

Regulation of water pollution in drinking water catchments and illegal disposal of solid waste

28 JUNE 2018



NEW SOUTH WALES AUDITOR-GENERAL'S REPORT

PERFORMANCE AUDIT

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In accordance with section 38E of the *Public Finance and Audit Act 1983*, I present a report titled
'Regulation of water pollution in drinking water catchments and illegal disposal of solid waste'.

A handwritten signature in black ink, appearing to read 'Margaret Crawford'.

Margaret Crawford

Auditor-General
28 June 2018

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Section one

Regulation of water
pollution in drinking water
catchments and illegal
disposal of solid waste



Executive summary

The NSW Environment Protection Authority (the EPA) is the State's primary environmental regulator. The EPA regulates waste and water pollution under the *Protection of the Environment Operations Act 1997* (the Act) through its licensing, monitoring, regulation and enforcement activities. The community should be able to rely on the effectiveness of this regulation to protect the environment and human health. The EPA has regulatory responsibility for more significant and specific activities which can potentially harm the environment.

Activities regulated by the EPA include manufacturing, chemical production, electricity generation, mining, waste management, livestock processing, mineral processing, sewerage treatment, and road construction. For these activities, the operator must have an EPA issued environment protection licence (licence). Licences have conditions attached which may limit the amount and concentrations of substances the activity may produce and discharge into the environment. Conditions also require the licensee to report on its licensed activities.

This audit assessed the effectiveness of the EPA's regulatory response to water pollution in drinking water catchments and illegal solid waste disposal. The findings and recommendations of this review can be reasonably applied to the EPA's other regulatory functions, as the areas we examined were indicative of how the EPA regulates all pollution types and incidents.



Conclusion

There are important gaps in how the EPA implements its regulatory framework for water pollution in drinking water catchments and illegal solid waste disposal which limit the effectiveness of its regulatory response. The EPA uses a risk-based regulatory framework that has elements consistent with the NSW Government Guidance for regulators to implement outcomes and risk-based regulation. However, the EPA did not demonstrate that it has established reliable practices to accurately and consistently detect the risk of non-compliances by licensees, and apply consistent regulatory actions. This may expose the risk of harm to the environment and human health.

The EPA also could not demonstrate that it has effective governance and oversight of its regulatory operations. The EPA operates in a complex regulatory environment where its regional offices have broad discretions for how they operate. The EPA has not balanced this devolved structure with an effective governance approach that includes appropriate internal controls to monitor the consistency or quality of its regulatory activities. It also does not have an effective performance framework that sets relevant performance expectations and outcome-based key performance indicators (KPIs) for its regional offices.

These deficiencies mean that the EPA cannot be confident that it conducts compliance and enforcement activities consistently across the State and that licensees are complying with their licence conditions or the Act.

The EPA's reporting on environmental and regulatory outcomes is limited and most of the data it uses is self-reported by industry. It has not set outcome-based key result areas to assess performance and trends over time.



1. Key findings

The EPA has a risk-based regulatory framework, but there are important weaknesses in the governance of its regulatory operations

The EPA's regulatory framework includes elements of good practice that are consistent with the NSW Government Guidance for regulators to implement outcomes and risk-based regulation. These include:

- a risk-based licencing scheme where risk is assessed on the basis of a licensee's compliance history and the potential for environmental harm from the licensed activities
- using a combination of proactive and reactive strategies to monitor compliance. This includes setting frequency targets for mandatory inspections of licensed premises, based on the risk level assigned to the licence
- tailoring enforcement responses for non-compliance according to the degree of actual or potential environmental harm, the compliance history of the licensee, and whether the non-compliance was deliberate or unintentional.

However, the EPA lacks effective governance arrangements to support its devolved regional structure. The EPA's performance framework has limited and inconclusive reporting on regional performance to the EPA's Chief Executive Officer and the Board. This limits the CEO and Board's oversight that would ensure the EPA's regulatory responsibilities are conducted efficiently and effectively.

The EPA also does not monitor the consistency or quality of its regulatory activities conducted across the State. Therefore, it cannot ensure that it is tailoring its regulatory responses in a consistent and transparent way to underpin its authority and credibility, and incentivise better compliance. This is an important principle in the NSW Government Guidance for regulators to implement outcomes and risk-based regulation, October 2016.

The EPA does not provide effective guidance for its staff. Many of its policies and procedures are out-dated, inconsistent, hard to access, or not mandated. For example, there are no structured requirements for how the EPA conducts mandatory site inspections under its risk-based licensing scheme which means there is a risk that it is not consistently detecting all breaches or non-compliances.

The EPA cannot be sure that correct licence conditions have been set for discharges into water

The EPA has not implemented appropriate internal controls or quality assurance processes to monitor the consistency or quality of licence conditions for discharges into water across the State.

The EPA has guidance developed in 2016 by its technical experts in the Water Technical Advisory Unit to assist its regional staff to set licence conditions for the discharge of pollutants into water. Up until April 2018, the EPA left discretion to regional offices to decide what guidance their staff used. This meant that practices differed across the organisation, leading to inconsistent or incorrect licence conditions.

The triennial 2016 Audit of Sydney Drinking Water Catchment report, prepared for the Minister for Energy and Utilities under the *Water NSW Act 2014*, identified that Lake Burragorang had experienced worsening water quality over the past 20 years due to increased salinity. Coal mining activity is identified in the report as being a contributor to increased salinity. Coal mining activity is licensed by the EPA. The report recommended that the sources and implications of the increased salinity levels be investigated. It did not propose which public authority should carry out such an investigation.

To date, no NSW Government agency has addressed the report's recommendation. Three public authorities, the EPA, WaterNSW and the Department of Planning and Environment (DPE) have regulatory responsibilities for activities that impact on water quality in the Sydney drinking water catchment.

The EPA does not have reliable practices that detect breaches and non-compliances

The EPA mostly uses reviews of licensee annual returns and mandatory site inspections to detect breaches of the Act and licence conditions. The few compliance audits that the EPA conducts annually are effective in identifying non-compliances and breaches.

The EPA does not systematically or consistently validate self-reported information from licensees in annual returns. For example, we found very few licensees (2.7 per cent over a three-year period) had self-reported non-compliance with a key licence requirement dealing with testing of incident management plans. This is compared to the findings of an EPA compliance audit that found 39 per cent of licensed premises audited had not complied with the same requirement.

The EPA's risk-based licensing scheme sets minimum mandatory inspection frequencies for licensed premises based on an assessed overall risk level. This is a key practice to detect breaches and non-compliances. The EPA has not defined what these mandatory inspections should cover and how they are to be conducted. We found variations in how the EPA conducted these inspections. The inconsistent approach means that the EPA does not use mandatory inspections as an effective tool to ensure it has complete and accurate information of licensees' compliance.

The EPA's unreliable detection practices, and weaknesses in its governance approach, limits its effectiveness to consistently apply regulatory action

The EPA has not balanced its devolved regional structure with appropriate governance arrangements to give it assurance that it applies a consistent approach to enforcement.

The extensive legislation determining the EPA's regulatory activities, and the devolved regional structure the EPA has adopted in delivering its compliance and regulatory functions, increases the risk of inconsistent compliance decisions and regulatory responses. A good regulatory framework needs a consistent approach to enforcement to incentivise compliance.

The EPA has not issued standard procedures to ensure consistent non-court enforcement action for breaches of the Act or non-compliance with licence conditions. Given our finding that the EPA does not effectively detect breaches and non-compliances, there is a risk that the EPA may not be applying regulatory actions for many breaches and non-compliances.

The EPA has implemented most strategic actions to address illegal dumping, but has not achieved targets to reduce large scale dumping

The NSW Illegal Dumping Strategy 2014–16 listed 21 actions for the EPA to implement. We found the EPA had implemented all these actions. However, the EPA did not achieve the strategy target of a 30 per cent reduction over four years in instances of large scale illegal dumping in Sydney, the Illawarra, Hunter and Central Coast from 2011 levels. The EPA advised that increased community awareness resulting from the strategy, and increased building activity, resulted in reports of large scale illegal dumping incidents increasing from 70 to 151 over the four-year period of the strategy.

In June 2017, the Independent Commission Against Corruption (ICAC) published a report titled Investigation into the Conduct of a Regional Illegal Dumping Squad Officer and Others. The ICAC made six recommendations for the EPA to address deficiencies in its oversight of Regional Illegal Dumping Squads. These squads use council employees who can operate across individual council boundaries to regulate illegal dumping. The EPA has until late September 2018 to report to the ICAC on its progress in implementing the recommendations. The EPA has implemented four recommendations, with one to be implemented by June 2018 and the other to be implemented at a date yet to be determined.

The EPA does limited monitoring of its performance in protecting the environment

A key aim of the Act is for the EPA to make progressive environmental improvements, including reducing pollution at its source. The EPA does not regularly and comprehensively measure whether it is reducing pollution discharges under its licensing scheme. The monitoring tools currently used, such as the annual National Pollutant Inventory and the triennial State of the Environment reports, are limited in their effectiveness as they use self-reported data, cover a limited geographical area, and only measure a limited range of pollutants. The EPA does not track trends in the emission loads permitted in licences.

The EPA does not use this limited data to measure environmental performance overall and to direct its future strategy to achieve the aims of the Act. The EPA has not set outcome-based key result areas to assess its performance in protecting the environment and trends over time.



2. Recommendations

By 31 December 2018 to improve governance and oversight, the EPA should:

1. implement a more effective performance framework with regular reports to the Chief Executive Officer and to the EPA Board on outcomes-based key result areas that assess its environmental and regulatory performance and trends over time

By 30 June 2019 to improve consistency in its practices, the EPA should:

2. progressively update and make accessible its policies and procedures for regulatory operations, and mandate procedures where necessary to ensure consistent application
3. implement internal controls to monitor the consistency and quality of its regulatory operations

By 30 June 2019, to address worsening water quality in Lake Burragorang, the EPA should:

4. (a) review the impact of its licensed activities on water quality in Lake Burragorang, and
(b) develop strategies relating to its licensed activities (in consultation with other relevant NSW Government agencies) to improve and maintain the lake's water quality

To improve compliance monitoring, the EPA should implement procedures to:

5. **by 30 June 2019**, validate self-reported information, eliminate hardcopy submissions and require licensees to report on their breaches of the Act and associated regulations in their annual returns
6. **by 31 December 2018**, conduct mandatory site inspections under the risk-based licensing scheme to assess compliance with all regulatory requirements and licence conditions

By 31 December 2018 to improve enforcement, the EPA should:

7. implement procedures to systematically assess non-compliances with licence conditions and breaches of the Act, and to implement appropriate and consistent regulatory actions.



1. Introduction

NSW environment protection legislation

The NSW Environment Protection Authority (the EPA) and local councils are primarily responsible for the regulation of waste and water pollution in New South Wales, under the *Protection of the Environment Operations Act 1997* (the Act).

The Act aims to:

- protect, restore and enhance the quality of the environment in New South Wales, having regard to the need to maintain ecologically sustainable development
- reduce risks to human health and prevent the degradation of the environment through:
 - reducing to harmless levels the discharge of substances likely to cause harm to the environment
 - making progressive environmental improvements, including reducing pollution at its source
 - monitoring and reporting of environmental quality on a regular basis
- rationalise, simplify and strengthen the regulatory framework for environmental protection.

The Act is extensive, with 327 clauses and four schedules. The two associated regulations - the *Protection of the Environment Operations (General) Regulation 2009* and the *Protection of the Environment Operations (Waste) Regulation 2014* - together also contain over 200 clauses and 11 schedules. As well as waste and water pollution, the Act covers environmental protection matters such as air pollution, littering, noise pollution, and recycling.

The EPA also has general responsibilities under the *Protection of the Environment Administration Act 1991* such as supporting ecologically sustainable development through the effective integration of social, economic and environmental considerations in any decisions made under the Act.

Scheduled activities and environment protection licences

The EPA administers a comprehensive licensing scheme to regulate activities in accordance with the Act. Organisations or individuals undertaking specific activities (which can generate pollution or waste) listed in Schedule 1 of the Act must hold an environment protection licence (licence) issued by the EPA. These activities have more significant environmental risks. Thresholds apply to each scheduled activity, below which a licence is not required. There are currently over 2,000 licensed premises that conduct these activities.

The EPA is the regulatory authority for all scheduled activities, or activities conducted on behalf of the Crown or local councils. Local councils are the regulatory authority for activities in their local government area which fall below the thresholds listed in Schedule 1. The Act also allows certain government bodies, such as WaterNSW, to be the regulatory authority for third party activities below Schedule 1 thresholds which occur on lands it controls, such as the Special Areas in Sydney's drinking water catchment.

Licences have conditions attached to minimise any adverse effects on the environment or human health. These vary depending on the nature of the scheduled activities, and can include:

- monitoring the operation of premises and plant, discharges from premises and ambient conditions prevailing on or outside premises
- notifying pollution incidents and conducting mandatory environmental audits
- restricting the storage, handling, treatment and processing of waste
- restricting the amount of various pollutants that can be discharged into water.

Each licensee pays an annual administrative fee to the EPA, based on the type and scale of scheduled activities carried out. The administrative fee is retained by the EPA and used to partly fund its regulatory activities. In 2016–17, the fee amounted to around \$20.0 million out of total EPA revenue of \$162 million.

Additional fees are payable by licensees that carry out licensed activities that are subject to load-based licensing. Each year, licensees under this scheme must determine the loads of specific and assessable pollutants released into the environment through their licensed activities, and pay an assessed load-based fee to the EPA. Load-based fees are not retained by the EPA and go into consolidated revenue.

