

Performance Audit Report

Environment Protection Authority

**Controlling and Reducing
Pollution from Industry**

State Library of New South Wales cataloguing-in publication data

New South Wales. Audit Office.

Performance audit report : Environment Protection Authority : controlling and reducing pollution from industry / [The Audit Office of New South Wales]

0734721188

1. New South Wales. Environment Protection Authority - Auditing. 2. Environmental protection - New South Wales - Auditing. 3. Pollution - Law and legislation - New South Wales. 4. Factory and trade waste - Environmental aspects - New South Wales. I. Title: Environment Protection Authority : controlling and reducing pollution from industry. II. Title: Controlling and reducing pollution from industry.

363.73709944

© Copyright reserved by The Audit Office of New South Wales. All rights reserved. No part of this publication may be reproduced without prior consent of The Audit Office of New South Wales.

Contents

Executive summary	1
Summary of recommendations	6
1. Introduction	11
1.1 Introduction	12
1.2 Pollution control in NSW	12
1.3 The audit	14
1.4 Acknowledgements	15
1.5 Cost of the audit	15
1.6 Audit team	15
2. Regulatory framework	17
2.1 Environment legislation	18
2.2 Regulatory framework	19
3. Licensing	23
3.1 Introduction	24
3.2 Licence quality	24
3.3 Licence review	27
4. Assuring compliance with licence conditions	29
4.1 Introduction	30
4.2 Statements of Compliance	30
4.3 Inspections	33
4.4 Compliance audits	35
5. Enforcement strategies	39
5.1 Introduction	40
5.2 Selecting the most effective enforcement strategy	40
6. Achieving compliance	45
6.1 Risk assessment	46
6.2 Is compliance and enforcement effective?	47

7. Pollution reduction	49
7.1 Introduction	50
7.2 Pollution Reduction Programs	50
7.3 The load-based licensing scheme	51
7.4 Other incentives to improve performance	52
8. Appendices	55
Appendix 1 Audit scope and objectives	56
Appendix 2 Audit fieldwork	58
Appendix 3 Glossary	59
Appendix 4 Industry sectors included in load-based licensing (as at 1 July 2000)	61
Appendix 5 References	62
Performance Audits by the Audit Office of New South Wales	65

Executive summary

Executive summary

The audit

This performance audit examines the efficiency and effectiveness of the Environment Protection Authority (EPA) in controlling and reducing pollution from industry in New South Wales.

The audit focused on determining whether:

- the EPA controls the environmental impact of industry through licences and pollution reduction schemes
- the EPA's compliance and enforcement activities achieve high rates of compliance
- systems are in place to support decisions on regulatory interventions and ensure resources are directed to areas of greatest need.

Regulating industry

Regulation, enforcement and education are the primary tools used by the EPA to control the amount of pollutants discharged to the environment by industry. Although the EPA administers numerous other programs aimed at environmental improvement, one of its core functions is environmental regulation.

The EPA regulates industry through the issue of environment protection licences to control pollution.¹ There are currently more than 2800 environment protection licences in force.

Reform agenda

The last 10 years has seen major reforms in environment protection in NSW. Firstly, the *Protection of the Environment Administration Act 1991* established the EPA as the lead environment protection agency in NSW.

Secondly, the introduction of the *Protection of the Environment Operations Act 1997* (POEO Act) which commenced 1 July 1999, restructured, streamlined and strengthened pollution control legislation.

Audit opinion

The regulatory framework introduced under the POEO Act, along with other initiatives progressively being implemented by the EPA, should enhance the overall effectiveness of environment protection in NSW.

The Audit Office is of the opinion that the framework is consistent with best practice and once fully implemented, should contribute to the achievement of further improvements in the environmental performance of industry.

¹ Other tools used by the EPA include community development, policy development and research, monitoring and modelling, and partnership development.

However while the legislative framework supports best practice in regulation and enforcement, there are a number of issues which limit the effectiveness of the reforms.

Some of the problems, such as the quality of licences and the effectiveness of compliance activities, have been identified by the EPA and may be addressed through recent initiatives.

The Audit Office identified a number of other factors which require attention:

- ❑ **compliance activities need to provide greater assurance that premises are operating in accordance with the conditions of their licence**
- ❑ **indicators are needed to measure the EPA's overall effectiveness in achieving environmental improvements arising from compliance and enforcement activities and pollution reduction programs**
- ❑ **further improvements in information systems and data quality are needed to enable the EPA to construct an accurate and complete record of its intervention in relation to a particular licensee or group of licensees**
- ❑ **a more structured and formalised approach for assessing licensee performance is needed to guide decision making and target resources to areas of greatest need.**

The audit opinion is based on the following findings.

- Regulatory reforms** The POEO Act is seen as a positive step towards improving environmental outcomes in NSW. It introduces key initiatives to protect the environment in that it provides for:
- ❑ a system which controls the loads or total mass of pollutants discharged to the environment (in addition to controlling the concentration of pollutants)
 - ❑ the introduction of economic incentives to industry in the form of a load-based licensing (LBL) scheme effective from 1 July 2000.²

The EPA plans to introduce the LBL scheme in stages with approximately 350 or 12% of all licence holders included in the first year. However, the EPA has yet to finalise an implementation plan to extend the scheme to other licensees.

² The objectives of the scheme are based on the polluter pays principle and aim to provide financial incentives to industry to reduce discharges of pollutants to the environment and foster ongoing improvements in environmental performance.

There will also be a proportion of licence holders for which LBL will not be applicable because the nature of environmental impact is incompatible with the load-based approach. For the majority of these licensees, the licensing system will not provide any significant economic incentives to reduce pollution beyond licence requirements.³

Licence integrity

The Audit Office found that the integrity of existing licences was diminished by a lack of consistency, appropriateness, relevance and enforceability in licence conditions.

Licences for operators within the same industry sector should be consistent and establish the same expectations for performance.

Many of the problems with the quality of licences may be addressed through existing EPA programs such as the licence review process introduced under the POEO Act, the development of model licences for industry sectors and the review of data monitoring and reporting requirements for industry.

Assuring compliance

The objective of compliance and enforcement activities is to achieve high rates of compliance with statutory requirements. The EPA gains assurance that licensees are complying with licence limits through licensee self-assessments, inspections and compliance audits.

Problems with current arrangements, however, are that:

- ❑ the EPA relies on licensee self-assessments which are not independently validated
- ❑ the coverage of compliance audit activities by the EPA is around 1.3% whilst the current rate of industry non-compliance is estimated to be at least 15%.

Better targeting of high-risk premises may also help to improve the level of confidence the EPA could draw from its compliance activities.

Better targeting of resources

Effective risk assessment enables a regulatory agency such as the EPA to substantiate whether the focus and level of its activities are appropriate to reduce risks to an acceptable level.

³ Although other economic instruments are being developed or are under consideration for specific geographic regions such as the Hawkesbury-Nepean, Sydney catchment and the Sydney metropolitan airshed. A trading scheme which controls saline discharges from coal mines and power stations along the Hunter River is also in operation.

There are opportunities for the EPA to use formal assessments of licensee performance to support decision making and better target resources.

Choosing the best options

The EPA is empowered to choose any of the regulatory tools available to it to achieve the best environmental outcomes. Prosecution or other approaches, such as audit or the provision of guidance, may be selected as the most effective method to achieve a desired environmental outcome.

However, in making this judgement, the EPA must be sufficiently informed about licensee performance, including the licensee's compliance history and the impact of previous decisions. The Audit Office found that this type of information was difficult to access, and not necessarily reliable or accurate due to poor quality records and the limited functionality of information systems.

The EPA has recently instituted some system improvements, together with a quality assurance program which may address these issues.

Judging effectiveness

Monitoring and reporting on the outcomes of compliance and enforcement activities is essential for maximising the effectiveness of intervention.

Although the EPA reports on compliance and enforcement activities in its annual report, it does not report on the outcomes of interventions in terms of environmental improvements or their impact on premises. As a consequence, it is not possible to report on the effectiveness of the EPA in achieving compliance or producing the best environmental outcome.

Conclusion

Overall, there are opportunities for the EPA to maximise environmental improvements from the reform initiatives. Accurate and complete data on regulatory intervention and structured assessments of licensee performance will enable the EPA to improve decision making and target resources to areas of greatest need.

Monitoring the effectiveness of intervention strategies will also provide the EPA with the necessary intelligence to select best available options and to substantiate its level of influence in environmental improvement in NSW.

Summary of recommendations

It is recommended that the EPA:

- | | |
|--|--|
| Post implementation review | <ul style="list-style-type: none">❑ conduct a post-implementation review to assess the effectiveness of the new regulatory framework following at least 2 years of operation |
| Regulatory framework | <ul style="list-style-type: none">❑ finalise an implementation plan to extend the load-based licensing scheme to all applicable licensees |
| Improving the quality of licences | <ul style="list-style-type: none">❑ further progress the development of model licences for industry sectors to standardise performance expectations and improve the quality of licences❑ complete the review of the efficacy of monitoring and reporting requirements and establish guiding principles to ensure requirements are cost effective, equitable and beneficial to the EPA❑ complete the post-implementation review of the licence review program |
| Enhancing assurance | <ul style="list-style-type: none">❑ consider the implementation of a system for independent certification of annual returns❑ use mandatory audit provisions as a means of complementing compliance audit activity❑ better match compliance audit resources to the level of industry non-compliance |
| Conducting risk assessments | <ul style="list-style-type: none">❑ adopt a more structured and formal methodology for assessing licensee performance |
| Improve data quality and access | <ul style="list-style-type: none">❑ improve the quality of records of regulatory intervention in regard to inspections, complaint investigations and enforcement action❑ improve access to information on the compliance and enforcement history of a licensee |
| Judging effectiveness | <ul style="list-style-type: none">❑ develop performance indicators to measure the EPA's overall effectiveness in achieving environmental improvements arising from compliance and enforcement activities and pollution reduction programs |
| Environmental performance | <ul style="list-style-type: none">❑ continue to investigate options for providing incentives which will encourage licensees to improve environmental performance (particularly those not included in the load-based licensing scheme). |

Response from the Environment Protection Authority

The Environment Protection Authority (EPA) appreciates the opportunity to make a formal response to the performance audit report on its work in controlling and reducing pollution from industry in NSW.

The EPA welcomes the report and its recommendations, and is pleased to note that the audit demonstrates the appropriateness of its decisions and actions in protecting the environment.

The performance audit report essentially confirms the EPA's reform directions, and delivers some constructive advice and new ideas.

