NEPC
National Environment Protection Council

annualreport
2010–2011

Annual Report 2010–2011

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Executive Officer
NEPC Service Corporation
PO Box 787
Canberra ACT 2601

Image credits: (Back l to r) Ruby Saltbush (Director of National Parks)
Close up of fern leaves in Bombala State Forest (Trevor Preston & DSEWPaC)
Coongie Lakes: Ramsar site No.27, South Australia (Ryan Breen)
(Front l to r) Garlic flower (Trevor Preston)
Selection of Rainforest Fruits (Wet Tropics Management Authority – Qld)
Murrays Beach, Booderee National Park (Director of National Parks)
Crepuscular rays at Pyengana (Margaret Brown)
Flora in Australian National Botanic Gardens (John Tyson)
Small sea shells in Anindilyakwa Indigenous Protected Area (Steve Strike).

Foreword

The Environment Protection and Heritage Council (EPHC) and the National Environment Protection Council (NEPC) are national forums for Australian governments to work together with industry and communities to achieve a more sustainable Australia – one where our healthy environment and vibrant heritage are sustained consistent with social and economic outcomes.

As chair of both Councils, I am pleased to report on our achievements and progress made in 2010–11 towards a more sustainable Australia.

The Councils, which comprise environment ministers from all Australian governments, met twice during the year.

Building on the substantial work already completed on the National Waste Policy, Council agreed on the priorities for the first five years of the ten-year national waste strategy. The National Waste Policy Implementation Plan, which will ensure progress across six key directions of the policy, was endorsed by Council. In addition, significant progress was made on the projects endorsed by the Council of Australian Governments (COAG) to improve the management of environmental impacts of chemicals.

To improve the wise stewardship of our water resources, ministers considered a strategic plan and new funding platform for the next phase of the Water Efficiency Labelling and Standards (WELS) scheme. To improve air quality for our communities, Council also approved the accelerated development of national actions aimed to reduce emissions from: wood heaters; small engines and garden equipment; non-road diesel engines; and toxins emitted from surface coatings including paints and solvents.

Along with all other ministerial Councils during 2010–11, EPHC has been part of a COAG reform of the ministerial Council system. In April 2011, COAG agreed in principle to the establishment of new Standing Councils of Ministers that will oversee key areas that are managed by the Commonwealth and the states and territories. This reform will focus Councils on national strategic priorities and will see new ways for COAG and its Councils to identify and address issues of national significance.

A proposed COAG Standing Council on Environment and Water was endorsed for inclusion within the new Council system. EPHC ministers steered arrangements for transition to the new Council, including the relocation of the secretariat to Canberra, the transition of the current EPHC/NEPC work program, and input into the draft terms of reference for the new Council.

I thank all EPHC/ NEPC members and those who have worked hard on these complex issues during the past year. I look forward to a renewed energy and focus as we move into 2011–12.

Tony Burke

Chair
National Environment Protection Council

Members of the National Environment Protection Council

1 July 2010 to 30 June 2011

COMMONWEALTH
The Hon. Tony Burke MP
Minister for Sustainability, Environment, Water, Population and Communities
(commenced 26 October 2010)
(Chair)

COMMONWEALTH
The Hon. Peter Garrett AM MP
Minister for Environment Protection, Heritage and the Arts
(ceased 25 October 2010)
(Chair)

NEW SOUTH WALES
The Hon. Frank Sartor MP
Minister for Climate Change and the Environment
(ceased 9 June 2011)

NEW SOUTH WALES
The Hon. Robyn Parker MP
Minister for the Environment and Minister for Heritage
(commenced 10 June 2011)

VICTORIA
The Hon. Gavin Jennings MP
Minister for Environment and Climate Change
(ceased 26 November 2010)

VICTORIA
The Hon. Ryan Smith MP
Minister for Environment and Climate Change
(commenced 28 March 2011)

QUEENSLAND
The Hon. Kate Jones MP
Minister for Climate Change and Sustainability
(ceased 19 June 2011)

WESTERN AUSTRALIA
The Hon. Donna Faragher MLC
Minister for Environment
(ceased 27 January 2011)

WESTERN AUSTRALIA
The Hon. Bill Marmion MLA
Minister for Environment
(commenced 28 January 2011)

SOUTH AUSTRALIA
The Hon. Paul Caica MP
Minister for Environment and Conservation
(commenced 21 May 2010)

TASMANIA
The Hon. David O'Byrne MP
Minister for Environment, Parks and Heritage
(ceased 11 April 2011)

TASMANIA
The Hon. Brian Wightman MP
Minister for Environment, Parks and Heritage
(commenced 12 April 2011)

AUSTRALIAN CAPITAL TERRITORY
Mr Simon Corbell MLA
Minister for the Environment and Sustainable Development
(commenced 7 November 2008)

NORTHERN TERRITORY
Mr Karl Hampton MLA
Minister for Natural Resources, Environment and Heritage
(commenced 22 September 2009)

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Executive Officer's Report

This has been a year of transition for the Environment Protection and Heritage Council (EPHC) and the National Environment Protection Council (NEPC). The Council of Australian Governments' (COAG) Review of Ministerial Councils heralded the transition of EPHC into a new COAG Standing Council on Environment and Water.

The EPHC and NEPC (Council) and EPH Standing Committee and NEPC Committee (Standing Committee) examined all activities and projects to ensure that the new Council, once constituted, was able to focus on the agreed COAG priorities. Concurrently, work continued on many important national issues.

The past year has also been one of transition for the NEPC Service Corporation. Dr Bruce Kennedy retired from the position of NEPC Executive Officer and the office in Adelaide closed, relocating the secretariat functions to Canberra, to be housed within the Australian Government Department of Sustainability, Environment, Water, Population and Communities (SEWPAC).

OVERVIEW

About the National Environment Protection Council

The National Environment Protection Council is a statutory body with law-making powers established under the *National Environment Protection Council Act 1994* (Cwlth), and corresponding legislation in other Australian jurisdictions.

The NEPC has two primary functions:

1. to make National Environment Protection Measures (NEPMs)
2. to assess and report on the implementation and effectiveness of NEPMs in participating jurisdictions.

The members of the NEPC are ministers, not necessarily environment ministers, from the participating jurisdictions (i.e. Commonwealth, state or territory governments). A list of members can be found on page v.

About the Environment Protection and Heritage Council

The Environment Protection and Heritage Council was established in June 2001 by the Council of Australian Governments. The EPHC incorporates the National Environment Protection Council, which meets simultaneously with the EPHC.

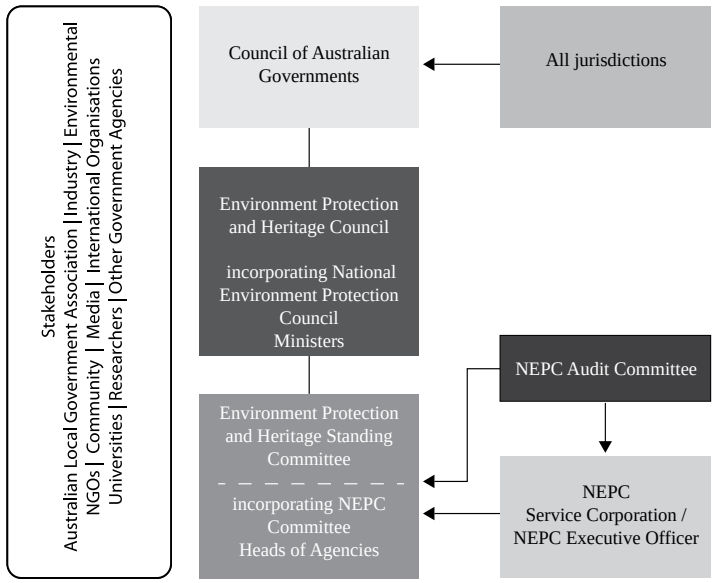
The EPHC has addressed broad national policy issues relating to environmental protection, particularly in regard to air, water and waste matters. The EPHC has also addressed natural, Indigenous and historic heritage issues.

The members of the EPHC are ministers, not necessarily environment ministers, from participating jurisdictions (i.e. Commonwealth, state and territory governments and the New Zealand Government). A list of members can be found on page iv.

About the NEPC Service Corporation

The NEPC Service Corporation is a statutory authority, which has provided project management services and administrative support to both EPHC and NEPC in the development of national environmental policy and NEPMs.

GOVERNANCE STRUCTURE



EPHC AND NEPC ACHIEVEMENTS

Performance report on Council-agreed priorities and legislative responsibilities

During 2010–11, Council met twice in 2010, in Darwin in July and Sydney in November. Standing Committee met twice (Adelaide in September 2010 and Melbourne in May 2011) and held two teleconferences (December and April).

Standing Committee oversaw the planning and implementation of Council's strategic priorities as outlined in the Strategic Plan 2010–14. Although transition arrangements altered the agreed course of action for some priorities, much work was completed during the reporting year, with progress made on NEPM variations and other work projects.

In accordance with Council's agreement on National Waste Policy priorities, the framework legislation for product stewardship to enable the development of an extended producer responsibility scheme for televisions and computers and arrangements for end-of-life tyres was well advanced, and a streamlined Australian Packaging Covenant agreed. A consultation Regulation Impact Statement (RIS) was also initiated to address resource efficiencies, environmental impacts, and reduction of litter from packaging wastes, including beverage containers.

Much work went into the variation of the Movement of Controlled Waste NEPM, to provide greater clarity and certainty to industry. It will also reduce the regulatory burden on industry.

COAG considered a number of options for the establishment of the proposed Environmental Chemicals Bureau and related projects for environmental labelling of chemicals and a performance framework for the monitoring of chemicals in the environment. Council has been progressing this important work.

In the light of the expected increase in wind farm development in coming years, the Council prepared a draft set of wind farm guidelines which outlined best practice for industry and planning authorities in areas including heritage, threatened species, and turbine noise. Released in July 2010, the guidelines underwent a 12 month consultation phase with relevant stakeholders and are a valuable reference document for industry and planning authorities.

Council's endorsement of the development of a new methodology for improving air quality, which integrates pollution and exposure reduction measures, health benefits and air quality standard setting, to provide maximum benefits to the Australian community at a minimum cost. Ministers also approved the development of a package of national emission reduction actions for wood heaters, small engines and garden equipment, non-road diesel engines, and surface coatings including paints and solvents. A minor variation to the Air Toxics NEPM to enable greater flexibility in monitoring and assessing air toxics in Australia was also initiated.

The Council released a discussion paper as part of the ongoing review of the Ambient Air Quality NEPM. The paper was used as the basis for public consultation to gain stakeholder input on health and air quality information that may be used in determining the need to vary this NEPM. Council will consider the need for a variation in the new reporting year.

A considerable body of work has been completed on the draft variation to the Assessment of Site Contamination NEPM, including stakeholder and public consultation to outline the key changes and to discuss any concerns arising. Issues were identified primarily relating to the assessment of asbestos and volatile substances. The draft varied Assessment of Site Contamination NEPM (including revised schedules) will be considered by the Council in the new reporting year.

Council welcomed the announcement of the Australian Convict Sites World Heritage Property as the eighth World Heritage Property in Australia, recognising the importance of Australia's convict experience at an international level.

I would like to acknowledge the various project teams and working groups that progressed this varied body of work for consideration by ministers.

Transition to new Council

Following an independent review of Ministerial Councils by Dr Allan Hawke, COAG accepted the need to effect fundamental reform to the Ministerial Council system to focus Councils on national strategic priorities and find new ways for COAG and its Councils to identify and address issues of national significance.

At its April 2010 meeting, COAG agreed in principle to reforms to rationalise the number of Councils overseeing key areas of ongoing importance to the Commonwealth and the states and territories.

As part of this decision, it was announced that the EPHC would cease and a new Council, the Standing Council on Environment and Water, would be formed.

In early 2011, Council provided advice to COAG on the role of the new Standing Council. It is anticipated that the Standing Council will incorporate the National Environment Protection Council. The new Council will also have a broader role delivering national reform on environmental regulation, water management, biodiversity and clean air.

In preparation for the transition, Council recommended to COAG five areas of national priority action:

- Pursuing seamless environmental regulation and regulatory practice across jurisdictions
- Progressing national water reform, including through implementing the National Water Initiative, the outcomes of the forthcoming COAG review of the National Water Initiative, and other COAG commitments on water
- Implementing the National Waste Policy
- Implementing a national partnership approach to the conservation and management of land, waters, the marine environment and biodiversity at the landscape and ecosystem scale, and to building resilience in a changing climate
- Developing and implementing a National Plan for Clean Air to improve air quality and community health and wellbeing.

Standing Committee focused a great deal of effort on completing and transitioning work that, while important, is not part of the ongoing COAG strategic reform agenda.

Website

The EPHC website continues to be a source of information for both government and industry on the range of projects and issues addressed by Council. Given the expected broader scope of the new Council, the website will be redeveloped during the next reporting year, to reflect the remit of the new Council and identified priorities.

NEPC SERVICE CORPORATION PERFORMANCE

Corporate governance

The statutory office of NEPC Executive Officer (EO) has the responsibility of managing the NEPC Service Corporation. The EO provides advice to the NEPC Audit Committee and is accountable to the ministers through the Standing Committee (see the governance structure chart on page 2).

The position of EO was substantively held by Dr Bruce Kennedy until his retirement on 4 November 2010, after 14 years of service. During the year, Ian Newbery acted as Executive Director while Dr Kennedy was on leave. Following Dr Kennedy's retirement, I was appointed acting NEPC Executive Officer.

I would like to take this opportunity to acknowledge the work of Dr Kennedy over the long period of time he served as Executive Officer. His contribution to both the NEPC and EPHC was formally recognised by ministers at their November 2010 meeting.

Management of human resources

Following the retirement of Dr Kennedy, NEPC Committee decided to relocate the offices of the NEPC Service Corporation. In June 2011, the Adelaide office closed and a new office opened in Canberra within the premises of the Commonwealth Department of Sustainability, Environment, Water, Population and Communities. The co-location of the NEPC Service Corporation within a larger department will allow the Service Corporation to draw on the expertise and support structures of the Commonwealth and will result in cost efficiencies for the Council.

The Adelaide-based staff of the NEPC Service Corporation did not choose to move to Canberra and early 2011 saw the resignations of a number of long-serving team members. With the move to Canberra as of 30 June 2011, the NEPC Service Corporation ceased to directly employ staff. The transition secretariat has been supported by employees of the Australian Government on a cost recovery basis.

During 2010–11, staff members of the Adelaide office were employed under individual contracts. No employee received performance pay during the reporting year.

With the opening of the Canberra office, I am in the process of accessing staffing resources from the Commonwealth Department of Sustainability, Environment, Water, Population and Communities, and building capacity in order to continue the work of the NEPC Service Corporation. I am working with the members of the Council and Standing Committee to ensure that the new arrangements support the Council with a responsive and strategic oversight and strong governance, particularly in relation to statutory requirements, financial management, and reporting.

Risk management

The NEPC Service Corporation had developed occupational health and safety (OH&S) policies. There is no information available concerning any OH&S inspections that may have been carried out during the reporting year. No information is available concerning any incidents or accidents at the Service Corporation during the reporting year.

With the relocation to Canberra, all OH&S matters are covered by the Department of Sustainability, Environment, Water, Population and Communities' policies and procedures and are reported against in that department's annual report.

No information is available concerning any Freedom of Information requests during the reporting year.

The Service Corporation previously reported that it developed a fraud control plan in accordance with the *Financial Management and Accountability Act 1997* (Cwlth). There is no information regarding any cases of fraud during the reporting year. With the new management arrangements, the fraud control plan will be reviewed and updated.

Governance and transitional arrangements

In order to facilitate transitional arrangements, Standing Committee reviewed current NEPC/EPHC activities and proposed transitional arrangements for this work for Council's consideration and agreement. They also examined options for secretariat and broader governance arrangements for the new Council.

The 16 May 2011 meeting of senior officials from all jurisdictions agreed to oversee work to develop the best practice governance arrangements for the Council, its subordinate bodies and the Secretariat, including delegations and procedures. There was a focus on establishing processes for the governance of the Standing Council, and it's subordinate bodies and the Secretariat.

In support of this work, at the beginning of June, the Secretariat commissioned a consultant to complete a Governance Project, to advise on:

- the development of a governance structure for the Ministerial Council
- the governance and function of the new Secretariat, including the effective and efficient incorporation of the NEPC Service Corporation and delivery of statutory functions within the new Secretariat.

The report for this project is due early in the new reporting year and should clarify the systems needed to deliver a robust and transparent secretariat function that will support the new Council structures.

NEPC Audit Committee

The NEPC Audit Committee provides advice to the Executive Officer on matters related to prudential management, governance and risk management.

Membership of the NEPC Audit Committee for 2010–11 comprised:

Mr David Papps (ACT), Chair

Mr Malcolm Thompson (Cwlth)

Ms Zoe de Saram (NSW)

Mr Stuart McConnell (Vic)

The NEPC Audit Committee met twice during 2010–11, on 9 November 2010 and 10 May 2011. The Audit Committee examined NEPC Service Corporation financial statements and the annual audit report, operational budget, project acquittals and project reports, and noted the NEPC Service Corporation's report against key performance indicators. In the light of the establishment of a new Council, the Audit Committee began preliminary considerations for transitional arrangements and options for the future directions of the Audit Committee.

External scrutiny

No information is available concerning external scrutiny measures during the reporting year.

The Australian National Audit Office (ANAO) was again appointed auditor for the 2010–11 financial year. (Please refer to Statement by Auditor, page 8).

Financial performance

Details of all financials are contained in the Auditor's Report and financial statements (see page 11).

Procurement and consultancies

The NEPC Service Corporation has strived to achieve the core principle of value for money in all of its procurement activities. The Service Corporation is currently reviewing its procurement policies to ensure consistency with better practice government procurement.

In 2010–11 the NEPC Service Corporation entered into consultancies for legal services totalling $12,262.80 inclusive of GST.

The NEPC Service Corporation is excluded from AusTender. I am in the process of setting up systems to better record and publicise details of all contracts and consultancies in the next reporting year.

Environmental performance

The Adelaide office was 358 square metres and had a small environmental footprint. The NEPC Service Corporation previously reported that an environmental management system was in place to enhance the environmental sustainability of its operations.

The new offices in Canberra comply with ecologically sustainable development and environmental performance reporting as part of broader departmental reporting in accordance with section 516A of the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth).

In conclusion, I would like to acknowledge the contributions of all stakeholders to the important work of Council which contributes to better environmental practices and general wellbeing for all Australians. My staff and I look forward to continuing this work with a renewed and revitalised focus in the coming year.

Anne-Marie Delahunt
NEPC Executive Officer

National Environment Protection Council

Financial Statements

2010–2011

Statement by Auditor

INDEPENDENT AUDITOR'S REPORT

To the Minister for Sustainability, Environment, Water, Population and Communities

I have audited the accompanying financial statements of the National Environment Protection Council Service Corporation for the year ended 30 June 2011, which comprise: a Statement by the Executive Officer; the Statement of Comprehensive Income; Balance Sheet; Statement of Changes in Equity; Cash Flow Statement; Schedule of Commitments; Schedule of Asset Additions and Notes to and Forming Part of the Financial Statements including a Summary of Significant Accounting Policies and other explanatory information.

Executive Officer's Responsibility for the Financial Statements

The Executive Officer of the National Environment Protection Council Service Corporation is responsible for the preparation of the financial statements that give a true and fair view in accordance with the Finance Minister's Orders made under the *Commonwealth Authorities and Companies Act 1997*, including the Australian Accounting Standards, and for such internal control as the Executive Officer determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on the financial statements based on my audit. I conducted my audit in accordance with the Australian National Audit Office Auditing Standards, which incorporate the Australian Auditing Standards. These auditing standards require that I comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Corporation's preparation of the financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Corporation's internal control. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting

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estimates made by the Executive Officer, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Independence

In conducting my audit, I have followed the independence requirements of the Australian National Audit Office, which incorporate the requirements of the Australian accounting profession.

Opinion

In my opinion, the financial statements of the National Environment Protection Council Service Corporation:

(a) have been prepared in accordance with the Finance Minister's Orders made under the *Commonwealth Authorities and Companies Act 1997*, including the Australian Accounting Standards; and

(b) give a true and fair view of the matters required by the Finance Minister's Orders including the National Environment Protection Council Service Corporation's financial position as at 30 June 2011 and of its financial performance and cash flows for the year then ended.

Australian National Audit Office

S. Buchanan

Serena Buchanan
Audit Principal

Delegate of the Auditor-General

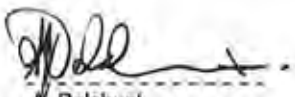
Canberra
8 December 2011

Statement by Executive Officer

In my opinion, the attached financial statements for the year ended 30 June 2011 are based on properly maintained financial records and give a true and fair view of the matters required by the Finance Minister's Orders made under the *Commonwealth Authorities and Companies Act 1997*, as amended.

In my opinion, at the date of this statement, there are reasonable grounds to believe that the Service Corporation will be able to pay its debts as and when they become due and payable.

This statement is made in accordance with a resolution of the Executive Officer.



K. Delahunt
NEPC Executive Officer

8 December 2011

STATEMENT OF COMPREHENSIVE INCOME - FOR THE YEAR ENDED 30 JUNE 2011

	Note	2011 $	2010 $
EXPENSES			
Employee expenses	3A	**763,159**	854,501
Supplier expenses	3B	**1,795,820**	1,683,872
Depreciation and amortisation	3C	**12,734**	15,795
Write down and impairment of assets	3D	**-**	3,991
TOTAL EXPENSES		**2,571,713**	**2,558,159**
LESS:			
OWN-SOURCE INCOME			
Own-source revenue			
Sale of goods and rendering of services	4A	**1,295**	6,552
Interest	4B	**248,617**	158,547
Other Revenue	4C	**-**	18,502
Total own-source revenue		**249,912**	183,601
Gains/(Losses)			
Net gain/(loss) from sale of assets	4D	**(29,926)**	-
Total Gains		**(29,926)**	-
Total own-source income		**219,986**	183,601
Net cost of services		**2,351,727**	2,374,558
Revenue from Government		**5,503,877**	2,237,762
Revenue from Government - in-kind		**-**	35,888
Surplus/(Deficit) from continuing operations		**3,152,150**	(100,908)
Surplus/(Deficit) attributable to the Australian Jurisdiction		**3,152,150**	(100,908)
OTHER COMPREHENSIVE INCOME			
Changes in asset revaluation reserves		**-**	10,196
Total other comprehensive income		**-**	10,196
Total comprehensive income/(loss)		**3,152,150**	(90,712)

BALANCE SHEET - AS AT 30 JUNE 2011

	Note	2011 $	2010 $
ASSETS			
Financial Assets			
Cash and cash equivalents	5A	2,490,319	3,889,368
Trade and other receivables	5B	1,320,037	617,594
Investments	5C	2,318,270	470,000
Total Financial Assets		**6,128,626**	**4,976,962**
Non-Financial Assets			
Property, Plant and Equipment	6A	6,057	48,717
Other non-financial assets	6D	28,238	44,007
Total Non-Financial Assets		**34,295**	**92,724**
TOTAL ASSETS		**6,162,921**	**5,069,686**
LIABILITIES			
Payables			
Supplier payables	7A	131,596	188,534
Other payables	7B	51,969	1,916,997
Total Payables		**183,565**	**2,105,531**
Provisions			
Employee provisions	8A	20,172	176,171
Other provisions	8B	43,000	23,950
Total Provisions		**63,172**	**200,121**
TOTAL LIABILITIES		**246,737**	**2,305,652**
NET ASSETS		**5,916,184**	**2,764,034**
EQUITY			
Reserves		11,977	100,754
Retained surplus		5,904,207	2,663,280
TOTAL EQUITY		**5,916,184**	**2,764,034**

STATEMENT OF CHANGES IN EQUITY - FOR THE YEAR ENDED 30 JUNE 2011

	Retained Surplus		Asset Revaluation Reserves		Capital Reinvestment Reserve		Operating Capital Reserve		Total Equity	
	2011	2010	2011	2010	2011	2010	2011	2010	2011	2010
	$	$	$	$	$	$	$	$	$	$
Opening Balance										
Balance carried forward from previous period	**2,663,280**	2,799,188	**30,754**	20,558	**50,000**	25,000	**20,000**	10,000	**2,764,034**	2,854,746
Adjusted opening balance	**2,663,280**	2,799,188	**30,754**	20,558	**50,000**	25,000	**20,000**	10,000	**2,764,034**	2,854,746
Comprehensive income										
Other comprehensive income	**-**	-	**-**	10,196	**-**	-	**-**	-	**-**	10,196
Surplus (Deficit) for the period	**3,152,150**	(100,908)	**-**	-	**-**	-	**-**	-	**3,152,150**	(100,908)
Total comprehensive income	**3,152,150**	(100,908)	**-**	10,196	**-**	-	**-**	-	**3,152,150**	(90,712)
of which:										
Attributable to the Australian Government	**3,152,150**	(100,908)	**-**	10,196	**-**	-	**-**	-	**3,152,150**	(90,712)
Transfers between equity components	**88,777**	(35,000)	**(18,777)**	-	**(50,000)**	25,000	**(20,000)**	10,000	**-**	-
Closing balance as at 30 June	**5,904,207**	2,663,280	**11,977**	30,754	**-**	50,000	**-**	20,000	**5,916,184**	2,764,034
Closing balance attributable to the Australian Jurisdiction	**5,904,207**	2,663,280	**11,977**	30,754	**-**	50,000	**-**	20,000	**5,916,184**	2,764,034

CASH FLOW STATEMENT - FOR THE YEAR ENDED 30 JUNE 2011

	Note	2011 $	2010 $
OPERATING ACTIVITIES			
Cash received			
Receipts from Government		3,075,886	2,615,789
Interest		249,127	154,354
Other cash received		1,295	25,054
Net cash received		-	64,632
Total cash received		**3,326,308**	**2,859,829**
Cash used			
Net GST paid		(73,274)	-
Employees		(985,364)	(826,008)
Suppliers		(1,818,449)	(1,727,462)
Total cash used		**(2,877,087)**	**(2,553,470)**
Net cash used by operating activities	9B	**449,221**	**306,359**
INVESTING ACTIVITIES			
Cash received			
Investments		-	1,193,678
Total cash received		**-**	**1,193,678**
Cash used			
Purchase of plant and equipment		-	(7,341)
Investments		(1,848,270)	-
Total cash used		**(1,848,270)**	**(7,341)**
Net cash used by investing activities		**(1,848,270)**	**1,186,337**
Net increase/(decrease) in cash held		**(1,399,049)**	**1,492,696**
Cash and cash equivalents at the beginning of the reporting period		3,889,368	2,396,672
Cash and cash equivalents at the end of the reporting period		**2,490,319**	**3,889,368**

SCHEDULE OF COMMITMENTS - FOR THE YEAR ENDED 30 JUNE 2011

	2011 $	2010 $
BY TYPE		
Commitments receivable		
GST recoverable on commitments	(79,455)	(19,006)
Total Commitments Receivable	**(79,455)**	**(19,006)**
Commitments payable		
Operating leases [1]	80,104	209,063
Project funding agreements	793,901	-
Total commitments payable	**874,005**	**209,063**
Net commitments by type	**794,550**	**190,057**
BY MATURITY		
GST recoverable on commitments		
One year or less	(79,455)	(12,004)
From one to five years	-	(7,002)
Total GST recoverable on commitments	**(79,455)**	**(19,006)**
Operating lease commitments		
One year or less	80,104	132,040
From one to five years	-	77,023
Total operating lease commitments	80,104	209,063
Project funding agreement commitments		
One year or less	793,901	-
From one to five years	-	-
Total project funding agreement commitments	793,901	-
Net Commitments by Maturity	**794,550**	**190,057**

NB: Commitments are GST inclusive where relevant.

Information on project funding agreement commitments were not available as at 30 June 2010.

[1] Operating leases included are effectively non-cancellable and comprise:

Leases for office accommodation.

Lease payments are subject to periodic increases as set out in the lease schedule. The current lease term is five years and is due to expire 31 January 2012.

SCHEDULE OF ASSET CONTINGENCIES - FOR THE YEAR ENDED 30 JUNE 2011

Consistent with the previous financial year, there were nil contingent assets or liabilities at or during the year ended 30 June 2011.

SCHEDULE OF ASSET ADDITIONS - FOR THE YEAR ENDED 30 JUNE 2011

The following non-financial non-current assets were added in 2010-11:

	Office Furniture & Equipment $	Leasehold Improvements $	Total $
By purchase - Government funding	-	-	-
Total additions	-	-	-

The following non-financial non-current assets were added in 2009-10:

	Office Furniture & Equipment $	Leasehold Improvements $	Total $
By purchase - Government funding	7,341	-	7,341
Total additions	7,341	-	7,341

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS - FOR THE YEAR ENDED 30 JUNE 2011

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1. Summary of Significant Accounting Policies

1.1 Objective of NEPC Service Corporation

The NEPC Service Corporation is a Commonwealth Statutory Authority.

The functions of the NEPC Service Corporation (under *Section 36* of the *National Environment Protection Council Act 1994*) are:

- To provide assistance and support to the NEPC, the NEPC Committee, and any other committees.
- To provide assistance and support to other Ministerial Councils as directed by the NEPC.

The object of the Act is to ensure that, by means of the establishment and operation of the National Environment Protection Council (NEPC):

1. People enjoy the benefit of equivalent protection from air, water or soil pollution and from noise, wherever they live in Australia; and

2. Decisions of the business community are not distorted, and markets are not fragmented, by variations between participating jurisdictions in relation to the adoption or implementation of major environment protection measures.

The continued existence of the Council in its present form and with its present programs is dependent on Government policy and on continuing funding by all jurisdictions for the Council's administration and programs.

1.2 Basis of Preparation of the Financial Statements

The financial statements are general purpose financial statements and are required by *Commonwealth Authorities and Companies Act 1997*:

a) clause 1(b) of Schedule 1 to the *Commonwealth Authorities and Companies Act 1997*.

The financial statements have been prepared in accordance with:

a) Finance Minister's Orders (FMOs) for reporting periods ending on or after 1 July 2010; and

b) Australian Accounting Standards and Interpretations issued by the Australian Accounting Standards Board (AASB) that apply for the reporting period.

The Financial Statements have been prepared on an accrual basis and are in accordance with historical cost convention, except for certain assets at fair value. Except where stated, no allowance is made for the effect of changing prices on the results or the financial position.

The Financial Statements are presented in Australian dollars and values are rounded to the nearest dollar unless otherwise specified.

Unless an alternative treatment is specifically required by an accounting standard or the FMOs, assets and liabilities are recognised in the balance sheet when and only when it is probable that future economic benefits will flow to the entity and the amounts of the assets or liabilities can be reliably measured. However, assets and liabilities arising under agreements equally proportionately unperformed are not recognised unless required by an accounting standard. Liabilities and assets that are unrecognised are reported in the schedule of commitments or the schedule of contingencies.

Unless alternative treatment is specifically required by an accounting standard, income and expenses are recognised in the statement of comprehensive income when, and only when, the flow, consumption or loss of economic benefits has occurred and can be reliably measured.

1.3 Significant Accounting Judgements and Estimates

In the process of applying the accounting policies listed in this note, the Service Corporation has made the following judgements that have the most significant impact on the amounts recorded in the financial statements:

- The fair value of plant and equipment has been taken to be the market value of similar assets as determined by an independent valuer.

No accounting assumptions or estimates have been identified that have a significant risk of causing a material adjustment to carrying amounts of assets and liabilities within the next accounting period.

1.4 New Accounting Standards

Adoption of new Australian Accounting Standard requirements

No accounting standard has been adopted earlier than the application date as stated in the standard. No new standards, revised standards, interpretations and amending standards issued prior to the signing of the statement by the Executive Officer, that were applicable to the current reporting period had a financial impact on the entity.

1.5 Revenue

Revenue from the sale of goods is recognised when:

a) The risks and rewards of ownership have been transferred to the buyer;
b) The seller retains no managerial involvement nor effective control over the goods;
c) The revenue and transaction costs incurred can be reliably measured; and
d) It is probable that the economic benefits associated with the transaction will flow to the entity.

Revenue from rendering of services is recognised by reference to the stage of completion of contracts at the reporting date. The revenue is recognised when:

a) The amount of revenue, stage of completion and transaction costs incurred can be reliably measured; and
b) It is probable that the economic benefits associated with the transaction will flow to the entity.

Receivables for goods and services, which have 30 day terms, are recognised at the nominal amounts due less any impairment allowance account. Collectability of debts is reviewed at balance date. Impairment allowances are made when collectability of the debt is no longer probable.

Interest revenue is recognised using the effective interest method as set out in *AASB 139 Financial Instruments: Recognition and Measurement.*

Resources Received Free of Charge

Resources received free of charge are recognised as revenue when and only when a fair value can be reliably determined, the services would have been purchased if they had not been donated. Use of those resources is recognised as an expense. Resources received free of charge are recorded as either revenue or gains depending on their nature.

Revenues from Government

Funding received or receivable from agencies (appropriated to the agency as a CAC Act body payment item for payment to this entity) is recognised as Revenue from Government unless they are in the nature of an equity injection or a loan.

1.6 Gains

Resources Received Free of Charge

Resources received free of charge are recognised as gains when, and only when, a fair value can be reliably determined and the services would have been purchased if they had not been donated. Use of those resources is recognised as an expense.

Contributions of assets at no cost of acquisition or for nominal consideration are recognised as gains at their fair value when the asset qualifies for recognition, unless received from another government agency or authority as a consequence of a restructuring of administrative arrangements (refer to Note 1.7).

Sale of Assets

Gains from disposal of assets is recognised when control of the asset has passed to the buyer.

1.7 Transactions with Government as Owner

Equity Injections

Amounts that are designated as equity injections for a year are recognised directly in contributed equity in that year.

Restructuring of Administrative Arrangements

Net assets received from or relinquished to a government agency or authority under a restructuring of administrative arrangements are adjusted at their book value directly against contributed equity.

Other Distributions to Owners

The FMOs require that distributions to owners be debited to contributed equity unless in the nature of a dividend.

1.8 Employee Benefits

Liabilities for 'short-term employee benefits' (as defined in AASB 119) and termination benefits due within twelve months of balance date are measured at their nominal amounts.

The nominal amount is calculated with regard to the rates expected to be paid on settlement of the liability.

All other employee benefit liabilities are measured at the present value of the estimated future cash outflows to be made in respect of services provided by employees up to the reporting date.

Leave

The liability for employee benefits includes provision for annual leave and long service leave. No provision has been made for sick leave as all sick leave is non-vesting and the average sick leave taken in future years by employees of the Service Corporation is estimated to be less than the annual entitlement for sick leave.

The leave liabilities are calculated on the basis of employees' remuneration, including the Service Corporation's employer superannuation contribution rates to the extent that the leave is likely to be taken during service rather than paid out on termination.

The estimate of the present value of the long service leave liability takes into account attrition rates and pay increases through promotion and inflation.

Separation and Redundancy

Provision is made for separation and redundancy benefit payments. The Service Corporation recognises a provision for terminations when it has developed a detailed formal plan for the terminations and has informed those employees affected that it will carry out the terminations.

Superannuation

Certain employees of the Service Corporation are members of the Public Sector Superannuation Scheme. The liability for their superannuation benefits is recognised in the financial statements of the Australian Government and is settled by the Australian Government in due course. This liability is reported by the Department of Finance and Deregulation as an administered item.

The Service Corporation makes employer contributions to employees various complying superannuation schemes at rates determined by the actuary to be sufficient to meet the cost to the Australian Government of the superannuation entitlements of the Service Corporation's employees.

The liability for superannuation recognised as at 30 June represents outstanding contributions for the final superannuation payment period of the year.

