



Clearing the Air

Opportunities for improved regulation
of pollution in New South Wales

This report was prepared by the Environmental Defender's Office (NSW), on behalf of the Nature Conservation Council of NSW.



The Environmental Defender's Office (EDO) is a community legal centre with over 25 years experience specialising in public interest environmental and planning law.

www.edo.org.au



Founded in 1955, the Nature Conservation Council of NSW (NCC) is the peak environment organisation for NSW, representing more than 100 community environment groups across the state.

www.nccnsw.org.au

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Foreword

The public response to the leak of hexavalent chromium from the Orica facility at Kooragang Island on 8 August, and subsequent pollution incidents, demonstrates the strength of community concern in relation to pollution.

Each year, industrial facilities across New South Wales release hundreds of millions of kilograms of pollution into our air, water and soil. Over the last decade, industrial facilities have self-reported thousands of breaches of pollution licences, and compliance audits conducted by the Environment Protection Authority (EPA) routinely revealed unreported breaches.

The EPA is responsible for regulating pollution from thousands of licensed facilities across the state. It is essential that the agency has the legal tools, financial resources, organisational culture and political support necessary to crack down on pollution breaches and drive sustained reductions in air, water and soil pollution.

This report, prepared by the Environmental Defender's Office at the request of the Nature Conservation Council of NSW, sets out a clear agenda for legislative and operational reform aimed at restoring public faith in NSW's pollution control system.

I commend this report to you, and extend my sincere thanks to the dedicated team of lawyers and scientists responsible for its preparation.



Chief Executive Officer
Nature Conservation Council of NSW

Executive Summary

On 8 August 2011, a hazardous material known as Chromium VI was accidentally released on the site of the Orica ammonium nitrate plant at Kooragang Island (**Orica Incident**). The Orica Incident has put a spotlight on the inadequacies of the present framework for regulating industry discharge of pollutants. Each year, industrial facilities across New South Wales release hundreds of millions of kilograms of pollution into our air, water and soil. Over the last decade, industrial facilities have self-reported thousands of breaches of pollution licences, and compliance audits conducted by the Environment Protection Authority (**EPA**) routinely revealed unreported breaches. No one knows the cumulative impact of this pollution on the environment and people's health.

This discussion paper was prepared by the Environmental Defender's Office (**EDO**) at the request of the Nature Conservation Council of NSW (**NCC**) to inform the future direction of pollution regulation and the NSW Environment Protection Authority.

The paper describes the regulatory framework for the management of pollution in NSW and outlines significant shortcomings of the current system in protecting human health and the environment. The discussion paper is divided into sections addressing:

- existing pollution regulation
- the need for an integrated inter-agency approach
- key elements of an effective pollution management system
- opportunities for enhancing community engagement
- priorities for effective compliance and enforcement.

This Paper proposes an enhanced approach to managing pollution in NSW that:

- places duties on regulators and polluters to minimise and, where possible, eliminate pollutants from entering our environment;
- sets pollution management on an objective, scientifically based foundation;
- strengthens the role of the EPA in strategic planning and decision making;
- strengthens the pollution licencing system and increases transparency around information relating to polluting activities;
- enhances and broadens the use of existing tools to minimise pollution loads and drive continual improvement;
- strengthens community engagement in pollution management decisions; and
- enhances the EPA's role as an independent regulator.

Recommendations

Improving the overarching pollution regulation framework

1. 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 licenced facilities.
2. Legislation should impose a general duty on all facility operators to prevent or minimise environmental harm arising from their activities.

Improving strategic planning for polluting activities

3. Decisions on strategic planning, development assessment and pollution control should be integrated to manage the cumulative impacts of existing and emerging pollution sources in a strategic manner.
4. Measurable limits must be set on the cumulative amounts of pollution allowable at a State, catchment and site level.
5. Decision-makers should be required to take into account a project's cumulative impacts in any decision on whether to approve it, and must reject the project if these impacts will degrade the receiving environment.
6. The EPA's independence in issuing and setting conditions on pollution licences should be reinstated for all classes of development, including major projects.

Improving pollution management and licensing

7. Licensing of polluting facilities should be based on objective standards that maintain environmental health, rather than procedural requirements that do not consider the receiving environment. For example, the EPA should be required to reject a pollution licence application unless the applicant can demonstrate there will be no net degradation in the quality of the receiving environment. Additional considerations, such as whether the licence holder is a fit and proper person, and long-term impacts of the proposed facility, should also be considered.
8. Legislation should state that, unless a pollution licence expressly authorises the discharge of pollutants, any such discharge is unlawful.
9. The EPA should utilise the strong regulatory tools available to it, and implement:
 - Protection of the Environment Policies, so that all regulatory agencies are required to ensure ambient environmental conditions are met;
 - Financial assurances to ensure that polluters remain financial responsible for minimising pollution and repairing associated environmental degradation;
 - Capping and allocating the amounts of pollutants that can be emitted into a particular zone, based on the capacity of the receiving environment to maintain its environmental values (bubble licenses); and
 - Pollution Reduction Programs should be imposed as a standard, mandatory licence condition. These should require industry to conform to continuous improvement of technology to reduce pollution. Their effectiveness should be audited and assessed at the five-yearly licence review.
10. The EPA should cease to rely on measures such as Pollution Reduction Programs to enforce compliance with pollution licences, and these should not be included as a regulatory option in compliance policies and guidelines.
11. Revise Schedule 1 to the POEO Act to ensure it includes a current list of all activities with potential for environmental impact.
12. The load based licensing system should be extended to include a more comprehensive list of pollutants. For load based fees:

- Revenue derived from load based fees is allocated to an EPA-managed or independent trust fund, and allocated specifically to environmental remediation projects to mitigate harm from industrial pollution.
 - The load based fee schedule should be revised to properly reflect the long-term costs to human health and the environment.
13. The EPA should be empowered to immediately suspend pollution licences where prescribed emission levels are exceeded.
 14. Revise the pollution licences in a number of ways to ensure that:
 - the applicant has demonstrated compliance with best practice principles of waste management;
 - licence conditions are 'SMARTER';
 - licence limits reflect the capacity of the receiving environment to bear the impacts of pollution without degradation;
 - licensees commit to continual improvement;
 - offsets are imposed on unavoidable discharges to achieve 'no net degradation' in the long term;
 - licences are reviewed in industry clusters to facilitate meaningful public participation; and
 - the community has a clear understanding of the industry and discharges.
 15. The level of detail and comparative data reported in facility operators' annual returns should be increased. Raw monitoring data is made publicly available to the community on the POEO Register, but the annual return should also include a report (provided by the licence holder) that interprets the results in a contextual and meaningful way for the community.
 16. Ensure that the five-yearly review of pollution licences includes a commitment to implementing Best Available Technology.
 17. Ensure that end of project licence revocation does not occur until an independent audit has ensured that all pollution (current and potential) has ceased.

Increasing community engagement

18. Reinstate the role of community and local council representatives on the EPA Board.
19. The EPA should work with local communities to ensure best practice transparency, and access to 'relevant and meaningful' information on pollution, in line with state goals and pollution law objectives.
20. Legislation should provide that a formal community consultation process is required for pollution licence reviews, for decisions relating to the issue, transfer or surrender of pollution licenses, and for licence variations which do not improve environmental outcomes.
21. Ensure that the quality and effectiveness of community engagement, including community consultation committees, is monitored and reported on.
22. Ensure that such community consultative committees seek out the aims, needs and preferences of the community and the environment, and can effectively contribute to policy and decisions on pollution control.
23. Third party appeal rights should be implemented in relation to pollution licensing decisions.
24. The EPA's public register should be expanded to provide for publication of all relevant details of the licensing process. This includes:
 - licence variation applications
 - any public submissions received in relation to licensing decisions
 - reasons for all licensing decisions.

Improving compliance and enforcement

25. The EPA should be empowered to immediately suspend pollution licences where prescribed emissions levels are exceeded.
26. Penalty notices for pollution offences should be used more frequently, and higher maximum penalties introduced
27. Move civil enforcement of breaches of the POEO Act to an 'own costs' jurisdiction in the Land and Environment Court, to remove costs barriers and increase access to justice by the community.
28. Upgrade the effectiveness of the EPA's response to industry audits and focus on benchmarking its methods and performance. This should align with the Audit Office's 2010 recommendations on improved internal analysis. The progress of these improvements should be publicly reported by the EPA or the Environment Minister.
29. Given the likelihood that pollution breaches are often unreported:
 - risk-based compliance audits should be undertaken more regularly,
 - the findings for each facility should be published on the internet, and
 - compliance action should be taken in response to identified breaches.
30. Consider imposing a duty on the EPA (accompanied by sufficient resources) to investigate pollution incidents for which local councils are the appropriate regulatory authority, in circumstances where all other mechanisms at council level have been exhausted.
31. Undertake a review of the EPA's compliance and enforcement approach and policy to ensure that it improves compliance and minimises harm to the environment.
32. The NSW Bureau of Crime Statistics and Research should be asked to undertake a comprehensive review of the enforcement of environmental offences. This review could include consideration of:
 - the use of penalty notices and the appropriate financial penalty to be imposed by these notices;
 - how the EPA's prosecution policy could be improved, to more effectively deter environmental pollution offences;
 - how alternatives to financial penalties could be better used to improve enforcement of lower level offences; and
33. Make alternative enforcement orders available, including:
 - orders which allow the Court to insist that a corporate defendant undertake satisfactory internal disciplinary action;
 - equity fines, where shares from a convicted corporation go to a public interest trust fund.

Glossary of Terms

BMCS	Blue Mountains Conservation Society
BOCSAR	NSW Bureau of Crime Statistics and Research
CO	Carbon Monoxide
EIS	Environmental Impact Statement
EPA	Environment Protection Authority (NSW)
EREP	Environment and Resource Efficiency Plan
NEPM	National Environment Protection Measure
NOx	Nitrogen Oxide
NPI	National Pollutant Inventory
OEH	Office of Environment and Heritage
Orica Incident	Release of hazardous material known as Chromium VI at the site of the Orica Australia ammonium nitrate plant at Kooragang Island in NSW
PEP	Protection of the Environment Policy
Planning Act	<i>Environmental Planning and Assessment Act 1979</i> (NSW)
Planning Regulation	<i>Environmental Planning and Assessment Regulation 2000</i> (NSW)
POEA Act	<i>Protection of the Environment Administration Act 1991</i> (NSW)
POEO Act	<i>Protection of the Environment Operations Act 1991</i> (NSW)
POEO Regulation	<i>Protection of the Environment Operations (General) Regulation 2009</i> (NSW)
Pollution Licence	An environment protection licence, regulated under chapter 3 of the POEO Act
PRP	Pollution Reduction Program
SEA	Strategic Environmental Assessment
SEPP	State Environmental Planning Policy
USEPA	United States of America Environmental Protection Agency
VOC	Volatile Organic Compound

1. Introduction

On 8 August 2011, a hazardous material known as Chromium VI was accidentally released on the site of the Orica ammonium nitrate plant at Kooragang Island, dispersing over the Newcastle suburb of Stockton (**Orica Incident**). The public record shows that the facility has breached its licence every year since 2000 except 2004, with a total of 131 breaches.¹ Despite these consistent breaches, in the period 2000-2011 Orica was not issued with a single prevention, clean up or prohibition notice. The sole prosecution of Orica in relation to the facility in that period occurred in 2005, with Orica required to pay a fine of \$10,500.² The revelations surrounding the Orica Incident, along with other recent examples of pollution emissions in NSW, makes it clear that the present framework for managing polluting industries in NSW is inadequate.

Problems with the current pollution management system in NSW extend through various elements of the system, from the process of approving and licensing polluting facilities, to opportunities for community engagement and the role of the Environmental Protection Authority (**EPA**) in enforcing the legislation. This paper covers each of these elements in turn, and proposes recommendations for reform. The Inquiry into the Orica Incident by the NSW Legislative Council,³ along with amendments to the *Protection of the Environment (Operations) Act 1997* (NSW) (**POEO Act**) and *Protection of the Environment (Administration) Act 1991* (NSW) (**POEA Act**), are important in setting the context for these matters.

This discussion paper proposes an enhanced approach to managing pollution in NSW that:

- places duties on regulators and polluters to minimise and, where possible, eliminate pollutants from entering our environment;
- sets pollution management on an objective, scientifically based foundation;
- strengthens the role of the EPA in strategic planning and decision making;
- strengthens the pollution licencing system and increases transparency around information relating to polluting activities;
- enhances and broadens the use of existing tools to minimise pollution loads and drive continual improvement;
- strengthens community engagement in pollution management decisions; and
- enhances the EPA's role as an independent regulator.

The recommendations set out in this report are based on proven regulatory tools, including a range of mechanisms already available under existing NSW pollution laws. Taken together, these recommendations present clear opportunities for reducing pollution risk, engaging local communities in pollution control and improving the health of the NSW environment.

1 The public register established under section 308 of the POEO Act, available at www.environment.nsw.gov.au/prpoeo/index.htm.

2 Nature Conservation Council of NSW and Total Environment Centre, Submission No 23 to Kooragang Island Orica chemical leak Committee, NSW Legislative Council, *Inquiry into the Kooragang Island Orica chemical leak*, 8 November 2011, 3–4. Available at www.parliament.nsw.gov.au/Prod/parliament/committee.nsf/0/55436904D7DBC9BBCA2579430014923F

3 Kooragang Island Orica chemical leak Committee, NSW Legislative Council, *Inquiry into the Kooragang Island Orica chemical leak* (2011) <www.parliament.nsw.gov.au> .

2. Overview of the Existing Pollution Regulation System

The primary laws that regulate polluting activities in New South Wales are the:

- *Protection of the Environment Operations Act 1997* (NSW) (**POEO Act**);
- *Environmental Planning and Assessment Act 1979* (NSW) (**Planning Act**); and
- *Protection of the Environment Administration Act 1991* (NSW) (**POEA Act**).

