW Environment Protection Authority conduct a comprehensive review of its licensing procedure for hazardous chemicals. The review should examine the appropriateness of

granting environmental protection licences that do not provide clear limits with respect to the use of hazardous chemicals. Further, the review should also consider the appropriate recourse to be taken against a licensee for failing to maintain concentrations within specified limits.

**Recommendation 10****82**

That the NSW Government amend the *Protection of the Environment Operations Act 1997* to require cruise ship terminals to hold an environment protection licence.

**Recommendation 11****82**

That the NSW Environment Protection Authority immediately approach the National Environment Protection Council to request a review of the air pollution limits set under the National Environment Protection Measures.

**Recommendation 12****82**

That the NSW Government require that:

- cruise ship operators using the White Bay Terminal be required to develop noise mitigation strategies and that noise be monitored and limits be enforced
- the White Bay Terminal be retrofitted to include shore to ship power.

**Recommendation 13****96**

That the NSW Government allocate significant additional funds to the Environment Protection Authority to further train staff and to facilitate the appointment of additional personnel to the Forestry Division.

**Recommendation 14****99**

That the NSW Environment Protection Authority, as part of its public engagement and communication strategy, make greater use of community consultation committees, ensuring they are transparently evaluated and engender genuine participation.

**Recommendation 15****99**

That the NSW Environment Protection Authority be adequately resourced to clear the backlog of contaminated sites awaiting assessment, as well as develop systems to ensure contaminated lands are assessed in a more timely manner.

**Recommendation 16****99**

That the NSW Environment Protection Authority take immediate steps to refine and enhance stringent internal protocols and procedures to ensure timely public communication of all pollution incidents.

**Recommendation 17****100**

That the NSW Environment Protection Authority make greater use of Protection of the Environment Policies, available to it under the *Protection of the Environment Operations Act 1997*, and give serious consideration to applying a multiplier effect for penalty notices to repeat offenders and setting maximum pollution or emissions caps for zones and regions.



# Chapter 1 Introduction

This chapter provides an overview of inquiry process, including the methods the committee used to facilitate participation by members of the public, government, environmental protection experts and advocates, and relevant organisations. It also includes a brief outline of the report structure.

## Conduct of the inquiry

### Terms of reference

- 1.1 The inquiry's terms of reference were adopted on 19 June 2014 under the committee's power to make a self-reference.<sup>2</sup>
- 1.2 The terms of reference required the committee to measure the NSW Environment Protection Authority's (EPA) recent performance against its objectives pursuant to section 6 of the *Protection of the Environment Administration Act 1991*, and consider the following case studies:
- land contamination issues at Botany and Hillsdale
  - EPA investigations and public statements about the effects of coal dust pollution in the Hunter
  - EPA investigation into ground water contamination in the Pilliga by Santos' coal seam gas exploration
  - the prosecution of Du Pont (Australia) Ltd for the alleged offence of land pollution in the western Sydney suburb of Girraween
  - the regulation of cruise passenger ships at the White Bay Cruise Terminal at Balmain
  - the regulation of forestry practices in Royal Camp State Forest.
- 1.3 The full terms of reference are set out on page iv.

### Submissions

- 1.4 The committee invited submissions by sending a media release announcing the inquiry media outlets around the state on 26 June 2014.
- 1.5 The committee also sought submissions by writing to key stakeholders and inviting them to make a submission to the inquiry. The closing date for submissions was Friday 29 August 2014. However, the committee continued to accept submissions after this date.
- 1.6 The committee received a total of 254 submissions and two supplementary submissions. A full list of submissions is set out in Appendix 2.

<sup>2</sup> *Minutes*, Legislative Council, 19 June 2014, p 2618.

**1.7** In addition to issues in the terms of reference, there were a range of other matters raised during the inquiry through submissions and supplementary questions that were not dealt with in the hearings, including:

- Noise pollution from trains, especially along the Northern Line and Epping to Thornleigh Third Track area.
- Regulation of wood heaters and particulate pollution.
- Land contamination issues at Hexham Swamps
- Quarry issues, including Martins Creek, Kincumber and Sandy Point,
- Malabar Waste Water Treatment Plant,
- Water contamination issues at Moolarben Mine
- Grange State Forest.
- Gore Bay and Clyde Terminals.
- Elf Farm Mushroom Composting Facility.
- North Head Waste Water Treatment Plant.
- Water contamination of Wollangambe River.

### **Hearings**

**1.8** The committee held four public hearings. Two at Parliament House on 13 October 2014 and 24 November 2014, one at the Lismore City Hall on 29 October 2014, and one at Newcastle City Hall; on 10 November 2014.

**1.9** A full list of witnesses who appeared at the hearings is set out in Appendix 3. The list of documents tabled during the hearing is available at Appendix 4, and the list of witnesses who provided answers to questions taken on notice during hearings can be found at Appendix 5.

**1.10** Transcripts of the hearings are available on the committee's webpage and the minutes of proceedings of all committee meetings regarding the inquiry are included in Appendix 6.

### **Site visits**

**1.11** The committee undertook three site visits: to the White Bay Cruise Terminal and surrounding streets in Balmain, Sydney; to sites connected to the movement of coal trains and recent air monitoring studies in the Hunter; and to the Royal Camp State Forest, NSW.

**1.12** The committee wishes to thank all the stakeholders who provided written submissions to the inquiry, gave evidence at public hearings, or hosted a site visit.

## Report structure

- 1.13** Chapter 2 provides the context for the inquiry by providing an overview of the structure of EPA, first summarising key events leading to the EPA's reform in 2012, and then outlining the structure of the EPA and its board, and the agency's position within the broader NSW government hierarchy. The chapter then provides an overview of the legislation outlining the objectives of the EPA, particularly those under section 6 of the *Protection of the Environment Administration Act 1991*. The chapter concludes by summarising how these statutory objectives are used by the EPA in relation to its operations.
- 1.14** Chapter 3 discusses the handling by the Environmental Protection Authority of the legacy environmental problems caused by the operation of a former mercury based chlor-alkali plant on the Botany Industrial Park which ceased operations in 2002.
- 1.15** Chapter 4 discusses a series of events connected to two investigative studies into particle emissions associated with trains transporting coal in the Hunter rail corridor. The chapter provides an overview of community concerns regarding coal operations, rail transportation arrangements in the Hunter, the key events surrounding the studies, and statements made by the EPA in regards to the studies. The chapter concludes with an analysis of a number of allegations made by concerned community groups in regards to the integrity of the studies and statements made by the EPA.
- 1.16** Chapter 5 explores the EPA's response to groundwater contamination surrounding Pond 3 of the Bibblewindi Water Treatment Plant in the Pilliga. The chapter canvasses allegations made by community groups about the EPA in response to the leak, including the subsequent requirements made of the company Santos under a pollution reduction program (PRP) issued by the EPA in response to the leak, and the current inter-agency arrangements that apply to the regulation of coal seam gas in New South Wales.
- 1.17** Chapter 6 discusses the series of events connected to the EPA's attempts to prosecute Du Pont (Australia) Pty Ltd for alleged land pollution in the western Sydney suburb of Girraween<sup>3</sup> and reasons why the prosecution was ultimately unsuccessful. The chapter also discusses improvements made to Du Pont's facilities following the legal proceedings and potential avenues for redress in similar situations in the future.
- 1.18** Chapter 7 examines the role and performance of the NSW EPA regulating the impacts of cruise passenger ships at White Bay cruise terminal, Balmain. The chapter begins with a history of the terminal and an overview of the White Bay area. A timeline of the planning approval to relocate the cruise terminal to White Bay and the regulatory framework governing the cruise ships' activities is then presented. Finally, the chapter examines the impact of the cruise terminal on the surrounding areas and the regulatory action by the EPA.
- 1.19** Chapter 8 discusses the EPA's activities in monitoring and enforcing compliance with regard to forestry practices in the Royal Camp State Forest. In 2012 and 2013 the environment group North East Forest Alliance made a series of allegations about breaches of logging licences in that area. This chapter canvasses the EPA's response to those allegations and outcomes arising from the subsequent investigation.

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<sup>3</sup> The committee notes that the bulk of the information received during the inquiry in regard to the Girraween chapter was received from the NSW Environment Protection Authority.

**1.20** Chapter 9 considers key themes arising from the committee's inquiry to inform the operation of a more effective EPA into the future.



## Chapter 2 Structure and objectives of the Environment Protection Authority

This chapter provides the context for the inquiry by providing an overview of the structure and objectives of the NSW Environment Protection Authority (EPA). It first summarises key events leading to the EPA's reform in 2012, and then outlines the structure of the EPA and its board, the agency's position within the broader NSW government hierarchy, and its objectives under section 6 of the *Protection of the Environment Administration Act 1991*.

### Pre-2012 background to the Environment Protection Authority

- 2.1** The NSW EPA was originally established as an independent agency in 1991 under the *Protection of the Environment Administration Act 1991* (POEA Act). The POEA Act has a particular emphasis on environmental outcomes informed by the principles of 'ecologically sustainable development' (ESD).<sup>4</sup>
- 2.2** In 1997 the POEA Act was complemented by the *Protection of the Environment Operations Act 1997* (POEO Act), which integrated a range of environment specific legislation into a single Act, and provided regulatory tools for the EPA to help protect the environment through best practice regulation.<sup>5</sup>
- 2.3** In 2003 the EPA was incorporated into a new Department of Environment and Conservation, along with other environment related agencies such as the NSW National Parks and Wildlife Service. The incorporation followed similar trends in other states and was done for several reasons, including the perceived benefit of a 'one stop shop' for the public, reduced overhead and back office costs and the prevention of a 'silo mentality', with a view towards an improved whole of government approach.<sup>6</sup>
- 2.4** Between 2003 and 2012 the EPA's functions were exercised as part of larger government agencies with a much broader ambit of legislative responsibilities. As a result, the delivery of the EPA's core functions was altered as environmental priorities shifted from pollution prevention and control to conservation.<sup>7</sup>
- 2.5** The committee heard that these amalgamations into successive larger government agencies reduced the EPA's public visibility, causing the community and business confusion as to the organisation's role.<sup>8</sup>
- 2.6** The impetus for a return to an independent EPA occurred in 2011 following a significant pollution incident at Kooragang Island in Newcastle.<sup>9</sup> In August 2011, an ammonia plant at

<sup>4</sup> Submission no. 156, NSW Environment Protection Authority, p xi.

<sup>5</sup> Submission no. 156, NSW Environment Protection Authority, p xi.

<sup>6</sup> Brendan O'Reilly, *A review into the response to the serious pollution incident at Orica Australia Pty. Ltd. ammonium nitrate plant at Walsb Point, Kooragang Island on August 8, 2011*, 30 September 2011, p 41.

<sup>7</sup> Submission no. 156, NSW Environment Protection Authority, p xi.

<sup>8</sup> Submission no. 156, NSW Environment Protection Authority, p xi.

<sup>9</sup> Submission no. 156, NSW Environment Protection Authority, pp xi-xii.

Orica Kooragang Island leaked the chemical chromium VI, with a portion of the chemical falling over the nearby Newcastle suburb of Stockton. Orica, the Office of Environment and Heritage and the then Minister for the Environment, came under significant criticism for their delayed response to the leak.<sup>10</sup>

- 2.7** The Kooragang Island leak led to then Premier, the Hon Barry O'Farrell MP, appointing Mr Brendan O'Reilly, former Director General of the Department of Premier and Cabinet, to conduct an independent review of the incident (the O'Reilly Report).<sup>11</sup> The O'Reilly Report concluded that the amalgamation of the EPA had resulted in resource 'dilution', caused by specialist roles becoming more generalised and increased span of control of managerial positions. The O'Reilly Report recommended that an independent Environmental Regulatory Authority be formed, headed by a Chief Environmental Regulator with appropriate experience and qualifications.<sup>12</sup>
- 2.8** The O'Reilly Report recommended that 'An Independent Board be established whose membership be drawn from people with regulatory expertise as well as representatives from community interests'. The Government did not accept this advice and removed community and local government representatives from the board of the EPA.<sup>13</sup>
- 2.9** The NSW government accepted the recommendations of the O'Reilly Report, and in February 2012 the EPA was re-established as an independent government agency, at which time the Minister for the Environment stated that the purpose for re-establishing the EPA was to improve 'an environment protection regime that had stalled and a regulator that lost its public profile as strong and visible'.<sup>14</sup> Reforms included a new governing board, as well as a program developed to rebuild the organisation's capacities, enhance its powers and improve stakeholder engagement.<sup>15</sup>

## Structure of the Environment Protection Authority

### The structure of the EPA

- 2.10** The EPA functions as an independent statutory authority and is the principal environmental regulator in New South Wales. Whilst an independent statutory authority, the EPA sits within

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<sup>10</sup> Legislative Council, Select Committee on the Kooragang Island Orica Chemical Leak, *Kooragang Island Orica chemical leak*, February 2012, p 1.

<sup>11</sup> Legislative Council, Select Committee on the Kooragang Island Orica Chemical Leak, *Kooragang Island Orica chemical leak*, February 2012, p 1.

<sup>12</sup> Brendan O'Reilly, *A review into the response to the serious pollution incident at Orica Australia Pty. Ltd. ammonium nitrate plant at Walsh Point, Kooragang Island on August 8, 2011*, 30 September 2011, p 41.

<sup>13</sup> Recommendation 7, Brendan O'Reilly, *A review into the response to the serious pollution incident at Orica Australia Pty Ltd. ammonium nitrate plant at Walsh Point, Kooragang Island on August 8, 2011*, Accessed at [http://www.dpc.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0012/131160/A\\_review\\_into\\_the\\_response\\_to\\_the\\_serious\\_pollution\\_incident\\_at\\_Orica\\_Australia\\_Pty.\\_Ltd.\\_ammonium\\_nitrate\\_plant\\_at\\_Walsh\\_Point\\_Kooragang\\_Island\\_on\\_August\\_8\\_2011.pdf](http://www.dpc.nsw.gov.au/__data/assets/pdf_file/0012/131160/A_review_into_the_response_to_the_serious_pollution_incident_at_Orica_Australia_Pty._Ltd._ammonium_nitrate_plant_at_Walsh_Point_Kooragang_Island_on_August_8_2011.pdf) (Recommendation 7); Submission 162, Environmental Defenders Office NSW, p 15.

<sup>14</sup> *Hansard*, Legislative Assembly, 11 November 2011, p 7444 (Robyn Parker).

<sup>15</sup> Submission no. 156, NSW Environment Protection Authority, p xi.

the environment portfolio under the NSW Department of Premier and Cabinet, with the Minister for the Environment the portfolio minister responsible for the agency.<sup>16</sup> As shown in Figure 1, the EPA itself is divided into several branches of responsibility.

- 2.11** Division 3 of the POEA Act establishes the position of Chairperson, who is responsible for the management and control of the Authority. The current Chairperson is Mr Barry Buffier, who within the EPA is also referred to as the Chief Executive Officer. As explained further below, the Chairperson reports both to the Minister for the Environment and a separately established EPA Board.
- 2.12** The minister reviews the performance of the Chief Executive Officer, to whom four senior staff report directly.<sup>17</sup> Mr Buffier explained that his performance agreement is based almost entirely around the strategic plan:

My performance agreement is almost entirely based around the strategic plan in terms of what are the key result areas, and in fact it is an attachment to my performance agreement.<sup>18</sup>

### ***EPA Board***

- 2.13** The EPA Board is a statutory body established under s 15 of the POEA Act, and acts as an independent, expertise-based governing board that oversees and monitors the EPA.<sup>19</sup>
- 2.14** The Board is comprised of five members, including the Chairperson of the EPA and four other members who are part-time. The Chairperson is the presiding officer of the Board. Of the part-time members, one must have expertise in environmental science; one in environmental law; one in corporate, financial and risk planning and management; and one in business.<sup>20</sup> The Board members are appointed by the NSW Governor upon the recommendation of the Minister for the Environment. The functions of the Board are as follows:
- determine the policies and long-term strategic plans of the EPA
  - oversee the effective, efficient and economic management of the EPA
  - develop publicly available guidelines relating to the institution of criminal and related proceedings
  - determine whether the EPA should institute proceedings for serious environment protection offences referred to in section 17 of the POEA Act
  - advise the Minister for the Environment on any matter relating to the protection of the environment
  - receive reports from the EPA on any failure of the organisation to comply with its requirement to review environment protection licences every five years

<sup>16</sup> Environment Protection Authority, *EPA Annual Report 2013-14*, p 82.

<sup>17</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 4.

<sup>18</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 12.

<sup>19</sup> Environment Protection Authority, *Annual Report 2012-13*, p 71.

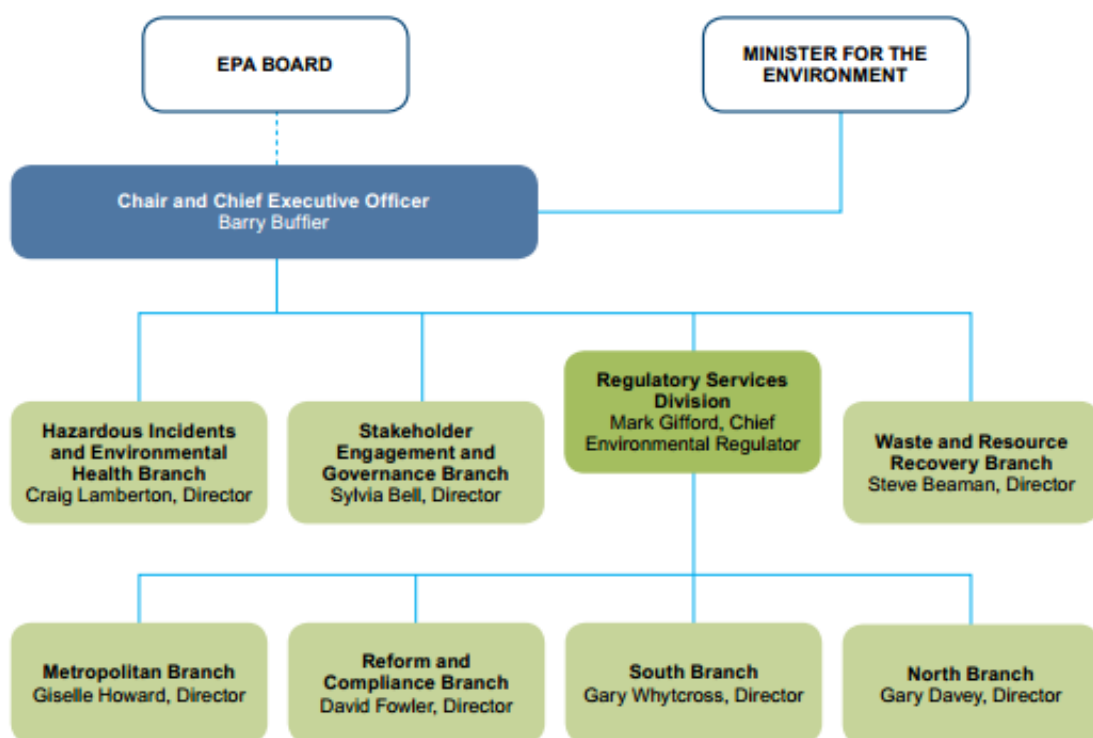
<sup>20</sup> *Protection of the Environment Administration Act 1991*, s 15.

- approve the EPA granting an exemption to any person or class or persons from the provisions of the POEO Act or other relevant EPA-administered legislation.<sup>21</sup>

**2.15** The board meets eight times a year, and also has the option to convene ad hoc extraordinary meetings.<sup>22</sup>

**2.16** The Board is not subject to the control and direction of the Minister in the exercise of any of its functions.<sup>23</sup>

**Figure 1 EPA Organisation Structure**



Source: Environment Protection Authority, *EPA Annual Report 2013-14*, p 82.

**2.17** A number of inquiry participants observed that the current composition of the board stands in contrast to its predecessor, as the 2012 amendments to the EPA's structure removed community representatives from the EPA board.<sup>24</sup> However, the EPA leads or participates in a number of Community Consultation Committees and engages with other community and environment groups across the state to ensure that community input remains prominent within the decisions making process.<sup>25</sup>

<sup>21</sup> Environment Protection Authority, *Annual Report 2012-13*, p 72.

<sup>22</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 4.

<sup>23</sup> *Protection of the Environment Administration Act 1991*, s 16(2).

<sup>24</sup> Submission no. 162, EDO NSW, p 15; Submission no. 114, Nature Conservation Council of NSW, p 8; Submission no. 41, The Colong Foundation for Wilderness Ltd, p 2.

<sup>25</sup> Submission no. 156, NSW Environment Protection Authority, p 8.

## Governance of the EPA

- 2.18** In the exercise of its functions, the EPA is subject to the control of the Minister, except for the following functions:
- any report or recommendation made to the Minister
  - a state of the environment report under the POEA Act
  - any decision to institute criminal or related proceedings.<sup>26</sup>
- 2.19** Mr Barry Buffier, Chair and Chief Executive Officer of the EPA, advised the committee that the minister has never issued any formal direction to him in his capacity as Chief Executive Officer.<sup>27</sup>

## The dual role of the EPA Chairperson

- 2.20** As noted, the Chairperson controls both the day to day operations of the Authority, and also acts as the presiding officer of the Board. While the Minister can direct the Chairperson in some circumstances, this only relates to the position of head of the EPA, and not the Board. Mr Barry Buffier, Chair and Chief Executive Officer, discussed the practical operation of this structure, under which the board is not subject to the control of the minister, but the Chief Executive Officer of the EPA is:

The legislation specifically says that the board is not subject to the control and direction of the minister. So the board and any of its deliberations or decisions cannot be directed by the minister. The minister has no power of direction in relation to prosecutions. However, the minister can direct the authority, so as chief executive the minister can direct me.<sup>28</sup>

- 2.21** During evidence to the committee, Mr Buffier's role as both Chair and Chief Executive Officer, and his accountability to the board in the first respect, and the minister in the latter, was likened to wearing 'two hats':

**The Hon. LUKE FOLEY:** ... Mr Buffier, are you telling us that the minister explicitly has no power to direct you as chairperson, but has a power to direct you as the CEO? ... How do you manage that?

...

**Mr BUFFIER:** It is relatively straightforward, if you understand what hat you are wearing at that particular point in time, yes.<sup>29</sup>

<sup>26</sup> *Protection of the Environment Administration Act 1991*, s 13(2).

<sup>27</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 6. Mr Buffier and Mr Mark Gifford, Chief Environmental Regulator, went on to note that the minister had issued directions regarding certain matters, but not formal direction under the provisions of the *Protection of the Environment Administration Act 1991*.

<sup>28</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 5.

<sup>29</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 7.

**2.22** Mr Buffier also acknowledged that the Act does not make any reference to the position of Chief Executive Officer.<sup>30</sup> Mr Buffier advised that the Chair/Chief Executive Officer structure came about as the result of negotiations on the amending legislation, the *Protection of the Environment Legislation Amendment Bill 2011*:

... I have had some discussions – I think possibly in writing – from the Public Service Commissioner on this issue, and the issue arises because when the Act was amended, the position of director general of the EPA was removed and the word ‘chair’ was inserted, which effectively meant it was a chair and CEO role, so the interpretation requires that ... That is what I understand happened in respect of getting the legislation done and that explains why you have got this situation.<sup>31</sup>

**2.23** During the course of the inquiry, members of the committee questioned whether the structure in place enabled the board to execute any tangible influence and successfully ‘oversee the effective, efficient and economical management of the Authority’,<sup>32</sup> as envisaged under the Act. The committee heard that the board does not have any role in the appointment or removal of senior executives, and if there were to be a vacancy for the position of Chief Executive Officer in the future, the board would be unlikely to select and recommend to the minister a candidate for the position.<sup>33</sup> The committee similarly questioned the efficacy of the ‘dual hat’ nature of Mr Buffier’s position and the autonomy that the current legislative arrangements provided to the incumbent officer. However, Mr Buffier did not concur with the suggestion that the autonomy enjoyed by the position was absolute:

No, the legislation is quite clear that the Minister can issue a direction to the EPA in a lot of circumstances. So to imply that the EPA is absolutely independent and answerable to nobody is not correct. My performance agreement is with the Minister, and the Minister has the power to issue directions.<sup>34</sup>

### **The governance structure**

**2.24** Although the EPA has been established as an independent regulatory agency, the structure of the EPA contrasts strongly to the structure of most of its New South Wales counterparts. In those agencies, where the Chief Executive Officer (or equivalent position) is a member of the board that exercises a supervisory role over the government department, agency or trust that they govern, they participate only in their capacity as a member, rather than the Chair.<sup>35</sup>

**2.25** The principles for a strong independent governance structure are reflected in the provisions of the *State Owned Corporations Act 1989*. For example:

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<sup>30</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 7.

<sup>31</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 7.

<sup>32</sup> *Protection of the Environment Administration Act 1991*, s 16.

<sup>33</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 12.

<sup>34</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 13.

<sup>35</sup> For example, the NSW Treasury Corporation, Transport NSW, Sydney Water, the Sydney Ports Corporation and the WorkCover Authority. The Chief Executive Officers (or equivalent position) of a number of other departments, agencies and trusts do not hold a position on the board – for example, the Department of Education and Communities, NSW Fair Trading, the Sydney Cricket and Sports Ground Trust, the NSW Institute of Sport and First State Super.

- under s 20J, the chief executive officer may be appointed as a director, but no reference is made to the Chair
- under s 20K, the Governor, on the recommendation of the minister, may appoint the chief executive officer of a statutory state owned corporation, however the appointment cannot be effected unless it is recommended by the board
- under s 20L, the Chief Executive Officer is responsible for the day to day management of the operations of the state owned corporations in accordance with the general policies *and specific directions* of the board [emphasis added]
- under s 4 of Schedule 9, the board of a statutory state owned corporation, rather than the minister, may require the chief executive officer to enter into performance agreements.

**2.26** These sentiments reflect broadly accepted governance principles supported by bodies such as the ASX Corporate Governance Council, whose ‘Corporate Governance Principles and Recommendations’ provide the following direction:

The chair of the board of a listed entity should be an independent director and, in particular, should not be the same person as the CEO of the entity.

...

Good governance demands an appropriate separation between those charged with managing a listed entity and those responsible for overseeing its managers. Having the role of chair and CEO exercised by the same individual is unlikely to be conducive to the board effectively performing its role of challenging management and holding them to account.

...

The role of chair is demanding, requiring a significant time commitment. The chair’s other positions should not be such that they are likely to hinder effective performance of the role.<sup>36</sup>

**2.27** While these sentiments are not reflected in the structure of the position of Chair and Chief Executive Officer of the EPA, comments made at the time at which the new independent regulator was established suggest that a more independent and clearly delineated governance structure was envisaged. In the period in which the *Protection of the Environment Legislation Amendment Bill 2011* was under the consideration of Parliament, the then Premier, the Hon Barry O’Farrell MP, stated that:

We also will restore independence to the Environment Protection Authority to ensure it is headed by an independent chair, who is responsible for its operation.<sup>37</sup>

**2.28** Echoing similar sentiments, in her comments in support of the bill, the then Minister for the Environment asserted that:

<sup>36</sup> ASX Corporate Governance Council, *Corporate Governance Principles and Recommendations*, 3rd ed, 2014, p 18.

<sup>37</sup> *Hansard*, Legislative Assembly, 11 October 2011, p 5927.

The authority will be comprised of an experienced board with control over what happens under direct lines of supervision. It will have a chief environmental regulator and a chairperson employed to work with the community and industry to achieve good outcomes.<sup>38</sup>

- 2.29** In spite of these sentiments, the bill removed the pre-existing position of Director-General and replaced it with the position of Chairperson, who was also the Chairperson of the board. This provision was not amended during consideration of the bill by either House of Parliament.<sup>39</sup>

### ***Committee comment***

- 2.30** The committee has given careful consideration to the issue of corporate governance of the EPA. The committee is of the view that, in the interests of effective corporate governance, the *Protection of the Environment Administration Act 1991* should be amended to provide for the appointment of a Chairperson of the Board independent of the Chief Executive Officer of the EPA. The committee believes it appropriate that the Chief Executive Officer remain as a member of the Board.

- 2.31** Further, in keeping with the provisions that apply to Chief Executive Officers of state owned corporations in New South Wales, the committee believes that more effective oversight and governance would be achieved by the Board entering into performance management agreements with the Chief Executive Officer, rather than with the minister.

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### **Recommendation 1**

That the NSW Government amend the *Protection of the Environment Administration Act 1991* to provide for the appointment of a chairperson of the board independent of the Chief Executive Officer of the NSW Environment Protection Authority.

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### **Recommendation 2**

That the NSW Government amend the *Protection of the Environment Administration Act 1991* so that the Governor, on the recommendation of the portfolio Minister, and with the concurrence of the board, appoint the Chief Executive Officer of the NSW Environment Protection Authority.

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### **Recommendation 3**

That the NSW Government amend the *Protection of the Environment Administration Act 1991* to provide that the board of the Environment Protection Authority has a performance management agreement with the Chief Executive Officer.

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<sup>38</sup> *Hansard*, Legislative Assembly, 11 October 2011, p 5961.

<sup>39</sup> Protection of the Environment Legislation Amendment Bill 2011, Passed by both Houses, p 3.



## Objectives of the Environment Protection Authority

**2.32** Since the EPA was first established in 1991, the organisation's objectives have been set out in section 6 of the POEA Act, which has been reproduced in Appendix 1. Section 6 of the Act is split into two parts, and each sub-section is discussed in turn below.

### Section 6(1)(a) and 'ecologically sustainable development'

**2.33** Section 6(1)(a) of the POEA Act sets out the EPA's primary role of protecting, restoring and enhancing the quality of the environment in NSW. Notably, it requires the EPA to have regard to 'ecologically sustainable development' (ESD) while performing its duties.

**2.34** Section 6(2) of the POEA Act notes that ESD 'requires the effective integration of economic and environmental considerations in decision-making processes'. Section 6(2) further states that ESD can be achieved by implementing the following principles:

- inter-generational equity
- conservation of biological diversity and ecological integrity
- consideration of environmental factors when valuing assets and services, including the 'polluter pays' principle; prices based on the full life cycle of costs of providing goods and services; and cost effective ways to meet environmental goals
- the precautionary principle.

**2.35** Section 6(2) has also been reproduced in other legislation impacting on land use decisions, including the *Environmental Planning and Assessment Act 1979*,<sup>40</sup> the *Local Government Act 1993*,<sup>41</sup> and the *Mining Act 1992*.<sup>42</sup> This highlights the importance of the principle of ESD to environmental regulation.

**2.36** While the terms of the Act provide general direction, in the absence of a comprehensive statutory definition, ESD has been further defined and clarified by the Land and Environment Court.

### *The precautionary principle and its application*

**2.37** According to s 6(2) of the POEA Act, exercise of the precautionary principle entails that a lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation if there are threats of serious or irreversible environmental damage.

**2.38** The practical application of the principle has been outlined by the Land and Environment Court in *Telstra Corporation Limited v Hornsby Shire Council*. Justice Preston held that the application of the precautionary principle is triggered by the satisfaction of two conditions:<sup>43</sup>

<sup>40</sup> Environmental Planning and Assessment Act 1979 (NSW) s 5, Pts 4-5.

<sup>41</sup> Local Government Act 1993 (NSW) s 7.

<sup>42</sup> Mining Act 1992 (NSW) s 3A.

<sup>43</sup> *Telstra Corporation Limited v Hornsby Shire Council* [2006] NSWLEC 133, [128].

- threat of serious or irreversible environmental damage, and
- scientific uncertainty as to the environmental damage.

### **Section 6(1)(b) – reducing human health risks and environmental degradation**

- 2.39** The second part of section 6 of the POEA Act requires the EPA to reduce the risks to human health and prevent the degradation of the environment.<sup>44</sup>
- 2.40** This sub-section sets out a number of examples to meet the goal of protecting and maintaining the environment under s 6(1)(a). The EPA told the committee that, '[a]lthough these aims are inherent in the first part of the objectives, by explicitly addressing them and giving examples of the types of actions for achieving them in the second part, the Act defines more precisely the role of the EPA'.<sup>45</sup>
- 2.41** Section 6(1)(b) lists several ways to reduce the risks to human health and prevent the degradation of the environment including the following:
- promoting pollution prevention
  - reducing to harmless levels the discharge into the air, water or land of substances likely to cause harm to the environment
  - encouraging the reduction of the use of materials, encouraging the re-use and recycling of materials and encouraging material recovery
  - adopting minimum environmental standards prescribed by complementary Commonwealth and State legislation, and advising the state government to prescribe more stringent standards where appropriate
  - setting mandatory targets for environmental improvement
  - ensuring the community has access to relevant information about hazardous substances from industries or public authorities.

### **The Vision Statement**

- 2.42** The EPA advised the committee that, following its 2012 re-establishment as a separate statutory authority, the agency sought to reflect the centrality of ESD to its work in its new vision statement, titled *Healthy Environment, Healthy Community, Healthy Business*:

This vision is founded on the principles of ecologically sustainable development, one that recognises the interrelationship of these elements and one that recognises that without a healthy environment the other two—healthy community and healthy business—are not sustainable in the long term.<sup>46</sup>

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<sup>44</sup> Submission 156, NSW Environment Protection Authority, p 5.

<sup>45</sup> Submission 156, NSW Environment Protection Authority, p 5.

<sup>46</sup> Mr Barry Buffier, Chair and Chief Executive Officer, NSW Environment Protection Authority, Evidence, 24 November 2014, p 2.

2.43 While the EPA stressed the pertinence of their vision to the agency's responsibilities under the POEA Act, a number of inquiry participants were critical of the EPA's vision statement.<sup>47</sup>

2.44 For example, Ms Naomi Hogan, NSW Coordinator of the Wilderness Society, argued that the EPA vision statement should only refer to human health and the environment:

While an inclusive approach is good, the problem is that the EPA should first and foremost be looking to protect human health and the environment. In fact, the United States Environment Protection Agency's mission is to protect human health and the environment. The confusion about protecting healthy business is perhaps a side issue that the EPA does not need to have as its top tier guidance. We need an organisation which is clearly independent and robust and which puts human health and the environment first and foremost. The other agencies will deal with the rest.<sup>48</sup>

### Application of the EPA's statutory objectives

2.45 The statutory objectives in the POEA Act are used by the EPA in the following operations:

- the legislation that the EPA administers
- its role in the New South Wales planning process
- its policies and programs
- its compliance framework.<sup>49</sup>

2.46 Each of these are briefly reviewed below.

### Administered Legislation

2.47 The EPA has responsibilities and functions under 11 different pieces of legislation.<sup>50</sup> ESD is integrated into each of these Acts as a common objective, and aims to protect the environment and reduce risks to human health by prohibiting or mandating actions, and providing flexible regulatory tools to encourage compliance and to help integrate environmental and economic considerations.<sup>51</sup>

2.48 Practical examples of administrative and legislative mechanisms include requiring industry licensees to develop pollution incident response management plans, environment protection licences which set legally binding operating conditions, load-based licensing (linking fees to pollutant loads according to the 'polluter pays' principle), risk-based licensing (to commence

<sup>47</sup> Submission 132, Lock the Gate Alliance, p 1; Submission 162, EDO NSW, p 7; Ms Kate Smolski, Chief Executive, Nature Conservation Council of NSW, Evidence, 13 October 2014, p 51.

<sup>48</sup> Ms Naomi Hogan, Newcastle Campaign Manager, Wilderness Society, Evidence, 24 November 2014, pp 49-50.

<sup>49</sup> Submission no. 156, NSW Environment Protection Authority, pp 5-6.

<sup>50</sup> Submission no. 156, NSW Environment Protection Authority, p 6.

<sup>51</sup> Submission no. 156, NSW Environment Protection Authority, pp 6-7.

in July 2015, and consultation with other agencies such as the Department of Planning and Environment during the planning and assessment phase for new projects and developments.<sup>52</sup>

### **New South Wales planning processes**

- 2.49** The EPA advised that that the agency's role in relation to planning decisions is primarily that of an advisory role in regard to strategic planning or development assessment processes, and either an advisory or concurrence role depending on the type of development.<sup>53</sup> This limitation caused a number of inquiry participants to question the efficacy of the EPA.<sup>54</sup>

### **EPA policies and programs**

- 2.50** According to the EPA, when the agency responds to new or emerging environmental issues its first actions are based on the precautionary principle.<sup>55</sup>
- 2.51** The EPA advised that it seeks to achieve ESD through a variety of policies and programs, including: regulation; education; business and community partnerships, and economic mechanisms consistent with the precautionary principle and s 6 of the POEA Act.<sup>56</sup> Policy responses may vary from national, state or local based policy decisions.

### **EPA compliance framework**

- 2.52** The committee heard that the EPA has a wide compliance framework used to manage issues relating to air, water, noise, waste, contaminated sites, hazardous substances, emergencies and native forestry. The EPA provided the following examples of the integration of ESD into relevant EPA legislation, planning, policies and programs, such as advisory letters and formal warnings, official cautions, improvement programs and licence variations, notices, directions, orders, penalty notices, mandatory environmental audits, enforceable undertakings and protections.<sup>57</sup>
- 2.53** The following chapters present a number of case studies which, in accordance with the inquiry terms of reference, the committee has used to evaluate the performance of the EPA against its statutory objectives.

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<sup>52</sup> Submission no. 156, NSW Environment Protection Authority, pp 13-29.

<sup>53</sup> Submission no. 156, NSW Environment Protection Authority, p 7.

<sup>54</sup> For example, see discussion relating to the question of the White Bay Cruise Terminal at paragraphs 7.23 to 7.28.

<sup>55</sup> Submission no. 156, NSW Environment Protection Authority, p 7.

<sup>56</sup> Submission no. 156, NSW Environment Protection Authority, pp 5-11

<sup>57</sup> Submission no. 156, NSW Environment Protection Authority, pp 13-29.

## Chapter 3 Land contamination issues at Botany and Hillsdale

The Sydney suburbs around Botany have a long history of industrial production, which in some cases has led to significant land contamination. This chapter reviews the performance of the Environment Protection Authority in managing this contamination, with a specific focus on a former mercury based chlor-alkali plant on the Botany Industrial Park, which ceased operations in 2002.

### Background

- 3.1** The City of Botany Bay incorporates the suburbs of Botany, Hillsdale, Banksmeadow and Pagewood. It has a long industrial past, with over a century of industrial operations conducted in the area, including chemical works, metal platers, tanneries, petro-chemical storage and, more recently, port-related activities. Recent development has seen the growth of residential areas located close to industrial areas or on sites of previous industrial activity which have legacy contamination issues.<sup>58</sup>
- 3.2** The EPA has exercised its powers under the following legislation to instigate remediation projects that address the contamination legacy in the Botany local government area:
- *Contaminated Land Management Act 1997*: Under the Act, the EPA regulates contaminated sites where the contamination is significant enough to warrant regulation.
  - *Environmentally Hazardous Chemicals Act 1985*: A licence is required under the Act for the storage of hazardous waste.
  - *Protection of the Environment Operations Act 1997*: Under the Act, the EPA also regulates contaminated land via its licensing powers. Some activities, such as contaminated soil treatment, requires an environment protection licence (EPL). The EPA may also impose legally binding pollution reduction program (PRP) conditions on licensees.<sup>59</sup>
- 3.3** The EPA advised the committee that work on contamination in the Botany local government area has fallen into two major categories: firstly, the most significant and concentrated issues are located at Botany Industrial Park, and secondly, the regulation of 12 other contaminated sites spread across the area.<sup>60</sup> Issues relating to the management of contamination at the Botany Industrial Park have been the primary subject of community concerns regarding the EPA's response, and therefore are the focus of this chapter.

### Remediation projects at the Botany Industrial Park

- 3.4** Four key remediation projects are either underway or have been completed by the occupier, Orica, at the Botany Industrial Park. These are outlined as follows:

<sup>58</sup> Submission no. 156, NSW Environment Protection Authority, p 150.

<sup>59</sup> Submission no. 156, NSW Environment Protection Authority, pp 150-1.

<sup>60</sup> Submission no. 156, NSW Environment Protection Authority, p 150.

### **Groundwater clean-up project**

- 3.5** A groundwater clean-up project is addressing chlorinated hydrocarbon groundwater plumes resulting from subsurface contamination sources at the Park. The initial commitment from Orica to install a groundwater treatment plant and associated infrastructure was reported to cost \$167 million, and the EPA has estimated that the project will have ongoing annual costs of approximately \$10 million. The EPA advised the committee that the treatment plant will likely need to operate for the next 100 years, but this is subject to ongoing assessment of new and emerging technology.<sup>61</sup>

### **Car park waste remediation project**

- 3.6** A car park waste remediation project successfully cleaned up contaminated soil from the historical storage of hexachlorobenzene (HCB), hexachlorobutadiene and octachlorostyrene at a cost of \$55 million and was completed in 2012, with 1.4 hectares of land restored to productive use.<sup>62</sup>

### **Storage and monitoring of toxic hexachlorobenzene (HCB) waste**

- 3.7** HCB was produced as a waste by-product in the former solvent and plastic manufacturing plants operated by Orica at Botany Industrial Park. Approximately 15,000 tonnes of HCB waste and related materials are stored in purpose-built storage facilities and shipping containers at the park, together with low-level waste such as contaminated used packaging materials and personal protective equipment.<sup>63</sup>
- 3.8** HCB is bio-accumulative, very resistant to degradation in the environment, and has been classified as a possible human carcinogen. It is classified as a priority Persistent Organic Pollutant under the Stockholm Convention and is internationally targeted for elimination.<sup>64</sup>
- 3.9** Despite the establishment of a HCB Waste Management Plan in 1996 and a number of attempts by Orica to transport the waste to an offsite facility, the EPA advised that 'at present Australia has no facility capable of treating HCB waste and there is no prospect of a suitable facility being available in the foreseeable future'.<sup>65</sup> The EPA advised the committee that it conducts regular inspections to ensure that HCB continues to be safely stored until a permanent solution is found.<sup>66</sup>

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<sup>61</sup> Submission no. 156, NSW Environment Protection Authority, p 151.