Employees have the option of choosing a fund providing it is a "complying superannuation fund" within the meaning of Part IX of the *Income Tax Assessment Act 1936* (Cth). The contributions are based on percentage of salary sufficient to meet the minimum requirements contained within the *Superannuation Guarantee (Administration) Act 1992*.

Contributions in accordance with the *Superannuation (Productivity Benefit) Act 1988* (Cth) are made to the Australian Government Employees Superannuation Trust under which members are entitled to benefits on retirement, resignation, death or disability.

The amount of superannuation contributions totalled $72,389 for the year ended 30 June 2011 ($71,382 in 2010).

1.9 Leases

A distinction is made between finance leases and operating leases. Finance leases effectively transfer from the lessor to the lessee substantially all the risks and rewards incidental to ownership of leased non-current assets. An operating lease is a lease that is not a finance lease. In operating leases, the lessor effectively retains substantially all such risks and benefits.

Operating lease payments are expensed on a straight-line basis that is representative of the pattern of benefits derived from the leased assets.

1.10 Cash

Cash is recognised at its nominal amount. Cash and cash equivalents includes:

a) cash on hand;

b) demand deposits in bank accounts with an original maturity of 3 months or less that are readily convertible to known amounts of cash and subject to insignificant risk of changes in value;

1.11 Financial assets

NEPC Service Corporation classifies its financial assets in the following categories:

a) financial assets as at fair value through profit or loss;
b) held-to-maturity investments;
c) available-for-sale' financial assets; and
d) loans and receivables.

The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition. Financial assets are recognised and derecognised upon 'trade date'.

Effective interest method

The effective interest method is a method of calculating the amortised cost of a financial asset and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset, or, where appropriate, a shorter period.

Income is recognised on an effective interest rate basis except for financial assets that are recognised at fair value through profit or loss.

Financial assets at fair value through profit or loss

Financial assets are classified as financial assets at fair value through profit or loss where the financial assets:

a) has been acquired principally for the purpose of selling in the near future;

b) are a part of an identified portfolio of financial instruments that the Service Corporation manages together and has a recent actual pattern of short-term profit-taking; or

c) is a derivative that is not designated and effective as a hedging instrument.

Assets in this category are classified as current assets.

Financial assets at fair value through profit or loss are stated at fair value, with any resultant gain or loss recognised in profit or loss. The net gain or loss recognised in profit or loss incorporates any interest earned on the financial asset.

Held-to-maturity investments

Non-derivative financial assets with fixed or determinable payments and fixed maturity dates that the group has the positive intent and ability to hold to maturity are classified as held-to-maturity investments. Held-to-maturity investments are recorded at amortised cost using the effective interest method less impairment, with revenue recognised on an effective yield basis.

Loans and receivables

Trade receivables, loans and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as 'loans and receivables'. Loans and receivables are measured at amortised cost using the effective interest method less impairment. Interest is recognised by applying the effective interest rate.

Impairment of financial assets

Financial assets are assessed for impairment at end of each reporting periods.

Financial assets held at amortised cost - if there is objective evidence that an impairment loss has been incurred for loans and receivables or held to maturity investments held at amortised cost, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the asset's original effective interest rate. The carrying amount is reduced by way of an allowance account. The loss is recognised in the statement of comprehensive income.

Financial assets held at cost - If there is objective evidence that an impairment loss has been incurred the amount of the impairment loss is the difference between the carrying amount of the asset and the present value of the estimated future cash flows discounted at the current market rate for similar assets.

1.12 Financial liabilities

Financial liabilities are classified as either financial liabilities 'at fair value through profit or loss' or other financial liabilities. Financial liabilities are recognised and derecognised upon 'trade date'.

Financial liabilities at fair value through profit or loss are initially measured at fair value. Subsequent fair value adjustments are recognised in profit or loss. The net gain or loss recognised in profit or loss incorporates any interest paid on the financial liability.

Other Financial Liabilities

Other financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs. These liabilities are subsequently measured at amortised cost using the effective interest method, with interest expense recognised on an effective yield basis.

The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or, where appropriate, a shorter period.

Supplier and other payables are recognised at amortised cost. Liabilities are recognised to the extent that the goods or services have been received (and irrespective of having been invoiced).

1.13 Contingent Liabilities and Contingent Assets

Contingent Liabilities and Contingent Assets are not recognised in the balance sheet but are reported in the relevant schedules and notes. They may arise from uncertainty as to the existence of a liability or asset, or represent an existing liability or asset in respect of which the amount cannot be reliably measured. Contingent assets are reported when settlement is probable, but not virtually certain and contingent liabilities are disclosed when settlement is greater than remote.

1.14 Financial Guarantee Contracts

Financial guarantee contracts are accounted for in accordance with *AASB 139 Financial Instruments: Recognition and Measurement.* They are not treated as a contingent liability, as they are regarded as financial instruments outside the scope of *AASB 137 Provisions, Contingent Liabilities and Contingent Assets.*

1.15 Acquisition of Assets

Assets are recorded at cost on acquisition except as stated below. The cost of acquisition includes the fair value of assets transferred in exchange and liabilities undertaken. Financial assets are initially measured at their fair value plus transaction costs where appropriate.

Assets acquired at no cost, or for nominal consideration, are initially recognised as assets and revenues at their fair value at the date of acquisition, unless acquired as a consequence of restructuring of administrative arrangements. In the latter case, assets are initially recognised as contributions by owners at the amounts at which they were recognised in the transferor entity's accounts immediately prior to the restructuring.

1.16 Property, Plant and Equipment

Asset Recognition Threshold

Purchases of property, plant and equipment are recognised initially at cost in the balance sheet, except for purchases costing less than $3,000, which are expensed in the year of acquisition (other than where they form part of a group of similar items which are significant in total).

The initial cost of an asset includes an estimate of the cost of dismantling and removing the item and restoring the site on which it is located. This is particularly relevant to 'make good' provisions in property leases taken up by the Service Corporation where there exists an obligation to restore the property to its original condition. These costs are included in the value of Service Corporation's leasehold improvements with a corresponding provision for the 'make good' recognised.

Revaluations

Fair values for each class of asset are determined as shown below.

Asset Class:	Fair value measured at:
Leasehold improvements	Depreciated replacement cost
Office furniture & equipment	Market Selling Price

Following initial recognition at cost, property plant and equipment are carried at fair value less subsequent accumulated depreciation and accumulated impairment losses. Valuations are conducted with sufficient frequency to ensure that the carrying amounts of assets do not differ materially from the assets' fair values as at the reporting date. The regularity of independent valuations depends upon the volatility of movements in market values for the relevant assets. A revaluation was conducted as at 26 May 2010.

Revaluation adjustments are made on a class basis. Any revaluation increment is credited to equity under the heading of asset revaluation reserve except to the extent that it reverses a previous revaluation decrement of the same asset class that was previously recognised through surplus and deficit. Revaluation decrements for a class of assets are recognised directly through surplus and deficit except to the extent that they reverse a previous revaluation increment for that class.

Any accumulated depreciation as at the revaluation date is eliminated against the gross carrying amount of the asset and the asset restated to the revalued amount.

Depreciation

Depreciable property plant and equipment assets are written-off to their estimated residual values over their estimated useful lives to the Service Corporation using, in all cases, the straight-line method of depreciation. Leasehold improvements are depreciated on a straight-line basis over the lesser of the estimated useful life of the improvements or the unexpired period of the lease.

Depreciation rates (useful lives) and methods are reviewed at each reporting date and necessary adjustments are recognised in the current, or current and future reporting periods, as appropriate.

Depreciation rates applying to each class of depreciable asset are based on the following useful lives:

	2011	2010
Office Furniture and Equipment	3 - 8 years	3 - 8 years
Leasehold Improvements	Lease Term	Lease Term

Impairment

All assets were assessed for impairment at 30 June 2011. Where indications of impairment exist, the asset's recoverable amount is estimated and an impairment adjustment made if the asset's recoverable amount is less than its carrying amount.

The recoverable amount of an asset is the higher of its fair value less costs to sell and its value in use. Value in use is the present value of the future cash flows expected to be derived from the asset. Where the future economic benefit of an asset is not primarily dependent on the asset's ability to generate future cash flows, and the asset would be replaced if the Service Corporation were deprived of the asset, its value in use is taken to be its depreciated replacement cost.

Derecognition

An item of property, plant and equipment is derecognised upon disposal or when no further future economic benefits are expected from its use or disposal.

1.17 Taxation

The Service Corporation is exempt from all forms of taxation except fringe benefits tax (FBT) and the goods and services tax (GST).

Revenues, expenses and assets are recognised net of GST except:

a) where the amount of GST incurred is not recoverable from the Australian Taxation Office; and
b) for receivables and payables.

1.18 In Kind Contributions

Each jurisdiction has the option to contribute a portion of its National Environment Protection Measure (NEPM) budget as an in kind contribution. This is in the form of the provision of a NEPM project team member for the NEPC Service Corporation. The amount is calculated per an agreed formula using the top level of the NEPC Executive One salary range plus 15% on-costs. The income and associated expense are recognised when incurred.

1.19 Reserves

At its meeting on 17 April 2008, NEPC approved the creation of two contingency funds, via a Capital Reinvestment Fund and an Operational Contingency Fund. The NEPC Audit Committee recommended the creation of both Funds (commencing in 2008-09) and an initial allocation of $25,000 and $10,000 respectively.

Further allocations were made to the Capital Reinvestment Fund and the Operational Contingency Fund of $25,000 and $10,000 respectively during the year ended 30 June 2010.

The Capital Reinvestment Fund provides for future asset replacement and the Operational Contingency Fund provides for unplanned and unbudgeted expenditures. Both funds have been written back against retained earnings.

The operations of both Funds, and the quantum of future instalments, are subject to annual review by the NEPC Audit Committee and NEPC. Application of the Funds requires approval from NEPC Audit Committee and NEPC.

2. Events After the Reporting Period

There are no material subsequent events that need to be disclosed.

	30 June 2011 $	30 June 2010 $
3. Expenses		
3A: Employee Expenses		
Wages and Salaries	541,927	762,460
Superannuation – defined contribution plans	72,389	71,382
Leave and other entitlements	4,809	20,659
Separation and redundancies	144,034	-
Total employee expenses	**763,159**	**854,501**
3B: Supplier Expenses		
Goods and services		
Travel and Accommodation	132,983	121,869
Consultancy Services	1,004,389	1,247,838
Communications	9,268	12,303
Other	518,221	177,577
Total goods and services	**1,664,861**	**1,559,587**
Goods and services are made up of:		
Provision of goods - external entities	118,854	169,505
Rendering of services - related entities	40	35,939
Rendering of services - external entities	1,545,967	1,354,143
Total goods and services	**1,664,861**	**1,559,587**
Other supplier expenses		
Operating lease rentals – external entities		
Minimum lease payments	130,959	124,285
Total other supplier expenses	130,959	124,285
Total supplier expenses	**1,795,820**	**1,683,872**
3C: Depreciation and Amortisation		
Depreciation of office furniture and equipment	6,924	9,395
Amortisation of leasehold improvements	5,810	6,400
Total depreciation and amortisation	**12,734**	**15,795**
3D: Written down and impairment of leases		
Asset write-downs and impairments from:		
Plant and Equipment	-	3,991
Total Asset write-downs and impairments	**-**	**3,991**

	30 June 2011 $	30 June 2010 $
4. Income		
4A: Sale of Goods and Rendering of Services		
Rendering of services – related entities	1,295	6,552
Total sale of goods and rendering of services	**1,295**	**6,552**
4B: Interest revenue		
Cash at bank and on hand	7,413	6,852
Term Deposits	241,204	151,695
Total Interest revenue	**248,617**	**158,547**
4C: Other revenue		
Other revenue	-	18,502
Total Other revenue	**-**	**18,502**
4D: Sale of Assets		
Office Furniture and Equipement:		
Proceeds from sale	-	-
Carrying value of assets sold	29,926	-
Selling expense	-	-
Net gain/(loss) from sale of assets	**(29,926)**	**-**

	30 June 2011 $	30 June 2010 $

5. Financial Assets

5A: Cash and cash equivalents

Cash at bank and on hand	1,977,950	1,039,368
Term deposits	512,369	2,850,000
	2,490,319	**3,889,368**

Cash at bank is at call and recognised at its nominal amount. Interest is credited to revenue as it accrues.

There are no interest rates applicable to the financial assets and liabilities of the Service Corporation other than cash and term deposits. Cash receives interest on the balance at a variable rate. As at 30 June 2011 the applicable rate was 5.10% (2.60% in 2010).

Term deposits are recognised at cost. Interest is accrued as it is earned. The term deposits mature between 14 July 2011 and 16 November 2011. The weighted average rate of interest is 6.05% on $2,830,363 (6.04% on $3,320,000 in 2010).

5B: Trade and other receivables

Goods and Services		
Goods and services – related entities	-	522
Goods and services – external parties	1,320,037	595,948
Total receivables for goods and services	**1,320,037**	**596,470**
Other receivables		
GST receivable from the Australian Taxation Office	-	21,124
Total other receivables	-	21,124
Total trade and other receivables	**1,320,037**	**617,594**
Trade and other receivables expected to be recovered in no more than 12 months	**1,320,037**	**617,594**

Management have assessed receivables for impairment and consider no allowance for doubtful debts necessary for the year ended 30 June 2011.

Receivables are aged as follows:		
Not overdue	-	21,124
Outstanding by:		
Less than 30 days	487,716	595,999
30 to 60 days	800,349	-
60 to 90 days	31,972	-
More than 90 days	-	471
	1,320,037	596,470
Total receivables	**1,320,037**	**617,594**

	30 June 2011 $	30 June 2010 $

5B: Trade and other receivables (continued)

These receivables are recognised at the nominal amounts due, less any allowance for impairment. Allowances are made when the collection of debts are judged to be less rather than more likely to be collected. Management does not consider an allowance for impairment necessary as at balance date. Credit terms are net thirty days. All receivables are expected to be recovered within 12 months.

5C: Investments

Term deposits	2,318,270	470,000
Total Investments	**2,318,270**	**470,000**
Expected to be recovered in:		
No more than 12 months	2,318,270	470,000
Total Investments	**2,318,270**	**470,000**

6. Non-Financial Assets

6A: Property, Plant and Equipment

Leasehold Improvements – fair value	12,607	12,607
- accumulated amortisation	(6,550)	(740)
Total Leasehold improvements	**6,057**	**11,867**
Office Furniture and equipment – fair value	-	37,545
- accumulated depreciation	-	(695)
Total Office Furniture and Equipment	-	36,850
Total Property, plant and equipment	**6,057**	**48,717**

All revaluations are independent and are conducted in accordance with the revaluation policy stated at Note 1. Revaluations were last conducted at 26 May 2010 by an independent valuer A.J. Robertson (AAPI [P&M], Certified Practicing Valuer, MSAA Master).

Revaluation decrements of $nil for leasehold improvements (2010: $2,077 increment) and $18,777 office furniture and equipment (2010: $8,119 increment) were allocated to the asset revaluation reserve by asset class and included in the equity section of the balance sheet. No impairment was recognised for office furniture and equipment (2010: $3,991) directly in the statement of comprehensive income during the year.

	30 June 2011 $	30 June 2010 $
6B: Analysis of Leasehold Improvements		
Reconciliation of the opening and closing balance of leasehold improvements		
As at 1 July – Gross book value	12,607	23,274
Accumulated depreciation/amortisation	(740)	(7,084)
Opening Net book value	**11,867**	**16,190**
Additions – by purchase	-	-
Revaluation and impairments recognised in other comprehensive income	-	2,077
Amortisation expense	(5,810)	(6,400)
Disposals	-	-
Accumulated depreciation adjustment for disposal	-	-
Net book value 30 June	6,057	11,867
Net book value as of 30 June represented by:		
Gross book value	**12,607**	**12,607**
Less: Accumulated amortisation	(6,550)	(740)
Closing Net Book Value	**6,057**	**11,867**

6C: Analysis of Office Furniture and Equipment		
Reconciliation of the opening and closing balance of office furniture and equipment		
As at 1 July – fair value	37,545	45,000
Accumulated depreciation/amortisation	(695)	(10,224)
Opening Net book value	**36,850**	**34,776**
Additions – by purchase	-	7,341
Revaluations and impairments recognised in the other comprehensive income	-	4,128
Depreciation expense	(6,924)	(9,395)
Disposals	(29,926)	-
Net book value 30 June	-	36,850
Net book value as of 30 June represented by:		
Gross book value	**-**	**37,545**
Less: Accumulated depreciation	**-**	(695)
Closing Net Book Value	**-**	**36,850**

	30 June 2011 $	30 June 2010 $
6D: Other Non Financial Assets		
Prepayments	-	15,259
Accrued income	28,238	28,748
Total other non-financial assets	**28,238**	**44,007**
Total other non-financial assets – are expected to be recovered in:		
No more than 12 months	28,238	44,007
Total other non-financial assets	**28,238**	**44,007**

No indicators of impairment were found for other non-financial assets.

7. Payables

7A: Supplier Payables		
Trade creditors	5,000	168,705
Accrued expenses	126,596	19,829
Total supplier payables	**131,596**	**188,534**
Supplier payables – are expected to be settled in:		
No more than 12 months	131,596	188,534
Total supplier payables	**131,596**	**188,534**
Supplier payables expected to be settled within 12 months:		
External parties	131,596	188,534
Total	131,596	188,534
Total supplier payables	**131,596**	**188,534**

Creditors and accruals are recognised at their nominal amounts, being the amounts at which the liabilities will be settled. Settlement varies with the creditors' terms, which are between 7-30 days.

7B: Other Payables		
Salaries and Wages	28,629	94,835
Prepaid contributions	0	1,704,424
GST payable to Australian Taxation Office	23,340	117,738
Total other payables	**51,969**	**1,916,997**
Other payables – are expected to be recovered in:		
No more than 12 months	51,969	1,916,997
Total other payables	**51,969**	**1,916,997**

	30 June 2011 $	30 June 2010 $

8. Provisions

8A: Employee Provisions

Annual leave	44	38,384
Long service leave	20,128	137,787
Total employee provisions	**20,172**	**176,171**
Employee provisions are expected to be settled in:		
No more than 12 months	20,172	33,499
More than 12 months	-	142,672
Total employee provisions	**20,172**	**176,171**

8B: Other Provisions

Make-Good Provision	43,000	23,950
Total other provisions	**43,000**	**23,950**
Other provisions are expected to be settled in:		
No more than 12 months	43,000	23,950
Total other provisions	**43,000**	**23,950**
Carrying amount at 1 July	23,950	23,950
Additional provisions made	19,050	-
Amounts reversed	-	-
Closing balance at 30 June	**43,000**	**23,950**

The Service Corporation currently has an agreement for the leasing of premises which have provisions requiring the Service Corporation to restore the premises to their original condition at the conclusion of the lease. The Service Corporation has made a provision to reflect the present value of this obligation.

9. Cash Flow Reconciliation

9A: Reconciliation of cash and cash equivalents as per Balance Sheet to Cash Flow Statement

Cash and cash equivalent as per:		
Cash flow statement	2,490,319	3,889,368
Balance sheet	2,490,319	3,889,368
Difference	**-**	**-**

	30 June 2011 $	30 June 2010 $
9B: Reconciliation of net cost of services to net cash from operating activities		
Net cost of services	**(2,351,727)**	**(2,374,558)**
Add revenue from Government	5,503,877	2,273,650
Adjustment for non-cash Items		
Depreciation/ Amortisation	12,734	15,795
Write-down and impairment of assets	-	3,991
(Profit)/Loss on sale on non current assets	29,926	-
Changes in Assets and Liabilities		
(Increase)/Decrease in Trade and other Receivables	(702,443)	(254,889)
(Increase)/Decrease in Other Financial Assets	15,769	2,795
Increase/(Decrease) in Provisions	(136,949)	12,780
Increase/(Decrease) in Supplier Payables	(56,938)	(70,850)
Increase/(Decrease) in Other Payables	(1,865,028)	697,645
Net Cash from/(used by) Operating Activities	**449,221**	**306,359**

10. Related Party Disclosure

Members of the National Environment Protection Council

The Council Members during the year were:

The Hon Peter Garrett, Commonwealth (ceased 25 October 2010)
The Hon Tony Burke, Commonwealth (commenced 26 October 2010)
The Hon Frank Sartor MP, New South Wales (ceased 9 June 2011)
The Hon Robyn Parker MP, New South Wales (commenced 10 June 2011)
The Hon Gavin Jennings MP, Victoria (ceased 26 November 2010)
The Hon Ryan Smith, Victoria (commenced 28 March 2011)
The Hon Kate Jones MP, Queensland (ceased 19 June 2011)
The Hon Donna Faragher MLC, Western Australia (ceased 27 January 2011)
The Hon Bill Marmion MLA, Western Australia (commenced 28 January 2011)
The Hon Paul Caica, South Australia
The Hon David O'Byrne, Tasmania (ceased 11 April 2011)
The Hon Brian Wightman, Tasmania (commenced 12 April 2011)
The Hon Mr Simon Corbell MLA, Australian Capital Territory
The Hon Karl Hampton MLA, Northern Territory

The Council Members received no remuneration from the NEPC Service Corporation.

There were no related party transactions during the year.

	30 June 2011 $	30 June 2010 $
11. Executive Remuneration		
11A: Senior Executive Remuneration Expense		
Short-term employee benefits:		
Salary (including leave taken)	-	188,735
Annual leave accrued	-	5,525
Performance bonus	-	13,077
Other	-	4,720
Total short-term employee benefits	**-**	**212,057**
Post-employment benefits:		
Superannuation	-	18,121
Total post-employment benefits	**-**	**18,121**
Other long-term benefits:		
Long-service leave accrued	-	(927)
Total other long-term benefits	-	(927)
Total	**-**	**229,251**

Notes:

1. Note 11A was prepared on an accrual basis.

2. Note 11A excludes acting arrangements and part-year service where remuneration expensed for a senior executive was less than $150,000.

11B: Average Annual Remuneration Packages for Substantive Senior Executives

Average annualised remuneration packages for substantive Senior Executives

Fixed Elements	As at 30 June 2011			As at 30 June 2010		
	No. SES	Base salary	Total remuneration package[1]	No. SES	Base salary	Total remuneration package[1]
Total remuneration (incl. Part time arrangements):						
$150,000 to $179,999	-	-	-	-	-	-
$180,000 to $209,999	-	-	-	-	-	-
$210,000 to $239,999	-	-	-	1	203,253	225,374
Total	-			1		

Notes

1. This table reports substantive senior executives who were employed by the entity at the end of the reporting period. Fixed elements are based on the employment agreement of each individual. Each row represents an average annualised figure (based on headcount) for the individuals in that remuneration package band (i.e. the 'Total' column).

Variable Elements:

With the exception of bonuses, variable elements were not included in the 'Fixed Elements and Bonus Paid' table above. The following variable elements were available as part of senior executives'

(a) On average senior executives were entitled to the following leave entitlements:

• Annual Leave (AL): entitled to 20 days (2010: 20 days) each full year worked (pro-rata for part-time SES);

• Personal Leave (PL): entitled to 18 days (2010: 20 days) or part-time equivalent; and

(b) Senior executives were members of one of the following superannuation funds:

• Australian Government Employee Superannuation Trust (AGEST): this fund is for senior executives who were employed for a defined period. Employer contributions were set at 9 per cent (2010: 9 per cent). More information on AGEST can be found at http://www.agest.com.au;

• Commonwealth Superannuation Scheme (CSS): this scheme is closed to new members, and employer contributions were averaged 28.3 per cent (2010: 24 per cent) (including productivity component). More information on CSS can be found at http://www.css.gov.au;

• Public Sector Superannuation Scheme (PSS): this scheme is closed to new members, with current employer contributions were set at 15.4 per cent (2010: 15.4 per cent) (including productivity component). More information on PSS can be found at http://www.pss.gov.au;

• Public Sector Superannuation Accumulation Plan (PSSap): employer contributions were set at 15.4 percent (2010: 15.4 per cent), and the fund has been in operation since July 2005. More information on PSSap can be found at http://www.pssap.gov.au; and

• Other: there were some senior executives who had their own superannuation arrangements (e.g. self-managed superannuation funds). Their employer contributions were set at 15.4 per cent (2010: 15.4 per cent).

2. No figure is shown as at 30 June 2011 as there were no Senior Executives employed directly by NEPC Service Corporation at that time. The Senior Executive's substantive position as 30 June 2011 was held outside the Service Corporation.

11C: Other Highly Paid Staff

During the reporting period, there were two employees whose salary plus performance bonus were $150,000 or more. These employees did not have a role as senior executive or director and were therefore not disclosed as senior executives in Note 11A and Note 11B.

	30 June 2011 $	30 June 2010 $
12. Remuneration of Auditors		
Remuneration to the Auditor-General for auditing the financial statements for the reporting period	17,900	17,200

No other services are provided by the Auditor-General.

13. Financial Instruments

13A: Categories of financial instruments

Financial assets		
Cash on hand or on deposit	2,490,319	3,889,368
Trade and other receivables	1,320,037	617,594
Investments	2,318,270	470,000
Carrying amount of financial assets	**6,128,626**	**4,976,962**
Financial Liabilities		
At amortised cost		
Suppliers	131,596	188,534
Carrying amount of financial liabilities	**131,596**	**188,534**

13B: Net income and expense from financial assets

Loans and receivables		
Interest revenue	248,617	158,547
Net gain/(loss) loans and receivables	248,617	158,547
Net gain/(loss) from financial assets	**248,617**	**158,547**

There is no interest income or expense from financial assets not at fair value through profit or loss in the years ending 2010 or 2011.

13C: Net income and expense from financial liabilities

There were nil income/expenses from financial liabilities.

13D: Fair Values of financial instruments

All carrying amounts of financial instruments are a reasonable approximation to fair value due to their short term nature, and as such no separate disclosure is shown in the financial statements for fair value.

	30 June 2011 $	30 June 2010 $

13E: Credit Risk Exposures

The Service Corporation is exposed to minimal credit risk as the majority of loans and receivables are cash, appropriation made under law (which guarantees fixed amounts of funding that the entity can drawdown as required) or amounts owed by the Australian Taxation Office in the form of a Good and Service Tax refund.

The Service Corporation's maximum exposure to credit risk is equal to the carrying amount of financial assets. Receivable balances are monitored on an on-going basis with the result that the Service Corporation's exposure to bad debts is not significant.

The Service Corporation has no significant exposures to any concentrations of credit risk.

The Service Corporation holds no collateral to mitigate against credit risk.

Credit quality of financial instruments not past due or individually determined as

Not Past Due Nor Impaired		
Cash at bank or on deposit	2,490,319	3,889,368
Trade and other receivables	487,716	595,999
Total	**2,978,035**	**4,485,367**
Past Due or Impaired		
Trade and other receivables	-	471
Total	**-**	**471**

Ageing of financial assets that are past due but not impaired

Trade and other receivables

31 to 60 days	800,349	-
61 to 90 days	31,972	-
90+ days	-	471
Total	**832,321**	**471**

13F: Liquidity risk

The Services Corporation's financial liabilities consist mainly of payables to suppliers. The exposure to liquidity risk is based on the notion that the Service Corporation will encounter difficulty in meeting its obligations associated with financial liabilities. This is highly unlikely due to appropriation funding and mechanisms available to the entity.

Maturities for non-derivative financial liabilities

	2011				
	On demand	**Within 1 year**	**1 to 5 yrs**	**>5 yrs**	**Total**
	$	**$**	**$**	**$**	**$**
Suppliers	-	131,596	-	-	131,596
Total	**-**	**131,596**	**-**	**-**	**131,596**

	2010				
	On demand	**Within 1 year**	**1 to 5 yrs**	**>5 yrs**	**Total**
	$	**$**	**$**	**$**	**$**
Suppliers	-	188,534	-	-	188,534
Total	**-**	**188,534**	**-**	**-**	**188,534**

The Service Corporation has no derivative financial liabilities in both the current and prior year.

The Service Corporation manages its budgeted funds to ensure it has adequate funds to meet payments as they fall due. In addition, the Service Corporation has policies in place to ensure timely payment is made when due and has no past experience of default.

13G: Market risk

The Service Corporation holds basic financial instruments that do not expose it to significant market risks. The Service Corporation is not exposed to 'currency risk' or 'other price risk'.

	30 June 2011 $	30 June 2010 $
14. Average Staffing Levels		
The average staffing levels for the Service Corporation during the year were (FTE):	8.0	8.0

The actual number of staff members employed during the year was 9 (2010: 9).

Effective 22 June 2011, with the exception of one employee, all service corporate staff members had finished service.

15. 2011-2012 Budget

The National Environment Protection Council has approved the budget for the Service Corporation 2011-12 of $1,061,113 ($1,197,823 in 2010-11).

16. Compensation and Debt Relief		
No payments were incurred during the reporting period (2010: Nil).	-	-

17. Reporting of Outcomes

17A: Net Cost of Outcome Delivery

	Outcome 1		Total	
	2011	2010	**2011**	2010
Expenses	**2,571,713**	2,558,159	**2,571,713**	2,558,159
Income from non-government sector				
Activities subject to cost recovery	**-**	-	**-**	-
Other	**249,912**	183,601	**249,912**	183,601
Total	**249,912**	183,601	**249,912**	183,601
Other own-source income	**(29,926)**	-	**(29,926)**	-
Net cost/(contribution) of outcome deliv	**2,351,727**	2,374,558	**2,351,727**	2,374,558

There is one outcome of the Corporation which is described in Note 1.1.

** In accordance with 'Australian Government Competitive Neutrality Guidelines for Managers', NEPC is not conducting a business and is therefore not required to report on competitive neutrality.

NEPC Report on the implementation of the

Air Toxics NEPM

2010–2011

NEPC Report on the implementation of the Air Toxics NEPM

PART 1 — GENERAL INFORMATION

NEPM details

Title: National Environment Protection (Air Toxics) Measure.

Made by Council: 3 December 2004.

> **Commencement date:** *20 December 2004 (advertised in Commonwealth of Australia Special Gazette no. S 52904, 20 December 2004).*

NEPM goal (or purpose)

The goal of the National Environment Protection (Air Toxics) Measure is set out in clause 5 of the measure:

> *The national environment protection goal of this Measure is to improve the information base regarding ambient air toxics within the Australian environment in order to facilitate the development of standards following a Review of the Measure within eight years of its making.*

Desired environmental outcomes

The desired environmental outcome of the National Environment Protection (Air Toxics) Measure is set out in clause 6 of the measure:

> *The desired environmental outcome of this Measure is to facilitate management of air toxics in ambient air that will allow for the equivalent protection of human health and well-being, by:*
>
> 1. *providing for the generation of comparable, reliable information on the levels of toxic air pollutants ('air toxics') at sites where significantly elevated concentrations of one or more of these air toxics are likely to occur ('Stage 1 sites') and where the potential for significant population exposure to air toxics exists ('Stage 2 sites').*
> 2. *establishing a consistent approach to the identification of such sites for use by jurisdictions.*
> 3. *establishing a consistent frame of reference ('monitoring investigation levels') for use by jurisdictions in assessing the likely significance of levels of air toxics measured at Stage 2 sites.*
> 4. *adopting a nationally consistent approach to monitoring air toxics at a range of locations (*e.g. *near major industrial sites, major roads, areas affected by wood smoke).*

Evaluation criteria

The National Environment Protection (Air Toxics) Measure has been evaluated against the evaluation criteria for this NEPM.

PART 2 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

Table 1: Summary of implementation frameworks

Jurisdiction	Summary of implementation frameworks
Commonwealth	• The NEPM is implemented administratively.
New South Wales	• The NEPM is implemented under the *Protection of the Environment Operations (Clean Air) Regulation 2010* and *Protection of the Environment Operations (General) Regulation 2009* under the *Protection of the Environment Operations Act 1997*.
Victoria	• The key legislative instrument is the State Environment Protection Policy (Air Quality Management).
Queensland	• The NEPM is implemented under the *Environmental Protection Act 1994*, the Environmental Protection Regulation 1998, Environmental Protection (Air) Policy 2008 and programs under the South East Queensland Regional Plan 2009–2031.
Western Australia	• The NEPM is implemented under the *National Environment Protection Council (Western Australia) Act 1996*, the *Environmental Protection Act 1986* and by programs in the Perth Air Quality Management Plan. • The Environmental Protection Authority is finalising a draft State Environmental (Ambient Air) Policy.
South Australia	• The NEPM operates as an Environment Protection Policy under the *Environment Protection Act 1993.*
Tasmania	• The NEPM is a State Policy under the *State Policies and Projects Act 1993*. The management of air toxics is included in the Tasmanian Air Quality Strategy 2006. • Implementation is through the Environment Protection Policy (Air Quality) 2004 and the *Environmental Management Pollution Control Act 1994.*
Australian Capital Territory	• The NEPM is implemented under the *Environment Protection Act 1997*.
Northern Territory	• The key legislative instruments are the Waste Management and Pollution Control Act and the *National Environment Protection Council (Northern Territory) Act 2004.*

Implementation issues arising

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	• Nil issues reported.
New South Wales	• Nil issues reported.
Victoria	• There was no monitoring of air toxics undertaken in 2010. • During 2011, monitoring for benzene, toluene and xylene commenced in residential areas in Tullamarine and Dandenong South.
Queensland	• Consistent with last year's report, due to other priorities requiring air toxics monitoring elsewhere in the state, monitoring at the stage 2 sites was not carried out during 2010–11. • Subject to the availability of resources, it is proposed to commence monitoring at the stage 2 sites in 2012. • NEPM compliant monitoring of benzene, toluene, xylenes, formaldehyde and polycyclic aromatic hydrocarbons was carried out at five identified sites in and around Gladstone, using a one-day-in-six sampling cycle. • In addition to the requirements of the NEPM, selected air toxics were monitored during the 2010–11 reporting period, using open path Differential Optical Absorption Spectroscopy (DOAS) instrumentation at Springwood in South-East Queensland and a sixth site in central Gladstone. • The DOAS monitoring methodology is not in accordance with the protocols set out in the NEPM, and the monitoring sites are not identified as stage 2 sites. However, the data collected improves knowledge of ambient concentrations of the majority of the toxic pollutants in Schedule 1 of the NEPM and is more cost effective.
Western Australia	• As reported previously, monitoring of air toxics using methods recommended by the Air Toxics NEPM continues to be limited due to the cost of such methods. The cost of alternative methods, such as passive sampling, is significantly less. • Passive sampling for air toxics in Western Australia has been conducted at several sites, in addition to Air Toxics NEPM compliant monitoring. • Although this passive sampling does not meet the Air Toxics NEPM requirements, the results provide useful information on background levels in urban areas.
South Australia	• Surrogate monitoring has been conducted at Mount Gambier utilising fine particles as an indicator of air toxics produced from industrial and domestic wood combustion. Fine particles from wood smoke are associated with air toxics. The levels of these fine particles measured indicated a need for further investigation into the possibilities of elevated concentrations of air toxics. • There is still a need in the South Australian jurisdiction for confirmation of predictions of desktop analyses and to contribute information to the goal of the NEPM.
Tasmania	• Nil issues reported.
Australian Capital Territory	• Nil issues reported.
Northern Territory	• Nil issues reported.

PART 3 — JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

Identification of sites

Queensland identified two types of locations as having the most potential for significant population exposure to air toxics: built-up residential areas close to heavily trafficked roads with significant congestion problems (e.g. Woolloongabba); and built-up residential areas close to major petrochemical industries (e.g. Wynnum).

Tasmania undertook monitoring at two additional sites in 2010.

No other jurisdictions identified any new sites in the reporting period.

