



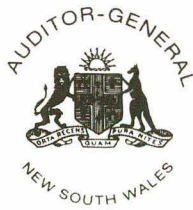
N E W   S O U T H   W A L E S

# PERFORMANCE AUDIT REPORT

**Roads and Traffic Authority**

**Managing Environmental Issues**





GPO BOX 12  
SYDNEY NSW 2001

Members of the Legislative Council  
Members of the Legislative Assembly  
Parliament House, Macquarie Street  
SYDNEY NSW 2000

In compliance with Section 38E of the *Public Finance and Audit Act 1983*,  
I present a report to the Legislative Assembly titled **Roads and Traffic Authority:  
Managing Environmental Issues.**

A handwritten signature in black ink, appearing to read 'R J Sendt'.

R J Sendt  
Auditor-General

Sydney  
April 2002





# *Performance Audit Report*

## **Roads and Traffic Authority**

---

### **Managing Environmental Issues**

**State Library of New South Wales cataloguing-in publication data**

New South Wales. Audit Office.

Performance audit report : Roads and Traffic Authority : managing environmental issues / [The Audit Office of New South Wales]

0734721323

1. Roads and Traffic Authority of NSW – Auditing. 2. Roads – Environmental aspects – New South Wales. 3. Environmental management – New South Wales – Auditing. I. Title: Roads and Traffic Authority : managing environmental issues. II. Title: Managing environmental issues.

354.77243909944

388.109944

© 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

## Foreword

<b>Executive Summary</b>	<b>1</b>
<b>1. Introduction</b>	<b>9</b>
1.1 The RTA	10
1.2 The RTA and the Environment	10
1.3 Environmental Management System (EMS)	11
1.4 Ecologically Sustainable Development (ESD)	12
<b>2. Environmental Policy</b>	<b>15</b>
2.1 Government Policy	17
2.3 The RTA's Response to Government Policy	18
2.4 The RTA's Environmental Policy	19
<b>3. Planning</b>	<b>21</b>
3.1 Environmental Aspects and Impacts	23
3.2 The RTA's Response to the Law	25
3.3 The RTA's Approach	26
3.4 Partnering	28
<b>4. Implementation</b>	<b>29</b>
4.1 Performance Agreements	30
4.2 The RTA's Approach	32
4.3 EMS Documentation	34
4.4 Controlling Environmental Impacts	34
4.5 The RTA's Approach	36
4.6 The RTA's Approach	38
<b>5. Management Review</b>	<b>41</b>
5.1 The RTA's Approach	43
5.2 Audit and Surveillance Programs	47
5.3 The <i>RTA Environment Report</i>	49
<b>Appendices</b>	<b>53</b>
<b>Performance Audits</b>	<b>63</b>

---





---

## **Foreword**

The NSW environment and its natural resources are under pressure from activities in agriculture, forestry, fishing, energy, transport, and mining and introduced species.

While the Commonwealth Government has some power to protect the environment, environmental management is primarily a state function.

It is important therefore that agencies of government have appropriate arrangements in place to implement government policies for the environment, including compliance with the law, and to manage the impacts of their activities on the environment.

This performance audit examines the way in which the RTA has addressed its environmental responsibilities.

In undertaking the audit the Audit Office developed a comprehensive questionnaire, based on AS/NZS 14001, which addresses key areas of environmental management.

The questionnaire is located on the Audit Office website.

It is recommended that all agencies of government review their arrangements for managing the environment. The questionnaire should assist in such a review.

---



## Executive Summary

---

## Executive Summary

### The Audit

The audit reviewed the arrangements established by the Roads and Traffic Authority (the RTA) to manage the environmental impacts of its operations.

### The RTA and the Environment

An objective of the RTA, as stated in its 2001 Environment Report, is:

*... to be at the forefront of good environmental practice ...*

To manage the process, the RTA introduced in June 2000, an Environmental Management System (EMS). An EMS is a series of actions or 'stepping stones' to assist management to develop, implement, review and maintain an organisation's environmental policy. The EMS of the RTA has been developed to meet the requirements of the AUS/NZS ISO14001.

The RTA is also committed to the principles of Ecological Sustainable Development (ESD). This in essence requires that development should be managed so that the needs of the present are met without compromising the ability of future generations to meet their own needs.

### Audit Opinion

**The RTA has taken positive steps towards continuous improvement in managing the environment. It is also one of the very few Government agencies to produce a separate *Environmental Report*. RTA is to be commended for its actions and the Audit Office considers that other Government agencies should follow suit.**

**The RTA has implemented a structured process by which its environmental policy can be advanced. Whilst the process is comprehensive, especially at the project level, a more systematic approach in a number of areas would assist the RTA to achieve its stated objective and be at the forefront of environmental practices.**

**This audit makes observations and recommendations designed to assist the RTA in this regard.**

**In our opinion the main areas that would require attention are:**

- the setting of clearer objectives and targets
- the identification of risks
- measuring and reporting of performance based on the development of key indicators.



## Audit Findings

### Progress by the RTA

In terms of managing the environment, the RTA has introduced and implemented:

- the *RTA Environmental Policy*
- an RTA-wide *Environmental Management System (EMS)*
- 'better practice' tools and techniques including policy, guidelines and procedures in EIA and Heritage management
- environmental protection specifications for the contractor tendering and management processes of all construction and maintenance activities
- structured management improvement and training programs
- core documentation covering environmental policy, environmental impact assessment, risk assessment and environmental management plans.
- a biennial Community Attitudes Survey
- an Environment Report.

### Responding to Government Policy

The channels by which the Government issues its priorities and objectives for the environment are many and varied. As a result the management of environmental policy and planning in NSW is complex.

As indicated above, the RTA has implemented an array of policies and procedures to comply with the environment policies of the Government. However, in view of the complexities relating to the Government policies, a more systematic process, which is documented, would be needed to ensure that they are addressed.

### The RTA Environmental Policy

The *RTA Environmental Policy*, which was introduced in 1997, commits the RTA to comply with the law and in most respects complies with the general principles of ISO 14001.

Although the policy has been reviewed over the years, it has remained substantially unchanged. The Audit Office considers that the policy could now be reconsidered to be more challenging and provide a clearer direction for the environmental management.

For example, the policy and/or the *Environmental Report* could:

- communicate in clearer terms the scale of the RTA's business activities, products and services
- reflect the commitment, challenges and actual progress of the RTA in environmental management, for example, the integration of ESD since its introduction.

The policy could:

- identify and integrate core environmental commitments
- commit to setting measurable targets against which performance can be judged and eventually reported publicly.

The RTA's Environment Strategic Plan and EMS are the primary mechanisms for implementing the RTA's environmental responsibilities. It is important, however, that the policy is sufficiently specific so as to provide a basis for target setting, which will drive discrete and measurable outcomes.

## EMS

The RTA introduced its corporate EMS in 2000. The EMS is not certified to international standards.

There are certain key processes that are not systematically carried out and documented from an RTA-wide perspective.

For example, the RTA would benefit if the process would more clearly:

- define the mechanisms for the establishment, implementation and maintenance of the EMS
- support the *RTA Environmental Policy*, objectives and performance targets
- specify a timetable, strategies and responsibilities for progressing the EMS across all key business units of the RTA.

Addressing these gaps would improve the RTA's EMS system, and assist the RTA to have its EMS certified, should it wish to do so.

## ESD

There is also a need to review the extent to which the RTA has integrated its ESD into its business planning process. Given that the RTA committed itself to ESD in 1997, the integration of ESD on an RTA-wide basis could now be expedited.

## Measuring Performance

The RTA collects and reports information on many aspects of its environmental performance. However, many of the indicators relate to management actions and operational efficiency measures rather than the actual environmental impacts of those actions.

To be able to measure performance '*corporate-wide*', there is a need to have an integrated management information framework that provides for internal and external reporting.

In this regard, the RTA has advised that phase 1 of an Integrated Management System (IMS), incorporating existing financial and project management information, is due for implementation this year.



The Audit Office commends the steps proposed by the RTA. We would suggest though that prior to the introduction of an IMS, the RTA should also consider to establish a clearer linkage between its:

- risk assessment
- the *RTA Environmental Policy*
- RTA specific objectives and targets, relevant key performance indicators, monitoring and reporting.

## **Reporting of Performance**

The RTA produces a separate report on the environment titled the *Environment Report*. The RTA has advised that it is currently the only Austroads member authority that has published a stand alone environmental report. The RTA is to be commended for this initiative.

The report could be improved, however, by ensuring that it contains performance targets in absolute terms, projected levels of performance and performance over time. Data on key impacts provide the core of an environment report.

It is essential that the *Environment Report* include a suite of key RTA-wide performance indicators by which environmental performance can be measured.

The 2001 *Report* includes the *RTA Environmental Policy*. This is in line with better practice, which suggests that the policy should always be included in the report.

## **Managing Risks**

The RTA has a process for identifying and determining significant environmental risk at the project level.

The RTA advised the Audit Office that it last assessed and reported on its environmental aspects and impacts RTA-wide in 1997. The report, however, was not available for review during the audit.

In line with better practice, the identification of environmental aspects and impacts RTA-wide should be an ongoing process and should now be undertaken as soon as possible.

To inform readers of the *RTA Environment Report*, particularly stakeholders, it is suggested the report include details of the environmental risks faced by the RTA and its approach to the management of risk.

## Recommendations

### It is recommended that the RTA:

- reconsider its *Environment Policy* to ensure that it is in line with better practice. As a minimum it is recommended that the policy provide:
  - clearer direction for managing the environment RTA-wide
  - a better linkage between all planning documents
  - a commitment to the setting of performance targets
  - that environmental objectives be more specifically identified in terms of managing environmental impacts
- consider the suggestions in this report designed to improve the content of the RTA's *Environment Report*
- expedite the integration of ESD within its planning, implementation and reporting processes
- review its risk on an ongoing basis
- establish a suite of indicators to measure environmental performance RTA-wide over time in both absolute terms and against targets.



## **Response from the Roads and Traffic Authority**

*I refer to the Performance Audit Report on the Roads and Traffic Authority – Managing Environmental Issues. I am pleased that the report recognises the RTA's commitment to the principles of ESD and the comprehensive measures and processes that the Roads and Traffic Authority has put in place to manage the environmental aspects of its operations.*

*The RTA has focussed on the achievement of positive environmental and social outcomes and the many awards that it has received, in particular for the management of our urban design guidelines, heritage management and our environmental impact assessment processes, are testament of the public recognition of those good outcomes. The standard and consistency of RTA's environmental management practices and the very low incidence of environmental infringements, is verification of the efficacy of our environmental management measures, particularly in consideration of the large scale and diversity of the RTA's operations.*

*As the Audit Office notes in the Report, the RTA is committed to continuous improvement in all areas of work, and is pleased that the Audit Office recognises RTA as a leader in environmental management. The RTA works cooperatively with other road transport bodies at national and international levels as well as environmental regulatory agencies in New South Wales, in developing appropriate policies, management processes and reporting measures. The recommendations of the Report have been noted and will assist in improving RTA's environmental management practices.*

*(signed)*  
*Paul Forward*  
*Chief Executive*

*Dated: 11 April 2002*



# 1. Introduction

---

## 1.1 The RTA

### Legislative Framework

The RTA was established under the Transport Administration Act 1988 as a statutory authority and is responsible for the administration of several other Acts of Parliament.

### Core Functions

The RTA is responsible for:

- promoting road safety and traffic management
- driver licensing and vehicle registration
- providing road management, design, construction and maintenance solutions for the NSW community.

The RTA is a key player in:

- integrated transport and land-use planning
- road-based public transport, especially in planning and delivering bus transit-ways
- freight transport and economic development
- strategic transport planning and programming
- urban and regional design
- road asset management
- contract management.

## 1.2 The RTA and the Environment

The RTA affects the environment in a significant way including:

- direct impacts associated with its day-to-day operations, for example, the construction, operation and maintenance of road, bridge and traffic maintenance projects; and
- the operation of fixed asset facilities including estates (for example (sub) depots, work centres), energy use, consumption of natural resources and procurement
- and indirect influences from business planning, policy development and decision making.

Road transport, for example is a major contributor to both noise and air pollution, including greenhouse gas emissions. Domestic transport accounts for about 26% of national carbon dioxide emissions, of which 79% is generated by road transport (Austroads, 2001).



The provision of roads can have the following impacts:

- soil erosion
- land use conflicts
- reduction in biological diversity
- loss of habitat for wildlife, including impacts on wetlands
- lower water quality
- reduced access.

The use of roads also has impacts:

- social impacts
- traffic noise
- impacts on air quality and water quality
- resource use inefficiencies
- deaths of animals, including wildlife
- loss of amenity
- resource use opportunity costs
- equity.

*Source:* Environmental Strategy Austroads 1994

## **The RTA Environmental Policy**

The RTA's commitment to the environment is formalised in its *Environmental Policy*.

### **1.3 Environmental Management System (EMS)**

The means by which an organisation manages its environmental responsibilities and impacts is an Environmental Management System (EMS).

An EMS includes the organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing and maintaining the environmental policy.

The RTA maintains an EMS which has been developed to meet the requirements of AUS/NZ ISO14001' (the RTA EMS Manual, 2000). The EMS provides the structural and policy framework for Directorate and business area EMS implementation, which adhere to the 14 key elements as outlined in the NSW Government's EMS guidelines.<sup>1</sup>

---

<sup>1</sup> NSW Government EMS Guidelines. (1998) The Construction Policy Steering Committee.

The objectives of the EMS are to:

- establish continuous improvement to the environmental performance of the RTA
- ensure staff are aware of their environmental responsibilities
- provide a framework for environmental management throughout the RTA.

## 1.4 Ecologically Sustainable Development (ESD)

### What Is Sustainability (ESD)?

ESD involves organisations developing the balance between social, environmental, and economic operations in the present as well as providing for the social, environmental and economic needs of future generations.