The EPA is emerging from a decade of reform that began with its establishment on 1 March 1992. The creation of the EPA signalled a move away from a solitary focus on end-of-pipe pollution control, towards the use of a mix of tools to protect and improve the NSW environment. As the performance audit report notes, regulation and enforcement remain key EPA tools, complemented by policy development and research; education, advice and community development; economic instruments; monitoring, modelling and reporting; and partnership development.

NSW's environmental regulatory framework has been overhauled in the last ten years, not least via the enactment of the landmark Protection of the Environment (Operations) Act (POEO) that commenced on 1 July 1999.

The implementation of the legislation has given extra impetus to the EPA's efforts to continuously improve the way it fulfils its regulatory functions and, importantly, the results it achieves for the NSW environment.

The cornerstones of the EPA's regulatory approach are:

- statutory requirements to control pollution,
- industry monitoring and reporting requirements,
- a legally binding compliance certification process,
- compliance audits,
- regular licence reviews,
- strong but flexible enforcement powers, and
- economic incentives.

While some different conclusions may have been drawn if a larger sample had been used in the audit, overall I congratulate The Audit Office on its efforts to do a meaningful performance audit of a regulatory and enforcement framework that is still evolving.

The audit confirmed the EPA's own assessment of areas for improvement in its regulatory and enforcement practice, and the organisation has programs underway to address them all. It is important to look at these issues in the context of the enormous success the EPA has had in the last ten years in reducing pollution from industrial sources. For example, Sydney's beaches are cleaner than they have been for a very long time, and overall air quality has shown significant improvement to the point where the biggest threat is now motor vehicles rather than industrial sources. This also illustrates the fact that, despite what the performance audit report might suggest, there is rarely a simplistic linear relationship between direct EPA action and environmental outcomes. The EPA can - and has - controlled industrial emissions but the ability now to make further substantial improvements to Sydney's air and water quality lies in the ability to manage diffuse sources of pollution. These require a different set of tools from the conventional licensing and regulatory approaches.

Specific areas for improvement are as follows:

- Quality of statutory instruments. The audit report notes that the EPA is already pursuing major improvement programs like licence reviews (where every POEO licence is reviewed once every three years and the community has the chance to be involved), the model licence program (where sets of appropriate licence conditions are prepared for industry sectors), and a review of the use of monitoring conditions in licences. There is a flaw, however, in The Audit Office's conclusion that standard conditions for the same emissions should be on all licences in a sector. For instance, for amenity impacts like noise and dust, it is inappropriate to focus just on the similarity or otherwise of operations – control conditions need to be determined by the receiving environment and the proximity of sensitive receptors.
- Compliance checking. The EPA is reviewing its compliance audit program with a view to substantially increasing the number of industry audits and making more use of campaigns and tools like mandatory audits. A resource increase to this area has been committed as part of the organisation's 2001/2 budget planning process.

- Procedures, records and data quality. The audit report notes that various systems improvements have already been put in place, and that the EPA has instituted a Quality Review to ensure that appropriate standards are set and maintained for operational activities.
- Risk assessment. The EPA utilises risk assessment in its routine regulatory decision making and acknowledges The Audit Office's recommendations for improved documentation in this area. The EPA is very keen to develop in this area and approaches are being piloted in the licence review process and the compliance audit program in this regard.

In terms of constructive suggestions, The Audit Office has put forward ideas like independent certification of statements of compliance, making more information available to the public on the performance of individual licensees, and the introduction of more incentives for licensees.

There is already a significant amount of information publicly available (for instance through the EPA's public register, annual reports, the State of the Environment Reports and the National Pollutant Inventory). It is important also to note that the NSW EPA is recognised by the Australasian environment ministers' council as a centre of excellence for implementation of economic instruments for environment protection. The Audit Office has suggested that the benefits of Load Based Licensing may be limited by the number of licensees captured in Stage 1, however it is important to note that the vast majority (80%+) of all licensed emissions are already captured in Load Based Licensing Stage 1. Other instruments in development or under consideration include Load Reduction Agreements, pilot point/non-point emissions trading in the lower Hawkesbury Nepean, a development offsets scheme for the Sydney Drinking Water Catchment, and a nitrogen oxides emissions trading scheme. Nonetheless, the EPA is willing to explore The Audit Office's recommendations in these areas. The EPA has a statutory requirement to have regard to the economic consequences of its decisions, and such propositions will have to be considered in terms of their environmental and administrative impacts, as well as the likely implications, including costs, for licensees.

The EPA welcomes the audit report as a positive contribution to its past, current and planned efforts to address relevant issues – one that confirms the appropriateness of the EPA’s ongoing commitment to a program of continuous improvement.

(signed)

LISA CORBYN
Director-General

Dated: 3 April 2001

1. Introduction

1.1 Introduction

This performance audit examines the efficiency and effectiveness of the Environment Protection Authority (EPA) in controlling and reducing pollution from industry in NSW.

Protecting the environment

Environmental regulation has proven to be one of the most effective means of achieving large reductions in pollutant emissions from stationary sources and is the primary tool used by governments to control the amount of pollutants discharged to the environment.

In Australia, all three tiers of government (Commonwealth, State and local) play a role in protecting the environment either through the establishment of limits or regulating sources.

Although State decisions (on emission limits) are influenced by national and international environmental goals and agreements, it is left up to each State to determine what individual emissions it will permit industry whilst remaining within these goals.

The result has been an approach to environmental licensing that is very much on a case by case basis with wide differences among States in coverage, limits and enforcement activities.⁴

In NSW, the Environment Protection Authority is the agency responsible for licensing industries (large facilities), activities which present an environmental risk and activities conducted by public authorities. Responsibility for regulating small and medium sized facilities generally rests with local councils.

1.2 Pollution control in NSW

Recent reforms

The last 10 years have seen major reform in the field of pollution control in NSW. Firstly, the *Protection of the Environment Administration Act 1991* established the Environment Protection Authority as the lead government agency for environment protection in NSW.

Secondly, the introduction of the *Protection of the Environment Operations Act 1997* which commenced 1 July 1999, restructured, streamlined and strengthened pollution legislation and established a regulatory framework consistent with international best practice.

⁴ Environmental Performance Review Australia OECD 1998 p18

**Environment
Protection
Authority**

The Environment Protection Authority has responsibility for developing and implementing environment protection programs including environmental regulation.

The main objectives of the EPA are to:

- protect, restore and enhance the quality of the environment
- promote pollution prevention and reduce to harmless levels the discharge of substances into the air, water or land.

At a glance

In 1999-2000, the EPA:

- had 2,847 licences in force
- issued 260 new POEO licences
- received 76,000 calls to the Pollution Line
- negotiated 157 new pollution reduction programs (estimated value of over \$24m)
- completed 35 compliance audits
- completed 41 special investigations
- completed 115 prosecutions (with a 91% success rate)
- issued 3,570 Penalty Infringement Notices (PINs) for breaches of environment protection legislation (the majority for smoky vehicles)

Source: EPA Annual Report 1999-00, EPA data request

EPA Governance

A ten-member board governs the EPA. The Board's role is to develop environment policies and set the long-term strategic direction for the EPA. The board also makes key decisions on significant prosecutions for non-compliance (for serious offences) and oversees the effective, efficient and economic management of the EPA.⁵

The EPA administers fourteen pieces of environment protection legislation covering air and water quality, contaminated land, noise control, pesticides, hazardous chemicals and dangerous goods, ozone, radiation and waste.

⁵ S 16 *Protection of the Environment Administration Act 1991*

Government policy The EPA aims to achieve environmental gains through regulatory tools designed to deliver high levels of compliance with statutory requirements. Other tools available to the EPA include education and community development, policy development and research, monitoring and modelling, and partnership development. The Government is committed to the EPA using a mix of tools to achieve the best environmental outcomes.⁶

The EPA's regulatory approach includes:

- licences to control pollution
- compliance certification
- compliance audits
- licence reviews
- enforcement powers
- economic incentives.

Regulating industry Licences impose conditions on industry to control the environmental impact of their activities. The EPA licenses activities that:

- are scheduled under the POEO Act (based on the nature and scale of the activity), or
- may pollute waters, or
- are conducted by public authorities (such as electricity generators, sewerage treatment plants, local councils etc).

As at June 2000, there were 2847 environment protection licences in force.

1.3 The audit

This audit assesses how well the EPA controls and reduces pollution through licensing, compliance and enforcement activities.

The audit has examined the overall regulatory framework and the EPA's:

- approach to licensing
- compliance assurance activities
- use of enforcement strategies
- pollution reduction schemes
- response to citizens complaints.

⁶ Government policy objectives for the EPA are outlined in Section 3 of the POEO Act and Section 6 of the *Protection of the Environment Administration Act 1991*. Policy considerations were also outlined in correspondence to the Audit Office from the Minister for the Environment dated 4 April 2000.

Other components of the EPA's suite of tools were not reviewed as part of this audit.

To undertake this audit, the Audit Office used a case study approach to review a sample of licensed premises.

The sample comprised:

- one licensed premise from the petroleum refining industry (Caltex Australia) where the EPA has used a variety of regulatory tools to prevent and control pollution, and
- 21 licensed premises from the extractive industry.

Details of the audit criteria are included in Appendix 1.

1.4 Acknowledgements

The Audit Office gratefully acknowledges the cooperation and assistance provided by representatives of the Environment Protection Authority.

Specifically, we wish to acknowledge the contribution made by our EPA liaison officers and staff from the EPA regional offices that were visited by the Audit Office.

The Audit Office also wishes to thank management and staff at the three premises visited by the team for their valuable insights and their time.

1.5 Cost of the audit

The cost of the audit was \$254,501. This figure includes the estimated cost of printing the report (\$7,000) and travel and incidentals (\$2,958).

1.6 Audit team

Jane Tebbatt, Principal Performance Auditor
Tiffany Blackett

2. Regulatory framework

2.1 Environment legislation

The *Protection of the Environment Operations Act 1997* (POEO Act) establishes the regulatory framework for environment protection in NSW and provides mechanisms for licensing, enforcement and prosecution.

Recent reforms

Prior to 1999, anti-pollution legislation was media specific and contained in five separate Acts; the *Clean Air Act 1961*, the *Clean Waters Act 1970*, the *Pollution Control Act 1970*, the *Noise Control Act 1975* and the *Environmental Offences and Penalties Act 1989*.