Reporting of monitoring of air toxics

NSW, Queensland, South Australia and Tasmania reported monitoring of air toxics. The results in all cases showed levels well below the monitoring investigation levels. NSW indicated that the results for benzo(a)pyrene, with levels of approximately 65% of the NEPM Monitoring Investigation Level, were the most significant. Tasmania reported that the monitoring was conducted predominantly using passive sampling techniques. Passive sampling allows for the possibility of longer sampling periods which increases the likelihood of detection of these species.

In Western Australia, monitoring, as well as the additional complementary air quality studies, indicated that air toxics levels in Perth continued to be low compared to international standards.

No other jurisdictions undertook monitoring during the reporting period.

Reporting on assessment and action if any planned or taken to manage air toxics

Victoria reported that screening for formaldehyde is planned at Tullamarine to evaluate the impacts from the nearby airport formaldehyde emissions. There is no data on formaldehyde levels near a major airport in Victoria.

Victoria is also monitoring for a number of air toxics at two sites, one near a former prescribed waste landfill at Tullamarine, the other at South Dandenong which surrounds a large industrial precinct and a current prescribed waste landfill.

In response to community concern, the South Australia EPA has worked closely with fuel storage facilities to develop Environment Improvement Programs (EIPs) to reduce emissions from their sites. South Australia is also undertaking a pilot project to develop an air quality management strategy and is currently reviewing the Air Environment Protection Policy to improve general air quality.

No other jurisdictions engaged in any specific strategies or actions.

Repeat identification of stage 1 and stage 2 sites

Queensland identified two new stage 2 sites that are medium density residential areas with the potential for significant population exposure to air toxics from motor vehicle emissions, and low–medium density residential areas with potential for significant population exposure to air toxics from industrial emissions, respectively.

South Australia reviewed its desktop analysis, which resulted in changes to the number of stage 1 sites identified in the first study for the Adelaide airshed. Consequently, the number of stage 2 sites identified in the Adelaide airshed also changed.

PART 4 — ASSESSMENT OF NEPM EFFECTIVENESS

The monitoring investigation levels provide a nationally consistent benchmark for assessing and comparing the concentration of ambient air toxics from diverse monitoring sites.

Most jurisdictions agree that the NEPM has been effective in providing an impetus to investigate available data and in identifying locations most likely to experience significant population exposure to elevated levels of air toxics.

One jurisdiction identified that the air modelling and air pollution inventory may not effectively capture emissions or resulting local impact from some small to medium enterprises adequately.

PART 5 — REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 1.

NEPC Report on the implementation of the

Ambient Air Quality NEPM

2010–2011

NEPC Report on the implementation of the Ambient Air Quality NEPM

PART 1 — GENERAL INFORMATION

NEPM details

Title: National Environment Protection (Ambient Air Quality) Measure.

Made by Council: 26 June 1998.

Commencement Date: 8 July 1998 (advertised in *Commonwealth of Australia Gazette* No. GN 27, 8 July 1998, p. 2211).

NEPM goal (or purpose)

The goal of the National Environment Protection (Ambient Air Quality) Measure is set out in clause 6 of the Measure as follows:

> *The National Environment Protection Goal of this Measure is to achieve the National Environment Protection Standards as assessed in accordance with the monitoring protocol (Part 4) within ten years from commencement to the extent specified in Schedule 2 column 5.*

Desired environmental outcome

The desired environmental outcome of the National Environment Protection (Ambient Air Quality) Measure is set out in clause 5 of the measure as follows:

> *The desired environmental outcome of this Measure is ambient air quality that allows for the adequate protection of human health and well-being.*

Evaluation criteria

The National Environment Protection (Ambient Air Quality) Measure has been evaluated against the evaluation criteria for this NEPM.

PART 2 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

Table 1: Summary of implementation frameworks

Jurisdiction	Summary of implementation frameworks
Commonwealth	• The Commonwealth implements the NEPM administratively. However, it is not required by the NEPM to undertake monitoring as it does not have authority over regions with a population of 25,000 or more.
New South Wales	• The NEPM is implemented under the *Protection of the Environment Operations Act 1997* and the Protection of the Environment Operations (Clean Air) Regulation 2010.
Victoria	• The key legislative instruments are the State Environment Protection Policy (Ambient Air Quality) and the State Environment Protection Policy (Air Quality Management) made under the *Environment Protection Act 1970.*
Queensland	• The NEPM is implemented under the *Environmental Protection Act 1994*, the Environmental Protection Regulation 1998, the Environmental Protection (Air) Policy 2008 and by programs under the South East Queensland Regional Plan 2009–2031.
Western Australia	• The NEPM is implemented under the *National Environment Protection Council (Western Australia) Act 1996*, the *Environmental Protection Act 1986* and by programs under the Perth Air Quality Management Plan.
South Australia	• The transitional provisions in the *Environment Protection (Miscellaneous) Amendment Act 2005* enable the NEPM to continue to operate as an Environment Protection Policy.
Tasmania	• The NEPM is a State Policy under the *State Policies and Projects Act 1993*. The management of ambient air quality is an objective of the Tasmanian Air Quality Strategy 2006. • Implementation is through the Environment Protection Policy (Air Quality) 2004 and the *Environmental Management Pollution Control Act 1994*.
Australian Capital Territory	• The NEPM is implemented by the Environment Protection Regulation 1997 under the *Environment Protection Act 1997*.
Northern Territory	• The key legislative instruments are the Waste Management and Pollution Control Act and the *National Environment Protection Council (Northern Territory) Act 2004*.

Implementation issues arising

Table 2 summarises the implementation issues that arose throughout the 2010–11 reporting year. For implementation activities, please refer to jurisdictional reports as listed in Part 5.

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	• Nil issues reported.
New South Wales	• Nil issues reported.
Victoria	• Nil issues reported.
Queensland	• Higher priority monitoring requirements, in Gladstone, Springwood, Rocklea and Arundel, have delayed implementation of monitoring in four regional centres identified in the original Monitoring Plan.
Western Australia	• Accreditation through the National Association of Testing Authorities (NATA) is still in progress; and • continuing to investigate and trial a number of new monitoring technologies to suit monitoring in the state.
South Australia	• Data captured in the reporting period for Whyalla proved inconclusive in confirming whether changes in industry practices or simply changes in weather were the cause of the decrease in PM_{10} levels.
Tasmania	• Nil issues reported.
Australian Capital Territory	• The population in the ACT has passed the threshold for a second monitoring station. The ACT Government is in the process of securing resources to establish a new station.
Northern Territory	• Significant downtime was encouraged with the Casuarina team being inoperable for nearly two months and the partisol from early November 2010 to mid-March 2011. • The monitoring station Palmerston was established during the 2010–11 reporting year. As data was only collected from 1 January 2010 to 30 June 2011, this data was classified as "not demonstrated".

PART 3 — JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

Detailed monitoring data are available in jurisdictional compliance reports which are available from www.ephc.gov.au

During 2010–11, the Air Quality Working Group worked on projects to reduce emissions from various product and equipment types and proposed a new integrated approach to national air quality management.

Jurisdictions report a continued focus on managing emissions from motor vehicles and wood heaters, with some jurisdictions investigating and trialling a number of monitoring technologies. One jurisdiction initiated a new pilot program to assist in reducing emissions from non-road diesel engines.

One state reported that exceedances of the standard for PM_{10} have decreased; however, reasons for this decrease are yet to be determined. Improvements may be associated with changes in industry practice or simply due to weather alone.

Another jurisdiction reported some delays in implementation of monitoring due to completion of campaign monitoring, other monitoring priorities, or site closure.

The State of the Air Report — a national report

The Commonwealth released the *State of the Air in Australia 1998–2008* report in April 2011. The report provides a national analysis of air quality for the 10-year period from 1999–2008 in Australia's major urban and regional monitoring regions. The data included in the report were collected by each state and territory as part of their monitoring for compliance for the NEPM. The report is the second national report on air quality. The report found that Australia's air quality is good overall, but noted that meeting air quality standards in the future will be more challenging.

A copy of the report is available from www.environment.gov.au/atmosphere/publications/state-of-the-air/index.html

PART 4 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM has been valuable in the management and assessment of air quality in Australia. It provides a nationally consistent framework for the monitoring and reporting of air quality and nationally consistent benchmarks against which to assess quality.

Meeting the AAQ NEPM standards for ozone continues to be a significant challenge for larger metropolitan areas of a number of jurisdictions, given pressures from a growing population, urban expansion and the associated increase in motor vehicle use. Bushfires and controlled burning continue to be sources of exceedances of particulate levels in a number of jurisdictions, particularly those in eastern Australia.

During the reporting period, work commenced on a consultation regulation impact statement (CRIS) to assess options for reducing emissions from domestic wood heaters. A public consultation process through the release of a CRIS for non-road spark ignition engines and equipment was also undertaken.

PART 5 — REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 1.

NEPC Report on the implementation of the

Assessment of Site Contamination NEPM

2010–2011

NEPC Report on the implementation of the Assessment of Site Contamination NEPM

PART 1 — GENERAL INFORMATION

NEPM details

Title: National Environment Protection (Assessment of Site Contamination) Measure.

Made by Council: 10 December 1999.

Commencement date: 22 December 1999 (advertised in *Commonwealth of Australia Gazette* No. GN 51, 22 December 1999, p. 4246).

NEPM goal (or purpose)

The goal of the National Environment Protection (Assessment of Site Contamination) Measure is set out in clause 5(1) of the measure as follows:

> *The purpose of the Measure is to establish a nationally consistent approach to the assessment of site contamination to ensure sound environmental management practices by the community which includes regulators, site assessors, environmental auditors, landowners, developers and industry.*

Desired environmental outcomes

The desired environmental outcome of the National Environment Protection (Assessment of Site Contamination) Measure is set out in clause 5(2) of the measure as follows:

> *The desired environmental outcome for this Measure is to provide adequate protection of human health and the environment, where site contamination has occurred, through the development of an efficient and effective national approach to the assessment of site contamination.*

Evaluation criteria

The National Environment Protection (Assessment of Site Contamination) Measure has been evaluated against the evaluation criteria for this NEPM.

PART 2 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

Table 1: Summary of implementation frameworks

Jurisdiction	Summary of implementation frameworks
Commonwealth	• The NEPM is implemented administratively.
New South Wales	• The NEPM operates under guidelines issued under the *Contaminated Land Management Act 1997* (amendment commenced on 1 July 2009).
Victoria	• The key legislative instruments for administering the NEPM are: - the State Environment Protection Policy (Prevention and Management of Contamination of Land) - the State Environment Protection Policy (Groundwaters of Victoria) - the Industrial Waste Management Policy (Prescribed Industrial Waste) - the Planning and Environment Act 1987. • The Environmental Audit System (Contaminated Land) provides the administrative framework for assessing site contamination.
Queensland	• The *Sustainable Planning Act 2009* and the *Environment Protection Act 1994* are the key legislative instruments. • The NEPM is applied through the Guidelines for the Assessment and Management of Contaminated Land in Queensland, May 1998.
Western Australia	• The NEPM is implemented through the *Contaminated Sites Act 2003* and the Contaminated Sites Regulations 2006 and associated guidelines, including the revised Contaminated Sites Management Series guideline 'Assessment Levels for Soil, Sediment and Water' (2010).
South Australia	• The *Environment Protection Act 1993* enables the NEPM to operate as an Environment Protection Policy. • Specific site contamination provisions of the *Environment Protection Act 1993* commenced in full on 1 July 2009.
Tasmania	• The NEPM is a State Policy under the *State Policies and Projects Act 1993*. • The NEPM is implemented under the *Environmental Management and Pollution Control Act 1994*, and associated guidelines.
Australian Capital Territory	• The NEPM is implemented by the Contaminated Sites Environment Protection Policy (reviewed in 2009) made under the *Environment Protection Act 1997*.
Northern Territory	• The NEPM is implemented by audits of contaminated sites and the pollution control provisions of the Waste Management and Pollution Control Act.

Implementation issues arising

For detailed implementation activities, please refer to jurisdictional reports as listed in Part 5.

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	• Nil issues reported.
New South Wales	• Nil issues reported.
Victoria	• Nil issues reported.
Queensland	• Nil issues reported.
Western Australia	• Nil issues reported.
South Australia	• Nil issues reported.
Tasmania	• Nil issues reported.
Australian Capital Territory	• Nil issues reported.
Northern Territory	• Nil issues reported.

PART 3 — JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

All jurisdictions report a high level of compliance with the guidelines as set out in the NEPM. Government agencies in each relevant jurisdiction continue to work closely with local government to deal with potential contamination issues. Most jurisdictions have assumed the NEPM guidelines into legislation or planning codes to ensure greater compliance. Clause 9 of the NEPM sets out the information that jurisdictions are required to report. Please refer to jurisdictional reports in Part 5.

PART 4 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM continues to provide guidance to professional practitioners in the field of site contamination assessment. One jurisdiction noted that some improvements in the consistency of site assessment have resulted from use of the NEPM.

Jurisdictional suggestions for the enhancement of the NEPM included the development of national guidelines for assessing contaminated sites in pristine or highly protected areas; an expansion of the NEPM to enable the assessment of ecological health risk; and more guidance on assessing some of the volatile contaminants that are commonly encountered on many sites. Broadening the accessibility of assessment guidelines was also suggested as a way of improving the administration of the NEPM.

NEPM variation

Work continued on a process to vary the NEPM during 2010–11. It is expected that this work will be completed during the next reporting period. The variation process aims to improve guidance on a range of site assessment issues, including revised health-based investigation levels, a new national methodology for derivation of ecological investigation levels, dealing with petroleum hydrocarbon contamination, updated site characterisation technologies and assessing asbestos soil contamination.

The process aims to improve assessment and response to potential human health risks and provide a scientific basis for the evaluation of ecological risks from common soil contaminants. It is anticipated that the variation of the NEPM will improve the standard and consistency of site assessments by clarifying certain aspects of the NEPM that have not been consistently applied by environmental practitioners.

PART 5 — REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 1.

NEPC Report on the implementation of the

Diesel Vehicle Emissions NEPM

2010–2011

NEPC Report on the implementation of the Diesel Vehicle Emissions NEPM

PART 1 — GENERAL INFORMATION

NEPM details

Title: National Environment Protection (Diesel Vehicle Emissions) Measure.

Made by Council: 29 June 2001.

Commencement date: 18 July 2001 (advertised in *Commonwealth of Australia Gazette* No. GN 28, 18 July 2001, p. 2014).

NEPM goal (or purpose)

The goal of the National Environment Protection (Diesel Vehicle Emissions) Measure is set out in clause 10 of the measure as follows:

> *The goal of this Measure is to reduce exhaust emissions from diesel vehicles, by facilitating compliance with in-service emissions standards for diesel vehicles.*

Desired environmental outcomes

The desired environmental outcome of the National Environment Protection (Diesel Vehicle Emissions) Measure is set out in clause 11 of the measure as follows:

> *The desired environmental outcome of this Measure is to reduce pollution from in-service diesel vehicles.*

Evaluation criteria

The National Environment Protection (Diesel Vehicle Emissions) Measure has been evaluated against the evaluation criteria for this NEPM.

PART 2 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

Table 1: Summary of implementation frameworks

Jurisdiction	Summary of implementation frameworks
Commonwealth	• The NEPM is implemented administratively. • The NEPM is supported by the Australian Design Rules under the *Motor Vehicle Standards Act 1989*, *Fuel Quality Standards Act 2000* and fuel tax credit arrangements.
New South Wales	• The key legislative instruments are the *Protection of the Environment Operations Act 1997* and the Protection of the Environment Operations (Clean Air) Regulation 2010.
Victoria	• The primary legislative tools are the Environment Protection (Vehicle Emissions) Regulations 2003 under the *Environment Protection Act 1970*.
Queensland	• The NEPM is implemented by the *National Environment Protection Council (Queensland) Act 1994*.
Western Australia	• The NEPM is implemented by the *National Environment Protection Council (Western Australia) Act 1996*, the *Environmental Protection Act 1986*, the Road Traffic (Vehicle Standards) Rules 2002 and through programs under the Perth Air Quality Management Plan.
South Australia	• The transitional provisions in the *Environment Protection (Miscellaneous) Amendment Act 2005* enable the NEPM to continue to operate as an Environment Protection Policy.
Tasmania	• The NEPM is a State Policy under the *State Policies and Projects Act 1993*.
Australian Capital Territory	• The key legislative instrument is the Road Transport (Vehicle Registration) Regulation 2000.
Northern Territory	• Vehicle performance standards are enforced under the Motor Vehicles Act and the Australian Vehicle Standard Rules.

Implementation issues arising

There are a number of implementation issues that were addressed in the 2007 review of the Diesel NEPM, in particular the need for a study of in-service emissions from diesel vehicles and the suitability of the DT80 emissions test. Work on implementation of the review recommendations is continuing.

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	• Nil issues reported.
New South Wales	• Nil issues reported.
Victoria	• Nil issues reported.
Queensland	• Nil issues reported.
Western Australia	• Nil issues reported.
South Australia	• In March 2011, the South Australian Government introduced a new provision in the Road Traffic (Vehicle Standards) Rules 1999: Rule 147A — Exhaust Emissions — diesel-powered vehicles, which sets emission limits for NO_x and particulate matter for diesel vehicles which are in service.
Tasmania	• Nil issues reported.
Australian Capital Territory	• Nil issues reported.
Northern Territory	• Aggregate data for the Northern Territory is not available.

PART 3 — JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

Most jurisdictions continue to run smoky vehicle reporting programs and diesel vehicle emission testing and repair programs with the exception of the Commonwealth, South Australia and the ACT. Some jurisdictions also run audited maintenance programs; however, only NSW has operated retrofit programs during the reporting period.

For details of individual programs and initiatives, please refer to jurisdictional reports as listed in Part 5 below.

PART 4 — ASSESSMENT OF NEPM EFFECTIVENESS

While there are some limitations on the ability to quantify the overall effectiveness of the NEPM-based initiatives implemented to date, jurisdictions report that the NEPM continues to be beneficial in reducing emissions from diesel vehicles across Australia and a useful component of the broader framework to manage emissions.

Considerable progress has been made toward achieving NEPM goals through national initiatives including the Australian Design Rules and fuel quality standards.

One jurisdiction commented on the lack of an adequate emissions inventory and has developed its own vehicle emissions inventory, which is currently undergoing review to enable the use of data from the Australian-based 'Second National In-Service Emissions Study.' This will enable the use of Australian, rather than overseas, vehicle emission data.

PART 5 — REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 1.

NEPC Report on the implementation of the

Movement of Controlled Waste between States and Territories NEPM

2010–2011

NEPC Report on the implementation of the Movement of Controlled Waste between States and Territories NEPM

PART 1 — GENERAL INFORMATION

NEPM details

Title: National Environment Protection Council (Movement of Controlled Waste between States and Territories) Measure.

Made by Council: 26 June 1998.

Commencement date: 8 July 1998 (advertised in the *Commonwealth of Australia Gazette* No. GN 27, 8 July 1998, p. 2212).

NEPM goal (or purpose)

The desired goal for the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure is set out in clause 11 of the measure as follows:

> *The national environment protection goal of this Measure is to assist in achieving the desired environmental outcomes set out in clause 12 by providing a basis for ensuring that controlled wastes which are to be moved between states and territories are properly identified, transported, and otherwise handled in ways which are consistent with environmentally sound practices for the management of these wastes.*

Desired environmental outcomes

The desired environmental outcome for the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure is set out in clause 12 of the Measure as follows:

> *The desired environmental outcomes of this Measure are to minimise the potential for adverse impacts associated with the movement of controlled waste on the environment and human health.*

Evaluation criteria

The National Environment Protection (Movement of Controlled Waste between States and Territories) Measure has been evaluated against the evaluation criteria for this NEPM.

PART 2 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

Table 1: Summary of implementation frameworks

Jurisdiction	Summary of implementation frameworks
Commonwealth	• The NEPM is implemented administratively.
New South Wales	• The key legislative instruments are the *Protection of the Environment Operations Act 1997* and the Protection of the Environment Operations (Waste) Regulation 2005.
Victoria	• The key legislative instruments are the *Environment Protection Act 1970*, the Environment Protection (Industrial Wastes Resource) Regulations 2009, and the Industrial Waste Management Policy (Movement of Controlled Waste between States and Territories) 2001.
Queensland	• The key legislative instruments are the *Environmental Protection Act 1994* and the Environmental Protection (Waste Management) Regulation 2000. • Requirements for the licensing of controlled waste transporters are included in the Environmental Protection Regulation 2008.
Western Australia	• The primary legislative instruments are the Environmental Protection (Controlled Waste) Regulations 2004.
South Australia	• The NEPM operates as an Environment Protection Policy under the *Environment Protection Act 1993* and is implemented through conditions of licences.
Tasmania	• The NEPM is a State Policy under the *State Policies and Projects Act 1993*. • The NEPM is implemented under the *Environmental Management and Pollution Control Act 1994*.
Australian Capital Territory	• The key legislative instruments are the *Environment Protection Act 1997* and the Environment Protection Regulations 2005.
Northern Territory	• The key legislative instruments are the Waste Management and Pollution Control Act and the Dangerous Goods (Road and Rail Transport) Act.

Implementation issues arising

In late 2010, the NEPC made a minor variation to the NEPM to provide greater clarity, remove unnecessary regulatory burden and remove clauses that are no longer required.

In February 2011, drafting errors in the 2010 minor variation were identified. The Executive Officer undertook to assess the circumstances leading to the error and work with the Australian Government to identify solutions. NEPC has commenced a second minor variation to correct these errors.

PART 3 — JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

The tables below provide a national summary of the data for quantities of each waste category transported. The waste classes group the 73 categories of waste streams and constituents listed in Schedule A of the NEPM into 15 broader types.

Table 2: Summary of total movements of controlled waste within Australia, imports by states and territories, for the period 1 July 2010 – 30 June 2011

Code	Description	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext-Terr(AAD)	Total (tonnes)
A	Plating & heat treatment	4.00	7.88	45.31	-	29.01	-	-	-	-	**86.20**
B	Acids	10,969.05	65.10	229.72	-	318.31	52.30	-	-	-	**11,634.48**
C	Alkalis	548.02	37.99	11,843.64	-	139.82	-	-	-	-	**12,569.47**
D	Inorganic chemicals	28,771.63	20,717.09	70.25	-	19,821.34	0.10	-	-	-	**69,380.41**
E	Reactive chemicals	4.84	2.00	-	-	8.50	-	-	-	-	**15.34**
F	Paints, resins, inks organic sludges	1,628.01	2,953.00	393.05	-	1,228.19	-	-	-	-	**6,202.25**
G	Organic solvents	634.62	1,804.76	0.22	-	3,213.76	27.10	-	-	-	**5,680.46**
H	Pesticides	38.92	678.54	19.13	-	0.25	-	-	-	-	**736.84**
J	Oils	8,746.01	5,439.35	10,387.32	40.00	5,043.33	9.60	181.34	-	-	**29,846.95**
K	Putrescible/organic waste	9,026.58	2,787.67	612.32	-	4.00	27.00	-	-	-	**12,457.57**
L	Industrial washwater	-	119.91	-	-	-	-	-	-	-	**119.91**
M	Organic chemicals	1,278.20	57.63	620.56	-	20.89	-	516.86	-	-	**2,494.14**
N	Soil/sludge	1,994.56	170.42	14,006.56	-	6,017.13	16.70	1,675.45	-	-	**23,880.82**
R	Clinical & pharmaceutical	183.59	697.41	529.15	-	167.83	-	260.86	-	-	**1,838.84**
T	Misc.	93.27	111.01	-	-	425.46	-	-	-	-	**629.74**
State Totals (tonnes)		**63,921.30**	**35,649.76**	**38,757.23**	**40.00**	**36,437.82**	**132.80***	**2,634.51**	-	-	**177,573.42**

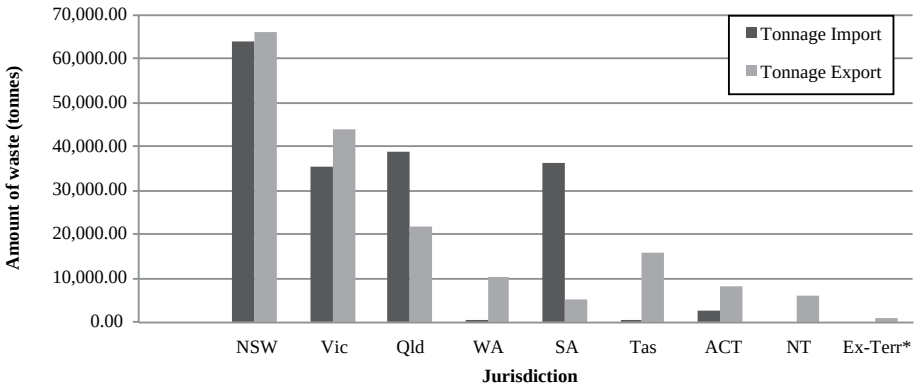
* Note: The Tasmanian state total includes External Territory figures.

Table 3: Summary of total movements of controlled waste within Australia, exports by states and territories, for the period 1 July 2010 – 30 June 2011

Code	Description	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext-Terr**	Total (tonnes) Excl. Ext Territories
A	Plating & heat treatment	45.56	31.62	9.02	-	-	-	-	-	-	**86.20**
B	Acids	264.44	11,149.80	66.81	2.97	58.83	2.06	0.69	88.58	0.30	**11,634.48**
C	Alkalis	11,668.56	491.80	53.98	2.38	1.39	1.21	1.07	349.08	-	**12,569.47**
D	Inorganic chemicals	18,809.95	19,731.00	10,936.05	8,698.13	3,951.64	6,439.95	30.82	782.77	0.10	**69,380.41**
E	Reactive chemicals	1.79	0.50	0.09	4.75	-	-	-	8.21	-	**15.34**
F	Paints, resins, inks organic sludges	3,121.94	588.27	1,993.82	216.48	234.96	0.14	34.64	12.00	-	**6,202.25**
G	Organic solvents	1,273.69	2,781.87	388.06	443.90	294.24	366.82	19.69	85.09	27.10	**5,680.46**
H	Pesticides	52.62	-	607.84	37.14	26.68	0.16	0.30	12.10	-	**736.84**
J	Oils	13,390.22	3,642.74	6,356.73	616.37	74.86	359.58	1,655.95	3,740.90	22.60	**29,859.95**
K	Putrescible/organic waste	3,228.79	4,144.30	22.20	-	4.50	-	4,882.28	148.50	27.00	**12,457.57**
L	Industrial washwater	116.91	-	-	-	3.00	-	-	-	-	**119.91**
M	Organic chemicals	706.36	397.55	1,001.11	20.00	123.41	64.05	172.68	8.98	-	**2,494.14**
N	Soil/sludge	12,132.65	1,207.85	137.70	216.00	54.14	8,757.99	1,071.49	286.30	1,018.70	**24,882.82**
R	Clinical & pharmaceutical	1,094.49	1.69	98.76	-	333.01	25.90	143.00	141.99	-	**1,838.84**
T	Misc.	97.64	-	26.38	1.44	-	11.55	90.22	402.51	-	**629.74**
State Totals (tonnes)		**66,005.61**	**44,168.99**	**21,698.55**	**10,259.56**	**5,160.66**	**16,029.41**	**8,102.83**	**6,067.01**	**1,095.80**	**178,588.42**

**Note: Information regarding External Territories (Ex-Terr — specifically, AAD) has been provided only since the reporting year 2009–10.

Figure 1: Tonnage of controlled waste moved within Australia 2010–11



*Note: Information regarding external territories has been provided only since reporting year 2009-10

Figure 2: Tonnage of controlled waste moved within Australia 1999–2011

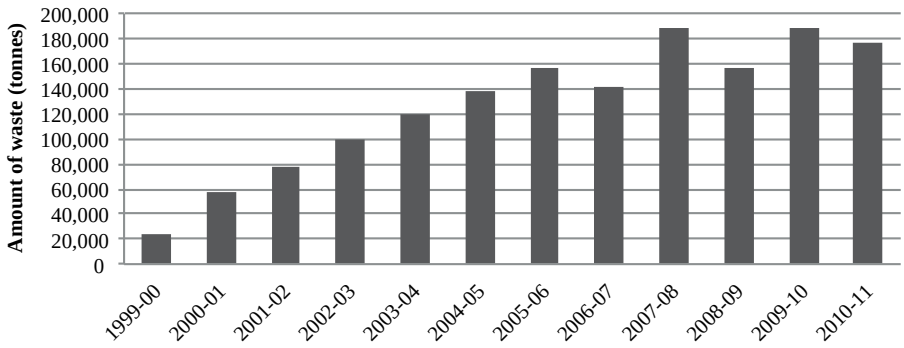
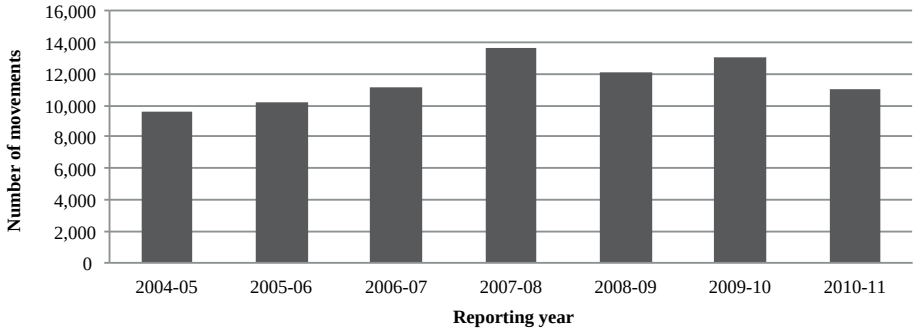


Figure 3: Number of movements of controlled waste within Australia 2004–2011



Note: information regarding number of movements has only been provided since the reporting year 2004

PART 4 — ASSESSMENT OF NEPM EFFECTIVENESS

Jurisdictions reported a high level of communication and cooperation amongst jurisdictions and that the NEPM was an effective means of tracking waste between states and territories.

Industry compliance with the NEPM was high, supported by successful consultation between industry and jurisdictions. A number of compliance audits were conducted by jurisdictions, with NSW reporting no identified compliance issues.

Online tracking systems continue to be effective, with the majority of transport certificates now completed correctly, while other processes have ensured waste has been consigned to the appropriate facility.

Last year was the first year that controlled wastes received from the Australian Antarctic Division (External Territories) were reported separately. Resulting issues surrounding movement of waste between Tasmania and Antarctica are currently being considered by Tasmania and the Commonwealth.

PART 5 — REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 1.

NEPC Report on the implementation of the

National Pollutant Inventory NEPM

2010–2011

NEPC Report on the implementation of the National Pollutant Inventory NEPM

PART 1 — GENERAL INFORMATION

NEPM details

Title: National Environment Protection (National Pollutant Inventory) Measure.

Made by Council: 27 February 1998.

Commencement date: Clauses 1 and 2 of the measure commenced on the date of Gazettal, 4 March 1998 (advertised in *Commonwealth of Australia Gazette* No. S 89, 4 March 1998, p. 1), with the remaining provisions of the measure commencing on 1 July 1998.

NEPM goal (or purpose)

The environment protection goals are established by clause 6 of this measure as follows:

> *The national environment protection goals established by this Measure are to:*
>
> *(a) collect a broad base of information on emissions and transfers of substances on the reporting list, and*
>
> *(b) disseminate the information collected to all sectors of the community in a useful, accessible and understandable form.*

In summary, the National Pollutant Inventory (NPI) NEPM provides the framework for the development and establishment of the NPI which is an Internet database designed to provide publicly available information on the types and amounts of certain chemicals being emitted to the air, land and water.

Desired environmental outcomes

The desired environmental outcomes, as set out in clause 5 of the measure, are:

> *(a) the maintenance and improvement of:*
>
> > *(i) ambient air quality; and*
> >
> > *(ii) ambient marine, estuarine and fresh water quality;*
>
> *(b) the minimisation of environmental impacts associated with hazardous wastes; and*
>
> *(c) an improvement in the sustainable use of resources.*

Evaluation criteria

The National Environment Protection (National Pollutant Inventory) Measure has been evaluated against the evaluation criteria for this NEPM.

PART 2 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

Table 1: Summary of implementation frameworks

Jurisdiction	Summary of implementation frameworks
Commonwealth	• The NEPM is implemented administratively.
New South Wales	• The key legislative instrument is the *Protection of the Environment Operations (General) Regulation 2009* under the *Protection of the Environment Operations Act 1997*.
Victoria	• The key legislative instrument is the *Industrial Waste Management Policy (National Pollutant Inventory) 1998* under the *Environment Protection Act 1970*.
Queensland	• The NEPM is implemented under the *Environmental Protection Act 1994* and the Environmental Protection Regulation 2008.
Western Australia	• The key legislative instrument is the *Environmental Protection (NEPM–NPI) Regulations 1998* under the *Environmental Protection Act 1986*.
South Australia	• The NEPM operates as an Environment Protection Policy under the *Environment Protection Act 1993*.
Tasmania	• The NEPM is a State Policy under the *State Policies and Projects Act 1993* and is implemented through the *Environmental Management and Pollution Control Act 1993*.
Australian Capital Territory	• The key legislative instrument is the *Environment Protection Act 1997*.
Northern Territory	• The NEPM is implemented by the Environment Protection (National Pollutant Inventory) Objective established under the Waste Management and Pollution Control Act.

Implementation issues arising

- Some jurisdictions have raised the issue that NPI Emission Estimation Technique Manuals need to be updated regularly to remain relevant. It was also suggested that reporting is confusing for industry.

A summary of implementation issues arising can be found in Table 2. For implementation activities, refer to jurisdictional reports as listed in Part 5.

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	• Nil issues reported.
New South Wales	• The requirement for reporters to provide information on transfers was a relatively recent addition to the NPI program. Many NPI reporters seek guidance from the Office of Environment and Heritage in relation to transfers and appropriate techniques to estimate the quantity of NPI substances in transfers.
Victoria	• Nil issues reported.
Queensland	• Nil issues reported.
Western Australia	• Some issues have arisen due to lack of clarity and emission factor shortcomings in selected Emission Estimation Technique Manuals and published electronic reporting tools. • Commonwealth staffing levels have resulted in a slowdown of reporting material updates and overall funding of the program may limit collection of Aggregated Emissions Data (AED).
South Australia	• The accuracy of some Emission Estimation Manuals is still of concern. There is a need to effectively resource the updating of these manuals as this directly affects data quality.
Tasmania	• The accuracy of some Emission Estimation Manuals is still of concern. There is a need to effectively resource the updating of these manuals as this directly affects data quality. • Consistency of approach to data validation across jurisdictions has been an issue.
Australian Capital Territory	• Loss of key staff and lack of resources has hampered work with industry within the ACT
Northern Territory	• The NT does not have sufficient funding to perform aggregate airshed emissions. • There remain issues with staffing at the Commonwealth level impacting on uploading of aggregate emission data and the updating of manuals.

PART 3 — ASSESSMENT OF NEPM EFFECTIVENESS

New Memoranda of Understanding (MoUs) have been signed at heads of agency level between each jurisdiction and the Commonwealth. These replace previous MoUs between ministers.

The MoUs set out those NEPM matters to be agreed by individual jurisdictions and the Commonwealth.

Web site and public awareness

Reporting information is available on the NPI web site at www.npi.gov.au

During the 2009–10 year, there was a change in the methodology for determining the number of visits to the NPI web site. As a result, it is not possible to directly compare the figures for 2010–11 with previous years. During the 2010–11 reporting year, there were 182,103 visits to the NPI web site.

Following the launch of the teacher resource kit program in the last reporting year, a number of kits have been sent to schools across Australia. Response to the program has been good, with teachers using the kits in a variety of ways.

The Freecall phone line and the public email box have continued to be used to inform the public.

Online reporting

There continues to be a steady increase in the number of online reporters. While the online reporting system training has been well received, it is acknowledged that further training is essential.