### Principles and Objectives

The Intergovernmental Agreement on the Environment (1992). commits all levels of government to the objectives of ESD.

The four interrelated principles of ESD are:

- the precautionary principle: if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation
- equity within and between generations
- protecting biodiversity and ecological integrity
- improved valuation, pricing and incentive mechanisms.

### The Government's Response to ESD

These principles of ESD are reflected in NSW legislation.

ESD is integrated throughout the NSW public sector by a variety of processes, including:

- key initiatives such as a 'Whole-of-government' strategic approach to urban, regional and rural integrated planning
- the charters of key advisory and decision-making bodies, for example, the Public Transport Advisory Council.

### The Implications of ESD

The major issues of concern to the transport sector, and therefore the RTA, fall under three categories:

- vehicle exhaust emissions (especially greenhouse gases)
- urban form and design; and
- long distance freight and passenger movements.

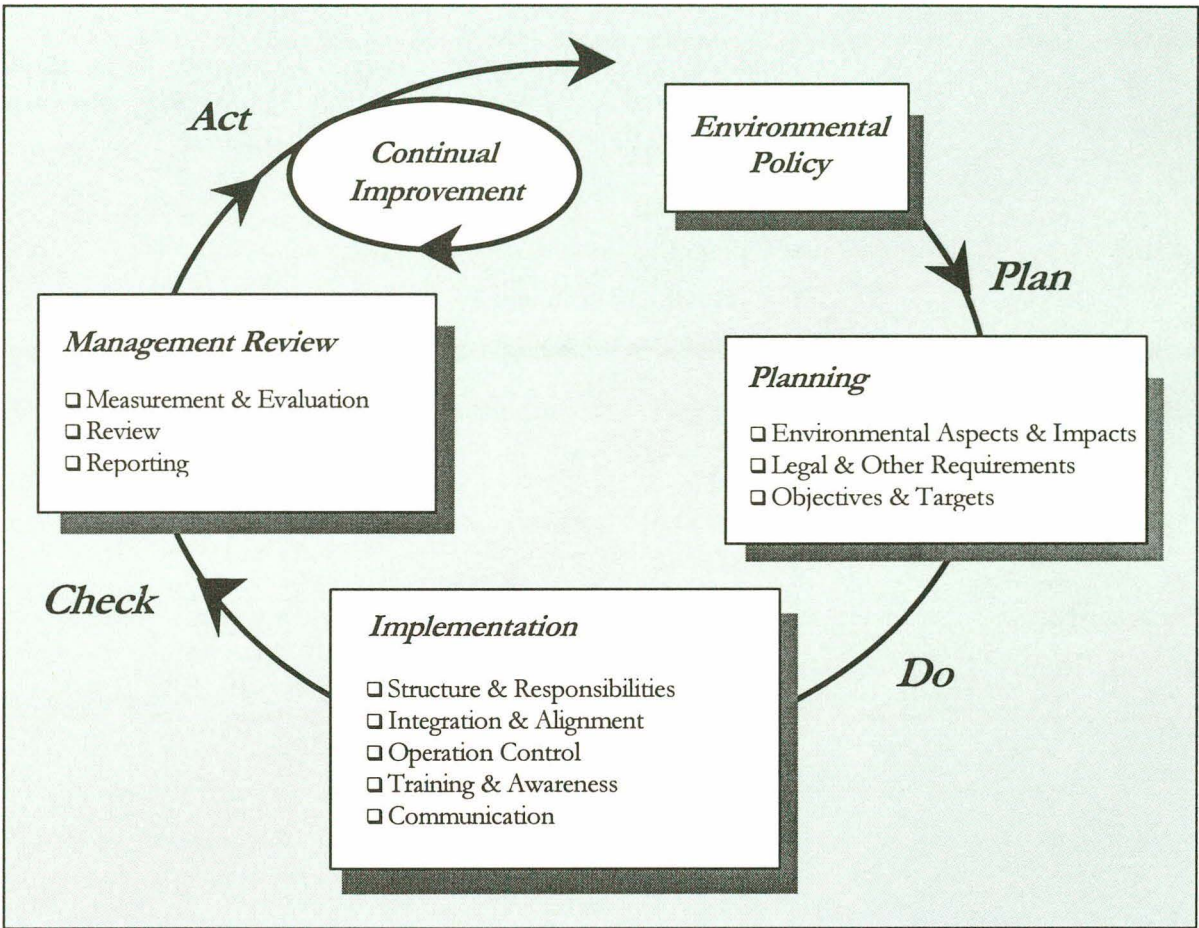
## **The Remainder of this Report**

Fundamental to improving performance, including environmental performance, is continual improvement.

The remainder of this report examines the practices of the RTA in terms of managing the environment against the components identified in the exhibit opposite which comprise:

- policy development
- planning
- implementation and
- management review.

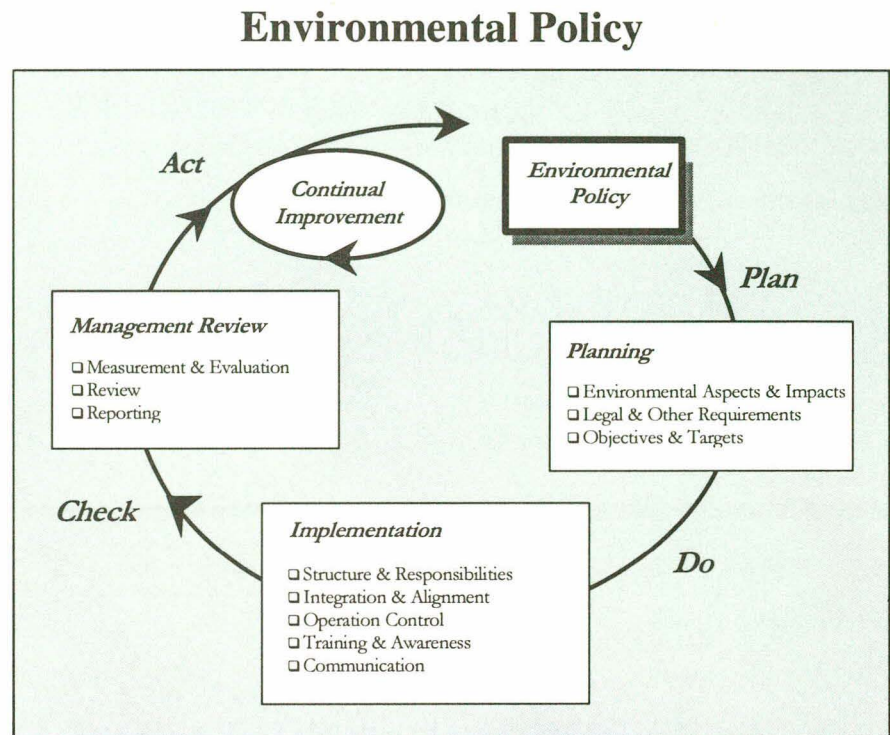
Exhibit 1.1 The Improvement Framework





## **2. Environmental Policy**

---



### Principle

An effective government-wide framework provides direction and supports the establishment of agency arrangements, policies and procedures for managing the environment and adopting the principles of ESD.

The policy forms the basis on which an organisation sets its objectives and targets.

An effective *Environmental Policy* should:

- be appropriate to the nature, scale and environmental impacts of an organisation's activities, products or services
- commit to continual improvement and the prevention of pollution
- comply with relevant environmental legislation and regulations and other environmental mandates
- provide a framework for setting and reviewing environmental objectives and targets
- be documented, implemented, maintained and communicated to all employees
- be available to the public.



## 2.1 Government Policy

The Government has responsibility for managing issues such as air and water quality, land use, waste management, transport and natural resource management.

Emphasis for environmental management is currently placed on inter-governmental co-operation, on sharing responsibilities and on developing a more consultative approach to environmental management.

NSW, in particular, adopts a partnership approach to environmental management in that it uses a mix of regulatory, economic and voluntary instruments, measures and agreements between governments, industry and community groups.

### Key Policy Documents

The RTA is subject to a range of:

- Commonwealth and State laws and strategies, and
- State government policies, guidelines and plans.

The Government policy is evidenced in part, by the following means:

### Whole of Government Strategic Plans and Guidelines

- *Action for the Environment: NSW Government Environment Statement 2001* (9 July 2001)
- *Action for Transport 2010 – An Integrated Transport Plan for NSW*
- *Action for Transport 2010 – An Integrated Transport Plan for Sydney*
- *Action for Air 2010*
- *Road Safety 2010*
- *National Greenhouse Strategy* (Commonwealth Government)
- *Action for Bikes Bikeplan 2010*.

It is these plans, which represent the driving strategies for the RTA under which several major initiatives are implemented. The RTA has participated in the development of several of the above plans.

### Policies

- *Government Energy Management Policy 1998*
- *Environmental Criteria for Road Traffic Noise*
- *Environmental Management Systems Guidelines 1998*
- *Waste Reduction and Purchasing Policy 1997*
- *State Environment Protection Policies (SEPP)*.

The document *Action for the Environment: NSW Government Environment Statement 2001* (9 July 2001) identifies actions taken by the Government in recent years and identifies steps designed to 'ensure a healthy environment'.

**Audit  
Observations**

The channels by which the Government issues its priorities and objectives for the environment are many and varied.

As a result the management of environmental policy and planning in NSW is complex.

### 2.3 The RTA's Response to Government Policy

**Strategic Plan**

The RTA's responds to the Government's environmental policy and priorities, including ESD, as documented through its corporate strategic plan titled *The Journey Ahead The RTA's Strategic Plan (2001-2006)*.

The RTA's interpretation of Government priorities for the agency is formalised through its four critical success areas:

- Meeting Transport Needs
- Meeting Customers' Needs
- Protecting and Enhancing Our Environment
- Providing Best Value For Money.

In terms of '*Protecting and Enhancing the Environment*' the Government's priorities for the RTA are interpreted by the RTA as:

- to minimise impacts on the natural and built environment from road use and RTA activities
- to contribute to enhancement of the environment
- to work with other agencies to move towards a more sustainable transport system.<sup>2</sup>

**Audit  
Observations**

The RTA has procedures and has developed documents that reflect the RTA's response to government policy, including the law, for protecting the environment.

In view of the complexities relating to environmental policy and planning, a more systematic process, which is documented, is needed to evidence the linkage between policy and its implementation.

---

<sup>2</sup> *The Journey Ahead 2001-2006*, The RTA's Strategic Plan

## 2.4 The RTA's Environmental Policy

The 2001 *RTA Environmental Report* states:

... The RTA strives to be at the forefront of good environmental practice and this report is part of that ...

An environmental policy is a critical document in terms of:

- setting the basis on which the organisation sets its objectives and targets for environmental management
- the EMS, and
- setting subsequent actions to meet the objectives of the policy.

The inaugural *RTA Environmental Policy* was released publicly in 1998; the policy was reissued in June 2001. The policy commits the RTA to:

- Ecological Sustainable Development (ESD)
- prevention of pollution
- continuous environmental improvement
- regulatory compliance
- and is available both to the public and employees of the RTA via Internet and Intranet.

### Audit Observations

In many respects the policy of the RTA complies with the principles of ISO 14001.

### *... but the policy can be improved.*

The policy, however, contains broad statements of intent. In keeping with the RTA's stated objective '*to be at the forefront of good environmental management*' the policy can be improved by the addition of statements to/ by which:

- reflect the challenges and actual progress of the RTA in environmental management, including ESD, since introduction of the policy
- prioritise environmental objectives
- align and integrate core issues with specific policy commitments
- commit to '*set targets for improvement and measures, appraise and report performance*' (Shell Australia: *Health, Safety, and Environmental Policy*)
- commit more clearly to reduce environmental impacts in the future.



*... realistic and measurable targets need to be set ...*

The *RTA Environmental Policy* should also facilitate the setting of objectives and realistic and measurable targets can be set. This includes not only the main policy document but also the subsidiary policies.

The setting and reporting of targets to reduce impacts for each area is important.

This is a crucial part of the process of monitoring and managing environmental performance and reducing environmental risk. Without targets an environmental report might appear complacent.

*Source:* Department for Environment, Food and Rural Affairs (United Kingdom)

The RTA produces an *Environment Report*, which is discussed later.

*... maintaining the policy*

The Standard requires the policy be maintained. The RTA has advised that the:

... policy was revised in June 2001 to reflect greater emphasis on implementation of the RTA EMS.

The policy has not changed significantly in scope and content since its introduction in 1997 despite it being reviewed. Under the circumstances there is a risk that the policy does not reflect:

- changes to the environment itself which require a new or revised approach
- fresh challenges and actual progress of the RTA in environmental management.

*... publicly available*

The *Standard* requires the policy be publicly available. The RTA has advised that the policy was not reproduced in the *RTA Environment Report* of 1999 and 2000 because the content of the policy had not altered. However it was included in the *2001 RTA Environment Report*.

While the policy is publicly available on the internet, the Audit Office is of the opinion that the *RTA Environmental Policy* should be published each year in the *RTA Environment Report* as it did in 2001.