<sup>62</sup> Submission no. 156, NSW Environment Protection Authority, p 151.

<sup>63</sup> Submission no. 156, NSW Environment Protection Authority, p 159.

<sup>64</sup> Submission no. 156, NSW Environment Protection Authority, p 159.

<sup>65</sup> Submission no. 156, NSW Environment Protection Authority, p 159.

<sup>66</sup> Submission no. 156, NSW Environment Protection Authority, pp 159-160.

### Remediation of mercury contamination from Orica's former chlor-alkali plant

- 3.10** The remediation of mercury has a long and complex history at the Botany Industrial Park site and has been the focus of much of the comment on both the safety of the site and surrounding areas, and the actions of the EPA. This project is discussed further below.

### Mercury remediation in the Botany and Hillsdale area

- 3.11** Between 1945 and 2002, Orica commissioned and operated a chlor-alkali plant which used elemental mercury cell technology, or electrolysis, to produce chlorine, hydrogen and caustic soda from brine. During the plant's lifetime mercury and mercury-containing sludges were spilled onto the floor of the plant and found their way into groundwater beneath the plant and contaminated soil on the site. Sediments in Penrhyn Estuary, which is located in Botany Bay, were also found to have been contaminated by effluent and sludge that had been washed from the premises through a stormwater channel to the estuary.<sup>67</sup>
- 3.12** The plant was demolished between 2004 and 2007 and the site was declared contaminated land by the EPA. Orica has been in negotiations with the EPA over remediation measures since. Under a range of legislative provisions, the EPA required Orica to assess the scale and extent of the contamination; identify potential options for remediation; undertake a remedial options analysis; update both human health and environmental health risk assessments; and extensively consult with stakeholders, including the local community.<sup>68</sup>

### The first Human Health and Environment Risk Assessment (HHERA)

- 3.13** The first step in this consultation process occurred in 2008, when Orica, at the request of the EPA, commissioned a Human Health and Environmental Risk Assessment (HHERA) to determine the potential risks to human health and the environment associated with mercury in soil and groundwater. During that process, Orica utilised a pre-existing Community Liaison Committee to enable residents to offer comment on proposed remediation plans. Once this process was complete, Orica, under a Voluntary Management Proposal approved by the EPA, implemented its first project to clean up the mercury contamination using a soil washing technology.<sup>69</sup> However, after four months of operation, the soil washing process was discontinued because of poor performance.<sup>70</sup>

<sup>67</sup> Submission no. 156, NSW Environment Protection Authority, p 154; Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 2.

<sup>68</sup> Submission no. 156, NSW Environment Protection Authority, p 154; Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 2.

<sup>69</sup> Submission no. 156, NSW Environment Protection Authority, pp 154-5; Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, pp 2, 6-7.

<sup>70</sup> Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 7.

- 3.14** Soon after, in September 2011 and January 2012, two incidents occurred at the Orica plant involving the emission of vapour with elevated mercury levels from a temporary enclosure which the EPA had required Orica to build to control that very type of release.<sup>71</sup> The incidents were the subject of significant media coverage and community concern<sup>72</sup> and, ultimately, a prosecution by the EPA<sup>73</sup>.

### **A Management Order is issued and a second HHERA completed**

- 3.15** In response to the limitations of the soil washing process, in 2012 the EPA required Orica to complete a second HHERA and develop new Remediation Action Plans (RAPs). The EPA required community input, expert comment and reference to new toxicity data and the applicable National Environment Protection (Assessment of Contaminated Sites) Measure (NEPM).<sup>74</sup>

#### **What are the NEPM measures for contaminated land management?**

- 3.16** The principles behind the measures, developed in 1999, are the product of a Council of Australian Governments initiative and provide a framework for responding to threats posed to the community by contaminated land.<sup>75</sup> Professor Chris Fell advised the committee that whilst the NEPM is in part derivative of earlier protocols established by the United States Environment Protection Agency and others in 1995, it represents the consensus thinking of all Australia state health departments, environment protection authorities and Commonwealth and university personnel.<sup>76</sup>

- 3.17** Orica provided their second HHERA assessment in 2013. This assessment was reviewed by the EPA and also independently by Professor Brian Priestly, a former member of the Independent Monitoring Committee, established and appointed by the Community Liaison Committee to provide independent expert advice to the community when required.<sup>77</sup> The EPA advised the committee that this review satisfied the agency that the assessment had been appropriately revised and used the updated NEPM guideline.<sup>78</sup>

<sup>71</sup> Submission no. 156, NSW Environment Protection Authority, p 155; Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, pp 7-8.

<sup>72</sup> Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 7.

<sup>73</sup> Submission no. 156, NSW Environment Protection Authority, pp 155, 156-157.

<sup>74</sup> Submission no. 156, NSW Environment Protection Authority, p 155.

<sup>75</sup> Evidence, Professor Chris Fell, 24 November 2014, p 33.

<sup>76</sup> Evidence, Professor Chris Fell, 24 November 2014, p 33.

<sup>77</sup> Submission no. 156, NSW Environment Protection Authority, p 155.

<sup>78</sup> Submission no. 156, NSW Environment Protection Authority, p 155.



### Assistance provided by Hg Recoveries Pty Ltd

- 3.18** As noted above, the EPA required Orica to develop the new Remediation Actions Plans in consultation with the community. In assessing the HHERAs and the planned remediation technologies, the community representatives of the Community Liaison Committee approached the community-based National Toxics Network for assistance, and were directed to Mr Andrew Helps. Mr Helps subsequently provided pro bono advice and advocacy on the residents' behalf on aspects of the plans. Mr Helps is the Managing Director of Hg Technologies Pty Ltd, a Victorian company established in 2010 to recover and sell mercury from mine waste dumps associated with artisanic gold mining in northern Victoria.<sup>79</sup> Mr Helps was highly critical of both the first and second HHERA and the proposed treatment plan. He also claimed that the experts had not properly accounted for elemental mercury off-gassing from soil on the whole of the Orica site.<sup>80</sup>
- 3.19** Mr Helps was also, and continues to be, of the view that there is no safe threshold limit for mercury contamination in residential areas, citing the precautionary principle. This approach runs counter to the protocols enshrined in the National Environmental Protection Measures which the EPA works to. This was discussed at paragraph 3.16.
- 3.20** While Mr Helps continued to express his concerns with the mercury remediation process, these concerns were particularly amplified when Mr Helps also alleged that the area may be subject to HCB contamination. This is discussed further at paragraph 3.25.

### Final land remediation plan

- 3.21** In 2013, in response to an order issued by the EPA, Orica submitted two Remedial Action Plans. Following further information required by the EPA, a second order was issued to Orica to detail the implementation of the action plans, which formed the basis of the new, and current, remediation project.<sup>81</sup>
- 3.22** Under this new project, soil contaminated by mercury and free mercury is removed offsite to the extent practicable. In addition, the site will have a 'capping and containment system' installed to restrict the movement of the remaining mercury contamination. The capping and containment system is essentially the construction of an impermeable barrier on either side of the contamination area, from the surface to the bedrock, which will prevent groundwater flowing through any remnant contamination and prevent groundwater becoming contaminated.<sup>82</sup>

<sup>79</sup> Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 2.

<sup>80</sup> Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 2, 11-19; Submission no. 245, Hillsdale and Eastgarden Residents Action Group, p 1; Submission no. 88, Hg Recoveries Pty Ltd, p 1; Evidence, Mr Andrew Helps, Hg Recoveries Pty Ltd, pp 67-69.

<sup>81</sup> Submission no. 156, NSW Environment Protection Authority, p 155.

<sup>82</sup> Submission no. 156, NSW Environment Protection Authority, p 156.

- 3.23** The EPA advised that the remediation work has four stages. Stages 1 and 2 have been completed, and involved the excavation of contaminated soil and preparation of the excavated areas for the next stages. Stages 3 and 4 involve the construction of the capping and containment system and decommissioning of the structures which were used to control mercury vapours.<sup>83</sup> The EPA further advised that NSW Health has provided input into the management approach and endorsed the reporting levels for ambient mercury concentrations in the air.<sup>84</sup>
- 3.24** In addition to these measures, in January 2013, the Botany Mercury Independent Review Steering Panel was established to provide an opportunity for community involvement and a forum for expert advice to inform and oversee the review. The panel includes representatives from the EPA, NSW Ministry of Health, Office of Environment and Heritage, Botany Bay and Randwick Councils, independent health and chemical experts and community members.<sup>85</sup>

### **Accusations of HCB contamination**

- 3.25** In addition to Mr Helps's concerns regarding mercury contamination, in April 2013 Mr Helps advised the EPA that he had detected a chlorine spike, which he attributed to hexachlorobenzene (HCB), in soils near Denison Street, Hillsdale. Mr Helps alleged that the chemical had leaked from Orica.<sup>86</sup> As noted earlier, Orica currently stores 15,000 tonnes of HCB waste material at its Botany Industrial Park site.
- 3.26** Mr Helps informed the committee that his advice was treated with much scepticism.<sup>87</sup> However, the EPA informed the committee that the information provided gave no clear indication of the sampling locations and methodology, and Mr Helps initially would not release full details about his sampling techniques. After a delay of several days, Mr Helps provided the EPA with sufficient information to commence an investigation.<sup>88</sup>
- 3.27** In response to Mr Helps' findings, the EPA undertook soil sampling to analyse for HCB, mercury and a range of 94 other contaminants at and around the location believed to have been sampled by Mr Helps. The EPA advised the committee that the samples were collected in accordance with Australian Standards.<sup>89</sup>
- 3.28** Later that day, the samples were submitted to a laboratory operated by the Office of Environment and Heritage (OEH), accredited by the National Association of Testing Authorities, for analysis. Unfortunately, handling of these samples was subject to errors and

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<sup>83</sup> Submission no. 156, NSW Environment Protection Authority, p 156.

<sup>84</sup> Submission no. 156, NSW Environment Protection Authority, p 156.

<sup>85</sup> Submission no. 156, NSW Environment Protection Authority, p 158.

<sup>86</sup> Submission no. 88, Hg Recoveries Pty Ltd, pp 1-2; Submission no. 156, NSW Environment Protection Authority, p 167.

<sup>87</sup> Submission no. 88, Hg Recoveries, Pty Ltd, p 2.

<sup>88</sup> Submission no. 156, NSW Environment Protection Authority, p 168.

<sup>89</sup> Submission no. 88, Hg Recoveries, Pty Ltd, p 2.

subsequently three revisions of the results were required.<sup>90</sup> The EPA summarised the versions as follows:

**Table 1 Reports issued by the OEH Laboratory<sup>91</sup>**

Version 1	18 April 2013	Issued on an urgent basis, containing the first results of sample testing without the complete set of quality assurance and quality control process taking place: testing for HCB, pesticides, total metals, mercury and PCBs <sup>92</sup> .
Version 2	23 April 2013	One sample was re-tested because of suspected cross-contamination in the original analysis: results of six samples corrected.
Version 3	1 May 2013	Seven samples re-tested for PCBs at the request of the EPA using a different method to allow comparison with NEPM Health Investigation Limits. This was not a correction of an error.
Version 4	17 May 2013	Metal results excluding mercury re-calculated due to an identified dilution error.

**3.29** On receipt of the final version from OEH, the EPA posted a summary of the findings of the final version on its website, the substance of which the EPA advised was:

- In relation to HCB and mercury, the levels detected in the samples were below the Health Investigation Levels (HILs) that require further investigation and therefore no further action was required.
- In relation to PCB, the levels detected in the samples were slightly above the HIL on the Sydney Water Easement adjacent to Denison Street for three of the sample locations.<sup>93</sup>

**3.30** In response to these findings, the EPA referred the results to:

<sup>90</sup> Submission no. 156, NSW Environment Protection Authority, pp 168-169; Submission no. 245, Hillsdale and Eastgarden Residents Action Group, pp 2-3; Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, pp 2-3.

<sup>91</sup> Submission no. 156, NSW Environment Protection Authority, p 169.

<sup>92</sup> PCBs are polychlorinated biphenyls, which contain individual chlorinated chemicals.

<sup>93</sup> Submission no. 156, NSW Environment Protection Authority, p 169.

- NSW Health, who after assessing all of the results and site information for the easement concluded that the PCB levels were not a health concern.
- Sydney Water, who, as the landholder, engaged a contractor to undertake additional sampling of the easement.<sup>94</sup>

**3.31** Subsequent testing conducted by Sydney Water confirmed the EPA's original findings. Remediation of the site commenced soon thereafter and was completed in December 2013.<sup>95</sup>

**3.32** Mr Helps then made further allegations of contamination in connection with the Grace Campbell Reserve Playground adjacent to the Sydney Water easement where the EPA testing had taken place.<sup>96</sup> The EPA also released a full version of the final copy of the OEH test results to two community members who became concerned by the reference to 'Version 4'. Subsequently, under freedom of information laws, the community obtained the original results of the OEH testing and became aware of the different versions of results. The result was that residents became confused. Mr Helps continued to assert that the EPA had not acted to address contamination in the area and significant media attention ensued.<sup>97</sup> The Hillsdale and Eastgarden Residents Action Group told the committee that comments made by the Chief Executive Officer of the EPA during this period further 'triggered unrest and without doubt obfuscated the real issues'.<sup>98</sup>

**3.33** During this period, the City of Botany Bay Council commissioned independent soil contamination testing of the Grace Campbell Reserve, which found that surface soils present on the reserve did not contain levels of environmental contaminants that would be considered to pose a potential health risk to park users. Further follow-up testing was also conducted on the soil samples originally taken by the EPA, in view of community concern that the analysis did not account for the total quantity of chlorine found and concerns raised by Mr Helps that the EPA had not considered the breakdown products of HCB. Further analysis revealed the presence of chlorine, which was attributed to the presence of particles of PVC plastic, and community members accepted this analysis. NSW Health advised that given the location and size of the particles in the affected areas, the impact on public health was negligible.

**3.34** However, although these results assisted to provide further answers to some of the concerns that remained in the community, the EPA advised the committee that in view of factors such as the significant community concern, the continued allegations of Mr Helps, and the confusion caused by the OEH testing results, the EPA Board decided to appoint an expert to undertake an impartial review of the agency's response to the various matters affecting Botany and Hillsdale. On the Chief Scientist's recommendation, the EPA Board commissioned senior chemical engineer, Emeritus Professor Chris Fell AM, to undertake this review in October 2013.<sup>99</sup>

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<sup>94</sup> Submission no. 156, NSW Environment Protection Authority, p 169.

<sup>95</sup> Submission no. 156, NSW Environment Protection Authority, pp 169-170.

<sup>96</sup> Submission no. 156, NSW Environment Protection Authority, p 170.

<sup>97</sup> Submission no. 245, Hillsdale and Eastgarden Residents Action Group, p 2; Submission no. 156, NSW Environment Protection Authority, p 167; Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, pp 2-3, 21.

<sup>98</sup> Submission no. 245, Hillsdale and Eastgarden Residents Action Group, p 2.

<sup>99</sup> Submission no. 156, NSW Environment Protection Authority, p 164.

## Findings of the Fell review

**3.35** Professor Fell concluded that, having carefully read correspondence and documents supplied by staff of EPA and others, and having interviewed EPA staff and others, including Mr Helps, the Director – Environmental Branch of NSW Health and community representatives, the EPA had:

- correctly considered and applied the NEPM framework, noting the 2013 revisions to the NEPM
- fulfilled its obligations under the Contaminated Land Management Act 1997 in relation to criticisms made by Hg Recoveries
- addressed the criticisms by Hg Recoveries of the NEPM process.<sup>100</sup>

**3.36** Professor Fell further concluded that he did not believe that the EPA had knowingly:

- misrepresented data on contamination and monitoring
- misinterpreted data on contamination and monitoring
- not been rigorous in its review and regulation of industrial activities at the Botany site.<sup>101</sup>

**3.37** Nor did Professor Fell believe that the EPA had an inappropriate relationship with Orica, and noted that an open professional relationship is in the best interests of the community in resolving the problems associated with remediation of contaminated land.<sup>102</sup>

**3.38** In reference to the criticisms made by Mr Helps, Professor Fell observed that ‘the role of Mr Helps as a protagonist for the concerns of some community members and his persistent questioning, comment and allegations have proved a major distraction within the authority’.<sup>103</sup> Professor Fell stated that, based on the evidence, it was difficult to support many of Mr Helps’ views:

Based on the evidence I have found available, it is difficult to support many of these views. From my reading of the documentation supplied I believe that the EPA has responded appropriately to Mr Helps’ input but that a more beneficial outcome would have occurred if Mr Helps had been obliged early in the piece to demonstrate that he

<sup>100</sup> Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 3.

<sup>101</sup> Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 3.

<sup>102</sup> Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 3.

<sup>103</sup> Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 24.

speaks for the community as a whole, following some sort of community approval process.<sup>104</sup>

- 3.39** However, Professor Fell went on to observe that there remained a substantial community perception of a lack of effectiveness by the EPA, and many residents felt they had been ‘kept in the dark’ about the real problems that existed in the Botany and Hillsdale area:

[The community] feels that it is being kept in the dark about the real problems existing and is uncertain about the efficacy of the now-licenced remediation process which is currently proceeding. It is felt that EPA does not keep residents properly informed by, for example, a comprehensive website or social media outlet. Residents feel that they are being patronised and lectured to rather than being listened to as a partner in developing a solution to the problem.<sup>105</sup>

- 3.40** To this end, Professor Fell explained that this while the EPA needs to produce more information, this does not just extend to ‘bald scientific information but also an explanation of how that should be used. The community was often of the opinion that they were talked over to—in other words the EPA people did not tell them what their thinking actually was, and that is very important.’<sup>106</sup>

- 3.41** Professor Fell concluded that this situation had been amplified by the observations of Mr Helps and commentary made by the media and, while the EPA had an obligation to accept input from the community, a protocol should be put in place to equip the EPA to manage particularly persistent negative comment from a single person or organisation:

My judgement is that the EPA officers handling the Orica matter are technically competent and aware of their regulatory role but are often forced into a defensive position by persistent external comment. The authority is obliged to respond to community input and should gratefully accept such input. But where such input from an individual or organisation is massive, a protocol should be put in place for its handling, lest it dominates the efforts of officers, force a culture of reaction rather than action and distracts them from their principal tasks. It should also be ascertained whether the individual or organisation speaks for the community as a whole.<sup>107</sup>

- 3.42** Professor Fell also observed that the errors made by the OEHL laboratory significantly contributed to the feelings of distrust and disquiet in the community, and that this was not unreasonable. In Professor Fell’s view, the community ‘expect people to get it right ... They expect to have good data and for it to be made freely available to them’.<sup>108</sup>

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<sup>104</sup> Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 25.

<sup>105</sup> Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 21.

<sup>106</sup> Evidence, Professor Chris Fell, 24 November 2014, p 34.

<sup>107</sup> Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 22.

<sup>108</sup> Evidence, Professor Chris Fell, 24 November 2014, p 38.

**3.43** To address the community's concerns and equip the EPA to better handle liaison into the future, Professor Fell made a number of recommendations:

- There is a need to strongly support within the organisation a culture that emphasises adequate and effective community consultation.
- At public meetings EPA should assume a leadership role and provide well-briefed, technically competent persons with delegated responsibility to take decisions and the will to question statements made by other parties. The EPA should avoid being forced to take a defensive posture and should be prepared to educate community delegates using its more detailed scientific and regulatory knowledge.
- Where an individual or organisation tends to dominate community discussions strong chairmanship should be used to ensure that all delegates have the opportunity to voice their feelings.
- One staff member should be designated to respond to persistent community questioners to ensure consistent responses informed by the appropriate officers. Inputs should be acknowledged but, where desirable, grouped for consolidated reply.
- EPA staff should be encouraged to develop strong external profiles by participating in national and professional activities and being strong contributors to the NEPM review process.<sup>109</sup>

**3.44** With respect to the Steering Panel set up to oversee the operation of the Orica Botany Mercury Independent Review (see paragraph 3.24), Professor Fell recommended that:

- Consideration should be given to appointing an independent chair to demonstrate the Panel's independence.
- To ensure that the community feels empowered, consideration should be given to involving at least one community representative on sub-committees set up for special tasks, e.g. selecting a tenderer.
- Documents for meetings should be sent out one week beforehand to allow members ample time for reading and assimilation.
- A communications policy should be developed so that the Panel can effectively communicate its deliberations and findings to the community. The possibility of using social media should be considered.<sup>110</sup>

**3.45** Finally, in view of the erroneous laboratory results originally provided to the EPA by the Office of Environment and Heritage, which Professor Fell's observation was 'pretty terrible'<sup>111</sup>, Professor Fell recommended that, where EPA staff request services from partner organisations, 'appropriate officers from these organisations should be involved in assessing

<sup>109</sup> Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 22.

<sup>110</sup> Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, pp 22-23.

<sup>111</sup> Evidence, Professor Chris Fell, 24 November 2014, p 38.

with EPA the significance of results before their public release. It is important that both parties understand the limitations of the service provided and take responsibility for it.<sup>112</sup>

### **Response to Professor Fell's review**

**3.46** In evidence to the committee, the EPA advised that it is 'being guided by the suggestions of Professor Fell on how the EPA might consider improving its image in regard to responding to community concerns, particularly in relation to community engagement'.<sup>113</sup>

**3.47** It should be noted that, following the publication of Professor Fell's report on his review, Mr Helps subsequently offered a number of comments<sup>114</sup> which were both forwarded to the EPA and published in the media. In response, Professor Fell provided his own response<sup>115</sup>, which was tabled in Parliament by the Minister.<sup>116</sup>

### ***Committee comment***

**3.48** The committee acknowledges that the land contamination issues in the Botany and Hillsdale areas are complex.

**3.49** The committee notes that, while the Steering Panel established to oversee the review of the Orica Botany Mercury Independent Review includes an independent chemical engineer, the panel is currently chaired by the Chief Environmental Regulator of the EPA. The committee recommends that, to demonstrate the Panel's independence, an independent chair should be appointed, and believes that this should be implemented as a matter of priority.

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### **Recommendation 4**

That the NSW Environment Protection Authority appoint an independent chair to the Independent Review Steering Panel overseeing the Orica Mercury Independent Review.

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**3.50** The committee notes that the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, which Australia is party to, highlights the obligation to 'ensure the availability of adequate disposal facilities, for the environmentally sound management of hazardous wastes and other wastes, that shall be located, to the extent possible, within it, whatever the place of their disposal'.

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<sup>112</sup> Emeritus Professor Chris Fell, *Review report to NSW Environmental Protection Authority: Independent Assessment of performance of EPA with respect to Orica activity on Botany Industrial Park*, 19 December 2013, p 23.

<sup>113</sup> Submission no. 156, NSW Environment Protection Authority, p 178.

<sup>114</sup> Submission no. 88, Hg Recoveries Pty Ltd, p 2.

<sup>115</sup> Annotated Copy of the Review Report to the New South Wales Environment Protection Authority by Fell Consulting Pty Ltd entitled 'Independent Assessment of Performance of EPA with respect to Orica activity on Botany Industrial Park', dated 19 December 2014.

<sup>116</sup> *LA Votes*, 26 February 2014, p 2047.



- 3.51** The committee has carefully reviewed the report produced by Professor Fell, together with evidence received by Professor Fell, Mr Helps and the Hillsdale and Eastgarden Residents Action Group. On balance, the committee is satisfied with Professor Fell's assessment that the EPA did not willingly misinform the community or seek to 'cover up' the results of tests of the soil samples taken. The committee also acknowledges that errors, requiring re-testing, and related confusion, contributed to the community concerns with the EPA.
- 3.52** The committee also concurs with Professor Fell's assessment that the EPA has considerable work to do towards regaining the community's faith and establishing a clearer and more collaborative method of engagement and communication with the community. The committee was disturbed to hear the comments of Professor Fell about the perception in the community that residents had been 'kept in the dark', patronised and lectured to rather than listened to. Professor Fell noted the apparent lack of any social media strategy to help keep the local community informed of the issues. The committee agrees with the recommendation by Professor Fell that the EPA should prioritise the development of a communications policy to inform local residents of the activities of the Steering Panel.

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**Recommendation 5**

That the NSW Environment Protection Authority prioritise the development of a communications and engagement process to consult and inform local residents of the activities of the Independent Review Steering Panel overseeing the Orica Mercury Independent Review and publicly release the results of any testing undertaken.

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## Chapter 4 Coal dust pollution in the Hunter

This chapter discusses a series of events connected to three reports into dust pollution associated with coal trains in the Hunter Valley. The chapter provides an overview of community concerns regarding coal operations, rail transportation arrangements in the Hunter, the key events surrounding the studies, and statements made by the EPA in regards to the studies. The chapter concludes with an analysis of a number of allegations made by community groups in regards to the integrity of the reports and the probity of the statements made by the EPA.

### Coal operations in the Hunter region

- 4.1 The Hunter Valley Coal Chain is the largest coal export operation in the world and consists of: approximately 35 coal mines; more than 31 points for loading coal onto trains; four rail haulage operators; three coal terminals; and the movement and loading of more than 1400 coal vessels/year from the coal terminals through the port of Newcastle.<sup>117</sup>

#### Community concerns regarding coal operations

- 4.2 The committee heard that aspects of the coal industry, in particular the potential health and environmental effects of coal dust and other particles produced as a result of mining activity and coal transportation, are of concern to residents of the Hunter region. The EPA itself has stated that, ‘Coal mines in the Hunter Valley are major contributors of dust and particulate matter’.<sup>118</sup>
- 4.3 Concerns regarding coal dust in the Hunter generally related to either coal dust from mining operations or coal dust from transportation. While coal dust from mining operations is of particular concern to communities in the Upper Hunter, coal dust from trains in the Hunter rail freight corridor is an issue for communities right through to the Port of Newcastle, in the Lower Hunter.<sup>119</sup> A number of witnesses reported that these issues have assumed increasing significance in recent years with the growth of the coal mining industry in New South Wales.<sup>120</sup> A proposal for a new coal loader for the Port of Newcastle would lead to a significant increase in the number of train movements to Newcastle Port from 41,792 per year to up to 77,672 per year.<sup>121</sup>

<sup>117</sup> Hunter Valley Coal Chain Coordinator, *The History of the Hunter Valley Coal Chain Coordinator*, accessed at <https://www.hvccc.com.au/Documents/20130515%20HVCCC%20Brochure.pdf>.

<sup>118</sup> Answers to supplementary questions, NSW Environment Protection Authority, question 9, 11 December 2014.

<sup>119</sup> Submission no. 156, NSW Environment Protection Authority, p 181.

<sup>120</sup> Submission no. 156, NSW Environment Protection Authority, p 179-181; Submission no. 142, Hunter Community Environment Centre, pp 5-6; Dr James Whelan, Coal Terminal Action Group, Evidence, 10 November 2014, p 26.

<sup>121</sup> Tabled Document, Hunter Community Environment Centre, *Performance of the NSW EPA: Legislative Council inquiry supporting materials*.

- 4.4 Both Hunter Councils and the Hunter Community Environment Centre informed the committee that recent surveys conducted by their organisations had identified coal dust and pollution from mining as a dominant concern for residents in the Hunter.<sup>122</sup>
- 4.5 While coal dust from mining operations has been a focus of the EPA's actions in recent years, it was the EPA's response to a series of coal dust pollution studies conducted in the Hunter Valley rail corridor that has been the focus of recent criticism and the subject of the committee's terms of reference, and is therefore the focus of discussion in this chapter.

### What is 'coal dust pollution'?

- 4.6 Coal dust pollution generally refers to the range of particulate matter emissions associated with coal mining coal transportation and port activities in the Hunter region.<sup>123</sup> The NSW Health Fact Sheet *Mine Dust and You* provides a description of the different sizes of particulate matter:

**Table 4.1 Types of particulate matter<sup>124</sup>**

Particle size	Description
TSP	Total Suspended Particulate Matter (TSP) refers to the total of all particles suspended in the air. Even the largest of these particles is barely half the width of a human hair.
Larger than PM10	A subset of TSP, and refers to all particles of size 10 µm in diameter and greater.
PM10	Also a subset of TSP, and includes all particles smaller than 10 µm in diameter (smaller than 1/7th of a hair width). Particles in the size range 2.5 µm to 10 µm in diameter are referred to as coarse particles (PM 2.5-10).
PM2.5	A subset of both PM10 and TSP categories and refers to all particles less than 2.5 µm in diameter. PM2.5 is referred to as fine particles and is mainly produced from combustion processes such as vehicle exhaust.

- 4.7 Generally it is thought that fine particles below 2.5 µm in diameter may be of greater health concern than larger particles as they can reach the air sacs deep in the lungs. However, coarse particles (PM 2.5-10) could also be associated with adverse health effects.<sup>125</sup>

<sup>122</sup> Submission no. 142, Hunter Councils, p 1; Submission no. 164, Hunter Community Environment Centre, pp 5-6.

<sup>123</sup> Submission no. 241, NSW Minerals Council, p 5.

<sup>124</sup> Submission no. 247, NSW Mining, pp 5-6, citing NSW Health Fact Sheet, *Mine Dust and You*.

<sup>125</sup> Submission no. 247, NSW Mining, p 6, citing NSW Health Fact Sheet, *Mine Dust and You*.

## Rail transportation of coal in the Hunter

- 4.8** The Australian Rail Track Corporation (ARTC), a Commonwealth-owned corporation, operates the interstate rail network, the metropolitan freight network and the Hunter Valley network. On average, over 300 trains per day access the Hunter Valley network, around half of which are coal trains. A number of passenger services also access the network, as well as grain and general freight trains.<sup>126</sup>
- 4.9** Under the *Protection of the Environment Operations Act 1997*, the ARTC holds an environment protection licence (EPL) issued by the EPA for railway systems activities. An EPL may include emission and noise limits, pollution reduction programs (PRPs) and monitoring requirements which can drive improvements in the environmental performance of industry over time. The key environmental issues associated with the operation of the rail network are noise and air emissions.<sup>127</sup>
- 4.10** The EPA advised the committee that the ARTC environment protection licence requires that all plant and equipment used on the licenced premises (in this case rolling stock operated on a licensed railway network) must be operated in a proper and efficient manner. However, the licence conditions do not specifically address issues associated with air emissions from locomotives and fugitive dust emissions from wagons.<sup>128</sup>

## Investigations and public statements made regarding the effects of coal dust pollution in the Hunter

- 4.11** Between 2008 and 2013, in response to increasing community concern regarding particulate emissions from coal trains operating on the New South Wales network, the EPA imposed three separate pollution reduction programs (PRPs) on the ARTC. As part of this, the Corporation was required to undertake a series of studies into particulate emissions associated with coal trains.
- 4.12** In response, the ARTC produced three reports. The first report was a ‘data gap analysis’ which identified dust mitigation options for further review. The second and third reports comprised dust monitoring studies undertaken at sites within the Hunter Rail Corridor.<sup>129</sup>
- 4.13** During the period in which the second and third reports were produced and published, allegations emerged that the EPA had made public statements that were contrary to the findings of the reports, or had altered the findings of the reports to benefit the ARTC or to fit within a pre-determined public relations plan prepared by the EPA. The following timeline and discussion lays out the series of events that led to these allegations as they relate to the imposition of each of the three pollution reduction programs imposed on the ARTC in the period between 2008 and 2014.

<sup>126</sup> Australian Rail Track Corporation, *2014 Annual Report*, p 16.

<sup>127</sup> Submission no. 156, NSW Environment Protection Authority, p 183.

<sup>128</sup> Submission no. 156, NSW Environment Protection Authority, p 183.

<sup>129</sup> Submission no. 156, NSW Environment Protection Authority, pp 183-185.

## The first pollution reduction program and report prepared by PAE Holmes

### *Time line of events*

September 2008	<p><i>EPA imposed a pollution reduction program (PRP) on the ARTC</i></p> <p>The PRP required the ARTC to provide a proposal outlining steps to implement appropriate technology to reduce coal particle emissions on its network.<sup>130</sup></p> <p>Subsequently, ARTC proposed to undertake a data gap analysis<sup>131</sup> of a study recently conducted by Queensland Rail. The study sought to evaluate coal dust emission from rolling stock in the Central Queensland Coal Industry, with particular focus on the advantages and disadvantages of fitting lids to coal wagons.<sup>132</sup> The EPA determined that the data gap analysis would be a useful first step to investigate options for reducing fugitive emissions of coal particles from rail operations.<sup>133</sup></p>
February 2010	<p><i>ARTC submitted its first report, prepared by PAE Holmes: Impacts of fugitive dust from coal trains in NSW</i></p> <p>In response, the EPA determined that further research should primarily focus on particulate emissions from the tops of loaded coal trains, given significant community concerns around the issue.<sup>134</sup></p>

- 4.14 Inquiry participants did not call into question the contents of the first report submitted by the ARTC.

## The second pollution reduction program and report prepared by Environ

### *Timeline of events*

September 2011	<p><i>EPA imposed a second PRP on ARTC requiring a particle monitoring study</i></p> <p>Some 18 months after the EPA received the first ARTC report, and following extensive engagement with the ARTC and other industry stakeholders, the EPA imposed a second PRP that required the ARTC to undertake a one-month pilot program to monitor dust generated by train movements at two locations along the Hunter Valley rail corridor. The study was intended to determine whether uncovered loaded coal trains contributed more dust to ambient air quality than other train movements.<sup>135</sup></p>
Feb-Mar 2012	<p><i>Dust monitoring program implemented</i></p> <p>The dust monitoring program required under the second PRP was subsequently implemented at Metford and Mayfield by independent consultants Environ Pty Ltd.<sup>136</sup></p>

<sup>130</sup> Submission no. 156, NSW Environment Protection Authority, p 183.

<sup>131</sup> A data gap analysis is a process of analysing existing data to determine where an organisation is not producing or evaluating data that would be beneficial for its operation – ie, there is a gap in the organisation's data.

<sup>132</sup> Connell Hatch, *Wagon Lids Analysis Environmental Evaluation for Queensland Rail Limited*, 31 March 2008.

<sup>133</sup> Submission no. 156, NSW Environment Protection Authority, p 183.

<sup>134</sup> Submission no. 156, NSW Environment Protection Authority, p 183.

<sup>135</sup> Submission no. 156, NSW Environment Protection Authority, p 184.

<sup>136</sup> Submission no. 156, NSW Environment Protection Authority, p 184.

July 2012	<p><i>Media campaign commences</i></p> <p>The Newcastle Herald published a series of articles entitled ‘Great cover-up’, calling for the government to address the dust generated by the increasing number of coal trains movements to and from the Port of Newcastle. The campaign included a petition for coal wagons travelling through the Hunter to be covered. Coverage of the issue was subsequently taken up by The Illawarra Mercury from October 2012 and in local papers, local and state radio and various television programs.<sup>137</sup></p>
17 July 2012	<p><i>EPA responds to Newcastle Herald</i></p> <p>The EPA responded to the Newcastle Herald by stating that there was ‘no reliable data to indicate whether coal trains with uncovered coal loads increase ambient dust levels in urban areas in New South Wales’. The EPA advised that studies being undertaken at the time would enable the government to determine if any measures were required to control and reduce dust emissions, or if further studies would be required. The EPA’s response further stated that ‘in Queensland, coal is washed prior to being loaded onto wagons and this may help to reduce dust’.<sup>138</sup></p>
3 August 2012	<p><i>ARTC provides draft report on dust monitoring study to the EPA.</i><sup>139</sup></p>
20 August 2012	<p><i>EPA finds methodology used in report to be sound; requires inclusion of additional data</i></p> <p>Following a review of the report by officers of the EPA and air quality and statistics experts attached to the Office of Environment and Heritage, the EPA advised the ARTC that it considered the overall methodology used in the monitoring program to be sound but recommended that the report be amended to include statistical analysis of the data and additional information.<sup>140</sup></p>
30 August 2012	<p><i>EPA requires the ARTC to make the report publicly available</i></p> <p>The EPA amended the ARTC’s EPL to require it to submit and make publicly available the final report of the dust monitoring study by 28 September 2012.</p>
September 2012	<p><i>ARTC published its report on the first dust monitoring study, prepared by Environ Pty Ltd: Pollution Reduction Program PRP 4 – Particular Emissions from Coal Trains</i></p> <p>The report concluded that there was no appreciable difference between the dust levels measured from loaded coal trains and other types of freight trains. This indicated that significant dust was not being generated from uncovered trains compared with other types of freight trains.<sup>141</sup></p> <p><i>EPA makes media statement to the Newcastle Herald</i></p> <p>On the day on which the report was published the EPA provided a media statement that noted that ‘the results of the report suggested that there was no appreciable difference between the dust levels measured from the movement of loaded coal trains and other types of freight trains. However, further monitoring is required to expand on and verify these results.’<sup>142</sup> The EPA did not go on to specify the nature of the monitoring required.</p>

**4.15** Inquiry participants made a number of allegations regarding the technical process by which the study connected to the second pollution reduction program was conducted and the means by which the results were released. These are discussed below.

<sup>137</sup> Submission no. 156, NSW Environment Protection Authority, p 184.

<sup>138</sup> Submission no. 156, NSW Environment Protection Authority, p 184.

<sup>139</sup> Submission no. 156, NSW Environment Protection Authority, p 184.

<sup>140</sup> Submission no. 156, NSW Environment Protection Authority, p 184.

<sup>141</sup> Submission no. 156, NSW Environment Protection Authority, p 185.

<sup>142</sup> Submission no. 156, NSW Environment Protection Authority, p 185.

***Concerns with the technical process***

- 4.16** A key concern expressed by inquiry participants was that the ARTC's report on the first dust monitoring study, prepared by Environ, was not subjected to an adequate review process.<sup>143</sup>
- 4.17** The Hunter Community Environment Centre (HCEC) alleged that correspondence obtained by the Centre under freedom-of-information laws made clear that an internal review of the report conducted by the EPA and Office of Environment and Heritage had been rushed, with staff given between two and 48 hours to review and comment on a 60 page technical document in order to meet the deadline for a media plan. Correspondence obtained suggested that major deficiencies were identified, with reviewers finding 'plain bad calculations' and 'basic arithmetical mistakes'.<sup>144</sup>
- 4.18** The HCEC provided the following extract of an EPA internal email to demonstrate their concerns:

A couple of our technical experts have had a cursory review as part of the mad rush to get the media plan finalised but as yet they have not undertaken a proper adequacy review to determine the implications of the pilot study for the next stage. And no one has done a proper check to see if they implemented all our comments on the draft. I am also concerned by the amount of errors that Ina picked up through a quick review. There may be more errors that a thorough review by our boffins would pick up.<sup>145</sup>

- 4.19** In spite of these concerns of EPA officers, the report was not subject to further review.
- 4.20** During questioning by the committee, Mr Buffier was asked why a thorough independent peer review process was not undertaken, and a focus instead placed on releasing the report on time. Mr Buffier replied that at no stage did he consider the peer review to be something that was necessary to prove the veracity of the report or its findings – he believed the review was just a check to ensure 'that we were doing things properly':

We had some peer review type process within OEH and EPA. At this stage we had not long separated from OEH and we tended to operate fairly loosely as a team still and people within OEH and EPA had done a review of the work. I went to a meeting and I said, "Are you clear in your own minds that this meets the requirements that we would meet?" and I was given the answer, "Yes." I said, "Well that's good because subsequent to this I would like a peer review just to see if the process we have gone through was actually okay." So I never at any stage thought of the peer review as being something that was necessary to prove that the report was okay. It was a check to see—I was fairly new to this process—that we were doing things properly. That explains why I was saying that the peer review might occur afterwards because I was more concerned about our processes internally.<sup>146</sup>

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<sup>143</sup> Submission no. 164, Hunter Community Environment Centre, p 14.

<sup>144</sup> Submission no. 164, Hunter Community Environment Centre, p 14.

<sup>145</sup> Appendix G, Submission no. 164, Hunter Community Environment Centre, p 6.

<sup>146</sup> Evidence, Mr Barry Buffier, NSW Environment Protection Authority, 10 November 2014, p 4.



- 4.21 When the EPA made a media statement in response to the publication of the report, it was not made clear that the report had not been independently reviewed. Instead, the EPA's statement noted only the findings of the study, with a comment that 'further monitoring is required to expand on and verify these results':

EPA Chair and CEO Barry Buffier said the results provided by the ARTC suggest that there is no appreciable difference between the dust levels measured from the movement of loaded coal trains and other types of freight trains. However, further monitoring is required to expand on and verify these results'.<sup>147</sup>

### *Allegations of a cover-up*

- 4.22 In addition to the criticisms outlined above, the dominant concern expressed by inquiry participants in relation to the EPA's handling of the reports on the two coal dust monitoring studies centred on allegations that the EPA attempted to 'cover-up' or misinterpret the findings of the studies.
- 4.23 In relation to the report on the first dust monitoring study undertaken by Environ, the HCEC summarised their concerns as follows:

The report, 'Pollution Reduction Program 4: Particulate Emissions from Coal Trains', was released in late September 2012. The report concluded that concentrations coinciding with loaded and unloaded coal trains are statistically higher for PM10 and PM2.5 than concentrations recorded during passenger train passes.