The POEO Act establishes a scheme whereby responsibility for pollution control rests with the ‘appropriate regulatory authority’. The principal agency responsible for regulating pollution in NSW is the Environment Protection Authority (**EPA**). The EPA is the appropriate regulatory authority for activities that require a pollution licence, and for activities that involve the state government or a public authority. Local councils also play a role through planning and enforcement processes, particularly for smaller-scale developments. Local councils are the appropriate regulatory authorities for most activities that do not require licences.⁴ Under the principle of ‘one site, one regulator’, if the EPA grants a licence to premises for one sort of polluting activity, such as water pollution, it is responsible for regulating all other types of pollution from the premises. The licensing system is discussed in detail in Part 4 below.

2.1 The Role and Functions of the EPA

The EPA was established in 1992 as a statutory body representing the NSW Crown. With some exceptions, its activities were subject to Ministerial control.⁵ It replaced the State Pollution Control Commission and the Ministry for the Environment. Its general responsibilities included ensuring that best practice measures were taken for environment protection, including co-ordinating the activities of other public authorities. Its role also included:

- investigating and reporting on all allegations of non-compliance with environment protection legislation, for the purposes of prosecutions and other regulatory action; and
- advising the Government on methods for integrating the EPA’s pollution approvals and licensing processes with the development consent process, so that the importance of environment protection was recognised.⁶

Since 2003, the EPA has been subject to continual change in its activities and administrative structure including integration into other environmental agencies. Following the Orica Incident and the subsequent O’Reilly Report,⁷ the NSW Government announced a number of reforms to the State’s pollution regulation system. This included the re-establishment of an independent EPA, headed by a Chief Environmental Regulator.⁸

Under the changes, the Board of the EPA will not be subject to the control and direction of the Minister in any of its functions.⁹ This has been said to increase the EPA’s independence. For more information on the current EPA reform process, see Appendix 1.

2.2 Licensing

Under the POEO Act, the EPA has the power to issue environment protection licences (**pollution licences**).¹⁰ These licences are required for activities listed in Schedule 1 of the POEO Act. Where development approval is also required under the *Environmental Planning and Assessment Act 1979* (**Planning Act**) licences are conditional upon the issue of that approval.¹¹ Some activities that do not require development approval may still require a pollution licence.¹²

4 POEO Act s 6.

5 By the POEA Act – see ss 5 and 13 of that Act as originally enacted.

6 POEA Act s 6.

7 The O’Reilly Report (undertaken after the Orica Incident recommended that: (1) The Environment Protection and Regulation Group within OEH be created separately as an independent Environmental Regulatory Authority (the **Authority**), headed by a Chief Environmental Regulator; (2) An Independent Board be established, whose membership be drawn from people with regulatory expertise as well as representatives from community interests; (3) Consideration is given to establishing community reference groups at strategic locations across NSW to assist the Authority in its deliberations; (4) The Director-General of the Department of Premier and Cabinet review what other existing functions within OEH should also be transferred to the proposed independent Environmental Regulatory Authority; and (5) The proposed independent Environmental Regulatory Authority has its corporate services requirements met through OEH’s existing corporate services division.

8 The Hon Barry O’Farrell MP, Premier of NSW, Minister for Western Sydney, ‘Tough New Pollution Laws: O’Reilly Report Accepted in Full’ (Media Release, 5 October 2011) <www.dpc.nsw.gov.au/_data/assets/pdf_file/0013/131161/Orica_OReilly_Report_Accepted_in_Full_5.10.11bb.pdf>. Commencing 29 February 2012, the composition of the Board of the EPA will change from having 10 members (appointed on the basis of expertise in nature conservation, environment protection, agriculture, industry, environmental science, regional issues, law and local government), to having five members. Of these, one will be the Chairperson and the other four will be appointed on the basis of expertise in environmental science, environmental law, corporate, financial and risk planning and management, and business: *Protection of the Environment Legislation Amendment Act 2011* (NSW) sch 1 cl 4.

9 *Protection of the Environment Legislation Amendment Act 2011* (NSW) sch 1 cl 6.

10 POEO Act ch 3.

11 POEO Act s 50.

12 POEO Act s 49.

The POEO Act provides for numerous planning and licencing mechanisms that can be used to improve environmental protection. These mechanisms will be discussed further in other sections of this report but include:

- load based fees;
- annual returns;
- protection of the environment policies;
- market-based mechanisms, including financial assurances, bubble licencing and cap and trade systems;
- pollution reduction plans; and
- load reduction agreements.

2.3 Compliance and Enforcement

Under the POEA Act, the EPA has responsibility for investigating and reporting on alleged non-compliance with the environmental protection legislation for the purpose of prosecutions.¹³ The Board of the EPA, in particular, is to determine whether the EPA should instigate proceedings for serious environmental protection offences, provided there is evidence capable of establishing the committing an offence.¹⁴ This provision will remain when the other changes to the structure of the EPA take place.

Consequences of committing an offence include the issue of environmental protection notices (clean up, prevention and prohibition orders),¹⁵ and civil and criminal enforcement remedies. Criminal offences under the POEO Act are classified as tier 1, tier 2 or tier 3 offences, with consequences ranging from the issue of penalty notices (tier 3) to prosecution before the Land and Environment Court or the Supreme Court of NSW (tier 1).

2.4 Community Engagement

The EPA is required to keep a public register which is to be available for public inspection.¹⁶ This register must record matters such as details of licence applications and decisions relating to licences, details of environment protection notices, and summaries of audit reports.¹⁷ Part 5 of this Discussion Paper sets out further details about opportunities for community involvement in the licencing process. Opportunities for community members to provide submissions on new polluting facilities are limited, but the EPA is required to take any submissions it receives into consideration in exercising its licencing functions.¹⁸ As part of the recent reforms, the role of community representatives on the EPA's board has been abolished significantly limiting community involvement in the pollution management process.

13 POEA Act s 7(e).

14 POEA Act pt 5 div 2.

15 POEO Act ch 4.

16 POEO Act ss 308 and 309.

17 POEO Act s 308.

18 POEO Act s 45(l).

3. Integrated inter-agency approach to pollution management

NSW should be striving for a pollution management system that minimises and, where possible, eliminates pollutants from entering the environment. This requires a specific enforceable duty to minimise and prevent pollution and the integration of pollution management into all NSW Government decision making. Legislation that guides decisions around pollution must be made consistent and pollution expertise must be appropriately integrated into other areas of decision making. Achieving this goal will require an across government approach that better utilises existing tools and resources for the protection of the environment.

3.1 Establishing a duty to regulate

There is no specific enforceable duty to regulate pollution imposed on the EPA under NSW pollution legislation. Instead, the role of the EPA is set out in the POEA Act by reference to its objectives, functions and powers. Relevant among its objectives¹⁹ are:

- to protect, restore, and enhance the quality of the environment in NSW, with regard to the need to maintain ecologically sustainable development;
- to reduce the risks to human health and prevent degradation of the environment, including through:
 - promoting pollution prevention;
 - aiming to reduce the discharge of environmentally harmful substances to harmless levels;
 - setting mandatory targets for environmental improvement.

Among other things, the EPA has general responsibility for:²⁰

- ensuring that the best practicable measures are taken for environment protection, in accordance with environmental protection laws and other legislation, and reporting on their efficacy;
- reviewing the regulatory framework for environment protection and advising on its rationalisation and simplification.

It has a specific responsibility to develop environmental quality objectives, guidelines and policies to ensure environmental protection, and to monitor the state of the environment so that it can assess whether these are being achieved.²¹

These powers and responsibilities are expressed in general terms. This means that the EPA is not bound by the law to exercise them in any particular way. This has consequences for enforcement. It is very difficult for the community to hold the EPA to account in regulating particular polluting substances in particular ways.

By contrast, other jurisdictions take a much more prescriptive approach. For example, the *Clean Air Act*²² in the United States requires the US Environmental Protection Agency (**USEPA**) to publish and revise a list of air pollutants, and air quality criteria for each of those pollutants.²³ The USEPA must set primary and secondary national ambient air quality standards for pollutants for which these criteria have been issued. Primary standards are to protect public health. Secondary standards are to protect public welfare, including in relation to environmental and property damage.²⁴

Furthermore, new major sources of pollution, or those facilities undertaking major modifications, have to obtain permits ensuring that they avoid causing or contributing to pollution that threatens emissions standards in the USA. They must also implement best available technology to control pollution.²⁵ The US Congress has listed some 188 pollutants that present a threat to human health and the environment. They include mercury, lead and asbestos. The USEPA is required to set out a list of the major sources of these pollutants and must regulate their emissions by reference to the cleanest existing facilities. New and existing plants must then do what is necessary to meet these standards.²⁶

19 POEA Act s 6. The POEA Act has similar objectives, namely: the protection, restoration and enhancement of the quality of the NSW environment, along with reduction of risks to human health and the prevention of environmental degradation by using mechanisms promoting, relevantly:

- Pollution prevention and cleaner production;
- The reduction of discharges of environmentally harmful substances to harmless levels; and,
- The making of progressive environmental improvements, including reducing pollution at source.

20 POEA Act s 7.

21 POEA Act s 9.

22 42 USC §§ 7401-7671.

23 *Clean Air Act* §7408.

24 *Clean Air Act* §7409.

25 United States Environmental Protection Agency, *New Source Review* (23 July 2011) <www.epa.gov/nsr/>.

26 *Clean Air Act* §7412.

The USEPA also sets standards for motor vehicle emissions of air pollutants that may cause damage to public health or welfare.²⁷ In 2008, this provision was used by a group of States, local governments and environment groups to compel the USEPA to regulate the emissions of four greenhouse gases from new motor vehicles.²⁸

Under this approach, not only are more pollutants regulated than they are in NSW, but by requiring new major sources to adopt best available technology, they are also regulated at a much stronger level. While offences exist under NSW law for failure to carry out maintenance work in a 'proper and efficient manner', or to cause air pollution by not dealing with materials in a 'proper and efficient manner',²⁹ this falls short of the standards required in the USA. Importantly, the clear legal definition of the USEPA's responsibilities for air pollution means that the USEPA can be held to account on this standard.³⁰ These lessons are applicable in NSW not only to air pollution, but also to land and water pollution

3.2 Enhancing Corporate Environmental Responsibilities

A requirement for the EPA to regulate pollution should be supported by a requirement on polluters to minimise pollution. Legislation in some other Australian jurisdictions goes further than NSW legislation in ensuring that environmental values are protected against potentially harmful activities, including polluting activities. In Queensland it is unlawful to carry out any activity that is likely to cause environmental harm unless all reasonable measures are taken to prevent or minimise that harm. There are a number of factors to be taken into account in determining what constitutes 'reasonable measures.' They include receiving environment sensitivity, the current state of technical knowledge for the activity, the likely effectiveness of various measures available and their financial implications.³¹

Similar provisions exist in South Australia. There, it is unlawful for a person to undertake an activity that might pollute the environment unless he or she takes all reasonable and practicable measures to prevent or minimise any resulting environmental harm. The factors to be taken into account in determining what constitutes a 'reasonable and practical measure' are similar to those in Queensland.³² Both jurisdictions also provide that it is an offence to cause environmental nuisance.³³ This includes causing environmental harm through pollution or contamination.³⁴

These requirements establish a more comprehensive scheme for environmental protection than what is available in NSW. In particular, the establishment of a general environmental duty for corporations would provide both symbolic and practical assistance in ensuring that proponents of polluting activities take proactive measures to implement available technology to minimise the environmental harms of these activities. There are a number of existing mechanisms that would support implementation of enhanced corporate environmental responsibilities. These could be incorporated as part of the pollution licencing scheme and are discussed in Part 4 of this document.

3.3 Managing Cumulative Impacts

There are significant concerns surrounding the cumulative impacts of pollution in NSW, for both the environment and for human health, often arising as a result of situating multiple polluting operations within one region.

To date there has been no overarching planning framework by which consideration of cumulative impacts of major projects can be done. The current system relies largely on single facility licences with no focus on environmental protection or continual improvement. The Planning Act adopts a project-based process that assesses individual projects in isolation. This results in an ad hoc, patchwork approach often with adverse local impacts.³⁵ Load-based pollution fees do not reflect the true cost of the long term, cumulative impact of pollutants to the environment and reporting does not consider the effect of pollution on the receiving environment.³⁶

In order to achieve the goal of the POEO Act to 'protect, restore and enhance the quality of the environment',³⁷ a fundamental paradigm shift in licensing policy needs to be made. This would require movement from a curative approach to pollution, to a preventative approach. Instead of a facility applying for, and being granted a licence independently of other facilities and independent of the receiving environment, the EPA should consider:

27 *Clean Air Act* §7521.

28 *Massachusetts v Environmental Protection Agency* 549 US 1 (2007).

29 POEO Act, ss 125, 126, 140.

30 *Massachusetts v Environmental Protection Agency* 549 US 1 (2007).

31 *Environment Protection Act 1994* (Qld), s 319.

32 *Environment Protection Act 1993* (SA), s 25.

33 *Environment Protection Act 1994* (Qld), ss 440, 443; *Environment Protection Act 1993* (SA), s 82.

34 *Environment Protection Act 1994* (Qld), s 15; *Environment Protection Act 1993* (SA), s 3.

35 See EDO NSW, Submission to the Review of the NSW Planning System (Stage 1), 4 November 2011, 27. <www.edo.org.au/edonsw/site/pdf/subs/111104review_nsw_planning_stage_1.pdf>.

36 The receiving environment is the water catchment, air shed or land area receiving the pollution.

37 POEO Act s 3(a).

- the ability of the receiving environment to withstand pollution, and
- the cumulative impact of surrounding facilities.

This should take into account not only facilities licenced under Schedule 1 to the POEO Act, but all sites that emit air, land or water pollution.³⁸ This approach will require EPA to enforce environmental standards. If a receiving environment is not capable of withholding additional pollution, the licence application should be refused.

Procedures for assessing environmental impacts must require that proponents provide detailed information on cumulative impacts, and decision-makers must be equipped with relevant expertise to be able to analyse this information. Environmental Impact Statements (EISs) are not required by the EPA when determining pollution licence applications, although the legislation provides that it is to take into account any EIS, or other statement of environmental effects, prepared or obtained by the applicant under the Planning Act.³⁹ A requirement that EISs provide detail on cumulative impacts will therefore involve both the EPA and the consent authority in consideration of these impacts.⁴⁰ Consideration of cumulative impacts is also critical at the licensing stage. This is discussed further in Part 4.