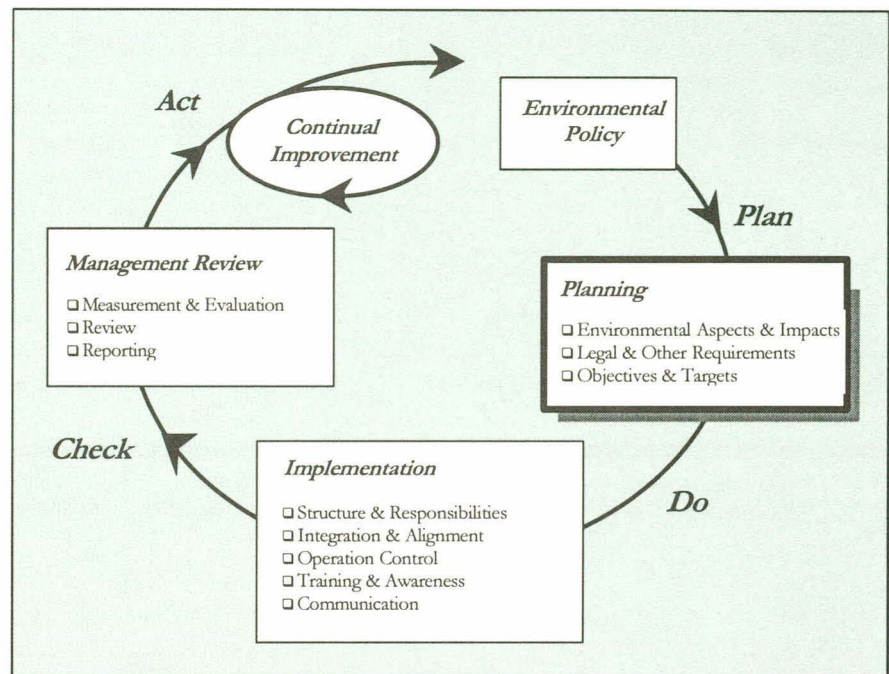
This should enable readers to review the extent of the RTA's commitment to environmental protection and compare progress against that commitment.



### **3. Planning**

---

## Planning



### Principle

In seeking to fulfil its *Environmental Policy* an organisation:

- needs to undertake and manage significant risks in terms of setting its environmental objectives
- shall establish and maintain documented environmental objectives and targets, at each relevant function and level in the organisation (AS/NZS ISO 1414000: 4.3.3). The objectives should be specific and targets should be measurable wherever practicable, and where appropriate take preventative measures into account
- maintain a program for achieving objectives and targets.

The identification of aspect and impacts (risks) inherent to an organisation's operations is an important part of environmental management and is a key element of the EMS.

An appreciation of risk helps management to both understand the organisation's potential for environmental impact and to focus attention and effort on managing those risks.

### 3.1 Environmental Aspects and Impacts

#### Principle

**Organisations shall undertake an initial environmental review (risk assessment) as a pre-cursor to the EMS planning stage in the formulation of an effective corporate policy and the correct identification of environmental aspects and impacts.**

**The organisation shall establish and maintain procedures to identify the environmental aspects of its activities products or services that it can control and over which it can be expected to have an influence in order to determine those which have or can have a significant impact on the environment.**

#### Manual

The RTA has developed a corporate risk manual to:

- identify and reduce risk exposure
- provide greater certainty and insight to decision making
- improve contingency planning for dealing with risks and their consequences
- assist in compliance with statutory obligations.

The RTA's risk assessment process is based on:

- Austroads *Environmental Risk Management Guidelines and Tools for Road Projects*
- AS/NZ ISO 4360 Risk Management
- and is consistent with the approach outlined in the document *Environmental Management Systems Guidelines* issued by the NSW Government.

The RTA, through its EMS, has in place processes for the management of the environmental impacts of construction and maintenance projects.

The RTA has advised that:

- the development of its EMS followed an RTA-wide review of environmental aspects in accordance with ISO 14001 A.3.1.
- this information helped develop RTA Environmental Policy in 1997 and subsequent specific environmental policies and guidelines.

The RTA also has advised that it continually reviews the environmental aspects of its activities, products and services through its policies, guidelines and procedures including, but not limited to:

- RTA Environmental Impact Assessment Policy, Guidelines, Procedures
- RTA Project Management Guidelines Estimating Scope Cost Control for Development Projects
- Quality, OHS and Environmental Audit Package
- RTA Heritage Manual.

#### **Audit Observations**

The RTA advised the Audit Office that it last assessed and reported on its environmental aspects and impacts RTA-wide in 1997. The report, however, was not available for review during the audit. The RTA would need to ensure that its control over documents is up-to-date.

The RTA has advised, that in its view, ISO 14001 does not require a RTA-wide re-assessment of environmental aspects where an EMS is in existence.

While the Standard supports the view of the RTA, we would consider that it would be prudent practice that risks be assessed regularly and on an ongoing basis given the changing environment in which organisations, including the RTA, operate.

One view is that the identification of risk should include all risks whether they are under the control of the organisation or not, for example, the risks that suppliers of services and products bring to the organisation.

Another view is that an organisation should identify significant risks over which it has some control and influence. The RTA's policy is silent in this regard.



## Legal and Other Requirements

### Principle

The organisation should establish and maintain a procedure to identify and have access to legal and other requirements that are applicable to the environmental aspects of its activities, products and services.

### 3.2 The RTA's Response to the Law

The RTA maintains a *Schedule of Environmental Legislative Requirements* accessible to all RTA staff via the Intranet. The schedule identifies:

- various laws designed to protect the environment and with which the RTA must comply
- and other documentation including project and facility specific environmental requirements identified in, for example, Conditions of Approval, Environmental Protection Licence, Contract Documentation.

These schedules do not reference:

- the actual operational requirements of legislation specific to the operations and activities of the RTA
- existing controlling mechanisms for their management.
- responsibilities/accountabilities for their management.

The RTA has advised that, because of the size of its operations, the above information is contained on various program/project files.

### Audit Observations

This approach may be appropriate in the circumstances. The approach does give emphasis to reviewing regularly those procedures to ensure compliance with legislative requirements on a programs/project basis.

## Objectives and Targets

### Principle

**An organisation should document and maintain environmental objectives and targets at each relevant function and level (within the organisation), and addressed by an environmental program.**

**The objectives and targets should be consistent with *Environmental Policy* and incorporate:**

- **relevant findings from environmental audits and reviews**
- **environmental risks associated with the organisation's operations and activities.**

**Each environmental objective should be supported by at least one specific and measurable target, achievable within a specified timeframe.**

**The programs should include schedules and resources and responsibilities for achieving the organisation's objectives and targets.**

### 3.3 The RTA's Approach

The *Environment Strategic Plan* represents the RTA's corporate environmental program, including the overall *environmental* direction for the RTA. The plan contains statements of intent including:

- objectives
- strategies and actions by which broad responsibilities are assigned and how objectives are to be achieved
- measures by which the RTA evaluates environmental performance in meeting its objectives.

The *Environment Strategic Plan* and supporting management programs are derived from the four basic requirements of AS/NZS 14001, namely:

- the achievement of environmental objectives and targets
- corrective actions
- preventive actions
- follow up actions from the management review.

The strategies and actions to achieve the RTA's objectives as stated in *Environment Strategic Plan* are incorporated in the business planning process of the Directorates and business areas and the EMS of the Road Services Branch and Client Services.

## Audit Observations

The RTA has a structured approach to environmental management planning incorporating:

- the *RTA Environmental Policy*
- *The Journey Ahead: The RTA's Strategic Plan*
- the *Environment Strategic Plan* and
- Business Plans.

Earlier in this report the Audit Office has suggested improvements to the content of the *RTA Environmental Policy*. Any improvements to the policy implemented by the RTA would need to be reflected in related strategy and planning documents of the RTA.

## ESD

In 1997 the RTA committed to the principles of Ecological Sustainable Development (ESD) throughout its operations:

... by achieving the optimum balance between the development and management of the transport system for the needs of the community and protection of the environment.<sup>3</sup> The RTA has committed to the principles of ESD.

By committing to ESD the RTA is required to:

- consider, in an integrated way, the wider economic, social and environmental implications (ESD) of its decisions and actions
- take a long-term, rather than short-term, view when taking those decisions and actions.

In March 2001, Directorate management conducted a structured self-assessment of current practices in implementing the principles of ESD in day-to-day activities. The results will form the basis of the RTA's plan for ESD.

The RTA engaged private consultants to advise it on the development of a strategy for the implementation of ESD. The consultants reported to the RTA in September 2001.

The RTA has advised that it has been integrating ESD practices across its activities for five years but recognises there is still more to achieve. In particular RTA has advised that:

- many of its activities contribute to the principles of the ESD without necessarily being undertaken with an overt focus on those principles (the *Waste Reduction and Purchasing Policy*)
- the longer term aim is to move to a more sustainable organisation but in doing so the RTA recognises that it needs to act on a more immediate level
- it has introduced various measures to conserve both natural and cultural heritage for future generations

<sup>3</sup> RTA Code of Practice for Water Management, Road Development and Management 1999



- it has established a position in the Environment and Community Policy Branch which has specific responsibilities for the development of a more overt approach to sustainability to ESD across the RTA.

**Audit  
Observations**

In order to fully integrate ESD throughout the RTA, it is suggested the RTA:

- integrate the principles of ESD into strategic planning and ensure greater alignment between key policy and strategy documents
- reconsider processes and procedures to facilitate integration into all facets of the RTA
- factor the principles of ESD into investment and decision making processes to ensure a proper balance is reached between competing objectives
- develop a communication strategy for ESD
- develop key performance indicators to measure success in implementing ESD.

The development of a systematic and documented process will be necessary for the integration of ESD into all operations of the RTA.

As indicated earlier the RTA has sought and received advice from the private sector to assist the RTA in developing a strategy for the implementation of ESD.

### **3.4 Partnering**

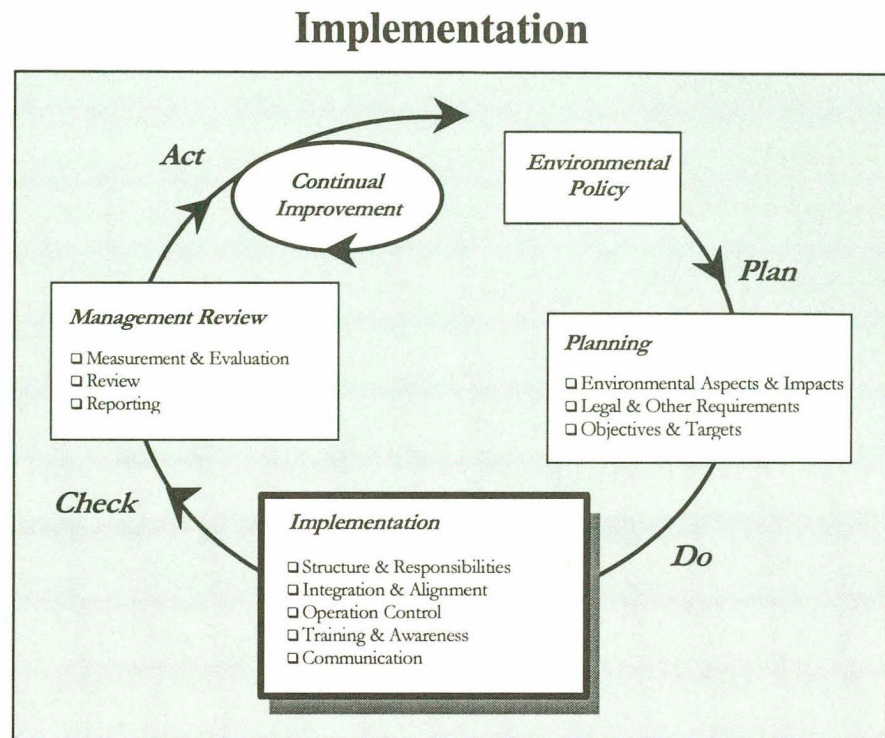
The RTA:

- has a *Partnering Charter* with contractors by which it monitors and provides feedback to contractors on performance, manages disclosures by contractors etc
- a *Waste Reduction and Purchasing Policy* (WRAPP) which identifies strategies for waste minimisation throughout the RTA and seeks to increase the use of materials containing recycled content.



## 4. Implementation

---



## Principle

For effective implementation of an EMS, an organisation should develop the capabilities and support mechanisms necessary to achieve its *Environmental Policy*, objectives and targets and performance measures.

## Structure and Responsibilities

## Principle

Roles, responsibility and authorities should be defined, documented and communicated in order to facilitate effective environmental management.

### 4.1 Performance Agreements

The performance agreement between the Chief Executive of the RTA, and the Minister for Roads requires that the Chief Executive:

- lead the development of environmental compliance, policy, EMS
- to ensure urban design is adequately considered in all stages of project development
- to ensure adverse environmental impacts of road and bridge development and maintenance are minimized.

These responsibilities are reflected in the performance agreement of the General Manager, the Environment and Community Policy Branch.

<b>Dedicated Groups</b>	<p>The RTA has established three specialised environmental working groups. These are the:</p> <ul style="list-style-type: none"> <li>▪ Environment and Community Policy Branch</li> <li>▪ Environmental Services Branch</li> <li>▪ Environmental Technology Branch.</li> </ul>
<i>Environment and Policy Branch</i>	<p>The <i>Environment and Community Policy Branch</i> develops the strategy and processes, policy and standards for environmental management. As such the branch is the key environmental discipline in the RTA.</p>
<i>Environmental Services Branch</i>	<p>The <i>Environmental Services Branch</i> has key accountabilities for implementation of policies and guidelines and environmental advice to project management and support staff.</p>
<i>The Environmental Technology</i>	<p>The <i>Environmental Technology</i> branch:</p> <ul style="list-style-type: none"> <li>▪ promotes environmental support to the Operations directorate business areas</li> <li>▪ provides environmental consultancy services for the construction and management of road, bridge and traffic maintenance</li> <li>▪ seeks to ensure compliance with environmental legislation and policy requirements.</li> </ul>
<b>Roles and Responsibilities</b>	<p>The RTA has defined environmental management roles, responsibilities and authorities at various levels within the organisation through:</p> <ul style="list-style-type: none"> <li>▪ job and personal specifications</li> <li>▪ performance agreements (Branch Manager level upwards)</li> <li>▪ quality management systems</li> <li>▪ project management procedures.<sup>4</sup></li> </ul> <p>The General Manager Environment and Community Policy Branch is a member of the RTA Executive. The Environmental Advisers in each RTA region report to the regional manager.</p> <p>Branch managers report directly to the Director Client Services and Director Operations respectively and provide routine environmental management services and support to the RTA through their respective directors.</p>

<sup>4</sup> RTA-CSD-PMS-PR-P-01 Project Planning



**Audit  
Observations**

As part of its change management program the RTA has adopted a funder / purchaser / provider model which delineates project planning and development functions from project management and delivery.