Risk-based licensing scheme

In July 2015, the EPA introduced the current version of a risk-based licensing scheme. Under the scheme, the EPA tailors its regulatory response to the environmental risk posed by the activities conducted by licensees. The EPA determines an environmental risk rating based on each licensed premises' environmental risk arising from the type and scale of licensed activity. The EPA also assigns the licensee one of five risk categories using an environmental management assessment that is based on a licensee's compliance history and the outcome of the EPA's regulatory actions over the past three years. A licensee assigned the lowest risk category is entitled to a five per cent discount on the annual administrative fee payable to the EPA, while a licensee assigned the highest risk category pays double the annual administrative fee.

The combination of the assessed environmental risk rating and the environmental management category assigned to the licensed premises results in an overall environmental risk level of either 1 (low), 2 (moderate) or 3 (high). The EPA has set minimum frequencies for site inspections of licensed premises for each of the three overall environmental risk levels. These range from twice yearly for risk level 3, once yearly for risk level 2 and once every three years for risk level 1.

From July 2015, the EPA commenced assessing overall environmental risk levels of licensed premises, and from July 2016 began applying the revised rules for calculating the annual administrative fee.

Exhibit 1: Number of licensed premises at 6 February 2018

Overall environmental risk level	Number of licensed premises	Percentage of total
1 (low)	1,663	80.8
2 (moderate)	221	10.7
3 (high)	70	3.4
Not yet rated	104	5.1
Total	2,058	100.0

Source: Environment Protection Authority 2018.

The EPA reviews the overall environmental risk level for each licence every five years. However, the EPA can review the risk level at other times in response to:

- reported licence non-compliances
- completion of voluntary pollution reduction programs by licensees
- an environmental incident or a change in operations at the licensed premises.

The EPA also reassesses environmental management categories every 12 months when the annual administrative fee is due.

Regulatory actions for breaches of environment protection legislation

The EPA is responsible for enforcing compliance with the Act and licence conditions. The EPA can issue clean-up or prevention notices under the Act to suspected polluters, suspected occupiers or the landowner as well as imposing fines or initiating prosecutions through the courts.

Breaches of the Act and its associated regulations, such as failure to hold a licence where required, contravening licence conditions, or polluting the environment (including water pollution and illegal waste disposal), can result in penalties which include:

- on-the-spot fines issued by the EPA of up to \$7,500 for individuals and \$15,000 for corporations
- court-imposed penalties of up to \$250,000 for individuals and \$1.0 million for corporations
- court-imposed penalties of up to \$1.0 million and/or seven years imprisonment for individuals, and \$5.0 million for corporations for pollution causing serious environmental harm
- court-imposed imprisonment of up to two years for individuals convicted of repeat illegal dumping offences.

The above penalties are paid into consolidated revenue, and not retained by the EPA. However, the EPA can recover some of its costs to monitor compliance with prevention or clean-up notices.

The EPA's enforcement approach

The EPA uses more than 15 regulatory actions to address non-compliances ranging from advisory letters to court prosecutions. (See Appendix two for a full list of regulatory actions.)

The EPA publishes a range of guidelines that explain how it makes decisions when determining the appropriate regulatory response, including issuing penalty notices and its approach to investigations and prosecutions.

Regulation of water pollution, including in drinking water catchments

Water pollution is defined as the introduction of any matter into water (river, stream, lake, lagoon, dam or water stored in a natural or artificial watercourse) that changes the physical, chemical or biological condition of the water. Under the Act, it is an offence to pollute water. However, the EPA can issue licences with conditions designed to manage the discharge of substances into water so that they do not adversely affect water quality. Nearly half of all licensed premises are authorised to discharge substances into water.

Exhibit 2: Number of licensed premises authorised to discharge into water at 6 February 2018

Overall environmental risk level	Number of licensed premises authorised to discharge into water	Percentage of total
1 (low)	792	80.0
2 (moderate)	127	12.8
3 (high)	39	4.0
Not yet rated	32	3.2
Total	990	100.0

Source: Environment Protection Authority 2018.

We defined drinking water catchments as geographical areas from which surface water is collected and discharged into streams or into natural or artificial storage and from which the water is then extracted, treated and distributed to the community.

The ambient levels of pollutants in streams and reservoirs used for drinking water sources includes pollutants from licensed activities, as well as other sources such as agriculture, urban development and parks and gardens. Under the Act, the EPA is responsible for regulating pollution that arises as a result of the activities of licensees. Local councils are responsible for regulating water pollution in their area from non-scheduled activities which do not have a licence and are not carried out by another public authority.

Regulation of illegal dumping

Illegal solid waste disposal, or illegal dumping, is disposing of waste (larger than litter) onto land or into water without correct approvals, such as a licence issued by the EPA. It includes illegal landfilling, where waste, often from construction or demolition, is dumped without approval. However, not all sites which can receive solid waste need to have a licence. The need for a licence depends on the quantity and type of solid waste. Illegal disposal of solid waste can also occur when licensed waste disposal premises breach their licence conditions.

For illegal dumping, the EPA is the regulatory authority for matters where there are more than 200 tonnes of building and demolition waste deposited onto land for which there is not a licence, and the waste must also originate from or be dumped in, regulated areas of the State. Regulated areas include:

- Sydney metropolitan
- Illawarra and Hunter regions
- Central and North Coast local government areas to the Queensland border
- Blue Mountains
- Wingecarribee and Wollondilly local government areas.

For building and demolition waste generated and illegally deposited outside regulated areas, the EPA regulatory threshold is 20,000 tonnes. Local councils are generally responsible for regulating building and demolition waste quantities below these thresholds.

The EPA also regulates other classifications of solid waste illegally deposited onto land within the regulated area, such as hazardous waste. These classifications are used to determine the various thresholds that apply to activities scheduled under the Act and identify the waste facilities that can accept waste of a particular classification.

Exhibit 3: Number of licensed waste disposal premises at 6 February 2018

Overall environmental risk level	Number of licensed waste disposal premises	Percentage of total
1 (low)	227	75.9
2 (moderate)	42	14.1
3 (high)	12	4.0
Not yet rated	18	6.0
Total	299	100.0

Source: Environment Protection Authority 2018.

NSW Government Guidance for regulators to implement outcomes and risk-based regulation

In 2012, the NSW Government endorsed the Quality Regulatory Services initiative. This initiative required all NSW Government regulators, including the EPA, to implement an outcomes and risk-based approach to regulation.

In October 2016, the Department of Finance, Services and Innovation updated the Guidance for regulators to implement outcomes and risk-based regulation (the guide). The guide incorporates a 10-step framework to ensure the consistent and transparent implementation of an outcomes and risk-based approach to regulation. These are:

- defining outcomes
- identifying risks
- assessing risks
- linking your work to outcomes
- identifying measures
- allocating resources
- tailoring the enforcement response
- monitoring, reporting and continual improvement
- implementation enablers
- data and systems capability.

In this audit, we assessed elements of the EPA's regulatory approach against the guide.

The EPA's stated regulatory system incorporates four key elements:

- legislation, policy and programs that underpin and guide EPA regulatory decisions, approaches and strategic direction
- administrative systems to support the EPA's statutory functions, financial management and governance of the programs
- information and accountability systems that:
 - provide the knowledge and data for problem identification and decision making
 - record decisions to measure, report and review performance, and to help determine environmental and compliance priorities
- compliance and enforcement activities, including:
 - education and support to the regulated community
 - compliance assurance activities, such as inspections and audits
 - enforcement actions to address non-compliances.

The EPA organisational structure for regulatory services

The EPA operates a matrix organisational structure with its branches and regions given broad discretion for how they operate. (See Appendix three.)

The Waste and Resource Recovery Branch focusses on waste management in the regulated areas of the State. The Regulatory Services Division regulates other forms of pollution, including water pollution and waste matters outside the regulated areas of the State. The Regulatory Services Division has three branches (North, South and West, and Metropolitan). The North, and South and West Branches are each divided into three regions. (See Appendix four.) The Regulatory Services Division also has a Regulatory Reform and Advice Branch that supports the development of the EPA's regulatory framework, including providing operational guidance and procedures.

Audit scope and focus

The audit assessed the effectiveness of the EPA's regulatory response to water pollution in drinking water catchments and illegal solid waste disposal. In making this assessment, we answered the following questions:

- Does the EPA effectively regulate water pollution in drinking water catchments for activities it has responsibility for under the Act?
- Does the EPA effectively regulate the illegal disposal of solid waste?

We also looked at whether the EPA:

- has achieved the priorities and objectives outlined in the NSW Illegal Dumping Strategy 2014–16
- addressed the recommendations relevant to its regulatory responsibilities made in the June 2017 Independent Commission Against Corruption (ICAC) report titled Investigation into the Conduct of a Regional Illegal Dumping Squad Officer and Others.

As part of our review, we visited the Wollongong, Bathurst, Queanbeyan and Newcastle EPA regional offices, which covered the EPA's three branches. We also met with staff from the Waste Resource and Recovery Branch, the Regulatory Reform and Advice Branch and Hazardous Incidents and Environmental Health Branch.

We did not examine illegal disposal of solid waste with asbestos as this was the subject of recent NSW Ombudsman and ICAC reports. We also did not examine the conduct of licensees, or other authorities who are authorised to regulate under the Act, such as local councils.



2. The EPA's regulatory framework



The EPA uses a risk-based regulatory framework for water pollution and illegal solid waste disposal but there are important gaps in implementation that reduce its effectiveness.

Elements of the EPA's risk-based regulatory framework for water pollution and illegal solid waste disposal are consistent with the NSW Government Guidance for regulators to implement outcomes and risk-based regulation. There are important gaps in how the EPA implements its risk-based approach that limit the effectiveness of its regulatory response. The EPA could not demonstrate that it effectively regulates licensees because it has not established reliable practices that accurately and consistently detect licence non-compliances or breaches of the Act and enforce regulatory actions.

The EPA lacks effective governance arrangements to support its devolved regional structure. The EPA's performance framework has limited and inconclusive reporting on regional performance to the EPA's Chief Executive Officer or to the EPA Board. The EPA cannot assure that it is conducting its regulatory responsibilities effectively and efficiently.

The EPA does not consistently evaluate its regulatory approach to ensure it is effective and efficient. For example, there are no set requirements for how EPA officers conduct mandatory site inspections, which means that there is a risk that officers are not detecting all breaches or non-compliances. The inconsistent approach also means that the EPA cannot rely on the data it collects from these site inspections to understand whether its regulatory response is effective and efficient. In addition, where the EPA identifies instances of non-compliance or breaches, it does not apply all available regulatory actions to encourage compliance. The EPA also does not have a systematic approach to validate self-reported information in licensees' annual returns, despite the data being used to assess administrative fees payable to the EPA and its regulatory response to non-compliances.

The EPA does not use performance frameworks to monitor the consistency or quality of work conducted across the State. The EPA has also failed to provide effective guidance for its staff. Many of its policies and procedures are out-dated, inconsistent, hard to access, or not mandated.

Recommendations

By 31 December 2018, to improve governance and oversight, the EPA should:

1. implement a more effective performance framework with regular reports to the Chief Executive Officer and to the EPA Board on outcomes-based key result areas that assess its environmental and regulatory performance and trends over time.

By 30 June 2019, to improve consistency in its practices, the EPA should:

2. progressively update and make accessible its policies and procedures for regulatory operations, and mandate procedures where necessary to ensure consistent application
3. implement internal controls to monitor the consistency and quality of its regulatory operations.

The EPA has not effectively implemented its risk-based regulatory framework

The NSW Government Guidance for regulators to implement outcomes and risk-based regulation (the guide) is designed to assist agencies in implementing regulation that is appropriate, effective and efficient. However, there are important gaps in how the EPA implements its risk-based regulatory framework which exposes the risk that it is not effectively detecting non-compliances of licence conditions or breaches of the Act. For example, the EPA has not established reliable practices that accurately and consistently detect non-compliances or breaches and enforce regulatory actions. The guide identifies the key steps to implement outcomes and risk-based regulation. Each stage within the framework matches specific steps to help regulators with implementation and improvements over time. (See Introduction section for more details.) We used the guide to examine the effectiveness of the EPA's approach in relation to its regulatory role.

The EPA's regulatory enforcement and compliance framework includes many elements of good practice consistent with the guide. For example:

Defining outcomes - the EPA's regulatory framework supports the strategic outcome to protect, restore and enhance the quality of the environment in New South Wales, having regard to the need to maintain ecologically sustainable development.

Identifying and assessing risks - the EPA has assessed licences against its risk-based licensing scheme and assigned each a risk level according to potential for environmental harm from the licensed activity and the licensee's compliance and enforcement history.

Allocating resources - the EPA uses proactive and reactive strategies to monitor non-compliance. This includes setting frequency targets for mandatory inspections of licensed premises under the risk-based licensing scheme commensurate with the assessed risk level for the licence, with low-risk premises being inspected less frequently. This results in a more efficient allocation of EPA resources conducting the inspections.

Tailored enforcement response - the EPA tailors its risk-based enforcement response according to the degree of actual or potential environmental harm, the compliance history of the licensee, and whether any breaches or non-compliances were deliberate or unintentional.

Enable implementation - the EPA publishes its enforcement and compliance policies, as well as using proactive and reactive measures to promote and enforce compliance.

Important gaps include:

Linking work to outcomes - EPA regions operate with broad discretions. The EPA has not balanced this devolved structure with an effective governance approach. For example, under the risk-based licensing scheme, EPA officers must conduct mandatory site inspections which vary in frequency, depending on the risk level allocated to the licensed premises. These inspections underpin the EPA's proactive monitoring for compliance. The EPA has not defined the requirements for these mandatory inspections. We found variations in how EPA officers in different regions explained how they conducted these inspections. The EPA's training program to carry out inspections is not mandatory despite the EPA training strategy indicating that the EPA expects appropriate capability in staff carrying out inspections and the importance of such inspections to the effective operation of the risk-based licensing scheme.