The Chairman of the NSW EPA Mr Barry Buffier communicated the findings of ARTC's first report. Mr Buffier asserted that the report demonstrated no significant difference between the emissions associated with *different train types*. Mr Buffier's statements were inconsistent with the report's conclusions.<sup>148</sup> [emphasis added]

- 4.24 The HCEC cites several media articles in support of this claim.<sup>149</sup>
- 4.25 An analysis of the ARTC's report confirms that the report did find that particulate concentrations coinciding with loaded and unloaded coal train passes at Metford were statistically higher for PM10 and PM 2.5 than concentrations recorded during passenger train passes.<sup>150</sup> The media articles cited by HCEC in reference to comments purportedly made by Mr Buffier incorrectly stated that there was no difference between the particulate matter emitted by different train types, including passenger trains, the articles attributed the comments either to the ARTC report or to other individuals.<sup>151</sup>

<sup>147</sup> Submission no. 156, NSW Environment Protection Authority, p 185.

<sup>148</sup> Submission no. 164, Hunter Community Environment Centre, p 11.

<sup>149</sup> Submission no. 164, Hunter Community Environment Centre, p 13, citing 'Dust up on rail tracks', *Newcastle Herald*, 29 September 2012; 'Dust study released for Hunter coal trains', *Rail Express*, 3 October 2012; 'Minister dismisses coal train dust claim', *The Northern Daily Leader*, 17 March 2013.

<sup>150</sup> Australian Rail Track Corporation Ltd, *PRP4 – Particulate Emissions from Coal Trains*, September 2012, p 2.

<sup>151</sup> Submission no. 164, Hunter Community Environment Centre, p 13, citing 'Dust up on rail tracks', *Newcastle Herald*, 29 September 2012; 'Dust study released for Hunter coal trains', *Rail Express*, 3 October 2012; 'Minister dismisses coal train dust claim', *The Northern Daily Leader*, 17 March 2013.

- 4.26** In contrast, the EPA advised the committee that in response to an inquiry from the *Newcastle Herald*, Mr Buffier had advised that there was no appreciable difference between the dust levels measured from the movement of loaded coal trains and *other types of freight trains*. This remark is consistent with the findings of the report. The committee was not provided with evidence to demonstrate that Mr Buffier had stated that the first report had found that there was no difference between the particulate matter emitted by *all train types*.

### ***Committee comment***

- 4.27** Allegations were made that Mr Buffier implied that the findings of the first report had indicated that there was no significant difference between emissions from passenger trains and coal or freight trains. Having reviewed the evidence, the committee notes that while Mr Buffier's statement could have been clearer, and he could have endeavoured to spell out the difference in emissions between coal, freight and passenger trains, his statement made reference only to findings that there was no appreciable difference between coal trains and other types of *freight trains*. This reflects the findings of the ARTC report.
- 4.28** In view of the evidence provided to the committee, the committee can only conclude that the newspaper articles misrepresented the findings published in the first report, and these deductions were mistakenly attributed to comments made by Mr Buffier.
- 4.29** In regards to concerns that the findings of the first study were not subject to adequate analysis, the committee finds that the evidence provided would appear to support this claim.
- 4.30** The committee also believes that the EPA's failure to respond more quickly and proactively to the community's concerns regarding coal dust emissions may in turn have precipitated the subsequent rush to publish the results of the study before they had been subject to an adequate review process. The EPA imposed its first PRP on the ARTC in September 2008. The ARTC's subsequent report recommending a data gap analysis was not produced until February 2010. The EPA then took a further 18 months to impose the second PRP for the dust monitoring study on the ARTC. When the *Newcastle Herald* commenced its media campaign in July 2012, four years had elapsed since the EPA had first identified significant community concern around the issue of coal dust, yet the EPA was only able to advise that studies were being undertaken to inform any subsequent action. Therefore, by the time at which the findings of the first study were published, the EPA was already on the back-foot in responding to serious concerns amongst the community regarding coal dust.
- 4.31** Had the EPA attempted to acknowledge that it had concerns over the accuracy of the findings, and advise the public that it was necessary to delay publication in order to ensure that the findings had been adequately tested, the EPA may have averted much of the criticism and distrust that followed when flaws in the data and the absence of an independent review came to light.
- 4.32** The committee notes that the EPA has acknowledged that the science it undertakes or commissions should meet widely accepted standards of scientific rigour and has taken steps towards ensuring that that takes place. The committee makes further comment in this regard at 4.60.

## The third pollution reduction program

### *Timeline of events*

9 October 2012	<p><i>EPA imposed a third PRP on the ARTC requiring additional monitoring to verify the results of the pilot program</i></p> <p>The PRP sought to address two potential issues identified by the EPA in regards to the data collected during the first study: firstly, that the data had been gathered during a period of above-average rainfall that may have led to suppression of particulate matter from the coal wagons, and secondly, that it had not been possible to link the pass-by of particular train types with particulate levels at the Mayfield site. The second study was therefore restricted to the Metford site.<sup>152</sup></p>
November 2012 – January 2013	<p><i>Katestone Environmental Pty Ltd carried out second dust monitoring program</i><sup>153</sup></p>
November 2012	<p><i>Hunter Community Environment Centre wrote to NSW Government Ministers to raise concerns with the monitoring programs undertaken by ARTC and impacts of dust from coal trains in general</i><sup>154</sup></p>
4 December 2012	<p><i>EPA response to the concerns raised by the Hunter Community Environment Centre</i></p> <p>The EPA provided a response in writing, addressing each of the specific concerns raised by the group. A response was also provided for the Minister for Environment in response to an inquiry from <i>The Australian</i>. The response noted that the results of the first study suggested there was no appreciable difference between the dust levels measured from loaded coal trains and other types of freight trains, and advised that a second study was underway to determine to what degree coal trains do contribute to dust emissions and measures for redress that may be required.<sup>155</sup></p>
15 March 2013	<p><i>ARTC provides draft report on the second dust monitoring study to the EPA</i><sup>156</sup></p>
3 May 2013	<p><i>EPA requires that the ARTC amend its report to better reflect the methodology chosen and to verify the conclusions drawn</i></p> <p>Following a review of the report by officers of the EPA and air quality and statistics experts attached to the Office of Environment and Heritage, the EPA wrote to the ARTC to require that the report be amended to include further analysis, discussion, verification and clarification to confirm that the data presented in the report was sound, and to provide more robust answers to the questions posed by the PRP.<sup>157</sup></p>
24 May 2013	<p><i>EPA met with NSW Health to discuss how to communicate the findings of the report to the community</i></p> <p><i>EPA requests that Office of Environment and Heritage obtain an independent peer review of the ARTC's report</i></p> <p>On the same day that the EPA met with NSW Health to discuss communication of the report's findings, the EPA requested that the Office of Environment and Heritage facilitate an independent peer review of the report. The EPA advised the committee that it did so 'to increase scientific rigour around the issue and provide confidence in the findings of the report'.<sup>158</sup></p>

<sup>152</sup> Submission no. 156, NSW Environment Protection Authority, pp 184-185.

<sup>153</sup> Submission no. 156, NSW Environment Protection Authority, p 185.

<sup>154</sup> Submission no. 156, NSW Environment Protection Authority, p 185; Submission no. 164, Hunter Community Environment Centre, p 11.

<sup>155</sup> Submission no. 156, NSW Environment Protection Authority, p 186.

<sup>156</sup> Submission no. 156, NSW Environment Protection Authority, p 186.

<sup>157</sup> Submission no. 156, NSW Environment Protection Authority, p 186.

<sup>158</sup> Submission no. 156, NSW Environment Protection Authority, p 186.

28 May 2013	<p><i>ARTC provides final draft report on the second dust monitoring study to the EPA</i></p> <p>Following review, the EPA considered that the final report addressed the issues raised in feedback provided on 3 May 2013. However, the EPA advised the committee that following receipt of the final report, ‘the findings needed to be revised to address apparent contradictions between reported conclusions and the tabulated and graphed monitoring data’.<sup>159</sup> This revision, and a further error identified by the report author, resulted in 12 of the report’s 15 conclusions being modified, one deleted and three added.<sup>160</sup></p> <p><i>The Office of Environment and Heritage sent a request for an independent review to an expert from the Queensland University of Technology. The expert declined, and recommended Dr Luke Knibbs, environmental health lecturer and National Health and Medical Research Council research fellow, University of Queensland.</i></p>
30 May 2013	<p><i>ARTC published its report on the second dust monitoring study, prepared by Katestone Environmental Pty Ltd: Pollution Reduction Program 4.2 – Particulate Emissions from Coal Trains</i></p> <p>The report indicated there was no appreciable difference between the dust levels measured from the movement of loaded coal trains and other types of freight trains.<sup>161</sup></p>
31 May 2013	<p><i>EPA responded to media inquiries regarding the findings of the report</i></p> <p>The EPA stated that the report suggests there is no appreciable difference between dust levels measured from loaded coal trains and other types of freight trains. The statement did not indicate that an independent review will be commissioned.<sup>162</sup></p>
8 June 2013	<p><i>EPA formally engaged Dr Knibbs to undertake an independent review of the Katestone report<sup>163</sup></i></p>
11 June 2013	<p><i>Hunter Community Environment Centre published allegations of a cover-up</i></p> <p>Concerns were raised regarding the differences in conclusions between the draft report and the publicly released final Katestone report.<sup>164</sup></p>
12 June 2013	<p><i>EPA issued a media release refuting the allegations and advising that it had commissioned an independent review of the report<sup>165</sup></i></p>
1 July 2013	<p><i>Dr Knibbs provided a report on his review of the Katestone study</i></p> <p>Dr Knibbs concluded that there was a major error with the statistical analyses undertaken by Katestone which affected the ‘scientific rigour of the study and the robustness of its conclusions’.<sup>166</sup></p>
2 July 2013	<p><i>EPA requested the NSW Chief Scientist and Engineer to recommend a suitably qualified person to undertake a review of Katestone’s statistical analyses and, if necessary, a re-analysis<sup>167</sup></i></p>
3 July 2013	<p><i>EPA issued a media release advising the results of Dr Knibbs’ review<sup>168</sup></i></p>
9 July 2013	<p><i>EPA responds in writing to the Hunter Community Environment Centre’s allegations of a cover-up, explaining why changes were made to the final report and advising the outcome of Dr Knibbs’ review<sup>169</sup></i></p>

<sup>159</sup> Submission no. 156, NSW Environment Protection Authority, p 187.

<sup>160</sup> Submission no. 156, NSW Environment Protection Authority, p 187.

<sup>161</sup> Submission no. 156, NSW Environment Protection Authority, p 187.

<sup>162</sup> Submission no. 156, NSW Environment Protection Authority, p 187.

<sup>163</sup> Submission no. 156, NSW Environment Protection Authority, p 187.

<sup>164</sup> Submission no. 156, NSW Environment Protection Authority, p 187.

<sup>165</sup> Submission no. 156, NSW Environment Protection Authority, pp 187-188.

<sup>166</sup> Submission no. 156, NSW Environment Protection Authority, p 188.

<sup>167</sup> Submission no. 156, NSW Environment Protection Authority, p 188.

<sup>168</sup> Submission no. 156, NSW Environment Protection Authority, p 188.

<sup>169</sup> Submission no. 156, NSW Environment Protection Authority, p 188.

Early September 2013	<i>Professor Louise Ryan, Professor of Statistics at the School of Mathematical Sciences, University of Technology, Sydney engaged to undertake a thorough independent review of Katestone's statistical analysis (on the recommendation of the NSW Chief Scientist and Engineer)</i> <sup>170</sup>
18 September 2013	<i>Professor Ryan provided a report on her review of the Katestone report</i> The report found that there were significant limitations with the statistical analyses used in the Katestone report and recommended a re-analysis of the data. <sup>171</sup>
23 September 2013	<i>EPA issued a media release to advise of Professor Ryan's findings</i> <sup>172</sup>
October-November 2013	<i>Hunter Community Environment Centre received over 3,000 pages of documents from the EPA under a freedom of information request</i> <sup>173</sup>
Late January 2014	<i>EPA engaged Professor Ryan to undertake a full statistical re-analysis of ARTC's data</i> <sup>174</sup>
February 2014	<i>Hunter Community Environment Centre made public statements that the EPA had covered up evidence received from ARTC studies and misled the public. The statements were refuted by the EPA, who stood by their previous statements regarding the studies.</i> <sup>175</sup>
25 February 2014	<i>Professor Ryan provided her final report to the EPA: Re-analysis of ARTC data on particulate emissions from coal trains</i> The report found that loaded coal trains, empty coal trains and freight trains are associated with a statistically significant increase in particulate matter compared with background levels; and there was no evidence supporting difference between loaded coal trains, empty coal trains or freight trains with respect to associated levels of particulates. Professor Ryan noted that diesel emissions from locomotives may be a contributing factor to particulate levels. <sup>176</sup>
26 February 2014	<i>EPA issued a media release advising the findings made by Professor Ryan</i>

**4.33** Inquiry participants expressed additional concerns regarding the technical process, publication and veracity of findings of the report on the second monitoring study. These are discussed further below.

### ***Concerns with the technical process***

**4.34** In November 2013, in response to a request under the *Government Information (Public Access) Act 2009*, the HCEC received access to over 3,000 pages of correspondence on the PRP applied to the ARTC dated between September 2012 and June 2013.<sup>177</sup> Following analysis of these documents, the Centre identified the following concerns with the process by which the second monitoring study was conducted and then reviewed:

- The scope of ARTC's second study was reduced dramatically as a consequence of intra- and inter-departmental consultation, including a decision to drop the requirement to monitor in locations at variable distances from the rail corridor, to monitor in schools, to characterise particles in order to assess the proportion that are coal, and to use monitoring equipment that met Australian Standards.

<sup>170</sup> Submission no. 156, NSW Environment Protection Authority, p 189.

<sup>171</sup> Submission no. 156, NSW Environment Protection Authority, p 189.

<sup>172</sup> Submission no. 156, NSW Environment Protection Authority, p 189.

<sup>173</sup> Submission no. 156, NSW Environment Protection Authority, p 189; Submission no. 164, Hunter Community Environment Centre, p 13

<sup>174</sup> Submission no. 156, NSW Environment Protection Authority, p 189.

<sup>175</sup> Submission no. 156, NSW Environment Protection Authority, pp 189-190.

<sup>176</sup> Submission no. 156, NSW Environment Protection Authority, p 191.

<sup>177</sup> Submission no. 164, Hunter Community Environment Centre, p 13.

- The EPA did not require ARTC to monitor at more than one location in their second study. The first study had included monitoring at both Metford and Mayfield, whereas the second only included Metford. The Centre alleges that this decision was made in response to the ARTC's concerns regarding the cost of installing a wayside monitor at Mayfield.
- When the Katestone report was ultimately subjected to independent review, the terms of reference for the review explicitly excluded reviewing the monitoring methodology, despite concerns raised by staff of the Office of Environment and Heritage. Instead, the EPA stated their confidence in the methodology.<sup>178</sup>

**4.35** The EPA repeatedly advised the committee that the parameters for the second study were developed to address two particular concerns: the above-average rainfall that occurred during the pilot monitoring program, and to obtain a new dataset from the Metford site only as it had not been possible to accurately link dust levels to train types at the Mayfield site.<sup>179</sup>

**4.36** The HCEC also highlighted excerpts from statements made during the EPA's internal review that suggested that prior to the publication of the second report, and following receipt of the revised draft from the ARTC, EPA officers still had concerns that the shortcomings of the report's methodology and its subsequent findings had not been addressed.<sup>180</sup> In spite of this, the report was released. In keeping with the approach taken with the report on the first study, an EPA officer decided that meeting the deadline for publication should take priority over ensuring the accuracy of the results:

...it would be best for the report to be released on time even if the peer review is incomplete, rather than varying the [environment protection licence] to delay release for the sake of a peer review ... I think questions will be raised as to what is so wrong with the report that its release needs to be delayed for a review.<sup>181</sup>

### *Committee comment*

**4.37** The third pollution reduction program applied to the ARTC required additional monitoring for the purposes of verifying the results obtained during the pilot study. While the EPA and the Hunter Community Environment Centre have provided conflicting commentary on the process by which the parameters for the study were negotiated, the study ultimately produced a dataset that was sufficient for Professor Ryan to perform her re-analysis, and addressed the possibility that the unusually heavy rainfall experienced during the first study could have had the effect of suppressing the dust that arose from coal trains and coloured the results of the study. On balance, the committee considers the process by which the data was gathered to have achieved its intended purpose.

**4.38** The committee notes the Hunter Community Environment Centre's concern that the terms of reference for the review of the report excluded review of the monitoring methodology. The committee has considered the terms of both reports. Both express concerns with the method

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<sup>178</sup> Submission no. 164, Hunter Community Environment Centre, pp 14-15.

<sup>179</sup> Submission no. 156, NSW Environment Protection Authority, pp 184-185; Evidence, Mr Frank Garofalow, NSW Environment Protection Authority, p 5.

<sup>180</sup> Appendix G, Submission no. 164, Hunter Community Environment Centre, pp 11-13.

<sup>181</sup> Appendix G, Submission no. 164, Hunter Community Environment Centre, p 13.

by which the data was analysed and findings determined, but do not express concern with the process by which the data itself was collected.

### **Allegations of a cover up**

#### ***The Katestone report***

**4.39** The ARTC provided its draft report on the second study, prepared by Katestone, to the EPA on 15 March 2013. On 3 May 2013, the EPA required the ARTC to amend the draft report. The EPA explained that these amendments were required in order to ensure that the findings accurately reflected the questions posed by the pollution reduction program, and to explain how certain factors had informed the results:

On 3 May 2013, following a review of the report, including by OEHL's air quality technical advisers and statistics experts at the EPA's request, the EPA wrote to the ARTC requiring that the report be amended to include further analysis, discussion, verification and clarification to confirm that the data presented in it was sound and provide more robust answers to the questions posed by the PRP. In particular, the EPA considered the report did not adequately explain why the methodology used was chosen, how meteorological conditions, monitoring location and operation affected the results, and that the EPA would like the report to compare the new findings with the pilot monitoring program.<sup>182</sup>

**4.40** This revision, and a further error identified by the report author, resulted in 12 of the report's 15 conclusions being modified, one deleted and three added.<sup>183</sup>

**4.41** While the EPA acknowledged that these significant amendments were made to the report, they emphasised that in spite of the amendments made, 'both the final draft and final report had the same conclusion: there was no appreciable difference between the dust levels measured from the movement of loaded coal trains and other types of freight trains.'<sup>184</sup>

**4.42** In contrast, the HCEC alleged that the amendments made by the EPA were an attempt to tamper with the findings of the report and mislead the public. One week after the report was released, the Hunter Community Environment Centre and the Australian Greens were emailed what purported to be an earlier version of the report, dated 24 May 2013, from an undisclosed source. A comparison of the two reports made clear the changes that had been made prior to the final report being published. The Hunter Community Environment Centre were particularly concerned that three conclusions had been inverted to delete or insert the word 'no' or 'not' to reverse the report's findings and five conclusions were modified to significantly reduce the pollution levels associated with coal trains. According to the Hunter Community Environment Centre, the revelation that these amendments had been made was met with 'community outrage'.<sup>185</sup>

<sup>182</sup> Submission no. 156, NSW Environment Protection Authority, p 186.

<sup>183</sup> Submission no. 156, NSW Environment Protection Authority, p 187; Submission no. 164, Hunter Community Environment Centre, p 12. HCEC refers to '18' conclusions, rather than 15, as they have included the three new recommendations made within their tally.

<sup>184</sup> Submission no. 156, NSW Environment Protection Authority, p 187.

<sup>185</sup> Submission no. 164, Hunter Community Environment Centre, p 12.

- 4.43 These concerns were exacerbated when it later emerged that at the time at which the report was published, the public were not informed that the EPA had significant concerns about the quality of the report and had already commenced the process of commissioning an independent review. As noted earlier, following receipt of the ARTC's final report on the study, but prior to the report being made public, the EPA requested that the OEH commence the process of obtaining an expert to independently review the report. Despite this, the ARTC was still encouraged to publish the report by the agreed due date, and the EPA responded to media enquiries citing the findings made in the report. No mention was made of the EPA's intention to subject the report to a review process.<sup>186</sup>
- 4.44 When it later came to light that the report had been forwarded for independent review, the Hunter Community Environment Centre alleged that this decision had been made by the EPA in a rush to respond to the community's concern over the variations in the two reports and determine whether the conclusions reached were valid.<sup>187</sup>
- 4.45 The HCEC also alleged that despite the correction of major errors, and ARTC acknowledging that there is a difference between PM2.5 pollution associated with coal trains and other types of trains, the EPA maintained their statement that there was no difference.<sup>188</sup>
- 4.46 While the Hunter Community Environment Centre referred to a number of media articles published during this period, some of which do mistakenly state that the report found that there was no difference in the emission recorded from coal trains and *other types of trains*, none of these comments are attributed to the EPA.<sup>189</sup> In contrast, the EPA cited the contents of a number of media statements made during the period in which the second study was undertaken, in the months following the release of the report and in the months following the appointment of the independent reviewer, all of which make reference to report finding that coal trains do not produce more particle matter than other types of *freight trains*.<sup>190</sup> These statements reflect the findings of the Katestone report, and the findings of the re-analysis published by Dr Louise Ryan.<sup>191</sup>

### ***Committee comment***

- 4.47 The committee notes that allegations of a 'cover-up' are serious and have clearly fuelled concerns in the community both in regard to the effects of coal dust pollution and the performance of the EPA in regards to the study.

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<sup>186</sup> Submission no. 156, NSW Environment Protection Authority, p 187.

<sup>187</sup> Submission no. 164, Hunter Community Environment Centre, p 12.

<sup>188</sup> Submission no. 164, Hunter Community Environment Centre, p 15.

<sup>189</sup> Submission no. 164, Hunter Community Environment Centre, p 12, citing 'Covered wagons en route for coal', *Newcastle Herald*, 7 June 2013; 'ARTC says no need to cover coal trains', *ABC Online*, 31 May 2013; 'Study says coal trains not dustier than others', *Newcastle Herald*, 10 June 2013; 'Greens slam coal report', *Maitland Mercury*, 5 June 2013; 'Contentious dust study gets review', *Newcastle Herald*, 16 July 2013.

<sup>190</sup> Submission no. 156, NSW Environment Protection Authority, pp 186-190.

<sup>191</sup> Katestone Environmental Pty Ltd, *Pollution Reduction Program 4.2 Particulate Emissions from Coal Trains, prepared for Australian Rail Track Corporation Pty Ltd*, May 2013, Final, p vii; Professor Louise Ryan, *Re-analysis of ARTC Data on Particulate Emissions from Coal Trains*, 25 February 2014, p 3.



- 4.48** With regard to statements made to the media by the EPA, the committee finds that, in view of the evidence before it, the EPA has been consistent in its statements that coal trains do not produce more particle matter than other types of freight trains. These statements are supported by the findings made by Professor Ryan following her re-analysis of the monitoring data in early 2014.
- 4.49** With regards to allegations regarding changes made to the Katestone report, an analysis of the findings of the two reports makes clear that significant amendments were made. This is acknowledged by both the EPA and Hunter Community Environment Centre.
- 4.50** While the amendments requested by the EPA do clearly result in the reversal of a number of findings, the findings published in the final report, as amended, were later substantively confirmed by Professor Ryan's re-analysis.
- 4.51** These findings do not support the allegation that the EPA sought to misinform the public regarding the outcomes of the dust monitoring studies. However, the committee believes that it is understandable for the residents of the Hunter to be concerned that significant amendments had been made to the report prior to release. On not one but both occasions on which the EPA's experts expressed concern with the findings made in the reports on the monitoring studies, the EPA nevertheless allowed the reports to be published and spoke to the findings of the report. On the occasion of the second report, the EPA did not make any reference to the likelihood that the study would be subject to review, even re-analysis. When this information came to light, the EPA did not seek to explain why this had not previously been advised in their prior statements.

### **Lessons learned from the community's response to the dust monitoring studies**

- 4.52** In evidence to the committee, the EPA discussed the events related to the publication of the dust monitoring studies.

#### **Communication**

- 4.53** In response to the allegations made regarding the monitoring studies, Mr Buffier acknowledged that the EPA did not explain their processes clearly and that a lack of clarity in the statements made to the community had resulted in distrust:

What have we learnt from this vexed issue? We recognise that by not explaining our processes clearly and not communicating clearly in our public statements on the results of the studies, this has aroused a level of distrust in parts of the community. We could have done better in terms of our communication.<sup>192</sup>

- 4.54** The EPA further acknowledged that the lack of communication about work being undertaken led to the perception that action was not being taken; that the EPA's focus on smaller PM<sub>2.5</sub> and PM<sub>10</sub> particles did not recognise the community's concerns regarding larger particles and the associated amenity issues which could be seen as visible dust; that the EPA's complex technical approach led to a sense of disconnect and distrust of the independence of the EPA; and that barriers existed for the community to raise issues and possible solutions with the

<sup>192</sup> Evidence, Mr Barry Buffier, NSW Environment Protection Authority, p 4.

EPA.<sup>193</sup> The EPA did not acknowledge that it had not been forthcoming with the community with regards to the concerns expressed by experts in response to the findings made in the studies.

### ***Committee comment***

- 4.55** While the committee commends the EPA for acknowledging the limitations of its communication with the public and the media during the period in which the monitoring studies were undertaken, the committee reiterates its previous comments regarding the need for the EPA to learn from its tendency to focus only on meeting the deadline, to the detriment of scientific rigour and ensuring that the community can have faith in the information disseminated by the agency.
- 4.56** The committee believes that it would be prudent for the EPA to acknowledge the need for frank and open dialogue with the community, particularly where the information upon which it relies has not been subject to review and assessment or a review is underway.

### **Technical processes**

- 4.57** The EPA advised the committee that ‘the EPA firmly believes it has managed the technical component in a scientifically robust and credible manner’.<sup>194</sup> The EPA further stated that its decisions in relation to the investigation had been consistently based on the available scientific evidence and accurate and robust analysis of the data obtained:

With regard to the technical aspect of this matter, the EPA’s decisions in relation to the investigation and regulation of particle emissions from the operational rail network have been consistently based on the available scientific evidence. The above information demonstrates the rigour with which reports have been reviewed, commented on, and where necessary re-analysed, to ensure that the decisions are based on the most accurate and robust analysis of the data obtained. Review of technical reports by peers with equivalent technical expertise is a standard process in scientific work and the process undertaken in this case is consistent with EPA practice across all its technical work.<sup>195</sup>

- 4.58** The committee also heard that to ensure that the agency has robust scientific evidence on which to base its decisions, the EPA adopted the NSW Office of Environment and Heritages Scientific Rigour Position Statement in July 2013.<sup>196</sup> The statement outlines a process involving appropriate design of studies, meticulous implementation and objective analysis and reporting of results. In particular, the statement requires that the evidence supports results and conclusions, and that peer review occurs prior to publishing data, results and conclusions.<sup>197</sup>

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<sup>193</sup> Submission no. 156, NSW Environment Protection Authority, p 195.

<sup>194</sup> Submission no. 156, NSW Environment Protection Authority, p 194.

<sup>195</sup> Submission no. 156, NSW Environment Protection Authority, p 195.

<sup>196</sup> Submission no. 156, NSW Environment Protection Authority, p 191.

<sup>197</sup> NSW Office of Environment and Heritage, *Scientific Rigour Statement*, July 2013, accessed at <http://www.environment.nsw.gov.au/resources/research/OEHSciRigPosnStmntJul13.pdf>.

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***Committee comment***

- 4.59** While the committee concurs that the evidence received suggests that the EPA's decisions with regard to the findings and methodology for the studies were based on scientific evidence, the committee does not consider that due priority was given to authenticating the studies' findings *prior* to publication. Although the data analysis undertaken by Dr Ryan verified the statements made by the EPA, the statements were nevertheless made before the data had been verified and during a period when review of the data was either anticipated or already underway. The EPA should take a more cautious approach when issuing public statements in future.
- 4.60** The committee notes that the Scientific Rigour Position Statement adopted by the EPA emphasises the role of peer review prior to the publication of data, results and conclusions. The committee commends the EPA for their decision to adopt the Statement.

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**Recommendation 6**

That the NSW Environment Protection Authority consult with the new Chief Scientist and Engineer to review the air quality monitoring strategy in the Upper and Lower Hunter, including a survey of international data and policy responses to the issue, and request recommendations to devise a monitoring network that will assist with any knowledge gaps and strengthen the confidence of the community. The response from the NSW Environment Protection Authority should include its advice on the method of funding this monitoring network.

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**Recommendation 7**

That, in the event that the Chief Scientist recommends that all coal trains be fully covered and all empty wagons be washed to reduce coal dust emissions, the NSW Environment Protection Authority amend the relevant licences to adopt the Chief Scientist's recommendation.

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## Chapter 5 Groundwater contamination in the Pilliga

This chapter explores the EPA's response to groundwater contamination in the Pilliga. The chapter canvasses allegations made by community groups regarding the EPA's response to the leak, including the subsequent pollution reduction program issued by the EPA to the responsible entity. It concludes with a review of the current inter-agency arrangements that apply to the regulation of coal seam gas in New South Wales.

### Background

- 5.1** Santos Pty Ltd operates a coal seam gas facility in the Pilliga Region, approximately 20 kilometres south-west of Narrabri in central New South Wales. Part of the operations include the Bibblewindi Water Treatment Plant. The plant is the central water management facility for the site, and is comprised of three ponds which are used to hold water and brine produced during exploration and assessment.<sup>198</sup>
- 5.2** Prior to its acquisition by Santos in November 2011<sup>199</sup>, the coal seam gas site was owned by Eastern Star Gas. It was during their tenure that it was alleged there had been a number of unauthorised discharges of contaminated water into the Pilliga.<sup>200</sup>
- 5.3** In December 2011 Santos temporarily closed the site, including the Bibblewindi Water Treatment Plant, and undertook 'an operational review of the facilities'.<sup>201</sup> Arising from the review, Santos decided to keep the gas field shut, pending a redesign and the implementation of a revised water management plan, and commenced a broad rehabilitation program.<sup>202</sup>
- 5.4** As part of this rehabilitation program, Santos investigated the integrity of Bibblewindi Pond 3 and potential subsurface impacts. In early 2012, Santos retained an independent consultant engineer to carry out detailed volume studies on the pond. These studies did not show any unexplained volume losses, which implied that there had been no leakage from the pond. However, to further rule out any integrity issues, in May 2012, Santos retained an independent consultant to carry out further investigations.<sup>203</sup>

<sup>198</sup> Submission no. 156, NSW Environment Protection Authority, p 203; Submission no. 140, Santos Ltd, p 3.

<sup>199</sup> Submission no. 140, Santos Ltd, p 3.

<sup>200</sup> Submission no. 162, EDO NSW, p 19.

<sup>201</sup> Submission no. 140, Santos Ltd, p 3.

<sup>202</sup> Submission no. 140, Santos Ltd, p 3.

<sup>203</sup> Submission no. 140, Santos Ltd, p 3.

- 5.5** The second round of investigations utilised electrical testing techniques, which identified potential breaches in the liner. The testing found electrical conductivity between the pond and surrounds, which indicated a possible small seepage of pond water. Santos stressed to the committee that the findings of the second study had to be viewed within the context of the findings of the first study, which demonstrated that the volume lost through any pond liner integrity was very small.<sup>204</sup>
- 5.6** In response to the findings of the second study, on 18 May 2012 Santos provided the NSW Department of Trade and Investment, Regional Infrastructure and Services (DTIRIS) and the EPA with a copy of the consultant's findings, and notified the agencies that it had concerns regarding the integrity of the liner of Bibblewindi Pond 3. Between May 2012 and April 2012, Santos undertook further bore monitoring at the Bibblewindi Treatment Plant and, in January 2013, installed an additional eight subsurface monitoring bores near Bibblewindi Pond 3 (following consultation with the Department). Santos self-notified the results to the Department and to the EPA on 27 March 2013.<sup>205</sup>

## Response to the leak

- 5.7** Criticisms of the EPA's response to the leak have centred on several main themes: that the EPA did not respond to the leak in a timely manner; that the EPA's comments to the media and the community did not adequately convey or stress critical information, including that the spill included unsafe trace elements including uranium; that the EPA's decision to apply a penalty notice to Santos with a fine of \$1500 for the leak was an inadequate response; and that the EPA has failed to apply load limits on pollution from flaring at coal seam gas assessment sites in the Pilliga.<sup>206</sup> Each of these are explored in greater detail below.

### Timeliness of initial response

- 5.8** One of the principal concerns raised with the committee was that the EPA had 'sat on' notification of the leak for the period of almost one year, from May 2012 to March 2013.
- 5.9** Santos informed the committee that they had notified both the Department of Trade and Investment, Regional Infrastructure and Services and the EPA of the findings of their second study on 18 May 2012.<sup>207</sup>
- 5.10** The EPA's submission to the inquiry did not acknowledge receipt of this information.<sup>208</sup> However, when questioned by the committee, the EPA acknowledged that the letter was

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<sup>204</sup> Submission no. 140, Santos, p 3.

<sup>205</sup> Submission no. 140, Santos Ltd, p 3.

<sup>206</sup> Submission no. 114, Nature Conservation Council of NSW, pp 6-7; Submission no. 162, EDO NSW, pp 19-20; Submission no. 169, Wilderness Society, pp 3-11; Submission no. 156, NSW Environment Protection Authority, pp 2-4-205.

<sup>207</sup> Submission no. 140, Santos Ltd, p 3.

<sup>208</sup> Submission no. 156, NSW Environment Protection Authority, pp 203-210.

received, but was during a period in which the EPA was not the regulatory authority for coal seam gas. Instead, the Department was the regulator.<sup>209</sup>

- 5.11** As noted above, between the period in which Santos notified the Department and the EPA of the findings of the second study in May 2012, and the point at which the EPA became the official regulator in 2013, Santos undertook bore monitoring ‘in consultation with the Department’<sup>210</sup>. The EPA advised the committee that ‘no elevated levels of heavy metals in groundwater were identified by the EPA between the period May 2012 and March 2013’.<sup>211</sup> However, the EPA was not seeking to monitor the groundwater during this period, and acknowledged that they did not undertake any independent testing of the site.<sup>212</sup> Evidence provided to the committee, obtained by the Wilderness Society via a freedom of information application and referred to in evidence, indicates that a letter sent from Santos to the Department in November 2012 and forwarded to the EPA the following day acknowledged that results collected in October 2012 indicated highly varying electrical conductivity and concentrations of metals and cations across the site.<sup>213</sup>
- 5.12** In February 2013, the NSW Government announced new measures to strengthen coal seam gas regulation. This included appointing the EPA the lead environmental regulator for coal seam gas activities in New South Wales, and requiring all coal seam gas activities to have an environment protection licence.<sup>214</sup> While the announcement was made in February 2013, the EPA officially became the new regulator from 28 June 2013, from which date the relevant legislative amendments took effect.<sup>215</sup>
- 5.13** As noted above, on 27 March 2013<sup>216</sup>, Santos advised both the Department and the EPA of the results of additional bore monitoring, which had detected elevated levels of electrical conductivity in the water, indicating a possible leak in the pond liner.

<sup>209</sup> Evidence, Mr Mark Gifford, Chief Environmental Regulator, EPA, 24 November 2014, p 24; Answers to questions on notice, EPA, 14 November 2014, p 33. Prior to 28 June 2013, the only coal seam gas-related activities requiring an environment protection licence were those that produced more than five petajoules of gas per annum. The EPA advised the committee that there was, and is, only one production activity of that size in New South Wales, which is operated by AGL Rosalind Park at Camden. Environment protection licences were not required for CSG exploration, assessment or production below this limit. See Submission no. 156, NSW Environment Protection Authority, p 205.

<sup>210</sup> Submission no. 140, Santos Ltd, p 3.

<sup>211</sup> Answers to questions on notice, NSW Environment Protection Authority, 14 November 2014, p 33.

<sup>212</sup> Answers to questions on notice, NSW Environment Protection Authority, 14 November 2014, p 33.

<sup>213</sup> Evidence, Ms Katherine Fleck, 24 November 2011, p 47.

<sup>214</sup> Submission no. 156, NSW Environment Protection Authority, p 205.

<sup>215</sup> Submission no. 156, NSW Environment Protection Authority, p 205; Evidence, Mr Mark Gifford, EPA, 24 November 2014, p 10.

<sup>216</sup> The EPA advised that this notification was received on 26 March 2013. Answers to questions on notice, NSW Environment Protection Authority, 14 November 2014, p 33.

- 5.14** The committee heard contradictory evidence regarding the event that triggered the EPA's response in March 2013. In its submission to the inquiry, the EPA advised that it commenced its formal investigation following receipt of notification of the leak from Santos on 26 March 2013.<sup>217</sup> However, in evidence to the committee, the Chief Environmental Regulator, Mr Mark Gifford, advised the committee that the EPA first became aware of the leak when the EPA conducted a series of site inspections in response to their new role as regulator:

To provide further context, prior to 28 June 2013 the EPA was not the regulator for all facets of coal seam gas activities... In February 2013, the Government announced that the EPA would take on an expanded role for the regulator of the environmental issues associated with coal seam gas... When that announcement was made the EPA then determined that it would be good regulatory practice to undertake site inspections of known coal seam gas activities because we had not been a regulator of those activities in the past. In the course of undertaking those inspections, one was undertaken at Santos' Pilliga facility. That is when the EPA became aware of the particular issue to which you referred.<sup>218</sup>

- 5.15** Documents obtained by the Wilderness Society suggest that the 'Issue alert' was signed off by Mr Gifford on 26 March 2013. Much of the alert focused on actions to be undertaken by Santos, placing responsibility for the response with the company itself, rather than the EPA or an external body<sup>219</sup>, a decision likened by one inquiry participant to 'putting the fox in charge of the henhouse'.<sup>220</sup> When questioned by the committee as to the integrity of this decision, Mr Gifford told the committee that this was simply the EPA requiring Santos to undertake actions, rather than the EPA authorising Santos to self-regulate its own activities:

I would not characterise that as Santos self-regulating its own activities. That was the EPA requiring Santos to undertake actions, and part of the challenge for us at that time was that we were not the regulator. We were not the regulator until 28 June 2013.<sup>221</sup>

### *Committee comment*

- 5.16** The committee acknowledges that the EPA was not the official regulator at the time at which they were first notified of the leak by Santos. Regulatory responsibility for the matter clearly fell within the purview of the Department of Trade and Investment, Regional Infrastructure and Services and Santos acknowledged that the additional bore monitoring undertaken had been implemented in consultation with the Department.
- 5.17** However, the committee considers that the EPA has been less than clear in its statements regarding their response to the leak at the Bibblewindi Water Treatment Plant.
- 5.18** In view of the evidence provided to the committee, the committee is of the view that the EPA is likely to have commenced action in 2013 because, following the Minister's announcement in

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<sup>217</sup> Submission no. 156, NSW Environment Protection Authority, p 206.

<sup>218</sup> Evidence, Mr Mark Gifford, NSW Environment Protection Authority, 24 November 2014, pp 9-10.

<sup>219</sup> Evidence, Mr Mark Gifford, NSW Environment Protection Authority, 24 November 2014, p 24.

<sup>220</sup> Submission no. 95, Mrs Sarah Ciesiolka, p 2.

<sup>221</sup> Evidence, Mr Mark Gifford, NSW Environment Protection Authority, 24 November 2014, p 24.



February 2013, they understood that responsibility for the incident at Bibblewindi would soon fall within its purview. Having received further advice of the leak in March 2013, the EPA quite rightly commenced an investigation to determine the nature of the issue, even though its formal regulatory role would not commence until June 2013.

- 5.19** The EPA stressed to the committee that it had responded to the notification in March 2013, three months prior to the EPA officially becoming the regulator for the matter. The EPA believed that it therefore ought to be commended for the timeliness of its response. The committee believes that confusion and accusation could have been avoided had the EPA more clearly articulated to the community and interest groups its reasons for not responding to the first notifications received in May and November 2012. The EPA has, until recently, routinely stated that commenced its investigation on receiving notification of the incident in March 2013. The committee considers the EPA should have been clearer as to when it received notifications, what were its responsibilities, when did those responsibilities commence and how the agency responded.

#### **Timeliness of subsequent response**

- 5.20** The EPA advised the committee that the agency commenced its formal investigation of Santos immediately following the March 2013 notification, and within 24 hours had contacted NSW Health and the NSW Office of Water.<sup>222</sup>
- 5.21** The committee heard that, as a result of its initial investigation, the EPA determined that:
- the leak was small, localised and contained
  - the groundwater was barely moving and therefore not a likely exposure pathway
  - the nearest private stock and domestic water source was more than four kilometres away
  - the nearest drinking water source was more than five kilometres away.<sup>223</sup>
- 5.22** Issues of aquifer connectivity were referred by the EPA to the NSW Office of Water, which advised that there was no threat to water supplied for irrigation or stock and domestic use.<sup>224</sup> Mr Barry Buffier, Chief Executive Officer, told the committee that the EPA determined very early in the investigation that the leak posed a low-risk:

Our assessment of this right from when we came to understand the situation was that this was a low-risk situation for human health and the environment because it was small-scale, isolated and localized and there was no exposure pathway, and our view of that risk assessment has not changed. I agree that it is at odds with some of the headlines, but that is the reality of our risk assessment of this situation...<sup>225</sup>

<sup>222</sup> Submission no. 156, NSW Environment Protection Authority, p 206.

<sup>223</sup> Submission no. 156, NSW Environment Protection Authority, p 206.

<sup>224</sup> Submission no. 156, NSW Environment Protection Authority, p 206.

<sup>225</sup> Evidence, Mr Barry Buffier, NSW Environment Protection Authority, p 11.