- Most jurisdictions have conducted industry training programs to assist reporters to use the Online Reporting System. These training programs vary from one-on-one sessions with new reporters to more formal group sessions. The high level of turnover in industry and new small business enterprises are the main reasons for the need for continued training.

Industry facility reporting

- The total number of reporting facilities for all jurisdictions was 4227, compared to 4214 in the previous year. There were 199 facilities that reported to the NPI for the first time in 2009–10.
- Industry representatives have been supportive of improving NPI reporting materials and the emission factors.
- The percentage of industry using the Online Reporting System continues to increase.

PART 4 — REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 1.

NEPC Report on the implementation of the

Used Packaging Materials NEPM

2010–2011

NEPC Report on the implementation of the Used Packaging Materials NEPM

PART 1 — GENERAL INFORMATION

NEPM details

Title: National Environment Protection (Used Packaging Materials) Measure.

Commencement date: July 2005.

NEPM goal (or purpose)

The environment protection goal is established by clause 6 of this measure as follows:

> *The goal of the Measure is to reduce environmental degradation arising from the disposal of used packaging and conserve virgin materials through the encouragement of re-use and recycling of used packaging materials by supporting and complementing the voluntary strategies in the National Packaging Covenant.*

Desired environmental outcomes

The desired environmental outcomes from the combination of the Australian Packaging Covenant and the measure are to minimise the overall environmental impacts of packaging by pursuing the covenant performance goals:

1. **Design:** optimise packaging to use resources efficiently and reduce environmental impact without compromising product quality and safety.
2. **Recycling:** efficiently collect and recycle packaging.
3. **Product stewardship:** demonstrate commitment by all signatories.

Evaluation criteria

The National Environment Protection (Used Packaging Materials) Measure has been evaluated against the evaluation criteria for this NEPM.

PART 2 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

Table 1: Summary of implementation frameworks

Jurisdiction	Summary of implementation frameworks
Commonwealth	• The Commonwealth's implementing legislation applies only to its jurisdictional territories and to brand owner companies with over 50% government ownership such as Australia Post.
New South Wales	• The NEPM is implemented by the Protection of the Environment Operations (Waste) Regulation 2005.
Victoria	• The NEPM is implemented by the Waste Management Policy (Used Packaging Materials) 2006, under the *Environment Protection Act 1970.*
Queensland	• The NEPM is implemented by the Environmental Protection (Waste Management) Regulation 2000.
Western Australia	• The NEPM is implemented by the Environmental Protection (NEPM Used Packaging Materials) Regulations 2007 under the *Environmental Protection Act 1986*.
South Australia	• The NEPM operates as an Environment Protection Policy under the *Environment Protection Act 1993.*
Tasmania	• The NEPM is a State Policy under the *State Policies and Projects Act 1993.* • The NEPM is implemented under the *Environmental Management and Pollution Control Act 1994*.
Australian Capital Territory	• The NEPM is implemented by the Industry Waste Reduction Plan under the *Waste Minimisation Act 2001*.
Northern Territory	• The NEPM is implemented through declaration of environmental protection objectives under the *Waste Managment and Pollution Control ACT 1998* (as in effect at 2011). Preparation of a NT waste strategy commenced in 2011.

Implementation issues arising

In June 2010, ministers agreed to endorse the new Australian Packaging Covenant (APC) and approve the 2010 minor variation to the NEPM.

Late in 2010, administrative issues were identified with the registration of the 2005 and 2010 minor variations to the NEPM. In order to put the question of validity beyond any doubt, the NEPM is being re-made. This administrative process will ensure the NEPM continues to provide regulatory underpinning for the Australian Packaging Covenant.

A notice of intention to prepare a draft NEPM was published in February 2011. The draft NEPM and an Impact Statement were subsequently released for public consultation in June 2011. The new NEPM has been drafted to be effective retrospectively and take all variations made to date into account.

For detailed implementation activities, refer to jurisdictional reports as listed in Part 5.

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	• Nil issues reported.
New South Wales	• Nil issues reported.
Victoria	• Nil issues reported.
Queensland	• Nil issues reported.
Western Australia	• Nil issues reported.
South Australia	• Nil issues reported.
Tasmania	• Nil issues reported.
Australian Capital Territory	• Nil issues reported.
Northern Territory	• The Northern Territory Government is not a signatory to the Australian Packaging Covenant as it is unlikely to deliver cost effective outcomes relevant to the unique demographic position of NT.

PART 3 — JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

The NEPM sets out the information that jurisdictions are required to report on. This information has been provided by jurisdictions in their individual reports listed in Part 5.

The NEPM contributes to better environmental outcomes by providing a regulatory safety net for the Australian Packaging Covenant.

Table 3: Australian Packaging Covenant signatories

ACT	6
NSW	281
QLD	57
SA	43
TAS	18
VIC	218
WA	43
TOTAL	**666**

Kerbside recycling

Local government authorities have continued to collect data on the composition of kerbside recycling waste streams. The amount and type of data collected in each jurisdiction vary and, therefore, no direct comparison between jurisdictions can be made.

Further information is available in jurisdictional reports as listed in Part 5.

Complaints, investigations and prosecutions

No complaints, investigations or prosecutions were reported by any jurisdiction for the current reporting period.

PART 4 — ASSESSMENT OF NEPM EFFECTIVENESS

At the end of June 2011, there were 666 covenant signatories, of which 658 were compliant.

The Australian Packaging Covenant commenced on 1 July 2010. Previous signatories to the National Packaging Covenant did not automatically become signatories to the new covenant and were required to sign on to the new covenant. A reduction in the number of signatories during the reporting period is considered a consequence of the transition to the covenant.

Following a transition period, jurisdictions were advised in April 2011 of which businesses may have been in breach of the covenant. There was therefore a reduced time period during which enforcement activities were undertaken.

Jurisdictions also reported that some enforcement activity was delayed while administrative issues were resolved. Queensland advised that up to two previous signatories would follow the NEPM requirements instead of signing the covenant.

The Northern Territory reported that the NEPM remains a less effective mechanism in that jurisdiction as the major contributors to the waste stream are brand-owners not based in the territory.

PART 5 — REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 1.

Appendix 1:

Jurisdictional Reports on Implementation and Effectiveness of NEPMs

2010–2011

Jurisdictional Reports on the implementation of the

Air Toxics NEPM

2010–2011

Commonwealth

Report to the NEPC on the implementation of the National Environment Protection (Air Toxics) Measure for the Commonwealth by the Hon. Tony Burke MP, Minister for Sustainability, Environment, Water, Population and Communities, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Commonwealth implements the NEPM administratively and ensures that its obligations under the *National Environment Protection Act 1994* are met.

In the 2005–2006 *NEPC Annual Report* the Commonwealth reported on its desktop analysis, which identified that there were no Commonwealth sites on which there was a potential for significant population exposure to elevated levels of air toxics. No reassessment of the information on air toxics levels and population exposure was undertaken in the reporting year, as no Commonwealth agency has reported that activities at their sites have varied significantly from the previous reporting year.

The Commonwealth is leading the work undertaken through the Environment Protection and Heritage Council on key sources of air pollutants, including air toxics from wood heaters and non-road spark ignition engines and equipment. In 2010–11, the Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) commenced work on a consultation regulation impact statement to assess options for reducing emissions from domestic wood heaters. DSEWPaC also undertook a public consultation process through the release of a consultation regulation impact statement for non-road spark ignition engines and equipment, which considered options for managing emissions from lawn mowers and other garden equipment and outboard motors. Building on from this, the development of a decision regulation impact statement was commenced, considering all stakeholder submissions from the consultation process.

In February 2011, the Council of Australian Governments agreed to a comprehensive reform plan for a new system of Ministerial Councils. Projects to reduce emissions will be considered under the Environment and Water Minister's policy agenda.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The Air Toxics NEPM has provided a nationally consistent framework for assessing the ambient levels of specified air toxics in a range of locations. Monitoring activities undertaken under the NEPM will provide important data for the review of the NEPM that should commence in 2012.

New South Wales

Report to the NEPC on the implementation of the National Environment Protection (Air Toxics) Measure for New South Wales by the Hon. Robyn Parker MP, Minister for the Environment and Minister for Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

The implementation of the Air Toxics NEPM in NSW is coordinated by the Office of Environment and Heritage (OEH), Department of Premier and Cabinet. Under Part 3, clause 8 of the NEPM, the identification of 'stage 1' and 'stage 2' sites for monitoring of air toxics was required within 12 months of commencement of the NEPM. NSW completed the desktop analysis and reported the results in the implementation report for the reporting year ended 30 June 2005.

Under Part 3, clause 9 of the NEPM, monitoring of air toxics is required at stage 2 sites. NSW has conducted ambient monitoring for the five NEPM air toxics at two stage 2 sites in the Sydney metropolitan area using a one-day-in-six cycle for a full year, and reported the results in the implementation report for the reporting year ended 30 June 2010.

NSW has fulfilled its obligations under the NEPM to date.

The Protection of the Environment Operations Act 1997 (NSW) and the Protection of the Environment Operations (Clean Air) Regulation 2010 (NSW) provide the regulatory framework for action to address air emissions including managing air toxics in NSW.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

NSW has achieved the goal of the NEPM, which is to estimate human exposure to the five NEPM air toxics using a consistent national framework, by conducting ambient monitoring for the five NEPM air toxics at two stage 2 monitoring sites in the Sydney metropolitan area. The monitoring carried out under the NEPM demonstrated that the five NEPM air toxics are within monitoring investigation levels (MILs) at all monitoring sites.

Reporting of monitoring of air toxics

NSW data collection commenced in October 2008 and concluded in October 2009.

The Turella site collected data on: formaldehyde and acetaldehyde; 19 polycyclic aromatic hydrocarbons including benzo(a)pyrene; and 41 volatile organic compounds including benzene, toluene and xylenes.

The Rozelle site collected data on: formaldehyde and acetaldehyde; and 41 volatile organic compounds including benzene, toluene and xylenes.

NEPM-compliant sampling and analysis methods were used.

Tables 1 to 5 of the implementation report for the reporting year ended 30 June 2010 (www.ephc.gov.au/sites/default/files/annual_reports/2010/AR_Jur_AT_NSW_09-10.pdf) summarise the monitoring results for the five air toxics — benzene, benzo(a)pyrene as a marker for polycyclic aromatic hydrocarbons (PAH), formaldehyde, toluene and xylenes.

The results clearly showed levels of air toxics were below the monitoring investigation levels. There were no occasions on which any of the air toxics monitored exceeded the monitoring investigation levels at any location. The results for benzo(a)pyrene, with levels of approximately 65% of the NEPM monitoring investigation level, were the most significant.

Victoria

Report to the NEPC on the implementation of the National Environment Protection (Air Toxics) Measure for Victoria by the Hon. Ryan Smith, Minister for Environment and Climate Change, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

There was no monitoring of air toxics under the Air Toxics NEPM (AT NEPM) in Victoria in 2010.

During 2011, monitoring for benzene, toluene and xylene commenced in residential areas in Tullamarine surrounding a former prescribed waste landfill, and in Dandenong South surrounding a large industrial precinct that includes a current prescribed waste landfill.

A review of the identification and prioritisation of potential stage 1 (ranking) and stage 2 (exposure) site locations or hotspots for air toxics monitoring was completed in May 2011. The review found all of the predicted concentrations of ambient air toxics or estimated emissions were below the Monitoring Investigation Level (MIL) specified in the AT NEPM.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

Past air monitoring results generally aligned with the levels estimated in our review of identification and prioritisation of potential stage 1 and stage 2 sites (further information below). The air modelling and air pollution inventory may not capture some specific areas and diffuse sources (such as emissions from some small to medium enterprises) effectively, or estimate the resulting local impact adequately. Therefore, more work is required to understand and evaluate potential impacts from industrial precincts where numerous small to medium enterprises are operating, such as Dandenong South.

Identification of sites

There were no new AT NEPM monitoring sites identified in Victoria in 2010.

Reporting of monitoring of air toxics

There was no monitoring of air toxics under the AT NEPM in Victoria in 2010.

Reporting on assessment and action if any planned or taken to manage air toxics

During 2011, monitoring for benzene, toluene and xylene commenced in residential areas in Tullamarine surrounding a former prescribed waste landfill, and in Dandenong South surrounding a large industrial precinct that includes the current prescribed waste landfill (further information can be found here: www.epa.vic.gov.au/community_issues/docs/Dandenong-south-industrial-precinct.pdf) Screening for formaldehyde will also be undertaken at Tullamarine to evaluate the impacts from the nearby airport formaldehyde emissions. There is no data on formaldehyde levels near a major airport in Victoria.

Repeat identification of stage 1 and stage 2 sites

A review of the identification and prioritisation of potential stage 1 (ranking) and stage 2 (exposure) site locations or hotspots for air toxics monitoring was completed in May 2011 using the revised procedures specified by the Air Toxics NEPM. The Air Toxics NEPM (NEPC, 2004) requires jurisdictions to periodically review sources of air toxic emissions and identification of potential air monitoring sites.

The review included the analysis of predicted concentrations from modelling using the air pollution emissions inventory, meteorology and population in 2006 for Victoria. In addition, an analysis based only on the air pollution emissions inventory for the Port Phillip Region was conducted.

The review found all of the predicted concentrations of ambient air toxics or estimated emissions were below the Monitoring Investigation Level (MIL) specified in the Air Toxics NEPM. Motor vehicle emissions were found to be the major sources at the sites with the highest levels. Based on air pollution modelling, highest predicted concentration relative to each air toxic MIL ranged from 22% for benzene, 15% for formaldehyde, 0.05% and 1.5% for toluene, 0.7% and 2.2% for xylene. Highest benzo(a)pyrene emissions were estimated to be 66% of MIL based on air pollution inventory estimates. Unlike the modelling predictions, the inventory estimates identified one other site for toluene associated with industry emissions in the higher category of 66% of the MIL. The benzo(a)pyrene and toluene sites identified will be considered in future monitoring programs.

Queensland

Report to the NEPC on the implementation of the National Environment Protection (Air Toxics) Measure for Queensland by the Hon. Vicky Darling MP, Minister for Environment, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In Queensland, the Air Toxics NEPM was implemented by the Department of Environment and Resource Management (DERM) under the *Environmental Protection Act 1994* (EP Act), the Environmental Protection Regulation 1998, and the Environmental Protection (Air) Policy 1998. As part of the revision that took place in 2008 resulting in the Environmental Protection Regulation 2008 and the Environmental Protection (Air) Policy 2008 (EPP Air), the Air Toxics NEPM monitoring investigation levels were incorporated as air quality objectives in the new policy.

Air toxics emissions are also managed through effective land use planning. The Queensland Government released the South-East Queensland Regional Plan 2009–2031 in July 2009 to provide a sustainable growth management strategy for South-East Queensland to the year 2031. The plan notes that clean air is a vital natural asset which plays a key role in ensuring the health of the community, protecting the environment and fostering economic development. A key policy principle is managing urban settlement and the use of transport, industry, energy and natural resources to minimise adverse impacts on the atmosphere.

Key features of the plan include:

- developing an urban form that minimises the demand for transport by ensuring that residents have easy access by walking or cycling to employment, retail centres, government services, medical facilities and leisure opportunities
- improving transport efficiency by improving facilities for public transport, cycling and walking, and by upgrading the road network
- encouraging the use of more efficient and lower-emitting modes of transport through education, information and economic incentives.

The regional plan is supported by the South-East Queensland Natural Resources Management Plan 2009–2031 and the South-East Queensland Infrastructure Plan and Program 2010–2031. The Natural Resources Management Plan is designed to coordinate the management and use of natural resources to enhance community, economic and environmental values. It establishes measurable regional targets for air and atmosphere resources. The Infrastructure Plan identifies specific projects to improve the availability, efficiency and effectiveness of public transport, cycling and walking facilities; and to reduce traffic congestion and its impact on air toxics. When completed, these projects will increase the number of trips taken by public transport, cycling and walking, and reduce motor vehicle emissions by eliminating congestion and stop-start traffic conditions. Taken collectively, these projects will significantly reduce transport-related emissions in South-East Queensland.

Implementation issues arising

Implementation issues arising during the 2010–11 reporting period included:

- Due to other priorities requiring air toxics monitoring elsewhere in the state, monitoring at the stage 2 sites identified in 2005–06 was not carried out during 2010–11. Subject to the availability of resources, it is proposed to commence monitoring at the stage 2 sites in 2012.
- In 2007–08, the Queensland Government commenced a new program called 'Clean and Healthy Air for Gladstone' to address community concerns regarding industrial emissions in Gladstone. As part of this program, NEPM-compliant monitoring of benzene, toluene, xylenes, formaldehyde and polycyclic aromatic hydrocarbons commenced in November 2008 and concluded in July 2010 using a one-day-in-six sampling cycle. The monitoring was carried out at five locations in and around Gladstone. The results from this monitoring program are presented in this report. Monitoring of benzene, toluene, xylene and formaldehyde on a continuous basis commenced in July 2009 at a sixth location in central Gladstone using the Differential Optical Absorption Spectroscopy (DOAS) methodology. Measurements are continuing at this site.
- In addition to the requirements of the NEPM, DERM monitored selected air toxics during the 2010–11 reporting period, using open path DOAS instrumentation at Springwood in South-East Queensland.
- The DOAS monitoring methodology is not in accordance with the protocols set out in the NEPM, and the monitoring sites are not identified as stage 2 sites. However, the data collected improves our knowledge of ambient concentrations of the majority of the toxic pollutants in Schedule 1 of the NEPM and is more cost effective.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The Air Toxics NEPM has been effective in providing an impetus to investigate available data, such as the National Pollutant Inventory and the Air Emissions Inventory for the South-East Queensland region, to identify the locations most likely to experience significant population exposure to elevated ambient concentrations of air toxics.

Investigations in the 2005–06 reporting period have identified two types of locations in Queensland, being proximity to major roads and industrial sites, as having the most potential for significant population exposure to air toxics, and from which stage 2 representative sites have been identified.

Identification of sites

The analysis for identification and prioritisation of stage 1 and stage 2 sites, as required by the NEPM, was limited to the populous areas of South-East Queensland. Two types of locations were identified as having the most potential for significant population exposure to air toxics: built-up residential areas close to heavily trafficked roads with significant congestion problems (e.g. Woolloongabba); and built-up residential areas close to major petrochemical industries (e.g. Wynnum).

Table 1: Stage 2 sites and proposed monitoring program

Location of stage 2 Sites	Air toxics with possible elevated levels	Air toxics to be monitored	Proposed timeframe for monitoring	Estimate of size of population likely to be exposed and identification of susceptible groups
Woolloongabba	Benzene, toluene, xylene, formaldehyde, benzo[a]pyrene	Benzene, toluene, xylene, formaldehyde, benzo[a]pyrene	2012	Residential population of 4000; employed population of 10,000; inner city close to major roads and freeway
Wynnum	Benzene, toluene, xylene, formaldehyde, benzo[a]pyrene	Benzene, toluene, xylene, formaldehyde, benzo[a]pyrene	2013	Residential population of 10,000; close to major petrochemical industries

Reporting of monitoring of air toxics

Jurisdictions are required to submit a report, in accordance with clause 13, of the reporting year ending 31 December 2010. This includes results of desktop analysis identifying sites, any monitoring that has taken place, and assessment and action taken to manage air toxics (where exceedances have been reported).

Although DERM did not conduct any air toxics monitoring at stage 2 sites in South-East Queensland, NEPM-compliant monitoring of benzene, toluene, xylenes, formaldehyde and polycyclic aromatic hydrocarbons was conducted at five locations in Gladstone using a one-day- in-six sampling cycle between November 2008 and July 2010. Results covering the entire monitoring period are provided below.

Levels of benzene, toluene and xylene were also monitored using an alternative Differential Optical Absorption Spectroscopy (DOAS) technique at ambient air quality monitoring network sites at Springwood in South-East Queensland and in central Gladstone. The primary air toxics emission source at the Springwood site was motor vehicles. Results from these monitoring sites for the 2010 year are also provided below. Data collected (Tables 2 to 6) indicate that levels in Gladstone and Springwood are well below the Air Toxic NEPM investigation levels.

Table 2: Monitoring results for benzene

	SE Qld	Gladstone					
Sites	**Springwood**	**Boat Creek**	**Boyne Island**	**Central Gladstone**	**Clinton**	**South Gladstone**	**Targinie**
Monitoring method	DOAS	TO-15	TO-15	DOAS	TO-15	TO-15	TO-15
Period of monitoring	01/01/10 to 31/12/10	07/11/08 to 28/07/10	07/11/08 to 28/07/10	01/01/10 to 31/12/10	07/11/08 to 28/07/10	07/11/08 to 28/07/10	07/11/08 to 28/07/10
Number of valid results	316	88	86	144	89	90	88
Maximum 24-hour average concentration	0.0015ppm	0.0015ppm	0.0009ppm	0.0014ppm	0.0015ppm	0.0016ppm	ND
Average concentration (as arithmetic mean)[a]	0.0007ppm	0.0005ppm	0.0005ppm	0.0009ppm	0.0004ppm	0.0004ppm	0.0005ppm
Arithmetic standard deviation of 24-hour average concentrations[a]	0.0002ppm	0.0003ppm	0.0003ppm	0.0002ppm	0.0002ppm	0.0002ppm	0.0002ppm
Number of times monitoring investigation level exceeded	0	0	0	0	0	0	0

ND = not detected

[a] calculated using half the minimum measurable concentration value for samples where no benzene was detected.

Table 3: Monitoring results for toluene

	SE Qld	Gladstone					
Sites	**Springwood**	**Boat Creek**	**Boyne Island**	**Central Gladstone**	**Clinton**	**South Gladstone**	**Targinie**
Monitoring method	DOAS	TO-15	TO-15	DOAS	TO-15	TO-15	TO-15
Period of monitoring	01/01/10 to 31/12/10	07/11/08 to 28/07/10	07/11/08 to 28/07/10	01/01/10 to 31/12/10	07/11/08 to 28/07/10	07/11/08 to 28/07/10	07/11/08 to 28/07/10
Number of valid results	309	88	86	318	89	90	88
Maximum 24-hour average concentration	0.0038ppm	0.0058ppm	0.0031ppm	0.0015ppm	0.0037ppm	0.0023ppm	0.0026ppm
Average concentration (as arithmetic mean)[a]	0.0014ppm	0.0007ppm	0.0016ppm	0.0009ppm	0.0021ppm	0.0006ppm	0.0005ppm
Arithmetic standard deviation of 24-hour average concentrations[a]	0.0005ppm	0.0006ppm	0.0005ppm	0.0002ppm	0.0006ppm	0.0004ppm	0.0003ppm
Number of times monitoring investigation level exceeded	0	0	0	0	0	0	0

[a] calculated using half the minimum measurable concentration value for samples where no toluene was detected.

Table 4: Monitoring results for xylene

	SE Qld	Gladstone					
Sites	**Springwood[a]**	**Boat Creek**	**Boyne Island**	**Central Gladstone**	**Clinton**	**South Gladstone**	**Targinie**
Monitoring method	DOAS	TO-15	TO-15	DOAS	TO-15	TO-15	TO-15
Period of monitoring	01/01/10 to 31/12/10	07/11/08 to 28/07/10	07/11/08 to 28/07/10	01/01/10 to 31/12/10	07/11/08 to 28/07/10	07/11/08 to 28/07/10	07/11/08 to 28/07/10
Number of valid results	308	88	86	338	89	90	88
Maximum 24-hour average concentration	0.0023ppm	0.0031ppm	0.0041ppm	0.0054ppm	0.0026ppm	0.0021ppm	0.0009ppm
Average concentration (as arithmetic mean)[b]	0.0008ppm	0.0006ppm	0.0006ppm	0.0030ppm	0.0006ppm	0.0005ppm	0.0005ppm
Arithmetic standard deviation of 24-hour average concentrations[b]	0.0004ppm	0.0004ppm	0.0005ppm	0.0009ppm	0.0003ppm	0.0003ppm	0.0002ppm
Number of times monitoring investigation level exceeded	0	0	0	0	0	0	0

[a] only the p-xylene isomer is monitored at Springwood.

[b] calculated using half the minimum measurable concentration value for samples where no xylene was detected.

Table 5: Monitoring results for formaldehyde

	Gladstone					
Sites	**Boat Creek**	**Boyne Island**	**Central Gladstone**	**Clinton**	**South Gladstone**	**Targinie**
Monitoring method	TO-15	TO-15	DOAS	TO-15	TO-15	TO-15
Period of monitoring	07/11/08 to 28/07/10	07/11/08 to 28/07/10	01/01/10 to 31/12/10	07/11/08 to 28/07/10	07/11/08 to 28/07/10	07/11/08 to 28/07/10
Number of valid results	55	70	326	69	67	71
Maximum 24-hour average concentration	0.0036ppm	0.0039ppm	0.0050ppm	ND	0.0037ppm	ND
Average concentration (as arithmetic mean)[a]	0.0017ppm	0.0017ppm	0.0024ppm	0.0016ppm	0.0017ppm	0.0016ppm
Arithmetic standard deviation of 24-hour average concentrations[a]	0.0004ppm	0.0006ppm	0.0007ppm	0.0001ppm	0.0003ppm	0.0001ppm
Number of times monitoring investigation level exceeded	0	0	0	0	0	0

ND = not detected

[a] calculated using half the minimum measurable concentration value for samples where no formaldehyde was detected.

Table 6: Monitoring results for benzo[a]pyrene

	Gladstone				
Sites	**Boat Creek**	**Boyne Island**	**Clinton**	**South Gladstone**	**Targinie**
Monitoring method	TO-15	TO-15	TO-15	TO-15	TO-15
Period of monitoring	07/11/08 to 28/07/10	07/11/08 to 28/07/10	07/11/08 to 28/07/10	07/11/08 to 28/07/10	07/11/08 to 28/07/10
Number of valid results	87	90	89	94	84
Maximum 24-hour average concentration	1.90ng/m^3	0.96ng/m^3	ND	0.51ng/m^3	0.24ng/m^3
Average concentration (as arithmetic mean)[a]	0.14ng/m^3	0.13ng/m^3	0.12ng/m^3	0.12ng/m^3	0.12ng/m^3
Arithmetic standard deviation of 24-hour average concentrations[a]	0.20ng/m^3	0.09ng/m^3	0.01ng/m^3	0.04ng/m^3	0.02ng/m^3
Number of times monitoring investigation level exceeded	0	0	0	0	0

ND = not detected

[a] calculated using half the minimum measurable concentration value for samples where no benzo[a]pyrene was detected.

Reporting on assessment and action if any planned or taken to manage air toxics

Progress toward improving the information base regarding ambient air toxics within the Queensland environment has occurred by way of the desktop analysis, identifying sites likely to have the highest population exposure to air toxics, and ambient monitoring of benzene, toluene, xylene, formaldehyde and benzo[a]pyrene in Brisbane and Gladstone. Current monitoring does not suggest a problem with air toxics at the sites monitored.

Repeat identification of stage 1 and stage 2 sites

The analysis for identification and prioritisation of stage 1 and stage 2 sites, as required by the NEPM, was limited to the populous areas of South-East Queensland. The following sites were identified as stage 2 sites representative of locations with the most potential for significant population exposure to air toxics:

- Ipswich Road, Woolloongabba — representative of a medium density residential area with potential for significant population exposure to air toxics from motor vehicle emissions
- Wynnum North Road, Wynnum North — representative of a low–medium density residential area with potential for significant population exposure to air toxics from industrial emissions.

Western Australia

Report to the NEPC on the implementation of the National Environment Protection (Air Toxics) Measure for Western Australia by the Hon. Bill Marmion MLA, Minister for Environment, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

In Western Australia, the Air Toxics NEPM is implemented by the Department of Environment and Conservation (DEC) under the *National Environment Protection Council (WA) Act 1996* and the Western Australian *Environmental Protection Act 1986.*

Additionally, the draft State Environmental (Ambient Air) Policy is a non-statutory policy developed under section 17(3) of the Western Australian *Environmental Protection Act 1986* to be applied on a whole-of-government basis. The policy aims to protect environmental values of ambient air, including human health. This was initially commenced to provide policy context to the Ambient Air Quality NEPM, but has been expanded to also incorporate the environmental protection goals of the Air Toxics NEPM. To achieve this end, the policy outlines values, objectives, criteria and provides direction for monitoring, managing and reducing pollutant and waste emissions. The draft policy was released for public and stakeholder comment by the Minister for Environment in June 2009. The WA Environmental Protection Authority is currently in the process of finalising the policy having regard to the submissions received.

Air toxics emissions are also managed through the Perth Air Quality Management Plan (Perth AQMP), a non-statutory mechanism established by the West Australian Government. The objective of the Perth AQMP is to ensure that clean air is achieved and maintained throughout the Perth metropolitan region. The Perth AQMP identifies that, to achieve an overall improvement in Perth's air quality, further studies are required to determine major sources and concentrations of air toxics in the Perth metropolitan region. The initiatives within the Perth AQMP are complementary to the Air Toxics NEPM.

Implementation issues arising

In Western Australia, the monitoring of air toxics using methods recommended by the Air Toxics NEPM has been limited due to the cost of such methods. The cost of alternative methods, such as passive sampling, is significantly less. Passive sampling for air toxics in Western Australia has been conducted at several sites, in addition to Air Toxics NEPM compliant monitoring. Although this passive sampling does not meet the Air Toxics NEPM requirements, the results provide useful information on background levels in urban areas.

PART — ASSESSMENT OF NEPM EFFECTIVENESS

The Air Toxics NEPM has been effective in highlighting the need to investigate air toxics concentrations and providing monitoring investigation levels to which the results can be compared. The monitoring investigation levels provide a nationally consistent benchmark for assessing and comparing the concentrations of ambient air toxics from diverse monitoring sites and are an effective tool to inform government policy and programs on appropriate abatement actions.

Monitoring for air toxics in Western Australia has primarily been undertaken as part of specific studies. These complementary monitoring programs are designed to meet a number of local objectives as well as Air Toxics NEPM requirements. To satisfy program objectives when developing and implementing these studies, alternative methodologies outside the NEPM monitoring protocol have also been utilised. The monitoring results from these studies are invaluable when assessing ambient air toxic concentrations across Western Australia.

Reporting on assessment and action if any planned or taken to manage air toxics

The results of Air Toxics NEPM compliant monitoring in 2005–06 as well as the additional complementary air quality studies in 2007–08 indicated that air toxics levels in Perth are low compared to international standards and below Air Toxics NEPM Monitoring Investigation Levels. Due to these findings, no additional Air Toxics NEPM compliant monitoring has been undertaken during the past twelve months.

Repeat identification of stage 1 and stage 2 sites

No repeat identification of stage 1 and stage 2 sites is currently planned. The initial desktop analysis identified 13 stage 1 sites for formaldehyde, of which three met the ranking criteria for PAH stage 1 sites. No stage 1 sites were identified for benzene, toluene or xylene. Two priority categories (traffic volume and wood heater density) were used to identify two stage 2 sites. The results of the air toxics monitoring at these two stage 2 sites showed that the annual average concentrations for formaldehyde and benzo(a)pyrene were below Air Toxics NEPM Monitoring Investigation Levels. As these two sites are representative of the stage 1 sites initially identified, repeat identification of stage 1 and stage 2 sites is not needed at this time.

South Australia

Report to the NEPC on the implementation of the National Environment Protection (Air Toxics) Measure for South Australia by the Hon. Paul Caica MP, Minister for Environment and Conservation, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The SA EPA has conducted the initial desktop analysis and a review of this analysis. Both analyses suggested that there were stage 2 sites for which monitoring was required to determine the level of air toxics.

There are shortcomings in the available inventory data used in the desktop analysis and review that result in uncertainties in recommendations of both studies.

Recently, surrogate monitoring has been conducted at Mount Gambier utilising fine particles as an indicator of air toxics produced from industrial and domestic wood combustion. Fine particles from wood smoke are associated with air toxics. The levels of these fine particles measured indicated a need for further investigation into the possibilities of elevated concentrations of air toxics.

Thus there is still a need in the South Australian jurisdiction for confirmation of predictions of desktop analyses and to contribute information to the goal of the NEPM.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

Since the implementation of the NEPM South Australia has obtained some monitoring data as well as desktop analysis information. The NEPM has been a significant factor in the decision to conduct this work. South Australia took part in the mid-term review of the NEPM and is looking forward to minor changes facilitating additional data gathering. All South Australian EPA available monitoring data and desktop analysis information have been provided as part of the mid-term review and in earlier reports. This report contains no new data. For completeness a summary of the desktop analysis and review are included later in this report.

Identification of sites

The initial desktop analysis of the 13 airsheds within the South Australian jurisdiction was conducted using the nationally agreed methodology and using data currently available. A summary of stage 2 sites identified throughout the state is listed in Table 1 below.

While many sites have been identified in the desktop analysis, some limitations in the methodology and the available data have added some uncertainty to the results. Uncertainties related to the correlation factors applied to the emission rates, the age of the emissions inventory and the lack of modelling to account for meteorological effects influence the effectiveness of the method to identify stage 1 and stage 2 sites. However, applying local knowledge and monitoring data to the results of both analyses will improve the uncertainty in the reported monitoring site selection.

Reporting of monitoring of air toxics

South Australia did not conduct any monitoring of air toxics during the reporting year ending 31 December 2010. A formal monitoring program under the NEPM has not been implemented.

Reporting on assessment and action if any planned or taken to manage air toxics

Domestic wood smoke emissions

Phase two of the three year SmokeWatch program in Mount Gambier commenced in April 2010. The aim of the program is to encourage householders to engage in efficient wood heating practices to minimise wood smoke, therefore reducing community exposure to fine particles and the air toxics associated with these particles. SmokeWatch combines community engagement and campaign monitoring of fine particles during winter which reinforce the messages about air quality and what the community can do to improve it. Although air toxics are not monitored directly through the program, reducing

Table 1: Summary of the stage 2 sites identified in South Australia.

Airshed	Benzene	Formaldehyde	PAH	Toluene	Xylenes
Adelaide	2	10	1	4	0
Mt Gambier	0	7	1	0	0
Pt Augusta	0	2	0	0	0
Pt Lincoln	0	1	0	0	0
Whyalla	1	5	1	0	0

wood smoke will contribute in a very real way to reducing the concentrations of air toxics in Mount Gambier. The SmokeWatch program in Mount Gambier is a collaboration between the SA EPA, SA Department of Health, the City of Mount Gambier, the Australian Home Heating Association, and the Firewood Association of Australia.

Petrol vapour recovery

In response to community concern, the Environment Protection Authority (EPA) has worked closely with fuel storage facilities identified as potential emission sources on the Le Fevre Peninsula to develop Environment Improvement Programs (EIPs) to reduce emissions from their sites. The facilities are required to implement their EIPs as part of their EPA licence conditions. All fuel storage facilities on the Le Fevre Peninsula have now installed Vapour Recovery Units (VRU) through implementation of their EIPs. This work was completed in late 2010, with all VRU emissions verification monitoring completed in early 2011.

All fuel storage facilities have committed to the installation of floating roof tanks on all potentially odorous fuel storage tanks, with this work due to be finalised in 2012.

The EPA is now considering options for stage 1B vapour recovery at petrol stations to recover vapours expelled from underground storage tanks during loading.

Desktop analysis

The lack of an adequate emissions inventory in SA has been identified as a significant issue in conducting accurate identification of stage 1 and stage 2 sites. To improve this situation the SA EPA has developed a vehicle emissions inventory which is currently undergoing review to enable the use of data from the Australian-based Second National In-Service Emissions Study. This will enable the use of Australian rather than overseas vehicle emission data.

Management strategies

South Australia is undertaking a pilot project to develop an air quality management strategy. The project aims to consolidate the efforts of all stakeholders (government, industry and the public) to manage and improve all aspects of air quality, including air toxics, in the study region. If successful the strategy may be expanded to include the entire jurisdiction.