These Acts, plus the regulatory provisions of the *Waste Minimisation and Management Act*, were consolidated into the POEO Act which commenced on 1 July 1999.

The primary objective of the Act was to rationalise, simplify and strengthen the environmental regulatory framework for air and water pollution, noise control and waste reduction.

The commencement of the POEO Act saw the introduction of two key initiatives:

- a system which controls the loads or total mass of pollutants discharged to the environment (in addition to controlling the concentration of pollutants)
- the introduction of economic incentives to industry in the form of a load-based licensing (LBL) scheme effective from 1 July 2000.⁷

Other notable improvements were:

- a clear delineation of responsibilities for pollution control between the EPA and local councils
- administrative efficiencies through the introduction of ongoing licences (rather than an annual renewal process)
- mandatory licence reviews at least once every three years
- the introduction of environmental audits (voluntary and mandatory)
- improved public access to information (public register)
- more appropriate penalties for offences
- a more equitable licence fee structure.

⁷ The objectives of the scheme are based on the polluter pays principle and aim to provide incentives to industry to reduce discharges of pollutants to air and water and foster ongoing improvements in environmental performance.

Improving access to information The POEO Act attempts to meet the wide ranging information needs of members of the public through the establishment of the public register.

The requirements of the Act are a positive step towards addressing public information needs, however the Act does not require the reporting of compliance and enforcement data (other than prosecution).

Best practice indicates that public data should provide a complete picture of what is occurring at a particular licensed facility. This includes enforcement and compliance data.⁸ In the case of the EPA, this would require additional data to be publicly available on individual licensees covering:

- number of complaints lodged
- inspections, dates and outcome
- instances of non-compliance and action taken such as Penalty Infringement Notices (PINs) issued.

Public access to this type of compliance and enforcement data may also motivate industry to achieve higher rates of compliance because of the risk of damage to corporate image.

Access would be improved if this additional data on individual licensees (listed above) were made available to the public, for example, via the EPA's internet website.

Recommendation **The EPA consider expanding the scope of data available to the public on individual licensees to include the results of compliance and enforcement activities.**

2.2 Regulatory framework

Assessing the framework Effective regulation is essential to achieving further improvements in the environmental performance of industry.

To enhance its effectiveness, traditional forms of regulation are being complemented by other measures such as economic tools, industry agreements, codes of practice and financial assurances. To be effective, environmental regulation needs to:

- support improvements in licensing procedures
- foster technological innovation
- encourage involvement of the public.⁹

⁸ Public Access Workgroup Report US EPA 2000

⁹ Environmental Requirements for Industrial Permitting Organisation for Economic Co-operation and Development (OECD) 1999

An assessment of the EPA's regulatory framework against these attributes is shown in Table 1.

Table 1: Assessment of the EPA's regulatory framework	
Criteria for effective environmental regulation	EPA regulatory framework
1. Streamlined permitting procedures	
<ul style="list-style-type: none"> <input type="checkbox"/> integrated cross-media permitting <input type="checkbox"/> integration with other policy/pollution prevention instruments (voluntary agreements, economic instruments) <input type="checkbox"/> indicators for measuring environmental performance of individual facilities and sectors <input type="checkbox"/> long-term goals and monitoring programs at plant level <input type="checkbox"/> adaptation to small and medium sized facilities and diffuse sources 	<ul style="list-style-type: none"> ✓ one licence for all media (air, water, land, waste) ✓ provisions for economic instruments such as load-based licensing and trading schemes ✓ premises to report annual load limits which will be used as the primary measurement of harm ✓ load reporting allows quantitative evaluation of changes in discharges and resulting outcomes ✓ local government's responsibility for small and medium sized facilities clarified ✓ project on developing a strategy for the management of diffuse sources of water pollution (commenced August 2000)
2. Technological innovation	
<ul style="list-style-type: none"> <input type="checkbox"/> incorporating technological change in the permitting process <input type="checkbox"/> performance based standards which allow the licensee to choose the best methods of compliance 	<ul style="list-style-type: none"> ✓ introduction of Load Reduction Agreements (LRA) where licensees may be eligible for a rebate on licence fees if they invest in cleaner technologies and emission reduction ✓ licensee free to select compliance method ✓ performance based approach to be introduced for licences ie EPA to set environmental outcomes in licences. Licensees determine how best to achieve outcome.
3. Public involvement	
<ul style="list-style-type: none"> <input type="checkbox"/> transparent and democratic processes <input type="checkbox"/> community participation 	<ul style="list-style-type: none"> ✓ public consultation in developing legislation ✓ establishment of a public register containing information on licences, notices and other regulatory matters ✓ public notification of licence reviews

Source: Organisation for Economic Co-operation and Development (OECD) 1999; Regulatory Impact Statement EPA 1998

The regulatory framework introduced under the POEO Act, along with other initiatives (either proposed or in place) by the EPA should enhance the overall effectiveness of environment protection mechanisms.

The Audit Office is of the opinion that the framework is consistent with best practice and once fully implemented, should contribute to the achievement of further improvements in the environmental performance of industry.

Implementation

As yet, not all of the components of the regulatory framework are in place but are progressively being implemented by the EPA.

One of the more significant changes is the introduction of LBL which provides incentives to industry to improve performance and establishes a means by which the EPA can better judge the impact of industry on the environment.

However, the introduction of the scheme is staged with approximately 350 or 12% of all licence holders included in the first year. Refer Appendix 4 for a list of activities included in LBL phase 1.

Although it is proposed to include more activities in the future, the EPA has yet to finalise an implementation plan to extend the scheme to all applicable licensees.¹⁰

Recommendations

The EPA finalise an implementation plan to extend the LBL scheme to all applicable licensees.

The EPA conduct a post implementation review to assess the effectiveness of the new regulatory framework following at least 2 years of operation.

Limits to effectiveness

While the legislative framework supports best practice in regulation and enforcement, the Audit Office identified a number of issues which limit the effectiveness of the reforms and require attention by the EPA.

The following chapters discuss these issues in more detail.

¹⁰ There will also be a proportion of licence holders for which the economic benefits of LBL will not be available because the nature of environmental harm is incompatible with the load-based approach.

3. Licensing

3.1 Introduction

Licensing is an integral part of environmental regulation. Licences prevent and control pollution by limiting emissions and discharges to acceptable levels and requiring facilities to operate in an environmentally sound manner. To be effective, licences need to be appropriate, relevant, realistic and enforceable.

Limits and conditions

Conditions are attached to licences to control the environmental impact of activities. Conditions can relate to discharge or emission limits, operating practices, monitoring and reporting requirements or other specific conditions set by the EPA.

There are generally three types of conditions used by the EPA (outlined in Table 2).

Emission or discharge limits are usually set on a case by case basis unless specified in legislation such as the *Clean Air Regulation* which specifies emission limits for a number of pollutants including sulfur dioxide, particulates and other compounds.

Best practice permitting suggests that licences should incorporate outcome-based standards rather than prescriptive conditions. Licences should leave it in the hands of the operator to determine the most cost effective and innovative options for meeting environmental requirements.¹¹

3.2 Licence quality

Model licences

The EPA has recognised that significant gains can be made from standardising aspects of the regulatory process through the introduction of model licences for industry sectors.

The primary objective of model licences is to achieve consistency in the application of licence conditions within a sector and to establish the same expectations for environmental performance.

The EPA has identified 28 possible model licences and has so far developed 12 model licences. Additional model licences are currently being developed.¹²

¹¹ Environmental Requirements for Industrial Permitting OECD 1999 p16

¹² An overview of the Environment Protection Authority EPA 1999 p8

Table 2: Types of licence conditions
<p>Mandatory conditions</p> <p>Mandatory conditions appear in all licences. For example operating requirements to prevent or minimise pollution:</p> <ul style="list-style-type: none"> <input type="checkbox"/> licensed activities must be carried out in a competent manner <input type="checkbox"/> all plant and equipment installed at the premises or used in connection with the licensed activity must be maintained and operated in a proper and efficient manner.
<p>Standard conditions</p> <p>Standard conditions are used to control common environmental issues within an industry sector or across sectors. For example standard dust conditions:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the premises must be maintained in a condition which minimises or prevents the emission of dust <input type="checkbox"/> all activities on site that are likely to generate dust must be carried out in a manner that minimises the generation of dust <input type="checkbox"/> all plant and equipment must be maintained in a condition that minimises the generation of dust.
<p>Site-specific conditions</p> <p>Site specific conditions are developed on a case by case basis for individual premises. For example emission limits for an oil refinery:</p> <ul style="list-style-type: none"> <input type="checkbox"/> under normal circumstances the maximum sulfur dioxide emission rate from refinery operations must not exceed 1600 kg/h.

Source: Licences and file review

Problems with licence quality

In reviewing the sample of licences for the extractive industry, the Audit Office found that licences did not always establish the same expectations for environmental performance. For example, standard conditions for dust minimisation (such as those in Table 2) did not appear in all licences for quarries.

In addition, the Audit Office identified problems with the appropriateness, enforceability and relevance of some conditions attached to licences.

Case study 1: Examples of problems with licence conditions

Conditions were vague (and difficult to comply with)
eg All erosion control and pollution control works must be inspected on a regular basis.

Conditions that would appear difficult to enforce eg
Material must not be allowed to bank-up against the windshields.

The use of highly prescriptive conditions eg All trucks must be fitted with a supplementary exhaust silencer so arranged that engine gases are diverted through this silencer during the period when the tray is tipped.

Source: Licences and file review

Recommendation **The EPA further progress the development of model licences for industry sectors to standardise performance expectations and improve the quality of licences.**

Monitoring and reporting Similar problems were found in the use of monitoring and reporting conditions in licences of the sample premises.¹³

Current estimates are that at least 25% of licences have some form of monitoring conditions attached ranging from minimal to comprehensive reporting of monitoring data.¹⁴ Most variations in requirements within an industry sector can be explained by the fact that the requirements were set on a case by case basis.¹⁵

However, the Audit Office identified cases where licensees were required to monitor and record specific emissions while other licensees (involved in similar operations) were also required to report this additional monitoring information to the EPA. While there may be valid reasons for this, it was difficult to determine the rationale for the inclusion of reporting requirements on some licences and not others.

The Audit Office also found that monitoring and reporting conditions did not always appear to be proportional to environmental risk.

¹³ Even where there are no specific data reporting requirements on a licence, all licensees must report to the EPA all licence breaches in the annual statement of compliance and all exceedences or breaches that may cause harm to the environment (as soon as practical).