Identifying measures - there is no evidence that the EPA analyses the outcome of site inspections conducted under the risk-based licensing scheme to understand whether its regulatory response is effective and efficient.

Tailoring the enforcement response - where the EPA identifies licence non-compliances or breaches of the Act, it does not apply all available regulatory actions. The Act contains significant penalties if licensees provide false and misleading information on their compliance with licence conditions in their annual returns. This should act as an incentive to provide accurate annual returns, thus mitigating a major risk associated with self-reported data. However, the EPA does not have operational procedures for EPA officers to consistently and comprehensively validate information or to consistently apply regulatory actions when non-compliances are discovered and were such that they should have been reported in the annual return. This exposes the risk that the EPA's enforcement response is based on inaccurate information.

Another example of this is in relation to Pollution Incident Response Management Plans (incident management plans), where the EPA's compliance audits found significant non-compliances. The EPA follow-up procedures for such audits are limited to ensuring licensees complete any identified corrective actions. Where the compliance audit observes a non-compliance that is a serious breach of the Act and is likely to cause, or is causing, environmental harm, the matter is referred to the region for any regulatory action.

Under these procedures, regulatory actions would not be applied if, for example, the licensee did not have a mandatory incident management plan. This is despite potential penalties of up to \$1.0 million for breaches of the incident management plan requirements.

Implementation of enablers - the EPA has not implemented any appropriate internal controls to monitor the consistency or quality of its regulatory activities. In addition, the EPA has policies and procedures that are out-dated, inconsistent, hard to access, or not mandated but used optionally as guidelines. The EPA is aware of the deficiencies regarding its policies and procedures. Since November 2017, two independent reviews commissioned by the EPA also reported these deficiencies. We also found that the EPA's devolved regional structure, together with the deficiencies in policies and procedures, led to inconsistent approaches being adopted by the regional offices that we visited, in activities such as:

- carrying out site inspections under the risk-based licensing scheme
- assessing annual returns of licensees
- using EPA guidance for setting limits on concentrations and loadings of pollutants for waterways to protect environmental values.

Data systems and capability - the EPA does not have a systematic approach to check the accuracy of self-reported information in licensee's annual returns despite the data being used to assess fees payable by licensees and the EPA's regulatory response to non-compliances.

The limited business rules in the EPA's recently superseded case management system guideline for managing pollution incidents have resulted in EPA officers, tasked to investigate incidents, able to close out the incidents without sign-off by the supervisor who assigned the task. However, for waste disposal incidents there is a policy that sign-off by supervisors is mandatory before any close out. This approach is endorsed by ICAC as an important corruption prevention measure.

On 13 February 2018, the EPA released a revised case management system guideline that mandates 22 business rules, including one that requires a supervisor to sign off before incidents are closed out. The EPA conducted presentations on the revised case management systems to all regional managers in March and April 2018. The EPA has yet to develop a training program for all its staff.

The deficiencies we found in how the EPA implements its regulatory framework means that the EPA cannot be confident that its officers conduct enforcement and compliance activities consistently across the State, and that licensees are complying with their licence conditions and the Act.

The EPA does not regularly analyse the operational performance of its regional offices

The EPA does not have an effective internal reporting framework that monitors the operational performance of regional offices with regular reports to the EPA's Chief Executive Officer and the EPA Board.

EPA regions operate with broad discretions. However, the EPA has not balanced this devolved regional structure with an effective governance approach.

The EPA's Regulatory Services Division prepares a quarterly report that summarises regulatory activities conducted across the EPA. This report is only submitted to the Chief Environmental Regulator. The report includes the number of penalty notices, formal warnings, official cautions and show cause letters issued in the past three months compared to the equivalent three month period in the previous year. It also reports the number of annual returns received, licence site inspections undertaken and licence variations approved in the past three months. This data is aggregated across the EPA rather than reported by region or office. The report also includes the number of pollution incident reports received over the past 12 months on a branch by branch basis.

The report presents no analysis of any trends this data shows, and most importantly does not list the type and number of non-compliances or breaches the EPA identified. If, for example, the regulatory response data was measured against the identified non-compliances or breaches by region or office, this could give a useful measure of the consistency of the EPA's regulatory performance.

There is a quarterly report on progress in implementing the EPA's 2017–21 Strategic Plan prepared for the EPA Chief Executive Officer and the EPA Board. However, like the quarterly report prepared for the Chief Environmental Regulator, this primarily reports the number and type of regulatory actions taken without listing the number of non-compliances and breaches of the Act detected by the EPA. Some of the measures in the report may not be appropriate, such as using lost time to injury as a measure of governance. Other measures do not accurately reflect publicly reported information, such as reporting a 99.8 per cent compliance rate for licensees on their incident management plan where the EPA's compliance audits and its 2016–17 annual report show significant non-compliances in this area.

The EPA provides limited guidance for its regulatory officers

During our fieldwork, we were advised at one regional office that it was no longer easy to access relevant policies and procedures. This occurred following the conversion from a paper-based and centralised model to an electronic and decentralised system. This was exacerbated by the devolved regional structure, with individual regions (and offices) developing their own procedures and approaches which were not always documented. This advice is consistent with our experience during fieldwork, and two internal reviews the EPA recently commissioned following an ABC 4 Corners program on the EPA and waste management in New South Wales aired in August 2017. The first review and report, dealing with the EPA's policies, procedures and practices for the management of corruption risk, conflicts of interest and regulatory capture found that many EPA procedures presented to the review by the EPA:

- did not have a clear status, and there was no clarity in how they were distributed or were to be used
- were outdated, and not integrated or cross referenced to current standard operational procedures
- were marked draft and had not been endorsed as approved.

This report recommended that the EPA conduct a stocktake of all procedural instructions and guidelines for staff to ensure contents are current, accessible and cross referenced with corporate instructions. Obsolete instructions should be removed from the system. We were advised by the EPA that the second internal review and report dealing with the EPA responses to illegal dumping arrived at similar conclusions on the quality of the EPA's policies and procedures.

The EPA advised during the audit it has embarked on a program to update and improve the dissemination of EPA policies and procedures relating to its regulatory role, and it anticipates this will take up to 18 months to complete. The EPA has been aware of these deficiencies in its policies and procedures for at least two years but has yet to proactively address them.

The EPA does not regularly and systematically measure environmental outcomes from its regulatory operations

Under the Act, and as stated in its 2016–17 annual report, the EPA has primary responsibility for the regulation of waste and water pollution in New South Wales. A key aim of the Act is for the EPA to protect, restore, and enhance the quality of the environment, having regard for the need to maintain ecologically sustainable development. Another key aim is to make progressive environmental improvements, including reducing pollution at its source.

The EPA's licensing activities include setting levels of pollutants that licensed premises can discharge into water. To address the Act's aim of reducing pollution at its source, we expected that the EPA would be measuring the levels of pollutants its licensing scheme was allowing to be discharged into water as well as the actual amounts being discharged on a regular basis. This would determine whether the level of pollution it was licensing and levels of actual discharges were in fact reducing. This would be a good overall measure of its environmental performance, bearing in mind the aim of the Act. However, the EPA is not using such measures.

The EPA references various monitoring tools that give some indication of overall pollution levels, such as the annual National Pollutant Inventory (NPI) report published by the Australian Government. The NPI report measures the emissions of 93 pollutants discharged from some 900 facilities in New South Wales, 147 of which are premises licensed to discharge pollutants into water.

In the 2016–17 NPI report, emissions into water of major pollutants had increased:

- phosphorous increased by 7 per cent
- nitrogen increased 6 per cent
- ammonia increased by 8 per cent
- fluoride increased by 6 per cent.

However, levels for air pollution generally showed a steady decline.

We note that the data used for the NPI is self-reported by the relevant facilities using approved measurement standards. The EPA is not required to validate the data.

While the NPI report is referred to the EPA executive and the Board, we found no evidence that it was being used as a strategic tool to measure the EPA's environmental performance overall, nor to direct its future strategy to achieve the aims of the Act.

The EPA publishes a triennial State of the Environment (SoE) report. Like the NPI report, some of the data regarding overall pollution levels is self-reported by licensees. In the 2015 SoE report, the EPA reported on licensed discharges under the load based licensing scheme to open marine water and estuaries between 2000–01 to 2012–13. This showed that levels of total suspended solids, total nitrogen, and total phosphorus over that period were relatively stable. However, there was no equivalent reporting of licensed discharges into inland water for these or other pollutants. In addition, the range of pollutants in this report is limited when compared to the NPI report.



3. Setting licence conditions for water pollution



The EPA does not apply a consistent approach to setting licence conditions for discharges to water.

The requirements for setting licence conditions for water pollution are complex and require technical and scientific expertise. In August 2016, the EPA approved guidance developed by its technical experts in the Water Technical Advisory Unit to assist its regional staff. However, the EPA did not mandate the use of the guidance until mid-April 2018. Up until then, the EPA had left discretion to regional offices to decide what guidance their staff use. This meant that practices have differed across the organisation. The EPA is yet to conduct training for staff to ensure they consistently apply the 2016 guidance.

The EPA has not implemented any appropriate internal controls or quality assurance process to monitor the consistency or quality of licence conditions set by its officers across the State. This is not consistent with good regulatory practice.

The triennial 2016 audit of the Sydney drinking water catchment report highlighted that Lake Burragorang has experienced worsening water quality over the past 20 years from increased salinity levels. The salinity levels were nearly twice as high as in other storages in the Sydney drinking water catchment. The report recommended that the source and implication of the increased salinity levels be investigated. The report did not propose which public authority should carry out such an investigation.

To date, no NSW Government agency has addressed the report's recommendation. There are three public authorities, the EPA, DPE and WaterNSW that are responsible for regulating activities that impact on water quality in the Sydney drinking water catchment, which includes Lake Burragorang.

Recommendation

By 30 June 2019, to address worsening water quality in Lake Burragorang, the EPA should:

4. (a) review the impact of its licensed activities on water quality in Lake Burragorang, and
(b) develop strategies relating to its licensed activities (in consultation with other relevant NSW Government agencies) to improve and maintain the lake's water quality.

The EPA has detailed guidance for setting licence conditions for water pollution

The mechanisms the EPA uses for setting the amount of allowable discharge of pollutants into drinking water catchments by licensees are in section 45 of the Act, and the EPA's 2016 Operational Guidance on Water Pollution.

Section 45 sets out the factors the EPA considers when exercising its licensing functions, including issuing licences and their conditions. Factors include:

- preventing the degradation of the environment by reducing to harmless levels the discharge of substances into water
- taking into account the pollution caused or likely to be caused by the carrying out of the activity or work concerned
- the practical measures that could be taken to prevent, or control that pollution
- where an activity causes or is likely to cause water pollution, the practical measures that could be taken to restore or maintain environmental values.

In setting conditions, the EPA needs to maintain ecologically sustainable development. Ecologically sustainable development is described as requiring the effective integration of social, economic and environmental considerations in the decision-making process. This means that the EPA must consider both the environmental and economic consequences of its licensing related decisions.

The Operational Guidance on Water Pollution, developed by EPA's Water Technical Advisory Unit aims to support decision-making by EPA officers in relation to their water pollution licensing and management functions. The guidance promotes consistent and contemporary procedures and practices for considering and managing the potential impacts of water pollution from EPA regulated activities. It also outlines a range of practical measures that can be taken to restore or maintain the environmental values of water. The document includes:

- the EPA's statutory framework for managing water pollution, including licensing
- the framework for considering the impacts of an activity on the environmental values of water and the practical measures that can be taken to maintain those values
- guidance on drafting conditions for a licence with a discharge into water.

Environmental values of water are defined as particular values or uses of the environment that are important for a healthy ecosystem or for public benefit, welfare, safety or health and that require protection from the effects of pollution.

Key EPA operational water policy and advice in the document is based on the guiding principles that:

- where environmental values are being achieved in a waterway, they should be protected
- where the environmental values are not being achieved, all activities should work towards their achievement over time.

In its regulatory decisions, the EPA must balance consideration of the pollution being caused, the impact of the pollution, the environmental values of water receiving the pollution and the practical measures that can be taken to maintain or restore these environmental values.

The guidance is consistent with the following frameworks that set water quality standards to be met in drinking water catchments:

- National Water Quality Management Strategy (adopted by the NSW Government), which provides fundamental policies and water pollution management philosophies, and water quality benchmarks
- NSW Water Quality Objectives, which provides the agreed environmental values and long-term goals for assessing and managing the long-term impacts of an activity on water
- Australian and New Zealand Environment and Conservation Council Guidelines which provide a framework to consider the environmental values of water and how a discharge will impact on receiving water.

The EPA has limited effectiveness in setting licence conditions for discharges into water

We found inconsistent approaches to setting water pollution limits, and mixed adoption of the 2016 guidance by the EPA regional offices we visited. The EPA lacks an effective process to monitor and analyse decisions made on pollutant concentrations and loadings to ensure a more consistent and compliant approach by the regions, as well as testing the effectiveness of the guidance.

In August 2016, the EPA approved updated guidance to assist its regional staff to set licence conditions for the discharge of pollutants into water, but its use was not mandated at that time. The EPA has only mandated the use of this guidance since mid-April 2018 to ensure a consistent approach by its officers. Up until then, the EPA left discretion to regional offices to decide what guidance their staff use. This meant that practices have differed across the organisation.