3.4 Integrated Pollution Regulation

3.4.1 Interaction between pollution and planning legislation

The planning system plays a role in regulating polluting activities both in terms of deciding where polluting activities will be allowed and because most facilities that are likely to generate pollution will require development consent (either from the local council or Planning Minister) in order to be established. In many cases, this will involve assessment of their environmental impacts.⁴¹ Some polluting operations will fall outside the requirements of Schedule 1 of the POEO Act and will therefore not require a pollution licence. The local council will usually bear primary responsibility for regulating the pollution effects of these operations.⁴²

3.4.2 Strategic Environmental Assessment

Strategic environmental assessment (**SEA**) is an important mechanism for identifying and mitigating the environmental impacts of multiple activities by considering their cumulative environmental impact before assessing and approving individual activities.

SEA requires a robust scientific underpinning to ensure decisions are made using the best available information and should form the basis of a modern planning system. In the context of pollution management, SEA should be used to set pollution limits based on the receiving environment's ability to maintain ecosystem health and biological processes. Limits should consider both point and diffuse sources plus the transport of pollutants within the system and the movement of pollution between receiving environments post release.

Existing resources that would support the use of SEA in pollution management include:

- ANZECC and AMRCANZ water quality guidelines and state water quality objectives;
- National Environment Protection Council standards for ambient air quality;⁴³
- National Framework for Chemicals Environment Management; and
- National Industrial Chemicals Notification and Assessment Scheme.⁴⁴

³⁸ Local councils are often the approval bodies for polluting facilities that do not require pollution licenses. This paper does not provide detailed discussion on their role, but notes that there is scope to ensure that their planning decisions align more closely with strategic planning goals. Local councils making decisions on the location of industrial, residential and other zones should ensure that such zoning decisions are consistent with pre-existing catchment boundaries, in order to ensure that the effects of zoning decisions on the receiving environment are minimised. Strategic planning also requires cooperation between councils to minimise the cumulative impacts of polluting facilities situated in neighbouring council regions. Among other things, this requires ensuring that each council takes into account the pollution impacts of facilities in neighbouring council areas when approving developments of polluting facilities, and that it also takes into account the impacts of proposed facilities on neighbouring council areas. An example of effective inter-council collaboration is provided by the Georges River Combined Councils' Committee, which was established in 1979 (See www.georgesriver.org.au/GRCCC.html). This Committee is made up of nine local councils, along with agencies and community representatives within the Georges River catchment. It advocates for protection, conservation and enhancement of the health of the Georges River. Among its roles, it lobbies for the needs of councils when they deal with government policies affecting the Georges River. The usefulness of this committee as a model for other forms of council collaboration should be assessed.

³⁹ POEO Act s 45(i).

⁴⁰ For assessment of activities under Part 5 of the Planning Act, there is presently a requirement to consider any cumulative effect with existing or likely activities – Planning Regulation cl 228(2)(o).

⁴¹ Note also that there is a limited class of activities that will require a pollution licence but not development consent. These are generally activities that are not premises-based, such as mobile waste processing activities. See POEO Act sch 1 pt 2.

⁴² POEO Act s 6.

⁴³ Environment Protection Heritage Council, National Environment Protection Measure (NEPM) (Ambient Air Quality) <www.nepc.gov.au/airquality/aaq_nepm>.

⁴⁴ Environment Protection Heritage Council, A national approach to the management of chemicals <www.ephc.gov.au/taxonomy/term/75>.

3.4.3 Designated Development

Operations that require a pollution licence will usually also require development consent under the Planning Act. In particular, many such developments tend to fit within the category of **designated development**.⁴⁵ Designated development requires consent, and tends to involve high-impact development (e.g. development that is likely to generate pollution), or development which is located in or near an environmentally sensitive area, such as a wetland.

Key elements of the approval process for designated development are that the applicant must provide an Environmental Impact Statement (**EIS**),⁴⁶ and that there is a formalised system for inviting public submissions on the application. The authority responsible for approving a designated development application (the **consent authority**) must place the application on display for at least 30 days (the **submission period**).⁴⁷ Notice of the application must be given to a variety of people, including the owners or occupiers of land that might be detrimentally affected by the proposed development.⁴⁸ Any person can make written submissions about the application to the consent authority during the submission period,⁴⁹ and the consent authority is required to take these into account when it is determining the application.⁵⁰

3.4.4 State significant development or state significant infrastructure

A development is state significant if it is declared as such under a State Environmental Planning Policy (**SEPP**) or by order of the Minister.⁵¹ Infrastructure is state significant if it is declared as such under a SEPP.⁵² State significant developments include many that have significant potential to generate environmental pollution.⁵³ Where development is classified as **state significant development** or **state significant infrastructure** requires a pollution licence, the EPA's discretion over whether or not to grant that licence is removed.⁵⁴

This means that once a state significant development receives development consent under the Planning Act, a pollution licence cannot be refused and the licence terms must be **substantially consistent with the terms of the consent**.⁵⁵ Similar provisions apply to the approval of state significant infrastructure.⁵⁶ Discretion in licensing decisions is not returned to the EPA until the first (five-yearly) review of the pollution licence is undertaken, or there is an application for renewal of a pollution licence or for a new pollution licence if an existing one lapses.⁵⁷

Although EPA discretion has been removed from licensing decisions for state significant development and state significant infrastructure, there are still requirements for an environment impact statement to be provided with the development application,⁵⁸ and for public notice and consultation procedures to be undertaken.⁵⁹

⁴⁵ Designated development is development that requires consent, and that is declared as designated development by an **Environmental Planning Instrument** or by the *Environmental Planning and Assessment Regulation 2000* (NSW) (**Planning Regulation**): Planning Act s 77A; Planning Regulation sch 3.

⁴⁶ Planning Act s 78A(8)(a).

⁴⁷ Planning Act s 79(1)(a).

⁴⁸ Planning Act s 79(1)(b).

⁴⁹ Planning Act s 79(5). The consent authority must also give notice of the application to public authorities (other than concurrence authorities or approval bodies) that the consent authority considers may have an interest in the determination of the application: Planning Act s 79(1)(b)(iii), Planning Regulation cl 77.

⁵⁰ Planning Act s 79C(d). There are also third party merits appeal rights for designated development. This means that if the development is approved, those who have lodged a submission objecting to the development can bring a merits appeal to the Land and Environment Court, within 28 days after the approval was given: Planning Act s 98. Under merits appeal, the Court can re-make the decision being challenged.

⁵¹ Planning Act s 89C.

⁵² Planning Act s 115U(2). Previously, the provisions relating to these major projects were contained in Part 3A of the Planning Act. The State significant development and infrastructure categories have been rationalised compared to the previous Part 3A regime. Unfortunately, the new regime retains significant aspects of Part 3A, limiting interagency concurrence and environmental authorisations. As for State significant development and infrastructure, where a pollution licence was necessary for carrying out a project approved under Part 3A, it could not be refused and its terms had to be consistent with the terms of the development consent. Planning Act ss 75V(1)(e) and 75V(3), as Planning Act stood prior to 1 October 2011.

⁵³ The kinds of developments classified as State significant include intensive livestock agriculture, aquaculture; agricultural produce industries and food and beverage processing; timber milling, timber processing and paper and pulp processing; mining; petroleum (oil and gas); extractive industries; geosequestration; **metal, mineral and extractive material processing**; chemical, manufacturing and related industries; hospitals, medical centres and health research facilities; air transport facilities; port facilities and wharf or boating facilities; rail and related transport facilities; electricity generating works and heat or co-generation; water storage or water treatment facilities; sewerage systems; and waste and resource management facilities: *State Environmental Planning Policy (State and Regional Development) 2011* sch 1. In many instances, these activities must fall within certain limits of capacity or capital investment value in order to be classed as State significant. State significant infrastructure includes port facilities and wharf or boating facilities; rail infrastructure and water storage or water treatment facilities: *State Environmental Planning Policy (State and Regional Development) 2011* sch 3.

⁵⁴ The provisions relating to State significant development and State significant infrastructure commenced in October 2011. This should be contrasted with provisions relating to integrated development. Development that is not State significant development may be determined under the **'integrated development'** provisions of the Planning Act (pt 4 div 5). The integrated development process grants a significant role to the EPA in decisions on authorisation of polluting activities. This system applied to major projects until the introduction of Part 3A into the Planning Act in 2005. Under the integrated development provisions, if a pollution licence is required under the POEO Act, the consent authority for the development cannot grant consent unless it first refers the application to the EPA and obtains its general terms of approval: Planning Act s 91A(2). The consent authority's consent must be consistent with the terms of the EPA's approval: Planning Act s 91A(3). If the EPA indicates that it will not grant a pollution licence, the development consent must be refused: Planning Act s 91A(4).

⁵⁵ Planning Act s 89K(1)(e).

⁵⁶ Planning Act s 115ZH(1)(e).

⁵⁷ Planning Act ss 89K(2), 115ZH(2).

⁵⁸ Planning Act ss 78A(8A) and 115Y.

⁵⁹ Planning Act ss 89F, 115Z; Planning Regulation cll 49, 83, 84, 85, 85A, 194.

3.4.5 Integrating pollution expertise

The current planning system shifts decision making on pollution away from staff with pollution expertise by requiring that the EPA provides a licence to any approved activity. This process significantly reduces the ability of the EPA to holistically manage pollutants in NSW. In large part, this is due to a move away from the integrated development approach. The listing of a number of polluting activities as State significant development, and the concomitant requirement that the EPA grant a pollution licence consistent with the terms of development approval, significantly undermines the EPA's role as pollution regulator.

It is contrary to good public policy that the projects with the greatest significance, and likely environmental impacts, are those exempt from (or rubber stamped with) the very approvals designed as a 'check' on those impacts. Bodies such as the EPA, which have the greatest experience in pollution regulation, should be empowered to use their expertise to promote enhanced environmental outcomes, rather than being excluded from the assessment process.⁶⁰

The current review of the NSW planning system presents a timely opportunity for improved integration of planning and pollution control. Both the EDO and NCC have highlighted the opportunities for securing improved environmental outcomes by reforming the planning system.⁶¹ This includes integration of planning law with other environmental protection legislation, consideration of cumulative impacts, reforms to the processes by which local councils manage polluting activities and improved public consultation processes in relation to planning and licensing decisions. Reforms to the Planning Act must therefore ensure that all potential pollution impacts are considered by decision-makers in making new plans and determining development applications that may have pollution implications.

Recommendations

1. 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 set and review lists of pollutants and emissions standards, and impose best practice standards on all licenced facilities.
2. Legislation should impose a general duty on all facility operators to prevent or minimise environmental harm arising from their activities.
3. Decisions on strategic planning, development assessment and pollution control should be integrated to manage the cumulative impacts of existing and emerging pollution sources in a strategic manner.
4. Measurable limits must be set on the cumulative amounts of pollution allowable at a State, catchment and site level.
5. Decision-makers should be required to take into account a project's cumulative impacts in any decision on whether to approve it, and must reject the project if these impacts will degrade the receiving environment.
6. The EPA's independence in issuing and setting conditions on pollution licences should be reinstated for all classes of development, including major projects.

⁶⁰ While it should be recognised that there is a need for government efficiency and the avoidance of unnecessary delay in obtaining concurrence from multiple governmental agencies, this should not be at the expense of using inter-agency expertise to obtain strong environmental outcomes.

⁶¹ EDO NSW, *Submission to the Review of the NSW Planning System (Stage 1)*, 4 November 2011, www.edo.org.au/edonsw/site/pdf/subs/111104review_nsw_planning_stage_1.pdf; NCC *Submission on NSW Planning System Review*, 4 November 2011, www.planningreview.nsw.gov.au/LinkClick.aspx?fileticket=bet16F6sC9Q%3d&tabid=105&mid=516

4. Pollution Management System

The EPA is responsible for issuing environment protection licences (pollution licences) for different classes of activities:⁶²

This section discusses the key features of the current licensing scheme and includes recommendations for changes to pollution licences so that:

- there is an increased focus on environmental protection;
- long-term, cumulative impacts of pollution are assessed; and
- continual improvement is required.

4.1 Licencing System

In determining whether or not to grant a licence, the EPA is required to consider a number of factors.⁶³ These include:

- any existing protection of the environment policies (**PEPs**);⁶⁴
- the objectives of the EPA;⁶⁵
- the pollution that will be, or will likely be caused by the activity, and the effect of this on the environment;
- practical measures that could be taken to reduce this pollution and to protect the environment;
- any relevant offset scheme or emissions trading scheme;
- whether the person concerned is a fit and proper person;
- the water pollution effects of the activity, and any measures that could be taken to restore or maintain the environmental values of the water;
- any documents accompanying a licence application (such as EISs or SISs);
- public submissions; and
- guidelines issued by the EPA.

The key criticism of the current system is that it is primarily administrative in nature.⁶⁶ There are currently no overarching standards that define “acceptable” levels of pollution with no set standards under which these matters must be considered and no consideration of the long term impact of pollution. This makes the decision to grant a licence highly discretionary.

Adequate environmental pollution management in NSW requires a significant shift in emphasis. The EPA must establish objective, scientifically based levels of acceptable pollution based on the receiving environment’s ability to accept that pollution. Once these levels have been established, the existing fit and proper person test should be applied and the industry must be required to demonstrate that in designing and implementing the facility they have considered use of best available technology, waste management principles,⁶⁷ the effect of proposed discharges on the environment, and opportunities for additional environmental protection elsewhere if some pollution is unavoidable.

If the proposed polluting activity exceeds the limits set for the receiving environment, or if a licence applicant cannot demonstrate that they have adequately considered ways to avoid or reduce pollution, the EPA should be required to refuse the licence. For areas that already have licenced pollution that exceeds the acceptable limits in the receiving environment, or if new industries wish to enter an area where limits have already been reached or exceeded, market mechanisms should be used to actively reduce pollution to acceptable levels.

4.1.1 Protection of the Environment Policies

The POEO Act allows for the development of Protection of the Environment Policies (**PEPs**) to manage cumulative impacts on the environment of existing and future human activities.⁶⁸

⁶² POEO Act ss 6(1), 42. These activities are: **scheduled activities**, which are set out in schedule 1 to the POEO Act and include activities such as chemical production and coal works. Scheduled activities are usually premises-based, but some, such as mobile waste processing, are not; **scheduled development work**, which is work undertaken at premises in order to enable scheduled activities to be carried out; and some **non-scheduled activities**, which generate water pollution. See POEO Act ss 43, 47(3), 48(1) and 122.