South Australia is currently reviewing the Air Environment Protection Policy and considering the inclusion of diesel fuel quality, and domestic and non-domestic burning, to improve general air quality.

Repeat identification of stage 1 and stage 2 Sites

A review of the Desktop Analysis was conducted. This review concentrated on the Adelaide airshed as it was assumed that since the highest ranking stage 2 sites were located in this airshed then if modelling did not indicate a problem in Adelaide it was unlikely the other airsheds would exceed the Monitoring Investigation Limits.

The review of the desktop analysis resulted in changes to a number of stage 1 sites identified in the first study for the Adelaide airshed as shown:

- Benzene reduced from 4 to 0
- Formaldehyde reduced from 264 to 0
- PAH increased from 4 to 2200
- Toluene reduced from 4 to 0
- Xylenes remained at 0.

Consequently, the number of stage 2 sites identified in the Adelaide airshed also changed as listed:

- Benzene reduced from 2 to 0
- Formaldehyde reduced from 10 to 0
- PAH increased from 1 to 2200
- Toluene reduced from 4 to 0
- Xylenes remained at 0.

The large increase in the number of stage 1 and stage 2 sites for PAH in the Adelaide airshed is believed to be due to problems with the methodology for preparing PAH emissions data input files for modelling. The assessments are not considered reliable, due to their sensitivity to the estimation methodology. They need further review in the light of projected improvements to emissions inventories and model updates, and where appropriate, targeted monitoring campaigns. This is supported by recent fine particle monitoring in Mt Gambier where the final review suggested Mt Gambier may not have stage 2 sites.

In support of this view, additional modelling based on emissions inventory estimates did not indicate issues with any of the NEPM air toxics in the Adelaide airshed, apart from PAH.

The report *Review of Air Toxics Desktop Analysis for the National Environment Protection (Air Toxics) Measure 2008* was submitted to NEPC and can be used for reference.

Tasmania

Report to the NEPC on the implementation of the National Environment Protection (Air Toxics) Measure for Tasmania by the Hon. Brian Wightman MP, Minister for Environment, Parks and Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Tasmania has adopted a staged approach to the monitoring of air toxics. Preliminary screening monitoring is undertaken initially. If levels approaching the Air Toxics NEPM Monitoring Investigation Levels are detected using the screening techniques, then additional monitoring using the NEPM reference methods would be conducted to confirm the findings. Otherwise the program will progress to other sites that have not been monitored to date.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The monitoring conducted has improved the information base regarding ambient concentration of air toxics within Tasmania.

Identification of sites

Fourteen stage 2 sites were identified in a desktop analysis in 2005 that was conducted according to the Air Toxics NEPM Desktop Analysis protocol. Monitoring at five of the 14 sites was undertaken in the period 2008 to 2009. An additional two of these sites were monitored in 2010.

Additional air toxics monitoring was undertaken to determine:

- the effect of domestic wood smoke on air toxic concentrations at New Norfolk
- the effect of emissions associated with motor vehicles on air toxics concentrations in Hobart at Cleary's Gates
- PAH concentration at Rowella in the Tamar Valley as an extension of a baseline study associated with a proposed pulp mill.

Table 1: Stage 2 sites and proposed monitoring program

Location of stage 2 sites **MGA easting (km)** **MGA northing (km)** **GDA94**	**Air toxics with possible elevated levels**	**Air toxics to be monitored**	**Proposed timeframe for monitoring**	**Estimate of size of population likely to be exposed and identification of susceptible groups**
Glenorchy 523 957 5 258 315	benzene, toluene, xylenes, formaldehyde	benzene, toluene, xylenes, formaldehyde	28/04/10-13/10/10	10 000 (note 1) Timsbury Rd Primary School Glenview Community Services (aged care)
Warrane 536 784 5 254 216	benzene, toluene, xylenes, formaldehyde	benzene, toluene, xylenes, formaldehyde	28/04/10-13/10/10	2200 (note 1) Cambridge Rd Play and Learn Centre (child care)
Hobart (Cleary's Gates) 525 752 5 254 406	benzene, toluene, xylenes, formaldehyde	benzene, toluene, xylenes, formaldehyde	28/4/10- 13/10/10	600 (note 1)

Location of stage 2 sites MGA easting (km) MGA northing (km) GDA94	Air toxics with possible elevated levels	Air toxics to be monitored	Proposed timeframe for monitoring	Estimate of size of population likely to be exposed and identification of susceptible groups
South Launceston 514 357 5 411 928	benzene, toluene, xylenes, formaldehyde	benzene, toluene, xylenes, formaldehyde	20/01/10- 29/12/10	4300 (note 2) East Launceston Primary School Launceston General Hospital Pedder Patter Childcare Centre
Ti Tree Bend 510 440 5 414 887	benzene, toluene, xylenes, formaldehyde	benzene, toluene, xylenes, formaldehyde	20/01/10- 13/10/10	3100 (note 2) St Finn Barr's Catholic Primary School Invermay Primary School
New Norfolk 504 878 5 263 771	benzene, toluene, xylenes, formaldehyde	benzene, toluene, xylenes, formaldehyde	28/4/10- 13/10/10	5200 (note 3)
Rowella 493 438 5 441 388		PAH (benzo(a) pyrene)	6/01/10-30/06/10	20 (note 4)

Notes: The size of population likely to be exposed is approximate and is based on Australian Bureau of Statistics census data where available.

1. 2026.6 Tasmanian Population Census Data: Hobart Suburbs

2. 2028.6 Tasmanian Population Census Data: Launceston Suburbs

3. Cat. No. 2068.0 — 2006 Census Tables, New Norfolk (Urban Centre/Locality) - Tas.

4. This is an estimate. Census data is not available for Rowella.

Reporting of monitoring of air toxics

Air toxics monitoring was conducted predominantly using passive sampling techniques. Passive sampling allows for the possibility of longer sampling periods. As the level of air toxic pollutants is likely to be low in Tasmania, the extended deployment period associated with passive samplers increases the likelihood of detection of these species.

Table 2: Monitoring results

Site	**Glenorchy**	**Glenorchy**	**Glenorchy**	**Glenorchy**
Air toxic	Benzene	Toluene	Xylenes	Formaldehyde
[1] Monitoring method	RAD130	RAD130	RAD130	RAD165
Period of monitoring	28/04/10-13/10/10	28/04/10-13/10/10	28/04/10-13/10/10	28/04/10-13/10/10
Number of valid results	22	22	22	21
[2] Averaging period, days	7	7	7	7
[2] Maximum 7 day average concentration, ppm (parts per million)	0.00019	0.00120	0.00077	0.0040
[2] Average 7 day concentration during monitoring period (as arithmetic mean), ppm	0.00002	0.00017	0.00009	0.0020
[3] Maximum 24-hour average concentration				
[3] Annual average concentration (as arithmetic mean)				
[3] Arithmetic standard deviation of 24-hour average concentrations				
Number of times monitoring investigation level exceeded	not demonstrated	not demonstrated	not demonstrated	not demonstrated
Site	**Warrane**	**Warrane**	**Warrane**	**Warrane**
Air toxic	Benzene	Toluene	Xylenes	Formaldehyde
[1] Monitoring method	RAD130	RAD130	RAD130	RAD165
Period of monitoring	28/04/10-13/10/10	28/04/10-13/10/10	28/04/10-13/10/10	28/04/10-13/10/10
Number of valid results	22	22	22	22
[2] Averaging period, days	7	7	7	7
[2] Maximum 7 day average concentration, ppm	0.00025	0.00077	0.00051	0.0066
[2] Average 7 day concentration during monitoring period (as arithmetic mean), ppm	0.00002	0.00016	0.00008	0.0027
[3] Maximum 24-hour average concentration				
[3] Annual average concentration (as arithmetic mean)				
[3] Arithmetic standard deviation of 24-hour average concentrations				
Number of times monitoring investigation level exceeded	not demonstrated	not demonstrated	not demonstrated	not demonstrated

Site	Hobart (Cleary's Gates)	Hobart (Cleary's Gates)	Hobart (Cleary's Gates)	Hobart (Cleary's Gates)
Air toxic	Benzene	Toluene	Xylenes	Formaldehyde
[1] Monitoring method	RAD130	RAD130	RAD130	RAD165
Period of monitoring	28/4/10-13/10/10	28/4/10-13/10/10	28/4/10-13/10/10	28/4/10-13/10/10
Number of valid results	22	22	22	22
[2] Averaging period, days	7	7	7	7
[2] Maximum 7 day average concentration, ppm	0.00056	0.0016	0.0090	0.0046
[2] Average 7 day concentration during monitoring period (as arithmetic mean), ppm	0.00006	0.0006	0.0003	0.0024
[3] Maximum 24-hour average concentration				
[3] Annual average concentration (as arithmetic mean)				
[3] Arithmetic standard deviation of 24-hour average concentrations				
Number of times monitoring investigation level exceeded	not demonstrated	not demonstrated	not demonstrated	not demonstrated
Site	**South Launceston**	**South Launceston**	**South Launceston**	**South Launceston**
Air toxic	Benzene	Toluene	Xylenes	Formaldehyde
[1] Monitoring method	RAD130	RAD130	RAD130	RAD165
Period of monitoring	20/01/10-29/12/10	20/01/10-29/12/10	20/01/10-29/12/10	20/01/10-29/12/10
Number of valid results	42	42	42	45
[2] Averaging period, days	7	7	7	7
[2] Maximum 7 day average concentration, ppm	0.00066	0.00131	0.0087	0.0054
[2] Average 7 day concentration during monitoring period (as arithmetic mean), ppm	0.00004	0.00028	0.0001	0.0024
[3] Maximum 24-hour average concentration				
[3] Annual average concentration (as arithmetic mean)				
[3] Arithmetic standard deviation of 24-hour average concentrations				
Number of times monitoring investigation level exceeded	not demonstrated	not demonstrated	not demonstrated	not demonstrated

Site	Ti Tree Bend	Ti Tree Bend	Ti Tree Bend	Ti Tree Bend
Air toxic	Benzene	Toluene	Xylenes	Formaldehyde
1 Monitoring method	RAD130	RAD130	RAD130	RAD165
Period of monitoring	20/01/10-13/10/10	20/01/10-13/10/10	20/01/10-13/10/10	20/01/10-13/10/10
Number of valid results	37	37	37	36
2 Averaging period, days	7	7	7	7
2 Maximum 7 day average concentration, ppm	not detected	0.00084	0.00043	0.0037
2 Average 7 day concentration during monitoring period (as arithmetic mean), ppm	not detected	0.00014	0.00009	0.0025
3 Maximum 24-hour average concentration				
3 Annual average concentration (as arithmetic mean)				
3 Arithmetic standard deviation of 24-hour average concentrations				
Number of times monitoring investigation level exceeded	not demonstrated	not demonstrated	not demonstrated	not demonstrated
Site	**New Norfolk**	**New Norfolk**	**New Norfolk**	**New Norfolk**
Air toxic	Benzene	Toluene	Xylenes	Formaldehyde
1 Monitoring method	RAD130	RAD130	RAD130	RAD165
Period of monitoring	28/4/10-13/10/10	28/4/10-13/10/10	28/4/10-13/10/10	28/4/10-13/10/10
Number of valid results	22	22	22	22
2 Averaging period, days	7	7	7	7
2 Maximum 7 day average concentration, ppm	0.00023	0.00052	not detected	0.0028
2 Average 7 day concentration during monitoring period (as arithmetic mean), ppm	0.00023	0.00039	not detected	0.002
3 Maximum 24-hour average concentration				
3 Annual average concentration (as arithmetic mean)				
3 Arithmetic standard deviation of 24-hour average concentrations				
Number of times monitoring investigation level exceeded	not demonstrated	not demonstrated	not demonstrated	not demonstrated

Site	Rowella			
Air toxic	Benzo(a)pyrene			
1 Monitoring method	TO-13A			
Period of monitoring	6/01/10-30/06/10			
Number of valid results	3			
2 Averaging period, days	28			
2 Maximum 28 day average concentration, ng/m^3	0.09			
2 Average 28 day concentration during monitoring period (as arithmetic mean), ng/m^3	0.06			
3 Maximum 24-hour average concentration				
3 Annual average concentration (as arithmetic mean)				
3 Arithmetic standard deviation of 24-hour average concentrations				
Number of times monitoring investigation level exceeded	not demonstrated			

Notes

1. Monitoring methods:
   - RAD130: Radiello Passive Sampler RAD130: benzene, toluene and xylenes
   - RAD165: Radiello Passive Sampler RAD165: formaldehyde
   - USEPA TO-13A: NEPM Schedule 3 method modified to sample for 28 days continuously: polycyclic aromatic hydrocarbons
2. The following additional rows have been inserted for samples that were integrated over a number of days:
   - Averaging period, days
   - For benzene, toluene, xylenes and formaldehyde:
     - Maximum 7 day average concentration, ppm
     - Average 7 day concentration during monitoring period (as arithmetic mean), ppm
   - For benzo(a)pyrene:
     - Maximum 28 day average concentration, ng/m^3
     - Average 28 day concentration during monitoring period (as arithmetic mean), ng/m^3
3. The following rows are empty where samples were integrated over a number of days
   - Maximum 24-hour average concentration
   - Annual average concentration (as arithmetic mean)
   - Arithmetic standard deviation of 24-hour average concentrations

Reporting on assessment and action if any planned or taken to manage air toxics

As there is no evidence to indicate that NEPM Monitoring Investigation Levels would be exceeded at any of the monitored sites, no action was required to reduce concentrations of air toxics.

Repeat identification of stage 1 and stage 2 sites

Repeat identification has not been conducted.

Australian Capital Territory

Report to the NEPC on the implementation of the National Environment Protection (Air Toxics) Measure for the Australian Capital Territory by Mr Simon Corbell MLA, Minister for the Environment and Sustainable Development, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Environment and Sustainable Development Directorate, ACT Government, has the responsibility for the administration of the National Environment Protection Measure for Air Toxics (the NEPM).

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

In accordance with clause 8 of the NEPM, the ACT has previously undertaken a desktop analysis for the identification of stage 1 and 2 sites. This assessment was undertaken in accordance with the nationally agreed Desktop Analysis procedure. Only one stage 1 site was identified, which was not subsequently identified as a stage 2 site requiring monitoring.

Reporting on assessment and action if any planned or taken to manage air toxics

The previous desktop analysis has shown that air toxics are not an issue for the ACT.

Repeat identification of stage 1 and stage 2 sites

The ACT has not repeated the desktop analysis exercise because a preliminary analysis of the ACT's emission profile has not identified any significant change since the first desktop analysis. Since this assessment was undertaken, there has been an improvement in the ACT's air quality because of actions on both wood heaters and motor vehicle emissions.

Northern Territory

Report to the NEPC on the implementation of the National Environment Protection (Air Toxics) Measure for the Northern Territory by the Mr Karl Hampton MLA, Minister for Natural Resources, Environment and Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

The Department of Natural Resources, Environment, the Arts and Sport is responsible for implementation of the NEPM in the Northern Territory through provisions of the *Waste Management and Pollution Control (Northern Territory) Act 2009* and the *National Environment Protection Council (Northern Territory) Act 2004.*

Implementation issues arising

The Northern Territory undertook a desktop study in 2005 to identify stage 1 and stage 2 sites for the purposes of meeting obligations under the NEPM. No stage 2 sites were identified and a long-term monitoring program has not been implemented.

A nine month monitoring program was completed in February 2006 to establish baseline conditions for Darwin. The results indicated that there are very low concentrations of benzene, toluene and xylenes (ortho, meta and para), well below the investigation levels set by the NEPM.

No further implementation activities were conducted in 2010–11. Reassessment of stage 1 and stage 2 sites may be required in the future, taking into account industrial development in the Darwin region. According to NEPM guidance, reassessment was required by 2009 but the previous studies indicate that concentrations of air toxics are at very low levels, well below the monitoring investigation levels of the NEPM.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM has provided the impetus and methodology for identifying sites most at risk of air toxics in the NT. Associated monitoring in past years has provided baseline data for further consideration.

In the year 2010–11 no sites were evaluated or selected and no analyses were performed.

Jurisdictional Reports on the implementation of the

Ambient Air Quality NEPM

2010–2011

Commonwealth

Report to the NEPC on the implementation of the National Environment Protection (Ambient Air Quality) Measure for the Commonwealth by the Hon. Tony Burke MP, Minister for Sustainability, Environment, Water, Population and Communities, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Commonwealth implements the NEPM administratively and ensures that its obligations under the *National Environment Protection Act 1994* are met.

The Commonwealth is not required to undertake any direct monitoring as there are currently no non-self-governing Commonwealth territories or Commonwealth regions with a population above the 25,000 NEPM protocol threshold. The monitoring plan for the Commonwealth is available from www.environment.gov.au/atmosphere/airquality/publications/cmp.html

The Commonwealth released the *State of the Air in Australia 1998-2008* report in April 2011. The report provided a national analysis of air quality from 1999–2008 in Australia's major urban and regional monitoring regions and is the second national report on air quality. The report found that Australia's air quality is good overall, but noted that meeting future air quality standards will be more challenging.

The air quality data in *State of the Air in Australia 1998–2008* were collected by each state and territory as part of their monitoring for compliance with the National Environment Protection (Ambient Air Quality) Measure. The data is stored in the national air quality database housed at the Bureau of Meteorology. A copy of the report is available from draft.environment.gov.au/atmosphere/publications/state-of-the-air/index.html

In 2010–11 the Commonwealth continued to progress work through the Environment Protection and Heritage Council to reduce emissions from nationally significant sources. This work aims to support compliance in all jurisdictions with the NEPM standards. The Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) initiatives focused on wood heaters, which are a source of particulate matter emissions with an equivalent aerodynamic diameter of 10 micrometres or less (PM_{10}), and from non-road spark ignition engines and equipment, such as lawnmowers and outboard engines, which emit high levels of PM_{10}, nitrogen dioxide and chemicals that lead to ozone formation. A consultation regulation impact statement to assess options for reducing emissions from domestic wood heaters was commenced by DSEWPaC.

DSEWPaC also undertook a public consultation process through the release of a consultation regulation impact statement for non-road spark ignition engines and equipment, which considered options for managing emissions from lawn mowers and other garden equipment and outboard motors. Building on from this, the development of a decision regulation impact statement was commenced, considering all stakeholder submissions from the consultation process.

In February 2011, the Council of Australian Governments agreed to a comprehensive reform plan for a new system of Ministerial Councils. Projects to reduce emissions will be considered under the Environment and Water Minister's policy agenda.

The Commonwealth monitors fuel quality at fuel terminals, depots and service stations to ensure it complies with the *Fuel Quality Standards Act 2000* (the Act). The Act is in place to:

- reduce the adverse effects of motor vehicle emissions on air quality and human health
- enable Australia to effectively adopt new vehicle engine and emission control technologies
- allow for the effective operation of engines
- where appropriate, give information about fuel provided when the fuel is supplied.

In 2010–11, inspectors visited 623 fuel supply sites and tested 2983 samples. Compliance action under the Act resulted in a civil proceeding against a fuel supplier where the Federal Court granted an injunction to stop the supply of non-compliant diesel fuel. Further compliance action against a second fuel supplier resulted in the supplier entering into an undertaking with the Federal Court to not supply non-compliant diesel fuel.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM has been valuable in the management and assessment of air quality in Australia. It provides a nationally consistent framework for the monitoring and reporting of air quality and nationally consistent benchmarks against which to assess quality. The data collected for six criteria pollutants targeted by the NEPM (carbon monoxide (CO), nitrogen dioxide (NO_2), photochemical oxidants as ozone (O_3), sulfur dioxide (SO_2), lead (Pb) and PM_{10}) were essential for analysis and reporting in *State of the Air in Australia 1998–2008.*

New South Wales

Report to the NEPC on the implementation of the National Environment Protection (Ambient Air Quality) Measure for New South Wales by the Hon. Robyn Parker MP, Minister for the Environment and Minister for Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In 2010, the NSW Protection of the Environment Operations (Clean Air) Regulation 2002 (Clean Air Regulation 2002) was replaced with the Protection of the Environment Operations (Clean Air) Regulation 2010 (Clean Air Regulation 2010). This regulation is made under the *Protection of the Environment Operations Act 1997* and is the key instrument for controlling air emissions in NSW. The Clean Air Regulation 2010 revised local government areas in which control of burning provisions apply, modified requirements for the owners of certain vehicles and providers of fuel blended with ethanol, and made other minor changes.

Requirements commenced in July 2010 under the Clean Air Regulation to expand areas where stage 1 vapour recovery (VR1) is required and progressively require the introduction of stage 2 vapour recovery (VR2) at service stations. VR1 technology captures ozone-forming gaseous volatile organic compound (VOC) emissions from underground storage tanks as they are filled by road tankers and is required in the Greater Metropolitan Region (Sydney, Newcastle and Wollongong) by 2014. VR2 involves installation of equipment to recover VOCs when cars refuel at service stations. VR2 is being phased in across Sydney and parts of the Wollongong, Newcastle and Central Coast metropolitan areas up to 2017.

On 23 August 2010, the Department of Environment, Climate Change and Water (now the Office of Environment and Heritage (OEH), Department of Premier and Cabinet) held the third triennial Clean Air Forum, bringing together stakeholders and experts to review the effectiveness of NSW's programs to improve air quality and address the National Environment Protection (Ambient Air Quality) Measure (AAQ NEPM) goals. A $500,000 pilot 'Clean Machine Program' was announced at the forum to reduce emissions from non-road diesel engines. By June 2011, six organisations had joined the pilot to reduce emissions from equipment such as cranes and tractors.

As chair of the national Air Quality Working Group, OEH worked with other jurisdictions in 2010–11 on projects to reduce emissions from various product and equipment types and proposed a new integrated approach to national air quality management. The Environment Protection and Heritage Council approved developing this approach, which integrates standard setting with cost-effective actions to reduce emissions, in November 2010.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

NSW's Air Quality Monitoring Program is currently the largest in Australia, with a comprehensive monitoring network operated by OEH. Sydney's air has been monitored for a range of pollutants since the 1960s. Current reporting on ambient air quality levels is referenced against the AAQ NEPM.

The data presented in this report demonstrate that NSW achieved compliance with the AAQ NEPM goals for all pollutants except ozone and particles. Levels of carbon monoxide, nitrogen dioxide and sulfur dioxide continue to be well below AAQ NEPM standards. Monitoring for lead as a regional pollutant ceased in NSW from January 2005 in response to the extremely low concentrations of lead found in ambient air.

Due to technical issues with monitoring equipment, the criteria for data availability were not met for the following pollutants:

- sulfur dioxide (Bringelly and Wallsend)
- carbon monoxide (Newcastle)
- nitrogen dioxide (Prospect, Rozelle, Wallsend and Wollongong).

The goals for ozone were not met in the Sydney region, with exceedences of the one-hour standard on two days and the four-hour standard on four days. Compliance with the goals and standards was achieved within both the Illawarra and Lower Hunter regions.

For particles as PM_{10} the three regions in NSW Greater Metropolitan Region complied with the goal of no more than five exceedences per year, with: one exceedence day within the Sydney region, no exceedence days in the Illawarra region and one exceedence day in the Lower Hunter region. At regional sites, the PM_{10} goal was not met at Wagga Wagga, with six exceedence days recorded. Albury complied with two exceedence days and Bathurst and Tamworth both had zero. Smoke from hazard reduction burning contributed to one of the two exceedence events in Albury. Sources such as dust and agricultural stubble burning in rural regions can contribute to a number of particle events.

The annual advisory reporting standard for $PM_{2.5}$ was met at all monitoring stations within the Sydney and Lower Hunter regions. The 24-hour advisory reporting standard for $PM_{2.5}$, however, was exceeded on two days within the Sydney region. There were no exceedences of the 24-hour advisory reporting standard in the Illawarra or Lower Hunter regions.

Meeting the AAQ NEPM standards for ozone is a significant challenge for Sydney, given pressures from a growing population, urban expansion and associated increase in motor vehicle use and an increasing trend in domestic emissions of volatile organic compounds (which are precursors of ozone) from sources such as paints, solvents, aerosols, and small engines. The particle (as PM_{10} and as $PM_{2.5}$) goals present a similar challenge in NSW, particularly in rural population centres where agricultural activities and a combination of topography, climate and relatively high use of solid fuel heaters produce elevated levels of particles in autumn and winter. NSW has a range of programs in place, which target the primary emission sources of ozone and particle pollution, as determined using NSW's comprehensive air emissions inventory.

The AAQ NEPM goals provide an additional impetus for the implementation of strategies and a benchmark to assess programs to manage the air environment.

Data from relevant monitoring stations are presented below. The standards, with accompanying definitions and explanations, appear in Schedule 2 of the NEPM. For averaging times shorter than one year, compliance with the NEPM goal is achieved if the standard for a pollutant is exceeded on no more than a specified number of days in a calendar year (five days per year for PM_{10}, one day per year for all other pollutants) and at least 75% of data are captured in each quarter.

The data are presented in greater detail at www.environment.nsw.gov.au/aqms/aqi.htm

The monitoring plan for NSW is available from www.environment.nsw.gov.au/air/nepm/index.htm

CO Carbon monoxide

(NEPM standard 8 hours = 9.0ppm)

Station	Number of exceedences	NEPM goal compliance
Sydney		
Chullora	0	met
Liverpool	0	met
Macarthur	0	met
Prospect	0	met
Rozelle	0	met
Illawarra		
Wollongong	0	met
Lower Hunter		
Newcastle	0	not demonstrated

Data availability criteria were not demonstrated at Newcastle due to technical issues.

NO_2 Nitrogen dioxide

(NEPM standard: 1 hour = 0.12ppm, 1 year = 0.03ppm)

Station	1 Hour		1 Year	
	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Sydney				
Bringelly	0	met	0.005	met
Chullora	0	met	0.013	met
Liverpool	0	met	0.011	met
Macarthur	0	met	0.009	met
Prospect	0	not demonstrated	0.012	not demonstrated
Richmond	0	met	0.005	met
Rozelle	0	not demonstrated	0.011	not demonstrated
Illawarra				
Albion Park South	0	met	0.003	met
Wollongong	0	not demonstrated	0.009	not demonstrated
Lower Hunter				
Newcastle	0	met	0.008	met
Wallsend	0	not demonstrated	0.009	not demonstrated

Data availability criteria were not demonstrated at Prospect, Rozelle, Wollongong and Wallsend due to technical issues.

O_3 Ozone

(NEPM standard: 1 hour = 0.10ppm, 4 hours = 0.08ppm)

Station	1 Hour		4 Hours	
	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance
Sydney				
Bringelly	2	not met	3	not met
Chullora	0	met	0	met
Liverpool	0	met	1	met
Macarthur	1	met	1	met
Oakdale	0	met	2	not met
Prospect	2	not met	2	not met
Richmond	0	met	1	met
Rozelle	0	met	0	met
St Marys	0	met	1	met
Illawarra				
Albion Park South	0	met	0	met
Kembla Grange	0	met	0	met
Wollongong	0	met	0	met
Lower Hunter				
Newcastle	0	met	0	met
Wallsend	0	met	0	met

Data availability criteria were not demonstrated at Prospect, Rozelle, Wollongong and Wallsend due to technical issues.

SO_2 Sulfur dioxide

(NEPM standard: 1 hour = 0.20ppm, 1 day = 0.08ppm, 1 year = 0.02ppm)

Station	1 hour		1 day		1 year	
	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Sydney						
Bringelly	0	not demonstrated	0	not demonstrated	0.000	not demonstrated
Chullora	0	met	0	met	0.001	met
Macarthur	0	met	0	met	0.000	met
Prospect	0	met	0	met	0.001	met
Richmond	0	met	0	met	0.000	met
Illawarra						
Albion Park South	0	met	0	met	0.001	met
Wollongong	0	met	0	met	0.001	met
Lower Hunter						
Newcastle	0	met	0	met	0.001	met
Wallsend	0	not demonstrated	0	not demonstrated	0.001	not demonstrated

Data availability criteria were not demonstrated at Bringelly and Wallsend due to technical issues.

Pb Lead

(NEPM standard 1 year = 0.50µg/m^3)

NSW began phasing out ambient lead monitoring for the AAQ NEPM during 2004. All lead monitoring ceased from 1 January 2005. All regions do not require monitoring on the basis of screening arguments that lead levels are reasonably expected to be consistently below the AAQ NEPM standard and are assessed as complying with the standard and goal.

PM_{10} Particles as PM_{10}

(NEPM standard 1 day = 50µg/m^3)

Station	Number of exceedences	NEPM goal compliance
Sydney		
Bringelly	0	met
Chullora	0	met
Liverpool	0	met
Macarthur	1	met
Oakdale	0	met
Prospect	0	met
Richmond	0	met
Rozelle	0	met
Illawarra		
Albion Park South	0	met
Kembla Grange	0	met
Wollongong	0	met
Lower Hunter		
Beresfield	0	met
Newcastle	1	met
Regional		
Albury	2	met
Bathurst	0	met
Tamworth	0	met
Wagga Wagga	6	not met

Data have not been adjusted for temperature.

$PM_{2.5}$ Particles as $PM_{2.5}$ – continuous TEOM method

(NEPM standard 1 day = 25µg/m^3, 1 year = 8µg/m^3)

Station	1 year	
	Number of exceedences	Annual average (mg/m^3)
Sydney		
Chullora	0	5.7
Earlwood	0	5.6
Liverpool	0	6.3
Richmond	0	4.2
Illawarra		
Wollongong	0	5.0
Lower Hunter		
Beresfield	1	5.9
Wallsend	0	4.6

The TEOM $PM_{2.5}$ data included in this year's report have not been adjusted for temperature but have been adjusted to remove the USEPA PM_{10} equivalency factors of B=1.03 and A=3 and replace them with factors of B=1.00 and A=0 where y = A + Bx. All sites operating TEOM $PM_{2.5}$ instruments have been included.

$PM_{2.5}$ Particles as $PM_{2.5}$ – FRM method

(NEPM standard 1 day = 25µg/m^3, 1 year = 8µg/m^3)

Station	1 year	
	Number of exceedences	Annual average (mg/m^3)
Sydney		
Chullora	1	6.5

Victoria

Report to the NEPC on the implementation of the National Environment Protection (Ambient Air Quality) Measure for Victoria by the Hon. Ryan Smith, Minister for Environment and Climate Change, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Monitoring was performed in accordance with a modified state monitoring plan[1], AAQ NEPM Technical Papers and EPA's NATA accreditation. Data capture targets were achieved at all stations, except for ozone at Alphington (in quarter 3), Brighton (Q3), Melton (Q4) and Point Henry (Q3, Q4) due to technical problems with equipment.

There were no other significant implementation issues.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

Victoria's air quality in 2010 was generally good. The major impacts on air quality during the year were associated with particles from fire, local dust and urban emissions.

In the Port Phillip region in 2010, the goal for particles was met at NEPM stations for the first time since NEPM reporting commenced in 2002. This is most likely due to the increased rainfall resulting in less fire and raised dust activity producing less PM_{10} impacts.

The particles goal for PM_{10} was also met at Traralgon in the Latrobe Valley.

Another issue specific station not included in the NEPM network located in Brooklyn did not report good air quality, exceeding the PM_{10} air quality standard on 32 days during the year due to impacts from local sources[2].

The greatest number of days when the PM_{10} standard was exceeded in the Port Phillip region was four, at the Footscray monitoring station. Three days with levels above the air quality standard occurred at Traralgon in the Latrobe Valley. These were below the goal of no more than five days having levels above the standard.

The causes for exceedences included bushfires and/or planned burning (three days at Traralgon). In the total of eight days exceeding the standard in the Port Phillip region, five days were attributed to local dust and three days to urban sources, typically from vehicle traffic or domestic wood heaters.

The 24-hour advisory reporting standard for particles (as $PM_{2.5}$) was not exceeded at Footscray but was exceeded at Alphington in the Port Phillip region on three days. Urban sources, typically from vehicle traffic or domestic wood heaters, were identified as the likely causes on all three days. The annual reporting standard for $PM_{2.5}$ was met at both Alphington and Footscray.

The goals for ozone (O_3) were met at all stations under typical summer smog formation conditions where sufficient air monitoring data was available. Lack of air monitoring data due to technical issues prevented assessment during typical summer smog formation conditions at Melton and Point Henry.

Monitoring in 2010 showed that the AAQ NEPM goals and standards were met for carbon monoxide (CO), nitrogen dioxide (NO_2) and sulfur dioxide (SO_2).

Data from relevant monitoring stations are presented in tabular form below to enable an evaluation of whether the NEPM standards and goal were met at each monitoring station. The standards, with accompanying definitions and explanations, appear in Schedule 2 of the NEPM. For averaging times shorter than one year, compliance with the NEPM goal is achieved if the standard for a pollutant is exceeded on no more than a specified number of days in a calendar year (one day per year for all pollutants except PM_{10}, which may be exceeded no more than five days per year) and at least 75% of data is captured in each quarter.

The data are presented in greater detail in Victoria's *Monitoring Report 2010 – Compliance with the National Environment Protection (Ambient Air Quality) Measure*, which can be found at epanote2.epa.vic.gov.au/EPA/publications.nsf/PubDocsLU/1390?OpenDocument. The EPA also produces an annual air quality summary and data tables on its website: www.epa.vic.gov.au/air/monitoring.

The monitoring plan for Victoria is available from epanote2.epa.vic.gov.au/EPA/Publications.nsf/PubDocsLU/828?OpenDocument.

1 Ambient Air Quality NEPM Monitoring Plan Victoria (EPA publication 763), available from www.epa.vic.gov.au, under 'Resources > Publications online'.

2 Environment Report - Air monitoring in Brooklyn November 2009 to October 2010 from www.epa.vic.gov.au, under 'Resources > Publications online'.

CO Carbon monoxide

(NEPM standard 8 hours = 9.0ppm)

Station	Number of exceedences	NEPM goal compliance
Port Phillip region		
Alphington	0	met
Geelong South	0	met
Richmond	0	met

NO_2 Nitrogen dioxide

(NEPM standard: 1 hour = 0.12ppm, 1 year = 0.03ppm)

Station	1 Hour		1 Year	
	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Port Phillip region				
Alphington	0	met	0.009	met
Brighton	0	met	0.008	met
Footscray	0	met	0.011	met
Geelong South	0	met	0.006	met
Point Cook	0	met	0.005	met
Latrobe Valley region				
Traralgon	0	met	0.007	met

O_3 Ozone

(NEPM standard: 1 hour = 0.10ppm, 4 hours = 0.08ppm)

Station	1 Hour		4 Hours	
	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance
Port Phillip region				
Alphington	0	ND	0	ND
Brighton	0	ND	0	ND
Dandenong	0	met	0	met
Footscray	0	met	0	met
Geelong South	0	met	0	met
Melton	0	ND	0	ND
Mooroolbark	0	met	0	met
Point Cook	0	met	0	met
Point Henry	0	ND	0	ND
Latrobe Valley Region				
Traralgon	0	met	0	met

Compliance was not demonstrated (ND) at Alphington (Q3), Brighton (Q3), Melton (Q4) and Point Henry (Q3, Q4) due to technical problems with equipment.

SO_2 Sulfur dioxide

(NEPM standard: 1 hour = 0.20ppm, 1 day = 0.08ppm, 1 year = 0.02ppm)

Station	1 hour		1 day		1 year	
	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Port Phillip region						
Alphington	0	met	0	met	<0.001	met
Altona North	0	met	0	met	0.002	met
Geelong South	0	met	0	met	0.001	met
Latrobe Valley region						
Traralgon	0	met	0	met	0.002	met

Pb Lead

(NEPM standard 1 year = 0.50µg/m^3)

Following the phasing out of leaded petrol, concentrations at the peak station, Collingwood, were below the level specified for discontinuing monitoring[3]. Monitoring of lead in Melbourne ceased at the end of 2004. All other regions meet screening criteria as set out in the monitoring plan and all regions are assessed as complying with the standard and goal.