In our fieldwork in the Wollongong, Bathurst, Queanbeyan and Newcastle EPA regional offices we received mixed responses regarding the use of the guidance when setting licence conditions. One office considered the current version much improved, and strongly endorsed its use. This office also noted that it was still not widely used across regions despite being issued for over 18 months. It gave an example where conditions for water discharge were set in a way contrary to advice in the guidance and which had to be amended. The office considered a targeted training program would be appropriate to draw attention to the benefits of the guidance, and drive better uniformity across the regions.

Another office advised it had only recently commenced use of the 2016 guidance, and up to then had used the earlier version, supplemented by the experience of various operations officers in the region. The office had also relied on input from the Water Technical Advisory Unit if considered necessary.

While the EPA expects regional offices to use the 2016 guidance, it only recently issued clear instructions to do so. In mid-April 2018, the Chief Environmental Regulator advised all EPA staff to refer to the updated operational guidance when making regulatory decisions relating to discharges into water.

The EPA could not demonstrate how it ensures its officers use the 2016 guidance, and that its use results in consistent decisions on licence conditions dealing with water pollution. The EPA advised us that it was developing an on-line training program that would be launched in the first half of 2018, and tailored face-to-face training is expected to commence in the second half of 2018. The EPA has not advised whether attendance will be mandatory for EPA officers responsible for setting conditions for licensed discharges into water.

The responsible public authorities are not effectively addressing worsening water quality in Lake Burragorang

Lake Burragorang stores most of Sydney's drinking water supply and is part of the Sydney drinking water catchment.

In June 2017, the Minister for Energy and Utilities received the triennial 2016 Audit of Sydney Drinking Water Catchment report, required to be tabled in the NSW Parliament in accordance with Section 42 of the *Water NSW Act 2014*. The report is the eighth in a series which commenced in 1999 and was prepared by an independent audit team with input from government and non-government organisations and individuals. The report provided information about the health of the Sydney drinking water catchment area during the period 1 July 2013 to 30 June 2016. The audit determined the condition and trends of several indicators, including those relevant to water quality.

The report highlighted that Lake Burragorang has experienced worsening water quality over the past 20 years from increased salinity levels. The salinity levels were nearly twice as high as in other storages in the Sydney drinking water catchment. The report also stated that saline discharges from the Springvale coal mine into the Cocks River, which flows into Lake Burragorang, were a major contributor to the high salinity levels. In response, the EPA advised the report authors that this discharge will be transferred to the Mt Piper power station for reuse. The development application for this project indicates a completion by mid-2019. The report recommended that the sources and implications of the increased salinity levels be investigated without proposing the public entity to carry out such an investigation.

The report identified several public entities that have regulatory responsibility for various activities impacting on water quality:

- the Department of Planning and Environment (DPE) is the consent authority for coal mining activities under the *Environmental Planning Assessment Act 1979*
- WaterNSW is responsible for water quality in the Sydney drinking water catchment under the *Water NSW Act 2014*
- the EPA is responsible for regulating water pollution under the Act.

The EPA also licenses and regulates coal mining activities, and may include conditions that allow limited discharges of pollutants into water. While the pollution impacting on water quality in Lake Burragorang may not be caused by a breach of licence conditions for a specific mine, it may be a consequence of mining activity carried out under a licence.

The EPA has advised that it assumes regulatory responsibility for compliance with licence conditions, and the effectiveness of such licence conditions for discharges into water directly caused by mining operations. However, it advised it does not assume regulatory responsibility when licensed mining activity may indirectly result in pollution of water.

That said, the EPA's 2016 Operational Guidance on Water Pollution states that the EPA regulates any pollution arising from activities at licensed premises. Clause 45 of the Act requires the EPA to exercise its licensing functions to prevent the degradation of the environment by such means as promoting pollution prevention and adopting the principle of reducing to harmless levels the discharge into water of substances likely to cause harm to the environment. Clause 58 of the Act allows the EPA to unilaterally amend and add licence conditions if they are not achieving this outcome.

In response to the report's recommendation regarding the worsening water quality in Lake Burragorang, we consider that the EPA's responsibility under the Act means that it should review the impact of its licensed activities and develop strategies relating to its licensed activities (in consultation with other relevant NSW Government agencies) to improve and maintain the lake's water quality.



4. Monitoring compliance



The EPA's risk-based approach to monitoring compliance of licensees has limited effectiveness.

The EPA tailors its compliance monitoring approach based on the performance of licensees. This means that licensees that perform better have a lower administrative fee and fewer mandatory site inspections.

However, this approach relies on information that is not complete or accurate. Sources of information include licensees' annual returns, EPA site inspections and compliance audits, and pollution reports from the public.

Licensees report annually to the EPA on their performance, including compliance against their licence conditions. The Act contains significant financial penalties if licensees provide false and misleading information in their annual returns. However, the EPA does not systematically or consistently validate information self-reported by licensees, or consistently apply regulatory actions if it discovers non-compliance.

Self-reported compliance data is used in part to assess a licensed premises' overall environmental risk level, which underpins the calculation of the administrative fee, the EPA's site inspection frequency, and the licensee's exposure to regulatory actions. It is also used to assess the load-based licence fee that the licensee pays.

The EPA has set minimum mandatory site inspection frequencies for licensed premises based on its assessed overall risk level. This is a key tool to detect non-compliance or breaches of the Act. However, the EPA has not issued a policy or procedures that define what these mandatory inspections should cover and how they are to be conducted. We found variations in how the EPA officers in the offices we visited conducted these inspections. The inconsistent approach means that the EPA does not have complete and accurate information of licensees' compliance. The inconsistent approach also means that the EPA is not effectively identifying all non-compliances for it to consider applying appropriate regulatory actions.

The EPA also receives reports of pollution incidents from the public that may indicate non-compliance. However, the EPA has not set expected time frames within which it expects its officers to investigate pollution incidents. The EPA regional offices decide what to investigate and timeframes. The EPA does not measure regional performance regarding timeframes.

The few compliance audits the EPA conducts annually are effective in identifying licence non-compliances and breaches of the Act. However, the EPA does not have a policy or required procedures for its regulatory officers to consistently apply appropriate regulatory actions in response to compliance audit findings.

The EPA has not implemented any effective internal controls or quality assurance process to check the consistency or quality of how its regulatory officers monitor compliance across the State. This is not consistent with good regulatory practice.

Recommendations

To improve compliance monitoring, the EPA should implement procedures to:

5. **by 30 June 2019**, validate self-reported information, eliminate hardcopy submissions and require licensees to report on their breaches of the Act and associated regulations in their annual returns
6. **by 31 December 2018**, conduct mandatory site inspections under the risk-based licensing scheme to assess compliance with all regulatory requirements and licence conditions.

The EPA does not effectively validate self-reported compliance information from licensees

Each licensee must submit an annual return to the EPA to report its performance and compliance with its licence conditions and other statutory requirements, including:

- activities to which the licence applies and applicable administrative fee category
- number of pollution complaints
- concentrations, volume or mass monitoring summary for each monitoring point identified in the licence
- details of any non-compliances to licence conditions
- statement of compliance to prepare and maintain a mandatory incident management plan and its activation history
- statement of compliance to publish pollution monitoring data in accordance with licence conditions
- statement of compliance on the Environmental Management Systems and Practices in use.

The EPA uses the information in annual returns from licensees as a significant input to its risk-based approach. For example, the information provided in the statement of compliance on Environmental Management Systems and Practices is used to recalibrate the overall environmental risk level for the licensed premises under the risk-based licensing scheme and determine the inspection frequency. This could also result in increased or reduced licence administrative fees payable to the EPA. The information is also used to calculate the licensee's payments to the EPA under the load-based licensing scheme, if applicable.

Annual returns are legally binding statements that must be signed and certified by persons with appropriate authority depending on whether the licensee is an individual, company, public authority or local council. The annual return form states that 'it is an offence to supply any information in the annual return that is false or misleading in a material respect, or to certify a statement that is false or misleading in a material respect. There is a maximum court-imposed penalty of \$250,000 for a corporation or \$120,000 for an individual'. The EPA can also issue a penalty notice up to \$8,000. This is designed to mitigate some of the risk associated with the EPA relying on self-reported information and recognises the importance of this information for its regulatory responses.

However, the EPA is not effectively applying these available regulatory actions to respond to false and misleading annual returns. Data the EPA provided indicates that no financial penalties have been applied for false and misleading annual returns in the past two years. The EPA has not provided data on other regulatory actions which did not involve financial penalties it has applied for false and misleading annual returns over the past two years.

In November 2017, the EPA wrote to a licensee to advise it had concerns with an annual return submitted four months late. The EPA's concerns included that the annual return:

- was false as it had not reported seven non-compliances in the applicable period. The EPA had issued cautionary letters but no financial penalties for six of the non-compliances
- was not signed by an authorised person of the licensee
- indicated the licensee had no incident management plan in place.

In the letter, the EPA requested the licensee submit a revised annual return and did not indicate any regulatory actions that EPA proposed to take. The EPA has advised it took no regulatory action for either the false information provided or late submission of the annual return. This is despite the poor compliance record of the licensee during the applicable period. Considering the risks of self-reported information, this lenient response from the EPA undermines the importance placed on the need for licensees to submit accurate annual returns.

Financial penalties for false or misleading annual returns are in addition to other financial penalties that the EPA can seek to have imposed under the Act. For example, under Part 5.7A, failure to prepare an incident management plan, or to keep this a plan on the licensed premises, or to test such plans in accordance with regulations can incur maximum penalties of up to \$1.0 million for corporations and \$250,000 for individuals.

In the case of a materially false or misleading information on compliance with incident management plan requirements, the EPA can take regulatory action for a licensee issuing a false and misleading annual return in addition to the licensee's failure to have a compliant plan in place, to incentivise accurate self-reporting in annual returns. The size of the maximum penalties available for either non-compliance indicates the importance the Act places on compliance.

We note that licensees are not required to report on their compliance with applicable requirements of the Act and associated regulations. The EPA should include such a requirement to strengthen the effectiveness of annual returns.

The EPA provided us with annual return data for the period January 2014 to January 2017 that listed all water based self-reported non-compliances. Only 20 licensees (or around 2.7 per cent) in this three-year period disclosed 24 instances of non-compliance with the requirement to test or update the incident management plan. However, the EPA's compliance audits of such plans in 2016 found licensees at 39 per cent of the 24 licensed premises audited had failed to test or update their plans.

The EPA states that it analyses non-compliances reported by licensees to determine what action to take. However, the EPA does not have procedures that staff are required to use to assess annual returns. We found that individual offices are free to determine their own approach. When we questioned the EPA regional offices and the Regulatory Reform and Advice Branch on what mechanisms are used to validate self-reported data in annual returns, we received a variety of responses. These included:

- checking the veracity with data in the EPA licence management system on details such as address, activities, licence holders, licence conditions, and water pollution data from past returns (only reported by one office)
- reviewing pollution incident reports made by the community through the EPA telephone reporting system (Environment Line), pointing to potential licence breaches (common)
- reviewing findings from the EPA compliance audit program
- reviewing the results of mandatory site inspections carried out under the risk-based licensing scheme. These could include a check on data being kept on the premises, and whether pollution monitoring as prescribed in the licence conditions and reported as compliant was actually being carried out
- checking whether licensees collected samples as part of their monitoring and testing process as required
- relying on the certification process, which exposes companies and individuals to severe penalties if information in annual returns are found to be materially false or misleading, acts as a strong incentive for accurate returns.

This inconsistent approach means that the EPA cannot provide assurance that non-compliances are accurately and consistently identified by its regulatory officers.

Exhibit 4: Case study - Failure to investigate potential false or misleading annual return

In January 2018, the EPA penalised a licence-holder for an incident that occurred in September 2017 and resulted in wastewater discharging into a stormwater drain illegally. The cause was a corroded piece of equipment that fell into an effluent tank, causing an overflow from the tank. The EPA issued a penalty notice of \$15,000 for the unlicensed discharge, the maximum financial penalty the EPA can apply without mounting a court prosecution.

The EPA also issued an official caution to the licensee for its failure to comply with the standard licence condition to properly maintain its equipment. Noting that annual returns require a statement of compliance with licence conditions, the EPA did not investigate whether it could take regulatory action against the company or signatories for submitting a false or misleading annual return, even though the improperly maintained equipment was a breach of its licence conditions. This is because the EPA's compliance policy does not require staff to review annual return accuracy, and consider regulatory action if found inaccurate, when dealing with incidents which result from licence breaches.

Source: The Environment Protection Authority 2018.

To deter inaccurate annual returns, there must be consistent detection and application of available regulatory actions. Currently, when the EPA assesses the regulatory response to pollution incidents at licensed premises, it does not consider whether there was materially false or misleading information in the annual return, or to pursue appropriate available regulatory actions for this breach in addition to regulatory actions for other potential associated breaches. As a result, licensees have little incentive to provide accurate information in their annual returns which is detrimental to them.

We reviewed five recent annual returns to test their compliance with requirements. We found the following potential non-compliances in two of these:

- one was submitted late and therefore potentially liable to a penalty of \$1,500 for individuals and \$3,000 for corporations; did not certify whether the incident management plan had been tested in the last 12 months as required; and did not list dates the incident management plan was retested following its activation
- one listed a retest of the incident management plan on the same day it was activated.

In analysing another annual return, we also noted that one licensee had been experiencing a specific emission exceedance since 2006. This has yet to be resolved by the EPA.

For late submissions, the EPA advised there is a policy allowing a 14-day grace period before it considers whether to apply a regulatory action. If the licensee with a submission after the grace period has not received an official caution or penalty in the past three years then under the policy the EPA issues an official caution. For the late annual return we reviewed, the EPA advised it will be issuing an official caution as per the policy.