¹⁴ Terms of Reference for the review of monitoring conditions on licences EPA 2000

¹⁵ In the extractive industry sample, monitoring conditions were included in half of the licences. Of these, only 7 licensees were also required to report the results of monitoring to the EPA.

The EPA has acknowledged these inconsistencies and has recently commenced a review of monitoring conditions in all licences to identify minimum requirements for monitoring and reporting on activities.

Recommendations **The EPA complete the review of the efficacy of monitoring and reporting requirements and establish guiding principles to ensure requirements are cost effective, equitable and beneficial to the EPA.**

The EPA include monitoring and reporting requirements in model licences that reflect the guiding principles referred to above.

3.3 Licence review

Many of the problems observed by the Audit Office with the quality of licences may in part be due to the prior absence of a coordinated program of licence review to achieve consistency, appropriateness, relevance and enforceability of licence conditions.

Licence review under POEO

The POEO Act has now introduced a system of regular reviews of licences with the EPA being required to review all licences at least once every 3 years.

The licence review process has two main objectives; improvement in environmental outcomes and licence systems improvement.

The EPA is required to give public notice of its intention to review a licence, thereby providing the community with the opportunity to contribute to the formal process of reviewing conditions in licences.

The first review of existing licences is to occur within 3 years of the Act's commencement (by June 2002). The EPA has commenced a transitional licence review process to address the requirements of the legislation. The transitional licence review process establishes different levels of review for different industry sectors.

The success of the review process will depend on factors such as:

- ❑ the availability of model licences for the industry sector as a means of achieving regulatory consistency
- ❑ the manner in which the EPA addresses issues raised in submissions from licensees or the public.

The achievement of licence review objectives would also be enhanced if all licences were subject to the same rigour. Currently, only 27% of licensees will have a site inspection to check licence conditions.

Recommendations **The EPA complete the post-implementation review of the licence review program to assess effectiveness and identify opportunities to enhance the licence review process.**

The EPA report on the outcomes of this review in its annual report.

4. Assuring compliance with licence conditions

4.1 Introduction

There are three primary means by which the EPA gains assurance that licensees are complying with the conditions of their licence. These are:

- the provision of annual returns by licensees certifying whether licence conditions have been met
- inspections of premises
- compliance audits.

The EPA has reported that it prefers to use compliance audits and targeted investigations rather than routine inspections as a means of checking compliance with licence conditions.

4.2 Statements of Compliance

Statements of Compliance (or annual returns) are key accountability documents and are one of the primary means by which the EPA assures itself that licensees are complying with licence conditions.

Licence holders are required to provide an annual statement certifying whether or not licence conditions have been met and reasons for any non-compliance. Licensees must also advise of action taken or to be taken to prevent the recurrence of breaches, fees payable in relation to the licence, and provide monitoring data and a summary of complaints.^{16, 17}

The Audit Office found that annual returns provide limited assurance to the EPA that licensees are operating in accordance with their licence conditions.

Reviewing annual returns

Annual returns are subject to two levels of checking by the EPA:

- administrative review which involves checking for errors such as incorrect licence periods, whether or not the annual return was signed by the authorised officer and if it was submitted by the due date
- compliance review (undertaken at regional offices) of reported breaches in conditions of the licence and checking that monitoring reports have been received.

¹⁶ S66 (3) POEO Act

¹⁷ Under POEO, licensees are required to provide a statement of compliance on the anniversary date of their licence. Licence holders affected by load based licensing (ie with assessable pollutants) are also required to report pollutant loads generated by the premises. Load reporting commenced in July 2000.

Administrative review

The Audit Office found that all annual returns for the sample premises had been subject to at least an administrative review.¹⁸ Yet for 8 premises there were instances where errors in the annual return had been detected by the EPA but had not been corrected.

For example, one premise submitted annual returns with incorrect licence periods over a period of 4 years before the EPA approached the licensee for a correct annual return.

The EPA has advised that administrative procedures have recently been revised to prevent this occurring in future.

Compliance review

Additional problems were identified with compliance reviews. As a minimum, a compliance review of the annual return should constitute:

- ❑ a check of the monitoring and complaint summary provided by the licensee
- ❑ a review of any breaches or incidences reported in the annual return and the action taken by the EPA in response to those breaches
- ❑ a review of breaches and issues raised in complaints during the past year to determine if the licence conditions are appropriate.

For accountability purposes the review should be signed off by an officer and any actions arising from the review fully documented.

The Audit Office found that for the audit sample, there was no evidence that a comprehensive review of annual returns had been undertaken. Of the 110 annual returns in the sample only 11 noted receipt by a regional officer. In these cases, a hand-written note indicated that the administrative checklist had been noted, but there was no evidence of a more detailed review.

Recommendations

The EPA undertake compliance reviews of annual returns.

The EPA maintain records on the outcomes of compliance reviews of annual returns.

¹⁸ Annual returns from 1995-96 onwards for the sample premises were reviewed by the Audit Office.

Reliability of self assessment

The Audit Office found that the EPA does not routinely test the validity and accuracy of data provided in annual returns.¹⁹ Yet this is critical in a system which relies on the licensee being aware of and reporting instances of non-compliance.

Case study 2: Industry compliance
An EPA compliance report (April 2000) covering a sample of licensees in the extractive industry found that 65.5% of licensees had breached one or more conditions of their licence. Although many of these breaches were minor, they had not been declared in the licensee's annual return.

Source: Extractive Industry Sector: Compliance Performance Report EPA April 2000

There are many reasons why a licensee may not identify and report instances of non-compliance, such as:

- a lack of understanding or a misinterpretation of the requirements of the licence
- inadequate systems to monitor compliance with regulations
- poor reporting practices when breaches do occur.

Independent certification

A well-established method of enhancing levels of assurance is independent certification. This approach uses an independent third party to check compliance with standards and other regulatory requirements. For example, it is used for quality assurance certifications, motor vehicle safety inspections, hospital accreditation and checking the accuracy of financial statements.

A system of third party certification of annual returns would ensure that information reported by licensees was accurate and reliable. As with other certification schemes, the cost of certification should be borne by the licensee.

Consideration could also be given to a system in which certification is undertaken by auditors accredited by the EPA.

Recommendation

The EPA consider the implementation of a system for independent certification of annual returns.

¹⁹ The EPA reports that annual returns may be tested as part of a compliance audit or where the EPA suspects the licensee may have falsified the annual statement.

4.3 Inspections

The EPA conducts inspections of premises to ensure licensees are complying with the conditions of their licence.²⁰

A decision to conduct an inspection may also be in response to:

- complaints from the public
- self reported incidents/exceedences in discharge limits
- proposed changes in operations
- negotiations for a pollution reduction program.

The Audit Office found that there was no standard response to factors which should trigger an inspection, nor was there an inspection program to guide the frequency of site visits.

Case study 3: Frequency of inspections
<p>One premise reviewed by audit was inspected each year at the time of licence renewal even though the last 3 inspection reports indicated that it was not operating (the quarry was inactive). In contrast, the Audit Office found that for other premises there were numerous nuisance complaints yet there was no evidence of inspections on file.</p> <p>The Audit Office also found that during the last five years, 6 (27%) of the sample premises had been inspected only once and for 8 premises (36%) there were no records of inspection at all.</p>

Source: File review

Officers reported that inspection effort is generally concentrated on those licensees where the EPA has identified there is a significant risk to the environment or public health arising from their operations. Risk in this regard is determined by officers' and supervisors' knowledge and experience with the type of operation and activity.

However, the Audit Office considers that a more formal and objective approach to assessing risk is needed to better target resources.

Recommendation **The EPA consider using the results of a formal risk assessment to establish priorities for inspection activity.**

²⁰ The EPA also undertakes special investigations as required.

Documenting inspections

The Audit Office found that for the audit sample, there were inadequate records maintained on inspections. It was often difficult to determine the reason for an inspection, what action had been recommended or whether recommendations had been followed-up. In some cases, inspections were not formally documented but were only referred to in briefing notes, correspondence or notices.

One reason for this may be the absence of standard requirements for recording inspections. Similarly, there is no standard process for reviewing recommendations from inspection reports or for following-up recommendations arising from inspections to ensure implementation.

Inspection history

One of the consequences of poor record keeping is the absence of accurate and reliable data on inspection activity in regard to licensees. This in turn makes it difficult to obtain an accurate picture of the level of compliance with regulatory requirements (such as licence conditions, notices) which would guide the EPA's decisions on the best options for regulatory intervention.

Recommendation

The EPA introduce standard practices for recording inspections and procedures for reviewing recommendations arising from inspections.

The EPA reports that record keeping will be a key focus of the quality assurance program. Inspection reports have also been added to the computerised licensing system.

Investigating complaints

Members of the public can report pollution incidents or complaints direct to the EPA's regional offices or to the EPA Pollution Line, a 24-hour statewide telephone service.

Complaints are recorded on the Pollution Line database and referred to the regions for investigation.

The Audit Office found it difficult to determine the EPA's response to complaints from the public regarding licensees. In many cases responses were not recorded (either on the Pollution Line database or on file), nor reasons provided for no further action being taken.

Recent changes in the functionality of the Pollution Line database will allow easier recording of the outcomes of investigations by regions. However, the absence of documented procedures for investigating and recording the response to complaints will still create inconsistencies in complaint records.

Recommendations **The EPA introduce procedures for investigating and recording the outcomes of complaints.**

The EPA examine the accuracy and completeness of complaint data as part of the quality assurance program.

4.4 Compliance audits

Compliance audits provide a comprehensive assessment of a licensee's operations to check compliance with licence conditions and other statutory requirements. The EPA has a separate compliance audit function and has established an annual program of compliance audits.

There are two types of compliance audits: sector based audits and special purpose audits. Sector based audits examine a sample of premises within an industry sector (such as the extractive industry). Special purpose audits are reviews of individual premises.

On completion of a sector-based compliance audit, two reports are prepared: a compliance audit report and a regulatory review report. Regulatory review reports aim to improve the effectiveness of regulatory instruments and ensure licence conditions are appropriate and enforceable.