⁶³ POEO Act s 45.

⁶⁴ There are currently no PEPs.

⁶⁵ Which include protecting, restoring and enhancing the quality of the environment in NSW; reducing risks to human health and preventing degradation of the environment

⁶⁶ I.A. Wright, S. Wright, et al. 'Environmental protection and management: A water pollution case study within the Greater Blue Mountains World Heritage Area, Australia' (2011) 28 *Land Use Policy* 353-360.

⁶⁷ Avoid, reduce, reuse, recycle, recover, treat, dispose.

⁶⁸ POEO Act s10.

PEPs may be developed in respect of the entire state, or segments of the environment, and must specify an environmental goal, standard, protocol or guideline.⁶⁹ Unfortunately, no PEPs have yet been developed, despite the fact they provide an opportunity for EPA to set environmental standards at a state, catchment or airshed level, that must be considered by a consent authority when making a decision under the Planning Act.⁷⁰

The role of pollution policies in setting pollution standards and establishing a mechanism for managing cumulative pollution impacts has been demonstrated in other states. In Victoria, the EPA has gazetted State Environment Protection Policies for air, water, groundwater, land and noise pollution.⁷¹ The State Environment Protection Policies specify quantitative limits for pollution.⁷² All Victorian pollution licences must comply with relevant State Environment Protection Policies.

4.1.2 Provisions Regarding Licensees

In determining whether to approve an application for a pollution licence, one of the factors that the EPA must consider is whether the applicant is a fit and proper person.⁷³ In making a decision on this factor, the EPA may take into account any or all of a number of considerations that are listed in the Act.⁷⁴ In general, these considerations concern the applicant's character and record of solvency, record of compliance with environment protection laws, and technical competence to manage the licenced activities.

In addition to the 'fit and proper person' test, industry must be required to demonstrate their commitment to reducing pollution and its impact on the environment and surrounding communities. This should include demonstrating to the community that the pollution has been avoided to the maximum extent possible, satisfying the community that sufficient monitoring, maintenance and improvement of the ambient environmental conditions of the receiving environment have been planned and implemented, demonstrating that the cumulative effective of multiple emitters has been considered and that the principles of the waste hierarchy have been applied. If avoidance of pollution cannot be demonstrated, the licence application should include a justification for the proposal, including a description of how environmental impacts will be minimised on an ongoing basis.

4.1.3 Licence Conditions

Once it has been confirmed that a facility will be granted a licence, the conditions of the pollution licence must be set. Currently, many pollution licences contain conditions that are vague and unenforceable. Various sections of the pollution licence are often not completed or marked as "N/A".⁷⁵ This makes it impossible for the community to fully understand what pollutants are entering their local environment or for the EPA to adequately manage pollutants entering the environment. Problems with the current licencing system include inadequate details in the licence itself, such as lack of detail on the location of the facility; as well as a lack of load or concentration limits for identified pollutants. There is also no requirement on the polluter to actively and continually reduce its pollution loads. A stronger licence, with better environmental outcomes would prescribe conditions that conform to the principle of 'SMARTER'.⁷⁶

In addition, the case study on the Coxs River that is set out in Section 6 below has highlighted the need for clarity around the fact that unless a pollution licence expressly authorises the discharge of pollutants, any such discharge is unlawful – even when the company is required to monitor the discharge of those pollutants. This should be made clearer in the legislation.

Detailed recommendations for improving licence conditions are set out in **Appendix 2**.

69 POEO Act s11.

70 POEO Act s29.

71 State environment protection policies (SEPPs) www.epa.vic.gov.au/about_us/legislation/sepps.asp.

72 For example, the Victorian State Environment Protection Policy (SEPP) Ambient Air Quality, adopting the standards recommended by the NEPC sets out state goals for all Victorian ambient air, to achieve protection of beneficial uses including 'human health and well-being; life, health and well-being of other forms of life including animals and vegetation'. In addition to ambient air standards, the SEPP (Air Quality Management) specifies design criteria and intervention levels for indicator substances in an air-shed, as well as emission limits for stationary sources for up to 19 substances. Although not perfect, the Victorian model demonstrates the need for both point source and ambient (or receiving environment) concentration limits.

73 POEO Act s 45(f). If the applicant is a company, the EPA will generally be required to consider the conduct of its directors or other people concerned in its management.

74 POEO Act s 83.

75 For example, see pollution licence 398

76 Specific, Measurable, Achievable, Relevant, Timely, Evaluate, Re-evaluate.

4.2 Pollution Reduction Mechanisms

There must be a stronger focus on adequately pricing polluting activities so that the long term cost of managing pollution does not fall on the community, as is often the case with existing polluted sites. It is important that pollution law in NSW reflects the changing attitude of society. Communities will no longer accept governments and corporations breaching their social licence to operate.⁷⁷ In NSW, the government has failed to adequately regulate pollution, and has demonstrated a lack of willingness to enforce consent conditions.⁷⁸ It has also failed to provide adequate incentives for innovators to develop cleaner technologies.⁷⁹ Stronger use should be made of the pollution reduction mechanisms available under legislation. Specifically they should be used to manage cumulative impact and embed concepts of continual improvement.

4.2.1 Load Based Licence Fees

Load based licence fees for assessable pollutants are intended to cover the cost of the potential impact of the pollutant on the environment,⁸⁰ by encouraging polluters to reduce their pollution loads. This section addresses four particular areas where reform of the load based fee system is necessary. These are

- the fees are not set at the correct level;
- the licensing fee system covers an inadequate set of pollutants;
- greenhouse gases are not regulated as pollutants;
- the fees generated from the system could be better used to advance environment protection goals

These points are addressed in turn.

First, calculation of the fee is a function of the amount of the pollutant, how harmful it is and the sensitivity of the receiving environment. In reality, the fee schedule used to calculate load based fees is too low, and does not take into account the true costs of pollution⁸¹ or its long term impacts on the environment and local communities.⁸² Load-based fees, and the rate at which they increase, should be increased to provide a stronger incentive for polluters to invest in pollution reduction. This is consistent with the EPA's responsibility for promoting pollution prevention and reducing the discharge of environmentally harmful substances to harmless levels.

Secondly, load-based licence fees are calculated based on 'assessable pollutants'. There are currently 30 assessable pollutants listed in the Load Calculation Protocol.⁸³ By contrast, the NPI⁸⁴ requires industry to report emission concentrations of up to 93 pollutants, which are selected on the basis of their potential to harm human health or the environment. To enhance the effectiveness of the load-based licensing system, it would be appropriate for the EPA to expand the list of assessable pollutants to include the 93 listed by the NPI.

Thirdly, as the EDO has elsewhere argued, NSW pollution laws should regulate greenhouse gases as an environmental pollutant.⁸⁵ Despite the **potential avenues to deal with and reduce fugitive and other greenhouse gas emissions**, current regulation is uncoordinated and inadequate, and a range of measures are needed at different stages of project development. This includes environmental impact assessment, development consent, granting of titles, pollution control laws, and monitoring and enforcement (e.g. prosecution for breaches). These measures are needed in addition to a national carbon price.

77 The report of the United Nations Secretary-General's high-level panel on global sustainability (2012). Resilient People, Resilient Planet – A Future Worth Choosing, Overview. New York: United Nations.

78 A.L. Morrison, 'An assessment of the effectiveness of lead pollution reduction strategies in North Lake Macquarie, NSW, Australia' (2003) 303 *The Science of the Total Environment* 125-138.

79 J.M. Montero, 'A note on environmental policy and innovation when governments cannot commit' (2011) 33 *Energy Economics* 513-519.

80 DECCW (2008). Regulatory Impact Statement. POEO (General) Regulation.

81 For example, see: P.R. Epstein, J. J. Buonocore, et al, 'Full cost accounting for the life cycle of coal' (2011) 1219(1) *Annals of the New York Academy of Science* 73-98.

82 R McKittrick, "A simple state-contingent pricing rule for complex intertemporal externalities." (2011) 33 *Energy Economics* 111-120.

83 Available at: <www.environment.nsw.gov.au/licensing/lblprotocol/index.htm>.

84 National Pollutant Inventory <www.npi.gov.au/index.html>.

85 See Environmental Defender's Office New South Wales, *Submission on the Protection of the Environment Operations (Clean Air) Regulation 2010*, July 2010, http://www.edo.org.au/edonsw/site/pdf/subs/100701poeo_submission.pdf, Environmental Defender's Office New South Wales, *The Case for Regulating Carbon Dioxide Emissions Using the Load-Based Licensing Scheme – Discussion Paper*, July 2010, http://www.edo.org.au/edonsw/site/pdf/subs/100721load_based_licensing_discussion_paper.pdf.

Finally, there are a number of ways that revenue earned from load based fees could be used for environmental protection and remediation works. One option is to allow the EPA to manage a budget specifically for remediation and mitigation works. Another is to create an independent trust fund, from which money is allocated to the most appropriate organisation to undertake research, mitigation or remediation works.

4.2.2 Financial assurances

The POEO Act provides for financial assurances to be imposed as a condition of pollution licences. The aim of financial assurances is to guarantee that the licence holder will fund the works or programs required under a licence.⁸⁶ It is the EPA's responsibility⁸⁷ to set the amount of financial assurances, but this amount must be a reasonable estimate of the costs of carrying out the works or programs.⁸⁸ In setting a licence condition requiring financial assurance, the EPA must take into account matters including:⁸⁹

- the extent to which the licenced activities pose a risk of environmental harm;
- remediation work that may be necessary because of these activities;
- the environmental record of the licence holder.

If the licensee fails to carry out the work that is covered by the financial assurance, the EPA may carry out the work in its place.⁹⁰ The EPA may make a claim on the financial assurance in order to cover the costs of carrying out this work. There are procedural requirements in place for notifying the licence holder of a proposal to make a claim on the financial assurance.⁹¹

Financial assurances provide certainty to the community that a polluting facility will be appropriately managed or, if not, that resources will be available to rectify any environmental damage caused by the facility. More regular use of financial assurances will help to ensure that facilities do not leave a legacy of contamination, and will reduce the risk that facilities will allow breaches of their licence conditions to occur.

4.2.3 Bubble licences and cap and trade

The EPA has the power to administer a pollution licence that aggregates the emissions from multiple facilities.⁹² Where multiple polluters discharge to the same water body, a 'bubble licence' or cap and trade scheme would ensure that the ambient water quality is protected.

The EPA has created one such licence, a bubble licencing scheme in the South Creek area of the Hawkesbury-Nepean River.⁹³ The bubble licence, or emissions trading scheme, allowed the participating facilities to negotiate discharge concentrations among themselves, provided the total load limit was not exceeded. The total load limit for the scheme was set with reductions of 83% of phosphorus, and 50% of total nitrogen (compared to business as usual), and clearly demonstrates that licences that consider the receiving environment, rather than emissions at end of pipe, can achieve better environmental protection. Bubble licences provide the EPA with an opportunity to drive industry to develop innovative and cost-effective ways to reduce pollution.⁹⁴

86 POEO Act s 296.

87 As the appropriate regulatory authority.

88 POEO Act s 300.

89 POEO Act s 299.

90 POEO Act s 302.

91 POEO Act s 303.

92 Protection of the Environment Operations (General) Regulation 2009, r.23.

93 NSW Office of Environment and Heritage, South Creek Bubble Licencing Scheme, <www.environment.nsw.gov.au/licensing/bubble.htm>.

94 There is guidance available to the EPA in setting ambient environmental limits. For pollution to water, the ANZECC and AMRCANZ water quality guidelines provide recommendations for developing concentration limits that will protect the various uses of fresh and marine water. For air pollution, the National Pollution Protection Council (NEPC) has set uniform standards for ambient air quality.

Similarly, cap and trade schemes⁹⁵ provide incentives for industry to reduce pollution where it is most cost-effective. In Victoria, the Environment and Resource Efficiency Plan (**EREP**) program demonstrates that many major emitters can benefit financially from implementing water- and energy-saving measures. The program requires industry to implement water and energy saving measures that have a 3 year payback time.⁹⁶ Industries that trigger water and energy thresholds (by using more than 120ML water or 100TJ energy in a financial year) are required to assess their options to identify water, energy and waste savings. Nearly 250 commercial and industrial sites are currently participating in the program, and case-study evidence shows that environmental improvements have delivered economic savings within 3 years, and that these savings will be ongoing.

4.2.4 Pollution Reduction Programs

The EPA has the power to order licenced facilities to implement Pollution Reduction Programs (**PRPs**) to prevent, control, abate or mitigate pollution.⁹⁷ PRPs are a potentially powerful tool for reducing pollution, but they tend to have been underutilised, or used inappropriately as a substitute for strong enforcement action in response to repeated pollution licence breaches.

Development of PRPs is undertaken through negotiation between industry and the EPA, which encourages a collaborative relationship between the two bodies. This places the EPA in the difficult position of both collaborating with and regulating industry. PRPs are often seen by the community as a weak approach to compliance, and are indicative of EPA's reluctance to impose stronger penalties on polluting industry.

To ensure that industry commits to continuous improvement in pollution control, PRPs should be imposed as a standard licence condition at the time of licence approval, and progressively introduced for existing facilities at the five-yearly licence review.

4.3 Reporting requirements

All regulatory authorities under the POEO Act are obliged to keep a public register of information relevant to their functions and powers, which must be available to the public.⁹⁸ The EPA maintains on its website a public register which is legally required to provide certain information.⁹⁹

Holders of pollution licences are required to submit an annual return to EPA. This must contain a monitoring and complaints summary, a statement of compliance with licence conditions and - where applicable - load-based fee calculation worksheets.¹⁰⁰ These annual returns are not published in full on the EPA's register. Only a summary of self-reported non-compliance and, where relevant, load-based licensing details, is provided. Unless the data is willingly provided informally, community members wishing to obtain full versions of annual returns are required to lodge an application under the *Government Information (Public Access) Act 2009* (NSW).