This structure seeks to improve transparency, accountability and ownership of environmental management responsibilities through a formal contractual management process between business units.

## **Integration and Alignment**

**Principle**

**To effectively manage environmental concerns, an EMS should be designed [or revised] so that its elements are effectively integrated and aligned with existing management systems.**

### **4.2 The RTA's Approach**

The RTA has established a corporate wide EMS which outlines the responsibilities of each Directorate and business area to:

- adopt the components of the EMS framework for environmental direction
- establish management responsibility and a procedural framework to deliver environmental objectives
- document the assignment of responsibilities for undertaking the strategies and actions and the time scales for achieving the strategies and actions
- monitor progress in achieving the strategies and actions.

The Client Services Directorate and Road Services Branch (the RTA Operations Directorate) operate dedicated EMSs. Other Directorates have yet to establish an EMS. The various EMSs of the RTA are integrated within the existing management framework.

The EMS of the Client Services Directorate is integrated within the Project Management System and is certified to comply with ISO 9001.

The Project Management System, for example, addresses the planning and management of project-related functions including:

- project planning and risk management
- environmental management
- construction and contract/site management
- business management.



## Audit Observations

The above arrangements support the integration of the EMS across the RTA.

The *RTA Environmental Policy* first established a commitment to ESD in 1997. The planning documentation of the RTA does not fully reflect that commitment. To progress and improve integration of ESD, there would be a need for a greater alignment in the planning processes of the RTA.

A timetable needs to be developed for the development of EMSs across all Directorates of the RTA. At the time of the audit only the Operations Directorate has established such a timetable.

The EMS Manual identifies responsibilities for the maintenance of the EMS. However, the manual contains limited responsibilities for the establishment and maintenance of components of the EMS. To ensure that a robust, systematic and documented process is established, RTA should:

- defines the mechanisms, including a timetable, for the development, implementation and maintenance of the EMS across the RTA
- specifies strategies and related responsibilities
- provides procedures for review and amendment to the EMS.

## Operational Control

### Principle

**Operational control refers to those procedures that assist an organisation implement its environmental policy, objectives and targets.**

**All activities that have a significant environmental impact should be addressed by appropriate operational control.**

**Operational control of environmental impacts and risks is delivered by:**

- **environmental policies, guidelines and procedures**
- **supporting environmental management controls.**
- **the Environmental Impact Assessment (EIA) planning process**
- **management plans**
- **risk management procedures.**

The above mechanisms are addressed below.

### 4.3 EMS Documentation

The EMS includes specific environmental policies, guidelines which are supported by operational systems, guidance and safeguards. These are used by staff and contractors to:

- meet the requirements of the *Environmental Management Plan*
- manage identified significant impacts
- comply with environmental legislation and other requirements.

#### Controls

The EMS of Client Services Directorate describes operating controls on a project, program and asset management basis.

Management controls within the EMS of the Road Services' Branch are adopted from existing Quality Management Systems and include:

- stand alone operating procedures
- environmental technical procedures
- work method statements.

#### Audit Observations

The use of RTA-wide policies, guidelines and procedures seeks consistency in the approach to environmental control of issue and activity specific operational activities.

The mechanisms for achieving operational control at various levels in the RTA are extensive in their scope and number.

It is considered, however, that RTA could improve on its EMS documentation by ensuring that there is a systematic and documented process by which policies, guidelines and procedures are developed, maintained and reviewed for efficiency and effectiveness.

The RTA has advised it has processes for individual policy guideline review.

### 4.4 Controlling Environmental Impacts

The *Environmental Planning and Assessment Act 1979* requires an assessment of the likely environmental impacts for the construction and maintenance by the RTA of roads, bridges, tunnels and ancillary works.

The following documents are key to the management of environmental impacts of the operations of the RTA:

- the *Project Management Plan* (PMP)
- *Project Environmental Management Plan* (PEMP)
- *Contractor's Environmental Management Plan* (CEMP).

The *Environmental Management Plan* is the basis for:

- complying with environmental requirements
- assigning environmental responsibilities between the RTA and contractors
- including environmental requirements in tender documents
- management evaluation of environmental performance of projects.

#### **Contractor's Environmental Management Plan**

When undertaking work for the RTA a contractor is required to develop a *Contractor's Environmental Management Plan* (CEMP).

The RTA also requires contractors to comply with conditions to protect the environment. These conditions are integrated within contract management and tendering processes of the RTA. In so doing the RTA seeks to enhance the accountability of contractors for environmental protection.

#### **Contractor's Pre-qualification Scheme**

An accredited EMS system is required of contractors for work nominated by the RTA.

In accordance with the NSW Government's EMS Guidelines for the construction industry,<sup>5</sup> the RTA requires contractors to have in place an accredited EMS for pre-qualification for roadwork and bridgework tenders over \$2m. Government policy requires contractors to have an accredited EMS in place for projects in excess of \$10m.

At present 37 'pre-qualified' contractors have an accredited EMS. The RTA has advised that all contractors that are required to be 'pre-qualified' are in fact so qualified.

The EMS of the Road Services Branch (a construction and maintenance unit within the Operations Directorate) gained accreditation during 1999 thereby enabling the unit to tender for RTA and other government contracts.

<sup>5</sup> NSW Government EMS Guidelines (1998) were developed by the Construction Policy Steering Committee (CPSC) in collaboration with the NSW Environment Protection Authority (EPA).



**Project Management System**

The *Project Management System* establishes a minimum requirement on a project manager to:

- conduct a risk assessment at the commencement of the design phase of the project
- identify potential hazards
- to define mitigating measures.

**Audit Observations**

The RTA's approach to *Environmental Management Plans* complies with the NSW Government's EMS Guidelines (1998) and seeks to implement environmental safeguards as identified.

At the project level the RTA has procedures to assess and manage the impacts of its activities.

A review of certain maintenance and construction project files indicates environmental management is well documented.

## **Training and Awareness**

**Principle**

**The organisation should identify training needs. It shall require that all personnel whose work may create a significant impact upon the environment having received appropriate training.**

### **4.5 The RTA's Approach**

The *RTA Environmental Policy* states that employees:

... will be provided with the skills and, awareness and leadership to achieve the RTA's responsibilities.

This policy commitment is delivered through training programs under the Workplace Environmental Training framework (WET) as coordinated by the Learning and Development Branch and the Environment and Community Policy Branch.

**Skills**

The RTA seeks to equip staff and contractors who undertake activities that could give rise to significant environmental impacts with the skills to manage those impacts.

This policy commitment is delivered through various training programs.



<b>Targeting</b>	<p>Once a training need has been identified a program of activity or issue specific training is developed and deployed. Examples include:</p> <ul style="list-style-type: none"> <li>▪ erosion and sediment control training (in conjunction with the Department of Land and Water Conservation)</li> <li>▪ surveillance officer training</li> <li>▪ EMS Guidelines training delivered by the CPSC Environment Working Group</li> <li>▪ Environmental awareness and application of Environmental handbook for Routine Maintenance Works for Road Services SIMC personnel</li> <li>▪ Road Services Engineering and Senior Management Staff completed an Awareness training program</li> <li>▪ the RTA and the Environment Protection Authority have jointly developed criteria for Road Traffic Noise workshops. The RTA assisted the EPA in the training of the EPA, local government and the RTA in the application of the Government's criteria for road traffic noise.</li> </ul>
<b>ESD Awareness</b>	<p>Site specific induction is a requirement of RTA contracts. The RTA identifies the required level of qualification, competence and experience in procedures for specific activities.</p> <p>Senior management undertook a self assessment of current practices to measure the RTA's success in implementing ESD.</p> <p>The RTA has advised that the findings of the assessment will be used to identify training needs, from which training programs will be implemented. The questionnaire provided an opportunity to raise awareness of ESD among participating staff.</p>
<b>Internet Training</b>	<p>The Environment and Community Policy Branch is examining ways to deliver training via the Intranet. But a timeframe has yet to be determined. (<i>personal communication</i> Environment and Community Policy Branch Compliance Manager/EMS Coordinator, August 2001).</p>
<b>Effectiveness</b>	<p>The effectiveness of training is evaluated by:</p> <ul style="list-style-type: none"> <li>▪ the number of environmental incidents reported through internal environmental audit processes</li> <li>▪ post training evaluation by attendees.</li> </ul>
<b>Audit Observations</b>	<p>Training programs are both issue and activity specific.</p> <p>The RTA last conducted an agency wide environmental awareness training program in 1993.</p>

Apart from issue and activity specific training it is considered the RTA review arrangements to identify and if need be, improve environmental awareness across the RTA. It is understood that this objective was originally met through the '*new employee induction scheme*'.

While the *RTA Environmental Policy* is available on the Internet, the policy is not forwarded to contractors and suppliers.



#### **Better Practice**

The Roads Services Branch has established a tiered system of environmental competencies for relevant to the roles of all site personnel including:

- management and supervisory roles
- operators and all site personnel
- service and delivery personnel.

These competencies are monitored through site surveillance and site audits.

## **Communication**

### **Principle**

**An effective communication framework establishes and maintains procedures to facilitate internal communication between the various levels and functions of the organisation, and to receive, document and respond to relevant communications from external relevant parties.**

### **4.6 The RTA's Approach**

Communication, alliances and partnerships are two of six critical success areas within *The Journey Ahead: The RTA's Strategic Plan* of the RTA.

The RTA utilises various mechanisms to facilitate '*top-down/bottom-up*' communication and the transfer of environmental information including face-to-face meetings, forums and committees, reports, newsletters and the intranet and internet.

### **Audit Observations**

There is an opportunity to exploit the visual platform provided by RTA's intranet to capture and harnesses internal and external best practice. Providing project managers and regional environmental representatives with practical solutions and systematic approaches to environmental management issues is regarded as a helpful contribution.

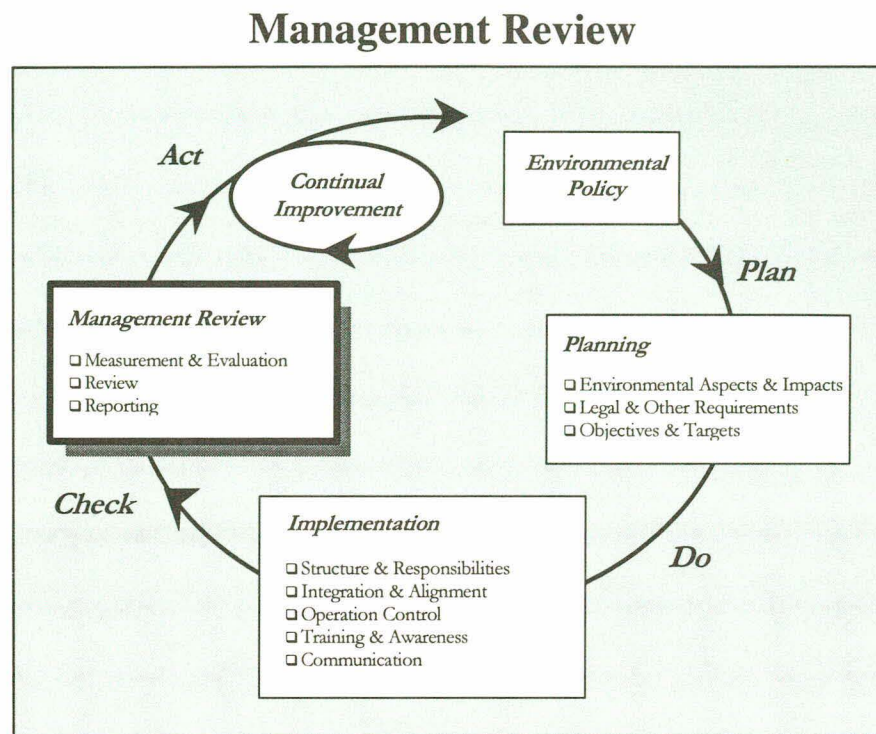
<b>Advisory Bodies</b>	<p>The RTA has established and contributes to a number of forums and advisory committees, for example:</p> <ul style="list-style-type: none"><li>▪ Road Traffic Noise Committee</li><li>▪ the RTA Heritage Committee</li><li>▪ Environmental Council</li><li>▪ Department of Urban Affairs and Planning Local Government Liaison Committee.</li></ul>
<b>Community Attitudes Survey</b>	<p>The RTA undertakes regular community attitudes survey to evaluate opinions about the RTA's performance in meeting the needs and expectations of the community.</p> <p>The survey provides information about community awareness and opinions on emerging issues and community responses to the RTA's strategies.</p> <p>During 1999-2000 the RTA established the <i>Community Involvement Practice Notes and Resource Manual</i>, which establishes a commitment to:</p> <p>... strive for effective community involvement in decision making across the functional areas and at all levels of activity...</p> <p>These guidance notes provide the framework, tools and techniques for establishing and reviewing the efficiency and effectiveness of community involvement within the context of project management evaluation.</p> <p>In response to the draft audit report the RTA advised of other processes in has in place to improve communication.</p>
<b>Audit Observations</b>	<p>The Audit Office considers that the RTA would benefit from a formal process which:</p> <ul style="list-style-type: none"><li>▪ draws together all internal and external communications strategies/policies and</li><li>▪ evaluates the efficiency and effectiveness of the RTA's communication strategies/policies.</li></ul>





## **5. Management Review**

---



## Principle

**An organisation should measure, monitor and evaluate its environmental performance against its environmental policy, objectives, targets and other environmental performance criteria.**

**ISO 14031 defines Environmental Performance Evaluation (EPE) as a:**

... process to facilitate management decisions regarding an organization's environmental performance by selecting indicators, collecting and analysing data, assessing information against environmental performance criteria, reporting and communicating, and periodic review and improvement of this process.<sup>6</sup>

**The Institute for Sustainable Development states that the:**

key to any system's effectiveness is usually whether management actively monitors the system's operations and outputs on an ongoing basis

**Source:** Report of the Auditor General of Canada, 1995.

<sup>6</sup> The EPE model proposed in ISO 14031 follows the familiar and accepted "Plan-Do-Check-Act" management model. In the planning stage, indicators are selected, and in the doing stage, relevant data is collected, analyzed and converted into information that describes environmental performance. This information is then assessed in comparison to environmental performance criteria, and reported and communicated to the appropriate audiences. In the final stage of checking and acting, the entire system is reviewed and improved as needed. The efficiency of and control over each of these activities can be greatly enhanced through the use of information technology.