**Uranium levels**

**5.23** Much of the community concern surrounding the leak at Bibblewindi centered around the possibility that the leaked water contained unsafe levels of trace elements, including arsenic, lead, barium, boron, aluminium and nickel, and levels of uranium that were 20 times over the safe drinking level.<sup>226</sup>

**5.24** Both Santos and the EPA advised that the elevated levels of trace elements identified, including those of uranium, were largely the result of seeping water leaching the naturally occurring minerals out of the surrounding soils and clays.<sup>227</sup>

**5.25** Santos stressed to the committee that there was no uranium identified in the pond water, and that those levels identified in the surrounding soils needed to be viewed in the context of the levels already naturally occurring in soils:

For context, the highest elevated uranium content found in our monitoring bores was 335 micrograms per litre. Naturally-occurring soils across Australia can be anywhere between 300 to more than 700 micrograms per kilogram. By contrast, the Namoi River sediments have naturally-occurring concentrations of ca. 800 micrograms per kilogram.<sup>228</sup>

**5.26** The EPA informed the committee that the uranium found in the water in the perched watertable had been mobilized by water in the pond, which was highly saline and highly alkaline.<sup>229</sup> However, the levels deeper in the aquifer, which in the EPA's view would have posed the greater threat, were very low, suggesting there was little connectivity between the perched watertable and the aquifer:

... We know that the uranium levels in the perched watertable were quite high, which was the issue that was in the public arena. The uranium levels by the time it got down to the deeper aquifer were much lower. That is how we know that there was some connection but not a very significant connection... [The uranium level in the watertable] was 335 micrograms per litre against an ANZECC guideline for stock watering of 200. If that water in the perched watertable was used for stock watering, which it was not, then it was above where you would want it to be... The aquifer – it was down to 30, as opposed to an ANZECC guideline for stock watering of 200, which is why we were saying that our assessment of the risk of that situation was that it was low risk because the nearest bore was four kilometres away.<sup>230</sup>

**5.27** In contrast to the assurances provided by the EPA, several inquiry participants questioned the adequacy of the EPA's response and their choice not to inform the public of the leak during

<sup>226</sup> Submission no. 162, EDO NSW, p 20; Submission no. 114, Nature Conservation Council of NSW, pp 6-7; Submission no. 95, Mrs Sarah Ciesiolka, p 1.

<sup>227</sup> Submission no. 140, Santos Ltd, p 3; Evidence, Mr Mark Gifford and Mr Barry Buffier, NSW Environment Protection Authority, 13 October 2014, pp 12-13.

<sup>228</sup> Submission no. 140, Santos Ltd, p4.

<sup>229</sup> Evidence, Mr Barry Buffier, NSW Environment Protection Authority, pp 12-13.

<sup>230</sup> Evidence, Mr Barry Buffier, NSW Environment Protection Authority, p 13.

the investigation process.<sup>231</sup> In support of these concerns, inquiry participants cited correspondence obtained from the EPA by the Wilderness Society in response to a freedom of information request, which they allege suggests that:

- The EPA ignored its own internal advice to go public on the leak from the ponds so that they could be seen to be active and on the front foot. Instead, they followed Office of Coal Seam Gas advice cautioning against singling Santos out, thereby choosing not to release vital information to the public.
- The EPA did not pass on critical information and documents regarding the contamination to NSW Health, instead asking Santos for permission to release the information. The permission was not granted.
- The EPA allowed Santos to run the investigation into their leaking ponds.
- The EPA chose not to talk to surrounding landholders around the groundwater contamination zone, even though they knew for some months that uranium contamination had taken place, and did not know if locals were drinking that water.
- On the advice of the Office of Coal Seam Gas, the EPA sat on a detailed 'holding statement' about the contamination event for months which was watered down and then never released.
- The EPA wrote a vague media statement about the pollution incident and \$1500 fine after the investigation was closed and uploaded the media release to their website, only actually emailing the news to one media outlet, a newspaper in Narrabri. That newspaper chose not to publish the pollution incident or fine.<sup>232</sup>

**5.28** In response to these allegations, the EPA acknowledged that the media and the community had expressed concern regarding the timeliness of the EPA response, but considered that their response was 'satisfactory' and 'timely'.<sup>233</sup> The EPA went on to express confidence in their consultation process with other agencies and in their assessment of the possible risks posed to the community and the environment:

The investigation was appropriate and considered possible health and environmental risks. The EPA consulted relevant agencies such as NSW Health, the Department of Primary Industries, NSW Office of Water and Office of Coal Seam Gas. Communications with NSW Health occurred within 24 hours of the EPA being notified of the incident ...<sup>234</sup>

**5.29** The EPA asserted that it had remained accessible and had engaged proactively with media outlets and community groups, but did acknowledge that 'it did not anticipate or take action to pre-empt the level of community concern regarding this matter, particularly since this was the first known case of coal seam gas operations impacting groundwater in New South

<sup>231</sup> Submission no. 169, Wilderness Society, pp 3-11; Submission no 132, Lock the Gate Alliance, pp 3; Submission no. 114, Nature Conservation Council of NSW, p 7.

<sup>232</sup> Submission no. 114, Nature Conservation Council of NSW, p 7; Submission no. 169, Wilderness Society, p 3-5, 8-11; Submission no. 132, Lock the Gate Alliance, p 5; Evidence, Ms Naomi Hogan, Newcastle Campaign Manager, Wilderness Society, 24 November 2014, pp 48-49

<sup>233</sup> Submission no. 156, NSW Environment Protection Authority, pp 207-208.

<sup>234</sup> Submission no. 156, NSW Environment Protection Authority, p 208.

Wales'.<sup>235</sup> The EPA further acknowledged that it could have publicised the penalty more widely, but attributed the omission to an oversight rather than a policy decision:

The EPA issued a media release on 18 February 2014 to one local media outlet and placed the media release on its public website. The EPA agrees that it could have broadcast the incident more widely, noting that this was inadvertent due to an oversight rather than to a specific policy decision. A procedure is now in place to ensure a consistent approach to the release of information.<sup>236</sup>

- 5.30** The EPA did not respond to the specific allegations made by other inquiry participants regarding the advice provided by the Office of Coal Seam Gas or the alleged decision to withhold information.

*Committee comment*

- 5.31** The committee notes that the EPA stated that, following assessment of the leak at the water treatment plant, it was confident that the leak was contained and of very little immediate threat to either the community, stock or the environment. The committee acknowledges that the EPA's response was largely informed by this assessment, and that some of the criticisms by the Wilderness Society canvassed the period in which the EPA was not the regulator.
- 5.32** Nevertheless, the committee concurs with the EPA in its assessment that it could have done more to inform and engage with the community regarding the leak, particularly in view of the significance of the leak as the first case in New South Wales of groundwater (unconnected to aquifers) impacted by coal seam activity waste water treatment.
- 5.33** The committee believes that the 'oversight' that limited the distribution of the media release to only one outlet does not warrant the EPA's assessment that the agency 'engaged proactively with media outlets and community groups'. The community has a right to expect more of the independent regulator. The committee is pleased that the EPA has introduced new procedures to ensure a more consistent approach to the release of information in future.
- 5.34** The committee notes the high level of community concern about the health and environmental impacts of the coal seam gas industry, and recommends that investigations into significant pollution incidents should be led by independent experts working with the NSW Environment Protection Authority, not the coal seam gas company under investigation.

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**Recommendation 8**

That, in consideration of the high level of community concern about the health and environmental impacts of the coal seam gas industry, investigations into significant pollution incidents should be led by independent experts working with the NSW Environment Protection Authority, not the coal seam gas company under investigation.

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<sup>235</sup> Submission no. 156, NSW Environment Protection Authority, p 208.

<sup>236</sup> Submission no. 156, NSW Environment Protection Authority, p 208.

### Adequacy of the penalty applied

- 5.35** Significant criticism was also made of the penalty applied to Santos. Some inquiry participants argued that the penalty was inadequate, while others argued that issuing a penalty notice was a ‘soft option’ that was favored over more stringent measures such as a prosecution.<sup>237</sup>
- 5.36** The EPA completed its investigation in November 2013 and, after seeking expert advice, concluded that the leak had polluted the groundwater, which qualified as a statutory offence. The EPA advised that its response to the offence comprised two elements.
- 5.37** Firstly, in 2014, under Santos’ environment protection licence, the EPA issued the company with a pollution reduction program (PRP) that required the development and implementation of a groundwater remediation and monitoring plan to address the contaminated water in the aquifer.<sup>238</sup> This is discussed further at paragraphs 5.43 to 5.45.
- 5.38** Secondly, the EPA fined Santos the statutory amount of \$1500 for ‘polluting water as the result of a poorly maintained holding pond leaking and impacting on groundwater’.<sup>239</sup> The EPA advised that, in determining the appropriate sanction for Santos’ actions, the EPA was guided by the EPA Compliance Policy and EPA Prosecution Guidelines, and determined that the following factors were of particular relevance in this case:
- The harm or potential harm to the environment caused by the offence was low.
  - Evidence suggested that most of the leak had been contained to the shallow perched groundwaters which were reported to be isolated, with no known access by nearby landholders.
  - Although samples collected from the deeper groundwater showed that some bores contained elevated levels of uranium and electrical conductivity, the deeper aquifer flowed slowly at approximately 0.003 metres per year. The closest bore to the site was a stock and domestic listed bore that was located over four kilometres away.
  - The ponds were installed in 2006, and operations ceased in December 2011, with use of Pond 3 limited since that time.
  - Santos had voluntarily approached the NSW Government with concerns about the integrity of the pond liner and commenced monitoring to ascertain possible impacts, taking measures to address the leak.
  - Other alternatives to prosecution were available, namely the use of a penalty notice.
  - The PRP applied to the site required significant remediation work, estimated to cost Santos in excess of \$10 million.
  - Santos had been proactive in addressing the impacts and cooperated with the EPA throughout its investigation.<sup>240</sup>

<sup>237</sup> Evidence, Ms Naomi Hogan, NSW Coordinator, Wilderness Society, 24 November 2014, p 50; Submission no. 169, Wilderness Society, pp 3-11; Submission no 132, Lock the Gate Alliance, p 5; Submission no. 114, Nature Conservation Council of NSW, p 7.

<sup>238</sup> Submission no. 156, NSW Environment Protection Authority, p 206.

<sup>239</sup> Submission no. 156, NSW Environment Protection Authority, p 207.

<sup>240</sup> Submission no. 156, NSW Environment Protection Authority, p 207.

- 5.39** Mr Gifford told the committee that the EPA's response sought to address the leak comprehensively to ensure that in addition to the penalty applied, the EPA could be confident that the environmental impact was addressed:

The important point also with that particular response is that it was not simply about whether or not there should be a prosecution or penalty notices; our response was about ensuring that environmental impact was addressed, that controls were put in place, that there were mitigation strategies and remediation strategies, and that is what we put in place to ensure that Santos undertook those works to achieve that.<sup>241</sup>

- 5.40** The EPA maintained that the penalty notice was appropriate in the package of measures put together to manage the incident, but acknowledged that the size of the penalty notice amount was met with controversy. The EPA stressed that, at the time, the agency had applied the statutory penalty notice amount available under the legislation, and welcomed a recent legislative amendment that saw the statutory penalty amount increase from \$1500 to \$15,000.<sup>242</sup>

### *Committee comment*

- 5.41** The committee acknowledges that members of the community have concerns regarding the monetary value of the penalty, but note that the pollution reduction program applied appears to be comprehensive in its scope, and steps have been taken to address the statutory limitations that previously prevented a more substantial fine being issued to the company. It is important that penalty notices are significant enough to give an incentive for companies to be proactive in protecting the environment. The committee is generally satisfied with the EPA's performance in this regard.

### **Load limits**

- 5.42** In evidence to the committee, the Lock the Gate Alliance drew attention to environment protection licence conditions applied to Santos' coal seam gas activities in the Pilliga which provide approval for the site to emit hazardous chemicals such as benzene, benzo(a)pyrene, fine particulates, hydrogen sulphides, nitrogen oxides, sulfur oxides and volatile organic compounds, with no limits imposed. Similar licence conditions apply to other coal seam gas sites under the EPA's purview.<sup>243</sup> Ms Georgina Woods, New South Wales Coordinator for the Lock the Gate Alliance, attributed the absence of load limits to a culture of adaptive management in which the EPA regulates in response to what happens rather than applying the precautionary approach to prevent dangerous levels of emissions:

... there is a culture of adaptive management that says we will see what happens and then we will regulate in response to what happens ... It is a suck-it-and-see sort of approach. Adaptive management is sort of the buzz word, in my our view, for a risky industry like coal seam gas it does not seem to us appropriate to not take the precautionary approach right from the outset.<sup>244</sup>

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<sup>241</sup> Evidence, Mr Mark Gifford, NSW Environment Protection Authority, 13 October 2014, p 12.

<sup>242</sup> Submission no. 156, NSW Environment Protection Authority, p 208.

<sup>243</sup> Submission no. 132, Lock the Gate, pp 3-4; Evidence, Ms Georgina Woods, New South Wales Coordinator, Lock the Gate Alliance, p 57

<sup>244</sup> Evidence, Ms Georgina Woods, New South Wales Coordinator, Lock the Gate Alliance, p 57.

- 5.43 When questioned by the committee as to the absence of load limits, Mr Gifford advised the committee that the load limit is not necessary in order for the scheme to operate effectively:

The licence goes to two separate things. One is about the concentrations of particular pollutants, and that is both to air and water. Secondly, as is the case with a particular activity licence, they sometimes go to identifying pollutants that are subject to our load base licencing scheme. So those two are different things. The conditions of a licence around discharges, monitoring and concentration, are about the potential for acute impact from the activity. The load base licencing scheme is essentially an economic incentive. What it seeks to do is look at the overall load of pollutants discharging into an environment and allocate a cost per pollutant and by doing that seek to drive down the overall load of pollutants from any particular activity. So the load limit is not necessary in order for that scheme to operate effectively.<sup>245</sup>

*Committee comment*

- 5.44 The committee believes that the NSW Environment Protection Authority should conduct a comprehensive review of its licensing procedure for hazardous chemicals. The review should examine the appropriateness of granting environmental protection licences that do not provide clear limits with respect to the use of hazardous chemicals. Further, the review should also consider the appropriate recourse to be taken against a licensee for failing to maintain concentrations within specified limits.

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**Recommendation 9**

That the NSW Environment Protection Authority conduct a comprehensive review of its licensing procedure for hazardous chemicals. The review should examine the appropriateness of granting environmental protection licences that do not provide clear limits with respect to the use of hazardous chemicals. Further, the review should also consider the appropriate recourse to be taken against a licensee for failing to maintain concentrations within specified limits.

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**Rehabilitation of the pond**

- 5.45 The legally binding pollution reduction program applied to Santos under the company's environment protection licence required that Santos develop and implement a groundwater remediation and monitoring plan to address the contaminated water in the acquifer.<sup>246</sup>
- 5.46 The committee heard that Santos is constructing a new \$30 million water storage and treatment facility with double lined ponds and an alarmed leak detection system for its Narrabri operations at Leewood. The committee was advised that on the completion of this facility, water from Bibblewindi ponds will be transferred to the new facility and treated, with the leaking pond then either repaired or decommissioned.<sup>247</sup>

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<sup>245</sup> Evidence, Mr Mark Gifford, NSW Environment Protection Authority, pp 23-24.

<sup>246</sup> Submission no. 156, NSW Environment Protection Authority, p 206.

<sup>247</sup> Submission no. 156, NSW Environment Protection Authority, p 207.

- 5.47** The committee was advised in the hearings by the Wilderness Society that they remain unsatisfied with the rehabilitation and condition of the site:

Unfortunately the rehabilitation that we have seen on the surface has not been successful. It still has not cleaned up the aquifer; it is still contaminated with heavy metals.<sup>248</sup>

- 5.48** This has not been verified by the EPA or an independent review.

### **The EPA's regulation of the coal seam gas industry into the future**

- 5.49** As noted earlier, in February 2013, the EPA became the lead regulator for all coal seam gas activities in New South Wales with impacts on human health and the environment. The committee heard that as part of preparations to regulate the industry, the EPA inspected all major NSW sites undertaking coal seam gas activities, including exploration, assessment and production, with the aim of assessing the environmental performance of the industry in relation to the management of environmental risks. These reviews were completed in September 2013 and assisted the EPA to develop environment protection licence conditions for CSG facilities and inform ongoing programs for the industry.<sup>249</sup>
- 5.50** In November 2014, the EPA assumed additional regulatory responsibilities for all environmental compliance and enforcement. Mr Gifford explained that the effect of these new arrangements will be that while the Office of Coal Seam Gas will continue to issue licences, the EPA will be responsible for compliance and enforcement of the petroleum titles issued.
- 5.51** The committee also heard that the NSW Government is acting to increase penalties for environmental offences. The EPA advised that penalty amounts for ten of the most serious, including many applicable to coal seam gas activities, have been raised from \$1,500 to \$15,000 and include: the pollution of waters; standards of air impurities exceeded or failure to take all practicable measures or failure to take all practicable measures to manage fugitive air emissions; failure to comply with a condition of an environment protection licence; and failure to hold a licence for scheduled activities.<sup>250</sup>

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<sup>248</sup> Evidence, Ms Hogan, Wilderness Society, p 50.

<sup>249</sup> Submission no. 156, NSW Environment Protection Authority, p 209.

<sup>250</sup> Submission no. 156, NSW Environment Protection Authority, p 210.



## Chapter 6 The prosecution of Du Pont

This chapter discusses the series of events connected to the EPA's attempt to prosecute Du Pont (Australia) Pty Ltd for alleged land pollution in the western Sydney suburb of Girraween<sup>251</sup> and reasons why the prosecution was ultimately unsuccessful. The chapter also discusses improvements made to Du Pont's facilities following the legal proceedings and potential avenues for redress in similar situations in the future.

### Background

- 6.1** Since 1969, Du Pont (Australia) Pty Ltd has operated a factory at Girraween in western Sydney where it manufactures herbicides using the chemical metsulfuron methyl (MSM). The company has held an environment protection licence (EPL) under the *Protection of the Environment Operations Act 1997* since 2001.<sup>252</sup>
- 6.2** Between April and May 2011, Du Pont manufactured two products called Ally 60 and Ally 75, both of which contained a high proportion of MSM.<sup>253</sup> From July 2011, the EPA<sup>254</sup> began to receive reports that hundreds of trees and other plants within one kilometre of the road on which the factory was located had suffered symptoms of dieback. In total, 112 complaints were received.<sup>255</sup>
- 6.3** In response to these complaints, the EPA undertook a 'thorough and exhaustive' investigation, which was one of the largest the agency had undertaken. It involved the collection of over 180 affidavits and witness statements from residents, business owners and others, and the collection of 295 samples from vegetation and other places within the area. Many of the samples showed the presence of MSM, with those samples taken closest to Du Pont's factory generally showing the highest levels of the chemical.<sup>256</sup>
- 6.4** The investigation found that there appeared to be a strong connection between Du Pont's production of Ally 60 and Ally 75 and the dieback of local vegetation. The dieback had commenced from late April, in keeping with the time at which the herbicides were produced. Investigators were not able to identify any other source of the MSM in the area, and the mixture of chemicals found in a stack in the factory were very similar to the mixture found in the environment outside the factory. Most of the damage to the vegetation was downwind of the factory. The EPA concluded that other possible causes of damage, such as fungi or tree diseases, were unlikely to have caused the types of damage that occurred in the area.<sup>257</sup>

<sup>251</sup> The committee notes that the bulk of the information received during the inquiry in regard to the Girraween chapter was received from the NSW Environment Protection Authority.

<sup>252</sup> Submission no. 156, NSW Environment Protection Authority, p 212.

<sup>253</sup> Submission no. 156, NSW Environment Protection Authority, p 212.

<sup>254</sup> Prior to February 2012, the Office of Environment and Heritage exercised the powers of the Environment Protection Authority.

<sup>255</sup> Submission no. 156, NSW Environment Protection Authority, p 211.

<sup>256</sup> Submission no. 156, NSW Environment Protection Authority, p 211-212.

<sup>257</sup> Submission no. 156, NSW Environment Protection Authority, p 212, 214.

- 6.5 Nevertheless, while considerable evidence showed that vegetation in the area had browned off or died from approximately late April 2011, there was no direct scientific evidence or ‘smoking gun’ linking the death of the vegetation to being poisoned with MSM.<sup>258</sup>

## Legal proceedings against Du Pont

- 6.6 Following its investigation, in April 2012 the EPA commenced prosecution proceedings against Du Pont in the Land and Environment Court for an alleged offence of land pollution. The EPA contended that dust containing MSM had escaped from Du Pont’s factory sometime during April and May 2011, leading to the death or damage of hundreds of suburban trees and garden plants.<sup>259</sup> The EPA stated that this charge period was determined based on the evidence it had gathered, in particular the production records discovered during its investigations.<sup>260</sup>
- 6.7 Du Pont pleaded not guilty to the charge and a trial commenced on 25 June 2013. The EPA informed the committee that, ‘as there was no direct evidence of a discharge, the EPA’s case had to rely on circumstantial evidence linking Du Pont to the incident’. Du Pont consistently maintained that there had been no emission from its premises to cause the impacts on the trees and other plants in the vicinity of its factory.<sup>261</sup>
- 6.8 The EPA noted that, at a very late stage in the process, Du Pont put forward an argument to the Court that the EPA could not exclude the possibility that the samples it had collected showing the presence of MSM could have been emitted by Du Pont either prior to, or after, the charge period that the EPA had put before the Court.<sup>262</sup> In light of this argument, the EPA sought advice from its Senior Counsel, who advised that the EPA should apply to the Court to amend the charge period by extending it both before and after the period comprising April to May 2011. The committee was informed by the EPA that it is not unusual for prosecutors to seek to amend the particulars of their charges, including charge periods, when new information comes to light before the trial commences, or during the trial when the prosecutor’s case is being heard.<sup>263</sup>
- 6.9 However, the application to amend the charge period was refused by the court, on the basis that amending the charge period would amount to a substantially different charge than that charge originally laid. Subsequently, Senior Counsel advised the EPA that a successful outcome on the original charges was unlikely.<sup>264</sup>

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<sup>258</sup> Submission no. 156, NSW Environment Protection Authority, p 213-214.

<sup>259</sup> Submission no. 156, NSW Environment Protection Authority, pp 211-212.

<sup>260</sup> Submission no. 156, NSW Environment Protection Authority, pp 212.

<sup>261</sup> Submission no. 156, NSW Environment Protection Authority, p 213.

<sup>262</sup> Submission no. 156, NSW Environment Protection Authority, p 213.

<sup>263</sup> Submission no. 156, NSW Environment Protection Authority, p 215.

<sup>264</sup> Submission no. 156, NSW Environment Protection Authority, p 213, 215.

**6.10** The EPA advised that, at that point in the proceedings, Du Pont's costs were likely to have been over half a million dollars, and the EPA's costs had already exceeded that amount.<sup>265</sup> If the case had continued and the EPA was unsuccessful, Du Pont's costs would have been substantially higher. Du Pont agreed that if the EPA withdrew the charge, it would not seek a costs order. In view of the agency's duty to spend public resources responsibly and the legal advice received, the EPA withdrew the charge against Du Pont.<sup>266</sup>

### Why was the prosecution unsuccessful?

**6.11** The EPA told the committee that their legal advice was that there were reasonable prospects of success in the prosecution. It was noted that while it would have been preferable to have had admissions or direct, eyewitness evidence, the case could still be proved on circumstantial evidence. The EPA had been unable to identify any other potential cause of the damage to the vegetation or any other source of MSM in the area surrounding the Du Pont factory.<sup>267</sup>

**6.12** However, the EPA was met with a strong and unwavering defence by Du Pont which combined:

- *Denial of the charges:* It is the EPA's experience that licensees generally make frank admissions when incidents occur on their premises and provide information to the EPA so that swift remedial action can be taken. In contrast, Du Pont completely denied any wrongdoing for the duration of the investigation until very late in the process, a period of almost two years.<sup>268</sup>
- *An aggressive challenge to the EPA's expert evidence:* Du Pont obtained a six month adjournment to the listing of a hearing date to enable them to engage experts to undertake testing and analysis of pesticide impacts in preparation for the trial. Three weeks prior to the hearing, Du Pont served 30 pages of objections to the EPA's evidence, comprising what the EPA described as a 'multi-pronged attack' on the evidence the agency was relying on to prove the offence. In contrast, only eight pages of facts were agreed to by the parties prior to the hearing.<sup>269</sup>
- *A change in strategy:* During the trial, Du Pont shifted its position from complete denial of responsibility for the offence to an argument that the company could be responsible for the pollution, but that the EPA could not definitely prove that the company had caused the pollution within the alleged charge period. This argument rested on the fact that other products which contained very small amounts of MSM had been produced close to the relevant time, but after the charge period laid by the EPA. Du Pont opposed the EPA's application to amend the charge period to accommodate this argument and, as noted earlier, the application was subsequently dismissed by the trial judge.<sup>270</sup>

<sup>265</sup> The EPA advised that it spent approximately \$577,00 on the Du Pont matter. The figure included legal, investigatory laboratory and internal experts' costs. Submission no. 156, NSW Environment Protection Authority, p 213.

<sup>266</sup> Submission no. 156, NSW Environment Protection Authority, pp 213, 215.

<sup>267</sup> Submission no. 156, NSW Environment Protection Authority, p 215.

<sup>268</sup> Submission no. 156, NSW Environment Protection Authority, pp 215-216.

<sup>269</sup> Submission no. 156, NSW Environment Protection Authority, p 216.

<sup>270</sup> Submission no. 156, NSW Environment Protection Authority, p 216.

- *A large, well-resourced legal team.* Du Pont's legal team comprised two senior counsel, at least four solicitors, one in-house counsel and a number of expert witnesses.<sup>271</sup>

## **Public engagement during and after the prosecution process**

- 6.13** The committee heard that the damage caused to vegetation in Girraween received considerable media exposure, and featured in the local newspaper, the Sydney Morning Herald, the Sun Herald, the Today Tonight program on Channel Seven and on radio, and was debated in Parliament.<sup>272</sup>
- 6.14** In response, the EPA undertook a range of activities to engage with the community and keep people informed during the investigation, including:
- issuing four letters to the community advising on progress at various times in the investigation
  - responding to numerous inquiries from the local media
  - meeting with individual affected residents
  - following the EPA's withdrawal from the prosecution, the EPA's Chief Environmental Regulator, Mr Mark Gifford, gave a number of radio and newspaper interviews.<sup>273</sup>

## **Outcomes following the withdrawal of legal proceedings**

### **Improvements at Du Pont's facilities**

- 6.15** In April 2012, the EPA issued a variation of Du Pont's environment protection licence which added a pollution reduction program (PRP) that required a Herbicide Air Impact Assessment. The EPA noted that 'the objective of the PRP was to account for the accumulation of any active herbicide ingredients from the site on soil, trees, plants and other human-made structures and to also account for the persistence of each herbicide ingredient'. The aim of the PPP was to determine if an appropriate licence limit for the herbicides could be established.<sup>274</sup>
- 6.16** The EPA advised that since its investigation, Du Pont has voluntarily installed additional controls to its facilities, including filters and monitoring equipment to reduce the risk of pesticide material being emitted from their activities. The EPA told the committee that when they conducted a site assessment to confirm that the additional filters were in place, they had noted that 'the controls in place at the time of the incident were adequate to control pesticide emissions but the additional filters provided extra protection'.<sup>275</sup>

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<sup>271</sup> Submission no. 156, NSW Environment Protection Authority, p 216.

<sup>272</sup> Submission no. 156, NSW Environment Protection Authority, p 217.

<sup>273</sup> Submission no. 156, NSW Environment Protection Authority, p 217.

<sup>274</sup> Submission no. 156, NSW Environment Protection Authority, p 218.

<sup>275</sup> Submission no. 156, NSW Environment Protection Authority, p 218.

### Tree Management Program

- 6.17** In response to the concerns of residents and industry owners who believed their vegetation had been damaged or killed by Du Pont's herbicide, the EPA sought approval from the Environmental Trust for the release of up to \$200,000 in compensation to pay for the assessment and removal of trees that might pose a risk to residents or the community under the Girraween Dangerous Tree Management Program, developed with Holroyd City Council. The EPA considered this was the best option for achieving a quick and effective clean-up of the damage, in view of the likelihood that Du Pont would refuse to accept responsibility for any clean-up activities.<sup>276</sup>
- 6.18** The arborist engaged under the program assessed 51 properties as part of the dangerous tree management program, and 25 properties had trees removed or trimmed, at a total cost of \$79,109.<sup>277</sup>

## Lessons from the Du Pont prosecution for the future

### Lessons for the EPA

- 6.19** The EPA told the committee that it will explore legislative changes to ensure that it has the option of taking civil legal action in the courts for damages, which has a lower burden of proof. The EPA determined that in the Du Pont case, this would have meant that for the relevant charge period the EPA would have had only to demonstrate that, on the balance of probabilities, the discharge took place in that period.<sup>278</sup>

### Duties on polluters

- 6.20** In evidence to the committee, the Environmental Defenders Office (EDO) stated that, in view of the limited evidence and distinct lack of assistance from Du Pont in this matter, the case demonstrated the potential benefits of imposing corporate duties on licensees as a means of deterrence to minimise pollution.<sup>279</sup>
- 6.21** The EDO observed that many Australian jurisdictions such as Queensland, South Australia, Tasmania, the Australian Capital Territory and the Northern Territory make it unlawful to carry out any activity likely to cause environmental harm, unless all reasonable and practicable measures are taken to prevent or minimise the harm.<sup>280</sup> Some jurisdictions also adopt an

<sup>276</sup> Submission no. 156, NSW Environment Protection Authority, p 217.

<sup>277</sup> Submission no. 156, NSW Environment Protection Authority, pp 217-218.

<sup>278</sup> Submission no. 156, NSW Environment Protection Authority, p 218.

<sup>279</sup> Submission no. 162, Environmental Defenders Office, p 22.

<sup>280</sup> Submission no. 162, Environmental Defenders Office, p 9 citing ss 440, 443 of the *Environment Protection Act 1994 (Qld)*, ss 3 and 82 of the *Environment Protection Act 1993 (SA)*, and G. Bates, *Environmental Law in Australia*, p 616.

offence for causing environmental nuisance, including environmental harm through pollution or contamination.<sup>281</sup>

**6.22** To address these issues, the EDO drew attention to two recommendations made in its report *Clearing the Air*.

- the EPA's responsibilities for regulating air, water and land pollution should be specified in the legislation as enforceable duties. These duties should require that the EPA sets and reviews lists of pollutants and emissions standards, and impose best practice standards on all licensed facilities.
- legislation should impose a general duty on all facility operators to prevent or minimise environmental harm arising from their activities.<sup>282</sup>

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<sup>281</sup> Submission no. 162, Environmental Defenders Office, p 9 citing s 15 of the *Environmental Protection Act 1994 (Qld)* and s 3 of the *Environmental Protection Act 1993 (SA)*.

<sup>282</sup> Submission no. 162, Environmental Defenders Office, p 9, citing Environmental Defenders Office and Nature Conservation Council of NSW, *Clearing the air: Opportunities for improved regulation of pollution in New South Wales*, 2012, p 6.

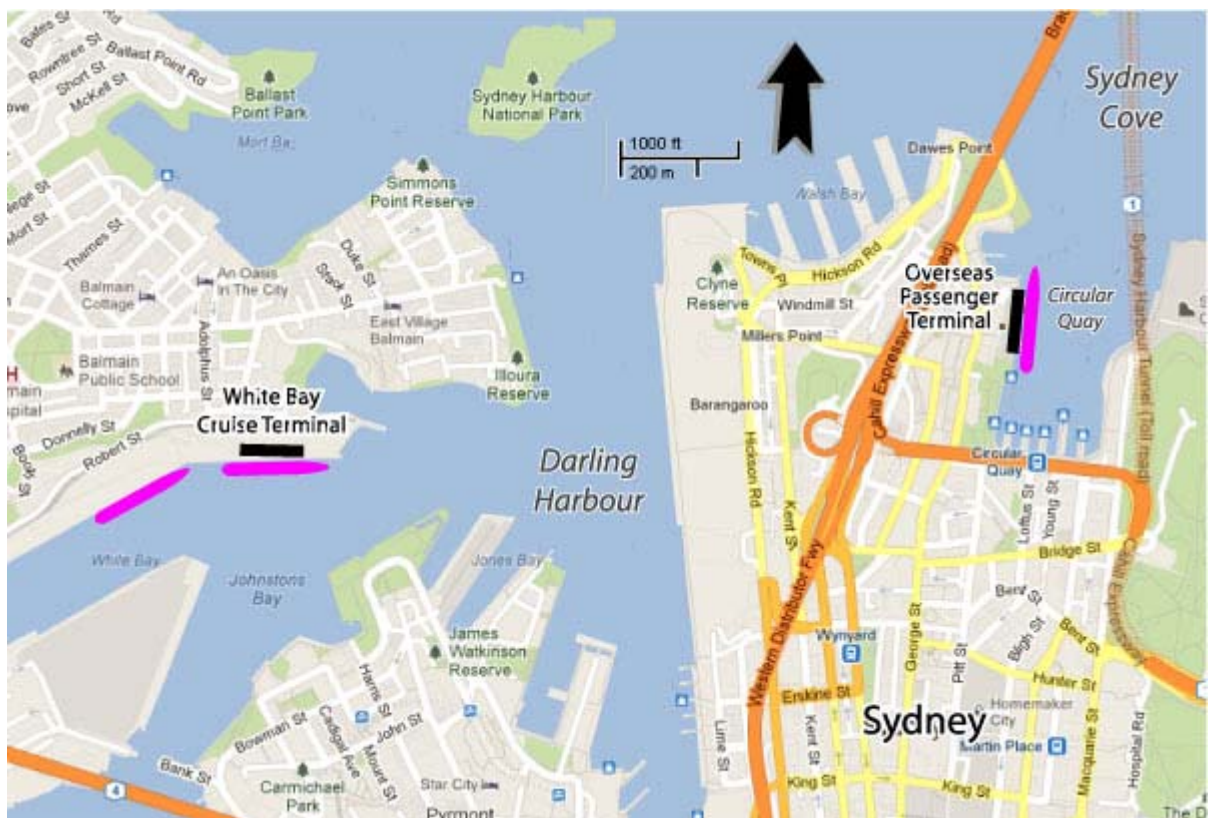
## Chapter 7 Cruise passenger ships at White Bay

This chapter examines the role of the EPA in responding to the impact of harmful emissions from cruise ships following the relocation of Sydney's second cruise ship terminal to White Bay. The chapter provides a summary of the impacts experienced by residents and canvasses the EPA's response. Possible measures for redress that are currently under the consideration of the EPA and other regulatory authorities are also discussed.

### The White Bay Cruise Terminal

7.1 The White Bay Cruise Terminal is one of Australia's major international and domestic tourism gateways and is owned and operated by Sydney Ports. As shown in Figure 1, the terminal sits directly parallel to the inner western Sydney suburb of Balmain, a high density residential area. Within Balmain are numerous preschools, primary and high schools and the suburb is one of the most densely populated in Sydney.<sup>283</sup>

Figure 2 White Bay cruise terminal location



Source: See Cruisewer - <http://www.cruisewer.com/wp-content/uploads/2013/12/sydney-cruise-port-map.jpg>

283 Submission no. 244, Ms Lisa Campbell, p 1.

- 7.2** For many years, Sydney's passenger cruise ship terminal was located at Barangaroo, on the opposite side of the harbour to Balmain. While berthed at Barangaroo, the prevailing wind distributed ship emissions across the harbour, ensuring minimal impact for surrounding residential areas.<sup>284</sup> In September 2008, the NSW Government began to explore options for moving the terminal, with a view to redeveloping the Barangaroo site and relocating the terminal to White Bay.<sup>285</sup>
- 7.3** A considerable number of groups objected to the proposal to relocate the cruise terminal to White Bay, including Leichhardt Municipal Council, the City of Sydney Council, North Sydney Council, Woollahra Council, the Barangaroo Action Group, the Friends of Barangaroo, the National Trust, and the Tourism and Transport Forum.<sup>286</sup>
- 7.4** Nevertheless, in 2011 the NSW Government granted approval to the Port Authority of NSW (Sydney Ports) to construct a new cruise terminal at White Bay. The terminal commenced operation in April 2013. Cruise ships dock at Berth 5 and, on occasion, an additional cruise ship is at Berth 4 at the same time.<sup>287</sup> In the 2014 calendar year, some 101 cruise ships berthed at the White Bay Terminal. The Port Authority expects the number of cruise ships visiting Sydney to increase by approximately 20 per cent in the coming years and ship berths are booked approximately two years in advance.<sup>288</sup>
- 7.5** While historically the greater White Bay port has been used as a working harbour and discharge point for various cargo ships, the committee heard that Berths 4 and 5, which directly border residential areas, did not comprise part of the working harbour. This was a result of a community protest that occurred in the 1960s. The ships that did enter White Bay operated from the other wharves available and did not significantly impact on the surrounding community.<sup>289</sup>
- 7.6** The new cruise ship terminal lies adjacent to Balmain's residential area, which sits high on the top of a cliff face. For this reason, when sizeable multi-story cruise ships are at berth, emissions from the ship funnels flow directly into homes, parks and other amenities.<sup>290</sup> Hence the current operations of the cruise ship terminal are in stark contrast to the operations of the old cargo wharves. Ms Katrina Horrobin, a resident of Balmain in a street bordering the terminal, stated emphatically that 'these ships are fundamentally different to anything that has ever entered White Bay'.<sup>291</sup>

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<sup>284</sup> Evidence, Councillor Rochelle Porteous, Mayor, Leichhardt Municipal Council and Ms Katrina Horrobin, 13 October 2014, pp 28-29.

<sup>285</sup> Submission no. 156, NSW Environment Protection Authority, p 222.

<sup>286</sup> Submission no. 146, Mr Jamie Parker MP, Member for Balmain, p 1.

<sup>287</sup> Submission no. 156, NSW Environment Protection Authority, p 223.

<sup>288</sup> Submission no. 156, NSW Environment Protection Authority, p 223.

<sup>289</sup> Evidence, Councillor Rochelle Porteous, Mayor, Leichhardt Municipal Council and John Stamolis, White Bay-Rozelle Precinct Group, 13 October 2014, pp 23-24.

<sup>290</sup> Submission no. 128, Name Suppressed, p 2; Submission no. 127, Name suppressed, pp 1-2; Submission no. 143, Mrs Jane Sampson, p. 1.

<sup>291</sup> Evidence, Ms Katrina Horrobin, White Bay-Rozelle Precinct Group, 13 October 2013, p 23.



## The impact on residents

- 7.7 The committee received many submissions from concerned residents of Balmain detailing the impacts that the relocation of the terminal has had on them due to diesel emissions, noise and vibrations from the ships. Ms Katrina Horrobin, a spokesperson for the White Bay-Rozelle Precinct Group, described the experience of many residents in the area:

In the months following the terminal opening, local residents started to notice that we were getting sick. We had kids getting asthma for the first time, adults with worsening respiratory conditions, nausea, heart palpitations and bronchitis, just to name a few. We were also overpowered by the strong acrid smell from the thick smoke spewing out of the ship funnels, located at the same level as our houses. We needed to close all our windows and doors but the fumes came in anyway. We became trapped and started to experience headaches, lethargy and eye irritations.

As neighbours we started talking to each other and we realised that we were not alone and we began to wonder what was causing this outbreak of health symptoms, so we did some research and it became painfully clear. Imagine our incredulity at the realisation that our high-density family community, which very unusually is located only metres from the terminal, was being exposed to such significant health risks as a result of grossly inadequate regulation which lags so far behind other countries.<sup>292</sup>

- 7.8 In addition to medical symptoms experienced, the noise and vibrations from the ships have reportedly caused severe insomnia for residents. Residents reportedly cannot open windows or doors, sit outside to enjoy their balconies or gardens, or enjoy sporting activities in the local parks due to the fumes that pervade the area.<sup>293</sup>
- 7.9 Mr Ryan Cole, Manager, Compliance and Enforcement, Leichhardt Municipal Council, also spoke about the lifestyle impacts, and explained that the historic housing stock that is characteristic of the Balmain area has not been built to withstand the heavy vibrations that emanate from the ships:

... A lot of the time when the ships are powering up or coming in they vibrate. This is an old area. A lot of houses have not been designed to deal with this. So vibrations are felt through houses and windows start rattling. Another issue is air quality. A lot of people say they cannot even walk outside their kitchen door without getting an influx of odour and toxins – it is similar to walking next to an old diesel bus.<sup>294</sup>

## The regulatory framework

- 7.10 The EPA advised that the shipping industry operates in a complex regulatory environment 'where international and national dimensions interact with a mosaic of regulatory responsibilities of various New South Wales agencies'.<sup>295</sup> In comparison to the EPA's jurisdiction over the environmental performance of other industries, the EPA is somewhat

<sup>292</sup> Evidence, Ms Katrina Horrobin, White Bay-Rozelle Precinct Group, 13 October 2013, p 19.

<sup>293</sup> Submission no. 127, Name suppressed, p 2.

<sup>294</sup> Mr Ryan Cole, Manager – Compliance and Enforcement, Leichhardt Municipal Council, 13 October 2014, p 22.

<sup>295</sup> Submission no. 156, NSW Environment Protection Authority, p 221.

restricted in its capacity to regulate shipping as it is not the consent authority for that industry. The industry operates to both an international and a state based regulatory framework.