A number of improvements are recommended to increase the community's ability to understand annual return data in the local context. For example, the licensee should:

1. Report the load and concentration of each of the pollutants in a meaningful way (per week, averages, minimum/maximums etc), and provide a comparison to ambient conditions;
2. Report any breaches of licence limits with regards to the discharge, with an explanation of why it occurred, how it was remedied and any environmental impact;

95 Similar to the Hunter salinity trading scheme, which provides polluters with an opportunity to purchase from a limited number of permits that allow pollution. See <www.environment.nsw.gov.au/licensing/hrsts/index.htm>.

96 EPA Victoria, Environment and Resource Efficiency Plans <www.epa.vic.gov.au/bus/erep/default.asp>.

97 POEO Act s 68.

98 POEO Act ss 308-309.

99 This includes details of each licence application; details of each decision made about each licence application; details of each licence issued; details of any variation of licence conditions; details of each decision to suspend, revoke or approve the surrender of any licence (including details of any conditions); details of each certificate supplied in accordance with any licence condition, that certifies compliance with the conditions of the licence; the date of completion of each review of any licence; details of each environment protection notice issued; details of convictions in prosecutions under the POEO Act undertaken by the EPA; the results of civil proceedings before the Land and Environment Court under the POEO Act by or against the EPA; and a summary of the conclusions of any audit report in connection with a mandatory environmental audit. See OEH's website, <www.environment.nsw.gov.au/prpoeo/index.htm> and POEO Act, s 308.

100 Department of Environment, Climate Change and Water (NSW), *Guide to Licensing under the Protection of the Environment Operations Act 1997, Part A*, Available: <www.environment.nsw.gov.au/resources/licensing/08244guidetolicensingA.pdf>

3. Compare the load and concentrations with the previous years' discharge with the purpose of demonstrating incremental reduction
4. Report the state of the receiving environment (including load and concentration measurements as well as physical attributes);¹⁰¹
5. Report any breaches of licence limits with regard to the state of the receiving environment,¹⁰² with an explanation of why it occurred, how it was remedied and any environmental impact and how it was remedied;
6. Contribute information that allows the EPA to compare the state of the receiving environment with the previous years' state with the purpose of demonstrating no negative impact and no increase in pollution; and
7. Report on any work done throughout the year that aimed to reduce pollution, and the success/failures and any future work that will be done and with what aims.

The 2011 amendments to the POEO Act require that where a licence is subject to conditions requiring monitoring of plant activities, that monitoring data must be published within 14 days.¹⁰³ At the time of writing, guidelines in relation to this requirement were still under development.¹⁰⁴

It is imperative to ensure that this data is presented in a relevant context and in a meaningful way, including facilitating easy identification of any breaches of license conditions. This will ensure that the public is able to understand the information, which in turn will help avoid licensees being subject to excessive public enquiries about what may be unexceptional data.

Greater transparency would be afforded by the publication of this data on the EPA's public register, rather than on the website of individual facilities. This would ensure that all monitoring data is immediately available to any member of the public, and that it can be easily located at one central site.

4.4 Licence variations and reviews

The EPA is required to review pollution licences every five years, and must give public notice of such review in a newspaper.¹⁰⁵ The EPA is also required to audit, on an industry wide or regional basis, compliance with licence requirements under the POEO Act and whether these requirements reflect best practice in relation to the matters regulated by the licence.¹⁰⁶

If it intends to vary the licence in a manner that will *significantly increase* the impact of the activity on the environment, and the variation has not been subjected to environmental assessment and public comment under the Planning Act, the EPA must invite and consider public submissions.¹⁰⁷

This limited approach to community consultation is inconsistent with the government's commitment to a more open and inclusive system of pollution control. To enhance community participation in licensing decisions, the 'significantly increase' threshold for inviting consultation on licence variations should be removed. Instead, public consultation on licence variations should be invited unless the proposed variation will improve environmental outcomes.

To minimise the burden of licence reviews on the EPA and affected communities, the EPA should review licences in industry clusters to facilitate meaningful public participation.

The EPA's website states that it welcomes submissions from the public at any time on licence review applications. However, the legislation does not provide a formal process for invitation of these submissions at a stage prior to any significant variation being considered, or their receipt and consideration.

101 For example, using data obtained from State of the Environment reports.

102 In the case of a bubble licence, or a licence where a limit on the concentration of contaminants in the receiving environment has been declared.

103 *Protection of the Environment Legislation Amendment Act 2011*, Sch 2, cl 1, which inserts subsections 66(6) and (7) into the POEO Act. The data is to be published on the licensee's website or, if there is no such website, the data must be provided to anyone who requests it.

104 See <www.environment.nsw.gov.au/resources/legislation/20120078drftgepubmondata.pdf>

105 POEO Act 78.

106 POEO Act 78(4A).

107 POEO Act s 58(6).

In other words, there is no clear process for requesting or considering information from community members on how the facility's emissions have affected them during the licence's operation. There is also no opportunity to hear from the community on the effects of cumulative impacts from other sources.

Consistent with its statutory aims, the EPA should be required to publicise and consult on all pollution licence reviews and related decisions. Although the EPA is required to consider all public submissions received in relation to applications to issue, transfer, vary or surrender a licence,¹⁰⁸ it is not under a statutory obligation to consider submissions received as part of its licence review.¹⁰⁹

Establishing a legislated process for inviting and considering public submissions would assist in ensuring appropriate regulatory transparency and public engagement. This, in turn, would increase the community's ability to monitor how the EPA responds to community concerns.

4.5 Revocation of pollution licences

Pollution licences are ordinarily issued for the lifetime of the commercial operation. This is despite the fact that there are numerous examples of pollution continuing after commercial production has ceased,¹¹⁰ and in fact many examples of pollution occurring for the first time after commercial production has ceased.¹¹¹ The pollution licence for a facility should not be revoked until it has been certified by the EPA that there is no ongoing or future risk of pollution from the facility.

108 POEO Act s 45(l).

109 For example, in July 2011, a client approached the EDO in relation to concerns about pollutants being generated by a recycling facility that processed, among other items, crushed cars. The pollutants included dioxins and furans. The EDO found that the relevant pollution licence was due for review and advised that the client make a submission to the OEHL, responsible for pollution licences. The client also wrote to his local member, who made submissions on his behalf to the Environment Minister. The Minister's response was that the EPA was considering the client's submission as part of its review of the pollution licence, and that the licensee had engaged an environmental consultant to review and advise on various practical measures that could be implemented on the site. It was only through an accident of timing that the client was made aware of the review and able to input into the process.

110 I.A. Wright, S. Wright, et al. 'Environmental protection and management: A water pollution case study within the Greater Blue Mountains World Heritage Area, Australia.' (2011) 28 *Land Use Policy* 353-360.

111 For example, tailings dam spills.

5. Enhancing Community Engagement

Robust and effective community engagement forms part of the objectives of the POEO Act. These include:

- to provide increased opportunities for public involvement and participation in environment protection; and
- to ensure that the community has access to relevant and meaningful information about pollution.¹¹²

The NSW Government has strongly emphasised the importance of community involvement in pollution control. The Minister for the Environment described the 2011 reforms to the POEO Act as putting ‘the interests of the community at the heart of environmental regulation’ and has stated that the new EPA Chair will ‘ensure ... community views are listened and responded to.’¹¹³

More broadly, agency accountability has been placed at the forefront of the NSW Government State Plan, *NSW 2021*.¹¹⁴ This includes goals and to:

- improve government transparency by increasing access to government information; and
- involve the community in decision making on government policy, services and projects.

There are also important practical reasons for high levels of public engagement with pollution regulation including:

- In areas of high industry concentration, such as in the Upper Hunter or Port Kembla regions, it is the public that bears the impact of pollution effects on the receiving environment and on community health. There is a clear imperative for community members to be informed of hazards with potential to affect them, and to participate in decisions that affect their community.
- Where the EPA chooses not to act in respect of polluting activities, it is left to the community to take enforcement action to protect its local environment (see Coxs River Case Study). Although this report advocates that public agencies take on an increased enforcement role, community enforcement remains an essential accountability mechanism.
- The authorities responsible for regulating polluting activities are all public authorities. The public has a right to demand that they be transparent in their dealings and respond effectively to community concerns.

5.1 Active community engagement in decision making

Community participation in decisions to approve polluting facilities under the planning system is discussed above. The following sections examine community engagement in licensing decisions and strategic direction of pollution regulation. The community’s role in civil enforcement is discussed below.

5.1.1 Community representation on the EPA Board

The 2011 amendments to the EPA’s structure have removed community representatives from the EPA Board. This contradicts the O’Reilly Report’s recommendation that the membership of the EPA Board include representatives from community interests,¹¹⁵ and is inconsistent with the government’s pledge to accept all of the O’Reilly Report’s recommendations. Business has a representative¹¹⁶ – so too should the community.

112 POEO Act s 3.

113 The Hon Robyn Parker MP, Minister for the Environment, Minister for Heritage, *Media Release: Industry on Notice – New Environmental Legislation Passes Parliament*, 11 November 2011. <www.environment.nsw.gov.au/resources/MinMedia/MinMedia1111103.pdf>.

114 NSW Government state plan, *NSW 2021* (Sept 2011), pp 58-59, available <2021.nsw.gov.au/> .

115 See 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*, <www.nsw.gov.au/sites/default/files/Orica-review.pdf>. It is also not clear that this meets the Government’s pledge to accept all of the O’Reilly Report’s recommendations. See NSW Government, *Tough New Pollution Laws: O’Reilly Report Accepted in Full*, 5 October 2011, <www.nsw.gov.au/news/tough-new-pollution-laws-o%E2%80%99reilly-report-accepted-full>.

116 See *Protection of the Environment Legislation Amendment Act 2011*, sch 1, cl 4, which alters s 15 of the POEA Act. In particular, the new s 15(3)(d) of the POEA Act provides that a member of the board is to have ‘expertise in business’.

5.1.2 Community reference groups and consultative committees

The O'Reilly Report also recommended the establishment of community reference groups. The Government has instigated a Newcastle Consultative Committee on the Environment.¹¹⁷ The committee's functions include advising the Minister on matters of environmental concern in the area, and on effectiveness of measures to reduce the environmental impact from industries and activities in the Newcastle Local Government Area. This is a pilot program, which if successful is intended to be rolled out elsewhere.¹¹⁸ The Government separately established an air quality liaison committee in Rutherford in September 2011, to provide a point of contact between the government and local community regarding air quality issues at the Rutherford Industrial Estate.¹¹⁹

If they are to play a useful role, community consultative committees require appropriate resourcing, effective chairs and access to evidence-based research. The performance of the Newcastle Consultative Committee should be carefully assessed and reported on annually. Importantly, community consultative committees must not simply be a forum for the EPA or government to 'tell' the community what will happen. Rather, such committees should be genuinely engaging – by seeking out the aims, needs and preferences of the communities in which they operate; and providing a proper conduit to policy makers and decision makers regarding effective pollution control.

5.1.3 Community involvement in planning and licensing decisions

Effective community engagement requires opportunities for genuine, appropriate and timely public participation. This must incorporate sufficient participation in all aspects of the process for approving new polluting facilities.

The community is able to engage with decisions on approval of new polluting facilities through providing submissions to development approval processes. The public consultation process relating to development consent provides the principal opportunity for members of the public to be involved in the approval process for licenced facilities that are also classed as designated development.

As previously discussed, when the EPA is considering granting a pollution licence, it is required to take into account any EIS or public submission relating to the development that is being licenced. This includes both public submissions provided directly to it, and public submissions provided as part of the development consent process.¹²⁰ Unlike the development consent process, the POEO Act does not set out formal mechanisms for the EPA to invite public submissions specifically on licensing decisions, or to notify neighbouring residents of a new licence application.¹²¹

Genuine public participation in pollution regulation requires a formal process for public notification and consultation on licensing decisions, together with measures aimed at assisting community members to engage in an informed and meaningful manner in these processes.

5.1.4 Third party appeal rights

The lack of formal consultation procedures in relation to decisions on EPA licence applications is compounded by the lack of appeal rights in relation to licensing decisions. The POEO Act allows licence applicants and licence holders aggrieved by a licensing decision of the EPA to appeal to the Land and Environment Court.¹²² It does not extend this right to members of the public.¹²³ To enhance accountability and improve decision-making, third party appeal rights should be made available for any decision to issue or vary a pollution licence.¹²⁴

117 <www.environment.nsw.gov.au/NewcastleCttee/termsOfReference.htm>

118 Hon Robyn Parker MP, *Media Release: Newcastle Community Consultative Committee on the Environment*, 14 October 2011, <www.environment.nsw.gov.au/resources/MinMedia/MinMedia11101402.pdf>.

119 See <www.environment.nsw.gov.au/rutherford/index.htm>. Note that the POEA Act also provides for the establishment of Environment Protection Community Consultation Forums in the Hunter and Illawarra Regions: POEA Act s 23.

120 POEO Act s 45(l).

121 This is important because the list of factors the EPA is required to consider in approving a licence application (see POEO Act s 45) will differ from the list of factors a consent authority considers in approving a planning application. As a result, submissions to the development consent process may not deal with a number of matters relevant to licensing decisions.

122 POEO Act s 287(1).

123 While there are limited opportunities for objector appeals under the NSW planning system, this only applies to certain forms of development, such as designated development and some State significant development. As this paper discusses, development assessment is a separate process with different considerations to pollution licensing.

124 see Environmental Defender's Office NSW and Total Environment Centre, *Submission on the Consultation Draft of the Protection of the Environment Operations Amendment Bill 2005*, 22 July 2005, <www.edo.org.au/edonsw/site/pdf/subs/050725poeobill.pdf>, p 6.

5.2 Access to Information

The NSW Government acknowledges the community's "right to openness, accountability and transparency when it comes to government decision making and information",¹²⁵ and the benefits this entails:

Greater public access fosters collaboration, increases efficiency and fosters a public sector that values and shares information. ... Providing people with access to information leads to improved community decision making and greater trust in public institutions.

Pollution regulation would benefit greatly from the Government's commitment to improve disclosure of and access to information. As well as the benefits noted above, public awareness and maximum publicity of pollution breaches is a significant incentive to increase compliance.