For the incomplete annual return where there was no certification whether the incident management plan had been tested in the past 12 months, the EPA advised it made enquiries with the licensee, who provided evidence that the plan had in fact been tested as per requirements. However, the EPA only raised the issue of the incomplete annual return with the licensee six weeks after the annual return was submitted. We consider an incomplete annual return should not be accepted, and should be returned immediately to the licensee as incomplete, and its resubmission subject to the policy for late submissions. The EPA advised that it has two forms of submission, hardcopy and electronic. Under electronic submission, incomplete returns cannot be lodged as the system will reject them. However, if received in hardcopy, there may be a delay in the EPA assessing the annual return for completeness, depending on workloads, thereby compromising the 14-day grace period policy for late submissions. This was the case for the one annual return we reviewed.

The EPA should eliminate paper-based annual returns as a productivity measure, and to better control incomplete returns.

The EPA advised that for the annual return that did not list dates of retesting of the incident management plan following its activation, the licensee, while activating the plan, did so for events that were not classified as incidents under the Act, and therefore the retesting was not needed.

The EPA has not satisfactorily explained why it considers retesting an incident management plan on the same day it was activated to deal with an incident to be acceptable.

In addition to self-reporting through annual returns, under Part 5.7 of the Act, licensees must immediately notify the EPA, and other relevant agencies, if a pollution incident occurs and causes or threatens material harm to the environment. Failure to do so can result in fines of up to \$2.0 million (plus \$240,000 per day if the offence is allowed to continue) for corporations, or \$500,000 (plus \$120,000 per day if the offence is allowed to continue) for individuals.

During our visits to EPA regional offices, we found no evidence that self-reported pollution incidents were matched to a licensee's annual return to identify whether they had breached their reporting obligations.

Mandatory site inspections are not effective in identifying licensee performance

The EPA can detect breaches of licence conditions and legislative requirements during mandatory site inspections of licensed premises under the risk-based licensing scheme.

To underpin the operation of the risk-based licensing scheme, the EPA has set mandatory targets for the minimum number of site inspections that it conducts of licensed premises for each overall risk level. In September 2018, EPA offices will begin quarterly reporting on their performance against these targets to the EPA Regulatory Practice Executive Subcommittee.

We consider these site inspections are critical to the effective operation of the risk-based licensing scheme, as they are a key mechanism for the EPA to detect non-compliances with licence conditions and breaches of the Act and can also be used to test the validity of self-reported compliance statements made in licensee's annual returns. This is supported by the need for EPA offices to submit quarterly reports to the EPA Regulatory Practice Executive Subcommittee.

However, the EPA has not defined procedures for officers conducting these mandatory site inspections. For example, there is no inspection plan developed for each licensed premises outlining what would be checked during the inspection, based on the key risks identified in the licence conditions and the environmental risk assessment used to set its risk level.

No EPA office that we visited had a documented procedure for conducting these inspections. Two of the four EPA offices we visited considered that any site visit, irrespective of what it was for, could be recorded as a mandatory inspection under the risk-based licensing scheme. For example, the visit may have been in response to a pollution incident reported through the Environment Line, and may have only dealt with that particular incident. The EPA has also advised that a site visit can be recorded as a mandatory site inspection, provided it is undertaken with the licensee present.

The EPA expects its officers to have appropriate capability in conducting site inspections. In October 2016, the EPA issued its training strategy that defined undertaking inspections as one of six occupation specific capabilities for relevant personnel. The EPA has also developed an inspection training course. However, the EPA does not require operational officers who carry out site inspections to complete the training course. EPA managers can consider whether the training is appropriate for their team.

The EPA has indicated the importance of these inspections for licensed premises with an overall moderate or high-risk rating by requiring more frequent inspections, as well as applying a higher annual administrative fee for licensees with a poor compliance and enforcement history. However, it has not issued a policy or mandated standard procedures to ensure an appropriate and consistent approach in how its officers conduct the inspections. In addition, the EPA's published information about the risk-based licensing scheme does not provide licensees with details about how it will carry out the inspections. This negates the value of the site inspections to the risk-based licensing scheme.

We consider a mandatory site inspection must include a comprehensive and consistent assessment of a licensee's operations, based on the key risks identified in the risk assessment process. In the absence of a defined and mandatory procedure, the EPA cannot be confident that appropriate and consistent inspections are carried out and it therefore cannot assure the effectiveness of the risk-based licensing scheme.

The EPA's compliance audit program identifies non-compliances but EPA's regulatory response is inconsistent

The EPA's Environmental Audit Unit (audit unit), staffed by experienced and certified environmental auditors, conducts regular compliance audits to detect breaches of licence conditions and the Act. Compliance audits are usually unannounced and conducted in accordance with the EPA's Compliance Audit Handbook. The EPA provides a copy of the audit report, and a follow-up action program based on the audit findings, on the EPA's public register.

The audit unit conducts two other types of audits - Strategic Environmental Compliance Performance reviews and Focussed audits.

Strategic Environmental Compliance Performance reviews focus on a particular industry sector or geographical region. These reviews aim to encourage industries to improve environmental performance. The review can combine assessing licence compliance with identifying best environmental management practices. The audit unit selects the review industry or geographical area by assessing major environmental and community concerns.

Focussed audits are conducted on licensed premises with an identified or suspected issue of concern. EPA regional offices identify premises to be audited.

Exhibit 5: Number of compliance audits completed, or in progress

Audit type	Completed in 2015–16	Completed in 2016–17	Completed between July 2017 and April 2018	In progress
Compliance audits	33	54	23	41
Strategic Environmental Compliance Performance review	--	--	1	--
Focussed audits	--	--	--	--

Source: Environment Protection Authority 2018.

Where the audit unit identifies non-compliances, it includes an action plan in the audit report detailing the corrective actions licensees are required to complete within set timeframes. The audit unit and the EPA regional office staff check that licensees implement the audit recommendations.

However, the EPA policy is generally not to apply regulatory actions as a result of any non-compliances found in its compliance audits. The EPA will apply regulatory action if the licensee fails to provide information on the progress of implementing the corrective actions for high-risk non-compliances. The only other enforcement related policy is if the compliance audit observes a non-compliance that is a serious breach of the law and is likely to cause, or is causing, environmental harm. In this case, the auditor should terminate the audit and have the EPA region conduct an investigation to determine whether regulatory action should be taken.

In its 2016–17 annual report, the EPA reported on its compliance audit of incident management plans. These plans are critical to ensure that licensees can take prompt and effective action if a pollution incident was to occur from licensed activities. The audit assessed 24 licensed premises for their compliance with incident management plan requirements.

While the audit found that all assessed licensees had developed an incident management plan, and that they were complying with 90 per cent of requirements, a large number had legislative non-compliances. These were:

- 57 per cent of the incident management plans had maps that did not show key information, such as the location of potential pollutants or the area most likely to be affected by a pollution incident
- 52 per cent of incident management plans did not list all on-site pollutants in their pollutant inventory
- 39 per cent of licensees did not test their plans as required, or had not provided details of tests that had been conducted.

Penalties for these types of non-compliances can be severe. Failure to prepare a complying incident management plan, or to keep a complying plan on the premises, or to test such plans in accordance with regulations can incur individual maximum penalties of up to \$1.0 million for corporations and \$250,000 for individuals.

In its response to the compliance audit outcome, the EPA stated it would:

- ensure licensed premises not audited complied with incident management plan requirements
- ensure incident management plans reflected any changes to operations at licensed premises
- encourage licensed premises not audited to use their annual returns to correctly assess and report on compliance with incident management plan requirements.

We asked the EPA what actions it took to ensure non-audited licensed premises complied with incident management plan requirements, and what regulatory actions it took to address each of the non-compliances identified in the compliance audit undertaken by its audit unit.

The EPA advised that in 2014, the South East region conducted an audit program assessing compliance with incident management plan requirements for all 160 licences in the region. In 2016, the Central West operations unit conducted a compliance program focussing on licence administrative requirements for 134 licences. The EPA reported whether the licensed premises had an incident management plan, not whether the plan complied with requirements.

The EPA also stated that the objective of EPA compliance audits is to improve licensees' environmental performance, and as such the EPA works with licensees to address issues of non-compliance in a cooperative manner. The EPA normally does not initiate regulatory actions when such audits identify non-compliances. The EPA was not able to provide any instances where regulatory action was taken following the discovery of non-compliances with licence conditions, or breaches of the Act through a compliance audit.

We acknowledge that the need to work cooperatively with licensees to improve their performance is a component of good practice regulation. However, the EPA's policy of applying regulatory responses only in instances of serious breaches which can harm the environment does not provide an effective incentive for licensees to abide by their licence conditions or the Act. For example, the lack of an incident management plan would not be considered a serious breach under the EPA definition, and such a finding during a compliance audit would not expose the licensee to a regulatory response. This is despite the fact that this breach of the Act can incur a maximum penalty of \$1.0 million.

We consider the EPA needs to use the imposition of a regulatory action for such breaches or non-compliances as a rule, rather than an exception. This need not be a financial penalty, but a regulatory action at the lower end of the scale such as a formal warning for licensees with a good compliance history. This would have an impact on a licensee's environmental management assessment, with potential increases in the annual administrative fees and overall risk level under the risk-based licensing scheme.

There is limited management oversight of how reported pollution incidents are investigated

Another major source of information about possible non-compliances of licence conditions is through the Environment Line reporting system for pollution incidents. Pollution incidents can derive from many sources. If the EPA is the appropriate regulatory authority, it is required to deal with the reported incident. Not all reported incidents involve licensed premises. (See Exhibit 6 for the pollution incident response process.)

Exhibit 6: Pollution incident response process

The Environment Line Operator (the operator) validates that the EPA is the appropriate regulatory authority (ARA) and then enters details from callers into the EPA's case management system to create an incident record. The incident is allocated to the appropriate EPA Work Unit and to an EPA compliance officer for investigation.

On receipt of the case, the assigned EPA compliance officer must prioritise the incident and perform an initial desk-top investigation to confirm that the EPA is the ARA, and confirm that there is an incident to investigate. The EPA may determine that there is no incident due to a number of factors including; discussion with the informant determining that there is no incident, the location not being identified, inability to contact the informant or the activities occurring being allowed.

Where it is determined that there is no incident the compliance officer will close the case with no further action.

Where the EPA is not the ARA, the compliance officer will contact the informant, and advise the correct ARA and forward the incident on with the informant's permission.

Where it has been determined, through the desktop assessment, that further investigation is required the incident in the case management system is closed as 'Investigation Continues via Regulatory Activity'. This forces the case management approval workflow to send the incident to the compliance officer's Unit Head or Manager for approval. When the outcome is approved the case management system creates an investigation, known as a regulatory activity, with additional features and workflow for the investigation to continue. The investigation then continues. Dependent on the investigation the regulatory outcome may include:

- no further action
- formal warning
- an official caution
- penalty notice (or other type of notice such as a clean-up or prevention notice)
- prosecution
- enforceable undertaking.

When the compliance officer is ready to close the investigation, the recommended regulatory actions are sent to their unit head, manager and/or director for approval. In addition to the findings within the case management system the compliance officer will include an investigation decision making report and a copy of any notices to be issued, as generated by the EPA's Permit and Licence Management System (PALMS).

Investigation Decision Making Reports/Breach are used to outline the investigation and how a compliance officer has come to the conclusion for the recommended action. This is in addition to the notes made within the case management system and outlines the evidence gathered, the suspects previously regulatory history, the incident itself and other relevant information.

Where a prosecution or enforceable undertaking is the recommended regulatory outcome, a breach report is sent to the appropriate director for endorsement and approval within one month (for offences that have a statute of limitations of 12 months) or within two months (for offences that have a statute of limitations of 24 months or greater), of the EPA becoming aware of the offence. This process allows specialist resources to be assigned to the case early in the investigation, including specialist investigators and lawyers, to ensure the best possible regulatory outcome is achieved. Where a prosecution or enforceable undertaking proceeds the investigation within the case management system remains open until a prosecution outcome is achieved or the enforceable undertaking is executed.

Source: Environment Protection Authority 2018.

Up until mid-February 2018, the EPA's case management system allowed EPA compliance officers to close most incident reports without review. Only recommendations for regulatory action needed the unit head's or manager's approval before the system allowed the incident record to be closed.

Prior to February 2018, the EPA allowed regional offices to apply their own business rules and delegations to review other actions in response to pollution incidents reported in the Environment Line reporting system. As a result, we found inconsistencies across the four EPA offices we visited.

Only the Waste and Resource Recovery Branch required the Regional Compliance Manager to approve an incident report being closed, irrespective of whether a regulatory action was recommended. We consider this to be a good practice approach to avoid premature close outs on reported incidents, as well as being a tested corruption prevention strategy identified by the ICAC. In June 2017, the ICAC's report on the conduct of Regional Illegal Dumping Squad Officers stated, 'an individual officer should not be the sole determiner of how to approach complaints and have the ability to close investigations without management approval'.

The EPA was aware of the shortcomings in its case management system and confirmed this had resulted in an inconsistent approach by regions in managing incidents, and any resultant regulatory actions. In addition, the case management system and the EPA's licensing management system are not integrated and data is manually entered if incidents are transferred to the licensing management system. This results in increased demand on EPA resources, and the potential that some pollution incidents get missed.

In March 2016, the EPA Chief Executive approved funding for a project to address these deficiencies. In the submission to the Chief Executive it was stated that 'the regions are requesting guidance on regulatory functions that they perform, and in particular documenting business rules to ensure clarity and consistency'. To date, the EPA had produced a new Guideline to Case Management and Taxonomy of Terms, to define the standards for the management of cases within the EPA, from receipt of a complaint or notification of an incident through to a final regulatory outcome. The guideline and taxonomy of terms were approved by the EPA executive and issued mid-February 2018. The guideline, and its associated processes and supporting tools, cover all pollution incidents reported to, or identified by, the EPA not just those reported via the Environment Line.