- 7.11** In the context of the international and national framework, the rules for the prevention of marine environment pollution by ship operations or accidents are outlined in the International Convention for the Prevention of Pollution from Ships, or MARPOL, since 1988. As an international treaty, MARPOL does not of itself have the force of law within Australia but is implemented by national or state legislation. Under MARPOL, limits are set on the nitrogen oxide emissions from engines and the sulphur content of shipping fuels.<sup>296</sup>
- 7.12** In the context of the state-based regulatory framework, under the former Part 3A of the *Environment Planning and Assessment Act 1979*, the Department of Planning and Environment approved the project plan for the terminal. The project approval is the primary tool for managing the cruise passenger terminal and cruise operations at White Bay.<sup>297</sup> The project approval included noise limits and noise and air quality monitoring requirements, among other conditions. The EPA advised the committee that, to the extent that a licensee operates within these conditions, the licensee does not commit a pollution offence. The Department of Planning and Environment is responsible for enforcing compliance with, and responding to breaches of, the project approval conditions.<sup>298</sup>
- 7.13** The EPA told the committee that it had two roles in relation to the project approval: an advisory role in the planning process (discussed at paragraphs 7.23 to 7.28), and assistance to the Department with technical aspects relating to the Department's responsibilities for compliance (paragraphs 7.35 to 7.39).<sup>299</sup>
- 7.14** While the *Protection of the Environment Operations Act 1997* contains a list of scheduled activities that require an environment protection licence, which captures most industries operating in New South Wales, it does not include cruise ship and terminal operations. As a result, White Bay Berth 4, which is mainly used for bulk shipping, is licensed by the EPA but Berth 5, which is used solely for passenger ships, is not.<sup>300</sup>

### **Enforcement**

- 7.15** The EPA advised that the *Protection of the Environment Operations Act 1997* and associated regulations<sup>301</sup> all contain offences and regulatory tools relevant to the operation of a cruise ship terminal.<sup>302</sup> The powers of enforcement for these different offences and regulatory tools are shared across a range of New South Wales government agencies, including the EPA, Roads and Maritime Services, NSW Police and local government. The allocation of these responsibilities is determined by the context of the offending activity (eg whether it is

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<sup>296</sup> Submission no. 156, NSW Environment Protection Authority, p 224.

<sup>297</sup> Submission no. 156, NSW Environment Protection Authority, p 225.

<sup>298</sup> Submission no. 156, NSW Environment Protection Authority, p 225.

<sup>299</sup> Submission no. 156, NSW Environment Protection Authority, p 225.

<sup>300</sup> Submission no. 156, NSW Environment Protection Authority, p 225.

<sup>301</sup> Protection of the Environment Operations (Clean Air) Regulation 2010 and Protection of the Environment Operations (Noise Control) Regulation 2008.

<sup>302</sup> Submission no. 156, NSW Environment Protection Authority, p 225.

committed by a public authority, a vessel in navigable waters, or a licensee under the Act). The EPA told the committee that it works closely with its relevant counterparts to ensure issues arising in this context are managed lawfully and by the appropriate regulatory authority.<sup>303</sup>

### *Clean air regulation*

- 7.16** The EPA has a role in regulating ship emissions at the terminal.<sup>304</sup> Ships are generally powered by large diesel turbines operating on lower quality fuel oil. The regulation of the sulphur content of fuel under the Act has been in place since the Clean Air (Plant and Equipment) Regulation 1997 and is currently reflected in s 58 of the Clean Air Regulation. The committee heard that the regulation of sulphur fuel was originally put in place to regulate land based, stationery source industrial emissions and at the time of its development regulation of the shipping industry was not considered.<sup>305</sup>
- 7.17** The regulation of the sulphur content in fuel under the Clean Air Regulation limits the maximum sulphur content of liquid fuel burnt in New South Wales to 0.5 per cent by weight in the Sydney, Wollongong, Newcastle or Central Coast metropolitan areas and 2.5 per cent elsewhere. However, the definition of these metropolitan areas does not extend to the waters of Sydney Harbour.<sup>306</sup>

### *Limitations set by the Project Approval*

- 7.18** Inquiry participants observed that assessment modelling criteria for the terminal relied on air quality monitoring data provided by the EPA's monitoring stations at Callan Park in Rozelle, a considerable distance from the location of the terminal parallel to the heart of Balmain. Local area conditions were not accounted for as it was assumed that the air quality in Rozelle would be similar to that in Balmain.<sup>307</sup> Therefore, toxicity levels that may have led to enforcement action being taken were likely to have appeared much lower during the monitoring rounds than would otherwise have been the case had the monitoring been situated closer to the White Bay Terminal.
- 7.19** Local residents also explained that the decision to apply the National Environment Protection Measure for air pollution emissions, rather than the World Health Organisation guidelines that apply overseas, resulted in a much higher level of emissions being permitted. Residents argued that the World Health Organisation's air quality guidelines were the most appropriate standards to apply to emissions. The 2005 WHO guidelines set the assessment criteria for air pollution emissions at the following levels:

PM<sub>10</sub> – 24 hour mean 50µg/m<sup>3</sup>

PM<sub>2.5</sub> – 24 hour mean 25µg/m<sup>3</sup>

<sup>303</sup> Submission no. 156, NSW Environment Protection Authority, p 225.

<sup>304</sup> Submission no. 156, NSW Environment Protection Authority, p 226.

<sup>305</sup> Submission no. 156, NSW Environment Protection Authority, p 226.

<sup>306</sup> Submission no. 156, NSW Environment Protection Authority, p 226.

<sup>307</sup> Submission no. 21, Name suppressed, p 1; Evidence, Ms Rochelle Porteous, Mayor, Leichhardt Municipal Council, 13 October 2014, p 20.

Nitrogen dioxide (NO<sub>2</sub>) – 1 hour mean 200µg/m<sup>3</sup>

Sulphur dioxide (SO<sub>2</sub>) – 24 hour mean 20µg/m<sup>3</sup>.<sup>308</sup>

**7.20** In contrast, the final approval for the terminal provided for only two criteria and these were based on the relevant National Environment Protection Measure:

SO<sub>2</sub>                    24 hour mean 228µg/m<sup>3</sup>

PM<sub>10</sub>                 24 hour mean 50 µg/m<sup>3</sup>.<sup>309</sup>

**7.21** This resulted in the approval of a sulphur content of fuel used by the cruise ships 35 times higher than is allowed within urban residential areas of USA or Europe.<sup>310</sup> It has therefore been difficult to prosecute the industry for breaches, as most cruise ship activity falls within the high emission levels set.

**7.22** The committee was told that the EPA was aware of the pollution dangers of using fuel with a high sulphur concentration, but never specified a lower sulphur concentrate as a condition of approval.<sup>311</sup> Mr Les Johnson, a resident of Balmain, observed that authorities in countries such as the United States of America regulate ships sailing close to urban areas to retrofit the vessel with alternative technology to reduce air emissions, and while the EPA was aware of this option it was not specified as a condition of approval.<sup>312</sup>

## The EPA's performance in regulating the impact of cruise ships

### Input during the planning process

**7.23** The committee heard that, as part of the planning and consultation process, the EPA attended regular planning meetings with the Department of Planning and Environment and provided comments at each stage of the planning process, in the context of environmental assessment. The EPA asserted that they had advised on a number of factors, including air and noise emissions, odour, water pollution, contamination, waste management, public transport and future operations at the port.<sup>313</sup> In particular, the EPA commented on air quality and greenhouse gas emissions reduction objectives, the need for a feasibility assessment of shore-side power for cruise operations to reduce emissions, improve air quality and reduce noise, and provided advice on managing contaminated materials and noise monitoring.<sup>314</sup>

<sup>308</sup> WHO Air quality guidelines for particulate matter, ozone, nitrogen dioxide and sulphur dioxide. Global Update 2005. Summary of risk assessment.  
([http://whqlibdoc.who.int/hq/2006/WHO\\_SDE\\_PHE\\_OEH\\_06.02\\_eng.pdf?ua=1](http://whqlibdoc.who.int/hq/2006/WHO_SDE_PHE_OEH_06.02_eng.pdf?ua=1))

<sup>309</sup> Submission 116, Carnival Australia, p 3.

<sup>310</sup> Submission 128, Name suppressed, p 3.

<sup>311</sup> Submission 128, Name suppressed, p 4.

<sup>312</sup> Submission 119, Les Johnston, p 9.

<sup>313</sup> Submission no. 156, NSW Environment Protection Authority, p 222.

<sup>314</sup> Submission no. 156, NSW Environment Protection Authority, p 222.

**7.24** Of particular note, the EPA advised the committee that during the planning process, the EPA had become aware of the potential for exceedences of noise criteria arising from the operation of the terminal and minor exceedences of the maximum 24-hour average sulphur dioxide and PM10 cumulative concentrations.<sup>315</sup> The EPA addressed these issues by providing suggested conditions of approval that included:

- recognising that low sulphur fuel would significantly reduce air quality impacts (but the EPA had concerns about enforcing this requirement)
- requiring a detailed assessment of odour impacts and implementation measures to prevent odour emissions
- stating that shore-to-ship power would be the most effective and innovative way to reduce air pollutants
- noting that the environmental assessment had not assessed the impacts of overnight berthing of two ships.<sup>316</sup>

**7.25** However, the EPA told the committee that, in spite of their contribution, ‘some of these recommendations were adopted in the conditions of approval while others were not: the [Department of Planning and Environment], for example, considered it was not appropriate to require the use of shore power’.<sup>317</sup>

**7.26** The EPA also told the committee that the agency did not anticipate the magnitude of the impacts the new terminal would have on the Balmain community:

The planning process did not identify all of the air quality issues that subsequently came to light once the terminal began operations... In relation to air emissions, the environmental assessment broadly expected there to be very little impact using the criteria in the National Environment Protection (Ambient Air Quality) Measure (AAQ NEPM). The environmental assessment indicated that cruise operations at the terminal would – and in practice do – meet the AAQ NEPM criteria and as a result the EPA did not anticipate the magnitude of impacts to community.<sup>318</sup>

**7.27** Inquiry participants’ primary concern with the EPA’s role in the preliminary planning process and subsequent development application approval requirements was that as the state’s environmental regulator, the EPA should have done more to ensure that the planning assessment process took into consideration the full and likely impact of the relocation of the terminal to White Bay. Ms Rochelle Porteous, Mayor of Leichhardt Municipal Council, summarised the sentiments of the community in this regard:

The environmental protection agency did not ensure the amenity of residents was adequately addressed during the planning stages for the White Bay cruise terminal. It could have imposed a requirement for shoreside power, a requirement of many north hemisphere cruise ship terminals, but it did not. It could have required stronger controls of sulphur dioxide concentrates, nitrous oxides and particulates; it did not. It could have required the retro-fitting of scrubbers, new exhaust gas cleaning systems

<sup>315</sup> Submission no .156, NSW Environment Protection Authority, p 222.

<sup>316</sup> Submission no. 156, NSW Environment Protection Authority, pp 222-223.

<sup>317</sup> Submission no. 156, NSW Environment Protection Authority, p 223.

<sup>318</sup> Submission no. 156, NSW Environment Protection Authority, p 223.

on all ships berthed in White Bay; it did not. And very crucially, it could have and should have required Sydney Ports to do comprehensive and ongoing monitoring of air, odour and noise pollution for the entire period of time that the port was in operation. Instead, it allowed the monitoring of Sydney Ports to cease after one year, and that was in terms of the requirements of the [Development Application]. Now the monitoring equipment has been removed from the area.<sup>319</sup>

- 7.28** The deficiencies of the process led inquiry participants to conclude that the EPA was ‘powerless’ in its attempts to exert any real influence with other government authorities.<sup>320</sup>

### **The EPA response to residential complaints**

- 7.29** The EPA received over 300 complaints regarding operations at the White Bay Cruise Terminal between November 2013 and June 2014.<sup>321</sup>

### *Determining who was responsible*

- 7.30** The EPA advised the committee that as soon as the complaints commenced, they began to examine the complex question of who was responsible for what and the powers available to the EPA and other New South Wales and Commonwealth agencies to take action.<sup>322</sup>

### *Review of air quality monitoring studies conducted by the Ports Authority*

- 7.31** Between September and December 2013, the Port Authority undertook two monitoring studies to assess the impacts of air emissions, including sulphur dioxide and PM10 particles, from the terminal against the criteria set in the Project Approval air quality assessment.<sup>323</sup>
- 7.32** The community expressed concerns about the adequacy of this monitoring. The studies were not conducted in the residential streets adjacent to the cruise ship funnels. Instead, they were carried out at the same location as used during the assessment process (Callan Park in Rozelle), quite some distance from the streets directly impacted by the cruise ship emissions. The monitoring undertaken at Callan Park was only undertaken for limited periods (between September and October 2013, then again in December 2013), and, as noted at paragraphs 7.18 to 7.22, the monitoring was set against criteria that residents had already considered were too high.<sup>324</sup>
- 7.33** In response to these concerns, the EPA’s technical air experts reviewed the monitoring reports from round one and two and concluded that they had been undertaken in accordance

<sup>319</sup> Evidence, Ms Rochelle Porteous, Mayor, Leichhardt Municipal Council, 13 October 2014, p 19.

<sup>320</sup> Submission no. 24, Balmain, White Bay and Rozelle Precincts, p 1.

<sup>321</sup> Submission no. 156, NSW Environment Protection Authority, p 227.

<sup>322</sup> Submission no. 156, NSW Environment Protection Authority, p 227.

<sup>323</sup> Submission no. 156, NSW Environment Protection Authority, p 227.

<sup>324</sup> Evidence, Ms Rochelle Porteous, Mayor, and Mr Ryan Cole, Manager, Compliance and Enforcement, Leichhardt Municipal Council, 13 October 2014, p 20; Submission no. 21, Name suppressed, p 1.

with the relevant Australian standards, and the agreed air quality standards had not been exceeded.<sup>325</sup>

- 7.34** The EPA advised the committee that, in spite of these results, the EPA accepted, and continues to accept, that the community was experiencing impacts as a result of the emissions from the cruise ships.<sup>326</sup> In response to community concerns, in February and March 2014 the Port Authority conducted additional air quality monitoring at different locations further into the peninsula of Balmain, including at residents' homes. The EPA advised that the results were posted on the Port Authority website and the EPA's technical experts are reviewing the results.<sup>327</sup> The committee heard from Carnival Australia that these emissions levels showed no exceedances of the allowable limits.<sup>328</sup>

### *Noise monitoring*

- 7.35** The Port Authority has conducted multiple rounds of noise monitoring in and around Balmain between June 2013 and February 2014. To December 2013, 25 exceedances of the noise limits in the Planning Approval were identified in 89 individual noise measurements. Subsequent monitoring in February 2014 indicated three minor exceedances of 1-2 decibels.<sup>329</sup>
- 7.36** The EPA advised that the Department of Planning and Environment is working with the Port Authority to address non-compliance with the terminal's Planning Approval's noise limits and respond to community complaints. The EPA in turn is assisting the Department to address noise management issues and has provided input to the development of a noise management strategy for the terminal.<sup>330</sup>
- 7.37** Carnival and the EPA advised that a 'Good Neighbour Commitment' (or 'Good Neighbour Agreement', according to the EPA) has been developed with the cruise ship industry that includes restricting non-essential deck announcements, external music during berth, use of engines and generators at berth and light spill. Baggage cases are also to be positioned before a ship's arrival when ships are berthing for two consecutive days. However, while Carnival Australia (the largest operator) told the committee that it is committed to these principles<sup>331</sup>, the EPA advised that there had been limited success in implementing the agreement.<sup>332</sup>
- 7.38** To better address noise issues, the EPA advised that, together with the Port Authority, they are undertaking a detailed investigation of individual ships to determine the particular sources of noise generation. Recommendations will then be made to the Department of Planning and Environment on specific actions or requirements that can be enforced on cruise ships.<sup>333</sup>

<sup>325</sup> Submission no. 156, NSW Environment Protection Authority, pp 227-228.

<sup>326</sup> Submission no. 156, NSW Environment Protection Authority, p 228.

<sup>327</sup> Submission no. 156, NSW Environment Protection Authority, p 228.

<sup>328</sup> Submission no.116, Carnival Australia, p 3.

<sup>329</sup> Submission no. 156, NSW Environment Protection Authority, p 228.

<sup>330</sup> Submission no. 156, NSW Environment Protection Authority, p 228.

<sup>331</sup> Submission no. 116, Carnival Australia, p 4.

<sup>332</sup> Submission no. 156, NSW Environment Protection Authority, p 228.

<sup>333</sup> Submission no. 156, NSW Environment Protection Authority, p 229.

### Community engagement

**7.39** The EPA advised that it has been engaging with both the Balmain community and government agencies since late 2013:

- In November 2013, the EPA attended a public meeting at Clontarf Cottage in Balmain hosted by Mr Jamie Parker MP, Member for Balmain, with approximately 50 people in attendance to listen to community concerns. At this meeting, the EPA advised the community to report pollution and its impacts to the EPA Environment Line.
- The EPA, along with NSW Health, has established regular interagency meetings regarding the terminal's operations. These meetings, also attended by Roads and Maritime Services (RMS), the DPE, Port Authority and Leichhardt Council commenced in December 2013.
- The EPA has also kept complainants updated in two letters.
- In April 2014, the regular interagency group was expanded to include community representatives. These representatives have communicated their concerns and tabled a number of solutions proposed by the community. These ranged from the use of better quality fuel and air filtration to reduce breaches of current approvals and consideration of the use of pollution alerts about health impacts.
- In May 2014, the Minister for the Environment and the EPA met with community representatives to better understand the community concerns and advise on actions being investigated.
- On 13 June 2014, the EPA hosted a diesel emissions workshop as part of the development of a non-road diesel emissions strategy. This workshop included presentations on the sources and trends of non-road diesel emissions in NSW, including shipping emissions. Workshop attendees included government agencies, industry and community members. The Minister for the Environment signalled to those in attendance, including the cruise industry, that the EPA would be regulating emissions for non-road diesel, including shipping.
- The EPA has also been working with NSW Health to respond to community concerns about health impacts from emissions to air.<sup>334</sup>

**7.40** However, Ms Porteous advised that despite the community engagement undertaken by the EPA to date, nothing had really been achieved and things were getting worse:

I think it would be fair to say that, as far as we can see, the EPA is not doing anything in terms of actually addressing the concerns of the residents. We have been talking about this for 1 ½ years and it is getting worse and worse.<sup>335</sup>

**7.41** Mr Cole similarly told the committee that while some work had been done, everything was 'on a fairly distinct time lag' and there was still no clear mitigation strategy:

At the beginning of the year the EPA was talking about creating an investigation plan for noise testing. To date I understand the EPA has done one ship inspection.

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<sup>334</sup> Submission no. 156, NSW Environment Protection Authority, pp 229-230.

<sup>335</sup> Evidence, Ms Rochelle Porteous, Mayor, Leichhardt Municipal Council, 13 October 2014, p 23.



Everything is on a fairly distinct time lag, if that makes sense. We have been talking to the EPA for a long period. There is no mitigation strategy. There are no known long-term strategies put in place. It took a very long time to even just get an investigation strategy up and running for noise, even though there were 75 breaches in the test period.<sup>336</sup>

**7.42** Mr Cole explained that from the council's first interaction with the EPA, the agency had appeared to be more focused on passing the issue off to other agencies than taking proactive measures to assist the community in its capacity as the state's environmental regulator:

I guess the best example I can give you is actually when councils started forwarding all the submissions to start with. The EPA redirected pretty much all of them to its other agencies—the Department of Planning and Environment; they tried to get Roads and Maritime Services [RMS] involved because the ships were actually in the harbour, and everything went back to Sydney Ports, 'Oh, they're the ones undertaking the functions so they are responsible'—and they wanted to, I guess, sit in the background and just provide the technical advice. I do not know about you but when I think of the EPA I think of an environmental leader, an independent regulator who can come in and sits over the top. These are large issues. They are within the harbour. They affect a large community. I would assume that the EPA would take responsibility for that and say, 'We're the regulator. We will find the solutions and implement them without any influence, or as an independent agency'.<sup>337</sup>

## Achieving change for the residents of Balmain

**7.43** Despite the actions taken to date, the residents of Balmain continue to suffer significantly from the impacts of the operations of the White Bay Terminal, particularly from the effects of emissions from the cruise ship funnels.

**7.44** While both residents and the local council ultimately remain opposed to the location of the terminal and believe the ships should be relocated, they were mindful that this may not be achievable, particularly in the short term. Instead, immediate measures that could be implemented as an interim were identified by community representatives as follows:

- Mandating that low sulphur fuel be used by all cruise ships, with a maximum sulphur content of 0.1 per cent, as is the case in North America and Europe.<sup>338</sup> Ms Horrobin explained that 'it would be possible to do this at a state level because the state of California did it in the United States'.<sup>339</sup>
- Implementing shore-to-ship power at White Bay, thereby allowing ships to turn off their engines for the bulk of the time they are at berth.<sup>340</sup> As Ms Horrobin observed, engines are often operating for well over nine hours per day.<sup>341</sup>

<sup>336</sup> Evidence, Mr Ryan Cole, Manager – Compliance and Enforcement, Leichhardt Municipal Council, 13 October 2014, p 21.

<sup>337</sup> Evidence, Mr Ryan Cole, Manager – Compliance and Enforcement, Leichhardt Municipal Council, 13 October 2014, p 25.

<sup>338</sup> Submission no. 128, Name suppressed, p 6.

<sup>339</sup> Evidence, Ms Katrina Horrobin, White Bay-Rozelle Precincts Group, 13 October 2014, p 29.

<sup>340</sup> Submission no. 128, Name suppressed, p 6.

<sup>341</sup> Evidence, Ms Katrina Horrobin, White Bay-Rozelle Precincts Group, 13 October 2014, p 29.

- Other emission prevention technologies. These include the installation of scrubbers, a type of filter, in smoke stacks. It is hoped that this would reduce the impact of fuels, without necessarily having to reduce the sulphur content of fuel.<sup>342</sup>

**7.45** Residents have also requested that the EPA be given the legislative power and authority to implement appropriate measures.<sup>343</sup>

**7.46** Obstacles identified to the introduction of these measures included:

- the availability of fuel
- supply chain and storage impacts
- achievable time frames
- costs to industry to ensure that ships can accommodate different fuel types or to install technologies such as scrubbers
- implementation criteria
- enforcement impacts
- the possible requirement for a new substation to be built to double electrical supply to residents, businesses and ships berthed at White Bay if ship-to-shore power was made available
- the complex backdrop of multi-layered legislation, with international conventions, national legislation and the scope for environmental regulation at a state level.<sup>344</sup>

**7.47** The EPA advised that, in recent months, it has made a number of public statements that the agency would like to see tighter controls over ships, focused initially at ships in New South Wales ports. Mr Buffier stated that the EPA has been a leader in this respect, and ‘it would be fair to say that the shipping industry has been paying a lot of attention to the New South Wales EPA since we have stepped into this space that has up until now been regarded as being dictated by international conventions and national conventions’.<sup>345</sup> In this regard, Mr Buffier considered the EPA to be something of a ‘game-changer’:

...In the case of White Bay, it is a long and complex issue. But the nub of the issue at White Bay is shipping traditionally has been regulated internationally and nationally. No state-based EPA has had any involvement in shipping. We have changed that. We have said we think there is an opportunity for us to do something.<sup>346</sup>

**7.48** The committee heard that on 14 November 2014, the EPA convened a large workshop with representatives from the shipping industry. Mr Buffier advised that as a result of that workshop, experts had been engaged to assess the feasibility of adopting emission reduction measures for ships at major ports in the New South Wales greater metropolitan region:

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<sup>342</sup> Submission no. 156, NSW Environment Protection Authority, p 231.

<sup>343</sup> Submission no. 24, Balmain, White Bay and Rozelle Precincts, p 2.

<sup>344</sup> Submission no. 156, NSW Environment Protection Authority, p 231; Answer to question on notice, Carnival Australia, 19 December 2014, p 4.

<sup>345</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 20.

<sup>346</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 13 October 2014, p 8.

At that workshop we made it quite clear and issued a press release afterwards saying that we were determined to do something in relation to shipping emissions in New South Wales ports prior to the MARPOL 2020 deadline. We have engaged some international experts, DNV GL, to assess the technical feasibility, costs and emission impacts of adopting emission reduction measures for ships at major ports in the New South Wales greater metropolitan region.<sup>347</sup>

**7.49** To this end, Mr Buffier flagged that introducing the use of low-sulphur fuel was likely to be the option for redress that had the most immediate potential for implementation:

The three options that are there would be shore-to-ship power, low sulphur fuel or scrubbers. We think there is the potential to do something in that regard. It is interesting that all Sydney ferries are powered by diesel engines with low sulphur fuel. Viva Energy at Gore Bay use road grade diesel in their ship the *Destine* there and I think other ships coming in there do too. Not all ships would have the ability to use road grade diesel but certainly some would. We think there is a lot of potential to move down that path.<sup>348</sup>

**7.50** However, Carnival Australia informed the committee that low sulphur fuel is currently unavailable in large quantities. While Shell has advised that it has the capacity to produce low sulphur fuel at its Geelong plant, a significant investment in a storage facility and associated transport would be needed. Carnival argued that this supply issue would put upward pressure on the local price due to a limited amount of producers having to supply a large number of customers forced under regulation to use the fuel. Carnival was of the view that, without government intervention to ensure that the fuel is made available at a commercially competitive price, or other financial incentives for voluntary use of the fuel, low sulphur fuel constitutes a very expensive option, particularly in view of the company's compliance with the applicable emissions limits currently set.<sup>349</sup> (These limits are discussed further in the following paragraphs.)

**7.51** Instead, Carnival Australia advised that it has scheduled the installation of scrubber technology on all of its vessels in Australia between 2017 and 2019, during the ships' scheduled dry docks.<sup>350</sup>

**7.52** Mr Buffier also advised that, following consultation with Leichhardt Municipal Council, the EPA have arranged for the Port Authority to conduct further air monitoring in the area, particularly during periods where two ships are berthing at the same time.<sup>351</sup> However, Ms Horrobin stressed that further air monitoring would not address the impacts being experienced by residents – residents know what is in the air they breathe:

The community does not believe that more monitoring is the solution here. We know what is coming out of the funnels. There are readily available calculators – you can

<sup>347</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 20.

<sup>348</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 20.

<sup>349</sup> Answer to question on notice, Carnival Australia, 19 December 2014, p 1.

<sup>350</sup> Answer to question on notice, Carnival Australia, 19 December 2014, p 1. Carnival advised that installing the scrubbers during unscheduled dry docks would have a significant commercial impact and involve considerable inconvenience for passengers due to the necessary cancellation of multiple cruises.

<sup>351</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 20.

enter the amount of fuel that needs to be burned and they will tell you exactly what is coming out of the funnels. We do not need single, stationery monitors to tell us what is going on; we know what is in the air we breathe.<sup>352</sup>

**7.53** While Mr Buffier was confident that the EPA could begin to make inroads to achieve change for the residents of Balmain, he did not consider it likely that measures would be implemented in time to ameliorate the impacts of the 2014/15 summer cruise season.<sup>353</sup>

**7.54** To this end, Ms Horrobin stressed that, while residents acknowledged the obstacles involved in implementing remediation measures, there was a need for both government and the cruise ship industry to take swift steps to address the impact the terminal operations were having on health, as ‘living within the law whilst knowing the law is inadequate and harming citizen’s health is not reasonable, nor is it safe’:

... Sydney and Australia, as I understand it, are the fastest-growing cruise market in the world. With that in mind, you will hear I am sure during the course of this inquiry that cruise lines are acting within the law in terms of what they are doing and the way that they are operating their ships. Whilst this may be correct, we believe that living within the law whilst knowing the law is inadequate and harming citizens’ health is not reasonable, nor is it safe. We know they know because they have needed to put mitigating solutions in place in the Northern Hemisphere.<sup>354</sup>

### *Committee comment*

**7.55** In the course of the inquiry the committee undertook a site visit to the streets most affected by the terminal operations. The committee can testify to the noxious fumes present in the streets adjacent to the terminal and the impacts quickly felt by those present. The committee acknowledges the significant impact these fumes and the corresponding issues with noise and vibrations have had on the quality of life of the surrounding community.

**7.56** The committee expresses its disappointment that the major client of the Terminal, Carnival Australia, did not appear before the inquiry. Despite a number of opportunities to engage with the committee during hearings, Carnival Australia chose not to appear. Inevitably this delays sound policy development.

**7.57** The committee acknowledges that the impacts of the operations of the new White Bay Cruise Terminal present significant obstacles and complexities for both government, residents and the cruise ship industry. The committee believes that these problems should have been avoided or mitigated at the planning stage by adopting the EPA’s original recommended conditions of approval, including low sulphur fuel and ship to shore power.

**7.58** Nevertheless, the committee is also concerned by the EPA’s evidence that, in spite of their attempts to alert the previous Government to the potential impacts of the terminal during the planning and assessment process, they failed to anticipate the extent of those impacts on the Balmain community. The community could rightly expect that with the collective expertise of the EPA’s officers, the agency would be sufficiently equipped to foresee the likely impacts of a large scale shipping operation on the livelihood of a small inner city village.

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<sup>352</sup> Evidence, Ms Katrina Horrobin, White Bay-Rozelle Precincts Group, 13 October 2014, p 23.

<sup>353</sup> Evidence, Mr Barry Buffier, Chair and Chief Executive Officer, EPA, 24 November 2014, p 20.

<sup>354</sup> Evidence, Ms Katrina Horrobin, White Bay-Rozelle Precincts Group, 13 October 2014, p 27.

- 7.59** The committee considers that the decision of the previous Government to not have a cruise terminal at Barangaroo to be a serious error, especially given the views expressed by groups listed in 7.3, and notes that the original plans for Barangaroo included just such a facility. A cruise terminal at Barangaroo would have allowed tourists much easier travel to key tourist areas in and around the Sydney central business district, rather than having to require them to travel from the Balmain peninsular.
- 7.60** The committee is mindful that the governance framework in which the new terminal operates is particularly complex. While the EPA is the state's environmental regulator, other departments and agencies have primary responsibilities for regulating the operations of the terminal. Pollution is significantly impacting residents, but with the exception of noise pollution, monitoring demonstrates that pollution has kept within the significantly high limits set by the Project Approval. This provides limited opportunities for authorities to take compliance or enforcement action. The industry, while it could do more, is working to the conditions that were set. The merits of the conditions set are not within the purview of this committee's terms of reference to make comment on.
- 7.61** The committee considers that, while the EPA's response to the complaints made by residents has been far from swift, and the EPA could have taken more proactive and persuasive action during the approval process, the EPA is working within the regulatory parameters set to try to achieve some progress for the residents of Balmain. Due to the interagency arrangements that apply to the operations of the terminal, the committee believes it would be a prudent step for all government agencies to take a more proactive approach to assisting the EPA to find achievable solutions to the problems presented by White Bay and work swiftly to ensure their timely implementation. Three solutions in particular have been identified. The committee believes that the NSW Government should commit to understanding the feasibility of these measures and ensure that their implementation is made an urgent priority. The committee believes that the White Bay Terminal should be retrofitted to facilitate the provision of shore to ship power.
- 7.62** The committee considers that the significant health effects of higher sulphur fuel, and the resulting health burden on the community outweighs the economic considerations of a single industry, especially when mutually beneficial solutions have been found in other countries, such as the United States of America and Canada.
- 7.63** The committee notes that cruise ship and terminal operations are not currently captured by the provisions of the *Protection of the Environment Operations Act 1997* for the purposes of requiring an environment protection licence. The committee recommends that the NSW Government amend the Act so that cruise ship terminals are required to hold an environment protection licence to remedy this arrangement as a matter of priority. The committee also recommends that cruise ship operators using the White Bay Terminal be required to develop noise mitigation strategies and that noise be monitored and limits be enforced.
- 7.64** The committee also notes that the NEPM measures have clearly failed the Balmain community. The EPA should approach the National Environment Protection Council to request that they commence a review of the air pollution limits set under the measures, on the basis of the evidence arising from the operation of the White Bay cruise ship terminal.

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**Recommendation 10**

That the NSW Government amend the *Protection of the Environment Operations Act 1997* to require cruise ship terminals to hold an environment protection licence.

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**Recommendation 11**

That the NSW Environment Protection Authority immediately approach the National Environment Protection Council to request a review of the air pollution limits set under the National Environment Protection Measures.

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**Recommendation 12**

That the NSW Government require that:

- cruise ship operators using the White Bay Terminal be required to develop noise mitigation strategies and that noise be monitored and limits be enforced
  - the White Bay Terminal be retrofitted to include shore to ship power.
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## Chapter 8      The regulation of forestry practices in Royal Camp State Forest

This chapter discusses the EPA's performance in relation to the monitoring and enforcement of forestry practices in the Royal Camp State Forest. In 2012 and 2013 the environment group North East Forest Alliance made a series of allegations about breaches of logging licences in that area. This chapter canvasses the EPA's response to those allegations and outcomes arising from the subsequent investigation.

### Background

- 8.1**      The Forestry Corporation of NSW's logging operations in Royal Camp State Forest near Casino in northern New South Wales are carried out under the terms and conditions of an Integrated Forestry Operations Approval (IFOA) for the Upper North East Region of the state. The IFOA incorporates an environment protection licence and threatened species licence, for which the EPA is the regulator.<sup>355</sup> To fulfil this function and other forestry regulatory duties across the state, the EPA has a forestry section which is comprised of 27 permanent staff, of whom 18 are dedicated to on ground inspection, audit and investigatory work.<sup>356</sup> These eighteen ground inspection staff are responsible for inspection and investigation across 1.78 million hectares of state forest, or almost 9,900 Ha per inspector.<sup>357</sup>
- 8.2**      In 2012, the North East Forest Alliance (NEFA), a local environment group, alleged that the Forestry Corporation was breaching IFOA threatened species conditions while undertaking forestry activities in certain sections of the Royal Camp State Forest. The forest is broken up into sections referred to as 'compartments', and the allegations centered primarily around compartments 14, 15 and 16. There was an additional and later report of plans by the corporation to log compartment 13.<sup>358</sup>

### Requirements under the threatened species licence

- 8.3**      The terms and conditions under which all forestry operations (including logging) must be conducted in Royal Camp State Forest are set out in the IFOA, to which licence terms under the *Threatened Species Conservation Act 1995* are an appendix. The following paragraphs provide a brief summary of the licence conditions that relate to the breaches alleged by NEFA.

<sup>355</sup> Submission no. 156, NSW Environment Protection Authority, pp 235-236.

<sup>356</sup> Answer to question on notice, NSW Environment Protection Authority, 11 December 2014, p 2.

<sup>357</sup> NSW Environment Protection Authority, Supplementary Questions and Answers, Question , 11 December 2014.

<sup>358</sup> Submission no. 175, North East Forest Alliance, pp 4-7.

**Habitat trees and recruitment trees**

- 8.4 Minimum numbers of habitat (hollow-bearing) trees are required to be retained across logging areas in order to reduce logging impacts on a wide diversity of forest animals, most notably those with requirements for essential resources provided by older eucalypt trees.<sup>359</sup>

**Koalas**

- 8.5 The threatened species licence<sup>360</sup> states that an adequately trained person must conduct searches for koalas or evidence of them at least 300 metres ahead of active harvesting operations. A thorough search must be undertaken at the base of trees at 10 metre intervals, including primary, secondary and incidental browse trees.<sup>361</sup>
- 8.6 Upon identifying a ‘trigger’ under the licence, such as 20 or more koala faecal pellets at the base of a tree, the Forestry Corporation must undertake a more comprehensive and in-depth survey of the forested area, referred to as a ‘koala star search’. Koala star searches are designed to identify important koala habitat areas, or Koala High Use Areas, and also trigger koala feed retention requirements.<sup>362</sup> Other conditions are also listed.

**Yellow-bellied gliders**

- 8.7 Yellow-bellied gliders live in family groups in territories of 30 to 60 hectares. They choose special trees to tap for sap by chewing, often V-shaped channels, into the bark to concentrate sap for feeding.<sup>363</sup>
- 8.8 The threatened species licence<sup>364</sup> states that an adequately trained person must conduct a thorough search for, record and appropriately mark dens of the yellow-bellied glider and sap feed trees used by the gliders.<sup>365</sup>
- 8.9 All yellow-bellied and squirrel sap feed trees must be retained and a 50-metre radius exclusion zone implemented around yellow-bellied glider dens. Logging debris must not be allowed to accumulate within five metres of a feed tree.<sup>366</sup> Other conditions are also listed.

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<sup>359</sup> Evidence, Mr Dailan Pugh, Coordinator, North East Forest Alliance, 29 October 2014, p 4.

<sup>360</sup> *Terms of licence under the Threatened Species Conservation Act 1995: Upper North East Region*, pp 21-22, accessed at <http://www.epa.nsw.gov.au/resources/forestagreements/UNETSLam7.pdf>.

<sup>361</sup> Submission no. 156, NSW Environment Protection Authority, p 237.

<sup>362</sup> Submission no. 156, NSW Environment Protection Authority, p 237.

<sup>363</sup> Evidence, Mr Dailan Pugh, Coordinator, North East Forest Alliance, 29 October 2014, p 4.

<sup>364</sup> *Terms of licence under the Threatened Species Conservation Act 1995: Upper North East Region*, pp 20-21, accessed at <http://www.epa.nsw.gov.au/resources/forestagreements/UNETSLam7.pdf>.

<sup>365</sup> Submission no. 156, NSW Environment Protection Authority, p 237.

<sup>366</sup> Submission no. 156, NSW Environment Protection Authority, p 237.



### Subjective terms in the licence

- 8.10** During the committee’s site visit to the Royal Camp State Forest, the committee heard that a ‘thorough’ search has proved to be a somewhat subjective concept, and these sentiments were echoed during the hearings. In evidence to the committee, Mr Dean Kearney, Operations Planning Manager, Hybrid Forest Division, Forestry Corporation of NSW, stated that licence conditions frequently rely on subjective and interpretive statements and are cluttered with material that is of a guidance nature:

At times some of the conditions are contradictory between the different licences – the fisheries licence, the soil and water licence or the environment protection licence, as it is termed. They frequently rely on subjective and interpretive statements that we have to apply and that the EPA also has to interpret and, to be honest, they are cluttered with material that is of a guidance nature. They certainly are not comprehensive in terms of how to translate those conditions.<sup>367</sup>

- 8.11** Mr Dailan Pugh of the North East Forest Alliance stated that a ‘thorough’ search should have a clear meaning, but that the Forestry Corporation had chosen to interpret the requirement differently:

Regarding the interpretation of words, ‘thorough’, look up the dictionary. It does have a meaning. Forestry interprets it to mean that you can just walk along and scan the surface and see if there are any koala scats to be seen sitting on top of the leaves under some vague search. That is certainly not the intent of the word ‘thorough’. Thorough means have a thorough look ...<sup>368</sup>

### The breaches alleged

- 8.12** The substantive concerns raised by NEFA in regards to the Forestry Corporations practice relate specifically to the selection and retention of hollow-bearing and recruitment trees, the identification and protection of koala habitat, the protection of yellow-bellied glider sap feed trees, and to a number of other alleged breaches of environment protection and threatened species licence conditions, across a number of different compartments in the forest. These allegations are elaborated below.

#### Compartments 14, 15 and 16

- 8.13** In late July 2012, Mr Dailan Pugh of NEFA raised concerns about habitat tree retention in Royal Camp State Forest. The EPA told the committee that they immediately commenced an investigation into the allegations and met with Mr Pugh on 31 July 2012.<sup>369</sup>
- 8.14** On 4 and 5 August 2012, a weekend audit by NEFA of logging operations underway in Royal Camp State Forest located four Koala High Use Areas in Compartment 15, with one actively

<sup>367</sup> Evidence, Mr Dean Kearney, Operations Planning Manager, Hybrid Forest Division, Forestry Corporation of NSW, 29 October 2014, p 24.

<sup>368</sup> Evidence, Mr Dailan Pugh, Coordinator, North East Forest Alliance, 29 October 2014, p 7.

<sup>369</sup> Submission no. 156, NSW Environment Protection Authority, p 238.

being logged, one about to be logged and two scheduled for logging in the near future. A potential Koala High Use Area was also identified in a logging area in Compartment 16.<sup>370</sup>

- 8.15** On 6 August 2012, NEFA provided a supplementary report through formal written advice to the Minister for the Environment and publicly called for the Minister to immediately stop the logging of Koala High Use Areas. Logging in the forest was suspended that afternoon and the EPA began investigating the alleged breaches in Compartment 15.<sup>371</sup> While the EPA informed the committee that there has been no further logging in Compartment 15 since this complaint<sup>372</sup>, NEFA advised that logging resumed days later in adjoining Compartment 16.<sup>373</sup>
- 8.16** In response to these concerns, the EPA sent investigators to the site to independently audit the protection of koalas and their habitat. The focus of the investigators was to prevent further actual or potential harm to koala habitat and collect in-situ evidence of any breaches.<sup>374</sup>
- 8.17** NEFA alleged that, during the period in which the EPA were conducting the audit, the Forestry Corporation burnt off part of the logged area in Compartment 15, destroying any koala scats and thus evidence of Koala High Use Areas present. NEFA further alleged that the Forestry Corporation illegally bulldozed two tracks across creeks in riparian exclusion areas close to the EPA auditors, and that the Forestry Corporation were still failing to search for koala scats in Compartment 16, where they had logged two Koala High Use areas. According to NEFA, the EPA refused to take any action and these actions occurred under the agency's supervision.<sup>375</sup>
- 8.18** On 9 August 2012, NEFA attended an arranged meeting with the EPA outside the forest on the understanding that they would be going on a site inspection to show the EPA a variety of breaches they had identified, but not yet provided GPS localities for. NEFA informed the Nature Conservation Council of NSW that when they arrived, the EPA refused to allowed NEFA to show them the breaches.<sup>376</sup> In evidence to the committee, while the EPA acknowledged that this had been the case, they stated that on that particular occasion their priority had been an independent field assessment and investigation. The EPA acknowledged that, in hindsight, it would have been better to have conducted a joint inspection as part of this meeting and advised that they had subsequently apologised to Mr Pugh and his colleague.<sup>377</sup>

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<sup>370</sup> Submission no. 175, North East Forest Alliance, p 5.