PM_{10} Particles as PM_{10}

(NEPM standard 1 day = 50µg/m^3)

Station	Number of exceedences	NEPM goal compliance
Port Phillip region		
Alphington	0	met
Brighton	0	met
Dandenong	0	met
Footscray	4	met
Geelong South	1	met
Mooroolbark	3	met
Richmond	0	met
Latrobe Valley region		
Traralgon	3	met

$PM_{2.5}$ Particles as $PM_{2.5}$

(NEPM standard 1 day = 25µg/m^3, 1 year = 8µg/m^3)

Station	1 year	
	Number of exceedences	Annual average (mg/m^3)
Port Phillip region		
Alphington	3	7.3
Footscray	0	6.8

3 National Environment Protection (Ambient Air Quality) Measure Technical Paper No. 9, Lead Monitoring, available from www.ephc.gov.au

Queensland

Report to the NEPC on the implementation of the National Environment Protection (Ambient Air Quality) Measure for Queensland by the Hon. Vicky Darling MP, Minister for Environment, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislation, regulatory and administrative framework

In relation to ambient air quality in Mount Isa, the Queensland Government passed legislation in May 2008 which requires all Special Agreement Act mine operations, including smelter operations in Mount Isa, to come under contemporary environmental controls under the *Environmental Protection Act 1994* (EP Act). The legislation provided for a three-year transition to the EP Act. In May 2011 the smelter operator made an application to convert their Transitional Authority to an Environmental Authority under the EP Act. The department is assessing the Environmental Authority application against the standard criteria in the EP Act, which require that any applicable Commonwealth plans, standards, agreements or requirements, including those relating to National Environmental Protection Measures, are considered.

Implementation issues arising

Implementation issues arising during the 2010–11 reporting period included:

- Monitoring was conducted in six of the 10 regions identified in the monitoring plan. Thirteen of the 19 sites nominated in the monitoring plan, and three additional reporting sites, were operational in 2010–11. Monitoring at two of the six remaining sites concluded prior to 2010–11 due to completion of campaign monitoring or site closure following termination of the monitoring site lease by the property owner. Other monitoring priorities have delayed implementation of monitoring in four regional centres.
- For the first time, this report contains data for the Gold Coast sub-region of South-East Queensland following the establishment of a new campaign monitoring site at Arundel in October 2010.
- Collection of $PM_{2.5}$ data using Tapered Element Oscillating Microbalance (TEOM) instrumentation continued during 2010 at three sites in South-East Queensland (Rocklea, Springwood and Arundel) and one site in Gladstone (South Gladstone). $PM_{2.5}$ monitoring using a reference sampler was also conducted at Rocklea for the entire year to gather data for the $PM_{2.5}$ Equivalence Program.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM has provided the mechanism for a staged expansion of DERM's ambient air monitoring network throughout Queensland. Queensland remains committed to implementing the actions contained in its Ambient Air Quality Monitoring Plan for Queensland. Community concerns about air quality in Gladstone and Mt Isa resulted in a reprioritising of monitoring plans, with resources directed to those areas. On the basis of approved screening criteria, campaign monitoring of nitrogen dioxide and ozone in some smaller regional centres listed in the monitoring plan will now not be necessary. It is reasonable to expect that levels of these pollutants will be consistently below the relevant NEPM standards in smaller regional centres.

Queensland's monitoring results for 2010 indicate that the goal of the AAQ NEPM — to achieve by 2008 the standards to the extent specified — was met for all pollutants at all monitoring stations where there was sufficient data capture to assess compliance, except for sulfur dioxide in Mount Isa.

While industry in Mount Isa has significantly reduced overall emissions of sulfur dioxide to the atmosphere in recent years (through capture and conversion to sulfuric acid), compliance with the 1 hour NEPM sulfur dioxide standard was unlikely to be achieved under previous regulatory controls. In May 2008 the Queensland Government amended the legislation regulating emissions from the Mount Isa smelters to bring these operations under the stricter controls contained within the EP Act. In May 2011 the smelter operator made an application to convert their Transitional Authority to an Environmental Authority under the EP Act. The department is assessing the Environmental Authority application against the standard criteria in the EP Act, which require that any applicable Commonwealth plans, standards, agreements or requirements, including those relating to National Environmental Protection Measures, are considered.

There were no ozone exceedances recorded in 2010. The South-East Queensland Regional Plan 2009–2031 provides a sustainable growth management strategy for the South-East Queensland region to the year 2031. Under the plan, urban settlement and the use of transport, industry, energy and natural resources will be managed to minimise adverse impacts on air quality. Significant investment in public transport infrastructure and alleviation of traffic congestion under the South-East Queensland Infrastructure Plan and Program 2010–2031 will support the management of future air quality impacts from rising motor vehicle use.

While there were no exceedences of the $PM_{2.5}$ 24-hour advisory reporting standard during 2010, infrequent but high $PM_{2.5}$ episodes resulting from hazard-reduction burning programs, combined with $PM_{2.5}$ emissions from urban sources such as motor vehicles, led to an exceedance of the annual average $PM_{2.5}$ advisory reporting standard of 8µg/m^3 at Rocklea in South-East Queensland. With increasing motor vehicle use, compliance with the $PM_{2.5}$ advisory standards, particularly the annual average criterion, in the longer term may be difficult to achieve in urban areas like South-East Queensland.

Data from relevant monitoring stations are presented in tabular form below to enable an evaluation of whether the NEPM standards and goal were met at each monitoring station. The standards, with accompanying definitions and explanations, appear in Schedule 2 of the NEPM. For averaging times shorter than one year, compliance with the NEPM goal is achieved if the standard for a pollutant is exceeded on no more than a specified number of days in a calendar year (one day per year for all pollutants except PM_{10}, which may be exceeded no more than five days per year) and at least 75% of data is captured in each quarter.

The data are presented in greater detail in www.derm.qld.gov.au/services_resources/item_list.php?series_id=203747

The monitoring plan for Queensland is available from www.derm.qld.gov.au/register/p00579aa.pdf

CO Carbon monoxide

(NEPM standard 8 hours = 9.0ppm)

Station	Number of exceedances	NEPM goal compliance
South-East Queensland		
Brisbane sub-region		
Woolloongabba	0	met
Toowoomba		
North Toowoomba	0	not demonstrated[a]

[a] Not demonstrated due to less than 75% of data in one or more quarters.

NO_2 Nitrogen dioxide

(NEPM standard: 1 hour = 0.12ppm, 1 year = 0.03ppm)

Station	1 hour		1 year	
	Number of exceedances	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
South-East Queensland				
North Coast sub-region				
Mountain Creek	0	met	0.005	met
Brisbane sub-region				
Deception Bay	0	met	0.005	met
Rocklea	0	met	0.007	met
Springwood	0	met	0.007	met
Gold Coast sub-region				
Arundel	0	not demonstrated[a]	Insufficient data[b]	not demonstrated[a]
Ipswich sub-region				
Flinders View	0	met	0.008	met
Toowoomba				
North Toowoomba	0	not demonstrated[a]	0.005	not demonstrated[a]
Gladstone				
South Gladstone	0	met	0.006	met
Townsville				
Pimlico	0	met	0.005	met

[a] Not demonstrated due to less than 75% of data in one or more quarters.

[b] Site established in October 2010.

O_3 Ozone

(NEPM standard: 1 hour = 0.10ppm, 4 hours = 0.08ppm)

Station	1 hour		4 hours	
	Number of exceedances	NEPM goal compliance	Number of exceedances	NEPM goal compliance
South-East Queensland				
North Coast sub-region				
Mountain Creek	0	met	0	met
Brisbane sub-region				
Deception Bay	0	met	0	met
Rocklea	0	met	0	met
Springwood	0	met	0	met
Gold Coast sub-region				
Arundel	0	not demonstrated[a]	0	not demonstrated[a]
Ipswich sub-region				
Flinders View	0	met	0	met
Toowoomba				
North Toowoomba	0	not demonstrated[a]	0	not demonstrated[a]
Gladstone				
Central Gladstone	0	met	0	met
Townsville				
Pimlico	0	met	0	met

[a] Not demonstrated due to less than 75% of data in one or more quarters.

SO_2 Sulfur dioxide

(NEPM standard: 1 hour = 0.20ppm, 1 day = 0.08ppm, 1 year = 0.02ppm)

Station	1 hour		1 day		1 year	
	Number of exceedances	NEPM goal compliance	Number of exceedances	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
South-East Queensland						
Brisbane sub-region						
Springwood	0	met	0	met	0.001	met
Ipswich sub-region						
Flinders View	0	met	0	met	0.001	met
Gladstone						
South Gladstone	0	met	0	met	0.002	met
Townsville						
Pimlico	0	not demonstrated[a]	0	not demonstrated[a]	0.000	not demonstrated[a]
Stuart	0	not demonstrated[a]	0	not demonstrated[a]	0.000	not demonstrated[a]
Mount Isa						
Menzies	19	not met	1	met	0.005	met
The Gap	19	not met	0	met	0.003	met

[a] Not demonstrated due to less than 75% of data in one or more quarters.

Pb Lead

(NEPM standard 1 year = 0.50µg/m^3)

Station	Annual average (µg/m^3)	NEPM goal compliance
Townsville		
North Ward	0.07	met
Mount Isa		
The Gap	0.13	met

PM_{10} Particles as PM_{10}

(NEPM standard 1 day = 50µg/m^3)

Station	Number of exceedances	NEPM goal compliance
South-East Queensland		
North Coast sub-region		
Mountain Creek	0	met
Brisbane sub-region		
Rocklea	0	met
Springwood	0	met
Gold Coast sub-region		
Arundel	0	not demonstrated[a]
Ipswich sub-region		
Flinders View	0	Met
Toowoomba		
North Toowoomba	0	not demonstrated[a]
Gladstone		
South Gladstone	0	not demonstrated[a]
Mackay		
West Mackay	0	not demonstrated[a]
Townsville		
Pimlico	0	not demonstrated[a]
Mount Isa		
The Gap	0	not demonstrated[a]

[a] Not demonstrated due to less than 75% of data in one or more quarters.

$PM_{2.5}$ Particles as $PM_{2.5}$

(NEPM standard 1 day = 25µg/m^3, 1 year = 8µg/m^3)

Station	1 year	
	Number of exceedances	Annual average (mg/m^3)
South-East Queensland		
Brisbane sub-region		
Rocklea[a]	0	5.5
Rocklea[b]	1	8.2
Springwood[c]	0	4.4
Gold Coast sub-region		
Arundel	0	insufficient data[d]
Gladstone		
South Gladstone[b]	0	6.2

[a] Monitoring by reference method (1 in 3 days).

[b] Monitoring by TEOM instrumentation fitted with Filter Dynamics Measurement System (FDMS).

[c] Monitoring by TEOM instrumentation in accordance with Technical Paper on Monitoring for particles as $PM_{2.5}$.

[d] Site established in October 2010.

Western Australia

Report to the NEPC on the implementation of the National Environment Protection (Ambient Air Quality) Measure for Western Australia by the Hon. Bill Marmion MLA, Minister for Environment, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Implementation activities may be viewed in two categories:

- those activities related to implementing the monitoring and reporting protocol of the Ambient Air Quality NEPM (AAQ NEPM), plus other activities associated with the 'Future Actions' listed in the AAQ NEPM Impact Statement
- those activities within Western Australia (including regulatory activities) designed to ensure that the air quality is in compliance with the AAQ NEPM goal for each of the six pollutants within the specified ten-year period.

In the first category, the Department of Environment and Conservation (DEC) has:

- an air quality laboratory which was fitted out and commissioned during the previous year, providing a centralised facility for servicing, testing and regular maintenance of air quality instruments used throughout the air quality network. The facility is a vital part of a general network upgrade as DEC progresses toward NATA certification.
- continued to liaise with local governments and other organisations as required to facilitate the positioning and repositioning of fixed ambient monitoring stations
- made substantial progress towards meeting its goal of receiving NATA accreditation, with all infrastructure upgrades and systems development now complete
- maintained monitoring of $PM_{2.5}$ to facilitate the review and potential development of compliance AAQ NEPM standards for this pollutant in the future
- contributed to the AAQ NEPM review team and the Standards Setting working group.

In the second category, DEC has:

- continued to implement the Perth Air Quality Management Plan (Perth AQMP). The Perth AQMP is a whole-of-government plan aimed at improving and maintaining Perth's air quality. Implementation of a number of priority actions within the Perth AQMP has commenced in addition to a number of ongoing programs. There continues to be a major focus on managing emissions from motor vehicles and wood heaters, via the CleanRun and Halt the Haze programs, respectively. DEC continues to investigate and trial a number of monitoring technologies.
- maintained community access to regularly updated air quality monitoring data via DEC's webpage www.dec.wa.gov.au/content/view/3420/1576/

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM has provided a focus for air quality issues and guided all jurisdictions to work towards nationally consistent monitoring techniques and reporting. This has culminated in the development and approval of monitoring plans for all jurisdictions, including Western Australia. The AAQ NEPM standards and goals provide an additional impetus for the implementation of strategies and a useful benchmark against which air quality management can be assessed.

Air quality management initiatives implemented in Western Australia have placed the state in a favourable position to achieve compliance with the AAQ NEPM goals in most circumstances. Sulfur dioxide and lead have been effectively controlled by regulatory means. Carbon monoxide and nitrogen dioxide concentrations comply with the AAQ NEPM standards by comfortable margins due to improved fuel quality standards, national vehicle emissions standards and control of other sources. Ozone and PM_{10} remain pollutants of concern in the Perth region and are the focus of attention within the Perth AQMP, particularly the management of domestic PM_{10} sources. In other regions, PM_{10} is the pollutant of most significance with respect to the AAQ NEPM standards.

The data presented below shows that Western Australia has met the AAQ NEPM goals for all the pollutants in 2010 except for PM_{10} in Collie. The exceedences were as a result of smoke-haze events, largely from prescribed burning activities.

Data from relevant monitoring stations are presented in tabular form below to enable an evaluation of whether the NEPM standards and goal were met at each monitoring station. The standards, with accompanying definitions and explanations, appear in Schedule 2 of the AAQ NEPM. For averaging times shorter than one year, compliance with the AAQ NEPM goal is achieved if the standard for a pollutant is exceeded on no more than a specified number of days in a calendar year (one day per year for all pollutants except PM_{10}, which may be exceeded no more than five days per year) and at least 75% of data is captured in each quarter.

The data are presented in greater detail in *2010 Western Australia Air Monitoring Report*, available on our web site at www.dec.wa.gov.au/content/view/3429/1680/

The monitoring plan for Western Australia is available from www.dec.wa.gov.au/content/view/3429/1680/1/9/

CO Carbon monoxide

(NEPM standard 8 hours = 9.0ppm)

Station	Number of exceedences	NEPM goal compliance
Perth		
North East Metro	0	met
North Metro	0	met
South East Metro	0	met

NO_2 Nitrogen dioxide

(NEPM standard: 1 hour = 0.12ppm, 1 year = 0.03ppm)

Station	1 hour		1 year	
	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Perth				
North Metro	0	met	0.007	met
North East Metro	0	met	0.007	met
Outer North Coast	0	met	0.004	met
South Coast	0	met	0.005	met
Outer East Rural	0	met	0.002	met
South East Metro	0	met	0.008	met
Inner West Coast	0	met	0.006	met

O_3 Ozone

(NEPM standard: 1 hour = 0.10ppm, 4 hours = 0.08ppm)

Station	1 hour		4 hours	
	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance
Perth				
North East Metro	0	met	0	met
Outer North Coast	0	met	0	met
South Coast	0	met	0	met
Outer East Rural	0	met	0	met
South East Metro	0	met	0	met
Inner West Coast	0	met	0	met

SO_2 Sulfur dioxide

(NEPM standard: 1 hour = 0.20ppm, 1 day = 0.08ppm, 1 year = 0.02ppm)

Station	1 hour		1 day		1 year	
	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Perth						
South Metro	0	met	0	met	0.001	met
South Coast	0	met	0	met	0.001	met
South East Metro	0	met	0	met	0.001	met

Pb Lead

(NEPM standard 1 year = 0.50µg/m^3)

From 1995, lead levels at Queens Building in the Perth central business district have been below 60% of the 0.50µg/m^3 annual NEPM standard. In 2001, the average lead level in Perth was 0.022µg/m^3, less than 5% of the NEPM standard. Due to these low levels, a performance monitoring station for lead was decommissioned in 2001.

PM_{10} Particles as PM_{10}

(NEPM standard 1 day = 50µg/m^3)

Station	Number of exceedences	NEPM goal compliance
Perth		
North East Metro	1	met
North Metro	0	met
South East Metro	4	met
Southwest		
Albany	1	met
Bunbury	2	met
Collie	16	not met
Southwest		
Geraldton	4	met

$PM_{2.5}$ Particles as $PM_{2.5}$

(NEPM advisory standard 1 day = 25µg/m^3, 1 year = 8µg/m^3)

Station	1 year	
	Number of exceedences	Annual average (mg/m^3)
Perth		
North East Metro	3	8.2
North Metro	3	8.2
Outer North Coast	3	7.8
South East Metro	2	8.7
Southwest		
Bunbury	7	9.2
Busselton	7	8.5

Relationship between location descriptors and monitoring station location/names

Location descriptor	Station location
North East Metro	Caversham
North Metro	Duncraig
Outer North Coast	Quinns rocks

Location descriptor	Station location
Outer East Rural	Rolling Green
South Coast	Rockingham
Inner West Coast	Swanbourne

South Australia

Report to the NEPC on the implementation of the National Environment Protection (Ambient Air Quality) Measure for South Australia by the Hon. Paul Caica MP, Minister for Environment and Conservation, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Dust monitoring at Whyalla

- The EPA has analysed the PM_{10} data collected at Walls Street and Schultz Reserve and formed the view that weather conditions are a major determinant of PM_{10} levels and by implication the number of times in a year the daily average PM_{10} exceeds 50 mg/m^3. In the current year, exceedences of the standard have decreased and so it is not yet possible to determine if improvements are due to changes in industry practice or simply due to weather alone.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

Air quality in South Australia was generally good during the 2010 reporting year. The following observations were made following analysis of monitoring data for this period:

- For CO the standard and goal were achieved at the Elizabeth Downs monitoring station.
- For NO_2 the 1-hour and 1-year standards and goals were met at all stations.
- For O_3 the 1-hour and 4-hour standards and goals were met at all stations.
- For SO_2 the 1-hour, 1-day and 1-year standards and goals were met at the Adelaide metropolitan station (Northfield). The 1-day and 1-year standards and goals were also met at the Port Pirie Oliver Street station. There were a number of exceedences of the 1-hour standard at Port Pirie so the 1-hour goal was not achieved.
- For Pb the goal was achieved at both monitoring stations in Port Pirie.
- For PM_{10} there were exceedences of the standard at all South Australian monitoring stations but were within the five exceedence days allowed per year. Therefore the goal was achieved at all stations in the Adelaide metropolitan and Spencer regions.
- For $PM_{2.5}$ the advisory reporting standards were met.

It is worth noting that rainfall in 2010 was higher than in previous years, which would have impacted on pollutant concentrations, especially particle concentrations.

Data from relevant monitoring stations are presented in tabular form below to enable an evaluation of whether the NEPM standards and goal were met at each monitoring station. The standards, with accompanying definitions and explanations, appear in Schedule 2 of the NEPM. For averaging times shorter than one year, compliance with the NEPM goal is achieved if the standard for a pollutant is exceeded on no more than a specified number of days in a calendar year (one day per year for all pollutants except PM_{10}, which may be exceeded no more than five days per year) and at least 75% of data is captured in each quarter.

The data are presented in greater detail in the *Air Monitoring Report for South Australia, Compliance with the National Environment Protection (Ambient Air Quality) Measure*, which is available from www.ephc.gov.au/taxonomy/term/34

The monitoring plan for South Australia is available from www.epa.sa.gov.au/xstd_files/Air/Report/airnepm.pdf

CO Carbon monoxide

(NEPM standard 8 hours = 9.0ppm)

Station	Number of exceedences	NEPM goal compliance
Adelaide		
ELI01 – Elizabeth Downs	0	met

NO_2 Nitrogen dioxide

(NEPM standard: 1 hour = 0.12ppm, 1 year = 0.03ppm)

Station	1 Hour		1 Year	
	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Adelaide				
ELI01 – Elizabeth Downs	0	met	0.004	met
NOR01 – Northfield	0	met	0.007	met
NET01 – Netley	0	met	0.008	met
KEN01 – Kensington Gardens	0	met	0.004	met
CHD01 – Christie Downs	0	met	0.005	met

O_3 Ozone

(NEPM standard: 1 hour = 0.10ppm, 4 hours = 0.08ppm)

Station	1 Hour		4 Hours	
	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance
Adelaide				
ELI01 – Elizabeth Downs	0	met	0	met
NOR01 – Northfield	0	met	0	met
NET01 – Netley	0	met	0	met
KEN01 – Kensington Gardens	0	met	0	met
CHD01 – Christie Downs	0	met	0	met

SO_2 Sulfur dioxide

(NEPM standard: 1 hour = 0.20ppm, 1 day = 0.08ppm, 1 year = 0.02ppm)

Station	1 hour		1 day		1 year	
	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Adelaide						
NOR01 – Northfield	0	met	0	met	0.000	met
Spencer						
PTP01 – Pt Pirie Oliver Street	35	not met	0	met	0.007	met

Pb Lead

(NEPM standard 1 year = 0.50µg/m^3)

Station	Annual average (µg/m^3)	NEPM goal compliance
Spencer		
PTP01 – Pt Pirie Oliver Street	0.23	met
PTP05 – Pt Pirie Frank Green Park	0.19	met

PM_{10} Particles as PM_{10}

(NEPM standard 1 day = 50µg/m^3)

Station	Number of exceedences	NEPM goal compliance
Adelaide		
ELI01 – Elizabeth Downs	1	met
NET01 – Netley	3	met
CHD01 – Christie Downs	5	met
Spencer		
WHY07 – Whyalla Schultz Park	3	met
PTP01 – Pt Pirie Oliver Street	3	met

$PM_{2.5}$ Particles as $PM_{2.5}$

(NEPM standard 1 day = 25µg/m^3, 1 year = 8µg/m^3)

Station	1 year	
	Number of exceedences	Annual average (mg/m^3)
Adelaide		
NET01 – Netley	0	7.5

Tasmania

Report to the NEPC on the implementation of the National Environment Protection (Ambient Air Quality) Measure for Tasmania by the Hon. Brian Wightman MP, Minister for Environment, Parks and Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In Tasmania the National Environment Protection (Ambient Air Quality) Measure (Air NEPM) is implemented primarily through the EPA Division of the Department of Primary Industries, Parks, Water and the Environment (DPIPWE). The enabling legislation for the Air NEPM process is the *Environmental Management and Pollution Control Act 1994* (EMPCA).

National Environment Protection Measures are adopted as state policies under the *State Policies and Projects Act 1993*. The Air NEPM is put into effect under the Environment Protection Policy (Air Quality) 2004, the Environmental Management and Pollution Control (Distributed Atmospheric Emissions) Regulations 2007 and the Tasmanian Air Quality Strategy 2006.

The EPP (Air Quality) or Air Policy, which came into force in June 2005, includes specific reference to meeting the requirements of the Air NEPM through regulation of industry and management of diffuse sources like planned burning activities. The policy is available on the EPA Division's website at www.environment.tas.gov.au

As required by the EPP (Air Quality), Tasmania's Air Quality Strategy was published in June 2006. The five-year strategy assesses compliance with the Air NEPM standards in Tasmania and specifies strategies for achieving compliance where standards are not being met. The strategy addresses the management of air quality in Tasmania and includes programs to further reduce domestic and industrial emissions of respirable particles in critical regions of the state.

Wood smoke continues to be the primary air quality issue for Tasmania. The Environmental Management and Pollution Control (Distributed Atmospheric Emissions) Regulations 2007, gazetted in August 2007, provide a legal framework for programs to reduce the emission of domestic wood smoke, through controls on the import, sale and installation of wood heaters, making the emission of excessive smoke from chimneys and smokestacks an offence and restricting backyard burning on suburban allotments.

The Tasmanian Government has continued to upgrade facilities to monitor ambient levels of $PM_{2.5}$ and PM_{10} particles as required by the amendment to the Air NEPM (May 2003). The Tasmanian air monitoring program operates under an ISO:17025 compliant Quality System and holds NATA accreditation for the daily measurement of $PM_{2.5}$ and PM_{10} using instruments and methods prescribed in the Air NEPM.

Work towards establishing a NEPM air quality monitoring station at Devonport was progressed during the 2010–11 fiscal year. It is anticipated that a NEPM station at Devonport will be commissioned in late 2011.

As previously reported, the EPA Division has established a non-NEPM regional online air quality monitoring network known as the Base-Line Air Network of EPA Tasmania (BLANkET). The stations comprising this network are equipped with optical particle monitors and are located in smaller regional centres whose population is below the threshold set for air monitoring under the Air NEPM. During 2010–11, this network was increased from 15 to 19 stations. Data from the BLANkET network have proved to be a valuable resource for understanding smoke movement and dispersal in the greater Tasmanian airshed, and estimating rural population exposure to smoke from planned burns, domestic wood heaters and bushfires.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The Air NEPM has been very effective in improving ambient air quality in Tasmania, by contributing to a community awareness of air quality issues in populated areas and supporting programs aimed at reducing wood smoke pollution during winter. This has been particularly effective in Launceston, where a significant reduction in the number of wood heaters, and improved community cooperation has led to a continuing improvement in winter air quality. 2010 was the second consecutive year where the $50\mu g/m^3$ 24-hour PM_{10} standard was not exceeded, and the fourth year that the PM_{10} concentration has met the NEPM goal of no more than five exceedences/year.

The number of exceedences of the $PM_{2.5}$ advisory reporting standard at Launceston has continued to decline from 35 in 2006 to 12 in 2009, and to 11 in 2010. The 2010 annual average $PM_{2.5}$ concentration of $8.3\mu g/m^3$ was marginally higher than the $7.5\mu g/m^3$ measured in 2009 and did not meet the annual average advisory standard of less than $8\mu g/m^3$.

There was a single exceedence of the 24-hour PM_{10} standard of $50\mu g/m^3$ observed in Hobart during the calendar year 2010. The 24-hour $PM_{2.5}$ concentration exceeded the $25\mu g/m^3$ advisory reporting standard on two days, compared with four in 2009, nine in 2008 and seven in 2007. The annual average $PM_{2.5}$ concentration was $7.1\mu g/m^3$. This was identical to the value from the previous year, and slightly less than the annual averages of $7.3\mu g/m^3$ for 2008 and $7.6\mu g/m^3$ for 2007.

Data from relevant monitoring stations are presented in tabular form below to enable an evaluation of whether the NEPM standards and goal were met at each monitoring station. The standards, with accompanying definitions and explanations, appear in Schedule 2 of the NEPM. For averaging times shorter than one year, compliance with the NEPM goal is achieved if the standard for a pollutant is exceeded on no more than a specified number of days in a calendar year (one day per year for all pollutants except PM_{10}, which may be exceeded no more than five days per year) and at least 75% of data is captured in each quarter.

The data are presented in greater detail in *Air Monitoring Report 2010, Compliance with the National Environment Protection (Ambient Air Quality) Measure.*

The monitoring plan for Tasmania is available from www.environment.tas.gov.au

CO Carbon monoxide

(NEPM standard 8 hours = 9.0ppm)

Station	Number of exceedences	NEPM goal compliance
Hobart		
Hobart CBD	Not monitored in 2010	Monitoring commenced February 2011

NO_2 Nitrogen dioxide

(NEPM standard: 1 hour = 0.12ppm, 1 year = 0.03ppm)

Station	1 Hour		1 Year	
	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Not monitored in Tasmania	-		-	

O_3 Ozone

(NEPM standard: 1 hour = 0.10ppm, 4 hours = 0.08ppm)

Station	1 Hour		4 Hours	
	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance
Not monitored in Tasmania	-		-	

SO_2 Sulfur dioxide

(NEPM standard: 1 hour = 0.20ppm, 1 day = 0.08ppm, 1 year = 0.02ppm)

Station	1 hour		1 day		1 year	
	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Not monitored in Tasmania	-		-		-	

Pb Lead

(NEPM standard 1 year = 0.50µg/m^3)

Station	Annual average (µg/m^3)	NEPM goal compliance
Not monitored in Tasmania since 1998	-	

PM_{10} Particles as PM_{10}

(NEPM standard 1 day = 50 µg/m^3)

Station	Number of exceedences	NEPM goal compliance
Hobart		
Metro – New Town	1	met
Launceston		
Metro – Ti Tree Bend	0	met
Devonport		
Not yet operational	-	-

$PM_{2.5}$ Particles as $PM_{2.5}$

(NEPM standard 1 day = 25µg/m^3, 1 year = 8µg/m^3)

Station	1 year	
	Number of exceedences	Annual average (mg/m^3)
Hobart		
Metro – New Town	2	7.1
Launceston		
Metro – Ti Tree Bend	11	8.3
Devonport		
Not yet operational	-	-

Australian Capital Territory

Report to the NEPC on the implementation of the National Environment Protection (Ambient Air Quality) Measure for the Australian Capital Territory by Mr Simon Corbell MLA, Minister for the Environment and Sustainable Development, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

The Environment and Sustainable Development Directorate (ESDD) has the responsibility for the administration of the National Environment Protection Measure for Ambient Air Quality (the NEPM).

Health Protection Services (HPS), Health Directorate, operate the ACT Government's ambient air monitoring network. In accordance with clause 12 of the NEPM, HPS are National Association of Testing Authorities accredited.

Implementation issues arising

The ACT's population has passed the threshold for a second NEPM station. HPS in conjunction with ESDD are working on securing resources necessary to establish this station. To expedite the process, HPS have already started the preliminary planning work to ensure the site is appropriately sited for population exposure purposes.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The ACT is making steady progress towards achieving the goal of the NEPM, which is to achieve the standards specified in Schedule 2.

Historical monitoring indicates that the only NEPM pollutant of concern in the Canberra airshed is particulate matter, which increases during winter because of emissions from domestic wood heaters. In more recent years, exceedences of the particulate matter standard have also been recorded from dust storms and smoke from controlled burns.

Unfortunately compliance was 'not demonstrated' for NO_2 at Civic and Monash, O_3 at Monash, and PM_{10} at Civic because of less than 75% data availability in one or more quarters. These pollutants are not of concern for the ACT airshed with levels of NO_2 and O_3 less than 33% and 70% of standards respectively.

In relation to PM_{10} and $PM_{2.5}$ it is pleasing to note that there were no exceedences of either standard because of wood heater emissions, although monitoring clearly shows that levels increase during the winter months. The two exceedences of the $PM_{2.5}$ advisory reporting standard were because of smoke coming into the ACT airshed from controlled burns in NSW.

The ACT Government acknowledges that wood smoke is a problem and is working towards addressing the issue in an informed and measured manner to ensure a satisfactory outcome for all Canberrans.

It will continue to implement an integrated program to address wood smoke. This will involve public education and enforcement activities, the licensing of firewood merchants, the implementation of the 'Don't Burn Tonight Campaign' and the ongoing implementation of the Wood Heater Replacement Program.

The ACT will also work with the Commonwealth and other jurisdictions at a national level through the Standing Council on Environment and Water to progress actions to improve air quality.

Data from relevant monitoring stations are presented in tabular form below to enable an evaluation of whether the NEPM standards and goal were met at each monitoring station. The standards, with accompanying definitions and explanations, appear in Schedule 2 of the NEPM. For averaging times shorter than one year, compliance with the NEPM goal is achieved if the standard for a pollutant is exceeded on no more than a specified number of days in a calendar year (one day per year for all pollutants except PM_{10}, which may be exceeded no more than five days per year) and at least 75% of data is captured in each quarter.

The data are presented in greater detail in the *ACT Air Quality Report 2010*, which is available from: www.environment.act.gov.au/?a=198473

CO Carbon monoxide

(NEPM standard 8 hours = 9.0 parts per million (ppm)

Station	Number of exceedences	NEPM goal compliance
Canberra		
Civic	0	met
Monash	0	met

NO_2 Nitrogen dioxide

(NEPM standard: 1 hour = 0.12ppm, 1 year = 0.03ppm)

Station	1 Hour		1 Year	
	Number of exceedences	NEPM goal compliance)	Annual average (ppm)	NEPM goal compliance
Canberra				
Civic	0	not demonstrated	0.010	not demonstrated
Monash	0	not demonstrated	0.006	not demonstrated

O_3 Ozone

(NEPM standard: 1 hour = 0.10ppm, 4 hours = 0.08ppm)

Station	1 Hour		4 Hours	
	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance
Canberra				
Civic	0	met	0	met
Monash	0	not demonstrated	0	not demonstrated

PM_{10} Particles as PM_{10}

(NEPM standard 1 day = 50µg/m^3)

Station	Number of exceedences	NEPM goal compliance
Canberra		
Civic	0	not demonstrated
Monash	0	met

$PM_{2.5}$ Particles as $PM_{2.5}$

(NEPM standard 1 day = 25µg/m^3, 1 year = 8µg/m^3)

Station	1 year	
	Number of exceedences	Annual average (mg/m^3)
Canberra		
Monash	2	6.7

Northern Territory

Report to the NEPC on the implementation of the National Environment Protection (Ambient Air Quality) Measure for the Northern Territory by Mr Karl Hampton MLA, Minister for Natural Resources, Environment and Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

- The Department of Natural Resources, Environment, The Arts and Sport (NRETAS) is responsible for implementing the NEPM in the Northern Territory through the provisions of the Waste Management and Pollution Control Act and the *National Environment Protection Council (Northern Territory) Act 2004*.
- The major pollution source in the Darwin airshed is associated with vegetation burning. Although not directly aimed at managing air quality, the primary tool available to government is enforcement of the *Bushfires Act 2009*. This Act has several thrusts including minimising the opportunity of wildfires to propagate by enforcing fire-breaks on properties and promoting early dry season controlled burn-offs via fire authorities. A reduction in particulate pollution is an outcome of strategic fire management to reduce greenhouse gas emissions, such as that occurring in Arnhem Land under the West Arnhem Land Fire Abatement project.
- The Northern Territory's ambient air monitoring program is undertaken in accordance with the approved monitoring plan. The administrative frameworks for implementation of the NEPM are in place. The monitoring plan will be updated when the planned primary station to be located at the Bureau of Meteorology is operational.