We note that the guideline requires a unit head's approval to close an incident report without undertaking an investigation following initial inquiries by the compliance officer. The guideline also mandates 22 other business rules relating to case management by EPA officers.

The EPA is introducing the new case management guidelines through a series of information sessions held at its regional offices.

The EPA has advised it is developing a new bespoke electronic system to integrate the case management system with the licensing management system. This system will address the deficiencies in the current electronic host, and is expected to be implemented within the next 18 months.

Timeliness of EPA's responses to pollution incidents

An ABC 4 Corners program reported critically on the timeliness of EPA responses to an alleged water pollution incident from a licensed landfill premise on Mangrove Mountain in mid-2015. This matter was also the subject of community representations to the Parliamentary Portfolio Committee in August 2017.

Based on material provided by the EPA, the allegation on timeliness made by the ABC 4 Corners program and by the community to the Parliamentary Committee appears unfounded. The issue was complicated due to involvement of Local Council officers, but the EPA's responses under the circumstances are considered reasonable.

However, the EPA has not set expected timeframes for officers to complete initial investigations of reported pollution incidents. Regional offices decide what to investigate and the timeframes.

EPA guidelines have clear timeframes for processes that lead to prosecutions through the courts after initial investigations. These stress the need to ensure that statutory time limits are not exceeded for specific breaches.

However, the EPA does not measure regional officers' performance regarding timeframes for investigating pollution incidents, to identify any significant variations.

Exhibit 7 shows the number of incidents relating to water pollution directed to the EPA from Environment Line and the median number of days that the EPA had taken to determine the appropriate action and respond. Data for the time taken to complete regulatory actions where the category involved ongoing investigations was not available.

Exhibit 7: Timeliness of the EPA's response to incidents relating to water pollution between January 2013 and December 2017

The EPA's response	Number of incidents relating to water pollution	Median number of days to determine appropriate action
Referred to other Appropriate Regulatory Authority (ARA) - the EPA has identified another agency as the ARA to respond to the incident	1,435	2
No action – the EPA has determined that no further action is required because there is insufficient evidence, the polluter cannot be identified, or the informant cannot be contacted	2,368	14
Regulatory action taken - the EPA has responded to an incident by issuing a low-level regulatory action, such as issuing an advisory or warning letter	24	49.5
Ongoing investigation - the EPA decides further investigation is required to determine if high-level regulatory action, including financial penalties, may be required	891	11
All the above responses	4,718	8

Source: Environment Protection Authority 2018.



5. Regulatory enforcement



The EPA cannot assure that its regulatory enforcement approach is fully effective.

The EPA's compliance policy and prosecution guidelines have a large number of available regulatory actions and factors which should be taken into account when selecting an appropriate regulatory response. The extensive legislation determining the EPA's regulatory activities, and the devolved regional structure the EPA has adopted in delivering its compliance and regulatory functions, increases the risk of inconsistent compliance decisions and regulatory responses. A good regulatory framework needs a consistent approach to enforcement to incentivise compliance.

The EPA has not balanced this devolved regional structure with appropriate governance arrangements to give it assurance that its regulatory officers apply a consistent approach to enforcement.

The EPA has not issued standard procedures to ensure consistent non-court enforcement action for breaches of the Act or non-compliance with licence conditions. Given our finding that the EPA does not effectively detect breaches and non-compliances, there is a risk that it is not applying appropriate regulatory actions for many breaches and non-compliances.

A recent EPA compliance audit identified significant non-compliances with incident management plan requirements. However, the EPA has not applied regulatory actions for making false statements on annual returns for those licensees that certified their plans complied with such requirements. The EPA also has not applied available regulatory actions for the non-compliances which led to the false or misleading statements.

Recommendation

By 31 December 2018 to improve enforcement, the EPA should:

7. Implement procedures to systematically assess non-compliances with licence conditions and breaches of the Act and to implement appropriate and consistent regulatory actions.

EPA's compliance policy is comprehensive

The EPA's stated regulatory action is based on the following principles:

- responsive and effective
- targeted
- proportional
- firm but fair
- informed
- consistent
- transparent
- ethical and accountable
- collaborative.

When the EPA identifies a licence non-compliance or a breach of the Act, it evaluates the significance to determine the most appropriate response to take. Evaluating 'significance' involves establishing the level of risk to the environment resulting from the non-compliance or breach, as well as the offender's actions, including whether the non-compliance or breach was intentional, opportunistic or unintentional. Action taken by the EPA aims to ensure that environmental impacts are minimised, contained or made good, and the regulatory action applied reflects the seriousness of the incident and acts as a deterrent to re-offending.

When determining the appropriate enforcement action, the compliance policy states that the following factors are to be considered:

- the enforcement measures necessary to ensure compliance and bring about the best environmental outcome
- the seriousness of the incident, based on its actual or potential impacts on the environment and the community
- the potential or actual risk of environmental harm caused by the incident
- voluntary action by the offender to mitigate any harm to the environment from the incident and any mechanisms put in place to prevent reoccurrence
- failure by the offender to notify or delay notification of the incident as required
- failure by the offender to comply with EPA requests, lawful directions or statutory notices
- cooperation with the EPA by the offender and their willingness to commit to appropriate remedial actions
- whether effective implementation of measures or procedures to address impacts are already in place
- the offender's history of compliance with legislation and the frequency of offences committed by them
- whether the offender has made false or misleading statements about the incident
- the culpability of the offender, including any mitigating or aggravating circumstances
- public interest and community expectation about the action taken to provide specific or general deterrence
- any precedent which may be set by not taking action
- statutory time limits for taking action
- the legislative procedures and policy requirements, including rights of appeal.

An EPA officer who issues penalty notices, or recommends prosecution, must be able to prove beyond reasonable doubt that the offender had committed the offence.

EPA regions have discretion in how they apply enforcement action

EPA regions have broad discretions in how they undertake regulatory activities including:

- detecting breaches and non-compliances, including the time taken to investigate incidents reported to the Environment Line
- applying non-court enforcement action, particularly issuing penalty notices, and lesser regulatory responses such as official cautions, advisory letters and formal warnings, notices, directions and orders and show cause letters.

The EPA has not balanced this devolved regional structure with appropriate governance arrangements that give it assurance that its regulatory officers apply an effective and consistent regulatory approach. For example, the EPA's governance lacks:

- mandated policies and standard procedures for some actions
- internal controls to check consistency and quality of work undertaken by its regulatory officers
- formal and mandatory training for regulatory officers in key operational procedures (such as applying consistent regulatory actions for some non-compliances)
- centralised database and effective management oversight (via performance reporting, KPIs, etc).

There is an increased risk of inconsistent compliance decisions and regulatory responses and how they are promulgated across the EPA due to:

- the large number of available regulatory responses and factors (many of which are subjective in nature, and have no specific measures) which should be taken into account when selecting an appropriate response
- the extensive legislation determining the EPA's regulatory activities
- the devolved regional structure the EPA has adopted in delivering its compliance and regulatory functions.

The EPA's Environmental Audit Unit conducted a strategic analysis on compliance and enforcement performance for all licensed premises over the 2012–2014 period. The analysis found that:

- for the 3,696 licence non-compliances self-reported in annual returns, 1,493 (40 per cent) resulted in regulatory action by the EPA
- for the 2,464 Environment line reports made by the community on licensed activities, 1,493 (61 per cent) resulted in regulatory action by the EPA
- the rate of regulatory actions per licence applied by each EPA office ranged from 1.6 to 0.1.

There may be good reasons why there is such a low regulatory action rate per non-compliance, and the large spread of regulatory actions per licence across the EPA. However, the data does indicate potential inconsistencies in how EPA applies enforcement actions. We found the EPA took no follow-up analysis on the reasons for these outcomes.

A good regulatory framework needs a consistent approach to regulation to incentivise compliance.

The EPA Metropolitan Branch conducted a review of penalty notices issued in three of its sections in 2014. The review found that there was not a consistent approach used. Differences identified include:

- use of a show cause letter as part of the investigation was inconsistent (always, sometimes and rarely)
- some sections issued penalty notices, with no, or very minor details of the offence provided and no covering letter
- some sections issue a covering letter with the penalty notice, and provide comprehensive information in the covering letter as to aggravating/mitigating factors, and the EPA's considerations in determining the regulatory response
- signatures on penalty notices and covering letters varied considerably section to section (investigating officer, unit head, regional manager)
- requirements for briefing notes to support a proposed penalty notice are inconsistently provided (always, sometimes, rarely).

As a result, the review recommended the branch use a standard procedure and provided a draft of the procedure. The EPA has not been able to confirm whether the branch has implemented a standard procedure, and whether this was extended to the rest of the EPA.

This level of inconsistency within three sections of one EPA branch illustrates the need for a mandated policy for issuing penalty notices. This should include clear delegations and comprehensive procedures to be promulgated and supported by a comprehensive training program and internal quality assurance program.



6. The EPA's response to illegal dumping



The EPA has implemented the actions listed in the NSW Illegal Dumping Strategy 2014–16. To date, the EPA has also implemented four of the six recommendations made by the ICAC on EPA's oversight of Regional Illegal Dumping Squads.

The EPA did not achieve the NSW Illegal Dumping Strategy 2014–16 target of a 30 per cent reduction in instances of large scale illegal dumping in Sydney, the Illawarra, Hunter and Central Coast from 2011 levels.

In the reporting period, the incidences of large scale illegal dumping more than doubled. The EPA advised that this increase may be the result of greater public awareness and reporting rather than increased illegal dumping activity.

By June 2018, the EPA is due to implement one outstanding recommendation made by the ICAC but has not set a time for the other outstanding recommendation.

The EPA has implemented all actions in the NSW Illegal Dumping Strategy 2014–16

The NSW Illegal Dumping Strategy 2014–16 (the strategy) developed by the EPA and released in June 2014. The strategy was described as an integrated approach to the illegal dumping problem, uniting action on education, enforcement and infrastructure to discourage people from dumping, and to take strong action against those who persisted in doing the wrong thing.

The strategy was supported by a significant funding boost of \$58.0 million over five years through the Waste Less, Recycle More initiative to tackle illegal dumping.

The EPA led the work to deliver the strategy, coordinating efforts of the many stakeholders working to combat illegal dumping, and managing funding for that work. The strategy listed 21 actions for the EPA to implement.

The EPA has comprehensive information to demonstrate it has completed all actions in the strategy.

It has also identified 15 actions that are ongoing and included in the NSW Illegal Dumping Strategy 2017–21, which replaced the 2014–16 strategy.

The Illegal Dumping Strategy 2014–16 did not achieve its target of reducing large scale illegal dumping

In 2011, the NSW Government set a target of reducing by 30 per cent the incidence of large scale dumping detected in Sydney, Illawarra, Hunter and the Central Coast by 2016 in the State plan NSW 2021: A plan to make NSW number one. The strategy incorporated this target as a success measure, and defined large scale illegal dumping as quantities greater than 200 cubic metres.

The target for large scale illegal dumping set in the strategy has not been achieved. The EPA advised a baseline for this target was established in 2010–11, based on illegal dumping incidents reported through the EPA's Environment Line incident reporting system and investigated by the EPA and local councils.

Large scale illegal dumping instances increased from 70 instances in 2011–12 to 151 instances in 2015–16. (See Exhibit 8)

Exhibit 8: Large scale illegal dumping instances 2011 to 2016

Year	Number of large scale illegal dumping instances
2011–12	70
2012–13	69
2013–14	50
2014–15	87
2015–16	151

Source: Environment Protection Authority 2018.

The EPA attributes the large increase to several factors.

The EPA advised it had difficulty capturing and querying illegal dumping data in its Environment Line incident reporting system. To address this issue, the EPA has developed RIDonline, a state wide dumping database.

The introduction of the Waste Less, Recycle More initiative after the baseline was set has resulted in increased regulatory presence and a greater public awareness of illegal dumping. This includes the introduction of Regional Illegal Dumping Squads (RIDS) staffed by council personnel and which enabled investigations to cross council boundaries. Media campaigns, and public education materials have also raised public awareness of illegal dumping.

The EPA advised anecdotal evidence suggests greater public awareness has resulted in an increased rate of reporting, rather than any increase in illegal dumping. With the introduction of RIDonline in February 2016, the EPA expects to have a system in place to more robustly measure trends in large scale, as well as smaller scale illegal dumping. The EPA also advised that it considers an increase in building activity over the period contributed to the increase in illegal dumping activity.

EPA has mostly implemented ICAC recommendations on its oversight of RIDS

In June 2017, the ICAC published its report on the Investigation into the conduct of a Regional Illegal Dumping Squad Officer and Others. The ICAC made six recommendations to address deficiencies in the EPA's strategic oversight, management and governance of RIDS, which were not asbestos waste specific. (See Exhibit 9.)

The EPA established RIDS jointly with some local councils to provide additional resources to address illegal dumping. RIDS are teams of area-based compliance officers who can operate across individual council boundaries. RIDS overcome the jurisdictional issues for local councils caused by waste originating in one council area, but being dumped in another, as RIDS officers can investigate dumping across all member council areas. The EPA provides 50 per cent of RIDS funding.

Exhibit 9: Relevant ICAC recommendations

Recommendation 3: That the EPA strengthens its involvement in the Western Sydney (WS) RIDS Management Committee to ensure it properly directs and oversees the WS RID's strategic performance.