<sup>371</sup> Submission no. 175, North East Forest Alliance, p 5; Submission no. 114, Nature Conservation Council of NSW, p 12, citing evidence from the EPA; Submission no. 156, NSW Environment Protection Authority, p 238.

<sup>372</sup> Submission no. 156, NSW Environment Protection Authority, p 238.

<sup>373</sup> Submission no. 175, North East Forest Alliance, p 5.

<sup>374</sup> Submission no. 156, NSW Environment Protection Authority, p 238.

<sup>375</sup> Submission no. 114, Nature Conservation Council of NSW, p 12, citing correspondence from the North East Forest Alliance; Submission no. 175, North East Forest Alliance, p 5; Evidence, Mr Dailan Pugh, Coordinator, North East Forest Alliance, 29 October 2014, p 3.

<sup>376</sup> Submission no. 114, Nature Conservation Council of NSW, p 12, citing correspondence from the North East Forest Alliance.

<sup>377</sup> Submission no. 156, NSW Environment Protection Authority, p 238.

- 8.19** Following complaints to the Chief Executive Officer of the EPA, the agency agreed to another site inspection on 24 August 2012 where NEFA pointed to a variety of alleged breaches. NEFA informed the committee that these breaches included those in Compartment 14, where a yellow-bellied glider sap-feed tree was alleged to have been logged. NEFA alleged that this tree was confirmed by a reputable expert on site, and that GPS localities for all breaches, together with photographs, were provided to the EPA on 20 August 2012. It was the understanding of NEFA that the EPA appeared to accept and understand this evidence.<sup>378</sup> Nevertheless, the EPA later observed that they could not locate the alleged location of the breaches shown that day or, in the case of the sap tree, could not determine beyond reasonable doubt whether the incisions in the tree had been made by a yellow-bellied glider. NEFA alleged that this response called into question the EPA officers' expertise.<sup>379</sup>

### *The EPA response*

- 8.20** The EPA informed the committee that over the course of their investigation, the EPA undertook 11 days of field inspections, some which occurred on separate occasions when new information was provided throughout the process, as six reports were received over an eight week period.<sup>380</sup> As part of its investigation and in the process of gathering evidence, the EPA also issued the Forestry Corporation with three statutory notices under the *Protection of the Environment Operations Act 1997* to enable them to obtain information and records regarding how the Corporation planned and executed operations in Royal Camp State Forest. This process entailed interviews with Forestry Corporation officers and the provision of assistance from a number of officers sourced from the Office of Environment and Heritage Legal Branch.<sup>381</sup>
- 8.21** As a result of the investigation, the EPA determined that the Forestry Corporation had not adequately implemented koala protection prescriptions in parts of the operations, particularly in Compartment 15; that compartment mark-up and searching in the area had not been conducted in adherence with the Corporation's threatened species licence; and that timber harvesting had been conducted within areas considered to be koala high use.<sup>382</sup> The EPA identified the root cause of the breaches to be the Corporation's failure to undertake searches for evidence of koalas – 'that is, if you don't look, you don't find and if you don't find, you don't protect'.<sup>383</sup>
- 8.22** The EPA also determined that the Corporation had not marked or retained trees as required by the licence.<sup>384</sup> NEFA advised the Nature Conservation Council of NSW that in an area where the Forestry Corporation were required to mark and retain 42 hollowing-bearing trees, 42 recruitment trees, 42 eucalypt feed trees and 42 koala feed trees, they had marked only two

<sup>378</sup> Evidence, Mr David Milledge, Ecologist, North East Forest Alliance, p 6; Submission no. 114, Nature Conservation Council of NSW, p 12, citing correspondence from the North East Forest Alliance.

<sup>379</sup> Submission no. 114, Nature Conservation Council of NSW, p 12, citing correspondence from the North East Forest Alliance.

<sup>380</sup> Submission no. 156, NSW Environment Protection Authority, p 238.

<sup>381</sup> Submission no. 156, NSW Environment Protection Authority, p 238.

<sup>382</sup> Submission no. 156, NSW Environment Protection Authority, p 240.

<sup>383</sup> Submission no. 156, NSW Environment Protection Authority, p 241.

<sup>384</sup> Submission no. 156, NSW Environment Protection Authority, p 241.

hollow-bearing trees and three recruitment trees.<sup>385</sup> While the EPA acknowledged that habitat and recruitment trees are not necessarily evenly distributed across the landscape, they nevertheless maintained that more trees ought to have been marked and retained in the area inspected.<sup>386</sup>

### ***Penalties issued***

**8.23** The EPA advised the committee that it had issued the Forestry Corporation with three penalty notices for breaching conditions of the Upper North East Threatened Species Licence and section 133(4) of the *National Parks and Wildlife Act 1997* for the following offences associated with Compartments 14, 15 and 16:

- timber harvesting in Koala High Use Areas
- timber harvesting in Koala High Use Exclusion Zones
- failing to conduct a thorough search for, record and appropriately mark Koala High and Intermediate Use areas.<sup>387</sup>

**8.24** These fines amounted to \$900 in total, being \$300 each.<sup>388</sup>

**8.25** The EPA also issued an official caution for failing to mark and retain hollow-bearing and recruitment trees and hazard reduction burning within exclusion zones contrary to the threatened species licence conditions.<sup>389</sup>

### ***A series of further allegations***

**8.26** On 19 August 2013, NEFA wrote to the EPA to dispute their findings and draw the EPA's attention to a number of allegations that NEFA alleged had been ignored, including issues relating to: bell miner associated dieback<sup>390</sup>; illegal stream crossing; a number of complaints of logging in Koala High Use Areas; and that the Forestry Corporation misled the public by failing to acknowledge that a Koala High Use Area was being logged.<sup>391</sup> NEFA was also concerned that the EPA had downgraded the offences relating to the failure to undertake koala mark up searches from that in accordance with section 5.2.2 of the licence, down to the more generic failure to undertake mark up surveys under section 5.1. NEFA told the committee that the lesser charge comprised a significant difference.<sup>392</sup>

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<sup>385</sup> Submission no. 114, Nature Conservation Council of NSW, pp 12-13, citing correspondence from the North East Forest Alliance.

<sup>386</sup> Submission no. 156, NSW Environment Protection Authority, p 241.

<sup>387</sup> Submission no. 156, NSW Environment Protection Authority, p 241.

<sup>388</sup> Submission no. 114, Nature Conservation Council of NSW, p 12, citing correspondence from the North East Forest Alliance.

<sup>389</sup> Submission no. 156, NSW Environment Protection Authority, p 241.

<sup>390</sup> Eucalypt dieback, strongly associated with sap feeding insects called psyllids, is sometimes associated with the native bell miner or Bellbird and has become common in some parts of the bird's range. The issue is of concern to compartments within the Royal Camp State Forest.

<sup>391</sup> Submission no. 175, North East Forest Alliance, pp 13-14.

<sup>392</sup> Submission no. 175, North East Forest Alliance, p 13.

- 8.27** In response, Mr Mark Gifford, Chief Environmental Regulator of the EPA, wrote to NEFA and acknowledged that while he considered the investigation to have been ‘detailed and robust in the main’, the approach of the EPA officers involved could have been more helpful, one allegation was missed, and other complaints should have been more fully investigated.<sup>393</sup> Mr Gifford also apologised for a number of complaints to which NEFA did not originally receive a response, and stated that ‘this response was not of a standard that I would expect from the EPA and I have asked the Forestry section to be sure that future responses address all allegations in an appropriate manner’.<sup>394</sup>
- 8.28** In evidence to the committee, the EPA made comment on several of these issues, citing their response to NEFA.
- *Selection and retention of hollow-bearing and recruitment trees:* The EPA acknowledged that, if not for the priority given to koala protection, the selection of recruitment trees would have been given greater focus in the investigation. The EPA is closely monitoring the Forestry Corporation’s identification of recruitment trees and the spatial distribution of retained hollow-bearing and recruitment in state forests.<sup>395</sup>
  - *Implementation of yellow-bellied glider protections:* The EPA acknowledged expert evidence that demonstrated that the Forestry Corporation logging had failed to identify and mark more than one feed tree that had been felled during logging. The EPA stated that they gave a lower priority to collecting evidence in relation to these alleged breaches because a significant number of yellow-bellied glider feed trees had been retained throughout the Forestry Corporation’s operations and there was likely to be low environmental harm. As such, the EPA decided not to issue a penalty notice but continues to closely monitor the issue.<sup>396</sup>
  - *Potential exacerbation of bell miner associated dieback:* The EPA considered the information tendered by NEFA regarding the presence of bell miners and susceptibility to the associated dieback in one area of forest. In response, the EPA has included forest health issues, including dieback, as a compliance priority for EPA Crown Forestry in 2013-14. The EPA will provide records of these observations to the Bell Miner Associated Dieback Working Group and the Forestry Corporation.<sup>397</sup> It should be noted that NEFA observed that, in their view, this working group is unstaffed and powerless, with no power or ability to deal with such complaints.<sup>398</sup>

### *Adequacy of the penalties applied*

- 8.29** In response to the applied penalties, a number of environmental groups, including NEFA, complained that the response had been weak and that the EPA had not acknowledged the seriousness of the breaches that had occurred.<sup>399</sup> NEFA advised that this sentiment was

<sup>393</sup> Submission no. 175, North East Forest Alliance, p 14.

<sup>394</sup> Submission no. 175, North East Forest Alliance, p 14.

<sup>395</sup> Submission no. 175, North East Forest Alliance, p 243.

<sup>396</sup> Submission no. 175, North East Forest Alliance, p 243.

<sup>397</sup> Submission no. 175, North East Forest Alliance, p 243.

<sup>398</sup> Evidence, Mr Dailan Pugh, North East Forest Alliance, 29 October 2014, p 5.

<sup>399</sup> Submission no. 175, North East Forest Alliance, p 17; Submission no. 94, Far North Coast Branch National Parks Association NSW, p 1; Submission no. 162, EDO NSW, p 20.

further exacerbated when, in reference to the three fines, the Regional Forester told ABC North Coast that:

I can understand that there's a perception in the community that [\$300] would be a light sort of fine. The reality is that the fines reflect the environmental outcome. Look in terms of the fines, they're administrative, they're like staying in a parking lot for a little bit too long, but the reality is there has been no environmental harm to koalas in that area.<sup>400</sup>

**8.30** In NEFA's view, 'what Royal Camp shows is that the Forestry Corporation has been sitting in that same parking lot for 13 years and the EPA had never asked them to move until we came along'.<sup>401</sup>

**8.31** NEFA acknowledged that some aspects of the EPA's response had been positive and that the EPA had apologised for some of the oversights that had occurred during their interactions with NEFA.<sup>402</sup> Nevertheless, NEFA concluded that the overall effectiveness of the EPA's regulatory efforts were limited:

In 15 years of regulation, it is apparent the EPA have made little progress as their findings and recommendations are treated with contempt by an unrepentant Forestry Corporation. What is needed is a more comprehensive and thorough approach where quantitative results are collected and published in professional reports. Breaches need to be dealt with clearly, consistently and transparently, with predictable consequences that are escalated for repeat offences. Repeat breaches at separate sites at different times should not be treated as a single offence.<sup>403</sup>

**8.32** In spite of the observations made by NEFA, the EPA asserted that issuing penalty notices was the appropriate regulatory action and that the EPA had applied the statutory penalty notice amount available under the legislation. In support of the course of action taken, the EPA cited the provisions of the EPA Compliance Policy and EPA Prosecution Guidelines and advised that it had considered the following factors in making their determination:

- alternatives to prosecution were available,
- the Forestry Corporation had acted in response to the EPA's request to cease logging,
- the EPA's experience in bringing prosecutions for threatened species offences against the Forestry Corporation was that sentencing can result in modest fines. Prosecution may have used considerable public resources which may have only achieved a modest outcome.<sup>404</sup>

**8.33** The EPA did however concur with concerns regarding the low level of fines for penalty notices for threatened species. This is discussed further at paragraph 8.48.

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<sup>400</sup> Submission no. 175, North East Forest Alliance

<sup>401</sup> Evidence, Mr Dailan Pugh, Coordinator, North East Forest Alliance, 29 October 2014, p 4.

<sup>402</sup> Submission no. 175, North East Forest Alliance, pp 8-17.

<sup>403</sup> Submission no. 175, North East Forest Alliance, p 18.

<sup>404</sup> Submission no. 156, NSW Environment Protection Authority, p 242. It should be noted that the EPA acknowledged that the two most recent cases prosecuted against the Forestry Corporation resulted in penalties of \$5,600 and \$35,000.

### Compartment 13

- 8.34** On 4 July 2013, NEFA inspected Compartment 13 where logging was scheduled to begin and located two Koala High Use Areas. NEFA called for logging to be suspended and a moratorium was agreed.<sup>405</sup>
- 8.35** On 8 July 2013, NEFA contacted the EPA with their concerns that logging was about to commence in an area that comprised a significant habitat for koalas in Compartment 13. In response, the EPA contacted the Forestry Corporation and was advised that logging was not due to commence for two to three months. The EPA told the committee that they raised the allegations that the area may contain regionally significant koala habitat with the Forestry Corporation and requested relevant information to assist their investigations. The EPA also undertook a pre-harvest survey of the area and ensured that all the koala identifications from this work were provided to the Corporation.<sup>406</sup>
- 8.36** The EPA's investigations identified that there was a high level of koala use in Compartment 13 where logging was scheduled to commence, and the level of activity indicated that this compartment supported a resident koala population.<sup>407</sup>
- 8.37** The EPA told the committee that during this time, the Minister for the Environment asked the EPA to determine the regional significance of the koala population. To assist with this task, the EPA contracted Dr Stephen Phillips of Biolink Pty Ltd to undertake an independent expert assessment.<sup>408</sup> Dr Phillips' report,<sup>409</sup> received on 28 June 2014, confirmed that Compartment 13 contained a resident koala population and that the majority of activity was located in the harvestable (loggable) area.<sup>410</sup>
- 8.38** Dr Phillips also provided advice on the significance of koala populations in the Richmond River Local Government Area, and suggested that with the koala population in significant decline, it would be eligible for listing as endangered. Dr Phillips also raised concerns about potential negative impacts of forestry operations on the resident koala population in Compartment 13.<sup>411</sup>
- 8.39** The EPA subsequently informed the Forestry Corporation of Dr Phillips' findings and requested that the Corporation not log in Royal Camp State Forest. A copy of the report was also provided to NEFA. The EPA advised the committee that to date, there has been no logging in Compartment 13 of Royal Camp State Forest since the allegations were made.<sup>412</sup>

<sup>405</sup> Submission no. 114, Nature Conservation Council of NSW, p 12, citing correspondence from the North East Forest Alliance.

<sup>406</sup> Submission no. 156, NSW Environment Protection Authority, p 239.

<sup>407</sup> Submission no. 156, NSW Environment Protection Authority, p 239.

<sup>408</sup> Submission no. 156, NSW Environment Protection Authority, p 239.

<sup>409</sup> Tabled document, Biolink Ecological Consultants, *Koala Habitat/Occupancy Assessment – Compartment 13, Royal Camp State Forest*, 25 June 2014.

<sup>410</sup> Submission no. 156, NSW Environment Protection Authority, p 240.

<sup>411</sup> Submission no. 156, NSW Environment Protection Authority, p 240.

<sup>412</sup> Submission no. 156, NSW Environment Protection Authority, p 239.

## Other outcomes of the investigation process

### Audits in the Upper North East Region

- 8.40** The committee heard that, concurrent with the investigation in the Royal Camp State Forest, the EPA commenced a series of proactive audits in the Upper North East Region to determine if there were regional systemic issues with the Forestry Corporation implementation of koala protection provisions. The audits revealed that the Forestry Corporation relies heavily on koala sightings as the main source of information for koala habitat protection, whereas the threatened species licence requires broader searching for evidence of koala at the base of trees.<sup>413</sup> In response training has been provided to foresters, as discussed further below.

### Training for Forestry Corporation officers

- 8.41** To address the issues identified above, senior EPA and Forestry Corporation officers met to discuss how to improve the Corporation's identification and protection of koalas and their habitat more broadly. The committee heard that these meetings included discussion on the level of effort needed to undertake the 'thorough search' required in the IFOA.<sup>414</sup>
- 8.42** Following this meeting, the Forestry Corporation commenced retraining all field staff responsible for pre-harvest searching and marking in adherence with the threatened species licence requirements, including the requirements for a thorough search.<sup>415</sup> The EPA was advised that the Forestry Corporation also held 'toolbox talks' with harvesting contractors to reiterate their legal obligations under the threatened species licence component of the IFOA. The EPA advised the committee that it has continued to audit the Corporation's koala identification and protection performance in the region and has observed improvements in operator performance in the field.<sup>416</sup>

### Consolidated Integrated Forestry Operation Approvals

- 8.43** The genesis for the licencing process under which the Integrated Forestry Operations Approval (IFOA) system currently operates dates back to the 1990s.<sup>417</sup> In the course of discussions with the EPA and the Forestry Corporation during a site visit to the Royal Camp State Forest, and during evidence from NEFA, the committee heard that the ambiguity of the terminology utilised in the IFOA has frustrated stakeholders on all sides.<sup>418</sup>
- 8.44** The EPA advised the committee that, in response to these challenges, the NSW Government proposes to remake the four coastal IFOAs into a single regulatory instrument which is 'efficient, effective and enforceable; reflects modern best-practice regulation; and maintains

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<sup>413</sup> Submission no. 156, NSW Environment Protection Authority, p 239.

<sup>414</sup> Submission no. 156, NSW Environment Protection Authority, p 241.

<sup>415</sup> Submission no. 156, NSW Environment Protection Authority, p 241.

<sup>416</sup> Submission no. 156, NSW Environment Protection Authority, p 241.

<sup>417</sup> Submission no. 175, North East Forest Alliance, p 4.

<sup>418</sup> Evidence, Mr David Milledge, Ecologist, North East Forest Alliance, 29 October 2014, p 8.



access to existing levels of wood supply without eroding environmental values'.<sup>419</sup> The proposed consolidated Coastal IFOA will include Royal Camp State Forest.

**8.45** The objectives of the proposed IFOA are to:

- improve the clarity and enforceability of the IFOAs, including the conditions of environment protection, threatened species and fisheries licences held by the Forestry Corporation of NSW
- reduce the costs associated with implementation and compliance
- recognise innovations in best regulatory practice, incorporate advances in technology, and deliver a contemporary regulatory framework that is fit for purpose.<sup>420</sup>

**8.46** In February 2014, a discussion paper outlining the key elements of the proposed IFOA and legislative amendments was released for public comment until 9 April 2014. During this time six independently facilitated community information sessions were held. The NSW Government received 877 submissions on the discussion paper, which have been reviewed and are informing the draft of the new IFOA. The EPA advised that the draft of the new IFOA will be released for public comment, and then there will be further opportunity for the community to comment on the proposed regulatory practices.<sup>421</sup>

**8.47** NEFA, represented by the Nature Conservation Council of NSW (NCC), were originally a participant in the process for developing the new IFOAs.<sup>422</sup> However, NEFA and the NCC found it to be 'an incredibly biased process' with limited consultation and information sharing, so decided to withdraw from the process.<sup>423</sup>

### **Review of threatened species penalties**

**8.48** As noted above, a number of environmental groups objected to the limited financial penalties applied to the Forestry Corporation following the breaches identified in several compartments. The EPA concurred with these sentiments.<sup>424</sup> The committee heard that in the period since the breaches occurred, the \$1,500 water pollution penalties under the IFOA are being increased to \$15,000 and the Board of the EPA had recommended that penalty notices for threatened species should also be increased, from the current \$300 set in legislation to

<sup>419</sup> Submission no. 156, NSW Environment Protection Authority, p 240.

<sup>420</sup> Submission no. 156, NSW Environment Protection Authority, p 240.

<sup>421</sup> Submission no. 156, NSW Environment Protection Authority, p 240.

<sup>422</sup> Evidence, Mr Dailan Pugh and Mr David Milledge, North East Forest Alliance, 29 October 2014, p 8; Evidence, Professor Donald White and Ms Kate Smolski, Nature Conservation Council NSW, 13 October 2014, p 52.

<sup>423</sup> Evidence, Mr Dailan Pugh and Mr David Milledge, North East Forest Alliance, 29 October 2014, p 8; Evidence, Professor Donald White and Ms Kate Smolski, Nature Conservation Council NSW, 13 October 2014, p 52.

<sup>424</sup> Submission no. 156, NSW Environment Protection Authority, p 242.

\$15,000.<sup>425</sup> This is expected to be considered by the Government as part of the proposed consolidated IFOA process.<sup>426</sup>

### **Core koala habitat mapping**

**8.49** As part of the proposed consolidated Coastal IFOA, the EPA and Forestry Corporation have committed to moving to regional koala habitat mapping. The committee heard that the EPA has commenced broad-scale mapping of koala habitat. The outcome of this mapping project will be used to inform appropriate conditions, including exclusion zones, the protection of feed trees and other alternative provisions in the consolidated Coastal IFOA.<sup>427</sup> A total of \$373,000 has been allocated to the program.<sup>428</sup>

### **Cessation of logging**

**8.50** The EPA advised the committee that, based on the findings of the Phillips report, the agency recommended in June 2014 that no further forestry activities occur in Royal Camp State Forest until:

- appropriate mitigation measures are developed for the consolidated Coastal IFOA
- regional refinement of the EPA's koala habitat mapping project is undertaken in the Royal Camp State Forest.<sup>429</sup>

### **Process improvements**

**8.51** Based on the outcomes of the EPA's experience at Royal Camp State Forest, the agency identified a number of improvements to its processes. These included: confirming complex allegations in writing prior to an investigation; where multiple complaints are received, advising the complainant whether the complaint will be included in the current process or dealt with in a separate process; the provision of detailed responses to enable the complainant to track the progress of individual allegations; and establishing clearer boundaries for infield engagements prior to meeting with stakeholders to avoid misunderstandings.<sup>430</sup>

### **Clarification of compliance priorities**

**8.52** The EPA acknowledged that underlying some of the concerns expressed by NEFA was a view on the level of prioritisation accorded to their complaints. The committee heard that during the period in which NEFA made their complaints, the EPA was conducting and finalising 10

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<sup>425</sup> Submission no. 156, NSW Environment Protection Authority, p 242.

<sup>426</sup> Correspondence, Ms Sarah Low, Project Officer Governance, NSW Environment Protection Authority to Principal Council Officer, 28 January 2014.

<sup>427</sup> Submission no. 156, NSW Environment Protection Authority, p 244.

<sup>428</sup> Submission no. 156, NSW Environment Protection Authority, p 235.

<sup>429</sup> Submission no. 156, NSW Environment Protection Authority, p 244.

<sup>430</sup> Submission no. 156, NSW Environment Protection Authority, p 246.

proactive audits under its *Crown Forestry Compliance Strategy* and investigating 13 operations across the state in response to alleged offences under the IFOAs.<sup>431</sup>

- 8.53** To ensure compliance resources are deployed to the most significant issues, in July 2013 the EPA began to publish annual compliance priorities, which were developed in consultation with stakeholders. The EPA told the committee that the strategy and annual priorities use a risk-based approach and seek a better balance between responsive and proactive work.<sup>432</sup>

***Committee comment***

- 8.54** The committee has carefully reviewed the material provided and evidence given regarding the activities of the Forestry Corporation in the Royal Camp State Forest and the EPA's role in ensuring effective oversight, compliance and enforcement. The committee was assisted in this task by visiting Royal Camp State Forest.
- 8.55** The committee considers that the complaints lodged with the EPA by NEFA highlight the need for a clearer and more efficient regulatory system. To this end, the committee notes the efforts of the EPA to rewrite the integrated forestry operation approvals licensing system. The committee is hopeful that a new licensing regime will help to reduce some of the ambiguity that seems to surround the present system.
- 8.56** The committee is mindful that there will always be a divergence in views in determining the right balance in forestry practices. While the Chief Environmental Regulator acknowledged that the response to NEFA's allegations was not always of the standard that the community should be able to expect from the regulator, the committee is concerned that the incidents at Royal Camp State Forest highlight once again the need for the EPA to communicate more effectively with stakeholders, particularly during periods in which investigations are being undertaken and levels of concern are high. The committee reiterates the observations and recommendations made throughout this report regarding the need for effective stakeholder engagement to be made a greater priority for the agency.
- 8.57** The committee also notes that some 27 EPA personnel are responsible for the oversight and compliance of the forestry industry in New South Wales. Given the industry's wide geographical distribution, and its historical tendency to attract significant attention in the media and community, the committee recommends that the EPA commit greater resources to this important regulatory role.
- 8.58** The committee also notes that the EPA Board has recommended that the penalty notice for threatened species breaches be lifted from \$300 to \$15,000. The committee supports this call and believes such an amendment would better equip the EPA to take action against breaches without resorting to prosecutory action which, as noted above, can be costly and subject to lengthy delays and unpredictable outcomes. The committee recommends that the government make the legislative amendments required to effect this increase a matter of priority.

<sup>431</sup> Submission no. 156, NSW Environment Protection Authority, p 247.

<sup>432</sup> Submission no. 156, NSW Environment Protection Authority, p 247.

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**Recommendation 13**

That the NSW Government allocate significant additional funds to the Environment Protection Authority to further train staff and to facilitate the appointment of additional personnel to the Forestry Division.

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## Chapter 9 A more effective EPA

### *Committee comment*

- 9.1** Throughout the course of this inquiry, the committee has received evidence that speaks to the broad and varied functions of the Environment Protection Authority in the performance of its role as the state's independent environmental regulator. Since its re-establishment in 2012, the effectiveness of the agency in its statutory role to protect, restore and enhance the quality of the environment, to ensure ecologically sustainable development, and in its role in building a collaborative working relationship with industry has been a source of significant debate.<sup>433</sup> This debate has continued to echo throughout the evidence received during this inquiry.
- 9.2** The committee has concluded that the EPA is performing the majority of its functions in keeping with the objectives set out under the *Protection of the Environment Administration Act 1991*. In the period since its re-establishment in 2012, the agency has sought to clarify its role and vision, and has worked to develop a relationship with industry that strikes the right balance between oversight and effective collaboration. The committee believes that the EPA has struck this balance appropriately and professionally.
- 9.3** The EPA has also begun to address some of the concerns of stakeholders, including reviewing statutory provisions for penalty notices and ensuring that subsequent recommendations for amendment reflect the principle that the punishment fits the gravity of the crime. The EPA has also begun to make a greater amount of information publicly accessible online, and has worked to develop community consultation groups, such as those established in Newcastle and in response to the Orica incidents, to ensure that key stakeholders have regular opportunities to engage with one another and with the EPA.
- 9.4** The EPA could make greater use of innovative approaches to deterrence and overall pollution limits of the environment. This could include greater use of Protection of the Environment Policies (PEPs), available to it under the *Protection of the Environment Operations Act 1997*, consideration of a multiplier effect for penalty notices to repeat offenders and setting maximum pollution/emissions caps for zones/regions.
- 9.5** Nevertheless, this inquiry has identified a number of areas in which the either the performance of the EPA was found wanting, or the committee identified areas for legislative amendment with a view to enhanced governance, oversight and, ultimately, accountability.
- 9.6** Firstly, the committee believes that the EPA would benefit from the alteration of its current governance structure. The committee is confident that separating the roles of Chairperson of the Board and Chief Executive Officer of the EPA will enable clearer delineation between the roles and responsibilities of each position. This reform will also assist the board to better fulfil its oversight function, and provide for a corporate structure that parallels those of other state agencies and authorities.
- 9.7** The committee has also identified the need for the EPA to place a greater emphasis on scientific rigour in the monitoring and assessment process and, in particular, the role of peer

<sup>433</sup> New South Wales Auditor-General's Report, *Performance Audit: Managing contaminated sites: Environment Protection Authority, Department of Trade and Investment, Regional Infrastructure and Services*, Audit Office of New South Wales, 10 July 2014.

review prior to the publication of information. While the EPA has rightly placed an emphasis on the commitments it has given to meeting deadlines and minimising public alarm, the community has the right to expect that information disseminated can be relied upon.

- 9.8** Related to this theme, the committee agrees with the call made by a number of inquiry participants that the EPA make transparency in decision making a greater priority and, in particular, commit to the timely release of monitoring and other quantitative data.
- 9.9** When the EPA was established as an independent statutory body in 2011, it was separated from the scientific division in the Office of Environment and Heritage and now relies on a service agreement to access scientific expertise.

**Dr MEHREEN FARUQI:** When the EPA was separated from the Office of Environment and Heritage, was the scientific division within OEH transferred with the EPA?

**Mr BUFFIER:** No. What we have is a service agreement with OEH, which relates to providing some of the basic administrative services—HR, payroll, et cetera. It also includes legal services and scientific services. Some of that changed a little bit. Air policy and water stayed with OEH but we have now transferred some of those resources into EPA with a subsequent adjustment in the service level agreement. We operate under a service level agreement.<sup>434</sup>

- 9.10** In July 2014, the Auditor General released a report entitled ‘Managing Contaminated Sites’ that highlighted significant problems with the way the EPA manages contaminated land and the very large backlog of sites waiting to be assessed. The EPA has stated that it would require an additional one program manager and four full time staff over five years to clear that backlog.<sup>435</sup> The committee suggests that resourcing to clear the backlog of sites waiting to be assessed be prioritised.
- 9.11** The committee also considers that the EPA could make greater use of Protection of the Environment Policies, available to it under the *Protection of the Environment Operations Act 1997*, and give serious consideration to applying a multiplier effect for penalty notices to repeat offenders and setting maximum pollution or emissions caps for zones and regions.
- 9.12** Finally, much of the evidence received from inquiry participants made reference to failings in the EPA’s communication and engagement with stakeholders. Inquiry participants spoke not only to errors in judgement made by the agency, but also to a perceived reduction in stakeholder engagement and participation in general. To a number of inquiry participants, the decision to remove community and local council representation from the board of the EPA was symptomatic of this cultural shift away from community consultation and engagement. The committee does not agree with this view, however we do believe that communication between the EPA, interested groups and individuals could have been better.
- 9.13** The committee acknowledges that the stakeholder groups with which the EPA must engage are varied. The regulatory functions of the agency canvass the concerns of diverse groups,

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<sup>434</sup> Evidence, Mr Barry Buffier, Chair and Executive Officer, NSW Environment Protection Authority, 13 October 2014, p. 9.

<sup>435</sup> NSW Environment Protection Authority, Supplementary Questions and Answers, Question 8, 14 November 2014.

including community groups, business and industry groups, environment and conservation groups, government, state and federal departments and agencies and the media.

- 9.14** Much of the work done by the EPA is both positive and effective in nature and the committee is pleased to have heard evidence regarding positive outcomes achieved in terms of stakeholder engagement in the years since its re-establishment in 2012.
- 9.15** Nevertheless, the EPA could do better in its communication with stakeholders, particularly in the provision of information during the management of incidents. To this end, while the committee heard many suggestions as to how the EPA could better engage with the community, the committee believes that those made by Professor Chris Fell following his review of the EPA's response to allegations regarding land contamination issues at Botany and Hillsdale speak to the heart of the matter. Principal among these is the need to achieve a clear and collaborative means of communication with stakeholders. The committee strongly endorses Professor Fell's findings and recommendations, as outlined in chapter 3.
- 9.16** The committee also recommends that the EPA take immediate steps to refine and enhance stringent internal protocols and procedures to ensure timely public communication of all pollution incidents.
- 9.17** The Newcastle Community Consultation Committee and related EPA engagement with both industry and the community in response to concerns regarding the activities of Orica Pty Ltd is a good example of a successful community outreach program. The committee believes that the EPA could make greater use of community consultation committees, and hence recommends that the EPA, as part of its public engagement and communication strategy, make greater use of community consultation committees where appropriate, ensuring they are transparently evaluated and engender genuine participation.

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#### **Recommendation 14**

That the NSW Environment Protection Authority, as part of its public engagement and communication strategy, make greater use of community consultation committees, ensuring they are transparently evaluated and engender genuine participation.

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#### **Recommendation 15**

That the NSW Environment Protection Authority be adequately resourced to clear the backlog of contaminated sites awaiting assessment, as well as develop systems to ensure contaminated lands are assessed in a more timely manner.

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#### **Recommendation 16**

That the NSW Environment Protection Authority take immediate steps to refine and enhance stringent internal protocols and procedures to ensure timely public communication of all pollution incidents.

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**Recommendation 17**

That the NSW Environment Protection Authority make greater use of Protection of the Environment Policies, available to it under the *Protection of the Environment Operations Act 1997*, and give serious consideration to applying a multiplier effect for penalty notices to repeat offenders and setting maximum pollution or emissions caps for zones and regions.

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## Appendix 1 *Protection of the Environment Administration Act 1991* s 6 – Objectives of the Authority

1. The objectives of the Authority are:
  - a. to protect, restore and enhance the quality of the environment in New South Wales, having regard to the need to maintain ecologically sustainable development, and
  - b. to reduce the risks to human health and prevent the degradation of the environment, by means such as the following:
    - promoting pollution prevention,
    - adopting the principle of reducing to harmless levels the discharge into the air, water or land of substances likely to cause harm to the environment,
    - minimising the creation of waste by the use of appropriate technology,
    - regulating the transportation, collection, treatment, storage and disposal of waste,
    - encouraging the reduction of the use of materials, encouraging the re-use and recycling of materials and encouraging material recovery,
    - adopting minimum environmental standards prescribed by complementary Commonwealth and State legislation and advising the Government to prescribe more stringent standards where appropriate,
    - setting mandatory targets for environmental improvement,
    - promoting community involvement in decisions about environmental matters,
    - ensuring the community has access to relevant information about hazardous substances arising from, or stored, used or sold by, any industry or public authority,
    - conducting public education and awareness programs about environmental matters.
2. For the purposes of subsection (1) (a), ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes. Ecologically sustainable development can be achieved through the implementation of the following principles and programs:
  - a. the precautionary principle—namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.

In the application of the precautionary principle, public and private decisions should be guided by:

- i. careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
  - ii. an assessment of the risk-weighted consequences of various options
- b. inter-generational equity—namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,
  - c. conservation of biological diversity and ecological integrity—namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,
  - d. improved valuation, pricing and incentive mechanisms—namely, that environmental factors should be included in the valuation of assets and services, such as:

- i. polluter pays—that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
- ii. the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
- iii. environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

## Appendix 2 Submissions

No	Author
1	Name suppressed
2	Name suppressed
3	Mrs Annelie Child
4	Mr John Holden
5	Name suppressed
6	Mr Roy Carter
7	Mr Mervyn Murchie
8	Name suppressed
9	Clarence Environment Centre
10	Beecroft-Cheltenham Civic Trust
11	Name suppressed
12	Mrs Kim Smith ( <i>partially confidential</i> )
13	Name suppressed
14	Mr Anthony O'Halloran ( <i>partially confidential</i> )
15	Name suppressed
16	Name suppressed
17	Mr Bruce Holdsworth
18	Mr Dennis Hirst
19	Confidential
20	Nelson Parade Action Group
21	Name suppressed
22	Mrs Samantha Marshall
23	Name suppressed
24	Balmain, WhiteBay & Rozelle Precincts
25	Ms Kathie Frankland
26	Name suppressed
27	Confidential
28	Name suppressed
29	Name suppressed
30	Mr Magdy Habib

No	Author
31	Name suppressed
32	Confidential
33	Mr Ron Windred
34	Mrs Elizabeth Laverty
35	Mr Frank Nolan
36	Mr Doug Bathersby ( <i>partially confidential</i> )
37	Mr Peter Carroll
38	Confidential
39	Mr Howard Lovatt
40	Mr Michael Mizzi
41	The Colong Foundation for Wilderness Ltd
42	Mr Mark Merritt
43	Mr Thomas Ebersoll
44	Blue Mountains Conservation Society
45	Professor Alan Rosen
46	Name suppressed
47	Mr Adrian Lockhart ( <i>partially confidential</i> )
48	Mr Fergus Horrobin
49	Cr John Stamolis
50	Name suppressed
51	Dr John Goldberg
52	Dungog Shire Council
53	Confidential
54	Name suppressed
55	Mr Ken Brown
56	Dr Ian Wright
57	Confidential
58	Mr Jeremy Child
59	Dr Elaine Moon
60	Mr Leonard Clarke
61	Mr Tony Pickard
62	North Coast Environment Council

<b>No</b>	<b>Author</b>
63	Mr Ron Campey
64	Name suppressed
65	Mr Andrew Turbill ( <i>partially confidential</i> )
66	Mr David Banwell
67	Mr Jamie Blacklaw
68	Mr Kevin Davies
69	Ms Caroline Nute
70	Ms Harriet Swift
71	Ms Melanie Petranovic
72	Ms Sherryl Mula
73	Name suppressed
74	Dr Mary MacGibbon
75	Mrs Jane Judd
76	Keep NSW Beautiful
77	Confidential
78	Ms Suzanne Gleeson
79	Mr Dorte Planert
80	Mr Brent Richards
81	Ms Karen Campbell
82	Name suppressed
83	Ms Marcia Horvai
84	Mr Roy Bishop
85	Mr Gary Humble
86	Mr Marcelle Lawrence
87	Ms Coleen Greene ( <i>partially confidential</i> )
88	Hg Recoveries Pty Ltd ( <i>partially confidential</i> )
89	Dr Ann Young
90	Mr Anthony Whan
91	Sandy Point Progress Association Inc
92	Byron Environment Centre Inc
93	Ballina Environment Society Inc.
94	Far North Coast Branch National Parks Association NSW

<b>No</b>	<b>Author</b>
95	Mrs Sarah Ciesiolka
96	Mr Andre Hacobian
97	Mr Adrian Boss
98	Confidential
99	Ms Lorraine Vass
100	Mr Russell Hiscox ( <i>partially confidential</i> )
101	Name suppressed
102	Ms Jennie Minifie
103	Name suppressed
104	Ms Judith Turley
105	Mr Tom Grant
106	Ms Nerida Crowe
107	Ms Diane Montague
108	Ms Vera Zaccari
109	Mr Ray Kearney
110	Mr John Merlov
111	Ms Deborah Rothschild
112	Ms Meredith Stanton
113	Ms Beverley Trevenen ( <i>partially confidential</i> )
114	Nature Conservation Council of NSW
115	Confidential
116	Carnival Australia
117	Confidential
118	Name suppressed
119	Mr Les Johnston
120	Name suppressed
120a	Name suppressed
121	Friends of Gore Bay
122	Mr David Foster
123	Name suppressed
124	Hawkesbury Environment Network
125	Mrs Meredith Southwood

<b>No</b>	<b>Author</b>
126	Ms Nazli Munir
127	Name suppressed
128	Name suppressed
129	Leichhardt Municipal Council
130	Confidential
131	Newcastle City Council
132	Lock the Gate Alliance
133	Ms Helen Smith
134	Name suppressed
135	Name suppressed
136	Ms Helen Gilbert
137	Name suppressed
138	Confidential
139	Koolewong Point Clare and Tascott Progress Association ( <i>partially confidential</i> )
140	Santos Ltd
141	Mr William Thomson
142	Hunter Councils
143	Mrs Jane Sampson
144	Australian Air Quality Group
145	Professor John Reizes
146	Mr Jamie Parker
147	Confidential
148	Ms Annette O'Neill
149	Ms Gillian Moon
150	Waste Contractors & Recyclers Association of NSW
151	Charlton Excavations & Demolition Pty Ltd ( <i>partially confidential</i> )
152	Northern Rail Noise Committee
153	Confidential
154	Confidential
155	Name suppressed
156	NSW Environment Protection Authority
157	Ms Jann Joy

<b>No</b>	<b>Author</b>
158	Mr Sam Herbert
159	Ryde Hunters Hill Flora and Fauna Preservation Society
160	Confidential
160a	Nambucca Valley Conservation Association Inc
161	Hunter Environment Lobby Inc
162	EDO NSW
163	Mudgee District Environment Group
164	Hunter Community Environment Centre
165	Mr Raymond Cox
166	Correct Planning & Consultation for Mayfield Group
167	Name suppressed
168	Name suppressed
169	Wilderness Society Newcastle ( <i>partially confidential</i> )
170	Confidential
171	Ms Margot Maasackers
172	Ms Clarissa Watson
173	Mr John Byrnes
174	Central Coast Greens
175	North East Forest Alliance ( <i>partially confidential</i> )
176	Ms Margaret Fleck
177	Name suppressed
178	Ms Verity Firth
179	Mr David Body
180	Ms Chrissie Tucker
181	Mr Dallas Baxter
182	Mr David Finlay
183	Mrs Dianne Pawsey
184	Mr William Pawsey
185	Mr Paul Taylor
186	Confidential
187	Mr Joe Sparks
188	Ms Diana Fraser