Implementation issues arising

Implementation issues arising during the 2010–11 reporting period included:

- As identified in the Northern Territory's monitoring plan, and corroborated by the gas data to date from the new AAQ NEPM station in Palmerston, the primary air pollutant of concern in the Northern Territory is particulate matter from landscape fires. NRETAS is continuing to discuss fire management regimes in the Darwin region with the Northern Territory Bushfires Council.
- Significant downtime was encountered with the Casuarina Tapered Element Oscillating Microbalance (TEOM) inoperable for nearly two months in September 2010. Additionally the Casuarina Partisol instrument underwent repairs from early November 2010 to mid-March 2011.
- As part of an air quality network for the Darwin area, an AAQ NEPM campaign monitoring station has been established near the satellite city of Palmerston. Like the Casuarina station, the operation is under an arrangement with Charles Darwin University, and in addition a dichotomous TEOM to measure particulates PM_{10} and $PM_{2.5}$ also has gas instruments to measure NO, NO_2, NO_X, CO, SO_2 and O_3 but lead will not be determined. NATA certified and validated data from this station starting from 1 January 2011 is included in this report. Because the data is not for the entire calendar year, compliance is classified as not demonstrated.
- A primary long-term Trend Station consistent with the technical requirements of the AAQ NEPM is planned for a more central location in Darwin and will be established around the end of calendar year 2011. This station based in Winnellie at the Bureau of Meteorology will have the same instrumentation as Palmerston for analysing gasses and particulates according to the AAQ NEPM. When operational the Casuarina-based TEOM will be shut down and the Partisol instrument transferred to this primary site and operated on a one day in six basis.
- Monitoring in Alice Springs has not been undertaken; however, the need for monitoring in the region is being considered in the context of establishing a more comprehensive air quality monitoring network in the Territory. As per Darwin, the overriding pollutant of concern in Alice Springs has been particulates caused by vegetation burning and in the winter months by household heating stoves or fireplaces. Natural gas pipelines have been extended throughout the town and more households have switched over to gas heating, thus reducing the problem. Alice Springs has experienced record-breaking rainfall over all of 2010 and part of 2011 which has resulted in significant vegetation growth. When this vegetation dries out and the weather warms, the risk of bushfires is exacerbated.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

- The Ambient Air Quality NEPM has provided a legislative framework to monitor general community exposure to the criteria pollutants in Darwin. The NEPM and the NT Air Quality Monitoring Plan have promoted expansion of the network to include a station in the Palmerston area and another soon to be installed more centrally in Darwin at Winnellie.
- After researching literature and other jurisdiction experiences, NRETAS decided to install dichotomous TEOM instruments for PM_{10} and $PM_{2.5}$ particulate monitoring. This instrument provides near real-time data and provides significant labour savings over gravimetric methods, despite issues with data comparability.

- During the 3rd and 4th quarter overlap, the particulates data collected at Palmerston show remarkable correlation with Casuarina with the only exceptions due to localised events such as nearby vegetation fires. The 2010–11 wet season in Darwin was a record event and the resultant vegetation growth was greater than normal. Bushfires NT have been performing extensive control burns throughout the northern NT but also in the Darwin environs, and some of these events are local and may affect only one station. The data confirms the conclusion that, at least for particulates outside the local events, the Darwin airshed is quite uniform.
- The Casuarina-based TEOM and Partisol instruments suffered considerable downtime in the reporting period. Combining Casuarina Partisol and TEOM PM_{10} data results in very few gaps and indicates a typical number of exceedences for the reporting period. Palmerston station PM_{10} TEOM data for the 3rd and 4th quarters showed four exceedences.
- Casuarina Partisol $PM_{2.5}$ data showed a high 10 advisory exceedences which is atypical for Darwin. The downtime for the Partisol coincided with the wet season where exceedences are rare, suggesting the number of exceedences is accurate. The Palmerston TEOM with $PM_{2.5}$ data for the 3rd and 4th quarters also showed 10 exceedences. The Palmerston station is located adjacent to bushland and the areas around the site have been burnt a number of times late in the reporting year, resulting in the high number of advisory exceedences.
- The annual $PM_{2.5}$ average data indicates that Darwin suffers from fine particulates or smoke that occurs mainly in the dry season and at levels close to and often above the yearly advisory level.
- The Palmerston gas data for CO, O_3 and SO_2 all show data recovery greater than 75% for the 2nd and 3rd quarters except the NO_2 instrument which suffered from condensation from constant elevated relative humidity during the wet season, with less that 75% data capture. Nafion dryers have been installed upstream of all the gas instruments and should eliminate the problem during the next wet season. All gasses showed no exceedences of the standards in the 3rd and 4th quarters and the average and maximum data were usually a small proportion of the standards. The exception was O_3 where the natural background level was a high proportion of the standard but not high enough to cause any exceedences. More detail will be available on the annual NT air quality report, noting that it is based on a calendar year so 2011 data is published in 2012.
- It will take a number of years collecting data from the newly commission Palmerston and the soon to be installed Winnellie station at the Bureau of Meteorology to confirm the general direction of particulate trends in the Darwin airshed.

Data from relevant monitoring stations are presented in tabular form below to enable an evaluation of whether the NEPM standards and goal were met at each monitoring station. The standards, with accompanying definitions and explanations, appear in Schedule 2 of the NEPM. For averaging times shorter than one year, compliance with the NEPM goal is achieved if the standard for a pollutant is exceeded on no more than a specified number of days in a calendar year (one day per year for all pollutants except PM_{10}, which may be exceeded no more than five days per year) and at least 75% of data is captured in each quarter.

The data are presented in greater detail at www.nt.gov.au/nreta/environment/air/index.html (when available). Note that this more detailed report is for the calendar year 2010.

The monitoring plan for the Northern Territory is available from www.nt.gov.au/nreta/environment/air/index.html

CO Carbon monoxide

(NEPM standard 8 hours = 9.0ppm)

Station	Number of exceedences	NEPM goal compliance
Darwin Region		
Palmerston	0	not demonstrated*

* CO data is only available for the 3rd and 4th quarters, thus compliance was not demonstrated.

NO_2 Nitrogen dioxide

(NEPM standard: 1 hour = 0.12ppm, 1 year = 0.03ppm)

Station	1 Hour		1 Year	
	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Darwin Region				
Palmerston	0	not demonstrated*	0.003*	not demonstrated*

* NO_2 data is only available for the 3rd and 4th quarters with 62% and 72% hourly data recovery respectively due to problems with moisture, thus compliance is not demonstrated.

O_3 Ozone

(NEPM standard: 1 hour = 0.10ppm, 4 hours = 0.08ppm)

Station	1 Hour		4 Hours	
	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance
Darwin Region				
Palmerston	0	not demonstrated*	0	not demonstrated*

* O_3 data is only available for the 3rd and 4th quarters, thus compliance is not demonstrated.

SO_2 Sulfur dioxide

(NEPM standard: 1 hour = 0.20ppm, 1 day = 0.08ppm, 1 year = 0.02ppm)

Station	1 hour		1 day		1 year	
	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Darwin Region						
Palmerston	0	not demonstrated*	0	not demonstrated*	0.0008	not demonstrated*

* SO_2 data is only available for the 3rd and 4th quarters, thus compliance is not demonstrated.

PM_{10} Particles as PM_{10}

(NEPM standard 1 day = 50µg/m^3)

Station	Number of exceedences	NEPM goal compliance
Darwin region		
Casuarina TEOM	3*	not demonstrated
Casuarina Partisol	1^	not demonstrated
Palmerston TEOM	4#	not demonstrated

* Casuarina TEOM was inoperative for much of the 1st quarter, thus compliance is not demonstrated.

^ Casuarina Partisol was inoperative for most of the 2nd and 3rd quarters, thus compliance is not demonstrated.

Palmerston TEOM data is only available for the 3rd and 4th quarters, thus compliance is not demonstrated.

$PM_{2.5}$ Particles as $PM_{2.5}$

(NEPM standard 1 day = 25µg/m^3, 1 year = 8µg/m^3)

Station	1 year	
	Number of exceedences	Annual average (mg/m^3)
Darwin Region		
Casuarina Partisol	10*	8.8*
Palmerston TEOM	10^	7.7^

* Casuarina Partisol was inoperative for most of the 2nd and 3rd quarters, thus advisory compliance is not demonstrated and the number is an overestimate (see text above).

^ Palmerston TEOM data is only available for the 3rd and 4th quarters, thus advisory compliance is not demonstrated.

Jurisdictional Reports on the implementation of the

Assessment of Site Contamination NEPM

2010–2011

Commonwealth

Report to the NEPC on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for the Commonwealth by the Hon. Tony Burke MP, Minister for Sustainability, Environment, Water, Population and Communities, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Commonwealth implements the Assessment of Site Contamination NEPM as guidelines under the *National Environment Protection Council Act 1994*. The NEPM is subject to review five years from the date of commencement. The review report was accepted in November 2006 by the National Environment Protection Council (NEPC). The NEPC directed the NEPC Committee to prepare a detailed proposal to initiate a variation to the NEPM based on the recommendations from the review. At its meeting on 2 June 2007, the NEPC agreed to initiate the variation process to ensure that the NEPM remains the premier methodology for the assessment of site contamination in Australia. Work continued on the variation process in 2010–11.

Of those Commonwealth agencies that reported on their activities relevant to the NEPM, eight indicated responsibility for assessment and management of contaminated sites. The responses outlined the agencies' activities in relation to contaminated sites and therefore a requirement for implementation and use of the NEPM. Agencies used a variety of methods to implement the NEPM and ensure ongoing management of land contamination issues, including:

- internal policies, guidelines and manuals that include the NEPM requirements and assist staff and contractors with identification, prioritisation and remediation of contaminated sites
- engaging with the research sector to develop improved understanding about contamination pathways and clean-up technologies
- contamination assessment training for staff
- the use of compliance registers and databases for incident notification.

All agencies except one indicated that their sites were managed in accordance with relevant legislation and that site assessments were conducted in line with the NEPM. In the case of Australia's Antarctic Territories, very low levels of contamination are considered to be ecologically significant and therefore levels are set according to that specific context rather than using the generic ones in the NEPM. Some agencies referenced internal guidelines, procedures and programs that incorporate the NEPM into their general environmental management programs.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

Agencies have been successfully implementing the NEPM and achieving the desired environmental outcomes. They have found the consistent national methodology of the NEPM beneficial for achieving their goals of protecting human health and the environment.

One agency suggested that the effectiveness of the NEPM could be enhanced through development of national guidelines for assessing contaminated sites in pristine or highly protected areas, which could be useful for environmental management of world heritage areas, national heritage areas, national parks and reserves as well as for highly sensitive areas such as the Antarctic. Broadening the accessibility of assessment guidelines was also suggested as a way of improving the administration of the NEPM.

New South Wales

Report to the NEPC on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for New South Wales by the Hon. Robyn Parker MP, Minister for the Environment and Minister for Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

- New South Wales has fulfilled all its obligations under the Assessment of Site Contamination NEPM to date. There is substantial stakeholder compliance with the recommended assessment processes because the requirements are integrated into the pre-existing regulatory framework.
- Written advice outlining the approved NEPM guidelines has been regularly communicated to consultants, accredited auditors, local government, other state government bodies, peak environment groups, peak industry groups and peak organisations of Councils in NSW.
- The list of all guidelines made or approved under section 105 of the *Contaminated Land Management Act 1997* (CLM Act) is available to the public on the Office of Environment and Heritage (OEH), Department of Premier and Cabinet, web site to help increase public accessibility to the guidelines.
- Measures to ensure relevant stakeholders are informed of the NEPM are ongoing.
- OEH verifies that site audits and site audit statements have been undertaken with due regard to the NEPM. As noted above, section 105 of the CLM Act requires the NEPM to be taken into consideration by OEH when making a decision on whether a contaminated site requires regulation under the CLM Act and when conducting performance reviews of accredited contaminated site auditors.
- The NEPM guidelines are generally applied by environmental consultancies in undertaking contaminated site investigation under the planning process.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM leads to increased consistency between jurisdictions and has been advantageous for interactions between OEH and equivalent agencies in other states, territories and the Commonwealth. This process has benefits for all involved parties, as issues relating to assessment of land contamination are consistently managed.

Since its approval as a guideline under section 105 of the CLM Act, the NEPM has been taken into account by OEH, site auditors and consultants when assessing the risks posed by contaminated sites. During the year ending 30 June 2011, OEH finalised 80 assessments under the CLM Act, and accredited site auditors issued 150 audit statements (95 statutory and 55 non-statutory).

There are no legislative requirements for the application of the NEPM to the redevelopment of contaminated sites under land-use planning legislation. While the NEPM is applied in the assessment of redevelopment projects with contamination issues in NSW, OEH is not routinely advised by Councils of redevelopment projects that are managed through local planning processes. Therefore no state-wide data is available on the number of contaminated site assessments where the NEPM guidelines have been applied.

Victoria

Report to the NEPC on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for Victoria by the Hon. Ryan Smith, Minister for Environment and Climate Change, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Victoria has a well-established process for the management of contaminated sites including the environmental auditing system. Therefore, successful implementation of the NEPM required only minor changes to Victoria's existing framework.

In the ten years that the NEPM has been in operation, substantial progress has been made in incorporating the NEPM into statutory instruments and guidelines, particularly through the declaration of the State Environment Protection Policy (SEPP) Prevention and Management of Contamination of Land.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM reinforces an existing framework for the management of contaminated sites in Victoria by providing consistent, consolidated guidance on the assessment of site contamination. Some improvements in the consistency of site assessment have resulted from use of the NEPM. The NEPM is well supported by environmental auditors and others in the site assessment industry, with comments indicating that it is a comprehensive source of guidance.

The NEPM could be more effective if it was expanded to enable the assessment of ecological health risk and contain more guidance on assessing some of the volatile contaminants that are commonly encountered on many sites, particularly former service station sites which are being redeveloped as a result of the rationalisations in the oil industry. These issues are being considered in the current review of the NEPM.

Queensland

Report to the NEPC on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for Queensland by the Hon. Vicky Darling MP, Minister for Environment, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Department of Environment and Resource Management (DERM) is the central administering authority for contaminated land in Queensland. Local government is the assessment manager for the majority of developments, including the separation and direction to DERM of applications that involve contamination issues. In addition, local government plays an important role in notifying DERM of land with potential contamination issues for listing on the Environmental Management Register (EMR).

The following relevant operational data estimates associated with NEPM implementation were collected in the reporting period 2010–2011.

- 88 site assessment and validation reports, many involving multiple sites, were reviewed for compliance with NEPM section 6(13) and (14) prior to statutory decisions regarding Environmental Management Register and Contaminated Land Register (EMR/CLR) status of the subject land including reports submitted under the Third Party Reviewer (TPR system).
- Approximately 22 of these reports were directly audited by DERM. Additional information under notices was sought from the submitters in 15 cases requiring demonstration that the work was conducted using NEPM processes.
- 407 development applications were forwarded to DERM under the Sustainable Planning Act (SP Act) conditions for contaminated land issues relating to material change of use or lot reconfiguration of contaminated or potentially contaminated land. Of these applications, approximately 90 were directly conditioned to manage contamination, and additional site assessment information was sought for the remaining 70 development sites.
- 41 sites were finalised as being adequately assessed according to the NEPM, decontaminated, and removed from the EMR.
- 42 Site Management Plans were issued for development or use of a site, including those that were assessed and partially decontaminated with management of residual contamination for restricted land uses.
- 101 permits were issued for the transport and disposal of contaminated soil in accordance with NEPM section 6(4).
- 65 sites were placed under audit by Third Party Reviewers (TPRs) appointed under DERM's Operational Policy for Third Party Review (TPR) in accordance with Schedule B10 of the NEPM. TPRs independently oversee the work of contaminated land consultants to ensure that a high standard of remediation work is achieved.

Thirteen DERM-appointed TPRs are currently approved for practice in Queensland subject to DERM's requirements, including six auditors accredited in NSW and Victoria. Seven TPRs carry out the majority of site assessment review to ensure standards are in accordance with the NEPM guidance.

The number of appointments of TPRs for individual sites has fallen by 30% compared to the previous financial year. This may, in part, reflect decreased activity in the property market and the deferment of some major development projects which have obtained development approval for up to three years, until the property market improves. There has also be a trend in the final quarter of the year to change or defer previously approved developments as a result of cost and demand pressures and reduce the development size, e.g. reducing development footprint.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM has been adopted as a central reference document for assessment of site contamination in Queensland, supported by Queensland's guidelines on contaminated land. Its use is well established in contaminated land practices, leading to effective and practical site and development outcomes.

The use of the NEPM by contaminated land practitioners is mandated by DERM through the provisions of the Environmental Protection Act 1994 (EP Act) and SP Act and by TPRs in auditing site assessment work. All applications to DERM for statutory decisions about site contamination and altering the status of land on the EMR/CLR must demonstrate compliance with the NEPM. DERM seeks additional information to clarify compliance issues relating to the NEPM when necessary prior to altering the register status of land.

Implementation of the general provisions of the NEPM is limited by the lack of adequate guidance for particular common types of contamination. This includes limited guidance for petroleum hydrocarbon compounds and fragments of cement bonded asbestos that are commonly encountered on contaminated sites.

DERM has continued active participation in the finalisation of the NEPM variation which is due for completion and final NEPC consideration in the

2011–2012 financial year. This work has been assisted by DERM's contribution to the Cooperative Research Centre Contamination Assessment and Remediation of the Environment (CRC CARE) based at the University of South Australia, which has produced detailed guidance on petroleum hydrocarbon contamination. The varied NEPM is expected to provide health-based investigation levels for soil, soil gas and contaminated groundwater for the predominant exposure pathway of hydrocarbon vapour intrusion into buildings.

The NEPM variation has completed the final public consultation phase. Submissions have been assessed and contributions incorporated into the final drafts where appropriate with the results of additional research. The NEPM variation will provide best practice guidance on a range of site assessment issues including revised health-based investigation levels, a new national methodology for derivation of ecological investigation levels, dealing with petroleum hydrocarbon contamination, updated site characterisation technologies and assessing asbestos soil contamination. The guidance will improve assessment and response to potential human health risks and provide a scientific basis for the evaluation of ecological risks from common soil contaminants.

The current NEPM has continued as an effective technical basis for site assessment for contaminated site professionals operating in Queensland. Statutory approval conditions related to development require NEPM adherence. The quality control procedures applied by DERM in internal review of assessment reports involve a review of the practitioner's adherence to the NEPM. Additional information is requested where there is poor reporting and NEPM inconsistency.

Similarly, Queensland-appointed TPRs review compliance with the NEPM by practitioners in assessment work. The acceptance of accredited auditors from other Australian jurisdictions continues to provide an additional check of consistency between Queensland and other Australian jurisdictions. In the reporting period, an estimated 83 land parcels were either removed from the EMR/CLR or made 'fit for use' through the approval of statutory Site Management Plans. This is a significant decrease over the previous financial year and may partly reflect the decrease in property development activity on contaminated sites. This statistic can be distorted by some development sites comprising multiple lots that have not been amalgamated prior to development application. The use of the NEPM played a major role in achieving these outcomes and provided clear guidance for delivery of high quality work by site assessors.

Western Australia

Report to the NEPC on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for Western Australia by the Hon. Bill Marmion MLA, Minister for Environment, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

No new guidelines in the Contaminated Sites Management Series (CSMS) of administrative and technical guidelines were released in 2010–11.

During 2010–11, the Department of Environment and Conservation (DEC) received 149 new reports of known or suspected contaminated sites compared with 197 in 2009–10. In the same period, DEC received 960 environmental reports, including 51 audit reports. DEC officers classified 539 sites under the *Contaminated Sites Act 2003* during 2010–11. As of 30 June 2011, 1842 sites had been classified, of which 427 were listed on the publically-available database on DEC's website.

As of 30 June 2011, there were 26 contaminated sites auditors accredited in WA.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

In Western Australia, the site classification system provides an effective administrative framework for ensuring compliance with the Contaminated Sites Management Series of guidelines and the principles of the NEPM. It is anticipated that the variation of the NEPM will improve the standard and consistency of site assessments and provide increased confidence that human health and the environment are protected.

PART 3 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

- New South Wales has fulfilled all its obligations under the Assessment of Site Contamination NEPM to date. There is substantial stakeholder compliance with the recommended assessment processes because the requirements are integrated into the pre-existing regulatory framework.
- Written advice outlining the approved NEPM guidelines has been regularly communicated to consultants, accredited auditors, local government, other state government bodies, peak environment groups, peak industry groups and peak organisations of Councils in NSW.
- The list of all guidelines made or approved under section 105 of the *Contaminated Land Management Act 1997* (CLM Act) is available to the public on the Office of Environment and Heritage (OEH), Department of Premier and Cabinet, web site to help increase public accessibility to the guidelines.
- Measures to ensure relevant stakeholders are informed of the NEPM are ongoing.
- OEH verifies that site audits and site audit statements have been undertaken with due regard to the NEPM. As noted above, section 105 of the CLM Act requires the NEPM to be taken into consideration by OEH when making a decision on whether a contaminated site requires regulation under the CLM Act and when conducting performance reviews of accredited contaminated site auditors.
- The NEPM guidelines are generally applied by environmental consultancies in undertaking contaminated site investigation under the planning process.

PART 4 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM leads to increased consistency between jurisdictions and has been advantageous for interactions between OEH and equivalent agencies in other states, territories and the Commonwealth. This process has benefits for all involved parties, as issues relating to assessment of land contamination are consistently managed.

Since its approval as a guideline under section 105 of the CLM Act, the NEPM has been taken into account by OEH, site auditors and consultants when assessing the risks posed by contaminated sites. During the year ending 30 June 2011, OEH finalised 80 assessments under the CLM Act, and accredited site auditors issued 150 audit statements (95 statutory and 55 non-statutory).

There are no legislative requirements for the application of the NEPM to the redevelopment of contaminated sites under land-use planning legislation. While the NEPM is applied in the assessment of redevelopment projects with contamination issues in NSW, OEH is not routinely advised by Councils of redevelopment projects that are managed through local planning processes. Therefore no state-wide data is available on the number of contaminated site assessments where the NEPM guidelines have been applied.

South Australia

Report to the NEPC on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for South Australia by the Hon. Paul Caica MP, Minister for Environment and Conservation, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

- The implementation of the guidance provided by the NEPM is ongoing.
- On 1 July 2009, the site contamination provisions of the *Environment Protection Act 1993* (the EP Act) (the Act) commenced in full. These provisions are an important step in the process of managing site contamination in South Australia.
- Site contamination, as defined in the Act, exists when chemical substances have been added to a site through an activity, above background concentrations and the presence of the chemical substances results in an actual or potential harm to human health or the environment, taking into account the land use. For harm to water, land use is not considered.
- The Act provides the EPA with the power to order the person responsible for causing site contamination to assess and, if necessary, remediate the property to ensure that there is appropriate protection for human or environmental health.
- The Act allows for the establishment of recognised experts external to the government for site contamination management, that is, assessment and remediation through a system of accredited auditors. The level of knowledge and understanding and technical competencies required to be demonstrated by auditors in South Australia reflects the guidance provided in the NEPM. Auditors already appointed in an equivalent occupation in other states or territories may seek accreditation in South Australia in accordance with mutual recognition legislation. Twenty seven persons are currently accredited as site contamination auditors in South Australia.
- The SA EPA continues to provide written and verbal guidance and information in regard to site contamination, particularly the NEPM, to planning authorities, environmental consultants, environmental auditors, industry and the community.
- The SA EPA continues to provide in-kind support to the review of the NEPM.
- The principles of the NEPM have been introduced, where appropriate, into licence conditions, guidelines and advice issued by the EPA.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The ongoing implementation of the NEPM should be instrumental in achieving the NEPM purpose and desired environmental outcomes. In South Australia the attainment of this desired outcome has been improved with the commencement of the legislative framework for managing site contamination.

The variation to the NEPM is anticipated to greatly improve its effectiveness.

Tasmania

Report to the NEPC on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for Tasmania by the Hon. Brian Wightman MP, Minister for Environment, Parks and Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Under section 12A of the *State Policies and Projects Act 1993* (the Act), NEPMs are taken to be State Policies immediately after they are made by the National Environment Protection Council. When NEPMs become State Policies, they come within the provisions of section 13 of the Act, including the obligation (section 13(3)) for the Resource Planning and Development Commission to amend planning schemes to remove any inconsistencies with the State Policy. Section 13(1) of the Act provides that the State Policy prevails in the event of any inconsistency.

Tasmania continues to progress the implementation of the NEPM through the development of a standard planning code, implementation of 2007 contaminated sites amendments to the *Environmental Management and Pollution Control Act 1994*, implementation of regulations for preventing environmental harm on sites with underground petroleum storage systems and by incorporating reference to it in all guidelines produced. There are no significant issues to report.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM has provided highly useful guidance to professional practitioners in the field of site contamination assessment. The variation of the NEPM should increase its effectiveness by ensuring it takes account of recent developments in the field and by clarifying certain aspects of the NEPM that have not been consistently applied by environmental practitioners.

Australian Capital Territory

Report to the NEPC on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for Australian Capital Territory by Mr Simon Corbell MLA, Minister for the Environment and Sustainable Development, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Environment and Sustainable Development Directorate is responsible for the implementation and administration of the National Environment Protection (Assessment of Site Contamination) Measure (the NEPM).

The provisions of the NEPM are implemented under the *Environment Protection Act 1997* (the Act).

The Contaminated Sites Environment Protection Policy (EPP), made under the Act, is the primary policy document for the assessment and management of contaminated land in the ACT. The EPP references the NEPM as the key resource for assessing contaminated land in the ACT. The NEPM is the only standard or guideline currently prescribed under the Act for the assessment of contaminated land.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The use of the NEPM as the primary reference tool for contaminated land assessment has ensured a consistent and effective approach to site assessment across the ACT and ensures the ACT contributes to a nationally consistent approach to the assessment of site contamination.

The ACT Government and contaminated land practitioners await the finalisation of the NEPM review process. The inclusion of guidance within the NEPM on the assessment of petroleum hydrocarbons and asbestos will only add to the effectiveness of the NEPM in the ACT.

Northern Territory

Report to the NEPC on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for the Northern Territory by Mr Karl Hampton MLA, Minister for Natural Resources, Environment and Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The NEPM is implemented in the NT through the planning process. The Development Consent Authority (DCA) can issue conditioned permits that require the development proponent to undertake formal site assessment with the engagement of a Victorian or NSW accredited site contamination auditor. This occurs at sites where preliminary contamination assessment undertaken by credible environmental consultants has established that investigation thresholds have been exceeded for contaminants of concern. In the NT, the auditor also oversees the development and implementation of a Remedial Action Plan (RAP) to render the land fit for purpose. An auditor's Statement of Environmental Audit for any particular site then provides government with the necessary guidance to place on title a caution notice or administrative note that gives effect to the auditor's recommendations. The proponent cannot proceed with any development unless the DCA is satisfied that its conditions have been met. The DCA relies on advice for such matters to be compiled and forwarded from the Environment and Heritage (EH) Division of the Department of Natural Resources, Environment, The Arts and Sport (NRETAS).

The EH Division is engaged in the associated ecological risk assessment review.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM has allowed for the level playing field for site contamination assessment and remediation to be established in the NT.

Jurisdictional Reports on the implementation of the

Diesel Vehicle Emissions NEPM

2010–2011

Commonwealth

Report to the NEPC on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for the Commonwealth by the Hon. Tony Burke MP, Minister for Sustainability, Environment, Water, Population and Communities, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Diesel Vehicle Emissions NEPM is supported by the following Commonwealth legislative, regulatory and administrative framework:

- Australian Design Rules (ADRs) under the *Motor Vehicle Standards Act 1989*
- the *Fuel Quality Standards Act 2000*
- fuel tax credit arrangements.

The Commonwealth monitors for fuel quality at fuel terminals, depots and service stations to ensure it complies with the Fuel Quality Standards Act. In 2010–11, inspectors visited 623 fuel supply sites and tested 2983 samples including 873 diesel fuel samples. Compliance action under the Act resulted in a civil proceeding against a fuel supplier where the Federal Court granted an injunction to stop the supply of non-compliant diesel fuel. Further compliance action against a second fuel supplier resulted in the supplier entering into an undertaking with the Federal Court to not supply non-compliant diesel fuel.

There are a number of implementation issues that were addressed in the 2007 review of the Diesel NEPM, in particular the need for a study of in-service emissions from diesel vehicles and the suitability of the DT80 emissions test. The Commonwealth has continued to undertake work to implement these recommendations.

According to the information provided by agencies, the Commonwealth's vehicle fleet is relatively new and well maintained. The Commonwealth operates approximately 6763 diesel vehicles and the majority of these were manufactured in or after 1995. More than 89% were manufactured after 2005.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The Commonwealth considers the NEPM to be beneficial in reducing emissions from diesel vehicles across Australia and a useful component of the broader framework to manage emissions. While the Commonwealth has no airshed responsibilities in regard to Diesel NEPM goals, considerable progress has been made toward achieving these goals through national initiatives including the Australian Design Rules and fuel quality standards.

The Commonwealth is making strong progress towards reducing emissions from in-service diesel vehicles through:

- ongoing administration of the Fuel Quality Standards Act and the Motor Vehicle Standards Act
- provision of funding support to jurisdictions to develop and implement diesel in-service emissions testing programs and to establish testing facilities
- supporting work to implement the recommendations of the Diesel NEPM review
- proper maintenance and management of its diesel fleet
- provision of the fuel tax credit to encourage proper engine maintenance and use of cleaner diesel engine vehicles.

Smoky vehicles program

The Commonwealth does not undertake smoky vehicles programs.

Diesel vehicle emission testing and repair programs

The Commonwealth does not undertake diesel vehicle emissions testing and repair programs.

Audited maintenance programs for diesel vehicles

All those Commonwealth agencies which reported that they were operating diesel vehicles indicate that, in general, vehicles are serviced according to the manufacturer's specifications at specified intervals, thus minimising emissions through regular maintenance and repair.

Diesel vehicle retrofit programs

The Commonwealth does not undertake diesel vehicle retrofit programs.

Other programs

Commonwealth agencies reported a variety of actions undertaken to reduce emissions from diesel vehicles, including:

- Environmental Driver Training Programs which cover issues such as harsh braking, engine over-revving, idling and economical driving
- installation of diesel particulate filters
- adjustment of air deflectors to optimise the aerodynamics of vehicles
- selection of vehicles with Green Vehicle Guide ratings above a certain minimum level
- use of AdBlue exhaust additive to reduce nitrous oxide emissions
- policies mandating an open road speed limit less than the legal limit of 110 km/h
- implementation of a tyre pressure standard to ensure line haul vehicles' tyre pressure is maintained to the manufacturer's specifications
- driver training in the safe and efficient operation of vehicles
- journey planning to reduce fuel usage and maximise operational use.

New South Wales

Report to the NEPC on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for New South Wales by the Hon. Robyn Parker MP, Minister for the Environment and Minister for Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The *Protection of the Environment Operations Act 1997* (NSW) and the Protection of the Environment Operations (Clean Air) Regulation 2010 (NSW) (the Regulation), provide the regulatory framework for action to address emissions from the in-service diesel fleet.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

In 2010–11, the tenth year of NEPM implementation, the focus has been on continuing the Smoky Vehicle Program and expanding the Diesel Retrofit and Clean Fleet Programs.

Program effectiveness

Smoky vehicles program

- Significant participation in the program by the general public, with an average of 326 reports of smoky vehicles received from the public each month, indicated a high level of awareness in the community of the unacceptability of excessive visible emissions.
- An average of 62 warning letters were issued per month in 2010–11 to vehicles observed as excessively smoky; of those issued following observation by an authorised officer (an average five per month), approximately 52% were returned with evidence of subsequent repair.
- Authorised officers issued an average of 24 penalty infringement notices per month in 2010–11 to diesel vehicle owners.

Audited maintenance guidelines

- Emissions testing of approximately 3000 vehicles has been completed since program inception.
- Continued implementation of the Clean Fleet Program with more than 6700 vehicles currently in the program.

Other initiatives

- Industry training to achieve improved maintenance practices and emissions performance continued throughout 2010–11 in urban and regional TAFE colleges.
- Expansion of the diesel vehicles retrofit program to retrofit particle filters to older diesel vehicles (see Diesel Vehicle Testing and Repair Programs below).

Motor vehicles emissions estimates

On-road mobile sources contribute approximately 61% of oxides of nitrogen (NO_x) and 13% of particle (PM_{10}) emissions from all anthropogenic sources in the Sydney region. As at June 2011, diesel vehicles made up approximately 13.7% of the mobile fleet. However, they contribute disproportionately to the amount of air pollution produced by on-road mobile sources. Based on 2008 data, diesel vehicles are estimated to contribute approximately 37% of NO_x and 53% of PM_{10} emissions from all on-road mobile sources in the Sydney region.

Both the absolute diesel emissions and the diesel emissions as a percentage of the total motor vehicle fleet are predicted to fall from 2011 to 2015, with the introduction of more stringent Euro 5 diesel vehicle emissions. However, the rapid increase in market share of light-duty diesel vehicles seen in the last couple of years may offset this trend.

Diesel vehicle fleet profile

NSW Roads and Traffic Authority (RTA) registration data show that the proportion of diesel vehicles in the fleet continues to grow and constituted 13.7% of the fleet at 30 June 2011, up from 12.7% in 2010 and 11.7% in 2009 (see Table 1 below).

Light commercial vehicles constitute the largest sector of the diesel fleet at 52.9%. Off-road passenger vehicles account for 14.2% of the diesel fleet. Together, these categories account for 67.1% of the total diesel fleet in NSW.

RTA registration data indicate that, between June 2010 and June 2011, the number of diesel vehicles registered in NSW increased by 62,563 or 11.1%. Light commercial vehicles accounted for 57.3% of the increases (see Table 2 below).

Table 1: Diesel vehicles by category as proportion of total fleet and diesel fleet

Diesel vehicles (%)								
NSW June 2010	**Passenger vehicles**	**Off-road passenger vehicles**	**Light commercial vehicles**	**Heavy trucks**	**Prime movers**	**Small buses**	**Buses**	**Total**
Diesels in total NSW fleet	1.9	1.9	7.3	1.7	0.5	0.2	0.3	13.7
Diesel vehicles in diesel fleet	13.6	14.2	52.9	12.2	3.7	1.1	2.2	100

Source: RTA registration data, June 2011.

Table 2: Change in diesel vehicles by category

Vehicle type	No. of diesel vehicles		Change	Percentage change (%)	Proportion of total decrease (%)	Proportion of total increase (%)
	June 2010	**June 2011**				
Passenger vehicles	60 597	85 327	24 730	40.8	-	39.5
Off-road passenger vehicles	89 892	89 020	-872	-1.0	-1.4	-
Light commercial vehicles	295 831	331 701	35 870	12.1	-	57.3
Heavy trucks	75 524	76 458	934	1.2	-	1.5
Prime movers	21 559	23 114	1555	7.2	-	2.5
Small buses	7213	7162	-51	-0.7	-0.1	-
Buses	13 403	13 800	397	3.0	-	0.6
Total	**564 017**	**626 582**	**62 563**	**11.1**		

Source: RTA registration data, June 2011.

Registration data also show that, in 2011, 18.3% of the diesel fleet in NSW was manufactured prior to 1996. This is down from 21.8% in 2010 and follows a trend of approximately 4% reduction per year. Tighter emissions standards for new vehicles for NO_x and particles were introduced in 1996 under Australian Design Rule 70 (ADR70). Stricter emissions standards have been introduced for diesel vehicles manufactured from 2002 under ADR80.00, and from 2007 under ADR80.02, and again from 2010 under ADR 80.03.

Projected increase in vehicle kilometres travelled

The NSW total diesel vehicle kilometres travelled (VKT) are increasing due to both the underlying total fleet VKT growth, and a rapid increase in the proportion of diesel vehicles in the fleet. RTA registration data show the total NSW diesel fleet to have grown by 11% in the period from 1 April 2010 to 31 March 2011. The majority of this growth is in diesel passenger cars and light trucks, with growth of 50% and 12% respectively.

The 2010 issue of VKT forecast for the NSW Greater Metropolitan Region (GMR) from the Bureau of Transport Statistics of the NSW Department of Transport estimates an average annual VKT increase from 2006 to 2011 of 0.8% for passenger vehicles and 2.3% for heavy-duty diesels. Assuming the GMR VKT increase is also applicable to all of NSW, and combining the VKT growth and diesel vehicle proportion increases, an increase of total diesel fleet VKT of 7.5% is estimated for year ending 30 June 2011 (12.5% light-duty diesel and 2.3% heavy-duty diesel). However, as noted above, the introduction of Euro 5 standards from 2011–15 will assist in offsetting the increase in VKT.

Smoky vehicles program

In NSW, it is an offence for a vehicle to emit excessive air impurities for a continuous period of more than 10 seconds. In 2010/11, 286 penalty infringement notices were issued to the registered owners of diesel vehicles emitting excessive air impurities.