Recommendation 4: That the EPA strengthens the WS RIDS Funding Agreement to include additional specifications consistent with regulatory good practice, such as evaluating regulatory performance against strategic outcomes.

Recommendation 5: That the EPA strengthens and mandates the technical training of WS RIDS Officers to ensure that all officers carry out compliant and effective regulatory activity.

Recommendation 6: That the EPA, in partnership with the host council, reviews all WS RIDS position descriptions to ensure they reflect the skills and personal attributes necessary to be an effective RIDS manager or field officer.

Recommendation 7: That the EPA develops a case management system to be used by all RIDS that will support compliant processes, allow in-built approval levels for key decisions and provide metrics to improve oversight of the WS RIDS.

Recommendation 12: That the EPA develops clear guidelines to ensure confusion regarding the application of waste disposal laws is eliminated. This came about when ICAC noted that at times RIDS Officers were dealing with illegal waste disposal incidents (either large scale or hazardous materials) which were outside their authority, and were ones under the EPA's regulatory authority.

Source: ICAC report Investigation into the conduct of a Regional Illegal Dumping Squad Officer and Others, 2017.

We reviewed the EPA's progress in addressing the ICAC recommendations that are relevant to the scope of our review. (See Exhibit 10.)

In September 2017, the EPA advised the ICAC it accepted each of the above six recommendations and provided an implementation plan. The EPA agreed to implement recommendations 4, 6, 7 and 12, as described by the ICAC, but to implement recommendations 3 and 5 in an alternate way.

The EPA has until late September 2018 to report to the ICAC on its progress in implementing the recommendations.

Exhibit 10: The EPA's progress on implementing ICAC recommendations at May 2018

ICAC recommendation	Status
3	Completed and effective from July 2017
4	Completed and effective from July 2017
5	Completed and ongoing
6	Completed
7	Due for completion June 2018
12	Not completed and date yet to be determined

Source: Environment Protection Authority 2018.

The EPA has confirmed (which is supported by evidence provided for the completed recommendations) that the implementation strategy covers all RIDS, not just Western Sydney RIDS for recommendations 3, 4, 5 and 6. Evidence included funding agreements and annual strategic plans for Sydney, Hunter-Central Coast and Western Sydney RIDS, position descriptions for Sydney, Western Sydney and Hunter-Central Coast RIDS Coordinators and RIDS investigators.

We make the following comments in relation to those recommendations the EPA is implementing in an alternative way (recommendations 3 and 5).

For recommendation 3, the EPA contends that the EPA co-contributes 50 per cent of the funding with member councils contributing the remainder. The EPA is a member of the RIDS Management Committee and has a role in providing direction and contributing to decisions associated with RIDS. The EPA does not have authority to direct activities of RIDS without consensus from other RIDS Management Committee members. The EPA however can influence activities through conditions of the funding agreement. As a result, the EPA has amended the funding agreement to include specific conditions relating to the RIDS Management Committee which better outline the seniority, roles and responsibilities of the committee members and the host council. The EPA will also chair matters relating to strategic and operational performance at RIDS Management Committee meetings. Based on the issues raised in the ICAC report, this approach appears to address the concerns of the ICAC.

For recommendation 5, the EPA contends that RIDS officers are employees of the host council. Mandating training (to ensure that all officers carry out compliant and effective regulatory activity) would require the agreement of the host council. The EPA has no authority to mandate such training. To implement the recommendation, the EPA advised it would continue to provide training through a course which has been designed to equip authorised officers from local government with the necessary knowledge to fulfil their responsibilities as outlined in the Act. This training includes exercising regulatory powers under the Act and an understanding of delegations as the appropriate regulatory authority.

The EPA also advised the successful completion of the training course is a precondition of a RIDS officer becoming an authorised officer under the Act. While failure to undertake the course does not preclude a person from being appointed as a RIDS officer by the host council, that person would not have the powers that are conferred by the Act to an authorised officer such as to:

- require information and records
- enter and search premises
- question and identify persons.

The EPA has also strengthened the funding agreement to include conditions relating to training and RIDS officers carrying out duties in a transparent and effective way. The EPA will also work to ensure it communicates to RIDS and councils how they can access training related to investigating illegal dumping. While we do not necessarily agree that the EPA, being a 50 per cent funding contributor to RIDS, cannot persuade host councils to ensure all RIDS officers are properly trained as recommended by the ICAC, the alternative strategy the EPA has adopted should address the concerns of the ICAC.

Section two

Appendices



Appendix one – Response from agency



Our reference: DOC18/415992

Ms Margaret Crawford
Auditor General
NSW Audit Office
GPO Box 1,
SYDNEY NSW 2001

Dear Ms Crawford *Margaret.*

Performance audit – Regulation of water pollution in drinking water catchments and illegal disposal of solid waste. Audit Office reference PA6611

Thank you for the chance to consider and respond to your Performance Audit of the EPA - *Regulation of water pollution in drinking water catchments and illegal disposal of solid waste.*

I welcome the opportunity that the Performance Audit provides to identify prospects for the EPA to improve its regulatory operations. In particular, the audit has recommended areas where we can improve our governance and oversight of our regulatory activities, and provide greater guidance, training and support to our officers to deliver reliable and consistent environmental regulatory services to the NSW community. The EPA accepts in full the recommendations of the Performance Audit.

I would like to express my appreciation for the significant work of your audit team and their ongoing commitment to working through this process with my team.

Yours sincerely

Anissa Levy
A/Chair and CEO
Environment Protection Authority

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Attachment 1 – EPA Response to the NSW Audit Office's Performance Audit Recommendations

Recommendation	EPA response
Recommendation 1 By 31 December 2018, to improve governance and oversight, the EPA should: <ol style="list-style-type: none"> 1. implement a more effective performance framework with regular reports to the Chief Executive Officer and to the EPA Board on outcomes based key result areas which assess its environmental and regulatory performance and its trends over time. 	<p>The EPA will review its current performance framework, analyse any gaps and implement improvements to ensure that the EPA can better assess its environmental, regulatory performance and trends over time.</p> <p>The EPA will:</p> <ul style="list-style-type: none"> - establish a governance and assurance function, independent of the operational functional areas within the EPA, to provide oversight of regulatory activities including monitoring, reviewing and reporting of these. - document a clear assurance and governance framework. - establish additional outcomes based indicators and reporting, including demonstrating the outcomes of both regulatory and non-regulatory actions; and - improve reporting to the EPA Board, Chair and CEO and EPA Executive. <p>The EPA will implement improvements by 31 December 2018.</p>
Recommendation 2 By 30 June 2019, to improve consistency in its practices, the EPA should: <ol style="list-style-type: none"> 2. progressively update and make accessible its policies and procedures for regulatory operations, and mandate procedures where necessary to ensure consistent application. 	<p>The EPA has commenced a review of its operational regulatory policy and procedures to ensure that they remain current and address operational requirements.</p> <p>The review will also identify where there are gaps and inform the development and implementation of new policy and guidance to respond to these.</p> <p>As part of the review, the EPA will:</p> <ul style="list-style-type: none"> - Ensure that the policies and procedures are subject to a regular review schedule so that they remain current and valid. - Develop and implement a standard for communication and training for staff in relation to new and amended policies and procedures. - Ensure that all operational policies and procedures are centrally located and made available via the EPA's intranet, - Amend the EPA's training strategy to include mandatory training and/or accreditation (where it is better suited) for all officers to drive consistent application of policies and procedures. - Ensure that policies and procedures are linked to the EPA's performance framework (where appropriate) to improve data collection and reporting for the EPA Board, Chair and CEO. <p>The operational policies and procedures will be updated by 30 June 2019.</p>
The EPA considers recommendations 3, and 5-7 complementary to recommendations 1 and 2. Therefore the approach to implement these recommendations will also consider the approach and outcomes for recommendations 1 and 2.	

Recommendation	EPA response
<p>Recommendation 3</p> <p>By 30 June 2019, to improve consistency in its practices, the EPA should:</p> <p>3. implement internal controls to monitor the consistency and quality of its regulatory operations</p>	<p>Agreed</p> <p>The EPA currently monitors consistency and quality of its regulatory and operational functions through:</p> <ul style="list-style-type: none"> - Quarterly reports to the EPA Board, Executive, Regulatory Practice Sub-Committee and Senior Management Group. Reports are currently generally activity based. - Branch plans, aligned with the EPA's strategic plan. - Board, Executive and Senior Management meetings. - Weekly issues meeting. - Staff performance and development plans. - The EPA Board's annual Regulatory Assurance Statement. <p>The EPA is committed to further improvements to its monitoring of regulatory operations. The identified improvements include:</p> <ul style="list-style-type: none"> - Reporting on compliance with controls, policies and procedures. - Measurement of outcomes based on regulatory activities and actions. - Introduction of balanced scorecards based on the EPA's strategic and branch plans. - Reporting on validation of, and regulatory response to, industry self-reported data. - Monitoring of regulatory outcomes associated with operational activities, including site inspections and compliance audits. - Improved information management through the implementation of a data governance framework and implementation of a new case management system as part of the EPA's inflight Regulatory Systems Transformation program. <p>The EPA will implement improvements by 30 June 2019.</p>

EPA reference DOC18/418992-1

Recommendation	EPA response
<p>Recommendation 4</p> <p>By 30 June 2019, to address worsening water quality in Lake Burragorang the EPA should:</p> <p>4. (a) review the impact of its licenced activities on water quality in Lake Burragorang and</p> <p>(b) develop strategies relating to its licenced activities (in consultation with other relevant NSW Government agencies) to improve and maintain the lake's water quality.</p>	<p>Agreed</p> <p>The responsibility for the management and regulation of water quality in the drinking water catchments is set out in the <i>Water NSW Act 2014</i> (Act) and the <i>Water Management Regulation (2013)</i> (Regulation). WaterNSW is a state-owned corporation responsible for setting the strategic direction for protecting the Sydney Catchment areas. The responsibilities under the Act and Regulation lie with WaterNSW.</p> <p>WaterNSW's principle objectives include ensuring that the declared catchment areas, and water management works in such areas, are managed and protected so as to promote water quality, protection of public health and public safety, and the protection of the environment. As such, WaterNSW has a key role in the development application and consent process. Under the <i>State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011</i> WaterNSW is required to consider if a proposed activity will have a neutral or beneficial effect on water quality. Development applications provided under the <i>Environment Planning and Assessment (EP&A) Act 1979</i> also allow for additional consideration by WaterNSW to further regulate the activity or unexpected impacts.</p> <p>Consideration by WaterNSW to development applications is required irrespective of whether an applicant will be required to hold an environment protection licence as part of any development consent.</p> <p>In the Sydney catchment area, a broad range of residential, commercial and agricultural development and activities are undertaken that can pose a risk to water quality. The EPA's primary regulatory oversight is triggered where a development proposal includes a 'scheduled activity' under the <i>Protection of the Environment Operations Act 1997</i>, thus requiring an environment protection licence. Under the integrated development provisions of the <i>Environment Protection and Assessment Act 1979</i> the EPA provides general terms of approval to the consent authority which are then incorporated into the development consent conditions. The development consent conditions are included in any subsequently issued environment protection licence.</p> <p>The EPA is committed to undertaking a review of environment protection licences that have conditions to discharge into the Lake Burragorang catchment. As an outcome of the review the EPA will also develop and implement strategies, relating to the setting, reviewing and maintaining of licence conditions for licenced activities, that may impact on the water quality of Lake Burragorang. The EPA will work with other NSW Government agencies, where appropriate, to ensure licence conditions will protect water quality.</p> <p>The EPA will complete the review, and, development and implementation of strategies by 30 June 2019.</p> <p>In addition, if there is any broader review relating to the issue of water quality in Lake Burragorang the EPA would be happy to work alongside all other agencies involved.</p>

EPA reference DOC18/418992-1

Recommendation	EPA response
<p>Recommendation 5</p> <p>To improve compliance monitoring, the EPA should implement procedures to:</p> <p>5. by 30 June 2019, validate self-reported information, eliminate hardcopy submissions and require licensees to report on their breaches of the Act and associated regulations in their annual returns</p>	<p>Agreed</p> <p>Annual returns are required to be submitted to the EPA by licensees as part of the conditions attached to their environment protection licence. The annual return reports on the licensee's level of compliance with conditions attached to their licence and specific legislative requirements regarding the existence and testing of their pollution incident response management plan (PIRMP), load based licensing and risk based licensing (specifically the implementation of environment management systems).</p> <p>The EPA has an ongoing program that encourages licensees to submit their annual returns via the EPA's digital licensing portal (eConnect EPA). The EPA has stopped sending annual return hardcopy templates with annual return correspondence reminding licensees of their reporting obligations. All communications to licensees has been updated to align with behavioural insights methodology. The EPA will be removing the ability to download hardcopy annual returns from the EPA's website in December 2018.</p> <p>The EPA has commenced a review of the annual return management policy and as part of this review will consider improvements to procedures and guidance that mandate the considerations of regulatory actions for:</p> <ul style="list-style-type: none"> - late submission of the annual return; and - the submission of false and misleading information. <p>The EPA currently reviews the information provided in all annual returns to inform ongoing regulation of licenced activity. The information provided is considered in accordance with the EPA's Compliance Policy and where appropriate, regulatory action is taken in response to non-compliance.</p> <p>The EPA will, as part of the review, provide policy advice for all staff on the management of licensee misreporting of non-compliances with licence conditions and breaches of the Act via their annual return. This advice will provide clarity for staff on the regulatory action(s) that must be considered as part of the assessment of the annual return information.</p> <p>Additionally, the EPA is exploring opportunities to centralise the initial review of compliance reporting to improve validation of self-reported information and data will focus effort on misreporting.</p> <p>The EPA will also ensure industry self-reporting obligations align with risk based regulatory principles.</p> <p>The EPA will mandate submission of annual returns electronically via the EPA's digital licensing portal (eConnect EPA).</p> <p>The EPA will complete the review and implement improvements by 30 June 2019.</p>