## Measurement and Evaluation

### Principle

Three levels of environmental performance indicators identified by the AS/NZS ISO 14031:

- operational indicators measure potential stresses on the environment (or society), as consequence of [for example] the use of energy, or the disposal of wastes.
- management indicators measure the results of actions taken to eliminate or reduce potential stresses, such as programs for energy efficiency, waste reduction or awareness building.
- state-of-the-environment indicators measure background conditions in the physical as well as the social environments, such as aspects of air or water quality, or public participation in decision making.

The development of organisation specific performance indicators by leading practitioners is based on what is most relevant both to the reporting organisation and key stakeholders.

Consultation with stakeholders is therefore, an essential part of the process for selecting indicators.

### 5.1 The RTA's Approach

The *2001 RTA Environment Report* comments on, among other matters:

- the protection of the waterways (for example, the *Stormwater Environment Improvement Program [SEIP]*)
- air quality (*Action for Air, Action for Transport*)
- greenhouse gas emissions and climate change (the RTA has the lead role for five transport measures under the Commonwealth Government's National Greenhouse Strategy, namely 'teleworking' and ride sharing, promoting walking and cycling, reducing vehicle emissions, increasing the use of alternative fuels, and providing information on efficient vehicle use)
- the assessment and mitigation of noise (... *the RTA supports the Government's Environmental Criteria for Road Traffic Noise...* )
- and waste management (*Waste Reduction and Purchasing Policy*).



Currently the RTA uses a framework of performance indicators, including:

- Austroads<sup>7</sup> national performance indicators
- internal performance indicators in *The Journey Ahead The RTA's Strategic Plan* and *Environment Strategic Plan*.

A selection of indicators are:

*RTA's Strategic Plan*

- achieve zero infringements from State Government environmental regulators.

*Environment Strategic Plan*

- achieve zero growth in vehicles kilometres travelled per capita by 2011
- proportion of targeted NSW motor vehicles tested against exhaust emission standards
- workplace environmental training implemented in accordance with an approved program
- percentage of pre-qualified tenderers with demonstrated environmental management capability to an adequate level
- EIA and *Environmental Management Plans* completed for all works that could impact on the environment
- all major depots to be subject to *Environmental Management Plans* by July 2000 and all other depots and work centres to be covered by *Environmental Management Plans* by July 2002.

The *2001 RTA Environment Report* has foreshadowed:

... the development of a Key Performance Indicator (KPI for each statement of the *RTA Environmental Policy* ...

**Audit  
Observations**

As indicated above, the *2001 RTA Environment Report* comments on the environmental impact of, and response to, RTA's operations on water, air, greenhouse gas emissions, noise and waste management.

*Performance  
Indicators*

Certain indicators used by the RTA provide a level of assurance that the RTA has, for example, complied with the law (the number of infringement notices issued on the RTA by the EPA).

This particular level of assurance is, however, dependant the efficiency and effectiveness of the EPA's monitoring program.

---

<sup>7</sup> Austroads is the association of Australian and New Zealand road transport and traffic authorities whose purpose is to contribute to the achievement of improved Australian and New Zealand transport related outcomes



*... data on key impacts provide the core of your environmental report ...*

(Department for Environment, Food and Rural Affairs)

In the main the targets in the *2001 RTA Environment Report* supporting the actions being taken by the RTA to protect the environment are not specific.

It would be helpful if the *RTA Environment Report* included indicators which informs stakeholders whether:

- the negative impact to the environment of those operations is being contained or reduced to acceptable levels
- the actions taken by the RTA contribute positively to the environment at the local, regional, or even the national or global level where appropriate.

The Audit Office supports the steps being taken by the RTA to develop a suite of key performance indicators.

It is suggested the RTA present data in absolute terms, projected levels of performance and performance over time and that the indicators include:

- operational indicators
- management indicators
- state of the environment indicators where appropriate.

'Better practice' guidelines<sup>8</sup> advocate a hierarchy of performance evaluation criteria including *Categories, Aspects* and *Indicators*. These terms are discussed in Appendix 1 *Key Performance Indicators*.

It is suggested the RTA consider arranging the indicators under economic, environmental and social aspects of performance (*triple bottom line* reporting).

Exhibit 5.1 The Shell Report, *People, planet and profits* produced by the Royal Dutch Petroleum Company/Shell group of Companies provides an overview of the way in which performance data is organised.

Appendix 4 identifies Canada's *National List of Environmental Aspects*.

<sup>8</sup> Global Reporting Initiative. Guidelines on economic, environmental, and social performance (June 2000).

**Exhibit 5.1    The Shell Report 2000**  
**People, planet and profits**

The Shell Report:

- arranges its reporting under categories of economic, environmental, social and managing our business
- presents highlights under each category, *Environmental: greenhouse gas emissions 11% below 1990 levels; volume of spills halved; cost of carbon included in major project decisions; global diversity expectations set.*
- environmental performance data is grouped into emissions to air, discharges to water, spills and waste
- the data is represented in absolute terms, targets, projected levels of performance and performance over time
- five year targets and projections were fixed in 1998 over time
- *'as part of our minimum environmental expectations we set a target for all major installations to have the environmental elements of their management systems externally certified to international standards by end 2000' (page 25)*
- includes a verifier's report (page 5) which provides an opinion on the data, graphs and statements based on the work done by the verifier.

*... linkage between planning documents is important*

In the view of the Audit Office there is a need for the RTA to establish a clearer linkage between its:

- risk assessment at the corporate and directorate levels
- the *RTA Environmental Policy*
- RTA specific objectives and targets.

*... the development of KPIs starts with specific policy*

In conjunction with the development of KPIs, it is suggested that the RTA:

- review the rigour of its policy including the setting and reporting of targets to reduce impacts for each area
- develop data and management systems to support the indicators
- improve integration between management information and internal and external reporting
- develop information systems that:
  - track and integrate internal and external (societal) costs and benefits, and
  - support evaluations of the short and long term consequences of activities and projects from environmental, social and economic perspectives.



*periodical  
review*

While it is essential to have agreed indicators, circumstances do change. Further, indicators improve as data collection processes improve and management information systems are refined.

On that basis the RTA should regularly review the appropriateness of performance indicators and establish a systematic and documented process to support and evidence such reviews.

## **Review**

### **Principle**

**An organisation should review and continually improve its environmental management systems, with the objective of improving its overall environmental performance.**

## **5.2 Audit and Surveillance Programs**

### **Continuous Improvement**

There are four key mechanisms by which the RTA seeks continuous improvement in environmental management. These include:

- internal audit and surveillance program
- the EMS Working Party
- management review
- mainstreaming environmental management.

### **EMS Working Party**

The EMS Working Party is a key mechanism by which key issues regarding systems and performance compliance are raised and addressed to support continual improvement.

### **Recent Initiatives**

In May 2001 the RTA contracted PSC and Associates Consulting Pty Ltd to undertake a gap analysis of the EMS against the principles of AS/NZS ISO14001.

The RTA advised that a report, in draft form or otherwise, was not available for review by the Audit Office.

The internal audit function of Control Management Services, RTA, is planning to conduct a performance audit of the efficiency and effectiveness of the RTA's overall environmental management process.

### **EMS Review**

An inaugural management review of the RTA's corporate EMS is proposed.

The EMS manuals of Operations Directorate and Client Services Directorate provide for an annual EMS management review as defined by AS/NZS ISO14001.

At the time of the audit, Client Services Directorate was in the process of conducting its inaugural review.

**Audit  
Observation**

A management review (as defined by the *Standard*) of the RTA's corporate EMS and the EMS of the Operations Directorate has yet to be undertaken.

It is suggested a review be planned and implemented, in part of full, consistent with the *Standard* and the *RTA Environmental Policy* which provides for the:

... continued development and implementation of an environmental management system with provision for auditing and reviewing on an ongoing basis ....

### **Reporting**

**Principle**

**Public reporting of performance can benefit an organisation in a number of ways. It can help an agency manage environmental impacts, improve performance, and minimise potential risks.**

**Reports can also be used to differentiate an agency from other agencies. Employees are also likely to respond well and join in efforts to minimise impacts on the environment.**

**Some businesses are now extending their reporting to other aspects of corporate social responsibility – for instance social and broader sustainability issues.**

The principles outlined above have been adapted from the *General Guidelines on Environmental Reporting* issued by the Department for Environment, Food and Rural Affairs (United Kingdom).



### 5.3 The RTA Environment Report

<b>Environmental Report</b>	The inaugural <i>RTA Environment Report</i> (ER) was published in 1998.
<b>Regulatory Reporting</b>	<p>The RTA reports to regulatory authorities in accordance with specific license and conditions of approved works.</p> <p>The RTA also provides environmental performance data to various whole-of-government environmental reporting initiatives including the:</p> <ul style="list-style-type: none"> <li>▪ EPA's biennial <i>State of the Environment Report</i> which provides details on the current status of environmental issues facing New South Wales</li> <li>▪ Council on the Cost and Quality of the Government's <i>Service Efforts and Accomplishments in the NSW Public Sector Reports</i></li> <li>▪ Ministry of Energy and Utilities <i>Annual Energy Report</i>.</li> </ul>
<b>Audit Observations</b>	<p>The RTA is to be commended for producing an <i>Environment Report</i>. Since the commencement of the audit the RTA has issued its report for the year 2001.</p> <p>The report for 2001 included the <i>RTA Environmental Policy</i> and provides information about the scope and scale of the RTA's activities. This was not the case in 1999 or 2000 although the policy was available on the RTA's website.</p>
<b>Policy</b>	The Audit Office considers that the RTA should continue to include its <i>Environmental Policy</i> in its annual <i>Environment Report</i> .
<b>Environmental Impacts</b>	<p>The <i>2001 RTA Environment Report</i> discusses issues that are of fundamental concern to the community such as water, air, greenhouse gas emissions and noise. The report is silent as to:</p> <ul style="list-style-type: none"> <li>▪ any significant changes in the size, structure, or nature of the organisation since the last reporting period</li> <li>▪ there are other significant impacts</li> <li>▪ what, if anything, has been omitted and its likely significance.</li> </ul>

It is important that the scope of the report:

- be disclosed clearly and openly
- state the impacts and areas not being reported on and why so as to avoid the inference that an organisation is reporting only the 'good news' (Department of Environment, Food and Rural Affairs, United Kingdom).

*'better practice'*

It is suggested that future environment reports of the RTA include:

- details of the reporting period and the previous report, significant changes in the size, structure or nature of the organisation since the last reporting period and
- a detailed examination of which operations the report covers and which, if any, are excluded and why
- details of any recognised standard of environmental management used in your organisation.

**Source:** Department for Environment, Food and Rural Affairs (United Kingdom).

The establishment of a *Register of Environmental Effects* provides a convenient record for the development of objectives and targets, managing aspects and impacts and reporting on the management thereof.

*Identifying Risks*

... annual reports should contain a discrete section dealing with the risk management plan and strategies including a specific reference to the control environment, risk identification and analysis as well as reporting and monitoring processes ...

**Source:** Treasury Circular TC 00/16 97/7 – Annual Reporting Update 31 July 2000.

While the above comment applies to Annual Reports of agencies, it is considered there is scope to inform readers, particularly stakeholders, of the *RTA Environment Report* of the environmental risks faced by the RTA.

The report discusses issues that are of fundamental concern to the community such as water, air, greenhouse gas emissions and noise. The report is silent as to:

- what priority is placed on risks to the environment
- whether there are other direct and indirect risks to the environment from the activities of the RTA, and the significance of those risks
- the process by which risks were identified and whether the process follows generally accepted practices issued by, for example, Standards Australia
- risks arising outside the control of the RTA.

### *Greening its Procurement Policies*

The *RTA Environment Report* would also benefit from information about how the RTA manages its contractors/suppliers of products and services in terms of:

- what 'green' policies are in place with contractors/suppliers, or what objectives are in place for introducing policies in the future
- details of agreements in place with contractors/suppliers including agreements by which suppliers have to meet standards in the future
- the means by which an organisation assesses contractors/suppliers' environmental performance safeguards, for example, accreditation to recognised environmental management schemes, site inspections, questionnaires etc.
- any sectoral agreements on greening supply chains an organisation is party to.

The above information is in addition to that of the *Waste Reduction and Purchasing Policy Plan (WRAPP)*.

### *'Triple Bottom Line'*

It is a growing practice for the priorities to be arranged under the headings of social, environmental and economic issues known as *triple bottom line* reporting. The priorities can then be evaluated in those terms. The Shell Report 2000, *People, planet & profits*, adopts such an approach.

### *Environmental Management System*

Section 6 of the *2001 RTA Environmental Report* includes a section on the EMS of the RTA. Better practice suggests that the ER include reference to:

- naming the responsible person (the Board member where there is one) who heads the *Environmental Management System*
- a description of the EMS including, for example roles and responsibilities between the board, environmental committee, environmental manager, environmental team and staff.

*Source:* The Department for Environment, Food and Rural Affairs.

### *Verifiers*

A private accounting firm has verified performance information in the Shell Report. This improves the credibility of the report. It is suggested the RTA consider such an approach.