Case study 4: Good practice in compliance auditing
<p>The EPA's sector-based approach to compliance auditing assists the identification of systemic issues that may affect compliance rates within an industry sector.</p> <p>To date, two sector-wide audits have been finalised, including one for the extractive industry.²¹ Compliance audits of a sample of premises from a sector are undertaken to assess each licensee's compliance with statutory requirements. These findings then form the basis of the compliance audit report which comments on the industry sector's overall performance.</p> <p>The regulatory review report provides recommendations on the model licence for the industry sector and the need for other tools such as education, industry consultation and enforcement to improve compliance rates.</p> <p>Findings from regulatory review reports are being incorporated into the licence review process and the model licence program.</p>

Source: EPA 2000

²¹ Extractive Industry Sector: Compliance Performance and Regulatory Review Report EPA April 2000; Solid Waste Landfills Compliance Performance and Regulatory Review Report EPA March 2000.

Currently, 85% - 90% of compliance audit resources are dedicated to sector-based audits, with the remaining resources allocated to special purpose audits.

Industry selection

The EPA uses a formal structured approach to select industries for sector based compliance audits. However, the approach used to select premises from a sector is less rigorous and relies on suggestions on specific high priority licences from the regions.

Ideally, criteria for selection should be based on the results of licensee risk assessment and targeted to licensees most likely to breach licence conditions.

The results of risk assessment could also be used for the selection of industry sectors and to extend the audit program to include other priority areas such as:

- specific media (air, land, water)
- geographical regions
- groups within an industry sector.

Recommendation

The EPA consider using the results of risk assessment to identify priorities for its compliance audit activities.

Coverage

In general, the level of compliance activities undertaken by a regulator must be sufficient and appropriate to reduce the risk of non-compliance to an acceptable level.

The Audit Office would consider the proportion of licences subject to compliance audit (1.3%) insufficient to provide the EPA with an adequate level of assurance that premises are complying with the conditions of their licence.

Table 3: Number of compliance audit reports per annum				
	1997-98	1998-99	1999-00	2000-01 (projected)
No. of compliance audits	40	42	37	50*
% of total licences	0.9%	0.9%	1.3%	1.8%**

Source: EPA Compliance Audit Unit and data request

Notes:

* Estimate based on current resources

** 99-00 figure for total licences used in calculation

Current data indicate wide variations in industry compliance (from 15% to 65% depending on the data source).

For example, 15% of licensees reported non-compliance in their annual returns for 1998-99. However as illustrated previously, this is not always a reliable indicator of industry compliance as the licensee may not report all instances of non-compliance.

In future, the information reported in annual returns (following independent validation as described in section 4.2) may provide the most accurate measure of non-compliance with statutory requirements.

Recommendation **The EPA better match compliance audit resources to the level of industry non-compliance.**

Enhancing compliance audit Under the POEO Act there are also provisions to encourage industry to undertake voluntary environmental audits and to require poor performers to undertake mandatory environmental audits as a condition of their licence.

In future, compliance audit activities may be complemented by mandatory environmental audits undertaken by licence holders.

Recommendation **The EPA use mandatory environmental audit provisions as a means of complementing compliance audit activity.**

5. Enforcement strategies

5.1 Introduction

The EPA's approach to enforcement is important in providing a deterrent to pollution and achieving greater compliance with environmental legislation.

Enforcement options

Enforcement options available to the EPA include:

- cautions (oral and written)
- letters of agreement
- penalty infringement notices (PINs)
- prosecution
- licence suspension
- licence revocation
- court orders.

Notices (eg for completion of work or changes in conditions), pollution reduction programs and mandatory audits can also be used to remedy environmental problems.

The POEO Act establishes a three-tiered framework of offences and penalties based on the severity and intention of actions. Tiers 1 and 2 are the most serious and are dealt with through prosecution, with minor Tier 2 and Tier 3 offences dealt with through the issue of PINs.

Penalties range from \$1500 for a PIN to \$1m for a Tier 1 offence for a corporation which has caused significant harm to the environment. Minor breaches in licence conditions are generally dealt with through the issue of PINs.

5.2 Selecting the most effective enforcement strategy

The Audit Office found that enforcement action is generally in response to complaints, incidents, inspections or self-reported breaches of licence conditions.

Once a breach has been identified, officers use the EPA's Prosecution Guidelines to guide decisions on selecting the most appropriate enforcement strategy. These guidelines outline factors to be taken into account in deciding enforcement action to be taken.

For example, PINs are appropriate in the following instances:

- ❑ the breach is minor
- ❑ facts are incontrovertible
- ❑ the breach is one-off and can be remedied easily
- ❑ the issue of a PIN will be a viable deterrent.²²

Officers reported that decisions are influenced by licensees' past performance and/or the level of licensee or process sophistication.

However, the Audit Office found that in some cases there was no apparent reason for the selection of one type of enforcement action over another, particularly given the history of incidents (see example below). It would appear that the decision to issue the caution letter (19 April 2000) was made without an awareness of the licensee's past performance.

Date of incident	Description	Enforcement action
23 Nov 1994	Exceeding overpressure levels for blasting	Caution
16 May 1995	Exceeding overpressure levels for blasting	PIN (8 Jun 95)
8 Mar 1996	Exceeding overpressure levels for blasting	No action taken (no reasons for decision provided)
20 Jan 2000	Blasting occurred outside hours specified in licence	Caution (14 Feb 00)
1 Feb 2000	Exceeding overpressure levels for blasting	Caution (19 Apr 00) Reason provided*

Source: File review

Notes

* *Letter to premises from the EPA reports that "this is the first exceedence of the overpressure blasting limit" relating to the premises.*

Similarly, Table 5 illustrates two premises with similar dust related incidents, yet one is cautioned and the other is issued a PIN.

²² EPA Prosecution Guidelines 1996 p 21

Premises	Date	Description	Enforcement action	History of similar incidents
PY	20 Apr 00*	Drill rig observed with no dust control	Caution (30 May 00)	No other similar incidents re dust on file
PZ	14 Apr 00	Drill rig observed with missing section of dust skirt	PIN (15 Jun 00)	No other similar incidents re dust on file

Source: File review

Notes

* Reported in a compliance audit report issued on 20 April 2000.

Poor information One explanation for inconsistencies in the selection of enforcement strategies could be incomplete records of past decisions (including the rationale for decisions) and difficulties accessing information on the compliance and enforcement history of a licensee.

The Audit Office found that in general, decisions regarding enforcement action were not well documented. File review indicated that even where triggers were present (such as breaches, pollution incidents etc) the reasons for the decision and the rationale for selecting a particular enforcement strategy were not always recorded, including decisions to take no further action.

Similarly, decisions were not always linked to an inspection or breach report, where options for action should be considered along with recommendations for enforcement action.

Compliance and enforcement history

In addition, the Audit Office was unable to obtain an accurate and complete picture of the compliance and enforcement history of a premises or industry sector.

At the time of audit, data on PINs and cautions issued to individual licensees was not easily accessible. Also the Audit Office could not easily access data on inspection activity and complaints against individual premises. The EPA has recently reported that a PIN database has been developed and a new field will be added to the Pollution Line database to record licence numbers. Improvements to the computerised licensing system have also been introduced to facilitate better recording of inspections.

For the prosecution guidelines to be effective (and penalties applied in a fair and consistent manner), it is important that officers making decisions on enforcement action have access to accurate and reliable information on the compliance and enforcement history of premises.

Without this information the EPA would be unable to make reliable judgements on the effectiveness of its compliance and enforcement activities. In addition, this data provides valuable information on licensee performance and can be useful in identifying emerging environmental issues.

Recommendations

The EPA ensure accurate and complete documentation of all decisions regarding compliance activities and enforcement action taken against individual premises.

The EPA improve access to information on the compliance and enforcement history of a licensee to support decision making.

6. Achieving compliance

6.1 Risk assessment

To attain high levels of compliance with statutory requirements it is essential that resources be directed to areas of greatest need. This is achieved by identifying premises with the greatest risk of causing environmental harm and directing regulatory intervention to reduce risk to an acceptable level.

As previously discussed, officers reported that regulatory effort is generally concentrated on those licensees where the EPA has identified significant risks to the environment or public health. Risk in this regard is determined by officers' and supervisors' knowledge and experience with the type of operation and activity.

The Audit Office found however, that the EPA would benefit from a more structured and formalised process for assessing the environmental performance of premises including licensee risk of non-compliance. The results of such a process would guide decision-making and resource allocation.

Risk assessment should take into consideration a number of factors including the compliance history of premises (ie record of compliance with licence conditions, results of inspections, enforcement action and history of complaints).

Other indicators of environmental performance could also be considered. For example, licensees may have management processes in place which demonstrate a commitment to continuous environmental improvement.

Similar risk management methodologies are used in other jurisdictions to appraise licensee performance and guide decision-making (refer Case study 5).

In these agencies, the results of risk assessment are used for targeting regulatory effort to high-risk processes with the aim of improving the effectiveness and efficiency of regulation. Possible applications include:

- establishing inspection priorities
- developing the compliance audit program
- determining monitoring and reporting requirements.

A consistent method of assessing industry performance would also provide a valid basis for benchmarking industry and help identify opportunities for further improvement.

Case study 5: Risk assessment

The UK Environment Agency conducts risk assessments based on an appraisal of operator performance and an assessment of the pollution hazard involved.

Operator performance is judged using a variety of attributes. Performance appraisal goes beyond just compliance with statutory requirements and examines mitigating factors including:

- recording and use of information (monitoring and reporting arrangements)
- knowledge and implementation of statutory requirements
- plant maintenance programs and standards
- operating procedures
- frequency, severity and response to incidents, complaints and non-compliance events
- existence of environmental management systems.

Pollution hazard appraisal is based on the inherent risk of the process due to the type of pollutant and the location of the activity.

Assessment criteria include:

- presence of hazardous substances
- amount of hazardous substance present in the process
- frequency and nature of hazardous operations
- technologies for hazard prevention and minimisation
- technologies for hazard abatement
- location of process
- offensive characteristics of the process such as odours or visible releases which give rise to public concern (public perception of risk).

Operator assessments are conducted by inspectors from the Environment Agency with some attributes weighted to better reflect environmental risk.

Source: UK Environment Agency, Operator and Pollution Risk Appraisal, 1997

Recommendations **The EPA adopt a more structured and formal methodology for assessing licensee performance.**

The EPA use the results of licensee performance assessments to support decision making, target regulatory intervention and benchmark licensee performance.

6.2 Is compliance and enforcement effective?

Monitoring and reporting on the results of compliance and enforcement activities is essential for maximising the effectiveness of regulation and in bringing about improvements in environmental outcomes.

Each year in its Annual Report, the EPA reports on compliance and enforcement activities in terms of outputs. For example, the number of pollution reduction programs, the number of PINs issued, the number of enforcement cases and the dollar value of enforcement penalties are regularly reported.