<b>No</b>	<b>Author</b>
189	Mr R Macintosh
190	Ms Kay Wilson
191	Ms Jo Hobson
192	Mr David Penn
193	Ms Anna Schlunke
194	Ms Patricia Ryan
195	Ms Lynda Newnam
196	Ms Jill Keogh
197	Ms Frances Scarano
198	Mr Phillip Blackwell
199	Ms Wendy Hawes
200	Ms Michelle Rower
201	Ms Sharyn Lafontaine
202	Mr Duncan Marshall
203	Ms Lisa Newling
204	Ms Anne Chidgey
205	Ms Claudia Graham
206	Mr Maurice Dowson
207	Mr Karl Adderley
208	Ms Helen Saville
209	Mr Asko Sutton
210	Ms Kelia Keogh
211	Mr John Lamb
212	Mr Paul Kreuzen
213	Ms Marion Armstrong
214	Mr Kevin O'Neill
215	Ms Rae Stewart
216	Ms Sheila Monahan
217	Ms Lynette White
218	Ms Jo Lewis
219	Mr Frank Briggs
220	Ms Linnie Lamb

<b>No</b>	<b>Author</b>
221	Mr Brian McDonald
222	Ms Helen Hackett
223	Mr Pieter Newtown
224	Ms Julianne Lynch
225	Ms Ilma Hynson
226	Mr John Bartholomew
227	Ms Anne Matheson
228	Ms Olga Tresz
229	Mr Michael Bushby
230	Ms Jenny Medd
231	Ms Jenny Simons
232	Ms Wendy Gillespie
233	Mr Bruce O'Connor
234	Ms Maryann Streeter
235	Mr Des Cleary
236	Ms Beverley Crossley
237	Ms Susan Wynn
238	Mr Mark Selmes
239	Ms Mary Rawlings
240	Ms Eira Battaglia
241	Lyn Fowler & Edward Walker
242	Name suppressed
242a	Name suppressed
243	Name suppressed
244	Ms Lisa Campbell
245	Hillsdale and Eastgarden Residents Action Group
246	Mr Steve Haigh
247	NSW Mining
248	Dr Ian Wilkinson
249	Dr Louise Young
250	Professor Robert Marks
251	Ms Gill Hazel

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<b>No</b>	<b>Author</b>
252	Mr John Priest
253	Ms Kate Horrobin
254	Confidential

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## Appendix 3 Witnesses at hearings

<b>Date</b>	<b>Name</b>	<b>Position and Organisation</b>
<b>13 October 2014 Macquarie Room Parliament House</b>	Mr Barry Buffier	Chair and Chief Executive Officer, NSW Environment Protection Authority
	Mr Mark Gifford	Chief Environmental Regulator, Regulatory Services Division, NSW Environment Protection Authority
	Mr Frank Garofalow	Manager Infrastructure Metropolitan, NSW Environment Protection Authority
	Mr Steve Hartley	Principal Manager Forestry, NSW Environment Protection Authority
	Ms Sarah Low	Project Officer – Governance, NSW Environment Protection Authority
	Ms Rochelle Porteous	Mayor, Leichhardt Municipal Council
	Ms Erla Ronan	Acting Director – Community and Environmental Management, Leichhardt Municipal Council
	Mr Ryan Cole	Manager – Compliance and Enforcement, Leichhardt Municipal Council
	Ms Katrina Horrobin	Member, White Bay/Rozelle Precinct Group
	Mr John Stamolis	Member, White Bay/Rozelle Precinct Group; Councillor, Leichhardt Municipal Council
	Mr Jeff Smith	Chief Executive Officer, Environmental Defenders Office
	Mr Nari Sahukar	Senior Policy and Law Reform Solicitor, Environmental Defenders Office
	Ms Rachel Walmsley	Policy Director, Environmental Defenders Office
	Mr Hywel Lewis-Jones	Member, Hillsdale and Eastgarden Residents Action Group
Mr Steve Haigh	Member, Hillsdale and Eastgarden Residents Action Group	
Mr Ross Salter	Member, Hillsdale and Eastgarden Residents Action Group	

Date	Name	Position and Organisation
	Ms Kate Smolski	Chief Executive Officer, Nature Conservation Council of NSW
	Ms Sarin Loane	Policy and Research Coordinator, Nature Conservation Council of NSW
	Professor Donald White	Chair, Executive Committee, Nature Conservation Council of NSW
	Mr Andrew Helps	Managing Director, HG Recoveries Pty Ltd
<b>29 October 2014</b>	Mr Dailan Pugh	Coordinator, North East Forest Alliance
<b>Lismore City Hall, Lismore</b>	Mr David Milledge	Ecologist, North East Forest Alliance
	Ms Fiona Folan	President, Ballina Environment Society Inc.
	Mr Dean Kearney	Senior Manager—Planning, Hardwood Forest Division, Forestry Corporation of NSW
	Mr Justin Williams	Operations Planning Manager, Hardwood Forest Division, Forestry Corporation of NSW
<b>10 November 2014</b>	Mr Barry Buffier	Chair and Chief Executive Officer, NSW Environment Protection Authority
<b>Newcastle City Hall, Newcastle</b>	Mr Mark Gifford	Chief Environmental Regulator, Regulatory Services Division, NSW Environment Protection Authority
	Mr Frank Garofalow	Manager Infrastructure Metropolitan, NSW Environment Protection Authority
	Ms Sarah Low	Project Officer – Governance, NSW Environment Protection Authority
	Mr Matthew Riley	Director Climate and Atmospheric Science, Office of Environment and Heritage
	Mr David Frith	Director, Industry and Environment, NSW Minerals Council
	Mr Damon Roddis	Principal and General Manager, Pacific Environment Limited

Date	Name	Position and Organisation
<b>24 November 2014</b> <b>Macquarie Room</b> <b>Parliament House, Sydney</b>	Dr John Mackenzie	Community Liaison, Hunter Community Environment Centre, and Coal Terminal Action Group
	Dr James Whelan	Representative, Coal Terminal Action Group
	Associate Professor Nick Higginbotham	Lecturer, Public Health, University of Newcastle, and Coal Terminal Action Group
	Ms Meredith Laing	Director, Environment Division, Hunter Councils
	Mr Bradley Nolan	Regional Program Manager, Hunter Councils
	Mr Barry Buffier	Chair and Chief Executive Officer, NSW Environment Protection Authority
	Mr Mark Gifford	Chief Environmental Regulator, Regulatory Services Division, NSW Environment Protection Authority
	Mr Frank Garofalow	Manager Infrastructure Metropolitan, NSW Environment Protection Authority
	Mr Steve Hartley	Principal Manager Forestry, NSW Environment Protection Authority
	Ms Sarah Low	Project Officer – Governance, NSW Environment Protection Authority
	Mr Keith Muir	Director, Colong Foundation for Wilderness
	Professor Chris Fell	Private Individual
	Mr Alan Rosen	Resident, Balmain
Ms Naomi Hogan	Newcastle Campaign Manager, Wilderness Society	
Ms Katherine Fleck	Private Individual	
Ms Georgina Woods	New South Wales Coordinator, Lock the Gate Alliance	

## Appendix 4 Tabled documents

**13 October 2014**

**Public Hearing, Macquarie Room, Parliament House**

- 1 NSW Environment Protection Authority, “EPA achievements since February 2012”, tendered by Mr Barry Buffier
- 2 NSW Environment Protection Authority, Environment Protection Licence for Santos NSW (Eastern) Pty LTD relating to the Narrabri Gas Field, tendered by Mr Barry Buffier
- 3 Environmental Defender’s Office (NSW), Report of Environmental Defender’s Office (NSW) entitled “Clearing the Air: Opportunities for improved regulation of pollution in New South Wales”, tendered by Ms Rachel Walmsley
- 4 Nature Conservation Council of NSW, Report of the Environmental Defender’s Office (NSW) entitled “If a tree falls: Compliance failures in the public forests of New South Wales”, tendered by Ms Kate Smolski
- 5 Hg Recoveries Pty Ltd, Document addressed to Natalie O’Brien, Senior Reporter, The Sun Herald Newspaper from Dr Ir. Ron McDowall OBE, International Consultant Scientist/Engineer for Un-FAO, Mission Specialist Toxic, Hazardous, Dangerous Chemical and Nuclear Wastes entitled “Non Commissioned Report”, tendered by Mr Andrew Helps.

**29 October 2014**

**Lismore City Hall, Lismore**

- 6 North East Forest Alliance, Photographs of Yellow-Bellied Gliders and their habitat in Royal Camp Forest, tendered by Mr David Milledge.

**10 November 2014**

**Newcastle City Hall, Newcastle**

- 7 NSW Environment Protection Authority, Document entitled “Summary of major air quality projects and programs in the Hunter”, tendered by Mr Barry Buffier
- 8 Hunter Community Environment Centre, Document entitled “Performance of the NSW EPA: Legislative Council inquiry supporting materials”, tendered by Dr John Mackenzie
- 9 Hunter Community Environment Centre, Document entitled “Comparison of the two versions of ARTC’s ‘Pollution Reduction Program 4.2 Particulate Emissions from Coal Trains’ report”, tendered by Dr John Mackenzie.

**24 November 2014**

**Macquarie Room, Parliament House**

- 10 NSW Environment Protection Authority, Letter from Mr Andrew McNee, Assistant Secretary to the United Nations Environment Programme (UNEP), regarding statements made by Mr Andrew Helps regarding his representation of the United Nations Mercury Group or the UNEP Global Mercury Partnership, tendered by Mr Barry Buffier
- 11 NSW Environment Protection Authority, Document entitled ‘Statement to Upper House Inquiry 21 November 2014 – Coal Seam Gas’, tendered by Mr Barry Buffier
- 12 Wilderness Society, Document entitled ‘NSW EPA Site Visit report (Santos, 22 and 23 May 2013)’, tendered by Ms Naomi Hogan.

## Appendix 5 Answers to questions on notice

The committee received answers to questions on notice from:

- Hillsdale and Eastgardens Resident Action Group
- Leichhardt Municipal Council
- Mr Andrew Helps
- Nature Conservation Council of NSW
- NSW Environment Protection Authority
- Forestry Corporation NSW
- North East Forest Alliance
- The Wilderness Society Newcastle
- Hunter Community Environment Centre
- The Colong Foundation for Wilderness
- Carnival Australia.



## Appendix 6 Minutes

### Minutes no. 58

Wednesday 25 June 2014

General Purpose Standing Committee No. 5

Room 1153, Parliament House, 11.02 am

#### 1. Members present

Mr Brown, *Chair*

Mr Buckingham, *Deputy Chair* (11.15 am)

Mr Colless (teleconference)

Mr Donnelly

Mr Foley

Mr MacDonald (teleconference)

Dr Phelps (teleconference)

#### 2. Previous minutes

Resolved, on the motion of Mr Colless: That draft minutes no. 57 be confirmed.

#### 3. Substitutions

The committee noted the substitution of Mr Foley for Mr Primrose.

#### 4. Correspondence

The Chair noted the following correspondence received:

- 24 June 2014 – Dr John Mackenzie to Chair expressing support for the inquiry into the performance of the NSW Environment Protection Authority on behalf of the Hunter Community Environment Centre.

#### 5. Inquiry into the performance of the NSW Environment Protection Authority

##### 5.1 Proposed timeline

Resolved, on the motion of Mr Donnelly: That the committee adopt the following proposed timeline for the administration of the inquiry:

- 9 February 2015 – Deliberative meeting
- 13 February 2015 – Report tabled.

##### 5.2 Hearings and site visits

Resolved, on the motion of Mr Colless: That the committee conduct site visits to the Hunter region, Royal Camp State Forest and White Bay Cruise Terminal at Balmain.

Resolved, on the motion of Mr MacDonald: That the committee hold one hearing in Sydney and one in Newcastle and that a reserve date be set aside for a possible third hearing in Sydney.

The committee noted the secretariat is to provide suggested dates for the hearings and site visits to members.

**5.3 Media release announcing inquiry**

Resolved, on the motion of Mr Buckingham: That the committee approve the publication of a media release issued by the Chair announcing the inquiry and calling for submissions.

**5.4 Closing date for submissions**

Resolved, on the motion of Mr Foley: That the closing date for submissions to be 29 August 2014.

**5.5 Stakeholder list**

The committee noted the draft list of stakeholders to be invited to make a submission to the inquiry.

Resolved, on the motion of Dr Phelps: That members email the secretariat with any additional stakeholders by close of business Friday 27 June 2014.

**5.6 Advertising**

The committee noted that the inquiry is to be advertised via twitter, stakeholder letters and via a media release distributed to all media outlets in New South Wales.

**5.7 Submission publication**

Resolved, on the motion of Mr Donnelly: That the committee authorise the publication of all submissions to the inquiry into the performance of the NSW Environment Protection Authority, subject to the committee clerk checking for confidentiality, adverse mention and other issues. Submissions identified as containing confidentiality, adverse mention or other issues are to be considered by the committee.

**5.8 Process for determining witnesses**

Resolved, on the motion of Mr Colless: That the secretariat circulates to members the Chair's proposed list of witnesses to provide them the opportunity to amend the list or nominate additional witnesses, and that the committee agree to the witness list by email, unless a meeting of the committee is required to resolve any disagreement.

**5.9 Questions on notice and supplementary questions**

Resolved, on the motion of Dr Phelps: That for the duration of the inquiry into the performance of the NSW Environment Protection Authority:

- supplementary questions may be lodged with the secretariat up to two days following the receipt of the hearing transcript
- witnesses be requested to return answers to questions on notice and supplementary questions within 21 days of the date on which questions are forwarded to the witness.

**6. Adjournment**

The Committee adjourned at 11.18 am until 10.20 am on Monday 18 August 2014, in Room 814/815 (Budget Estimates).

Stewart Smith

**Clerk to the Committee**

**Minutes no. 66**

Wednesday 17 September 2014

General Purpose Standing Committee No. 5

Room 1153, Parliament House, Sydney, at 9.30 am

**1. Members present**

Mr Brown, *Chair*

Mr MacDonald, *Deputy Chair*

Mr Colless

Mr Donnelly

Dr Faruqi

Mr Foley (from 9.35 am)

Dr Phelps

**2. Election of Deputy Chair**

The Chair called for nominations for Deputy Chair for the inquiry into the performance of the NSW Environment Protection Authority.

Dr Faruqi moved: That Dr Faruqi be elected Deputy Chair of the committee.

Dr Phelps moved: That Mr MacDonald be elected Deputy Chair of the committee.

The Chair informed the Committee that, there being two nominations, a ballot would be held:

The Chair announced the result of the ballot as follows:

Dr Faruqi – 2 votes

Mr MacDonald – 4 votes.

Mr MacDonald, having a majority of the members present and voting, was therefore elected Deputy Chair of the committee for the purposes of the inquiry into the performance of the NSW Environment Protection Authority.

**3. Confirmation of draft minutes**

Resolved, on the motion of Dr Phelps: That draft minutes no. 65 be confirmed.

Mr Foley joined the meeting.

**4. Correspondence*****Received***

- 28 July 2014 – From Mr Jeremy Buckingham MLC, Deputy Chair, to Chair, requesting that Dr Mehreen Faruqi be substituted onto the EPA committee inquiry in his place
- 29 July 2014 – From Ms Caroline Hocking, private citizen, to Chair, outlining odour issues in Hawkesbury region and EPA's alleged inaction
- 2 September 2014 – From Mr Barry Buffier, Chair & Chief Executive, NSW Environment Protection Authority, offering to show committee members the extent of publicly available material on the EPA website

**5. Inquiry into the performance of the NSW Environment Protection Authority****Public submissions**

The committee noted that the following submissions were published by the committee clerk under the authorisation of an earlier resolution: submission nos. 3-4, 6-7, 9-10, 17-18, 20, 22, 24-25, 30, 33-37, 39-45, 48-49, 51-52, 55-56, 58-63, 66-72, 74-76, 78-81, 83-86, 89-97, 99, 102, 104-112, 114, 116, 119, 121-122, 124-126, 129, 131-133, 136, 140-146, 156

**Partially confidential submissions**

Resolved, on the motion of Dr Phelps:

- That the committee keep the following information confidential, as per the request of the author: names and/or identifying and sensitive information in submissions nos. 1-2, 5, 8, 11, 13, 15-16, 21, 23, 26, 28-29, 31, 46, 50, 54, 64, 73, 103, 118, 120, 123, 127-128, 134-135, 137.
- That the committee keep the following information confidential, as per the recommendation of the secretariat: names and/or identifying and sensitive information in submissions no. 47, 100, 113, 139.
- That the committee keep the following information confidential, as per the recommendation of the secretariat: potential adverse mention in submissions nos 12, 14, 65, 88, 101.

**Confidential submissions**

Resolved, on the motion of Dr Phelps: That the committee keep submission nos 19, 27, 32, 38, 53, 57, 77, 98, 115, 117, 130, 138 confidential, as per the request of the author, as they contain identifying and/or sensitive information.

**Additional hearing**

Resolved, on the motion of Dr Phelps: That the committee hold an additional public hearing in Lismore on Wednesday 29 October 2014.

**Briefing on website by officers of the NSW Environment Protection Authority**

The committee met with Mr Mark Gifford, Ms Lisa Cassidy and Ms Sarah Lowe of the NSW Environment Protection Authority (EPA) for a private briefing on information published on the EPA's website.

**6. Adjournment**

The Committee adjourned at 10.25 am until 9.00 am, Monday 13 October 2014 (inquiry into the performance of the NSW Environment Protection Authority – public hearing).

Jenelle Moore

**Clerk to the Committee**

**Minutes no. 67**

Monday 13 October 2014

General Purpose Standing Committee No. 5

Macquarie Room, Parliament House, Sydney, at 8.50 am

**1. Members present**

Mr Brown, *Chair*

Mr MacDonald, *Deputy Chair*

Mr Colless

Mr Donnelly

Dr Faruqi

Dr Phelps

**2. Apologies**

Mr Foley

**3. Draft minutes**

Resolved, on the motion of Dr Phelps: That draft minutes no. 66 be agreed to.

#### 4. Correspondence

\*\*\*

#### 5. \*\*\*

#### 6. Inquiry into the performance of the NSW Environment Protection Authority

##### **Pro forma submissions**

The committee noted that 647 pro forma submissions regarding the performance of the EPA generally had been received, and 73 pro forma submissions regarding the operation of the White Bay terminal had been received.

##### **Public submissions**

The committee noted that the following submissions were published by the committee clerk under the authorisation of an earlier resolution: submission nos. 44a, 82, 148-150, 152, 157-166, 171-174, 176, 178-185, 187-240, 241, 244-247.

##### **Partially confidential submissions**

Resolved, on the motion of Dr Phelps:

- That the committee keep the following information confidential, as per the request of the author: names and/or identifying and sensitive information in submissions nos. 155, 167, 168, 177, 242 and 243.
- That the committee keep the following information confidential, as per the recommendation of the secretariat: names and/or identifying and sensitive information in submissions no. 151, 169, 175.

##### **Confidential submissions**

Resolved, on the motion of Dr Phelps: That the committee keep submission nos 147, 147a, 153, 154, 170, 186 confidential, as per the request of the author, as they contain identifying and/or sensitive information.

##### **Status of confidential submissions**

The committee considered the contents of submission nos 19a, 19b and 19c.

Resolved, on the motion of Dr Phelps: That the committee keep submission nos 19a, 19b and 19c confidential as they contain identifying and/or sensitive information.

##### **Allocation of questioning**

Resolved, on the motion of Dr Phelps: That the sequence of questions to be asked during the hearing alternate between crossbench, opposition and government members, in that order, with an equal proportion of time being allocated to each.

Resolved, on the motion of Mr Donnelly:

- That the time for questions allocated to the opposition during the evidence given by the Environment Protection Authority, being 40 minutes, be deferred until the hearing held on Monday 24 November 2014
- That during the evidence given by the Environment Protection Authority, the crossbench be allocated 30 minutes during the first round of questioning.

##### **Public hearing**

Witnesses, the public and the media were admitted.

The chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses from the NSW Environment Protection Authority were sworn and examined:

- Mr Barry Buffier, Chair and Chief Executive Officer
- Mr Mark Gifford, Chief Environmental Regulator, Regulatory Services Division

- Mr Frank Garofalow, Manager Infrastructure Metropolitan
- Mr Steve Hartley, Principal Manager Forestry
- Ms Sarah Low, Project Officer – Governance.

Mr Buffier tendered the following document:

- “EPA achievements since February 2012”

Mr Buffier tendered the following document:

- Environment Protection Licence for Santos NSW (Eastern) Pty LTD relating to the Narrabri Gas Field.

The evidence concluded and the witnesses withdrew.

The following witnesses from Leichhardt Municipal Council were sworn and examined:

- Ms Rochelle Porteous, Mayor
- Ms Erla Ronan, Acting Director – Community and Environmental Management
- Mr Ryan Cole, Manager – Compliance and Enforcement.

The following witnesses from the White Bay/Rozelle Precinct Group were sworn and examined:

- Ms Katrina Horrobin
- Councillor John Stamolis.

The evidence concluded and the witnesses withdrew.

The following witnesses from the Environmental Defender’s Office (NSW) were sworn and examined:

- Mr Jeff Smith, Chief Executive Officer
- Mr Nari Sahukar, Senior Policy and Law Reform Solicitor
- Ms Rachel Walmsley, Policy Director.

Ms Walmsley tendered the following document:

- Report of Environmental Defender’s Office (NSW) entitled “Clearing the Air: Opportunities for improved regulation of pollution in New South Wales”.

The evidence concluded and the witnesses withdrew.

The following witnesses from the Hillsdale and Eastgarden Residents Action Group were sworn and examined:

- Mr Hywel Lewis-Jones
- Mr Steve Haigh
- Mr Ross Salter.

The evidence concluded and the witnesses withdrew.

The following witnesses from the Nature Conservation Council of NSW were sworn and examined:

- Ms Kate Smolski, Chief Executive Officer
- Prof. Donald White, Chair, Executive Committee
- Ms Cerin Loane, Policy and Research Coordinator

Ms Smolski tendered the following document:

- Report of the Environmental Defender’s Office (NSW) entitled “If a tree falls: Compliance failures in the public forests of New South Wales”.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- Mr Andrew Helps, Hg Recoveries Pty Ltd.

Mr Helps tendered the following document:

- Document addressed to Natalie O'Brien, Senior Reporter, The Sun Herald Newspaper from Dr Ir. Ron McDowall OBE, International Consultant Scientist/Engineer for Un-FAO, Mission Specialist Toxic, Hazardous, Dangerous Chemical and Nuclear Wastes entitled "Non Commissioned Report".

The evidence concluded and the witnesses withdrew.

The public hearing concluded.

The public and the media withdrew.

#### **Tendered documents**

Resolved, on the motion of Mr Colless: That the committee consider the publication of the document tendered by Mr Helps at its next meeting.

#### **7. Adjournment**

The committee adjourned at 4.35 pm until 9.30 am, Monday 20 October 2014 (inquiry into the performance of the NSW Environment Protection Authority – site visit to Balmain).

Jenelle Moore

**Clerk to the Committee**

#### **Minutes no. 68**

Monday 20 October 2014

General Purpose Standing Committee No. 5

Room 1136, Parliament House, 9.15 am

#### **1. Members present**

Mr Brown, *Chair*

Mr MacDonald, *Deputy Chair*

Mr Colless

Mr Donnelly

Dr Faruqi (substituting for Mr Buckingham)

Mr Foley (substituting for Mr Primrose)

Dr Phelps

#### **2. Previous minutes**

Resolved, on the motion of Mr Colless: That draft minutes no. 67 be confirmed.

#### **3. Correspondence**

The committee noted the following items of correspondence:

##### ***Received***

- 14 October 2014 – From Mr Andrew Helps, Hg Recoveries Pty Ltd to the committee secretariat, providing information regarding gaseous mercury levels at Botany Industrial Park
- 14 October 2014 – From Mr Andrew Helps, Hg Recoveries Pty Ltd to the committee secretariat, providing a risk assessment matrix for Botany

- 16 October 2014 – From Emeritus Professor Chris Fell, Principal, Fell Consulting Pty Ltd to the chair, in response to comments made about him during the hearing held on Monday 13 October 2014.

Resolved, on the motion of Dr Phelps: That the correspondence from Emeritus Professor Fell be published and annotated to the transcript for the hearing held on Monday 13 October 2014.

4. \*\*\*

## 5. Inquiry into the Environment Protection Authority

### Tabled paper

Resolved, on the motion of Dr Phelps: That the committee publish the following document tendered during the hearing held on Monday 13 October 2014:

- Document addressed to Natalie O'Brien, Senior Reporter, The Sun Herald Newspaper from Dr Ir. Ron McDowall OBE, International Consultant Scientist/Engineer for Un-FAO, Mission Specialist Toxic, Hazardous, Dangerous Chemical and Nuclear Wastes entitled "Non Commissioned Report", tendered by Mr Andrew Helps, Hg Recoveries Pty Ltd.

### Hearing schedules – Newcastle and Lismore

Resolved, on the motion of Mr Colless: That the committee adopt the draft hearing schedules for Lismore (29 October 2014) and Newcastle (10 November 2014).

### Confidential submission

Resolved, on the motion of Dr Phelps: That submission no 160 be made confidential, at the request of the author.

### Public hearing – 24 November 2014

Resolved, on the motion of Mr Colless: That Emeritus Professor Chris Fell, Principal, Fell Consulting Pty Ltd, be invited to appear as a witness at the public hearing in Sydney scheduled for Monday 24 November 2014.

### Site visit – White Bay, Balmain

The committee met with Ms Giselle Howard, Director Metropolitan and Mr Frank Garofalow, Manager Infrastructure Metropolitan, Environment Protection Authority for a tour of sites of significance and streets in Balmain in closest proximity to the White Bay Cruise Terminal.

The committee then met with members of the Balmain community and representatives of Leichhardt City Council to discuss their experience of the White Bay Cruise Terminal and their contact to date with the Environment Protection Authority.

## 6. Adjournment

The committee adjourned at 11.55 am until Tuesday 28 October 2014 (*EPA inquiry – site visit to Royal Camp State Forest, Lismore*).

Jenelle Moore

**Clerk to the Committee**



**Minutes no. 69**

Wednesday 29 October 2014

General Purpose Standing Committee No. 5

Royal Camp State Forest, 10.00 am

**1. Members present**

Mr Brown, *Chair*

Mr MacDonald, *Deputy Chair*

Mr Colless

Mr Donnelly

Dr Faruqi (substituting for Mr Buckingham)

Mr Foley (substituting for Mr Primrose)

Dr Phelps

**2. Previous minutes**

Resolved, on the motion of Dr Phelps: That draft minutes no. 68 be confirmed.

**3. Correspondence**

The committee noted the following items of correspondence:

***Received***

- 20 October 2014 – From the Balmain, White Bay and Rozelle Precincts Group to the committee chair, comprising the results of a survey conducted with residents of Balmain and Rozelle.
- 27 October 2014 – From Lorraine Vass, President, Friends of the Koala to the secretariat forwarding further information regarding the group's concerns relating to logging activities in the Royal Camp State Forest.

**4. Inquiry into the Environment Protection Authority****Site visit – Royal Camp State Forest**

The committee participated in a tour of key sites in the Royal Camp State Forest, led by the following representatives from the Environment Protection Authority:

- Mr Steve Hartley
- Mr Tim O'Connell
- Mr Michael Wood.

The committee then met with the following representatives of the Forestry Corporation of NSW:

- Mr Dean Kearney
- Mr Justin Williams
- Mr Christopher Slade.

***Public hearing – Lismore City Hall******Allocation of questioning***

Resolved, on the motion of Dr Phelps: That the sequence of questions to be asked during the hearing alternate between opposition, cross bench and government members, in that order, with an equal proportion of time being allocated to each.

***Public hearing***

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Mr Dailan Pugh, Coordinator, North East Forest Alliance
- Mr David Milledge, Ecologist, North East Forest Alliance.

Mr Milledge tendered the following documents:

- Photographs of Yellow-Bellied Gliders and their habitat in Royal Camp Forest.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- Ms Fiona Folan, President, Ballina Environment Society Inc.

The evidence concluded and the witness withdrew.

The following witnesses were sworn and examined:

- Mr Dean Kearney, Senior Manager, Planning, Hybrid Forestry Division, Forestry Corporation of NSW
- Mr Justin Williams, Operations Planning Manager, Hybrid Forestry Division, Forestry Corporation of NSW.

The evidence concluded and the witnesses withdrew.

#### ***Tendered documents***

Resolved, on the motion of Mr Colless: That the committee accept and publish the following document tendered during the public hearing:

- Photographs of Yellow-Bellied Gliders and their habitat in Royal Camp Forest.

#### **5. Adjournment**

The committee adjourned at 5.45 pm until Monday 10 November 2014 (*EPA inquiry – site visit and public hearing, Newcastle*).

Jenelle Moore

**Clerk to the Committee**

#### **Minutes no. 70**

Monday 10 November 2014

General Purpose Standing Committee No. 5

Hunter Room, Newcastle City Hall, Newcastle 12.47 pm

#### **1. Members present**

Mr Brown, *Chair*

Mr MacDonald, *Deputy Chair*

Mr Colless

Mr Donnelly

Dr Faruqi (substituting for Mr Buckingham)

Mr Foley (substituting for Mr Primrose)

Dr Phelps

#### **2. Previous minutes**

Resolved, on the motion of Mr Colless: That draft minutes no. 69 be confirmed.

### 3. Correspondence

The committee noted the following items of correspondence:

#### *Received*

- 27 October 2014 – From Mr John Jeayes, North Coast Environment Council Inc., to the Chair noting the Council's concerns regarding a logging PVP that has been granted for a high conservation value forest at Moonee.
- 30 October 2014 – From Fiona Folan, Ballina Environment Society, to the Chair, providing opening deputation from 29 October 2014 hearing and comment from Neil Denison, Ballina Environment Society Treasurer.
- 29 October 2014 – From Jane Sampson, private citizen, to the Chair, thanking members for their Balmain site visit and providing further information about living near White Bay Cruise Terminal.
- 3 November 2014 – From Sarah Low, Environment Protection Authority, to the secretariat forwarding a report by Dr Stephen Phillips, Director, Biolink Ecological Consultants regarding the koala population in Compartment 13 of the Royal Camp State Forest, previously requested by the committee during its site visit to the Royal Camp State Forest on 29 October 2014.

#### *Sent:*

- 5 November 2014 – From the Chair to Cr Rochelle Porteous, Mayor, Leichhardt Municipal Council thanking the Council for its assistance during the committee's site visit to Balmain on 20 October 2014.

Resolved, on the motion of Dr Phelps: That the committee authorise the publication of correspondence from Sarah Low, attaching a report by Dr Stephen Phillips, Director, Biolink Ecological Consultants.

### 4. Inquiry into the Environment Protection Authority

#### **Site visit – Newcastle**

The committee met with the following representatives of the NSW Environment Protection Authority, the Office of Environment and Heritage and the Newcastle Consultative Committee on the Environment for a tour of sites relevant to community concerns regarding coal dust pollution in the Newcastle area:

- Mr Adam Gilligan, Manager, Hunter Region, NSW Environment Protection Authority
- Mr Frank Garafalow, Manager Metropolitan, NSW Environment Protection Authority
- Mr Matthew Riley, Director Climate and Atmospheric Science, Office of Environment and Heritage
- Mr John Tate, Chair of the Newcastle Consultative Committee on the Environment.

#### **Submissions – public**

The committee noted that the following submissions were published by the committee clerk under the authorisation of an earlier resolution: submission no.s 120a, 160a, 248, 249, 250, 251.

#### **Answers to questions on notice**

The committee noted receipt of the following answers to questions on notice following the public hearing held on 13 October 2014:

- Hillsdale Eastgardens Resident Action Group (and seven attachments) – received 27 October 2014
- Leichhardt Municipal Council – received 30 October 2014
- Mr Andrew Helps – received 3 November 2014
- Environment Protection Authority – 6 November 2014.

Resolved, on the motion of Dr Phelps: That:

- The committee authorise the publication of answers to questions on notice from Leichhardt Municipal Council, Environment Protection authority and Mr Andrew Helps, together with an attachment

- The committee authorise the publication of an answer to a question on notice from Hillsdale Eastgarden Resident Action Group, but that attachments to the answer be kept confidential.

**Allocation of questioning**

Resolved, on the motion of Mr Donnelly: That the sequence of questions to be asked during the hearing alternate between opposition, cross bench and government members, in that order, with an equal proportion of time being allocated to each.

**Public hearing – Newcastle City Hall**

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses were sworn and examined:

- Mr Matthew Riley, Director Climate and Atmospheric Science, Office of Environment and Heritage.

The following witnesses, who were sworn under a previous oath, were examined:

- Mr Barry Buffier, Chair and Chief Executive Officer, NSW Environment Protection Authority
- Mr Mark Gifford, Chief Environmental Regulator, Regulatory Services Division, NSW Environment Protection Authority
- Mr Frank Garofalow, Manager Infrastructure Metropolitan, NSW Environment Protection Authority
- Ms Sarah Low, Project Officer – Governance, NSW Environment Protection Authority.

Mr Buffier tendered the following document:

- Document entitled “Summary of major air quality projects and programs in the Hunter”.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Ms David Frith, Director – Industry and Environment, NSW Minerals Council
- Mr Damon Roddis, Principal/General Manager (NSW), Pacific Environment.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Dr John Mackenzie, Community Liaison, Hunter Community Environment Centre
- Dr James Whelan, Coal Terminal Action Group, Hunter Community Environment Centre
- Associate Professor Nick Higginbotham, Coal Terminal Action Group, Hunter Community Environment Centre.

Dr Mackenzie tendered the following documents:

- Document entitled “Performance of the NSW EPA: Legislative Council inquiry supporting materials”
- Document entitled “Comparison of the two versions of ARTC’s ‘Pollution Reduction Program 4.2 Particulate Emissions from Coal Trains’ report”.

The evidence concluded and the witnesses withdrew.

The following witnesses were sworn and examined:

- Ms Meredith Laing, Director of Environment Division, Hunter Councils
- Mr Bradley Nolan, Program Manager, Hunter Councils.

The evidence concluded and the witness withdrew.

**Tendered documents**

Resolved, on the motion of Mr Colless: That the committee accept the following documents tendered during the public hearing:

- Summary of major air quality projects and programs in the Hunter
- Document entitled “Performance of the NSW EPA: Legislative Council inquiry supporting materials”
- Document entitled “Comparison of the two versions of ARTC’s ‘Pollution Reduction Program 4.2 Particulate Emissions from Coal Trains’ report”.

**5. Adjournment**

The committee adjourned at 4.15 pm until Monday 24 November 2014 (*EPA inquiry – public hearing Parliament House*).

Jenelle Moore  
Clerk to the Committee

**Minutes no. 71**

Monday 24 November 2014  
General Purpose Standing Committee No. 5  
Macquarie Room, Parliament House, Sydney 12.47 pm

**1. Members present**

Mr Brown, *Chair*  
Mr MacDonald, *Deputy Chair*  
Mr Colless  
Mr Donnelly  
Dr Faruqi (substituting for Mr Buckingham)  
Mr Foley (substituting for Mr Primrose)  
Dr Phelps

**2. Previous minutes**

Resolved, on the motion of Mr Macdonald: That draft minutes no. 70 be confirmed.

**3. Correspondence**

The committee noted the following items of correspondence:

***Received:***

- 22 November 2014 – From an inquiry participant to the secretariat regarding the publication of submissions made to the inquiry into the performance of the NSW Environment Protection Authority.

***Sent:***

- 18 November 2014 – From the Chair to Ms Ann Sherry, Chief Executive Officer, Carnival Australia acknowledging receipt of advice that Ms Sherry will be unable to give evidence before the committee on 24 November 2014.

Resolved, on the motion of Mr MacDonald: That the committee authorise the publication of correspondence from the Chair to Ms Ann Sherry, Chief Executive Officer of Carnival Australia

#### 4. Inquiry into the Environment Protection Authority

##### **Submissions – public**

The following submissions were published by the committee clerk under the authorisation of an earlier resolution: submission nos 252 and 253.

##### **Answers to questions on notice**

The committee noted receipt of the following answers to questions on notice following the public hearing held on 13 and 29 October 2014:

- Nature Conservation Council, together with two attachments – 6 November 2014.
- Environment Protection Authority – Answers to supplementary questions on notice - 14 November 2014.
- Forestry Corporation NSW, together with two attachments – 19 November 2014.

Resolved, on the motion of Dr Faruqi: That the committee authorise the publication of answers to questions on notice from from the Nature Conservation Council, together with two attachments, Forestry Corporation NSW, together with two attachments, and the Environment Protection Authority.

##### **Allocation of questioning**

Resolved, on the motion of Mr Colless:

- (a) That the sequence of questions to be asked during evidence from the NSW Environment Protection Authority alternate in 20 minute intervals between opposition, crossbench, opposition, government and opposition members, to take into account additional time resolved to be allocated to Mr Foley at a hearing held on 23 October 2014,
- (b) That the sequence of questions to be asked during the remainder of the hearing alternate between opposition, cross bench and government members, in that order, with an equal proportion of time being allocated to each.

##### **Public hearing – Sydney**

Witnesses, the public and the media were admitted.

The Chair made an opening statement regarding the broadcasting of proceedings and other matters.

The following witnesses, who were sworn under a previous oath, were examined:

- Mr Barry Buffier, Chair and Chief Executive Officer
- Mr Mark Gifford, Chief Environmental Regulator, Regulatory Services Division
- Mr Frank Garofalow, Manager Metropolitan Infrastructure
- Mr Steve Hartley, Principal Manager Forestry
- Ms Sarah Low, Project Officer Governance, NSW Environment Protection Authority.

Mr Buffier tendered the following documents:

- Letter from Mr Andrew McNee, Assistant Secretary to the United Nations Environment Programme (UNEP), regarding statements made by Mr Andrew Helps regarding his representation of the United Nations Mercury Group or the UNEP Global Mercury Partnership.
- Document entitled ‘Statement to Upper House Inquiry 21 November 2014 – Coal Seam Gas’.

The evidence concluded and the witnesses withdrew.

Mr Primrose left the hearing.

The following witness was sworn and examined:

- Mr Keith Muir, Director, The Colong Foundation for Wilderness.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- Professor Chris Fell, University of New South Wales

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- Professor Alan Rosen, Resident, Balmain.

The evidence concluded and the witness withdrew.

The following witnesses were sworn and examined:

- Ms Naomi Hogan, Newcastle Campaign Manager, Wilderness Society
- Ms Margaret Fleck, Farmer, Liverpool Plains.

Ms Hogan tendered the following document:

- Document entitled 'NSW EPA Site Visit report (Santos, 22 and 23 May 2013)'.

The evidence concluded and the witnesses withdrew.

The following witness was sworn and examined:

- Ms Georgina Woods, New South Wales Coordinator, Lock the Gate Alliance.

The evidence concluded and the witness withdrew.

#### **Tendered documents**

Resolved, on the motion of Mr Colless: That the committee accept the following documents tendered during the public hearing:

- Document entitled 'Statement to Upper House inquiry 21 November 2014 – Coal Seam Gas'
- Document entitled 'NSW EPA Site Visit report (Santos, 22 and 23 May 2013)'.

Resolved, on the motion of Mr Colless: That the committee accept and publish the following document tendered during the public hearing:

- Document from United Nations Environment Programme re HG Recoveries and their claim to represent the UNEP.

#### **Confidential submission**

Dr Faruqi moved: That the committee publish submission nos. 19b and 19c with redactions.

Question put and negatived.

#### **Carnival Australia**

The committee considered correspondence sent to Ms Ann Sherry, Chief Executive Officer, Carnival Australia from the Chair responding to advice that she was unable to attend the hearing on 24 November 2014 for the purposes of giving evidence.

Resolved, on the motion of Dr Phelps: That:

- (a) members forward supplementary questions to Carnival Australia to the secretariat within 48 hours.
- (b) Carnival Australia be requested to answer to any supplementary questions within 21 days.
- (c) on receipt of answers to questions from Carnival Australia, the committee will meet to resolve whether to hold a supplementary hearing for the purposes of hearing evidence from Carnival Australia.

## 5. Adjournment

The committee adjourned at 3.32 pm, *sine die*.

Jenelle Moore

**Clerk to the Committee**

## Draft minutes no. 72

Monday 9 February 2015

General Purpose Standing Committee No. 5

Room 1254, Parliament House, Sydney at 10.03 am

### 1. Members present

Mr Brown, *Chair*

Mr MacDonald, *Deputy Chair*

Mr Colless

Mr Donnelly

Dr Faruqi

Mr Foley

Dr Phelps

### 2. Previous minutes

Resolved, on the motion of Mr MacDonald: That draft minutes no. 71 be confirmed.

### 3. Correspondence

The committee noted the following items of correspondence:

#### ***Sent***

- 8 October 2014 – From the Chair to Mr Thomas George MP, Member for Lismore, advising of forthcoming site visit and public hearing.
- 8 October 2014 – From the Chair to Mr Jamie Parker MP, Member for Balmain, advising of forthcoming site visit and public hearing.
- 18 November 2014 – From the Chair to Ms Ann Sherry AO, Chief Executive Officer, Carnival Australia, confirming that Ms Sherry no longer intends to provide evidence to the committee.
- 24 November 2014 – From the secretariat to an inquiry participant confirming the confidentiality of the participant's submission made to the inquiry into the performance of the NSW Environment Protection Authority.
- 27 November 2014 – From the Chair to Ms Ann Sherry AO, Chief Executive Officer, Carnival Australia, forwarding questions from the committee regarding matters raised in evidence and in Carnival's submission to the inquiry relating to the operation of the White Bay Cruise Terminal.