EPA reference DOC18/418992-1

Recommendation	EPA response
<p>Recommendation 6</p> <p>To improve compliance monitoring, the EPA should implement procedures to:</p> <p>6. by 31 December 2018, conduct mandatory site inspections under the risk-based licensing scheme to assess compliance with all regulatory requirements and licence conditions</p>	<p>Agreed</p> <p>The risk based licensing scheme mandates the minimum inspection requirements for a licensed premise based on the risk associated with the premise. As part of the scheme, every licensed premise undergoes a five-yearly risk based assessment. The current policy and supporting procedures dictate the requirements for this five-yearly risk based assessment and the minimum inspection frequency (twice yearly for high-risk facilities, once annually for medium risk facilities and once every three years for low risk facilities).</p> <p>When it was introduced, the EPA committed to review the scheme three years after implementation. This review has commenced and is scheduled for completion in June 2019.</p> <p>As part of this process, the EPA will develop and mandate clear procedures and guidance relating to inspections conducted as part of the risk based licensing scheme. These will include:</p> <ul style="list-style-type: none"> - Minimum standards and guidance for inspections conducted as part of the risk-based licensing scheme. - Mandated timing of these inspections. - A process that ensures validation of industry self-reported data. - Additional guidance relating to regulatory actions and any follow up that should be considered as part of the inspection process and findings. - Mandatory training and/or accreditation for staff conducting the inspections. <p>The EPA will complete the review and implement improvements by 31 December 2018.</p>
<p>Recommendation 7</p> <p>By 31 December 2018 to improve enforcement, the EPA should:</p> <p>7. Implement procedures to systematically assess non-compliances and breaches of the Act and to implement appropriate regulatory actions.</p>	<p>Agreed</p> <p>The EPA has commenced a review and assessment of current procedures and guidance to ensure alignment with the EPA's Compliance Policy and regulatory requirements.</p> <p>The EPA will implement improvements that ensure there is greater transparency of the decision-making processes relating to regulatory actions taken (or not taken) for non-compliances. This will improve the EPA's ability to assess environmental and regulatory performance over time.</p> <p>As part of this review and assessment the EPA will ensure there are:</p> <ul style="list-style-type: none"> - Appropriate procedures and guidance for all operational staff that reinforces a risk-based approach to non-compliance and regulatory response that acts as a deterrent to reoffending, and - Appropriate monitoring mechanisms in place that will be used to assess any inconsistencies in the response to non-compliances and breaches of the Act and inform additional communication and training requirements for operational staff. <p>As an outcome of the review and assessment, the EPA will implement new procedures and guidance for operational staff. This will include greater clarity for officers in their consideration of regulatory actions for non-compliances and any identified licensee breaches of the Act. These procedures and guidance will complement the EPA's Compliance Policy and their use will be mandated.</p> <p>The EPA will complete the review and implement improvements by 31 December 2018.</p>



Appendix two – List of regulatory actions

The EPA uses a range of enforcement tools to address non-compliances. These are listed in approximate order of severity (lowest to highest) of the non-compliance:

- advisory letter
- formal warnings
- show cause letters
- official cautions
- pollution reduction programs
- variations, suspensions and cancellations of licences
- notices, directions and orders (clean-up notices, prevention notices, compliance cost notices to recover EPA costs, and notices to recover costs of environmental risk analysis)
- mandatory third party environmental audits at licensee's expense
- penalty notices
- enforceable undertakings
- court prosecutions.

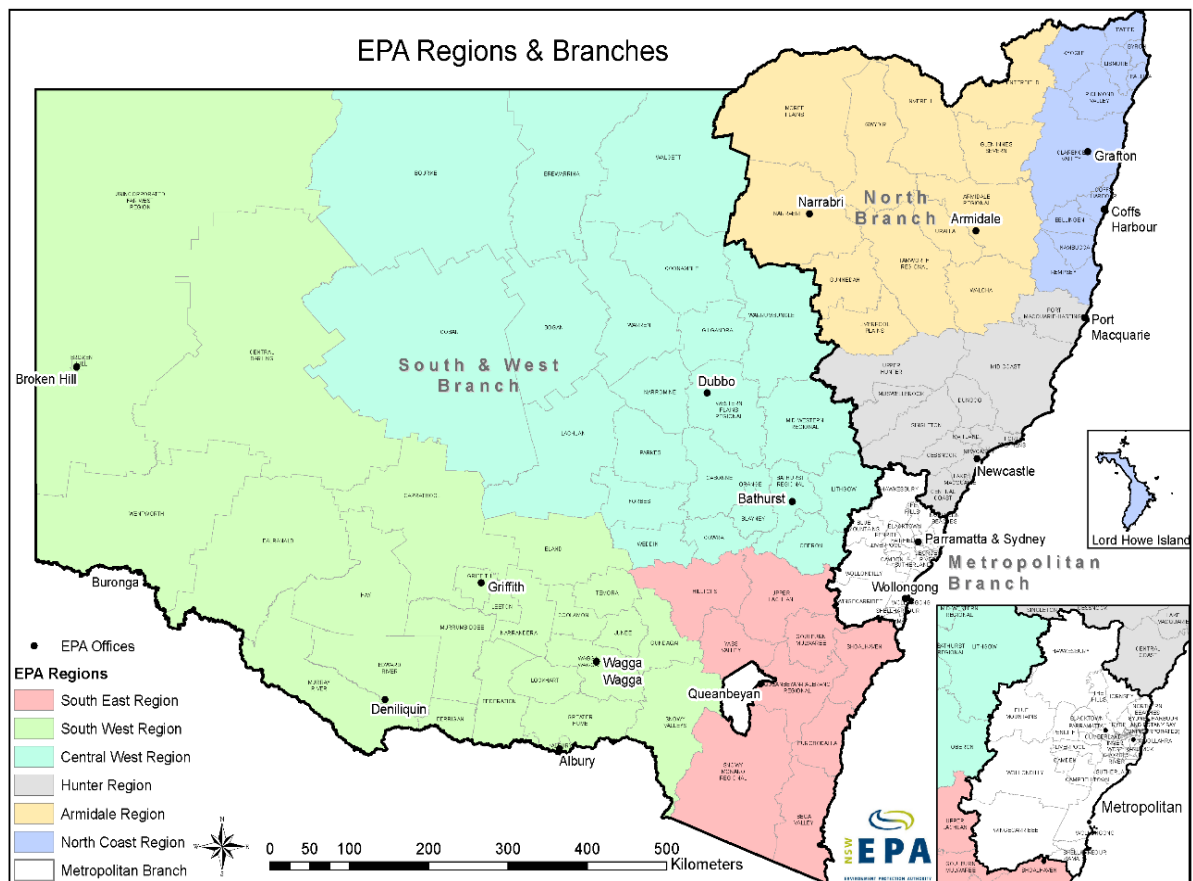


Appendix three – The EPA's organisational structure





Appendix four – The EPA's regions and branches





Appendix five – About the audit

Audit objective

This audit assessed the effectiveness of the EPA's regulatory response to water pollution in drinking water catchments and illegal solid waste disposal.

Audit criteria

We addressed the audit objective with the following lines of inquiry:

1. Does the EPA effectively manage water pollution in drinking water catchments? In addressing this line of enquiry, we assessed whether:
 - a) The EPA effectively assesses and monitors water pollution in drinking water catchments for EPA regulated activities defined in the *Protection of the Environment Operations Act 1997*.
 - b) The EPA effectively manages breaches of licence conditions related to water pollution in drinking water catchments.
 - c) The EPA effectively manages water pollution incidents, other than licence condition breaches, in drinking water catchments.
2. Does the EPA effectively manage illegal disposal of solid waste? In addressing this line of enquiry, we assessed whether:
 - a) The EPA effectively responds to illegal solid waste disposal through its regulatory role under the *Protection of the Environment Operations Act 1997*.
 - b) The EPA has achieved the priorities and objectives outlined in the NSW Illegal Dumping Strategy 2014–16.
 - c) The EPA has effectively addressed the seven recommendations made in the June 2017 ICAC report titled 'Investigation into a Regional Dumping Squad Officer and Others' which were not asbestos waste specific.

Audit scope and focus

In assessing the criteria, we checked the following aspects:

1. The EPA's regulatory framework in relation to solid waste disposal and water pollution.
2. The EPA's response to various reviews including NSW Ombudsman and ICAC, and the EPA's internal reviews.
3. The EPA's implementation of the NSW Illegal Dumping Strategy 2014–16.

Audit exclusions

The audit did not examine:

- Environmental protection requirements other than solid waste disposal and water pollution. For example, air pollution, noise pollution, and land pollution, as well as littering, recycling, and transportation of waste.
- Performance of other Appropriate Regulatory Authorities under the Act, including local councils.
- The conduct of licensees and other persons or corporations.
- Merits of NSW Government policy objectives.

Audit approach

Our procedures included:

1. Interviewing:
 - key EPA staff involved in conducting regulatory activities
 - consulting with councils and key stakeholders on the EPA's regulatory activities
 - authors of the 2016 Audit of the Sydney drinking water catchment
2. Examining:
 - EPA procedures and guidance for its regulatory officers for regulating water pollution and illegal solid waste disposal
 - data on the EPA's regulatory activities, such as pollution incidents reported and licence non-compliances detected, audit activity, regulatory actions and data on licences granted
 - relevant EPA management reports for the subject areas relevant to the audit

The audit approach was complemented by quality assurance processes within the Audit Office to ensure compliance with professional standards.

Audit methodology

Our performance audit methodology is designed to satisfy Australian Audit Standard ASAE 3500 Performance Engagements and other professional standards. The standards require the audit team to comply with relevant ethical requirements and plan and perform the audit to obtain reasonable assurance and draw a conclusion on the audit objective. Our processes have also been designed to comply with requirements specified in the *Public Finance and Audit Act 1983* and the *Local Government Act 1993*.

Acknowledgements

We gratefully acknowledge the co-operation and assistance provided by the EPA and those stakeholders who participated in the discussions held during the audit. In particular, we wish to thank our liaison officers and the EPA staff who contributed in interviews and provided material relevant to the audit.

Audit cost

Including staff costs, travel and overheads, the estimated cost of the audit is \$380,000.



Appendix six – Performance auditing

What are performance audits?

Performance audits determine whether State or local government entities carry out their activities effectively, and do so economically and efficiently and in compliance with all relevant laws.

The activities examined by a performance audit may include a government program, all or part of an audited entity, or more than one entity. They can also consider particular issues which affect the whole public sector and/or the whole local government sector. They cannot question the merits of government policy objectives.

The Auditor-General's mandate to undertake performance audits is set out in the *Public Finance and Audit Act 1983* for State government entities, and in the *Local Government Act 1993* for local government entities.

Why do we conduct performance audits?

Performance audits provide independent assurance to the NSW Parliament and the public.

Through their recommendations, performance audits seek to improve the value for money the community receives from government services.

Performance audits are selected at the discretion of the Auditor-General who seeks input from parliamentarians, State and local government entities, other interested stakeholders and Audit Office research.

What happens during the phases of a performance audit?

Performance audits have three key phases: planning, fieldwork and report writing.

During the planning phase, the audit team develops an understanding of the audit topic and responsible entities and defines the objective and scope of the audit.

The planning phase also identifies the audit criteria. These are standards of performance against which the audited entity, program or activities are assessed. Criteria may be based on relevant legislation, internal policies and procedures, industry standards, best practice, government targets, benchmarks or published guidelines.

At the completion of fieldwork, the audit team meets with management representatives to discuss all significant matters arising out of the audit. Following this, a draft performance audit report is prepared.

The audit team then meets with management representatives to check that facts presented in the draft report are accurate and to seek input in developing practical recommendations on areas of improvement.

A final report is then provided to the head of the audited entity who is invited to formally respond to the report. The report presented to the NSW Parliament includes any response from the head of the audited entity. The relevant minister and the Treasurer are also provided with a copy of the final report. In performance audits that involve multiple entities, there may be responses from more than one audited entity or from a nominated coordinating entity.

Who checks to see if recommendations have been implemented?

After the report is presented to the NSW Parliament, it is usual for the entity's audit committee to monitor progress with the implementation of recommendations.

In addition, it is the practice of Parliament's Public Accounts Committee to conduct reviews or hold inquiries into matters raised in performance audit reports. The reviews and inquiries are usually held 12 months after the report received by the NSW Parliament. These reports are available on the NSW Parliament website.

Who audits the auditors?

Our performance audits are subject to internal and external quality reviews against relevant Australian and international standards.

The Public Accounts Committee appoints an independent reviewer to report on compliance with auditing practices and standards every four years. The reviewer's report is presented to the NSW Parliament and available on its website.

Periodic peer reviews by other Audit Offices test our activities against relevant standards and better practice.

Each audit is subject to internal review prior to its release.

Who pays for performance audits?

No fee is charged for performance audits. Our performance audit services are funded by the NSW Parliament.

Further information and copies of reports

For further information, including copies of performance audit reports and a list of audits currently in-progress, please see our website www.audit.nsw.gov.au or contact us on 9275 7100.

OUR VISION

Our insights inform and challenge government to improve outcomes for citizens.

OUR PURPOSE

To help parliament hold government accountable for its use of public resources.

OUR VALUES

Purpose – we have an impact, are accountable, and work as a team.

People – we trust and respect others and have a balanced approach to work.

Professionalism – we are recognised for our independence and integrity and the value we deliver.

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