However, the Audit Office found that the EPA does not monitor or report on the outcomes arising from compliance and enforcement activities (other than prosecution) in terms of the impact on the environment and industry.²³

Performance measures

Case study 6: Evaluating compliance and enforcement

The US Environmental Protection Agency has developed a set of performance measures to monitor the state of compliance among regulated activities, the environmental outcomes of enforcement and the extent to which environmental objectives are being addressed.

Outcome measures are:

- rates of non-compliance for fully inspected industry, self-reported compliance information, targeted populations and priority industry sectors
- improvements resulting from EPA enforcement actions
- improvements resulting from compliance assistance tools and initiatives
- improvements resulting from other initiatives
- self-policing efforts by using compliance incentive policies
- average number of days for significant violators to return to compliance or enter enforceable agreements
- percentage of significant violators with new or recurrent violations within two years of receiving previous enforcement action.

Output measures are:

- number of inspections, record reviews, responses to citizen complaints and investigations conducted
- number of notices issued, prosecution actioned/concluded
- number of facilities reached through compliance assistance tools and initiatives or compliance information.

Source: National Performance Measures Strategy, US EPA, 1997

Adoption of an approach similar to that used by the US EPA may make it easier to judge the effectiveness of the EPA in achieving compliance or producing the most effective environmental outcome.

Recommendation

The EPA develop performance indicators to measure its overall effectiveness in achieving environmental improvements arising from compliance and enforcement activities.

²³ The EPA reports prosecution rates and the outcomes of significant prosecution cases (such as name of premises, the offence and total fine) as a means of increasing industry awareness of enforcement outcomes.

7. Pollution reduction

7.1 Introduction

In recent years, there has been increased emphasis placed on environmental protection through pollution prevention and reduction.

Two schemes used by the EPA to reduce the environmental impact of industry are pollution reduction programs and load-based licensing.

7.2 Pollution Reduction Programs

Since 1992, the EPA has negotiated pollution reduction programs (PRPs) with selected licensees to reduce potential environmental damage and bring plant operations to an acceptable level of environmental performance.

The total number of PRPs initiated in 1999-2000 was 157 requiring licensee improvements valued at around \$24m.²⁴

PRPs are negotiated agreements between the EPA and the licensee and are attached as conditions to the licence to make them enforceable.

Examples of recent PRPs include:

- upgrading sewerage treatment plants to improve the quality of wastewater and establish effluent re-use schemes
- introducing dry growing sheds to reduce odours and wastewater at piggeries
- diverting backwash from council swimming pools instead of discharging chlorinated water into storm water drains.

Judging the effectiveness of PRPs

The Audit Office was unable to judge the overall effectiveness of PRPs as the EPA does not prepare a consolidated analysis of the results of PRPs or report on the success or otherwise of PRPs in reducing pollution from premises (in terms of reduced emissions and discharges).²⁵

Other information that would assist in judging the benefits of these programs is outlined in Table 6.

²⁴ Pollution Reduction Programs may involve the installation of capital works, pollution control equipment and/or other cleaner production technologies to bring about environmental improvement.

²⁵ Although the EPA reports some outcomes in PRP case studies in annual reports.

Table 6: Measuring the benefits of PRPs

Any assessment of PRPs should include:

- the environmental objectives and whether they have been met (including levels of pollution reduced)
- total cost of the PRP once completed
- the economic benefits gained (eg cost savings from cleaner production)
- benefits for other licensees (sector wide issues)
- environmental issue addressed (air, water, land, waste).

Source: Pollution Reduction Programs EPA 1997

Better information on PRPs would help identify programs that should be extended across sectors or particular media and in negotiating realistically attainable emission and discharge targets for industry.

Recommendation

The EPA report on the success or otherwise of PRPs in reducing pollution from scheduled premises.

The EPA use this information to select the best options for maximising pollution reduction using these programs.

7.3 The load-based licensing scheme

The load-based licensing (LBL) scheme is a new pollution reduction mechanism which aims to give a financial incentive to industry to reduce emissions and discharges. The scheme links licence fees with the amount and type of pollutant emitted. Licensees who reduce their pollutant load are rewarded with lower licence fees.

Licensees will also be able to negotiate Load Reduction Agreements where they may be eligible for a rebate on licence fees for investments in cleaner technologies and emission reduction.

The LBL scheme is being implemented progressively. However in its first phase, LBL will affect only 350 licence holders (12%).

While more activities will be eventually incorporated into the scheme, there will still be a proportion of licence holders for which LBL will not be applicable. For these industries there are no satisfactory load calculation techniques available (the EPA can not set load limits) and/or the nature of environmental harm is incompatible with the load-based approach.

For the majority of these premises, the licensing system will not provide any significant economic incentives to reduce pollution beyond licence requirements.^{26, 27}

7.4 Other incentives to improve performance

Environment protection agencies in other jurisdictions (Australian and international) have introduced different types of pollution control licences as a means of motivating industry to improve environmental performance.

Industry's reward for satisfactory compliance with environmental legislation and a commitment to improved environmental performance is in the form of regulatory relief.

Case study 7: Regulatory relief as an incentive for improving performance
--

<p>The Department of Environmental Protection in Western Australia has introduced three types of pollution control licences:</p>
--

- | |
|--|
| <ul style="list-style-type: none">❑ an ordinary licence which is a standard licence with technical and operational conditions. Licence fees are based on discharge limits in the licence.❑ a monitored licence where fees are based on actual discharges.❑ a best practice environmental licence (BPEL) where licensees receive regulatory relief for achieving environmental improvements identified through audited self-management. |
|--|

<p>To qualify for a best practice licence, licensees must demonstrate best practice environmental management practices and have in place a program of continuous improvement in environmental performance.</p>
--

<p>Criteria for a best practice licence include:</p>
--

- | |
|---|
| <ul style="list-style-type: none">❑ an environmental policy❑ environmental performance objective agreed with the Department❑ environmental management plan❑ implementation and monitoring program❑ results of benchmarking environmental performance❑ evidence of community involvement❑ reporting environmental performance❑ an environmental audit plan. |
|---|

<p>Regulatory relief is in the form of reduced licence fees, a simplified (outcomes based) licence, expedited works approvals processing, exemptions of works approval fees and longer licence tenure.</p>
--

Source: Department of Environmental Protection 2000 WA

²⁶ Regulatory Impact Statement Proposed Pollution Control Regulation 1998 EPA pgs 9 16 19 & 21; NSW Parliamentary Debates (HANSARD) No. 5 11-13 November 1997 pgs 1743 & 1837 (Second Reading Pollution Control (load-based licensing) Bill & Protection of the Environment Operations Bill).

²⁷ Although other economic instruments are being developed or are under consideration for specific geographic regions such as the Hawkesbury-Nepean, Sydney catchment and the Sydney metropolitan airshed. A trading scheme which controls saline discharges from coal mines and power stations along the Hunter River is also in operation.

This approach encourages and rewards environmental performance which goes beyond compliance with statutory requirements. The benefits to government include continual improvement in environmental outcomes and better access to environmental performance information. In addition, reduced levels of intervention can result in savings to the regulator which can be passed onto industry.

Recommendation **The EPA continue to investigate options for providing incentives which will encourage licensees to improve environmental performance (particularly those not included in the load-based licensing scheme).**

8. Appendices

Appendix 1 Audit scope and objectives

Scope and objective This audit examines the efficiency and effectiveness of the EPA's regulatory framework in controlling and reducing pollution from scheduled activities.

The audit focused on the EPA's:

- approach to licensing
- compliance activities
- use of enforcement strategies
- pollution reduction schemes
- response to complaints.

The aim of the audit was to identify best practice in regulatory functions and issues that may impact on the effectiveness of the regulatory framework.

Criteria

1. Licensing

Hypothesis being tested: That licensing controls the environmental impact of scheduled activities in NSW.

Issues examined:

- regulatory framework
- coverage of scheduled activities
- development and review of licences
- licence requirements for monitoring and reporting.

2. Compliance activities

Hypothesis being tested: That compliance activities ensure adherence to licence conditions and assist in achieving improvements to the licensing system.

Issues examined:

- industry selection
- conducting inspections and audits
- systemic issues.

3. Enforcement strategies

Hypothesis being tested: That an appropriate mix of enforcement strategies is used to improve compliance with licence conditions, relevant legislation and EPA directions.

Issues examined:

- triggers for enforcement action
- determining the most effective enforcement strategy
- prosecutions.

4. Pollution reduction

Hypothesis being tested: That pollution reduction schemes undertaken by scheduled activities successfully reduce the levels of discharge into the air, water or land of substances likely to cause harm to the environment.

Issues examined:

- types of schemes
- coverage
- effectiveness of schemes
- monitoring and reporting outcomes.

5. Responses to pollution incidents

Hypothesis being tested: That the EPA investigates pollution incidents and that investigations result in improvements in controls.

Issue examined:

- notification and investigation of incidents
- systemic change.

Appendix 2**Audit fieldwork****EPA regions**

The audit team visited four EPA regions:

- Sydney Region
- South Coast Region
- Northern Region (Hunter)
- Western Region (Central West).

Files reviewed**Licensee****Licence No.*****Extractive industry***

Pioneer Construction Materials	000925
Mudgee Dolomite and Lime Pty	002588
Pasminco Australia Ltd	001301
Girilambone Copper Company	004501
Cadia Holdings Pty Ltd	005590
Normans Plant Hire	003540
Cleary Bros (Bombo) Pty Ltd	004146
Department of Land and Water Conservation	005199
Boral Resources (NSW) Pty	002068
Earburn Pty Ltd	002594
Pacific Blue Metal Pty	003393
Hexxon Minerals Pty Ltd	005153
Bayswater Colliery Company	000113
Liddell Coal Operations	002094
Mt Thorley Colliery	001976
Rocla Ltd	000414
James Cumming and Sons Pty	002107
Nepean Quarries Pty Ltd	002892
Collex Waste Management Pty	003469
Western Sands Mining Pty Ltd	003771
Vicary Corporation Pty Ltd	004946

Petroleum refinery

Caltex Australia Ltd	000837
----------------------	--------

The team also visited Mount Thorley Operations Pty Ltd (coal mine), Cadia Holdings Pty Ltd (gold mine) and Caltex Australia Ltd (petroleum refinery) and contacted environment protection agencies in other jurisdictions including Victoria, Western Australia, Queensland and South Australia.