5.2.1 Public Register

The POEO Act provides for the provision on the public register of details of decisions made in relation to licences.¹²⁶ Historically, this has meant that information on matters such as licence variation applications is given only in summary form,¹²⁷ limiting the community's ability to understand the details of proposed changes.

The EPA is currently required to provide reasons for the grant or refusal of a licence application to the applicant,¹²⁸ and must provide reasons for the decision to any person who requests it.¹²⁹ The statement of reasons must set out details of significant environmental issues, outcomes, standards or requirements that the EPA took into account in making its decision.¹³⁰

However, there is presently no requirement to publish reasons for licence decisions on the public register. To assist transparency and consistency of the licensing process, the EPA should be required to give reasons for all of its licensing decisions, and to publish this information on the register.¹³¹

The case study on the Cocks River, set out below, has highlighted the potential for the register to be better utilised as a tool for publishing details of licences. Since BMCS discontinued its litigation against Delta Electricity, the EPA has published applications for variation of Delta's licence, sought public submissions on emissions limits, and has published those on its website. The case is an example of how the EPA could better engage the community in the licensing process – not just for all variations of licences, but also for all licence applications.

The 2011 amendments to the POEO Act require the further following information to be published on the register from 31 March 2012:

- any mandatory audits required to be undertaken in relation to a licence;
- each pollution study required by a condition of a licence;
- each pollution reduction program required by a condition of a licence; and
- each penalty notice issued in relation to a premises.¹³²

While the public availability of this data is welcome, there are opportunities to improve the way it is provided, to ensure the information is 'relevant and meaningful'.

125 NSW Government state plan, *NSW 2021* (Sept 2011), Goal 31, p 58.

126 POEO Act s 308(2)(b).

127 Full details of licence variations are provided only after the EPA has made a decision on them.

128 POEO Act s 55.

129 (Other than in relation to applications for approval of surrender of a licence) POEO Act s 61.

130 POEO (General) Regulation 2009, cl 49.

131 The EDO and the Total Environment Centre drew attention to this need several years ago: see Environmental Defender's Office NSW and Total Environment Centre, *Submission on the Consultation Draft of the Protection of the Environment Operations Amendment Bill 2005*, 22 July 2005, < www.edo.org.au/edonsw/site/pdf/subs/050725poeobill.pdf >, 23-24.

132 Taken from OEH's website, < www.environment.nsw.gov.au/prpoeo/index.htm >

Recommendations

18. Reinstate the role of community and local council representatives on the EPA Board.
19. The EPA should work with local communities to ensure best practice transparency, and access to 'relevant and meaningful' information on pollution, in line with state goals and pollution law objectives.
20. Legislation should provide that a formal community consultation process is required for pollution licence reviews and for decisions relating to the issuing, transfer or surrender of pollution licenses, and for variations which do not improve environmental outcomes.
21. Ensure that the quality and effectiveness of community engagement, including community consultation committees, is monitored and reported on.
22. Ensure that such community consultative committees seek out the aims, needs and preferences of the community and the environment, and can effectively contribute to policy and decisions on pollution control.
23. Third party appeal rights should be implemented in relation to pollution licensing decisions.
24. The EPA's public register should be expanded to provide for publication of all relevant details of the licensing process. This includes:
 - licence variation applications
 - any public submissions received in relation to licensing decisions
 - reasons for all licensing decisions.

6. Compliance and Enforcement

6.1 Legislative framework of the enforcement system

The POEO Act contains a number of mechanisms that allow public authorities (usually the EPA or local councils), to take legal enforcement action against facilities that illegally emit pollution. There are three main classes of such enforcement mechanisms:

- environment protection notices
- proceedings in respect of criminal offences
- civil enforcement.

6.1.1 Environment Protection Notices

There are three types of environment protection notices,¹³³ namely:

- clean-up notices;
- prevention notices; and
- prohibition notices.

The appropriate regulatory authority may issue a **clean-up notice** directing the person responsible for a pollution incident¹³⁴ to take clean-up action as specified in the notice.¹³⁵ Failure to comply with a clean-up notice is an offence.¹³⁶

A **prevention notice** can be issued by the appropriate regulatory authority if it suspects that an activity is being carried out in an environmentally unsatisfactory manner.¹³⁷

The prevention notice can direct any relevant person to take the action specified in the notice to ensure that the activity is carried out in future in an environmentally satisfactory manner.¹³⁸ It is an offence not to comply with such a notice.¹³⁹ There is a right of appeal against a prevention notice to the Land and Environment Court.¹⁴⁰

For more serious pollution incidents, the EPA can recommend that the Environment Minister issue a **prohibition notice**.¹⁴¹ The Minister may direct the relevant person to stop carrying on the activity for the period specified in the notice. Non-compliance with a prohibition notice is an offence.¹⁴² These incidents are of a type that may cause significant harm to the environment or to public health, or may cause discomfort or inconvenience to persons not involved in the activity.

6.1.2 Criminal offences

The POEO Act contains a number of criminal offences. Criminal offences are generally enforced by government, and require the prosecuting authority to prove them 'beyond reasonable doubt'. In criminal cases, Courts have powers to impose a fine, and, in very serious cases where the maximum penalty for the offence allows, prison sentences.

133 POEO Act s 4.1.

134 Defined in the Dictionary to the POEO Act as 'an incident or set of circumstances during or as a consequence of which there is or is likely to be a leak, spill or other escape or deposit of a substance, as a result of which pollution has occurred, is occurring or is likely to occur. It includes an incident or set of circumstances in which a substance has been placed or disposed of on premises, but it does not include an incident or set of circumstances involving only the emission of any noise.'

135 POEO Act s 91(1).

136 The maximum penalty for a corporation is \$1 million, with an additional \$120,000 for each day the offence continues; the maximum penalty for an individual is \$250,000, with an additional \$60,000 for each day the offence continues: POEO Act s 91(5).

137 POEO Act s 96(2).

138 POEO Act s 96.

139 For a corporation, the maximum penalty is \$1 million, with an additional \$120,000 for each day the non-compliance continues. For individuals, the maximum penalty is \$250,000, with an additional \$60,000 for each day the non-compliance continues: POEO Act s 97.

140 The appeal must be made within 28 days of the service of the notice: POEO Act s 289.

141 POEO Act s 101.

142 Maximum penalties are \$1 million for corporations, with an additional \$120,000 for each day the offence continues; and \$250,000 for individuals, with an additional \$60,000 for each day the offence continues: POEO Act s 102.

Under the POEO Act, the EPA has principal responsibility for prosecuting offences that relate to activities on scheduled premises, pollution licences and activities that are undertaken by the State or by public authorities.¹⁴³ Local councils can bring proceedings where they are the appropriate regulatory authority, for example for pollution from non-scheduled activities.¹⁴⁴ In some cases, individuals may bring proceedings for a criminal offence under the POEO Act. They can only do so if given leave by the Court, if it appears that a case can be made out, and if the EPA has decided not to prosecute.¹⁴⁵

The EPA has discretion in determining what offences to prosecute. Its prosecution guidelines emphasise that the 'public interest' is the dominant factor in exercising that discretion. The guidelines note that deterrence is one of Parliament's primary aims in criminalising breaches of environmental law.¹⁴⁶

Criminal offences in the POEO Act are divided into three 'tiers'. Tier 1 is reserved for the most serious offences; tier 2 is for serious, mid-range offences, and tier 3 is for the least serious offences, punishable by penalty notices.¹⁴⁷

Tier 1 and tier 2 offences

Tier 1 and tier 2 offences carry maximum penalties for corporations of \$5 million and \$1 million respectively.

In the two years from 2009-2011, the EPA completed 85 prosecutions under the POEO Act and its related regulations. The total in fines and other financial penalties ordered for pollution related offences was \$1,346,000, representing an average fine of just under \$16,000 per prosecution. 36 of these prosecutions were pursued in the Land and Environment Court, with the others pursued in various Local Courts. The average final penalty in the Land and Environment court over these two years was \$28,000 and \$45,000 respectively.

Licence breaches are an area of particular concern. Over the past decade, there appears to be a trend of lack of follow-up of licence breaches and an implicit level of acceptability of licence breaches among both industry and the EPA. For example, of the 69 pollution licences issued for coal mines, 60 have self-reported breaches of their pollution licence with respect to water pollution, with several mines reporting several instances of water pollution multiple years in a row. Since 1999, however, the EPA has brought only five cases of pollution licence breaches (water pollution) from coal mines to the NSW Land and Environment Court, four of which resulted in convictions and fines ranging from \$49,000-\$105,000.¹⁴⁸

Likewise, the Orica Incident has brought to light more systemic issues surrounding licence breaches. Following the August 2011 incident, a number of further incidents occurred at the Orica plant. These include a leak of arsenic into the Hunter River,¹⁴⁹ a leak of 900 kilograms of ammonia into the atmosphere on 9 November 2011,¹⁵⁰ and a further leak of 20,000 litres of ammonium nitrate on 7 December 2011.¹⁵¹

These incidents at the Orica plant are not the first time that Orica has breached its licence conditions. Indeed, Orica has breached the terms of its licence every year since 2000, with the exception of 2004, with a total of 131 breaches. These breaches have included unlawful releases of arsenic (2006, 2007, 2009), chromium VI (2005), nitrogen oxides and ammonia. The only conviction in respect of these breaches was in 2005, when the Land and Environment Court found Orica guilty of breaching its relevant pollution licence as a result of its discharge of wastewater containing nitric acid into the Hunter River over a period of about six and a half hours.¹⁵²

After the Orica Incident, the EPA took the extraordinary step of suspending Orica's Pollution Licence, a course of action that has long been available but rarely exercised by the EPA.¹⁵³

143 POEO Act ss 217(2) and 218(1), (6).

144 POEO Act s 217(2).

145 POEO Act s 219(1) and (2).

146 EPA Prosecution Guidelines, 6-7.

147 POEO Act s 114.

148 www.caselaw.nsw.gov.au/aboutus.html

149 Alison Branley, 'Second industrial accident at Orica', *Newcastle Herald*, 20 August 2011, < www.theherald.com.au/news/local/news/general/second-industrial-accident-at-origa/2264412.aspx>.

150 Matthew Kelly, 'Orica ammonia leak sends two to hospital', *Newcastle Herald*, 10 November 2011, < www.theherald.com.au/news/local/news/general/orica-ammonia-leak-sends-two-to-hospital/2353071.aspx>.

151 Josephine Tovey, 'Yet another leak at Orica plant', *Sydney Morning Herald*, 7 December 2011, < www.smh.com.au/environment/yet-another-leak-at-origa-plant-20111207-1oila.html?>.

152 *Environment Protection Authority v Orica Australia Pty Limited* [2005] NSWLEC 621.

153 Failure to abide by the terms of the licence is an offence and may, in certain circumstances, give rise to the suspension or revocation of the licence: POEO Act Part 3.7

It is submitted that the strengthening of the suspension provisions, and their active use, would go a long way to reducing pollution and protecting the environment in NSW. In this respect, it is well to remember that pollution licences give the holder certain privileges over and above others – namely, the right to pollute the environment in NSW. We recommend that licences identify certain conditions – that is, those relating to emissions – where exceedences would give rise to immediate suspension of the licence.¹⁵⁴ In those circumstances, the onus would be on the licensee to demonstrate why – in environmental terms – the privilege to pollute should be restored.

Penalty notices

The maximum penalty imposable for breach of a licence condition is \$1,500 for a corporation.¹⁵⁵

From 2009-2011, DECCW issued 2900 penalty notices under the POEO Act and its regulations, with the majority (over 1500) for littering from motor vehicles. Of these penalty notices, 180 were for ‘other offences (e.g. contravene a condition of a licence)’.

Local and NSW Government authorised officers issued over 11,000 penalty notices, with the majority (over 8000) for littering, from motor vehicles and otherwise. Of these, over 880 were for ‘other offences (e.g. contravene a condition of a licence)’.¹⁵⁶

Breaches of licence conditions constituted up to 4.5% of all POEO Act-related penalty notices in 2009-10, increasing to 8.5% in 2010-11. Under the POEO Act, where a penalty notice is issued, the offender can choose whether to pay the penalty, or take the matter to Court.¹⁵⁷ Payment of a penalty notice does not constitute an admission of liability¹⁵⁸.

Penalty notices for pollution offences should be used more frequently, and higher maximum penalties introduced,¹⁵⁹ to provide an incentive for industry to invest in improved risk management and pollution control measures. Penalty notices, set at an appropriate level, provide a cost-effective mechanism for responding to minor to moderate pollution offences. The penalty imposed should be fair and proportionate to the offence, and the accused should retain the right to appeal the penalty notice in court.

6.1.3 Civil Enforcement

The POEO Act also provides a number of civil enforcement remedies. Civil enforcement action is where a person asks a court to enforce an Act or Regulations by imposing a civil remedy, rather than using criminal remedies to punish an offender (such as a fine or term of imprisonment). Civil proceedings are often faster and simpler than criminal proceedings because a civil case only needs to be proved on the balance of probabilities, rather than beyond reasonable doubt.

Civil proceedings can be brought under the POEO Act to remedy or restrain a breach of the POEO Act or regulations, or any other Act if the breach is likely to cause harm to the environment.¹⁶⁰ This could include a proceeding to require the EPA itself to comply with the Act.¹⁶¹

154 The real time monitoring of many pollution licences would allow this approach.

155 POEO (General) Regulation, Schedule 6.

156 DECCW, *Annual Report 2009-2010*, < www.environment.nsw.gov.au/resources/whoweare/deccwar0910_10900.pdf>, 262-267.

157 Decision to pay penalty or to go to Court must be made within 28 days of the service of the notice: POEO Act s 223.

158 POEO Act s 225(2).

159 This is less than the maximum on-the-spot fine for a driver caught speeding in a motor vehicle: \$1,915 for exceed speed limit by 45km/hr, <www.rta.nsw.gov.au/usingroads/penalties/speeding.html>.