# Appendices

---

## Appendix 1

## Terms Used in this Report

<b>Accounting for Sustainable Development</b>	an information tracking framework that (1) integrates internal (private) and external (societal) costs and benefits, and (2) supports evaluations of the short- and long-term consequences of activities and projects from environmental, social and economic perspectives. ( <i>Source:</i> Commissioner of the Environment and Sustainable Development)
<b>Continual Improvement</b>	Process of enhancing the environmental management system to achieve improvements in overall environmental performance in line with the organisation's environmental policy [AS/NZS ISO 14001 definition 3.1]
<b>Ecological Sustainable Development</b>	ESD is using, conserving and enhancing the communities resources so that the ecological processes on which life depends, are maintained, and the total quality of life now and in the future, can be increased.
<b>The Environment</b>	Surroundings in which an organisation operates including air, water, land, natural resources, flora, fauna, humans and their interrelation.
<b>Environmental Aspects</b>	<p>An element of an organisation's activities, products or services that can interact with the environment</p> <p>Note: A significant environmental impact is an environmental aspect that has or can have a significant environmental impact. [AS/NZS ISO 14001 definition 3.3]</p>
<b>Environmental Policy</b>	<p>AS/NZS ISO14001: 1996 defines an <i>Environmental Policy</i> as a declaration:</p> <p>... by the organisation of its intentions and principles in relation to its overall environmental performance which provides a framework for action and for the setting of its environmental objectives and targets</p> <p>...</p> <p>An Environmental Policy is designed to ensure that an organisation has the capacity to comply with its permitted environmental performance levels, which depend on the organisation's size, vision, services, products, customer demands, and other market influences.</p>
<b>Environmental Impact</b>	Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products or services. [AS/NZS ISO 14001 definition 3.4]
<b>Environmental Management System</b>	That part of the overall management system that includes organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving reviewing and maintaining the environmental policy.
<b>Environmental Management System</b>	<p>That part of the overall management system that includes the organisational structure planning activities, responsibilities, practices, procedures, processes and resources for developing implementing, achieving, reviewing and maintaining the environmental policy.</p> <p><i>Source:</i> AS/NZS ISO 14001:1996.</p>

<b>Environmental Performance</b>	Results of an organisation's management of its environmental aspects
<b>Environmental Performance Indicators</b>	<p>Provide a means to measure how well an organisation has performed in meeting its environmental objectives or achieving outcomes.</p> <p>EPIs are not an exact measure of achievement but rather an indication of agency performance</p>
<b>Environmental Policy</b>	A statement by the organisation of its intentions and principles in relation to its overall environmental performance which provides a framework for action and for the setting of its environmental objectives and targets.
<b>ESD</b>	<p>The <i>National Strategy for Ecologically Sustainable Development</i> (NSED)<sup>9</sup> (1992) defines ESD as :</p> <p>... using, conserving and enhancing the communities resources so that the ecological processes on which life depends, are maintained, and the total quality of life now and in the future, can be increased.</p> <p>The NSED establishes the broad strategic and policy framework under which governments and their agencies co-operatively make decisions and take actions to pursue ESD.</p>
<b>Environmental Stewardship</b>	<p>Environmental stewardship refers to the concept that society should recognise the impacts of its activities on environmental conditions and should adopt practices that eliminate or reduce negative environmental impacts.</p> <p>Every aspect of an organisation's operations, including strategic planning, procurement, waste reduction, waste management, water and energy usage, responses to existing environmental problems, and land management, must be conducted in such a way as to limit or eliminate adverse impacts on the environment.</p>
<b>Environmental Targets</b>	refers to detailed performance requirements, quantified where practicable, applicable to the organisation or parts thereof, that arise from the environmental objectives and that needs to be set and met in order to achieve those objectives.
<b>International Organization for Standardization (ISO)</b>	The ISO is a worldwide federation of national standards bodies that prepares international standards. International Standard ISO 14031 "Environmental Performance Evaluation" supports ISO 14001 and 14004. It is a draft international standard giving guidance on the design and use of environmental performance evaluation within an organisations ( <i>Source: ISO 14031</i> ).

<sup>9</sup> The NSED (1992) sets out an agreed framework under which governments are to make decisions and take actions to pursue ecologically sustainable development.



<b>Key Performance Indicators (KPIs)</b>	KPIs are those indicators which give a comprehensive, high level overview of a program's performance. They are particularly aimed at external users of performance information.
<i>Categories</i>	The broad areas, or groupings, of economic, environmental, or social issues of concern to stakeholders (for example, air, energy); commonly known as ' <i>triple bottom line</i> ' reporting.
<i>Aspects</i>	Information related to a specific category (for example, greenhouse gas emissions, energy consumed by source)
<i>Indicators</i>	Specific measures of individual aspects to track and demonstrate performance (for example, energy kw/h).
<i>Verification</i>	<p>The quality, usefulness, and credibility of the RTA's reporting can be enhanced by verification and validation. Independent verification, for example:</p> <ul style="list-style-type: none"> <li>▪ provides an additional level of assurance in regard to the reliability and completeness of the ER</li> <li>▪ enhances the quality, usefulness, and credibility of information used within the agency and the underlying management systems and processes.</li> </ul>
<i>Validation</i>	<ul style="list-style-type: none"> <li>▪ independent validation of systems and procedures for measuring, recording, and reporting performance data</li> <li>▪ internal auditing of systems and procedures for measuring, recording and reporting performance data</li> <li>▪ independent evaluations and commentaries by external experts regarding an organisation's economic, environmental, and social performance and/or management processes.</li> </ul>
<b>Process</b>	A process is a series of <i>systematic and documented</i> steps in a function or activity. When seeking improvement to a function or seeking to evidence a process the following steps are important:
<i>A Plan</i>	<ul style="list-style-type: none"> <li>▪ select the issue to receive attention (often based on priorities)</li> <li>▪ design a clear statement of purpose</li> <li>▪ define the process</li> <li>▪ seek advice about expectations from the process; prioritise expectations, set performance measures, identify barriers to good performance</li> <li>▪ measure current performance</li> <li>▪ identify opportunities for improvement and develop solutions.</li> </ul>
<i>Do</i>	<ul style="list-style-type: none"> <li>▪ test the process steps where practicable</li> <li>▪ seek the involvement of those affected by the change during the testing phase</li> </ul>



*Check*

- verify improved performance
- confirm costs and benefits of the revised process

*Act*

- standardise the improvement
- install the improvement
- leverage the improvement into other areas of the organisation.

The process should be:

- documented and approved by senior management
- communicated to relevant staff, and

Accountability for implementation and review should be established, performance should be monitored and reported with appropriate adjustment to the process where appropriate.

**The Shell Report:**  
*People, planet and profits*

A report produced by the Royal Dutch Petroleum Company/Shell group of Companies which documents the actions taken by the company in the year 2000 to meet the economic, environmental and social responsibilities (of the company).

## Appendix 2

## About the Audit

### Audit Objective

The objective of the audit is to:

- examine the environmental management arrangements of the RTA
- assist NSW public sector agencies to develop and implement a structured management approach to achieve continual improvement in environmental performance and integration Ecological Sustainable Development.

### Audit Criteria

There should be in place [adequate]:

- policies, procedures, processes
- management plans
- management information to measure progress towards achievement of management plans and performance targets generally
- monitoring and reporting arrangements

so that the RTA is able to demonstrate transparency and accountability in the management of the environment [including ESD].

### The Standard

The criteria used during the course of the audit had regard to the Australian/New Zealand Standard *Environmental Management Systems AS/NZS ISO 14001:199* (the Standard).

The Standard should not however be regarded as the ‘start and finish’ of ‘best practice’. The Standard does not, for example, require an organisation to be concerned with the environmental aspects of its suppliers. The Standard does not mandate that suppliers have an Environmental management System.

The Standard does not require the establishment of a Register of environmental effects and legal and other obligations.

This came about, apparently from concerns in the United States, that the register of adverse environmental impacts may be called upon in legal proceedings. Other standard setting organisations do, however, require a register.

The Standard on *Risk Management AS/NZS 4360* implies that a Register is to be maintained.

<i>'Better Practice'</i>	<p>A reference to 'better practice' (or the Principle preceding the discussions of issues in the report) is, in the main, influenced by the guidance provided by Standards Australia.</p> <p>In some cases better practice is guided by overseas organisations, for example, the Department for Environment, Food and Rural Affairs (United Kingdom).</p> <p>In other cases 'better practice' is based on what steps a prudent manager of the environment would undertake or alternatively what a progressive organisation might seek to undertake.</p>
<b>Audit Scope</b>	<p>The audit reviewed the adequacy of the RTA's approach to environmental management.</p>
<b>Audit Approach and Methodology</b>	<p>The audit methodology comprised (but not be restricted to):</p> <ul style="list-style-type: none"> <li>▪ research into Australian and international environmental literature on managing the environment</li> <li>▪ a survey issued to the RTA seeking information on environmental management</li> <li>▪ interviews with key personnel in the RTA offices including the Environment and Policy Branch, Roads Network Infrastructure Contracts, Environmental Technology and Client Services RTA</li> <li>▪ analysis of key RTA documents and files</li> <li>▪ analysis of legislation, international environmental standards and best practice</li> <li>▪ discussions with the NSW Environmental Protection Authority.</li> </ul>
<b>Cost of the Audit</b>	<p>The cost of the audit was \$146,000 including \$6,500 for printing.</p>
<b>Acknowledgement</b>	<p>The Audit Office thanks the personnel of the RTA for their co-operation and assistance during the course of the audit.</p> <p>The audit was undertaken by:</p> <ul style="list-style-type: none"> <li>▪ D Streater FCPA, Director Performance Audit and</li> <li>▪ R Perry BSc, MSc, AIEMA*, and Registered Environmental Auditor (IEMA)</li> </ul> <p>*Associate Member Institute of Environmental Management and Assessment.</p>

## Appendix 3

### The RTA Environmental Policy

The RTA manages road related transport infrastructure and provides safe and efficient access to the road network for the people of NSW/

The RTA will demonstrate due diligence in the provision of the service, manage its work activities in a manner that is consistent with the principles of ecologically sustainable development, and will deliver continuous improvement in environmental performance through:

- Ensuring the continued development and implementation of an environmental management system with provision for auditing and reviewing progress on an ongoing basis.
- Reviewing the environmental effects of our activities and setting appropriate environmental improvement objectives.
- Integrating environmental duty of care into business planning and day to day activities.
- At a minimum, conducting all our operations, whether carried out by or on behalf of the RTA, in accordance with relevant legislation and government policy and agreements.
- Minimising pollution and environmental impacts as a result of the RTA's activities.
- Promoting the efficient use, reuse and recycling of resources, and the minimisation of waste.
- Involving the community in planning and implementation decisions.
- Including environmental considerations in all aspects of strategic planning of our road and traffic management.
- Providing our employees with the skills, awareness and leadership to achieve the RTA's environmental responsibilities.
- Monitoring, reviewing and reporting publicly on the environmental performance of the organisation.

*Source: 2001 RTA Environment Report.*



**Appendix 4****Environment Canada's National List  
of Environmental Aspects**

<b>Air Emissions</b>	1. Fume hood emissions
	2. Boiler emissions
	3. Incinerator emissions
	4. Ozone depleting substances
<b>Liquid Effluents</b>	5. Wastewater discharge
<b>Waste Management</b>	6. Solid waste management
	7. Hazardous waste generation
	8. Landfill
<b>Resource Use</b>	9. Water conservation
	10. Energy conservation
<b>Hazardous Substances</b>	11. Other hazardous substances
	12. Polychlorinated Biphenyls in use
	13. Polychlorinated Biphenyls in storage
	14. Aboveground storage tank
	15. Underground storage tank
<b>Transportation and Motorised Equipment</b>	16. Ground transportation
<b>Land Management</b>	17. Land use management
	18. Potentially contaminated sites
	19. Environmental irritants
<b>Environmental Emergencies</b>	20. Spills
<b>Administration</b>	21. Procurement
	22. Human resource management
	23. Environmental assessment



## **Performance Audits by the Audit Office of New South Wales**

---



---

## Performance Auditing

---

### What are performance audits?

Performance audits are reviews designed to determine how efficiently and effectively an agency is carrying out its functions.

Performance audits may review a government program, all or part of a government agency or consider particular issues which affect the whole public sector.

Where appropriate, performance audits make recommendations for improvements relating to those functions.

### Why do we conduct performance audits?

Performance audits provide independent assurance to Parliament and the public that government funds are being spent efficiently and effectively, and in accordance with the law.

They seek to improve the efficiency and effectiveness of government agencies and ensure that the community receives value for money from government services.

Performance audits also assist the accountability process by holding agencies accountable for their performance.

### What is the legislative basis for Performance Audits?

The legislative basis for performance audits is contained within the *Public Finance and Audit Act 1983, Division 2A*, (the Act) which differentiates such work from the Office's financial statements audit function.

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

### Who conducts performance audits?

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

### How do we choose our topics?

Topics for a performance audits are chosen from a variety of sources including:

- ❑ our own research on emerging issues
- ❑ suggestions from Parliamentarians, agency Chief Executive Officers (CEO) and members of the public
- ❑ complaints about waste of public money
- ❑ referrals from Parliament.

Each potential audit topic is considered and evaluated in terms of possible benefits including cost savings, impact and improvements in public administration.

If you wish to find out what performance audits are currently in progress just visit our website at [www.audit@nsw.gov.au](http://www.audit@nsw.gov.au).

The Audit Office has no jurisdiction over local government and cannot review issues relating to council activities.

### How do we conduct performance audits?

Performance audits are conducted in compliance with relevant Australian standards for performance auditing and our procedures are certified under international quality standard ISO 9001.

Our policy is to conduct these audits on a "no surprise" basis.

Operational managers, and where necessary executive officers, are informed of the progress with the audit on a continuous basis.

### What are the phases in performance auditing?

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

During the planning phase, the audit team will develop audit criteria and define the audit field work.