Appendix 3**Glossary**

Annual return	A statement that is certified by the licence holder that reports on the extent of compliance with licence conditions, pollutant loads, and payment of fees and is due at the end of each 12-month licence fee period.
Compliance activities	Activities which the EPA uses to gain assurance that licensees are complying with the conditions of their licence. These include annual returns, inspections of premises and compliance audits.
Compliance audit	Comprehensive evaluation of a licensee's operations to check compliance with licence conditions and other statutory requirements.
Economic incentives	Incentives that affect the costs and benefits of licensee operations, with the effect of influencing behaviour in a way that is favourable to the environment eg load-based licensing.
Enforcement strategies	Strategies which the EPA uses to ensure compliance with licence conditions and environment protection laws. These strategies may direct licensees to remedy environmental problems or penalise operators for breaching statutory requirements. Examples are environment protection notices, penalty infringement notices and prosecution.
Environmental harm or impact	Harm to the environment which includes any direct or indirect alteration of the environment that has the effect of degrading the environment and includes an act or omission that results in pollution.
Exceedence	An occasion where a goal, guideline or standard is exceeded.
Extractive industry	For the purpose of this audit the definition of extractive industry included the following scheduled activities: <ul style="list-style-type: none"> <input type="checkbox"/> coal mining <input type="checkbox"/> crushing, grinding or separating works <input type="checkbox"/> dredging <input type="checkbox"/> hard-rock gravel quarrying <input type="checkbox"/> other land based extraction <input type="checkbox"/> mining (other than coal).
Inspection	A site visit by officers of the EPA to individual premises to check compliance with licence conditions or investigate a pollution incident or complaint.

Licence	An environment protection licence issued by the EPA under the <i>Protection of the Environment Operations Act 1997</i> , which authorises the carrying out of activities and controls the environmental impact of activities through licence conditions.
Licence conditions	Conditions attached to a licence which can relate to discharge or emission limits, operating practices, monitoring and reporting requirements or other specific conditions set by the EPA.
Load-based licensing	A polluter-pays fee system based on actual discharges or emissions of pollutants, and providing an economic incentive for the reduction of pollutants discharged into the environment.
Mandatory environmental audits	An environmental audit imposed on licensee holders where the EPA suspects that the licensee has contravened the POEO Act and has caused (or is likely to cause) harm to the environment.
Pollution reduction programs	A legally enforceable program which is negotiated and agreed between a licensee and the EPA which requires improvements to works, methods or management to bring about environmental improvement.
Premises	A building, structure, land, mobile plant or vehicle which operates one or more scheduled activity.
Risk assessment	A process that evaluates the likelihood of environmental harm that results from a licensee's activities. It includes an assessment of factors such as the type and amount of pollutant discharged, location of the activity, compliance history, operating procedures and management practices.
Scheduled activity	An activity listed in Schedule 1 of the <i>Protection of the Environment Operations Act 1997</i> , which requires a licence.
Statement of compliance	See annual return.
Third party certification	A process by which an independent accredited third party verifies that the requirements of a particular standard have been met.

Appendix 4 **Industry sectors included in load-based licensing (as at 1 July 2000)**

Industry sectors with assessable pollutants
Cement or Lime Production (more than 30kT per annum)
Cement or Lime Handling (more than 30kT per annum)
Glass Production
Ceramics Production (more than 30kT per annum)
Agricultural Fertiliser and/or Ammonium Nitrate Production (more than 20kT per annum)
Paint Production (more than 5kT per annum)
Petrochemical Production (more than 2kT per annum)
Plastics Production (more than 2kT per annum)
Chemical Storage (more than 2000T petroleum, 200T liquefied gases or 20T pressurised gas per annum)
Coke Production (more than 2000T per annum)
Electricity Generation (more than 250 Gwh per annum)
Primary and Secondary Iron and Steel Production (more than 10kT per annum)
Primary and Secondary Aluminium Production (more than 10kT per annum)
Primary and Secondary Non-Ferrous Production (more than 10kT per annum)
Paper Production using Recycled Material (more than 70kT per annum)
Other Paper Production (more than 30kT per annum)
Petroleum Refining
Waste Oil Recovery (more then 20kT per annum)
Sewage Treatment (more than 219L discharged per annum)
Biomedical Waste Incineration
Municipal Solid Waste Incineration

Source: *Protection of the Environment Operations (General) Regulations Notes*

LBL currently represents 350 (or 12%) of licence holders.

Appendix 5 References

- Australian National Audit Office, *Administration of Tax Penalties, Australian Tax Office*, Audit Report No. 31
- Brisbane City Council, *Environmental Incentive Licence*, 1996 (pamphlet)
- Council on the Cost of Government, *Service Efforts and Accomplishment, Report on the Environment*, 1998
- Department of Environment Protection, Western Australia, *Annual Report 1998-99*, 1999
- Department of Environment Protection, Western Australia, *Best Practice Environmental Licences 2000*
- Department of Environmental Protection, Western Australia, *Guidelines for the proposed Compliance Audit Statement System and Compliance Auditor Accreditation Scheme*, 2000
- Department of the Environment, Transport and the Regions, United Kingdom, *Integration Pollution and Prevention Control: A Practical Guide*, 2000
- Environment Agency, United Kingdom, *Operator and Pollution Risk Appraisal (OPRA)*, 1997
- Environment Agency, United Kingdom, *Spotlight on Business Environmental Performance, Report 1999*, 2000
- Environment Protection Authority of NSW, *An Overview*, 1999
- Environment Protection Authority of NSW, *Annual Report 1999-2000*, 2000
- Environment Protection Authority of NSW, *Draft Extractive Industry Sector Regulatory Review Report*, 2000
- Environment Protection Authority of NSW, *Environmental Success Stories, New Initiatives in Cleaner Production and Pollution Prevention*, 2000
- Environment Protection Authority of NSW, *EPA Prosecution Guidelines*, 1996
- Environment Protection Authority of NSW, *Ethics Package*, 1998
- Environment Protection Authority of NSW, *Industry Sector: Extractive Industry, Compliance Performance Report*, 2000
- Environment Protection Authority of NSW, *Operations Guidance Manual, Load Reduction Agreements*, 2000

Environment Protection Authority of NSW, *Pollution Reduction Programs, A Guide to Pollution Reduction Programs*, 1997

Environment Protection Authority of NSW, *Regulatory Impact Statement, Proposed Pollution Control Regulation*, 1998

Environment Protection Authority of Victoria, *A Question of Trust, Accredited Licensee Concept, A Discussion Paper*, 1993

Environment Protection Authority of Victoria, *EPA Information Bulletin, Accredited Licensee, Guidelines for Applicants*, 1996

Ministry for the Environment, *Establishing the Environment Protection Authority for New South Wales, Information Paper*, 1991

National Audit Office, United Kingdom, *The Gaming Board: Better Regulation*, 2000

Organisation for Economic Cooperation and Development, *Environmental Performance Reviews, Australia*, 1998

Organisation for Economic Cooperation and Development, *Environmental Requirements for Industrial Permitting, Vol 1 Approaches and Instruments*, 1999

Organisation for Economic Cooperation and Development, *Environmental Requirements for Industrial Permitting, Vol 2 OECD Workshop on the Use of Best Available Technologies and Environmental Quality Objectives*, 1999

Organisation for Economic Cooperation and Development, *Environmental Requirements for Industrial Permitting, Vol 3 Regulatory Approaches in OECD Countries*, 1999

Organisation for Economic Cooperation and Development, *Pollution Prevention and Control, Integrated Pollution Prevention and Control: The Status of Member Country Implementation of Council Recommendation*, 1996

NSW Parliamentary Debates (HANSARD) No. 5 11-13 November 1997, *Second Reading Pollution Control (Load-Based Licensing) Bill & Protection of the Environment Operations Bill*, 1997

Redfern Legal Centre Publishing, *The Environmental Law Handbook, Planning and Land use in New South Wales*, Third Edition, 1999

The Audit Office of NSW, *Performance Audit Report, NSW Department of Transport, Management of Road Passenger Transport Regulation*, 2000

United States Environment Protection Agency, *Annual Report on Enforcement and Compliance Assurance Accomplishments in 1999*, 2000

United States Environmental Protection Agency, *Annual Performance Report, Fiscal Year 1999*, 2000

United States Environmental Protection Agency, *Compliance Screening for EPA Partnership Programs, Policy Overview*, 2000

United States Environmental Protection Agency, *National Environmental Performance Track*, 2000

United States Environmental Protection Agency, Office of Enforcement and Compliance Assurance, *National Performance Measures Strategy*, 1997

United States Environmental Protection Agency, Office of Enforcement and Compliance Assurance, *Guide for Measuring Compliance Assistance Outcomes*, 1999

United States Environmental Protection Agency, *Public Access Workgroup Report*, 2000

Victorian Auditor-General's Office, *Handle with Care: Dangerous Goods Management*, 1995

Performance Audits by the Audit Office of New South Wales

Performance Auditing

Performance audits seek to serve the interests of the Parliament, the people of New South Wales and public sector managers.

The legislative basis for performance audits is contained within the *Public Finance and Audit Act 1983, Division 2A*, which differentiates such work from the Office's financial statements audit function. Performance audits examine whether an authority is carrying out its activities effectively and doing so economically and efficiently and in compliance with all relevant laws. These audits also evaluate whether members of Parliament and the public are provided with appropriate accountability information in respect of those activities.

Performance audits are not entitled to question the merits of policy objectives of the Government.

When undertaking performance audits, auditors can look either at results, to determine whether value for money is actually achieved, or at management processes, to determine whether those

processes should ensure that value is received and that required standards of probity and accountability have been met. A mixture of such approaches is common.

Where appropriate, performance audits provide recommendations for improvements in public administration.

Performance audits are conducted by specialist performance auditors who are drawn from a wide range of professional disciplines.

The procedures followed in the conduct of performance audits comply with the Audit Office's Performance Audit Manual which incorporates the requirements of Australian Audit Standards *AUS 806 and 808*.

Our performance audit services are certified under international quality standard *ISO 9001*, and accordingly our quality management system is subject to regular independent verification. The Audit Office of NSW was the first public audit office in the world to achieve formal certification to this standard.