160 POEO Act ss 252-3. The EPA can also bring enforcement proceedings in the Land and Environment Court for an order if the EPA considers that a person has breached an undertaking. The EPA can accept an undertaking from a person in relation to any of its functions under the POEO Act, but generally will only do so if it considers that a breach of the Act has occurred or is about to occur, and it considers the undertaking to be an appropriate regulatory outcome, with regard to the significance of the relevant issues to the environment and the community: POEO Act s 253A, and *Enforceable undertakings guidelines*, August 2009, www.environment.nsw.gov.au/resources/prpoeo/enforceableundertakingsguidelines.pdf.

161 Melinda Murray, ‘Pollution control and waste disposal’ in David Farrier and Paul Stein (eds), *The Environmental Law Handbook* (Redfern Legal Centre Publishing, 5th ed, 2011) 323, 388.

Any person may bring civil proceedings under the POEO Act.¹⁶² They are brought in Class 4 of the Land and Environment Court.¹⁶³ Class 4 proceedings fall within the 'costs jurisdiction' of the Land and Environment Court, which means that if a person is unsuccessful in attempting to enforce the POEO Act against someone else, that person is likely to be liable to pay the other side's costs in the proceedings. For members of the community, the fact that civil enforcement takes place in a 'costs' jurisdiction represents a significant impediment to bringing action against pollution offenders (see Case Study below). The default rule is that 'costs follow the event', so the group may be held liable for the other side's legal costs if it loses. These costs are difficult to estimate reliably at the outset of proceedings, and can be prohibitive.¹⁶⁴

Civil enforcement of the POEO Act should be moved from the Land and Environment Court's costs jurisdiction to an 'own costs' jurisdiction. This would enable community groups to protect the public interest with far less financial risk. Where civil proceedings are undertaken in the public interest, provisions are available to support community access to the Courts, such as maximum costs orders.¹⁶⁵ In limited circumstances, the Court can also determine that the public interest nature of proceedings requires that an unsuccessful applicant not be held liable for costs.¹⁶⁶ These sorts of costs orders depend on the Court's discretion, and can be difficult for the community to obtain. They require a specific application to the Court, and if an applicant for the order is unsuccessful, they may still have to pay the other side's costs in respect of that application. Given the failures of the EPA to undertake appropriate enforcement action, community enforcement represents an important alternative. Where the community takes on the burden of enforcing pollution law, it is inappropriate to burden them with costs.

162 See POEO Act s 252(1).

163 *Land and Environment Court Act 1979 (NSW)* s 20.

164 See Environmental Defender's Office *Discussion Paper on Access to Justice in the Land and Environment Court* www.edo.org.au/edonsw/site/pdf/subs/080218access_justice_lec.pdf.

165 These orders cap the maximum costs that an unsuccessful party (such as a community group) will have to pay at the end of proceedings. See *Uniform Civil Procedure Rules 2005*, rule 42.4. An order of this nature was granted in *Olofsson v Minister for Primary Industries* [2011] NSWLEC 137.

166 *Oshlack v Richmond River Shire Council* (1998) 193 CLR 72.

Case study: Community action to protect the Coxs River

The Coxs River is part of Sydney's drinking water catchment, supplying water to Warragamba Dam, Sydney's major water supply reservoir. In 2007, the Blue Mountains Conservation Society (**BMCS**) first became aware that Delta's power plant was discharging a range of potentially harmful substances into the River. The BMCS brought this to the attention of the Sydney Catchment Authority, the Minister for Environment, and the (then) Department of Environment and Climate Change, including the EPA. In 2008, the EPA advised that it did not intend to prosecute Delta for water pollution offences, despite the evidence of ongoing pollution. In 2009, BMCS filed its own civil enforcement proceedings in the Land and Environment Court for breach of s 120 of the POEO Act (water pollution).¹³

BMCS alleged that the waste water from Wallerawang power station being discharged into the Coxs River contained salt, copper, zinc, aluminium, boron, fluoride and arsenic. None of these were authorised under Delta's licence. To remedy the breach, BMCS sought a declaration of the past pollution, an order to stop the ongoing pollution, and such mitigation orders as the Court saw fit.

In late 2011, the parties agreed to try to resolve the issues through voluntary mediation and BMCS agreed to discontinue legal proceedings subject to the following conditions:

- Delta *admits* that it has discharged waste waters containing the pollutants between May 2007 and August 2011, and that it has *polluted waters* within the meaning of section 120 of the POEO Act, without authorisation under its licence, except in relation to salt;¹⁴
- Delta submits an application to the EPA to vary its licence to specify *maximum concentration levels* for copper, zinc, aluminium, boron, fluoride, arsenic, salt and nickel; and
- Delta submits an application to the EPA to include a condition in its licence requiring the *implementation of a program of works* for the full treatment of cooling tower blow down water from Wallerawang power station, pursuant to a pollution reduction program.

At no point did the EPA seek to take enforcement action itself, but instead, varied Delta's licence following the filing of the case to require monitoring of the very pollutants BMCS was complaining of, even though they were not authorised pollutants.

6.2 Complementary enforcement mechanisms

6.2.1 Compliance Audits

The EPA undertakes a program of compliance audits, known as Strategic Environmental Compliance and Performance Reviews. The EPA states that the aim of these reviews is to encourage improved environmental performance among industry. The reviews both assess legislative compliance, and review best environmental management practices. The reviews are undertaken with reference to various sectors and activities, chosen through assessing major environmental and community concerns along with EPA's objectives and strategies.¹⁶⁷ Most recently, in the wake of the Orca Incident, the Government has undertaken a review of 42 major hazard facilities in NSW.¹⁶⁸

These reviews consistently reveal substantial non-compliance with pollution licence conditions.¹⁶⁹

Compliance audits, while being instructive in terms of the data they present, require significant follow-up in order to be truly effective. The 2011 review identified that failures found five years previously were still occurring in the coal mining and solvents industries. Despite announcing its intention to improve compliance through training sessions, fact sheets and its website, the EPA had failed to obtain significant improvement.

The POEO Act provides that the EPA must audit compliance with licence requirements, and whether the licence requirements reflect best practice, on an industry or regional basis.¹⁷⁰ The Act also provides for the EPA to undertake mandatory audits of individual facilities, either where there is a mandatory audit condition in the pollution licence, or where the EPA suspects that a facility's actions are causing environmental harm.¹⁷¹ An environmental audit is a documented evaluation which advises the persons managing the activity on the activity's compliance with legal requirements, codes of practice and relevant policies relating to environmental protection.¹⁷² In neither of these instances does the legislation provide for follow up action to be taken. The EPA's guide to compliance audits does, however, provide that follow-up action programs should be developed for audited entities that are in breach of their obligations, and that the implementation of these programs should be monitored.¹⁷³ Examples such as the recurrence of similar breaches within the chemical solvent and mining industries during the five (or more) year gap between reviews tend to suggest that this monitoring is not being undertaken effectively. There is therefore evidence of a need for EPA to enhance the effectiveness of its compliance auditing activities.

6.2.2 Supporting local councils

Reforms to the EPA's structure provide opportunities to enhance its function of oversight of other regulatory bodies, especially local councils. The EPA presently has powers to set performance targets for public authorities, including councils, and give directions to them regarding environmental protection.¹⁷⁴ However, where a local council is the appropriate regulatory authority for an activity, the EPA will not become involved in regulating pollution incidents, except in an emergency.¹⁷⁵

167 OEH, *Compliance audit program* < www.environment.nsw.gov.au/licensing/complianceaudit.htm>.

168 The Hon Robyn Parker MP, Minister for the Environment, Minister for Heritage, *Media Release: Industries that pose a high risk of environmental harm targeted*, 12 September 2011, < www.environment.nsw.gov.au/resources/MinMedia/MinMedia11091201.pdf>.

169 For example, the 2005 environmental compliance report on liquid chemical storage, handling and spill management identified 127 unreported breaches at 61 facilities. These breaches related to air and water pollution, soil contamination and emergency management. Only 27% of licenced premises audited had fully complied with the conditions of their pollution licences: see Department of Environment and Conservation (2005), www.environment.nsw.gov.au/resources/licensing/ecrchemicalsa05589.pdf.

The 2008 compliance and performance review for industrial estates found numerous examples of non-compliance, including breaches in relation to stormwater management, air pollution, chemical and waste management, incident management, emergency responses plans and monitoring. Seventeen percent (17%) of these breaches in EPA regulated premises were categorised as 'code red' (high risk): see Department of Environment and Conservation (2008), *Strategic and Environmental Compliance and Performance Review – Industrial Estates*, www.environment.nsw.gov.au/resources/licensing/08444indest.pdf

The 2009 compliance and performance review on industry monitoring found multiple monitoring breaches relating to failure to monitor, inadequate monitoring procedures, failure to adequately record the location and history of monitoring, and not complying with reporting requirements: see DECCW (2010), www.environment.nsw.gov.au/resources/licensing/09695indmon.pdf.

In 2011 compliance and performance review on management of chlorinated solvents found 38 breaches in relation to handling and movement of chlorinated solvents, storage of chlorinated solvents and emergency management: see Office of Environment and Heritage (2011), www.environment.nsw.gov.au/resources/licensing/110642chlorinatedsolvents.pdf.

170 POEO Act, s 78(4A).

171 POEO Act, ss 174 and 175.

172 POEO Act, s 172(a).

173 Department of Environment and Conservation, *Compliance Audit Handbook* at [2.4.3] www.environment.nsw.gov.au/resources/licensing/cahandbook0613.pdf.

174 *Protection of the Environment Administration Act 1991*, ss 10 and 11.

175 For instance, in emergencies the EPA can issue clean-up notices even where it is not the appropriate regulatory authority: POEO Act s 91(2).

This premise of ‘one site, one regulator’ provides some clarity for the public. On the other hand, this can be frustrating for the community where local councils do not take action – whether due to limited capacity, lack of expertise or other reasons.¹⁷⁶ There is little public recourse if local councils refuse to investigate or enforce pollution breaches, other than bearing the risk and costs of civil enforcement action.

As the expert body on pollution regulation, arguably the EPA should have a *duty to intervene* where councils are not adequately fulfilling their responsibilities. The aim is to ensure that the public does not reach a ‘dead end’ on significant pollution concerns if councils are unwilling or unable to investigate. The resourcing implications of such a duty for the EPA, and relevant thresholds for assuming responsibility, would need further consideration.

While beyond the scope of this paper, clearly local councils play an important role in monitoring and enforcing smaller-scale pollution activities. Noting its general oversight role and ability to set performance targets, the EPA should engage with councils, communities and industry to elicit further information on the barriers, challenges and priorities for local pollution enforcement and conduct a ‘needs analysis’ of councils for effective local pollution regulation (regarding funding, skills, data systems and other possible gaps).

6.3 Enhancing Independent Regulation

The re-establishment of an independent EPA is a welcome reform. Furthermore, as discussed above, placing a duty on regulators and polluters to minimise and, where possible, eliminate pollutants from entering our environment and requiring an objective, scientific test on whether to approve a pollution licence will, in turn, enhance the EPA’s independent regulatory role.

A further important aspect is the need to do whatever it takes to effectively regulate industry. As the Audit Office Report in 2010 showed, the EPA needed to improve its internal reporting and analysis to determine whether the EPA’s response to pollution incidents minimised harm to the environment, and whether its regulatory approach improved compliance, especially concerning licensees.¹⁷⁷

Crucial to this endeavour will be two things. First, there is an urgent need to review the EPA’s compliance and enforcement policy. At present, there seems to be little understanding of the principles of best practice regulation. For example, while a strong penalty system is important, penalties provide little deterrent effect unless they are effectively enforced and imposed.¹⁷⁸ A process of review conducted recently in Victoria will be instructive in this regard.¹⁷⁹ Furthermore, there appears to be limited empirical evidence underpinning decisions about compliance and enforcement – and their place within the Courts. The NSW Bureau of Crime Statistics and Research (**BOCSAR**) is the official source of information about crime in NSW. It ‘conducts research into crime and criminal justice and evaluates initiatives designed to reduce crime and reoffending’.¹⁸⁰ Its expertise in this area makes it the ideal body to provide this evidence.

Second, there is a need to further utilise and expand the range of alternative sentencing options. In the case of corporate offenders, the use of high financial penalties may not always be appropriate.¹⁸¹ It is therefore important to have a broad suite of regulatory tools, and the wherewithal to use them.

The POEO Act provides for a range of enforcement options as alternatives to financial penalties. These include actions to publicise the offence; to undertake environmental restoration activities; and to order the offender or the offender’s staff to undertake training courses.¹⁸² In 2010-11, seven such alternative orders were made in relation to Tier 2 offences.¹⁸³ These include:

176 Detailed consideration of local councils’ role in pollution regulation is beyond the scope of this paper.

177 Department of Environment, Climate Change and Water, Auditor-General’s Report: Performance Audit 2010 pp 10,15.

178 Studies have demonstrated that the certainty of being apprehended is more significant than the penalty itself. For further information see Environmental Defender’s Office NSW, *Court Imposed Fines and their Enforcement: Submission to the NSW Sentencing Council*, 8 June 2006, <www.edo.org.au/edonsw/site/pdf/subs/060531finessub.pdf>. See also the judgment of Jacobs J in *Griffiths v The Queen* (1977) 137 CLR 293, 327 and Brian J Preston, *Principled Sentencing for Environmental Offences* (paper presented to Environmental Defender’s Office Annual Conference) ‘Making law work: improving environmental compliance and enforcement in Australia’, 26 May 2006, <[www.lawlink.nsw.gov.au/lawlink/lec/ll Lec.nsf/vwFiles/Speech_26May06_Preston.pdf/\\$file/Speech_26May06_Preston.pdf](http://www.lawlink.nsw.gov.au/lawlink/lec/ll Lec.nsf/vwFiles/Speech_26May06_Preston.pdf/$file/Speech_26May06_Preston.pdf)>, 8.

179 Neil Gunningham and Christine Parker, *Environment, Compliance and Pollution Response Review – Environment Law and Regulation*, May 2010; cited by Stan Krpan, *Compliance and Enforcement Review*, February 2011 at p. 90.

180 BOCSAR website: <www.bocsar.nsw.gov.au/lawlink/bocsar/ll_bocsar.nsf/pages/bocsar_aboutus>

181 For example, high penalties may not result in internal disciplinary action being taken against the responsible officers; the burden of penalties is likely to be borne by shareholders or consumers rather than responsible officers; a large monetary penalty may force a corporation into liquidation, with potential negative effects for workers and communities; and monetary penalties may be evaded, through such techniques as asset stripping See Australian Law Reform Commission (1994), *Compliance with the Trade Practices Act 1974*, ALRC 68, [10.3].