At the completion of field work an exit interview is held with agency management to discuss all significant matters arising out of the audit. The basis for the exit interview is generally a draft performance audit report.

The exit interview serves to ensure that facts presented in the report are accurate and that recommendations are appropriate. Following the exit interview, a formal draft report is provided to the CEO for comment. The relevant Minister is also provided with a copy of the draft report. The final report, which is tabled in Parliament, includes any comment made by the CEO on the conclusion and the recommendations of the audit.

Depending on the scope of an audit, performance audits can take from several months to a year to complete.

Copies of our performance audit reports can be obtained from our website or by contacting our publications unit.

#### **How do we measure an agency's performance?**

During the planning stage of an audit the team develops the audit criteria. These are standards of performance against which an agency is assessed. Criteria may be based on government targets or benchmarks, comparative data, published guidelines, agencies corporate objectives or examples of best practice.

Performance audits look at:

- ☐ processes
- ☐ results
- ☐ costs
- ☐ due process and accountability.

#### **Do we check to see if recommendations have been implemented?**

Every few years we conduct a follow-up audit of past performance audit reports. These follow-up audits look at the extent to which recommendations have been implemented and whether problems have been addressed.

The Public Accounts Committee (PAC) may also conduct reviews or hold inquiries into matters raised in performance audit reports.

Agencies are also required to report actions taken against each recommendation in their annual report.

To assist agencies to monitor and report on the implementation of recommendations, the Audit Office has prepared a Guide for that purpose. The Guide is on the Internet and located at <http://www.audit.nsw.gov.au/guides-bp/bpglist.htm>

#### **Who audits the auditors?**

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

The PAC is also responsible for overseeing the activities of the Audit Office and conducts reviews of our operations every three years.

#### **Who pays for performance audits?**

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

#### **For further information relating to performance auditing contact:**

Tom Jambrich  
Assistant Auditor-General  
Performance Audit Branch  
(02) 9285 0051  
email: [tom.jambrich@audit.nsw.gov.au](mailto:tom.jambrich@audit.nsw.gov.au)



## Performance Audit Reports

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"> <li>Government-wide Framework</li> <li>Defining and Measuring Performance (Better practice Principles)</li> <li>Legal Aid Commission Case Study</li> </ul>	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"> <li>Administrative Procedures</li> <li>Protection of Intellectual Property</li> <li>Minimum Standard Checklists</li> <li>Better Practice Examples</li> </ul>	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>	18 April 2001
83	Department of Corrective Services	<i>NSW Correctional Industries</i>	13 June 2001

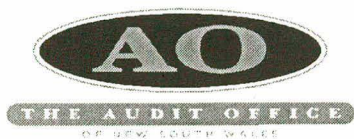
No.	Agency or Issue Examined	Title of Performance Audit Report or Publication	Date Tabled in Parliament or Published
84	Follow-up of Performance Audits	<i>Police Response to Calls for Assistance The Levying and Collection of Land Tax Coordination of Bushfire Fighting Activities</i>	20 June 2001
85*	Internal Financial Reporting	<i>Internal Financial Reporting including a Better Practice Guide</i>	27 June 2001
86	Follow-up of Performance Audits	<i>The School Accountability and Improvement Model (May 1999) The Management of Court Waiting Times (September 1999)</i>	14 September 2001
87	e-government	<i>Use of the Internet and related technologies to improve public sector performance</i>	19 September 2001
88*	e-government	<i>e-ready, e-steady, e-government: e-government readiness assessment guide</i>	19 September 2001
89	Intellectual Property	<i>Management of Intellectual Property</i>	17 October 2001
90*	Better Practice Guide	<i>Management of Intellectual Property</i>	17 October 2001
91	University of New South Wales	<i>Educational Testing Centre</i>	21 November 2001
92	Department of Urban Affairs and Planning	<i>Environmental Impact Assessment of Major Projects</i>	28 November 2001
93	Department of Information Technology and Management	<i>Government Property Register</i>	31 January 2002
94	State Debt Recovery Office	<i>Collecting Outstanding Fines and Penalties</i>	17 April 2002
95	Roads and Traffic Authority	<i>Managing Environmental Issues</i>	April 2002

\* Better Practice Guides

#### Performance Audits on our website

A list of performance audits tabled or published since March 1997, as well as those currently in progress, can be found on our website [www.audit.nsw.gov.au](http://www.audit.nsw.gov.au)





## **THE AUDIT OFFICE MISSION**

**Assisting Parliament  
improve the  
accountability and  
performance of the State**

**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](mailto:mail@audit.nsw.gov.au)

Office Hours: 9.00am - 5.00pm Monday to Friday

Contact Officer: Denis Streater  
Director Performance Audit  
+612 9285 0075

**To purchase this Report please contact:**

### **The NSW Government Bookshop**

#### **Retail Shops**

##### *Sydney CBD*

Ground Floor  
Goodsell Building, Chifley Square  
Cnr Elizabeth and Hunter Streets  
SYDNEY NSW 2000

#### **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) 9228 7227
-----------	----------------





**assisting parliament improve the accountability and performance of the state**

---

<b>Location:</b>	Level 11 234 Sussex Street SYDNEY NSW 2000 AUSTRALIA
<b>Office hours:</b>	Monday to Friday 9.00 a.m to 5.00 p.m
<b>Postal address:</b>	GPO Box 12 SYDNEY NSW 2001 AUSTRALIA
<b>Telephone:</b>	(02) 9285 0155
<b>Facsimile:</b>	(02) 9285 0100
<b>Website:</b>	<a href="http://www.audit.nsw.gov.au">www.audit.nsw.gov.au</a>
<b>Email:</b>	<a href="mailto:mail@audit.nsw.gov.au">mail@audit.nsw.gov.au</a>



# Questionnaire

## Managing the Environment





# Contents

## **Policy**

1.	Government Policy	1
2.	The Environmental Framework	1
3.	The Environmental Policy	2

## **Management Issues**

4.	Planning	3
5.	Implementation and Operation	6
6.	Checking and Corrective Action	12
7.	Management Review	14
8.	Reporting	15

	<b>Terms Used in this Questionnaire</b>	<b>17</b>
--	---	-----------



## About the Questionnaire

**The purpose of this questionnaire is to assist agencies review their management of environmental issues.**

**The questionnaire is based on established better practice.**

## 1. Government Policy

Are the environmental responsibilities of your agency reasonably clear to top management?

Does your agency have a systematic and documented process by which it identifies and responds to the environmental policy of the government of the day including its laws, regulations, guidelines etc?

Are the responsibilities of the Chief Executive of your agency in regard to the environment adequately documented and agreed with the relevant Minister?

## 2. The Environmental Framework

Has your agency established procedures to monitor your commitments to environmental stewardship?

Has your agency developed a comprehensive framework of policies, practices, systems and relevant management information to support environmental management?

Are the environmental responsibilities of your agency clearly documented and up-to-date?

To what extent has environmental management been integrated into the overall business management processes of your agency?

How does your agency identify, allocate and review human, technical and financial resources to meet its environmental objectives and targets?

Has your agency adopted the principles of the Environmental Management System AS/NZS 14001?

Has your agency assessed the costs and benefits of certification under the standard?

Has a business case been prepared in support of any decision?

Has certification been considered/sought/obtained?

Does your agency have collaborative relationships with other departments/agencies in relation to environmental management?

Does your agency have collaborative relationships with non-government stakeholders in the community and business sectors?

Has your agency assessed the financial cost of managing the environment?

### 3. Environmental Policy

Does your agency have a documented Environmental Policy?

Is the policy consistent with other corporate policies?

Has top management defined and committed to the policy?

Is (does) the policy:

- appropriate to the nature and scale and environmental impacts of its activities, products or services
- commit to continuous improvement, prevention of pollution, Ecological Sustainable Development (ESD)
- comply with relevant environmental legislation and regulations and other environmental mandates
- provide a basis for objective and target setting by setting organisational goals which will drive discrete and measurable outcomes
- communicated to employees of all business units
- commit to transparency and openness in reporting your agency's management of the environment
- available to, and accessible by, the public?

Are the policies of your agency reviewed periodically to ensure their continuing relevance in light of changing standards, technology, and emerging concerns?

What level of management is responsible for maintaining the currency of your corporate environmental policies?

Are the views of stakeholders taken into account in developing the policy?

By what methods are policies promulgated through out your agency and stakeholders?

Do the methods make the best use of contemporary technology?

## 4. Planning

### Environmental Aspects

Has your agency established a systematic and documented process describing the methods to identify, monitor and evaluate environmental aspects of your agency's activities, products or services?

Does the process:

- drive the development, application and operational aspects of environmental policy
- identify in an ongoing way all those aspects over which the agency has control, or over which it can be expected to have an influence
- include an environmental risk assessment to evaluate those aspects which may have a significant impact on the environment in appositve and negative way?
- include the scale, frequency, severity and sensitivity of the environmental impacts
- ensure that aspects which have a significant impact are considered in setting environmental objectives
- determine the significance of those impacts using a recognized risk management approach
- establish environmental objectives and targets
- establish programs for achieving those objectives and targets
- monitor and measure those operations that can have a significant impact on the environment
- describe how environmental responsibilities and risks will be managed, documented and communicated to appropriate management and staff?
- provide for the audit and review the process to confirm that planned arrangements are properly implemented and maintained?



## 4. Planning

### Legal and Other Requirements

Do your operations require compliance with environmental, health or safety regulations at either the national or state level.

Is there a process to:

- identify the legal and other regulatory requirements associated with environmental impacts of activities, products or services
- access to the legal and other regulatory requirements
- evaluate compliance with the legal and other regulatory requirements?

How does your agency keep track of (changes to) legal and other requirements?

### Objectives and Targets

Have environmental objectives been established for each relevant business function and level?

Do the objectives consider:

- identified significant aspects
- legal and other requirements?

Have targets been set for environmental objectives?

Have objectives and targets been communicated to all relevant business functions, employees, contractors and suppliers?

Has your agency established Key Performance Indicators (KPIs) to demonstrate progress against environmental objectives and targets?

Does your agency have the capability to identify and track KPIs and other data, necessary to achieve its environmental objectives and targets?

Are your agency's objectives and targets reviewed and revised to ensure they:

- reflect your agency's environmental policy
- reflect significant environmental impacts associated with your agency's operations?
- support continual improvement in environmental performance and better practice.

## 4. Planning

### Environmental Management Program

Have programs been developed to achieve objectives and targets established for each relevant business function and level?

Do these programs respond to your agency's environmental policy and the risk assessment?

Do the programs nominate:

- personnel with specific responsibilities
- resource needs
- strategies and timeframes
- objectives and targets at each relevant business function and level?

Are the programs monitored to track progress against objectives and targets?

Is someone responsible for tracking progress towards achieving objectives and targets?

Does the program include an environmental review for new activities?

Has the program been amended to reflect changes for new activities?

Does your agency monitor and revise its environmental management programs?

## 5. Implementation and Operation

### Structure and Responsibility

Is there an Executive Committee or Board to oversee the monitoring and reporting environmental your agency's activities?

Has top management defined the roles, responsibilities and authorities of management personnel for environmental management in the context of the Environmental Management System (EMS)?

Do the roles, responsibilities and authorities extend to establishing, implementing, maintaining and reporting on the EMS?

Have the roles been documented and communicated to relevant people responsible for environmental management?

Are the relevant people aware of the roles assigned to them?

Has management provided adequate resources to implement and control its EMS?

To what extent does your agency integrate an awareness of Ecological Sustainable Development (ESD) into its culture?

To what extent does your agency integrate the principle of ESD in decision making process through the appraisal and evaluation of policies, programs, plans and projects?

Are there written guidelines on how to conduct operations in a manner that is responsible in accordance with the principles of ESD?

Has your organisation taken measures to gain assurances that systems of internal control for managing the environment:

- are appropriate to your agency's corporate plan or business charter?
- provide timely and useful management information?
- include an effective internal audit function?

## 5. Implementation and Operation

### Training, Awareness and Competence

Has your agency conducted a Training Needs Analysis (TNA) for environmental management including Ecological Sustainable Development issues?

Is there adequate expertise in your agency to deal with the ESD issues?

Does your agency have a systematic and documented process to ensure that personnel who carry out tasks that have a significant impact on the environment are adequately trained and experienced?

Does your agency assess the adequacy of resources and training of staff with designated responsibilities for environmental management and/or protection?

Are employees' responsibilities for environmental management identified in their accountabilities (e.g. position descriptions, annual performance goals)?

Are employees encouraged to take the initiative, submit suggestions for improvement, and to suggest actions or policies to reduce your agency's environmental impact?

Does the agency sponsor scientific or policy research devoted to environmental technology, management, and performance issues or other relevant research areas at educational or research institutions?

Does the agency participate in external activities designed to share the results of such scientific and policy research?

### Document Control

Has your agency established and maintained procedures for controlling all key documents?

Are the procedures adequate so that the documents:

- can be located and at relevant locations essential to the effective functioning of the EMS
- are periodically reviewed
- are revised as necessary and approved for adequacy by those authorized to approve alterations to documentation?

Are obsolete documents promptly removed from all points of issue?

Are obsolete documents retained for legal and other reasons and suitably identified?



## 5. Implementation and Operation

### Communication

Does your agency have a process to communicate with key stakeholders in regard to significant environmental aspects?

How do you identify, monitor, evaluate and understand the needs and expectations of stakeholders?

Does your agency have a process to:

- record and maintain communications between key employees (in your agency) responsible for environmental management
- receive, record and respond to communications from interested parties about environmental impacts associated with your agency's operations?

Does your agency proactively seek the advice and counsel of independent community groups (e.g., through newsletters, regular meetings, open forums, or community oversight committees) regarding possible risks posed by the operations of your agency?

Are the processes maintained?

Have you established documented procedures to monitor and evaluate the effectiveness and efficiency of its communication strategy/plan/methods?