#### ***Received:***

- 26 November 2014 – From Mr Andrew Helps, Hg Recoveries Pty Ltd to the committee secretariat, responding to claims that he is not associated with UNEP and providing the following documentation:
  - Letter from Monash University



- Meeting papers of the UNEP Global Mercury Partnership, 3rd Waste Management Partnership Area meeting.
- 26 November 2014 - From an inquiry participant to the secretariat regarding their submission.
- 27 November 2014 – From John Tate, Chair of Newcastle Community Consultative Committee on the Environment, responding to submission no 144 from the Nature Conservation Council of NSW.
- 4 December 2014 - From an inquiry participant to the secretariat regarding their submission.
- 8 December 2014 - From an inquiry participant to the secretariat regarding their submission.
- 3 January 2015 – From an inquiry participant to the secretariat regarding their submission.
- 28 January 2015 – From Ms Sarah Low, Project Officer Governance, NSW Environment Protection Authority to Principal Council Officer, regarding penalties for threatened species.

Resolved, on the motion of Dr Phelps:

- That the committee keep the following information confidential: correspondence dated 22 November from an inquiry participant to the secretariat regarding their submission to the inquiry, and correspondence dated 24 November 2014 from the secretariat to an inquiry participant confirming that their submission will remain confidential.
- That the committee keep the following information confidential: correspondence dated 26 November 2014, 4 December 2014, 8 December 2014 and 3 January 2015 from an inquiry participant to the secretariat regarding their submission.

#### **4. Inquiry into the performance of the Environment Protection Authority**

##### **4.1 Partially confidential submissions**

The following submissions were partially published by the committee clerk under the authorisation of an earlier resolution: submission nos. 12, 14, 36, 65, 82, 87, 88.

Resolved on the motion of Mr Colless: That the committee keep the following information confidential, as per the request of the author: names and/or identifying and sensitive information in submissions nos. 12, 14, 36, 65, 82, 87, 88.

##### **4.2 Confidential submissions**

The following submissions should be considered for confidentiality: nos 77a, 242a, 254.

Resolved on the motion of Dr Phelps: That the committee keep submission nos 77a and 242a confidential, as per the request of the author, as they contain identifying and/or sensitive information.

##### **4.3 Answers to questions on notice**

Resolved on the motion of Mr Donnelly:

- That the committee authorise the publication of answers to questions on notice from:
  - Environment Protection Authority
  - Forestry Corporation NSW
  - North East Forest Alliance
  - Hunter Community Environment Centre
  - NSW Minerals Council
  - Professor Alan Rosen
  - Carnival Australia.
- That the committee authorise the publication of answers to questions on notice from the following witnesses, but that attachments to the answer be kept confidential:
  - Nature Conservation Council of NSW
  - The Wilderness Society Newcastle
  - The Colong Foundation for Wilderness.

#### 4.4 Attachments to submission

Resolved on the motion of Dr Phelps: That all attachments to submissions received during the inquiry remain confidential, except Appendix G to submission no. 164 from the Hunter Community Environment Centre.

### 5. Consideration of Chair's draft report

The Chair submitted his draft report entitled *The performance of the NSW Environment Protection Authority*, which, having been previously circulated, was taken as being read.

#### Chapter 1

Resolved, on the motion of Dr Faruqi: That the following paragraph be inserted after paragraph 1.6:

In addition to issues in the terms of reference, there were a range of other matters raised during the inquiry through submissions and supplementary questions that were not dealt with in the hearings, including:

- Noise pollution from trains, especially along the Northern Line and Epping to Thornleigh Third Track area.
- Regulation of wood heaters and particulate pollution.
- Land contamination issues at Hexham Swamps
- Quarry issues, including Martins Creek, Kincumber and Sandy Point,
- Malabar Waste Water Treatment Plant,
- Water contamination issues at Moolarben Mine
- Grange State Forest.
- Gore Bay and Clyde Terminals.
- Elf Farm Mushroom Composting Facility.
- North Head Waste Water Treatment Plant.
- Water contamination of Wollangambe River.

Resolved, on the motion of Mr Colless: That paragraph 1.10 be amended to include reference to the committee's site visit to Newcastle.

#### Chapter 2

Resolved, on the motion of Dr Faruqi: That paragraph 2.1 be amended by:

- a) omitting 'The POEA Act had' and inserting instead 'The POEA Act has'
- b) omitting 'informed by the principle of' and inserting instead 'informed by the principles of'.

Mr MacDonald moved: That paragraph 2.6 be amended by omitting 'Orica, the Office of Environment and Heritage and the then Minister for the Environment, came under significant criticism for their delayed response to the leak.'

Question put.

The committee divided.

Ayes: Mr Colless, Mr MacDonald, Dr Phelps.

Noes: Mr Brown, Mr Donnelly, Dr Faruqi, Mr Foley.

Question resolved in the negative.

Resolved, on the motion of Dr Faruqi: That the following new paragraph be inserted after paragraph 2.7:

‘The O’Reilly Report recommended that ‘An Independent Board be established whose membership be drawn from people with regulatory expertise as well as representatives from community interests’<sup>1</sup>. The Government did not accept this advice and removed community and local government representatives from the board of the EPA<sup>2</sup>.’

[Footnote: [http://www.dpc.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0012/131160/A\\_review\\_into\\_the\\_response\\_to\\_the\\_serious\\_pollution\\_incident\\_at\\_Orica\\_Australia\\_Pty\\_Ltd\\_ammonium\\_nitrate\\_plant\\_at\\_Walsh\\_Point\\_Kooragang\\_Island\\_on\\_August\\_8\\_2011.pdf](http://www.dpc.nsw.gov.au/__data/assets/pdf_file/0012/131160/A_review_into_the_response_to_the_serious_pollution_incident_at_Orica_Australia_Pty_Ltd_ammonium_nitrate_plant_at_Walsh_Point_Kooragang_Island_on_August_8_2011.pdf) (Recommendation 7); Submission 162, Environmental Defenders Office NSW, p 15.]

Dr Faruqi moved: That paragraph 2.16 be amended by inserting at the end: ‘However, many stakeholders have questioned the effectiveness of these community consultation committees. For example, the Nature Conservation Council stated that:

‘Following the Orica incident and the restructure of the EPA, the EPA established the Newcastle Community Consultative Committee on the Environment as a trial for improving community engagement and liaison with the EPA. General feedback provided to NCC is that this group has been ineffective at improving relations between the community and EPA. We note that there has yet to be an independent review of this or other community engagement programs and their effectiveness.’

[Footnote: Submission 114, Nature Conservation Council, p 8.]

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Resolved, on the motion of Dr Phelps: That paragraph 2.20 be amended by omitting ‘if there was to be a vacancy’ and inserting instead ‘if there were to be a vacancy’.

Resolved, on the motion of Dr Faruqi: That paragraph 2.31 be amended by

- a) omitting ‘Whilst not defining ESD, ’ before ‘Section 6(2) of the POEA Act notes that’
- b) omitting ‘the following measures:’ and inserting instead ‘the following principles:’

Dr Faruqi moved: That the following new paragraph be inserted after paragraph 2.49:

‘However, the EDO NSW has highlighted that EPA obligations and commitments to achieve its aims by implementing ESD should be more clearly demonstrated and linked to a long-term vision of a healthy society and environment. For example, the EPA strategic plan 2013-2016 does not refer to ESD.’

[Footnote: Submission No. 162, Environmental Defenders Office NSW, p 7.]

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

### Chapter 3

Resolved, on the motion of Dr Faruqi: That paragraph 3.9 be amended by:

- a) inserting ‘the EPA advised that’ before ‘at present Australia has’
- b) inserting quotation marks around ‘at present Australia has no facility capable of treating HCB waste and there is no prospect of a suitable facility being available in the foreseeable future’.

Resolved, on the motion of Mr Colless: That paragraph 3.20 be amended by omitting 'This is discussed further' and inserting instead 'This was discussed further'.

Resolved, on the motion of Mr Colless: That the second dot point in paragraph 3.30 be amended by omitting 'Sydney Water, as the landholder, and required the agency' and inserting instead 'Sydney Water, who, as the landholder, engaged a contractor to'.

Resolved, on the motion of Mr MacDonald: That paragraph 3.32 be amended by omitting 'The result was that residents became confused and distrustful of the EPA, and Mr Helps continued to assert that the EPA had not acted to address contamination in the area. Significant media attention ensued.' and inserting instead 'The result was that residents became confused. Mr Helps continued to assert that the EPA had not acted to address contamination in the area and significant media attention ensued.'

Resolved, on the motion of Dr Faruqi: That the following paragraph be inserted after paragraph 3.49:

'The committee notes that the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, which Australia is party to, highlights the obligation to "ensure the availability of adequate disposal facilities, for the environmentally sound management of hazardous wastes and other wastes, that shall be located, to the extent possible, within it, whatever the place of their disposal".'

Resolved, on the motion of Dr Faruqi: That paragraph 3.50 be amended by inserting at the end: 'The committee also acknowledges that errors, requiring re-testing, and related confusion, contributed to the community concerns with the EPA.'

Resolved, on the motion of Dr Faruqi: That paragraph 3.51 be amended by inserting 'engagement and' before 'communication with the community'.

Resolved, on the motion of Dr Faruqi: That recommendation 5 be amended by omitting 'That the NSW Environment Protection Authority prioritise the development of a communications policy to inform local residents of the activities of the Independent Review Steering Panel overseeing the Orica Mercury Independent Review' and inserting instead 'That the NSW Environment Protection Authority prioritise the development of a communications and engagement process to consult and inform local residents of the activities of the Independent Review Steering Panel overseeing the Orica Mercury Independent Review and publicly release the results of any testing undertaken.'

#### **Chapter 4**

Resolved, on the motion of Mr MacDonald: That paragraph 4.2 be amended by omitting 'great' before 'concern to residents'.

Resolved, on the motion of Dr Faruqi: That paragraph 4.2 be amended by inserting at the end: 'The EPA itself has stated that, 'Coal mines in the Hunter Valley are major contributors of dust and particulate matter.''

[Footnote: Answers to supplementary questions, question 9, 11 December 2014]

Resolved, on the motion of Dr Faruqi: That paragraph 4.3 be amended by omitting 'an' before 'increase in the number of train movements, and inserting instead 'a significant'.

Resolved, on the motion of Mr MacDonald: That paragraph 4.30 be amended by omitting the sentence: 'When flaws in the studies then threatened to delay its response further, the EPA appears to have favoured expediency over ensuring a sound technical process.'

Dr Faruqi moved: That the following be inserted after paragraph 4.36:

'In July 2013, members of several community groups monitored particle pollution levels in residential areas of Beresfield, Hexham and Mayfield. The Hunter Community Environment Study stated in their evidence that:

"All coal train signatures were associated with a significant increase in PM10 particle pollution levels. In the case of Signatures 1 and 5, this represents increases of 94% and 427% respectively

for loaded coal trains. Signature 6 found significant increased PM10 concentrations, 1210% above background. In sum, coal trains increase PM10 levels by between 94% and 1210%. While coal trains pass, particle pollution concentrations increase up to 13 times pre-coal train levels.”<sup>1</sup>

They subsequently recommended that:

“The EPA direct all coal rail operators to urgently implement appropriate dust mitigation strategies, including the covering and washing of coal wagons”.<sup>2</sup>

[Footnote: Submission 164, Hunter Community Environment Centre, p 9; <sup>2</sup> Submission 164, Hunter Community Environment Centre, p 2.]

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That paragraph 4.37 be amended by omitting the last sentence: ‘On balance the committee considers the process by which the data was gathered to have achieved its intended purpose.’

Question put.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Brown, Mr Colless, Mr Donnelly, Mr Foley, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Resolved, on the motion of Mr Colless: That paragraph 4.42 be amended by inserting ‘what purported to be’ before ‘an earlier version of the report’.

Mr MacDonald moved: That paragraph 4.51 be amended by:

- a) omitting ‘Although’ before ‘These findings do not support’
- b) omitting ‘the committee believes that it was not unreasonable for residents of the Hunter to respond with scepticism and distrust on learning that such significant amendments had been made to the report.’ after ‘dust monitoring studies’ and inserting instead ‘However the committee believes that it is understandable for the residents of the Hunter to be concerned that a number of amendments had been made to the report prior to its release.’
- c) omitting at the end, ‘The committee can only conclude that, in keeping with the EPA’s actions with regards to the publication of the first study, the EPA favoured expediency and the need to ‘save face’ over the its responsibility to the public to ensure that the information the agency disseminated was robust, accurate and carefully communicated. It is to be expected that such an approach would not engender trust of the EPA in its interactions with the community.’

Dr Faruqi moved: That paragraph (b) of the motion of Mr MacDonald be amended by omitting ‘a number of amendments’ and inserting instead ‘significant amendments’.

Amendment of Dr Faruqi put and passed.

Original question of Mr MacDonald, as amended, put.

The committee divided.

Ayes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Noes: Mr Donnelly, Dr Faruqi, Mr Foley.

Question resolved in the affirmative.

Resolved, on the motion of Mr MacDonald: That paragraph 4.56 be amended by inserting 'or a review is underway' after 'has not been subject to review and assessment'.

Mr MacDonald moved: That the following recommendation be inserted after paragraph 4.60:

**'Recommendation X**

That the EPA consult with the new Chief Scientist and Engineer to review the air quality monitoring strategy in the Upper and Lower Hunter and request recommendations to devise a monitoring network that will assist with any knowledge gaps and strengthen the confidence of the community. The response from the EPA should include its advice on the method of funding this monitoring network.'

Mr Donnelly moved: That the motion of Mr MacDonald be amended by inserting 'including a survey of international data and policy responses to the issue' after 'in the Upper and Lower Hunter'.

Amendment of Mr Donnelly put and passed.

Original question of Mr MacDonald, as amended, put and passed.

Dr Faruqi moved: That the following recommendation be inserted after paragraph 4.60:

'That the EPA protect community health and require all coal trains to be fully covered and empty wagons to be washed to reduce coal dust emissions.'

Question put.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Brown, Mr Colless, Mr Donnelly, Mr Foley, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Mr Foley moved: That the following recommendation be inserted after paragraph 4.60:

**'Recommendation X**

That, in the event that the NSW Chief Scientist and Engineer recommends that all coal trains be fully covered and all empty wagons be washed to reduce coal dust emissions, the NSW Environment Protection Authority amend the licence to adopt the NSW Chief Scientist and Engineer's recommendation.'

Question put.

The committee divided.

Ayes: Mr Brown, Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the affirmative.

## **Chapter 5**

Resolved, on the motion of Mr MacDonald: That paragraph 5.19 be amended by omitting the last sentence 'The committee considers that the EPA acted disingenuously by not further clarifying that prior notifications were received, but were not acted upon because the matter fell within the responsibilities of the Department.' and inserting instead 'The committee considers the EPA should have been clearer as to when it received notifications, what were its responsibilities, when did those responsibilities commence and how the agency responded'.

Resolved, on the motion of Mr MacDonald: That paragraph 5.32 be amended by omitting 'first case in New South Wales of contaminated groundwater caused by coal seam gas activity' and inserting instead 'first case in New South Wales of groundwater (unconnected to aquifers) impacted by coal seam activity waste water treatment'.

Resolved, on the motion of Mr Foley: That the following recommendation be inserted after paragraph 5.33:

**‘Recommendation X**

In consideration of the high level of community concern about the health and environmental impacts of the Coal Seam Gas industry, investigations into significant pollution incidents should be led by independent experts working with the EPA, not the coal seam gas company under investigation’.

Resolved, on the motion of Dr Faruqi: That paragraph 5.40 be amended by omitting ‘The committee is neither satisfied nor dissatisfied with the penalty issued to Santos. We acknowledge that members of the community’ and inserting instead ‘The committee acknowledges that members of the community’.

Dr Faruqi moved: That paragraph 5.40 be amended by omitting ‘, but note that the pollution reduction program applied appears to be comprehensive in its scope, and’.

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Resolved, on the motion of Dr Faruqi: That paragraph 5.40 be amended by inserting after ‘fine being issued to the company’ the words ‘It is important that penalty notices are significant enough to give an incentive for companies to be proactive in protecting the environment.’

Dr Faruqi moved: That paragraph 5.40 be amended by omitting ‘The committee is generally satisfied with the EPA’s performance in this regard’.

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Resolved, on the motion of Mr Foley: That the following recommendation be inserted after paragraph 5.42:

**‘Recommendation X**

That the EPA conducts a comprehensive review of its licensing procedure for hazardous chemicals. The review shall examine the appropriateness of granting environmental protection licences that do not provide clear limits with respect to the use of hazardous chemicals. Further, the review shall also consider the appropriate recourse to be taken against a licensee for failing to maintain concentrations within specified limits.’

Resolved, on the motion of Mr MacDonald: That paragraph 5.45 be amended by omitting ‘However, the committee also heard that the rehabilitation has not been effective in addressing contamination issues:

Unfortunately the rehabilitation that we have seen on the surface has not been successful. It still has not cleaned up the aquifer, it is still contaminated with heavy metals.’

and inserting instead: ‘The committee was advised in the hearings by the Wilderness Society that they remain unsatisfied with the rehabilitation and condition of the site:

Unfortunately the rehabilitation that we have seen on the surface has not been successful. It still has not cleaned up the aquifer, it is still contaminated with heavy metals.’

Mr MacDonald moved: That paragraph 5.45 be amended by inserting at the end ‘This has not been verified by either the EPA or an independent review.’

Question put.

The committee divided.

Ayes: Mr Brown, Mr Colless, Mr Donnelly, Mr Foley, Mr MacDonald, Dr Phelps.

Noes: Dr Faruqi.

Question resolved in the affirmative.

Dr Faruqi moved: That the following paragraph be inserted after paragraph 5.48:

‘Regardless of the regulatory changes, the NSW Government’s priority should have been to prevent environmental damage, whether through the EPA or the Department of Trade and Investment, Regional Infrastructure and Services.’

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

## **Chapter 6**

Dr Faruqi moved: That the following recommendation be inserted after paragraph 6.22:

### **‘Recommendation X**

That NSW legislation be amended to make it unlawful to carry out activity likely to cause environment harm, unless all reasonable and practical steps are taken to prevent or minimise the harm, in line with Queensland, South Australia, the ACT and the Northern Territory.’

[Footnote: Submission no. 162, Environmental Defenders Office, p 9 citing ss 440, 443 of the *Environment Protection Act 1994 (Qld)*, ss 3 and 82 of the *Environment Protection Act 1993 (SA)*, and G. Bates, *Environmental Law in Australia*, p 616.]

Question put.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Brown, Mr Colless, Mr Donnelly, Mr Foley, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Resolved, on the motion of Dr Phelps: That paragraph 6.23 and Recommendation 6 be omitted:

### **‘Committee comment**

**6.23** The committee notes the EPA’s advice that, in view of the difficulties encountered in mounting a successful prosecution in the Du Pont case, the EPA intends to explore legislative changes to facilitate other civil litigation options, which would apply a lower burden of proof. We therefore recommend that the EPA prepare a report to the Minister for the Environment exploring the feasibility of enacting legislative change to enable the EPA to pursue civil remedies for pollution offences. This report should be made public and form the basis for any subsequent legislative amendment.



### Recommendation 6

That the NSW Environment Protection Authority publish a discussion paper on the merits or otherwise of enacting legislative change to enable the Authority to pursue civil remedies for pollution offences. The NSW Environment Protection Authority should seek public comment on this paper before any legislative amendments are made.

### Chapter 7

Resolved, on the motion of Dr Phelps: That paragraph 7.46 be amended by inserting the following dot point after the words 'enforcement impacts':

- the possible requirement for a new substation to be built to double electrical supply to residents, businesses and ships berthed at White Bay if ship-to-shore power was made available.

Resolved, on the motion of Dr Phelps: That the following new paragraphs be inserted after paragraph 7.49:

'However, Carnival Australia informed the committee that low sulphur fuel is currently unavailable in large quantities. While Shell has advised that it has the capacity to produce low sulphur fuel at its Geelong plant, a significant investment in a storage facility and associated transport would be needed. Carnival argued that this supply issue would put upward pressure on the local price due to a limited amount of producers having to supply a large number of customers forced under regulation to use the fuel. Carnival was of the view that, without government intervention to ensure that the fuel is made available at a commercially competitive price, or other financial incentives for voluntary use of the fuel, low sulphur fuel constitutes a very expensive option, particularly in view of the company's compliance with the applicable emissions limits currently set. (These limits are discussed further in the following paragraphs.)

[Footnote: Answer to question on notice, Carnival Australia, 19 December 2014, p 1.

Instead, Carnival Australia advised that it has scheduled the installation of scrubber technology on all of its vessels in Australia between 2017 and 2019, during the ships' scheduled dry docks.

[Footnote: Answer to question on notice, Carnival Australia, 19 December 2014, p 1. Carnival advised that installing the scrubbers during unscheduled dry docks would have a significant commercial impact and involve considerable inconvenience for passengers due to the necessary cancellation of multiple cruises.]

Resolved, on the motion of Dr Phelps: That paragraph 7.53 be amended by omitting 'testify to the toxic fumes present' and inserting instead 'testify to the noxious fumes present'.

Resolved, on the motion of Dr Faruqi: That paragraph 7.54 be amended by inserting at the end: 'The committee believes that these problems should have been avoided or mitigated at the planning stage by adopting the EPA's original recommended conditions of approval, including low sulphur fuel and ship to shore power.'

Resolved, on the motion of Dr Phelps: That paragraph 7.55 be amended by omitting 'alert the Government to the potential impacts' and inserting instead 'alert the previous Government to the potential impacts'.

Dr Phelps moved: That the following paragraph be inserted after paragraph 7.55:

'The committee considers that the decision of the previous Government to not have a cruise terminal at Barangaroo to be a serious error, especially given the views expressed by groups listed in 7.3, and notes that the original plans for Barangaroo included just such a facility. A cruise terminal at Barangaroo would have allowed tourists much easier travel to key tourist areas in and around the Sydney CBD, rather than having to require them to travel from the Balmain peninsular.'

Question put.

The committee divided.

Ayes: Mr Colless, Dr Faruqi, Mr MacDonald, Dr Phelps.

Noes: Mr Brown, Mr Donnelly, Mr Foley.

Question resolved in the affirmative.

Dr Faruqi moved: That the following paragraph be inserted after paragraph 7.57:

‘However, the committee considers that the significant health effects of higher sulphur fuel, and the resulting health burden on the community outweighs the economic considerations of a single industry, especially when mutually beneficial solutions have been found in other countries, such as the United States of America and Canada.’

Question put.

The committee divided.

Ayes: Mr Brown, Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the affirmative.

Resolved, on the motion of Mr MacDonald: That the following paragraph be inserted after 7.53: ‘The committee expresses its disappointment that the major client of the Terminal, Carnival Australia, did not appear before the inquiry. Despite a number of opportunities to engage with the committee during hearings, Carnival Australia chose not to appear. Inevitably this delays sound policy development.

Resolved, on the motion of Mr Foley: That Recommendation 8 be amended by omitting ‘That the NSW Environment Protection Authority approach’ and inserting instead ‘That the NSW Environment Protection Authority immediately approach’.

Resolved, on the motion of Dr Faruqi: That the following recommendation be inserted after Recommendation 8:

‘Recommendation X

That the NSW Government require that:

- cruise ship operators using the White Bay Terminal be required to develop noise mitigation strategies and that noise be monitored and limits be enforced
- the White Bay Terminal be retrofitted to include ship to shore power.’

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 8:

‘**Recommendation X**

That low sulphur fuel (maximum sulphur content of 0.1%) be mandated to be used by cruise ships.’

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 8:

‘**Recommendation X**

The EPA have an enforceable role in preventing environmental damage by utilising the precautionary principle in planning decisions including state significant development and state significant infrastructure projects.’

Question put.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Brown, Mr Colless, Mr Donnelly, Mr Foley, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

### **Chapter 8**

Resolved, on the motion of Dr Faruqi: That paragraph 8.1 be amended by inserting at the end: ‘These eighteen ground inspection staff are responsible for inspection and investigation across 1.78 million hectares of state forest, or almost 9,900 Ha per inspector.’

[FOOTNOTE: EPA Supplementary Questions and Answers, Question 5 (11/12/14)]

Mr MacDonald moved: That paragraph 8.12 be amended by inserting at the end: ‘It is not clear to the committee if the members of NEFA are qualified to undertake species audits, surveys and associated reporting.’

Question put.

The committee divided.

Ayes: Mr Colless, Mr MacDonald, Dr Phelps.

Noes: Mr Brown, Mr Donnelly, Dr Faruqi, Mr Foley.

Question resolved in the negative.

Dr Faruqi moved: That paragraph 8.55 be amended by omitting: ‘To this end, the committee supports the efforts of the EPA to rewrite the integrated forestry approvals licensing system. The committee is hopeful that a new licensing regime will help to reduce some of the ambiguity that seems to surround the present system.’

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Mr Foley moved: That paragraph 8.55 be amended by omitting ‘To this end, the committee supports’ and inserting instead ‘To this end, the committee notes’.

Question put.

The committee divided.

Ayes: Mr Brown, Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the affirmative.

Resolved, on the motion of Mr MacDonald: That paragraph 8.56 be amended by omitting ‘the response to NEFA’s allegations was not of the standard’ and inserting instead ‘the response to NEFA’s allegations was not always of the standard’.

Resolved, on the motion of Mr MacDonald: That paragraph 8.56 be amended by omitting 'levels of alarm are high' and inserting instead 'levels of concern are high'.

Mr MacDonald, by leave, moved, in globo:

- a) That paragraph 8.57 be amended by omitting 'the committee recommends that the EPA commit greater resources to this important regulatory role' and inserting instead 'the committee recommends that the EPA review its resources to confirm that it has the skills and manpower to undertake its functions'.
- b) That Recommendation 9 be omitted:

**'Recommendation 9**

That the NSW Government allocate additional funds to the Environment Protection Authority to facilitate the appointment of additional personnel to the Forestry Division.'

Question put.

The committee divided.

Ayes: Mr Colless, Mr MacDonald, Dr Phelps.

Noes: Mr Brown, Mr Donnelly, Dr Faruqi, Mr Foley.

Question resolved in the negative.

Dr Faruqi moved: That Recommendation 9 be amended by:

- a) omitting 'allocate additional funds' and inserting instead 'allocate significant additional funds'
- b) omitting 'to facilitate the appointment of additional personnel to the Forestry Division' and inserting instead 'to further train staff and to facilitate the appointment of additional personnel to the Forestry Division'.

Question put.

The committee divided.

Ayes: Mr Brown, Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the affirmative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 9:

**'Recommendation X**

That the NSW Government implement all recommendations of the 'If a Tree Falls: Compliance failures in the public forests of New South Wales' prepared for the Nature Council Conservation Council by the Environmental Defenders Office.'

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 9:

**'Recommendation X**

That clear and enforceable guidelines for identifying koalas and other threatened species be developed.'

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 9:

**‘Recommendation X**

That illegally logged sites are rehabilitated and compensatory habitat provided by the perpetrator at their expense.’

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 9:

**‘Recommendation X**

That the EPA study for identifying koalas extend to all state forests with a view to providing permanent protection of koala habitat.’

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

**Chapter 9**

Dr Phelps moved: That paragraph 9.2 be amended by omitting ‘The committee believes that, on the whole, the EPA has struck this balance appropriately and professionally’ and inserting instead ‘The committee believes that the EPA has struck this balance appropriately and professionally’.

Question put.

The committee divided.

Ayes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Noes: Mr Donnelly, Dr Faruqi, Mr Foley.

Question resolved in the affirmative.

Resolved, on the motion of Dr Faruqi: That the following paragraph be inserted after paragraph 9.3:

‘The EPA could make greater use of innovative approaches to deterrence and overall pollution limits of the environment. This could include greater use of Protection of the Environment Policies (PEPs), available to it under the Protection of the Environment Operations Act 1997, consideration of a multiplier effect for penalty notices to repeat offenders and setting maximum pollution/emissions caps for zones/regions.’

Dr Faruqi moved: That the following paragraph be inserted after paragraph 9.7:

‘The removal of community representatives from the board of the EPA has had a detrimental effect on genuine community engagement and contributed to the distrust felt by many stakeholders.’

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Resolved, on the motion of Dr Faruqi: That the following paragraph be inserted after paragraph 9.7:

When the EPA was established as an independent statutory body in 2011, it was separated from the scientific division in the Office of Environment and Heritage and now relies on a service agreement to access scientific expertise.

**Dr MEHREEN FARUQI:** When the EPA was separated from the Office of Environment and Heritage, was the scientific division within OEH transferred with the EPA?

**Mr BUFFIER:** No. What we have is a service agreement with OEH, which relates to providing some of the basic administrative services—HR, payroll, et cetera. It also includes legal services and scientific services. Some of that changed a little bit. Air policy and water stayed with OEH but we have now transferred some of those resources into EPA with a subsequent adjustment in the service level agreement. We operate under a service level agreement.’

[FOOTNOTE: Evidence: Mr Barry Buffier, Chair and Executive Officer, EPA 13 October 2014, p. 9]

Dr Faruqi moved: That the following paragraph and recommendation be inserted after paragraph 9.7:

***Committee comment***

The committee is of the opinion that the EPA should have an independent scientific division to meet its objectives.

**Recommendation X**

That the EPA be resourced to establish a scientific division within its structure.

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following paragraph be inserted after paragraph 9.7:

‘The EPA generally relies on information provided by holders of Environmental Protection Licenses (EPL) to monitor their own compliance with license conditions. In some cases, the EPA undertakes independent data collection. The Committee believes that there should be some view to developing a regular and random independent sampling program to ensure that the data provided by EPL holders is correct and has integrity.

[FOOTNOTE: Reference: EPA Supplementary Questions and Answers, Question 7 (12/11/2014)]

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after paragraph 9.7:

‘That the EPA develop a regular, independent sampling program to undertake compliance monitoring to ensure that the data provided by EPL holders is correct and has integrity.’

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Resolved, on the motion of Dr Faruqi: That the following paragraph be inserted after paragraph 9.7:

‘In July 2014, the Auditor General released a report entitled ‘Managing Contaminated Sites’ that highlighted significant problems with the way the EPA manages contaminated land and the very large backlog of sites waiting to be assessed. The EPA has stated that it would require an additional one program manager and four full time staff over five years to clear that backlog.

[FOOTNOTE: EPA Supplementary Questions and Answers, Question 8 (14/11/14)]

Dr Faruqi moved: That the following paragraph be inserted after paragraph 9.7:

The Committee suggests that resourcing to clear the backlog of sites waiting to be assessed be prioritised.

Question put.

The committee divided.

Ayes: Mr Brown, Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the affirmative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the EPA be adequately resourced to clear the backlog of contaminated sites awaiting assessment as well as develop systems to ensure contaminated lands are assessed in a more timely manner.’

Question put.

The committee divided.

Ayes: Mr Brown, Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the affirmative.

Dr Phelps moved: That paragraph 9.8 be amended by inserting at the end: ‘The Committee does not agree with this view, however we do believe that communication between the EPA, interested groups and individuals could have been better.’

Question put.

The committee divided.

Ayes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Noes: Mr Donnelly, Dr Faruqi, Mr Foley.

Question resolved in the affirmative.

Dr Faruqi moved: That paragraph 9.12 be amended by omitting ‘The Newcastle Community Consultation Committee and related EPA engagement with both industry and the community in response to concerns regarding the activities of Orica Pty Ltd is a good example of a successful community outreach program.’ before ‘The committee believes that the EPA could make greater use of community consultation committees’.

Question put.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Brown, Mr Colless, Mr Donnelly, Mr Foley, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Resolved, on the motion of Dr Faruqi: That paragraph 9.12 be amended by:

- a) omitting ‘public communication strategy’ and inserting instead ‘public engagement and communication strategy’
- b) inserting at the end: ‘ensuring they are transparently evaluated and engender genuine participation’.

Mr MacDonald moved: That Recommendation 10 be amended by omitting ‘the NSW Environment Protection Authority, as part of its public communication strategy, make greater use of community consultation committees’ and inserting instead ‘the NSW Environment Protection Authority seek professional guidance as to how to manage its communications with all stakeholders, including developing guidelines for the timing and content of public updates of investigations and subsequent reports.’

Question put.

The committee divided.

Ayes: Mr Colless, Mr MacDonald, Dr Phelps.

Noes: Mr Brown, Mr Donnelly, Dr Faruqi, Mr Foley.

Question resolved in the negative.

Resolved, on the motion of Dr Faruqi: That Recommendation 10 be amended by:

- a) omitting ‘public communication strategy’ and inserting instead ‘public engagement and communication strategy’
- b) inserting ‘ensuring they are transparently evaluated and engender genuine participation’ at the end.

Resolved, on the motion of Mr Foley: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the NSW Environment Protection Authority take immediate steps to refine and enhance stringent internal protocols and procedures to ensure timely public communication of all pollution incidents.’

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That an independent and transparent mechanism be established for investigation of complaints against the EPA that is easily accessible, and developed in consultation with the community.’



Question put.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Brown, Mr Colless, Mr Donnelly, Mr Foley, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the Protection of the Environment Administration Act 1991 be amended to restore community representatives to the Environmental Protection Authority Board.’

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the EPA develop and implement an ‘Independence and Integrity Charter’ to give guidance to staff and minimise perceived conflicts of interest.’

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the POEO Act be amended to operationalise the ESD objective.’

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Resolved, on the motion of Dr Faruqi: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the EPA make greater use of Protection of the Environment Policies (PEPs), available to it under the Protection of the Environment Operations Act 1997 and give serious consideration to applying a multiplier effect for penalty notices to repeat offenders and setting maximum pollution/emissions caps for zones/regions.’

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the EPA adopt in full the recommendations of the ‘Clearing the Air: Opportunities for improved regulation of pollution in New South Wales’ report prepared for the Nature Council Conservation Council by the Environmental Defenders Office.’

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the EPA impose load limits on major projects that cap the amount of dangerous pollutants that can be released under an Environmental Protection License.’

Question put.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Brown, Mr Colless, Mr Donnelly, Mr Foley, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the EPA take immediate steps to reduce the amount of PM2.5 emitted by wood heaters, including through improving standards or mandatory filtering.’

Question put.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Brown, Mr Colless, Mr Donnelly, Mr Foley, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the EPA undertake immediate monitoring of Gore Bay and Clyde Terminal to ascertain the risks to human health from oil refineries located in residential areas.’

Question put.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Brown, Mr Colless, Mr Donnelly, Mr Foley, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the EPA license freight operators and rail system operators with Environmental Protection Licences that restrict noise, especially in residential areas, and that the criteria for noise disturbance be amended to measure annoyance and health impacts of noise.’

Question put.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Brown, Mr Colless, Mr Donnelly, Mr Foley, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the NSW Bureau of Crime Statistics and Research begin reporting and collecting environmental crime data.’

Question put.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Brown, Mr Colless, Mr Donnelly, Mr Foley, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the EPA undertake community consultation for licence variations that do not improve environmental outcomes.’

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the EPA take immediate steps to stop pollution of the Wollangambe River.’

Question put.

The committee divided.

Ayes: Mr Donnelly, Dr Faruqi, Mr Foley.

Noes: Mr Brown, Mr Colless, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Dr Faruqi moved: That the following recommendation be inserted after Recommendation 10:

**‘Recommendation X**

That the EPA develop a protocol and principles for community consultations that ensure genuine and transparent engagement and that adherence to this is monitored and reported on publically.’

Question put.

The committee divided.

Ayes: Dr Faruqi.

Noes: Mr Brown, Mr Colless, Mr Donnelly, Mr Foley, Mr MacDonald, Dr Phelps.

Question resolved in the negative.

Resolved, on the motion of Dr Phelps:

- That the draft report [as amended] be the report of the committee and that the committee present the report to the House;
- That the transcripts of evidence, submissions, tabled documents, answers to questions on notice and supplementary questions, minutes of proceedings and correspondence relating to the inquiry be tabled in the House with the report;
- That upon tabling, all transcripts of evidence, submissions, tabled documents, answers to questions on notice and supplementary questions, minutes of proceedings and correspondence relating to the inquiry not already made public, be made public by the committee, except for those documents kept confidential by resolution of the committee;
- That the committee secretariat correct any typographical, grammatical and formatting errors prior to tabling;
- That the committee secretariat be authorised to update any committee comments where necessary to reflect changes to recommendations or new recommendations resolved by the committee;
- That dissenting statements be provided to the secretariat within 24 hours after receipt of the draft minutes of the meeting;

That the report be tabled on Friday 13 February 2015.

**6. Other business**

**7. Adjournment**

The meeting adjourned at 1.45 pm until Monday 16 February 2015 at 1.00 pm (*Wambelong fire*).

Stewart Smith

**Clerk to the Committee**

## Appendix 7 Dissenting statement

**By Dr Mehreen Faruqi MLC, The Greens**

It is very clear from the inquiry that it is essential for NSW to have a strong, independent and well-resourced environmental regulator to protect human health and the environment. It is with this view that the Greens put forward a significant number of amendments to the draft report, many of which were accepted.

The committee's recommendations will go some way in addressing the matters raised during the inquiry and strengthening the NSW EPA to help reduce risks to human health as well as improve the quality of our environment. However, they will not fully address the breadth of concerns raised in the submissions and the evidence provided. The Greens proposed a number of recommendations that were not accepted by the Committee that would have further improved the EPA's effectiveness as the state's environmental regulator.

### **Governance and Board Composition**

The committee recommendation to separate the roles of chair and chief executive officer is a necessary change, but will not resolve the core issues at the heart of many of the community submissions which were about improving community representation and access to the EPA.

*Recommendation: That the Protection of the Environment Administration Act 1991 be amended to restore community representatives to the EPA Board.*

### **Consultative Committees, public engagement and communication**

The committee has made a number of recommendations regarding the use of consultative committees, in particular for the EPA to make greater use of them. However, many stakeholders have questioned the effectiveness of these community consultation committees.

*Recommendation: That the EPA develops a protocol and principles for community consultations that ensure genuine and transparent engagement and that adherence to this is monitored and reported on publicly.*

### **Independence and Integrity**

The perceived closeness of the EPA to industry could be addressed by developing a transparent 'Independence and Integrity Charter'.

The Charter could be similar to the Scientific Integrity Policy established by the US EPA which promotes a culture of scientific integrity for all employees and is intended to improve the internal management and operation of the Agency.

*Recommendation: That the EPA develop and implement an 'Independence and Integrity Charter' to give guidance to staff and minimise perceived conflicts of interest.*

*Recommendation: That an independent and transparent mechanism be established for investigation of complaints against the EPA that is easily accessible, and developed in consultation with the community.*

### **Scientific expertise**

Given the breadth of technical cases that the EPA deals with, the separation of the authority from an in-house scientific capacity in 2012 is concerning and may have contributed to some of the issues raised by the community.

*Recommendation: That the EPA be resourced to establish a scientific division within its structure.*

The EPA also generally relies on information provided by holders of Environmental Protection Licences (EPL) to monitor their own compliance with licence conditions.

*Recommendation: That the EPA develop a regular, independent sampling program to undertake compliance monitoring to ensure that the data provided by EPL holders is correct and has integrity.*

### **Ecologically Sustainable Development**

Whilst the important principles of Ecologically Sustainable Development (ESD) are enshrined in the legislation, there is concern that it has not been properly operationalised and applied into the way the EPA performs its day to day decision-making.

*Recommendation: That the POEO Act be amended to operationalise the ESD objective.*

### **Regulation of Cruise passenger ships at the White Bay Cruise Terminal**

The committee has adopted some positive recommendations proposed by the Greens, such as the provision of noise mitigation measures and ship to shore power but further measures should be enacted.

*Recommendation: That low sulphur fuel (maximum sulphur content of 0.1%) be mandated to be used by cruise ships.*

*Recommendation: The EPA have an enforceable role in preventing environmental damage by utilising the precautionary principle in planning decisions including state significant development and state significant infrastructure projects.*

### **Forestry Practices in the Royal Camp State Forest**

*Recommendation: That the EPA study for identifying koalas extend to all state forests with a view to providing permanent protection of koala habitat*

*Recommendation: Implement all recommendations of the 'If a Tree Falls: Compliance failures in the public forests of New South Wales' by the EDO.*

*Recommendation: That clear and enforceable guidelines for identifying koalas and other threatened species be developed*

*Recommendation: That illegally logged sites are rehabilitated and compensatory habitat provided by the perpetrator at their expense.*

### **Coal Dust Pollution in the Hunter**

It is also disappointing that despite a number of concerns raised about the technical process and conflicting scientific studies, including the reduced scope of ARTC's second study and not requiring ARTC to monitor at more than one location, the committee considers the process by which the data was gathered to have achieved its intended purpose.

*Recommendation: That the EPA protect community health and require all coal trains to be fully covered and empty wagons to be washed to reduce coal dust emissions.*

### **Preventing and minimising pollution**

The submission process and hearings gave rise to a range of innovative ways that the EPA could change the way it operates to improve environmental and community health outcomes.

A large number of submissions raised a wide variety of case studies not referred to in the inquiry terms of reference. The Greens recommendations to these cases can be found in the report (Draft Minutes no.72).

### **Conclusion:**

It is the Greens' opinion that NSW needs a strong, independent and effective environmental regulator to protect the environment and human health. The EPA needs significant improvements to achieve this, not only through increased resourcing but an expansion of its regulatory scope to match the community's expectations. Crucially, the EPA needs to make a shift to more effective community engagement and providing transparent access to information.

The amendments in the committee report will go some way towards strengthening the EPA and regaining public trust. However, some of the Greens' proposed recommendations that were not accepted by the Committee are critical to addressing core issues raised by the community.



**Dr Mehreen Faruqi MLC**