182 POEO Act s 250.

183 NSW Government Department of Premier and Cabinet, *Annual Report 2010-2011*, <www.dpc.nsw.gov.au/_data/assets/pdf_file/0013/133420/Department_of_Premier_and_Cabinet_Annual_Report_2010-11.pdf, 244.>

- For polluting waters, Centennial Newstan Pty Ltd was ordered to pay \$105,000 to Lake Macquarie City Council for the Ecosystem Enhancement Operations Program, and to publicise details of the offence in the *Sydney Morning Herald* and the *Newcastle Herald*;
- For polluting waters, Chillana Pty Ltd was ordered to pay \$60,000 to Land & Property Management Authority for Castlereagh River rehabilitation project and to publicise details of the offence in the *Coonabarabran Times* and the *Daily Liberal*;
- For breaching a licence condition, Huntsman Corporation Australia Pty Ltd was ordered to pay \$28,000 to Randwick City Council for the Stormwater Harvesting and Recycling Project at Chifley Sports Reserve, and to publicise details of the offence in the *Sydney Morning Herald* and the *Southern Courier*.

The use of these options should be encouraged by the EPA.

Furthermore, consideration should be given to additional orders that address corporate motivations of offending. For example:

- orders which allow the Court to insist that a corporate defendant undertake satisfactory internal disciplinary action;
- equity fines, where shares from a convicted corporation go to a public interest trust fund.

Recommendations

25. The EPA should be empowered to immediately suspend pollution licences where prescribed emissions levels are exceeded.
26. Penalty notices for pollution offences should be used more frequently, and higher maximum penalties introduced
27. Move civil enforcement of breaches of the POEO Act to an 'own costs' jurisdiction in the Land and Environment Court, to remove costs barriers and increase access to justice by the community.
28. Upgrade the effectiveness of the EPA's response to industry audits and focus on benchmarking its methods and performance. This should align with the Audit Office's 2010 recommendations on improved internal analysis. The progress of these improvements should be publicly reported by the EPA or the Environment Minister.
29. Given the likelihood that pollution breaches are often unreported:
 - risk-based compliance audits should be undertaken more regularly,
 - the findings for each facility should be published on the internet, and
 - compliance action should be taken in response to identified breaches.
30. Consider imposing a duty on the EPA (accompanied by sufficient resources) to investigate pollution incidents for which local councils are the appropriate regulatory authority, in circumstances where all other mechanisms at council level have been exhausted.
31. Undertake a review of the EPA's compliance and enforcement approach and policy to ensure that it improves compliance and minimises harm to the environment.
32. The NSW Bureau of Crime Statistics and Research should be asked to undertake a comprehensive review of the enforcement of environmental offences. This review could include consideration of:
 - the use of penalty notices and the appropriate financial penalty to be imposed by these notices;
 - how the EPA's prosecution policy could be improved, to more effectively deter environmental pollution offences;
 - how alternatives to financial penalties could be better used to improve enforcement of lower level offences;
33. Make alternative enforcement orders available, including:
 - orders which allow the Court to insist that a corporate defendant undertake satisfactory internal disciplinary action;
 - equity fines, where shares from a convicted corporation go to a public interest trust fund.

7. Conclusion

The Orica Incident, and the attendant scrutiny of the company's pollution record, has served to highlight deficiencies in the regulation of pollution in NSW more generally. The re-establishment of an independent EPA provides an excellent opportunity to strengthen pollution regulation and improve the protection of the environment in NSW.

Most of the responses proposed in this report are not new or radical – the law has long provided a plethora of tools to deal with pollution and these can be used in innovative ways to drive pollution reduction.

What is required, however, is a new and radical outlook – one that treats industry at arm's length and imposes objective, scientifically based criteria and standards to pollution management in NSW. A more open and transparent system, driven by meaningful community engagement, is the key to ensuring this transformation.

Appendix 1 – Recent changes to pollution law in NSW

Changes to pollution incident notification requirements (commenced 6 February 2012):

- Licensees (and other persons carrying on activities that result in a pollution incident) must report pollution incidents that cause or threaten material harm to the environment immediately to relevant response agencies. The previous requirement was that they report as soon as practicable after becoming aware of the incident.¹⁸⁴
- Material harm to the environment means actual or potential harm to the health or safety of human beings or to ecosystems that is not trivial; or results in actual or potential loss or property damage exceeding \$10,000.¹⁸⁵
- Incidents must be reported to a list of agencies, including: the EPA; the Ministry of Health; the WorkCover Authority and Fire and Rescue NSW. Previously, only the appropriate regulatory authority (generally the EPA) was required to be notified.¹⁸⁶
- The EPA may also require that any other person be notified of a pollution incident.¹⁸⁷
- Maximum penalties for failure to comply with notification provisions have doubled, such that they are now \$2,000,000 in the case of a corporation (with an additional \$240,000 for each day the offence continues), and \$500,000 for an individual (with a further \$120,000 for each day the offence continues).¹⁸⁸

New duty to prepare and implement pollution incident response management plans (PIRMPs) (commencing 29 February 2012)¹⁸⁹

- Holders of pollution licences and, where required by the EPA, others who occupy premises where industry is carried out, must prepare PIRMPs. A PIRMP must include procedures for notifying neighbouring residents and relevant authorities of a pollution incident; actions to be taken after an incident to reduce or control any pollution; and procedures for co-ordinating responses with relevant authorities.
- The PIRMP must be kept on the premises, must be tested as required by regulation, and must be implemented when there is a pollution incident.
- There are penalties for failing to comply with the legal requirements relating to PIRMPs.

New requirement for licensees to publish monitoring results (commencing 31 March 2012)¹⁹⁰

- Where a pollution licence contains a condition requiring the licence holder to monitor particular data, this data must be published within 14 days after it is obtained. There are penalties for failing to comply.¹⁹¹
- The data must be published on the licensee's website or, if it does not have a website, made available to any person who requests it. Licensees must comply with this requirement by 30 June 2012. There are penalties for failing to comply with this requirement, or for publishing materially false or misleading data. These penalties are \$4,400 for corporations and \$2,200 for individuals.

Other changes include:

- Expanded powers for the appropriate regulatory authority (generally the EPA) to impose a condition on a pollution licence requiring a mandatory environmental audit where the authority reasonably suspects that an activity has been or is being carried out in an environmentally unsatisfactory manner (commenced 6 February 2012).¹⁹²
- New powers for the EPA and the Director-General of the Ministry of Health to undertake analysis of any human health and environmental risk effects of a pollution incident, and to require the occupier of the premises, or any person reasonably suspected by the EPA of having caused the pollution incident, to pay the costs of such analysis (commenced 6 February 2012).¹⁹³
- Expansion of the information required to be included on the public registers held by the EPA or other authorised regulatory authority to details of (commencing 31 March 2012):¹⁹⁴
 - Any mandatory audit required to be undertaken in relation to a licence;
 - Any pollution study required by a condition of a licence;
 - Any pollution reduction program required by a condition of a licence;
 - Each penalty notice issued.

184 POEO Act s 148(2).

185 POEO Act s 147.

186 POEO Act s 148(2).

187 POEO Act s 151A.

188 POEO Act s 152.

189 To form Part 5.7A of the POEO Act.

190 To be inserted into s 66 of the POEO Act.

191 Draft guidance material is available on the OEH website: <www.environment.nsw.gov.au/resources/legislation/20120078drftegpubmondanda.pdf>

192 POEO Act s 175.

193 POEO Act part 9.3D.

194 To be inserted into s 308 of the POEO Act.

- Other complementary measures include:
 - Development of a precinct plan for Kooragang Island and appropriate surrounding areas;
 - Testing of public communication protocols and mechanisms in all future emergency response exercises;
 - Expanding the role of the community engagement system¹⁹⁵ (PIFAC) for hazardous materials incidents, including ensuring that community concerns about the timeliness of information are addressed.

195 The Public Information Functional Area Coordinator, established under the *State Emergency and Rescue Management Act 1989* (NSW).

Appendix 2 – Improving Pollution Licences

Many pollution licences contain conditions that are vague and unenforceable. As part of its submission for Delta’s application for licence variation, the Blue Mountains Conservation Society (**BMCS**) submitted its concept of a fully enforceable pollution licence that allows for continual environmental performance improvement over time. This “mock licence” is available on the OEH website,¹⁹⁶ and shows how a pollution licence can be improved.

A stronger licence, with better environmental outcomes would prescribe conditions that conform to the principle of ‘SMARTER’,¹⁹⁷ and would include:

- Facility location/s clearly identified on a locality map, attached to the licence and available on the POEO Register. Surrounding premises that also contribute to pollution of the shared watershed, airshed, or land identified on a map by name and pollution licence. Discharge and monitoring points (licence conditions “P”)¹⁹⁸ should be clearly described (with specific contaminants being discharged or monitored).
- Limit conditions (licence conditions “L”) imposed on all premises with a licenced discharge point, and on all premises with a non-point source discharge. Limit conditions should be set after a comprehensive assessment has been undertaken. Licence conditions should reflect:
 - A premises load limit (an annual allowable mass),
 - A premises concentration limit (maximum allowable concentration at any given time),
 - A receiving environment load limit (annual for open systems, and absolute for closed systems eg lakes, aquifers).
 - A receiving environment concentration limit (to be derived using ANZECC or more appropriate local data), and
 - A receiving environment ambient conditions requirement (which includes pH, salinity, BOD, COD, macroinvertebrate health, nutrients etc)¹⁹⁹.
- Discharge impact assessment to identify which pollutant/s are being emitted from the premises in what quantities. For example, the broad category of salinity can actually be comprised of any one or a number of elements,²⁰⁰ with varying degrees of impact to the environment.
- Any point considered an “emergency discharge” must have clearly described definitions of an emergency event and what pollutants could reasonably be expected to be emitted during an “emergency discharges”.
- Pollution Reduction Plans (**PRPs**) utilised proactively in the application stage of a development, as a tool to continually reduce any unavoidable discharge and used to develop a database of Best Available Technology (BAT) for each industry sector.²⁰¹
- Allowable pollutants are:
 - subject to a load based fee
 - specified and identified on a chemical level (eg the constituents of salinity should be identified and limited)
- Operating conditions (licence conditions “O”) require:
 - In addition to pollution incident response management plans, a clear description of plant or facility procedures to be enacted if any of the limits listed in Condition L are breached, until such time as the loads or concentrations are reduced and stabilised
 - Commitment to continual reduction of pollutant loads and concentrations
 - Commitment to implementing Best Available Technology (BAT) as identified on a regular basis by the PRP.
- Monitoring and recording conditions (licence conditions “M”) require
 - Direct monitoring of pollutants and ambient conditions listed in Condition L
 - Data to be continuously logged, or if not continuously logged, recorded in conjunction with plant operating conditions (eg, when operating at full discharge or 100% of plant etc).
 - Breaches to be recorded and reported immediately to EPA, the website, and surrounding community
- “No net degradation” introduced to licences to offset any discharge that cannot be avoided, reduced, reused, recycled, recovered or treated. If no offsetting mechanism has previously been developed, licensees should be responsible for funding independent research into appropriate mechanisms.²⁰² All offsetting should conform to the principles of offsetting²⁰³.

196 <www.environment.nsw.gov.au/licensing/>.

197 Specific, Measurable, Achievable, Relevant, Timely, Evaluate, Re-evaluate.

198 The pollution licence template used by EPA uses a nomenclature system that takes the first letter of the licence category, and names each condition with a subset of that letter. For example, the section dealing with Limits is named L1.1, L2.4 etc, and the section dealing with Monitoring is named M3.3, M2.1 etc.

199 For example, for freshwater environments, a limit or range on allowable pH, biological oxygen demand and temperature should be specified in the licence, to ensure that not only concentrations of pollutants limited, but that ambient conditions are not being effected in any other way.

200 For example, sodium, chloride, potassium.

201 This would need to be updated regularly, say every 5 or so years.

202 This could include other market mechanisms that can be used to reduce pollution cost effectively.

203 Enduring, quantifiable, targeted, located appropriately, supplementary and enforceable. see <www.environment.nsw.gov.au/greenoffsets/principles.htm>

- More accurate pollution monitoring and reporting for the initial application. For a full year from commencement of operation, a licensee should monitor extensively all air and water discharges to identify all pollutant/s.²⁰⁴ The pollutants identified should be used to determine the 'limits' in Condition L of the pollution licence. Applicants should demonstrate that they are committed to finding innovative ways to avoid or reduce pollution.

²⁰⁴ For example, a licensee should test against all pollutants declared by the NPI to be commonly discharged by that industry type.

(Case Study Footnotes)

- 1 Office of Environment & Heritage, NSW Government, <www.environment.nsw.gov.au/prpoeoapp/>. It is difficult to be certain that this is the correct number of licenses, because the online POEO Act register, available at www.environment.nsw.gov.au/prpoeo/index.htm, is limited in terms of search function and manageability of data.
- 2 Pollution Licence 397.
- 3 Pollution Licence 571.
- 4 Pollution Licence 654.
- 5 Pollution Licence 379.
- 6 Pollution Licence 549.
- 7 Pollution Licence 1110.
- 8 Pollution Licence 1165.
- 9 Pollution Licence 10095.
- 10 VOCs are an assessable pollutant, and contribute to photochemical smog and potential human health effects. The fact that they are not licenced demonstrates that the scheduling of premises in the POEO Act does not necessarily capture all large emitters.
- 11 Adapted from data available at: Department of Sustainability, Environment, Water, Population and Communities, Australian Government, *2009/2010 data within Wollongong – All Substances from All Sources* <www.npi.gov.au/npidata/action/load/map-result/criteria/year/2010/destination/ALL/lga/229/source-type/ALL/subthreshold-data/Yes/substance-name/All>.
- 12 Bluescope Steel EPL397, Manildra Energy EPL654 and Industrial Galvanizers EPL1165.
- 13 Land and Environment Court Proceedings No. 40358 of 2009.
- 14 Under its licence, Delta pays a load-based fee for the discharge of salt.