Has your agency established, and does it maintain, information to:

- describe the core elements of the EMS and their interaction
- provide direction on where to obtain more information on specific parts of the EMS

Does the information describe how the elements interact with each other?

Does the documentation contain:

- the environmental policy, objectives and targets
- describe the means of achieving objectives and targets
- document the key roles , responsibilities and procedures?

## 5. Implementation and Operation

### Operation Control

Has your agency identified operations and activities that are associated with significant environmental aspects of your agency's operations?

Are these operations and activities carried out under controlled conditions and in accordance with operating criteria to ensure compliance with environmental policy and the achievement of objectives and targets?

Does your agency have a formal written policy regarding materials/resource conservation, reduction, re-use and recycling?

Have you established specific targets for material/resource conservation programs?

Does your agency have an energy conservation program?

Have you established specific targets for energy conservation programs?

Does your agency monitor and document trends in energy consumption by source?

Does your agency have a program to maximise the use of environmentally safer and more sustainable energy sources?

Does your agency, routinely or in specific circumstances, track chemical use through materials accounting or some other method as distinct from, or in addition to, tracking environmental releases?

Has your agency procedures to identify the potential for, and response to, environmental incidents, accidents and emergency situations?

Does your agency have procedures to report on environmental incidents, accidents and emergency situations and in terms of implementing corrective actions?

Are the procedures communicated to suppliers?

Has your agency addressed issues of habitat protection and stewardship (such as watershed management, wilderness protection, biodiversity, etc.) in areas affected by your operations?

## 5. Implementation and Operation

### Hazardous Waste

Does your agency generate hazardous waste?

Does your agency have (a) specific program(s) to minimise hazardous waste?

Does the agency investigate the environmental performance of its hazardous waste disposal by vendors?

Does your agency monitor and document sites involved in remediation of contaminated soil or water, and their associated costs?

Has your agency identified your non-hazardous waste streams?

Does your agency monitor and document trends in non-hazardous waste management (e.g. production, disposal, recycling, reuse)

Are there programs in place at your agency to minimise non-hazardous waste streams?

Has your agency phased out the use and emission of ozone depleting chemicals targeted by the Montreal Protocol?

Do you monitor and document oil spills, chemical spills, and other accidental releases (e.g. effluent spills?) to all media (land, water, air).

### Green Procurement

Does your agency have a policy to incorporate ESD criteria in the selection of:

- suppliers/(sub) contractors/service providers
- goods and services?

Does your agency have a green transport plan?

Does your agency monitor and document trends in fuel consumption by the agency's transport fleet?

Are there guidelines specifying how (sub)contractors, suppliers, service providers and consultants hired by your agency must perform with respect to environmental stewardship?

Are there documented environmental monitoring systems including inspections or audits of suppliers/ (sub) contractors/ service providers sites/operations?

## 5. Implementation and Operation

### **Community Involvement**

Does your agency seek to protect vulnerable or at-risk groups in communities directly affected by your operations?

(Environmental justice refers to actions in support of populations most negatively affected by environmental factors, as they tend largely to be those populations most vulnerable due to economic, political, racial or other factors.)



## 6. Checking and Corrective Action

### Monitoring and Measurement

Does your agency have procedures to regularly monitor and measure the significant operations and activities that can have a significant impact on the environment?

Does your agency have systematic and documented procedures to evaluate compliance with relevant environmental legislations and regulations?

Are periodic audits carried out using established programs and procedures?

Does your agency have data collection and information management systems adequate to support ESD reporting needs?

How is the performance of your agency regularly monitored in relation to the principles of ESD and best practice?

Do you have a policy/guidelines that sets standards for the quality of Environmental Impact Statements and supporting research?

Do you compare and publicly report predictions made in Environmental Impact Statements (EIS) with actual outcomes?

Does your agency have auditing programs for workplace health, safety and environmental auditing?

Does your agency monitor and document trends in consumption of natural resources?

Are your agency's environmental audit programs reviewed by an independent organisation?

Does your agency seek independent verification of data collection and information management systems?

Are your audit results available to the public?

## 6. Checking and Corrective Action

### Measurement

Does your agency have the (non) financial management systems, practices and information to measure the cost and quality of environmental protection services and the use of resources entrusted to the agency?

To what extent does your agency use internal environmental cost information to support internal decision-making?

Is this done through a managerial cost accounting system or other financial management system that routinely compiles, analyses, and reports on environmental costs?

Which environmental costs are so identified (e.g., management costs, resource use, waste disposal, permitting, monitoring, training, auditing, insurance)?

At what level are costs aggregated (e.g., product, process, facility, division, corporate)?

For what purpose is this cost information compiled?

### Non-conformance and Corrective and Preventative Action

Do documented emergency/contingency plans exist for rectifying significant environmental mishaps?

Does your agency have procedures to establish and maintain responsibility and authority for handling investigations of non-conformance and taking corrective and preventative action?

Has the cost of rectifying specific environmental mishaps/repercussions been estimated in order to prioritise your risk assessment?

### Records

Does your agency have procedures for the identification, maintenance and disposition of environmental records?

## 7. Management Review

Does the Executive Committee or Board regularly receive key information, such as performance information, major initiatives or investigations of issues affecting the environment?

Does your agency have a process to demonstrate how recommendations and feedback from the EMS review have been implemented and contribute to improvement in environmental performance

Does your agency review on a regular basis:

- the extent to which objectives and targets have been met
- the results of audits undertaken
- any changed circumstances and
- take into account continuous improvement?

Are the results of the reviews:

- documented
- reported to, and considered by, the Board and or Chief Executive.

What action is taken on the results of the reviews?

Does your agency review on a regular basis its EMSs (or management arrangements where an EMS has not been developed) to ensure:

- its continuing suitability, adequacy and effectiveness
- systems conform to planned arrangements
- systems have been fully implemented
- systems are properly maintained
- the views of interested parties and stakeholders are taken into account?

Is accountability for ESD performance, environmental compliance and operational decision making principally handled in a centralized, mixed or decentralized fashion?

## 8. Reporting

Does your agency report internally and externally on its environmental performance?

Does your agency ensure that reporting processes link environmental risks, policy and strategies, objectives, and operations?

Does the report identify / include:

- the name of your agency
- a profile of your agency and its major sites
- whether the report refers to the whole of your agency or otherwise
- a statement as to what, if anything, has been omitted from the report
- significant operations (products and services) of your agency, size, geographic scope, markets and customers served
- the environmental policy including a recognition that your agency has environmental impacts and a commitment to improve performance
- a description of the management systems designed to implement, and report on, the environmental policy
- the roles and responsibilities between the Board, environment committee, environmental manager, environmental team and employees
- a commitment from your Chief Executive that endorses the environmental policy
- a commitment to set targets and to report progress against targets
- a statement that your agency plans to reduce environmental impacts in the future
- a statement that your agency plans to consult and involve interested parties
- a commitment to measure and report publicly on key aspects of environmental performance
- an overview of the key environmental impacts faced by your agency
- KPIs that are regularly used for internal assessment and operational purposes as well as for external ESD performance information?
- what structures, skills and resources have been put in place to assist employees implement and report on environmental policy
- non-compliances with licences or consents?
- prosecutions for breaches of environmental law, the amount of any fine in relation to each offence, why and how the offence occurred, action taken to ensure the offence does not re-occur
- significant changes in the size, structure, or nature of your organization since the last reporting period
- contact points for feedback on how the report can be improved
- the date of the report and the reporting period and the date of the last report?



## 8. Reporting

Does your agency report to regulators?

Does your agency contribute to Commonwealth, and/or State of the Environment (SoE) Reports?

Does your agency normalise environmental information (e.g., chemical releases, energy usage, greenhouse gas emissions) by an activity or unit within your agency (e.g., per unit of output, per unit of input, per labour hour, per employee)?

Does your agency produce an annual Environment Report?

Does this report address the issues of ESD?

Is the report externally verified or validated?

Does your agency report to the Parliament and/or the public on the fulfilment of its environmental responsibilities?

## Terms Used in this Questionnaire

<b>Accounting for Sustainable Development</b>	An information tracking framework that (1) integrates internal (private) and external (societal) costs and benefits, and (2) supports evaluations of the short- and long-term consequences of activities and projects from environmental, social and economic perspectives. ( <i>Source:</i> Commissioner of the Environment and Sustainable Development)
<b>'Better Practice'</b>	<p>A reference to 'better practice' is, in the main, influenced by the guidance provided by Standards Australia.</p> <p>In some cases better practice is guided by overseas organisations, for example, the Department for Environment, Food and Rural Affairs (United Kingdom).</p> <p>In other cases 'better practice' is based on what steps a prudent manager of the environment would undertake or alternatively what a progressive organisation might seek to undertake.</p>
<b>Continual Improvement</b>	Process of enhancing the environmental management system to achieve improvements in overall environmental performance in line with the organisation's environmental policy [AS/NZS ISO 14001 definition 3.1]
<b>Ecological Sustainable Development</b>	ESD is using, conserving and enhancing the communities resources so that the ecological processes on which life depends, are maintained, and the total quality of life now and in the future, can be increased.
<b>The Environment</b>	Surroundings in which an organisation operates including air, water, land, natural resources, flora, fauna, humans and their interrelation.
<b>Environmental Aspects</b>	<p>An element of an organisation's activities, products or services that can interact with the environment.</p> <p>Note: A significant environmental impact is an environmental aspect that has or can have a significant environmental impact. [AS/NZS ISO 14001 definition 3.3].</p>
<b>Environmental Policy</b>	<p>A statement by the organisation of its intentions and principles in relation to its overall environmental performance which provides a framework for action and for the setting of its environmental objectives and targets.</p> <p>AS/NZS ISO14001: 1996 defines an <i>Environmental Policy</i> as a declaration:</p> <p>... by the organisation of its intentions and principles in relation to its overall environmental performance which provides a framework for action and for the setting of its environmental objectives and targets ...</p>

## Terms Used in this Questionnaire

An Environmental Policy is designed to ensure that an organisation has the capacity to comply with its permitted environmental performance levels, which depend on the organisation's size, vision, services, products, customer demands, and other market influences.

### **Environmental Impact**

Any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organisation's activities, products or services. [AS/NZS ISO 14001 definition 3.4]

### **Environmental Management System**

That part of the overall management system that includes organisational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving reviewing and maintaining the environmental policy.

That part of the overall management system that includes the organisational structure planning activities, responsibilities, practices, procedures, processes and resources for developing implementing, achieving, reviewing and maintaining the environmental policy.

**Source:** AS/NZS ISO 14001:1996.

### **Environmental Performance**

Results of an organisation's management of its environmental aspects.

### **Environmental Performance Indicators**

Provide a means to measure how well an organisation has performed in meeting its environmental objectives or achieving outcomes.

EPIs are not an exact measure of achievement but rather an indication of agency performance

### **Environmental Stewardship**

Environmental stewardship refers to the concept that society should recognise the impacts of its activities on environmental conditions and should adopt practices that eliminate or reduce negative environmental impacts.

Every aspect of an organisation's operations, including strategic planning, procurement, waste reduction, waste management, water and energy usage, responses to existing environmental problems, and land management, must be conducted in such a way as to limit or eliminate adverse impacts on the environment.

### **Environmental Targets**

Refers to detailed performance requirements, quantified where practicable, applicable to the organisation or parts thereof, that arise from the environmental objectives and that needs to be set and met in order to achieve those objectives.

## Terms Used in this Questionnaire

<b>International Organization for Standardization (ISO)</b>	The ISO is a worldwide federation of national standards bodies that prepares international standards. International Standard ISO 14031 "Environmental Performance Evaluation" supports ISO 14001 and 14004. It is a draft international standard giving guidance on the design and use of environmental performance evaluation within an organisations ( <i>Source</i> : ISO 14031).
<b>Key Performance Indicators (KPIs)</b>	KPIs are those indicators which give a comprehensive, high level overview of a program's performance. They are particularly aimed at external users of performance information.
<b>Categories</b>	The broad areas, or groupings, of economic, environmental, or social issues of concern to stakeholders (for example, air, energy); commonly known as ' <i>triple bottom line</i> ' reporting.
<b>Aspects</b>	Information related to a specific category (for example, greenhouse gas emissions, energy consumed by source)
<i>Indicators</i>	Specific measures of individual aspects to track and demonstrate performance (for example, energy kw/h).
<i>Verification</i>	<p>The quality, usefulness, and credibility of the RTA's reporting can be enhanced by verification and validation. Independent verification, for example:</p> <ul style="list-style-type: none"> <li>▪ provides an additional level of assurance in regard to the reliability and completeness of the ER</li> <li>▪ enhances the quality, usefulness, and credibility of information used within the agency and the underlying management systems and processes.</li> </ul>
<b>Validation</b>	<ul style="list-style-type: none"> <li>▪ independent validation of systems and procedures for measuring, recording, and reporting performance data</li> <li>▪ internal auditing of systems and procedures for measuring, recording and reporting performance data</li> <li>▪ independent evaluations and commentaries by external experts regarding an organisation's economic, environmental, and social performance and/or management processes.</li> </ul>
<b>Process</b>	A process is a series of <i>systematic and documented</i> steps in a function or activity. When seeking improvement to a function or seeking to evidence a process the following steps are important:



## Terms Used in this Questionnaire

### *A Plan*

- select the issue to receive attention (often based on priorities)
- design a clear statement of purpose
- define the process
- seek advice about expectations from the process; prioritise expectations, set performance measures, identify barriers to good performance
- measure current performance
- identify opportunities for improvement and develop solutions.

### *Do*

- test the process steps where practicable
- seek the involvement of those affected by the change during the testing phase

### *Check*

- verify improved performance
- confirm costs and benefits of the revised process

### *Act*

- standardise the improvement
- install the improvement
- leverage the improvement into other areas of the organisation.

The process should be:

- documented and approved by senior management
- communicated to relevant staff, and

Accountability for implementation and review should be established, performance should be monitored and reported with appropriate adjustment to the process where appropriate.