Performance Audit Reports

No.	Agency or Issue Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
1	Department of Housing	<i>Public Housing Construction: Selected Management Matters</i>	5 December 1991
2	Police Service, Department of Corrective Services, Ambulance Service, Fire Brigades and Others	<i>Training and Development for the State's Disciplined Services: Stream 1 - Training Facilities</i>	24 September 1992
3	Public Servant Housing	<i>Rental and Management Aspects of Public Servant Housing</i>	28 September 1992
4	Police Service	<i>Air Travel Arrangements</i>	8 December 1992
5	Fraud Control	<i>Fraud Control Strategies</i>	15 June 1993
6	HomeFund Program	<i>The Special Audit of the HomeFund Program</i>	17 September 1993
7	State Rail Authority	<i>Countrylink: A Review of Costs, Fare Levels, Concession Fares and CSO Arrangements</i>	10 December 1993
8	Ambulance Service, Fire Brigades	<i>Training and Development for the State's Disciplined Services: Stream 2 - Skills Maintenance Training</i>	13 December 1993
9*	Fraud Control	<i>Fraud Control: Developing an Effective Strategy (Better Practice Guide jointly published with the Office of Public Management, Premier's Department)</i>	30 March 1994
10	Aboriginal Land Council	<i>Statutory Investments and Business Enterprises</i>	31 August 1994
11	Aboriginal Land Claims	<i>Aboriginal Land Claims</i>	31 August 1994
12	Children's Services	<i>Preschool and Long Day Care</i>	10 October 1994
13	Roads and Traffic Authority	<i>Private Participation in the Provision of Public Infrastructure (Accounting Treatments; Sydney Harbour Tunnel; M4 Tollway; M5 Tollway)</i>	17 October 1994
14	Sydney Olympics 2000	<i>Review of Estimates</i>	18 November 1994
15	State Bank	<i>Special Audit Report: Proposed Sale of the State Bank of New South Wales</i>	13 January 1995
16	Roads and Traffic Authority	<i>The M2 Motorway</i>	31 January 1995
17	Department of Courts Administration	<i>Management of the Courts: A Preliminary Report</i>	5 April 1995
18*	Joint Operations in the Education Sector	<i>A Review of Establishment, Management and Effectiveness Issues (including a Guide to Better Practice)</i>	13 September 1995
19	Department of School Education	<i>Effective Utilisation of School Facilities</i>	29 September 1995

No.	Agency or Issue Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
20	Luna Park	<i>Luna Park</i>	12 October 1995
21	Government Advertising	<i>Government Advertising</i>	23 November 1995
22	Performance Auditing In NSW	<i>Implementation of Recommendations; and Improving Follow-Up Mechanisms</i>	6 December 1995
23*	Ethnic Affairs Commission	<i>Administration of Grants (including a Guide To Better Practice)</i>	7 December 1995
24	Department of Health	<i>Same Day Admissions</i>	12 December 1995
25	Environment Protection Authority	<i>Management and Regulation of Contaminated Sites: A Preliminary Report</i>	18 December 1995
26	State Rail Authority of NSW	<i>Internal Control</i>	14 May 1996
27	Building Services Corporation	<i>Inquiry into Outstanding Grievances</i>	9 August 1996
28	Newcastle Port Corporation	<i>Protected Disclosure</i>	19 September 1996
29*	Ambulance Service of New South Wales	<i>Charging and Revenue Collection (including a Guide to Better Practice in Debtors Administration)</i>	26 September 1996
30	Department of Public Works and Services	<i>Sale of the State Office Block</i>	17 October 1996
31	State Rail Authority	<i>Tangara Contract Finalisation</i>	19 November 1996
32	NSW Fire Brigades	<i>Fire Prevention</i>	5 December 1996
33	State Rail	<i>Accountability and Internal Review Arrangements at State Rail</i>	19 December 1996
34*	Corporate Credit Cards	<i>The Corporate Credit Card (including Guidelines for the Internal Control of the Corporate Credit Card)</i>	23 January 1997
35	NSW Health Department	<i>Medical Specialists: Rights of Private Practice Arrangements</i>	12 March 1997
36	NSW Agriculture	<i>Review of NSW Agriculture</i>	27 March 1997
37	Redundancy Arrangements	<i>Redundancy Arrangements</i>	17 April 1997
38	NSW Health Department	<i>Immunisation in New South Wales</i>	12 June 1997
39	Corporate Governance	<i>Corporate Governance Volume 1 : In Principle Volume 2 : In Practice</i>	17 June 1997
40	Department of Community Services and Ageing and Disability Department	<i>Large Residential Centres for People with a Disability in New South Wales</i>	26 June 1997
41	The Law Society Council of NSW, the Bar Council, the Legal Services Commissioner	<i>A Review of Activities Funded by the Statutory Interest Account</i>	30 June 1997
42	Roads and Traffic Authority	<i>Review of Eastern Distributor</i>	31 July 1997
43	Department of Public Works and Services	<i>1999-2000 Millennium Date Rollover: Preparedness of the NSW Public Sector</i>	8 December 1997

No.	Agency or Issue Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
44	Sydney Showground, Moore Park Trust	<i>Lease to Fox Studios Australia</i>	8 December 1997
45	Department of Public Works and Services	<i>Government Office Accommodation</i>	11 December 1997
46	Department of Housing	<i>Redevelopment Proposal for East Fairfield (Villawood) Estate</i>	29 January 1998
47	NSW Police Service	<i>Police Response to Calls for Assistance</i>	10 March 1998
48	Fraud Control	<i>Status Report on the Implementation of Fraud Control Strategies</i>	25 March 1998
49*	Corporate Governance	<i>On Board: guide to better practice for public sector governing and advisory boards (jointly published with Premier's Department)</i>	7 April 1998
50	Casino Surveillance	<i>Casino Surveillance as undertaken by the Director of Casino Surveillance and the Casino Control Authority</i>	10 June 1998
51	Office of State Revenue	<i>The Levying and Collection of Land Tax</i>	5 August 1998
52	NSW Public Sector	<i>Management of Sickness Absence NSW Public Sector Volume 1: Executive Briefing Volume 2: The Survey - Detailed Findings</i>	27 August 1998
53	NSW Police Service	<i>Police Response to Fraud</i>	14 October 1998
54	Hospital Emergency Departments	<i>Planning Statewide Services</i>	21 October 1998
55	NSW Public Sector	<i>Follow-up of Performance Audits: 1995 - 1997</i>	17 November 1998
56	NSW Health	<i>Management of Research: Infrastructure Grants Program - A Case Study</i>	25 November 1998
57	Rural Fire Service	<i>The Coordination of Bushfire Fighting Activities</i>	2 December 1998
58	Walsh Bay	<i>Review of Walsh Bay</i>	17 December 1998
59	NSW Senior Executive Service	<i>Professionalism and Integrity Volume One: Summary and Research Report Volume Two: Literature Review and Survey Findings</i>	17 December 1998
60	Department of State and Regional Development	<i>Provision of Industry Assistance</i>	21 December 1998
61	The Treasury	<i>Sale of the TAB</i>	23 December 1998
62	The Sydney 2000 Olympic and Paralympic Games	<i>Review of Estimates</i>	14 January 1999
63	Department of Education and Training	<i>The School Accountability and Improvement Model</i>	12 May 1999

No.	Agency or Issue Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
64*	Key Performance Indicators	<ul style="list-style-type: none"> • <i>Government-wide Framework</i> • <i>Defining and Measuring Performance (Better practice Principles)</i> • <i>Legal Aid Commission Case Study</i> 	31 August 1999
65	Attorney General's Department	<i>Management of Court Waiting Times</i>	3 September 1999
66	Office of the Protective Commissioner Office of the Public Guardian	<i>Complaints and Review Processes</i>	28 September 1999
67	University of Western Sydney	<i>Administrative Arrangements</i>	17 November 1999
68	NSW Police Service	<i>Enforcement of Street Parking</i>	24 November 1999
69	Roads and Traffic Authority of NSW	<i>Planning for Road Maintenance</i>	1 December 1999
70	NSW Police Service	<i>Staff Rostering, Tasking and Allocation</i>	31 January 2000
71*	Academics' Paid Outside Work	<ul style="list-style-type: none"> ▪ <i>Administrative Procedures</i> ▪ <i>Protection of Intellectual Property</i> ▪ <i>Minimum Standard Checklists</i> ▪ <i>Better Practice Examples</i> 	7 February 2000
72	Hospital Emergency Departments	<i>Delivering Services to Patients</i>	15 March 2000
73	Department of Education and Training	<i>Using computers in schools for teaching and learning</i>	7 June 2000
74	Ageing and Disability Department	<i>Group Homes for people with disabilities in NSW</i>	27 June 2000
75	NSW Department of Transport	<i>Management of Road Passenger Transport Regulation</i>	6 September 2000
76	Judging Performance from Annual Reports	<i>Review of eight Agencies' Annual Reports</i>	29 November 2000
77*	Reporting Performance	<i>Better Practice Guide A guide to preparing performance information for annual reports</i>	29 November 2000
78	State Rail Authority (CityRail) State Transit Authority	<i>Fare Evasion on Public Transport</i>	6 December 2000
79	TAFE NSW	<i>Review of Administration</i>	6 February 2001
80	Ambulance Service of New South Wales	<i>Readiness to respond</i>	7 March 2001
81	Department of Housing	<i>Maintenance of Public Housing</i>	11 April 2001
82	Environment Protection Authority	<i>Controlling and Reducing Pollution from Industry</i>	April 2001

* Better Practice Guides

Performance Audits in Progress

A list of performance audits in progress can be found on our website www.audit.nsw.gov.au



**THE AUDIT OFFICE
MISSION**

A

S

For further information please contact:

The Audit Office of New South Wales

Street Address

Level 11
234 Sussex Street
SYDNEY NSW 2000
Australia

Postal Address

GPO Box 12
SYDNEY NSW 2001
Australia

Telephone (02) 9285 0155
Facsimile (02) 9285 0100
Internet <http://www.audit.nsw.gov.au>
e-mail mail@audit.nsw.gov.au

Office Hours: 9.00am - 5.00pm Monday to Friday

Contact Officer: Jane Tebbatt
Principal Performance Auditor
+612 9285 0074

To purchase this Report please contact:

The NSW Government Information Service

Retail Shops

Sydney CBD

Parramatta CBD

Ground Floor Goodsell Building Chifley Square Cnr Elizabeth & Hunter Sts SYDNEY NSW 2000	Ground Floor Ferguson Centre 130 George Street PARRAMATTA NSW 2150
--	---

Telephone and Facsimile Orders

Telephone

Callers from Sydney metropolitan area	9743 7200
Callers from other locations within NSW	1800 46 3955
Callers from interstate	(02) 9743 7200

Facsimile	(02) 9743 7124
-----------	----------------