Prosecutions may also occur, usually where a person issued with a penalty infringement notice elects to have the matter heard before a court, or where a smoky vehicle has previously been observed by an authorised officer on a number of occasions. In 2010/11, there were four prosecutions, all involving diesel vehicles.

In addition, the public may report smoky vehicles via the Office of Environment and Heritage (OEH), Department of Premier and Cabinet, Environment Line or the OEH web site. As a result of public reports, OEH may issue warning letters to the registered owners of these vehicles. In 2010/11, 84 warning letters were issued to diesel vehicle owners, based on public reports.

Annual statistics

Table 3 shows a breakdown of the percentage of smoky diesel vehicles observed by authorised officers and the percentage of diesel vehicle owners that received fines or warning letters as a proportion of the total fleet.

Table 3: Smoky vehicles observed and actions taken

	July 00 – June 01	July 01 – June 02	July 02 – June 03	July 03 – June 04	July 04 – June 05	July 05 – June 06	July 06 – June 07	July 07 – June 08	July 08 – June 09	July 09 – June 10	July 10 – June 11
Total number of vehicles observed (Reports from authorised officers and general public)	8554	7546	6918	6285	5116	4581	3013	3706	3001	4470	5623
Diesel vehicles observed	3299	3480	3781	3672	2882	2099	1752	1337	970	2331	1352
Percentage of all vehicles observed that were diesel vehicles	38.6%	45.5%	54.7%	58.4%	56.3%	45.8%	58.1%	36%	32.3%	52%	24%
Total number of vehicles that received fines	2392	2042	1847	1545	1175	694	664	616	373	303	301
Diesel vehicles that received fines	2279	1896	1696	1448	1127	580	527	495	351	278	286
Percentage of all vehicles fined that were diesel vehicles	95.3%	93%	91.8%	93.7%	95.9%	83.6%	79.3%	80%	94.1%	91.7%	95%
Total vehicles that received warning letters	2860	2880	2901	2398	2017	1405	1123	755	530	740	750
Diesel vehicles that received warning letters	672	523	520	450	303	174	161	103	123	133	135
Percentage of all vehicles that received warning letters that were diesel vehicles	23.5%	18%	17.9%	18.8%	15%	12.4%	14.3%	14%	23.2%	17%	18%

Diesel vehicle emission testing and repair programs

Over several years, the RTA has established diesel vehicle exhaust emissions testing equipment with Diesel NEPM funding. The equipment includes:

- heavy vehicle emissions testing facility — heavy duty dynamometer — in combination with a laboratory grade analysis unit, provides for emissions testing research
- lightweight dynamometer — in combination with an analysis unit, provides for mobile emissions testing
- testing van — contains the analysis equipment allowing for on-site emissions analysis in combination with the dynamometers.

Research has enabled previously expensive and lengthy diesel emission testing conducted in laboratories to become more accessible. Development of the DT80 test has allowed the RTA to take emission testing to fleet depots and conduct tests in very short times. The RTA is currently building a database to assist with the collation and analysis of DT80 data collected from all states and territories. This review will contribute to fine tuning of the DT80 test cycle.

Audited maintenance programs for diesel vehicles

The Clean Fleet Program, launched in 2006, encourages diesel operators to reduce diesel vehicle emissions through testing, repair and maintenance. Currently, there are more than 6700 vehicles in the program. To increase participation in the program, a promotional mail-out to high profile organisations took place in November 2010. The program was also advertised in the December edition of the *Australian Transport News*.

Clean Fleet participants may be eligible to seek a diesel rebate under the Federal Fuel Tax Credits Program. The Department of Transport requires metropolitan bus systems contract operators to comply with the Clean Fleet Program and OEH also encourages local Councils to include this requirement for waste management contractors.

Diesel vehicle retrofit programs

The NSW Diesel Retrofit Program continued in 2010/11. The program is administered and implemented by the RTA and OEH. Around 54 vehicles were fitted with retrofit devices during the year. Combined diesel oxidation catalysts and partial diesel particulate filters have been found to be the most successful strategy.

More than 520 vehicles have been retrofitted since the program's inception, at a total cost of $3.1 million, producing estimated particle emissions reductions of 4.7 tonnes per year and avoiding $1.2 million annually in health costs. The investment in retrofits is expected to avoid $10 million in health costs over the likely remaining life of the diesel vehicles. More financially sustainable funding options for the program are being investigated, including benchmarking fuel-saving devices to include in retrofit packages.

Other programs

Repair Industry Training

The RTA and TAFE course 'How to Reduce Truck Emissions' was held on 31 occasions at TAFE colleges throughout NSW during 2010/11 and was attended by 283 participants. The course provides information on the Clean Fleet Program, emission reduction measures, the impacts of pollution, fault finding methods and maintenance for truck owners, operators, diesel mechanics, and fleet and workshop managers. The RTA also made presentations covering diesel testing and maintenance to TAFE apprentice mechanics and university undergraduates at its IM240 light vehicle emissions testing facilities. To encourage participation, the course is promoted through funding provided by the RTA. The course is promoted through mail-outs to all NSW heavy vehicle operators and advertisements placed in local papers and industry magazines.

NSW Ports Diesel Retrofit Program

Since 2009 the RTA has provided funding for a diesel retrofit program for heavy vehicles accessing Port Botany, Port Kembla, Port of Newcastle and Cooks River Rail Yard. The demonstration program involved the fitting of partial particle traps on the exhausts of 57 diesel heavy vehicles at no cost to the operators.

Victoria

Report to the NEPC on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for Victoria by the Hon. Ryan Smith, Minister for Environment and Climate Change, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

No issues regarding efficiency of NEPM administration arose during the 2010–11 year.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

While there are some limitations on the ability to quantify the overall effectiveness of the NEPM-based initiatives implemented to date, they have provided significant value in a number of areas.

The numbers of vehicles reported in EPA's smoky-vehicle program continue to provide some insight into the high level of community awareness and concern into diesel vehicle exhaust emissions. The significant decline in the number of vehicles reported since 2005–06 could indicate that there are less smoky vehicles being sighted on Victorian roads. Furthermore, the significant decline in the proportion of diesel engined vehicles, greater than 1.5 GVM tonnes, being reported could indicate that there are less smoky diesel vehicles in this category.

The enhancement of the training program for diesel vehicle mechanics through the addition of the dedicated test facility at Kangan-Batman Institute of TAFE (KBIT) continues to provide a mechanism to:

- raise awareness within the heavy vehicle industry of the relationship between emissions and performance, and the importance of good maintenance
- raise awareness within the heavy vehicle industry of the new regulatory and testing environment for control of diesel emissions.

The effect that increased awareness and understanding has on reducing diesel vehicle emissions is difficult to quantify. Anecdotal evidence provided by the training program coordinators suggests that knowledge of the aspects of vehicle maintenance, as they relate to emissions performance, is being significantly improved through experience of the test facility. The facility is uniquely positioned to guide the diesel vehicle industry in aspects of maintenance relating to emissions performance. The influence of this knowledge and guidance upon the performance of the in-service fleet is felt to be one of the major achievements of the NEPM, even if unproven.

The in-service diesel vehicle emissions testing facility at Vipac Engineers & Scientists Ltd (Vipac) provides a valuable mechanism to achieve the objectives of the Diesel NEPM, by offering an opportunity for heavy-duty diesel vehicles to be tested against the in-service emissions requirements of the Environment Protection (Vehicle Emissions) Regulations 2003. While the numbers of vehicles tested during 2010–11 were low, the potential for this facility to evaluate emissions performance of in-service vehicles and provide an incentive for owners to undertake works to improve vehicle performance is significant.

The Freight Partnership EcoStation Program, once implemented, is expected to contribute to significant reductions in greenhouse gas and air emissions (NO_x and particles) due to reduced fuel use and increased uptake of emissions reduction technologies. The US EPA SmartWay program provides a working example of the potential of this project; savings and reductions include:

- saves 616 million gallons per annum
- reduces carbon dioxide by 6.8 million tonnes per annum
- reduces NO_x by 40 000 tonnes per annum
- reduces particulate matter by 1000 tonnes per annum.

Some fuel savings and emissions reduction may have occurred throughout the year as the Victorian Transport Association (VTA) and EPA have provided training and ongoing support to selected partners in the use of a Fleet Assessment Tool to measure their fuel consumption and emissions associated with their freight activities.

Smoky vehicles program

EPA Victoria has operated a public smoky vehicle reporting program for a number of years. This program allows members of the public to identify smoky vehicles (diesel, petrol or LPG) using the 10-second smoke rule, and report them to EPA. As a result of these reports, the owners of the offending vehicles are informed in writing of the report and are requested to have the problem fixed. They are also informed about the penalties that may apply if they are identified by officers from EPA, VicRoads or the police. The program resulted in 5766 smoky vehicles being reported by the public in 2010–11.

The EPA also operates a separate official smoky vehicle enforcement program where EPA or police officers can report vehicles identified as emitting greater than 10 seconds of continuous smoke. Cautionary letters advise the vehicle owner that the vehicle has breached regulations and if reported again will be liable to receive an infringement notice. In 2010–11, 630 cautionary letters were issued under this program. Infringement notices are issued only to repeat offenders.

The following table indicates the number of smoky vehicles being reported in the public reporting program and the number of cautionary letters issued under the official program over the past six years. Generally, there appears to be a downward trend in the number of vehicles being reported over recent years, in both the public program and the official program. This indicates that there are less smoky vehicles being sighted on Victorian roads.

Table 1: Number of smoky vehicles being reported in the public reporting program and the number of cautionary letters issued under the official smoky vehicle program over the past six years

Year	2005-06	2006-07	2007-08	2008-09	2009-10	2010–11
Number of public reports	10 315	7068	6443	5884	6177	5766
Number of cautionary letters	1538	849	946	708	445	630

Note: these numbers include all vehicles in the official program, not just diesel-engined vehicles.

Diesel vehicle emission testing and repair programs

The project involves the installation, commissioning and operation of diesel vehicle emission test equipment that can undertake the DT80 test for heavy vehicles in support of Victoria's official smoky vehicle reporting program.

In March 2006, EPA entered into a $1.85 million agreement with Vipac for provision of a diesel vehicle emissions test capability.

This project is effectively divided into two parts:

Part 1: the acquisition, installation and commissioning of equipment, along with the engagement and training of staff and establishment of a quality management system for a diesel vehicle emission test facility by Vipac Engineers & Scientists Ltd.

Part 2: the provision of a diesel vehicle emissions testing capability in support of EPA Victoria's regulatory infrastructure by Vipac.

Vipac has installed a custom-made Cirrus/CP Engineering AC-drive transient chassis dynamometer (which can be used in either 2WD or 4WD configuration to test emissions from trucks and buses), emissions analysis equipment and exhaust handling hardware which exceeds the analytical requirements of the DT80 diesel emission test. Part 1 of the project, fully funded by the Commonwealth, is complete and was delivered within budget.

Part 2 of the project includes the provision of a test facility to support EPA's regulatory infrastructure. Under EPA's official smoky vehicle program, diesel engine smoky vehicles registered in a defined Melbourne metropolitan area will be directed to the Vipac facility for vehicle testing. The initial vehicle test will be paid for by EPA (from Diesel NEPM funds). Any subsequent test, if the vehicle fails the initial test, would be borne by the vehicle owner ($550 plus GST).

During 2010–11, 12 vehicles were tested at the Vipac facility as part of its official smoky vehicle reporting program.

Vipac is not undertaking testing of vehicles for the fuel tax credit at present due to the documentation requirements needed, specifically the need for original manufacturers' signed copies. They will progress their application when time permits.

Audited maintenance programs for diesel vehicles

Victoria does not have an audited maintenance program for diesel vehicles. Victoria has other programs that aim to meet the objectives of the diesel NEPM. See 'Other programs' below.

Diesel vehicle retrofit programs

Victoria does not have a diesel vehicle retrofit program. We are considering the air quality implications of retrofit programs. Victoria has other programs that aim to meet the objectives of the diesel NEPM. See 'Other programs' below.

Other programs

Heavy vehicle maintenance training program

The project involves the acquisition, installation and operation of chassis diesel emission testing equipment, and engagement and training of staff to allow the training of heavy vehicle mechanics at KBIT. The facility is used for training heavy vehicle mechanic apprentices, industry courses, owner-driver's courses, research, conducting DT80 tests, and diploma students. KBIT provides training for 90% of diesel vehicle apprentice mechanics in Victoria, as well as some training in NSW and South Australia.

The project is divided into two phases:

- Phase 1: acquisition and commissioning of the emission testing equipment (completed)
- Phase 2: the period after the equipment becomes operational (current).

In July 2005, EPA entered into an $810,000 contract with KBIT for the acquisition, installation and operation of chassis diesel emission testing equipment, and engagement and training of staff to allow the training of heavy vehicle mechanics at KBIT. Funds were provided to KBIT under the EPA/Kangan Batman TAFE contract for capital and operational costs and concluded on submission of the final Phase 1 report. This phase was completed within budget. The total funding of $810,000 was provided by the Commonwealth.

In November 2006 a dedicated test training facility for diesel vehicle mechanics at KBIT was opened which has provided a significant enhancement to the training syllabus.

Phase 2 (the final phase) of this project has been completed. During this phase, funds were no longer provided (i.e. this phase was not funded by the Commonwealth). As per the contract between EPA Victoria and KBIT, a final report has been submitted by KBIT. EPA is satisfied that the objectives of this program have been met. KBIT is no longer required to report on this project.

A survey carried out by KBIT on a small sample of recently qualified apprentices indicates that 75% of students agreed that the course provided clearly communicated concepts and ideas about emission control and the environment.

KBIT will continue to use the dynamometer in practical programs and continue to run courses that consider vehicle emissions.

EcoStation Pilot

The EcoStation Pilot is a partnership project initiated by EPA Victoria and VTA. The EcoStation Pilot was based on the US EPA SmartWay Transport Initiative. The intention of the pilot was to consult and involve industry in the design of an equivalent program appropriate for the Australian context and determine what emissions gains are possible. In parallel to the workshops with industry, EPA worked with a select number of companies to trial the SmartWay partnership audit process and CO_2 and air pollutant measurement tools.

Under the COAG National Strategy on Energy Efficiency (NSEE) Measure 2.3.3 (introducing voluntary measures to improve the performance of heavy vehicle fleets), EPA Victoria was designated as the lead Australian agency responsible for developing and trialling a US SmartWay-style voluntary emissions reductions program for the freight sector, i.e. to pilot EcoStation.

The Commonwealth provided funding in 2009 for trialling EcoStation under the Diesel NEPM, and EPA Victoria invested additional funds into designing and implementing the pilot program with the VTA.

EPA has been working in partnership with the VTA through a Sustainability Covenant to develop and pilot the EcoStation program with the aim of reducing greenhouse gas and air pollutant emissions from participating freight operators and customers.

EPA and VTA held four workshops with 27 members from the freight industry between October 2009 and April 2010, which looked at how to translate the US SmartWay program to an Australian context. This included identifying the issues and challenges for the industry in addressing their fuel consumption and environmental impact.

The first phase of the pilot project involved developing a Fleet Assessment Tool to allow freight operators to calculate baseline fuel consumption and vehicle-related emissions by inputting fleet details and usage. The tool provides a user-friendly interface that summarises a fleet's performance on a vehicle-by-vehicle basis as well as providing information on the total fleet in regards to fuel consumption, greenhouse gas emissions and relative air pollution performance.

The Fleet Assessment Tool was used to compile initial baseline fuel audits with three foundation partner participants: Australia Post, Fonterra, and Freestones Transport, and three case studies were developed from this process.

Five best-practice fact sheets were produced and published, outlining strategies that companies can adopt to reduce their emissions, including the fitting of aerodynamic devices, reductions in idling, or retrofit of diesel emissions equipment. These are available on the new EcoStation website at www.ecostation.com.au

The activities funded by the Commonwealth include the audit pilot, implementation and reporting and promoting best practice

Throughout 2010 and the first months of 2011, the VTA and EPA have continued to provide training and ongoing support to selected Foundation Partner users of the Fleet Assessment Tool to measure the fuel consumption and emissions associated with their freight activities.

EPA has fulfilled its obligations under COAG and the NEPM by conducting a two-year trial of EcoStation in partnership with VTA through a Sustainability Covenant.

An independent review of the EcoStation pilot is currently underway. Learnings from the pilot will be used to further develop a strategic framework for an EcoStation program to be implemented statewide, with a view to eventual national rollout.

Queensland

Report to the NEPC on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for Queensland by the Hon. Annastacia Palaszczuk MP, Minister for Transport and Multicultural Affairs, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The *National Environmental Protection Council (Queensland) Act 1994* provides the framework for implementing the Diesel NEPM in Queensland. The Department of Transport and Main Roads (DTMR) is responsible for implementing and reporting on the Diesel NEPM in line with sections 13 (Application) and 15 (Reporting) of the Act.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

A number of programs are in place to ensure diesel vehicle emissions are well managed in Queensland and are discussed below.

Air quality is of greatest concern where there are high concentrations of transport and/or industrial activity such as in South-East Queensland where transport is a major contributor to air pollution. Particle levels, measured as PM_{10} and nitrogen dioxide (NO_2), which are of relevance to diesel vehicles, are monitored in South-East Queensland, Toowoomba, Gladstone, Mackay (PM_{10} only) and Townsville by the Department of Environment and Resource Management (DERM). Monitoring indicates air quality is generally good in these regions, and the 2009 goal of the National Environment Protection (Ambient Air Quality) Measures (Air NEPM) should be met for both PM_{10} and NO_2 in the 2010–11 reporting year.

The Air NEPM's 2011 goal is for ambient carbon monoxide (CO), NO_2, photochemical oxidants as ozone, sulphur dioxide and PM_{10} levels, assessed in accordance with its monitoring protocol, to comply with the national environment protection standards specified in Schedule 2 of the Air NEPM.

Queensland supports the Commonwealth with ongoing introduction of new Australian Design Rules (ADRs) to improve vehicle emission standards. Other programs to complement the ADRs and further reduce diesel vehicle emissions are described below.

Smoky vehicles program

Smoky Vehicle Hotline

The Smoky Vehicle Hotline provides the community with an avenue for reporting vehicles exceeding the 10-second smoke rule, via the internet or telephone. Following a data match of the information provided, a letter is sent to the owner advising them of the report and suggesting ways to identify and remedy the problem. If the vehicle is reported three times within a four-month period, the owner is issued with a 'Present Vehicle Order' which requires their vehicle to be checked for defects by a transport inspector. The continuation of the smoky vehicle program meets the requirements of Schedule A(1) of the Diesel NEPM, Guideline on Smoky Vehicle Programs. In 2010, a total of 701 diesel vehicles were reported to the smoky vehicle program, compared to 1228 diesel vehicles in 2009. This is a decrease of approximately 43% in diesel vehicles reported, and is significantly lower than the 1995 diesel vehicles reported in 2005. The number of diesel vehicles represented 42% of total vehicles reported to the Smoky Vehicle Hotline in 2010. This is slightly higher than the 2009 percentage of 37% but consistent with the share of diesel vehicles reported in the last five years.

Diesel vehicle emission testing and repair programs

Brisbane City Council diesel vehicle testing facility

The Brisbane City Council (BCC) maintains the only accredited DT80 diesel emission testing facility in Queensland. BCC tests vehicles from the BCC fleet and offers the service to privately owned vehicles testing for the purpose of confirmed compliance for the fuel tax credit.

During the 2010–2011 financial year, BCC tested a total of 421 vehicles, with 411 of the vehicles diesel powered and therefore reportable for Diesel NEPM purposes. The remaining vehicles were testing alternative fuels, blends and gas. This represents an increase of 14% when compared to the 353 vehicles tested in the last reporting year. This may be attributed to the new automated testing notice system for BCC vehicles.

Of the 411 diesel powered vehicles tested:

- 184 were pre-ADR70 (manufactured prior to January 1996).
- 227 were ADR70 or after (manufactured after December 1995).

Of the 411 diesel powered vehicles tested:

- 405 or 98.5% passed.
- 6 or 1.5% failed.

Of the six failed vehicles:

- 6 were pre-ADR70 (manufactured prior to January 1996).
- 5 failures were recorded for excessive levels of oxides of nitrogen (NO_x).
- 1 Failure was recorded for excessive levels of particulate matter (PM).

All five vehicles that recorded excessive levels of NO_x have now passed after being repaired and re-tested, with an average improvement of 30.24%. The remaining failed vehicle was not returned for re-testing as it had been disposed.

Of the 411 tested, only 132 were previously untested vehicles with 279 presenting for re-testing after a two-year period to verify continued compliance in order to claim fuel tax credits under criterion three of the fuel tax credit scheme.

Further to this, 109 of the previously untested vehicles came from BCC's own fleet, indicating that only 23 vehicles were made available from external operators. This verifies that there has been a very limited uptake of vehicles being tested.

Audited maintenance programs for diesel vehicles

Heavy vehicle accreditation and testing schemes

The Queensland Government encourages the heavy vehicle industry to participate in the National Heavy Vehicle Accreditation Scheme (NHVAS), which encourages heavy vehicle operators to take more responsibility for servicing their vehicles and ensuring vehicles are compliant with scheme accreditation requirements. Compliance with an accredited maintenance scheme may remove the requirement for Certificates of Inspection to be obtained for vehicles in the scheme. The vehicles under the NHVAS use diesel as their primary fuel source.

Currently, under the NHVAS maintenance scheme, there are 29,971 vehicles registered by 764 operators, and there are 5901 vehicles registered by 747 operators, under the NHVAS mass scheme.

Diesel vehicle retrofit programs

Queensland has no diesel retrofit programs at this time.

Other programs

Heavy vehicle fuel-efficiency industry awareness initiative

Queensland has been initiating programs to highlight the benefits of fuel efficiency to the heavy vehicle industry. Recently the Department of Transport and Main Roads produced fact sheets and distributed materials from other jurisdictions at the Queensland Truck Show. The materials promoted inexpensive technology changes and the adoption of simple driving techniques, known as eco driving. Adopting these techniques has been shown to improve fuel efficiency between 10 to 20%. These savings in fuel not only reduce costs to operators but translate directly to emission savings.

FreightSmart and Port of Brisbane trial

The Queensland Government has partnered with the Queensland Transport and Logistics Council on FreightSmart and the Port of Brisbane trial. The FreightSmart program aims to demonstrate and increase the use of fuel efficient transport and logistics practices. Reducing congestion and the amount of truck movements and moving freight more efficiently by using higher capacity trucks will reduce fuel consumption and associated emissions including diesel emissions.

The principal activities of the Port of Brisbane trial will be on-site and desktop engineering analysis and assessment of the capacity of the road network. In particular, roads, culverts, bridges and traffic signalling systems will be assessed to determine their capacity to accommodate alternative truck/trailer configurations to improve transport logistics and improve efficiencies.

Performance Based Standards and innovative heavy vehicles

Performance Based Standards is a nationally agreed process for assessing new and safer innovative heavy vehicles as an alternative to the prescriptive system for regulating heavy vehicles. Performance Based Standards focus on how well the vehicle behaves on the road, through a set of nationally agreed safety and infrastructure protection standards, rather than how big or heavy the vehicle is.

The Department of Transport and Main Roads is working to assess road networks of strategic significance across Queensland for Performance Based Standards Class B vehicles. Performance Based Standards Class B vehicles are longer than the currently allowed freight vehicles for the particular road network. However, their on-road performance and safety are commensurate, or better than, existing vehicles on approved Performance Based Standards routes.

The operation of these vehicles between Toowoomba and the Port of Brisbane since October 2010 has achieved significant freight efficiency gains through the reduction of heavy vehicle trips by up to 50% for freight tasks associated with the export of containerised grain. The reduction of truck trips translates to reduced fuel usage, greenhouse gas emissions and heavy vehicle congestion.

Approximately 4800 heavy vehicle trips are currently required between Toowoomba and the Port of Brisbane to carry 120,000 tonnes of containerised freight per year. PBS Level 2B vehicles have the potential to reduce the number of trips by up to 50%, meaning an estimated saving of about 230,000 litres of fuel and a greenhouse emissions reduction of about 490 tonnes every year.

Three hundred and fifty-four kilometres of roads have been assessed and approved in South-East Queensland and Townsville for the operation of Performance Based Standards Level 2B vehicles.

The department is currently assessing approximately 1000 kilometres of state controlled and Local Authority roads for Performance Based Standards Class B vehicles.

Hybrid bus trials

The Queensland Government has invested $1.4 million to undertake a trial of low-emission diesel-electric buses in the public transport fleet. The initiative has trialled two hybrid buses, one in regional Queensland and one in South-East Queensland, to assess the fuel efficiency and emissions reduction benefits for potential use in the broader public transport system. The findings from the trial are due for release in late 2011.

AirCare program

The Department of Transport and Main Roads is currently reviewing the 'AirCare' program in South-East Queensland. The AirCare program is a vehicle emissions action plan that was a key project within the Integrated Regional Transport Plan (IRTP) for South-East Queensland. The IRTP has been replaced by Connecting SEQ 2031:-An Integrated Regional Transport Plan for South East Queensland.

The South-East Queensland Regional Plan 2009–2031 (SEQRP)

SEQRP is Queensland's statutory regional planning strategy that guides growth and development in the south-east region. It was developed to help manage regional growth and change, including integrated transport planning, in the most sustainable way to protect and enhance the quality of life in the region.

Queensland's transport portfolio and other agencies have responded by developing plans to manage settlement patterns and transport growth and deliver a sustainable transport system for the region. These plans include:

- **TransLink Network Plan (TNP)** sets out the strategic direction and development of public transport services and infrastructure in South-East Queensland. TransLink has invested over $250 million in new and improved bus stations, interchanges and park'n'ride facilities with further spending planned over the next five years. TransLink has simplified ticketing and improved boarding and trip times through the introduction of the 'go card' smart ticketing system. Eighty per cent of weekday trips are now taken via go card which allows travel between 23 zones and three types of transport.
- **South-East Queensland Infrastructure Plan and Program 2010–2031 (SEQIPP)** outlines estimated infrastructure investment across South-East Queensland to 2031. SEQIPP is updated annually to reflect and align with the latest planning and budget commitments. Current investment in transport infrastructure projects include $770 million for the Northern Busway (Windsor to Kedron stage), $465 million Eastern Busway (Buranda to Main Avenue), $387 million Darra to Richlands Transport Corridor, 189 million Corinda to Darra Rail Upgrade and $100 million Keperra to Ferny Grove Rail Upgrade.
- **Connecting SEQ 2031: An Integrated Regional Transport Plan for South-East Queensland** is a 22-year regional transport plan that serves the long-term needs of the people living, working, recreating and conducting business in South-East Queensland. It presents a strategic framework for developing the future transport network for the region.

Western Ausralia

Report to the NEPC on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for Western Australia by the Hon. Bill Marmion MLA, Minister for Environment, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In Western Australia the National Environment Protection (Diesel Vehicle Emissions) Measure (Diesel NEPM) is implemented by the Department of Environment and Conservation (DEC) under the *National Environment Protection Council (WA) Act 1996* and the *Environmental Protection (WA) Act 1986*.

Vehicle emissions in Western Australia are regulated under the *Road Traffic Act 1974* and Road Traffic (Vehicle Standards) Regulations 2000. The 10-second rule for smoky vehicles was introduced from 1 November 2002 under the Road Traffic (Vehicle Standards) Rules 2002 and is administered by the Department of Transport (DoT). This regulation aims to target visually polluting diesel and petrol vehicles.

The Perth Air Quality Management Plan (Perth AQMP) is a non-statutory management plan established by the Government of Western Australia. The objective of the Perth AQMP is to ensure that clean air is achieved and maintained throughout the Perth metropolitan region over the next 30 years. The Perth AQMP identifies that the management of emissions from the in-service petrol and diesel vehicles is critical to achieving clean air, and contains a range of initiatives that target on-road vehicles. The implementation of vehicle emissions reduction initiatives of the Perth AQMP are largely complementary to the desired environmental outcomes of the Diesel NEPM, and are being undertaken in an integrated fashion.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The Diesel NEPM provides a framework for the development of programs by jurisdictions to ensure that in-service diesel vehicles are adequately maintained.

The introduction of the new vehicle emission standards for both diesel and petrol vehicles, supplemented by improvements in fuel quality, has clearly delivered significant emission benefits over the longer term.

Significant progress has been made in relation to the completion of the Diesel NEPM CleanRun funding agreement between the Commonwealth Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) and DEC.

Vehicle exhaust emissions testing using the CleanRun Remote Sensor (CleanRun RS) occurred during 2010–11 and will continue into the future. This emission testing will help to quantify the emissions performance of the Perth motor vehicle fleet including diesel vehicles. The CleanRun RS will also be used in Western Australia to identify specific vehicles that may require additional investigation, or general vehicle characteristics which should be considered when developing broader vehicle initiatives.

To date, the CleanRun RS has stimulated extensive interest from passing vehicle commuters and media, highlighting the innovative approach to monitoring vehicle emission and increasing public awareness of vehicle emissions and impact on air quality. In addition, the 'smartsign', with its capacity to generate instant feedback messages to the driver of a vehicle, has assisted with the delivery of key vehicle maintenance messages to over 36,000 drivers.

To complement and improve the effectiveness of the Diesel NEPM, communication, training and education components of CleanRun continue to be implemented. The CleanRun Ecodrive program was launched on 25 May 2011. Ecodriving incorporates a number of safer, smarter driving techniques that maximise fuel economy by operating the engine as efficiently as possible. To date, CleanRun EcoDrive resources have been mailed to over 50 organisations and individuals who have requested a copy of the package since its launch date. It's estimated that fleet operating organisations who implement the CleanRun EcoDrive program can reduce fuel use and related emissions by up to 10%.

The continued implementation of the Smoky Vehicle Reporting Program (SVRP) has resulted in a significant number (40%) of respondents repairing their vehicle since receiving a report of their smoky vehicle. Seventy-two per cent of respondents indicated that their vehicle was diesel.

DEC's continued implementation of vehicle emissions reduction initiatives of the Perth AQMP and the CleanRun program will strengthen all vehicle emissions reduction strategies undertaken by DEC. DEC will continue to work with DoT, other government agencies and industry associations to investigate and implement motor vehicle related policies and management actions where appropriate to reduce the impact of diesel vehicle emission in Western Australia.

Smoky vehicles program

Currently the SVRP receives an average of 57 reports per month. The total number of reports received and information packs sent out for the 12 months from July 2010 to June 2011 was 688.

Table 1 below summarises the responses from 498 owners of the 688 reported vehicles from July 2010 to June 2011. Vehicle owners were able to select more than one response. The results show that 40% of respondents have had their vehicle repaired since receiving a report of their smoky vehicle. However, a considerable amount of respondents (47%) believe their vehicle does not smoke. Seventy-two per cent of respondents reported their vehicle as diesel. The responses received in the 'Other' category are generally related to 'my vehicle doesn't smoke' and includes the reasons why, such as 'my vehicle was under excessive load', or 'going up a steep hill'. Comments such as 'my vehicle is old and smokes, but not for 10 seconds' and 'my vehicle smokes and will be repaired soon' were also common 'other' reasons given.

Table 1: Responses from owners of reported vehicles

Vehicle repaired	201 (40%)
Vehicle does not smoke	233 (47%)
Can't afford to repair	12 (2%)
Disposed of vehicle	17 (3%)
Wrong vehicle	11 (2%)
Other	38 (8%)
Petrol	86 (17%)
Diesel	355 (72%)
LPG	5 (1%)

Diesel vehicle emission testing and repair programs

DEC continues to implement the CleanRun RS program, which includes the utilisation of a portable roadside gas analyser that provides an efficient, cost effective method of characterising vehicle emissions and raising community awareness of vehicle emissions.

The CleanRun RS is being used to conduct regular on-road vehicle emission testing at various sites around the Perth metropolitan and regional areas. Twenty days of on-road vehicle testing using the CleanRun RS were undertaken between September and December 2010. In total, 26 days of testing at 13 locations has been undertaken, with the exhaust emissions data of over 36,000 vehicles collected. It is anticipated that emission data of more than 3000 diesel vehicles will be analysed. Analysis of the vehicle testing is currently being completed, with further remote-sensing projects to target and measure vehicle emissions planned for 2011 and 2012.

The CleanRun RS smartsign, with its capacity to generate instant feedback messages to the driver of a vehicle, has proven to be an invaluable asset which has assisted in the delivery of key vehicle performance and maintenance messages to vehicle owners. Depending on the level of exhaust emissions, the smartsign displays an instantaneous message to the driver of the vehicle indicating whether their vehicle emissions are either 'good = saving $$$' or 'ok/poor = costing $$$'. The variable message sign also has the capacity to change the target message being displayed.

The CleanRun RS was also incorporated into two Community Awareness Days. Community members and local businesses were invited to have their vehicle emissions checked using the CleanRun RS and were able to find out what factors may be influencing their vehicle's emission performance. More than 60 vehicles were emissions tested at each event, with similar numbers of people visiting the marquee displays, receiving information and advice from the Royal Automobile Club of Western Australia (RACWA) mechanics and DEC staff. A free information kit was provided to participants and included a printout of their vehicle's test results and other information and pamphlets on how to reduce vehicle emissions. Also included in the package was a tyre pressure gauge and a car-visor reporting pad with the smoky vehicle hotline number displayed. RACWA also provided a $30 voucher on the next service at a RACWA auto service centre.

DEC obtained community comments and feedback through survey forms which will be analysed and used to improve the delivery of future community days. Approximately 20% of vehicles tested were diesel. Analysis from one of the community days showed that, of the 32 attendees who completed a survey form, 81% were satisfied with the event, and as a result of attending had a better understanding of what they needed to do to maintain their vehicle. Eighty-four per cent of the respondents said they would review the way they drive and maintain their vehicle.

Audited maintenance programs for diesel vehicles

The National Heavy Vehicle Accreditation Scheme (NHVAS) encourages heavy vehicle operators to take more responsibility for servicing their vehicles and ensuring vehicles are compliant with scheme accreditation requirements.

In Western Australia, operators of certain types of heavy vehicles must become accredited to gain a permit from Main Roads. The majority of these vehicles use diesel as their primary fuel source. Western Australian Heavy Vehicle Accreditation is mandatory for individuals and organisations that perform any transport task as part of a commercial business or for profit within Western Australia, including interstate operators.

Accreditation involves two modules, Fatigue and Vehicle Maintenance, which operators are required to incorporate into their daily work practices. Maintenance management encourages heavy vehicle operators to take responsibility for servicing their vehicles regularly and ensuring their vehicles are safe at all times. The standards for this module are identical to that required under the nationally endorsed NHVAS.

Accredited operators must ensure their vehicles are maintained and meet all relevant safety standards. A record of the maintenance and servicing work done to each vehicle must be kept to prove the vehicles are safe at all times.

Compliance and enforcement activities are key factors in ensuring effective and safe management of heavy vehicles on the road network. Transport inspectors in Western Australia are authorised by law to intercept and inspect vehicles for roadworthiness, load security and vehicle licencing conditions. Compliance also performs the important role of educating and working with the transport industry and other agencies and stakeholders to improve standards.

Diesel vehicle retrofit programs

The Western Australia Government, through DEC, is currently focusing on diesel vehicle emissions, primarily through the CleanRun RS program and community education programs.

Other programs

Communication delivery and community education

A communication and community education campaign continues to be implemented under CleanRun. This campaign prompts community action in reducing emissions through highlighting the benefits of a well-maintained vehicle and working with drivers to take on more environmentally-friendly driving habits.

The CleanRun brand was developed to make the overall vehicle emission reduction program immediately identifiable and to facilitate the promotion of key Diesel NEPM messages in Western Australia. Web pages, posters, fact sheets and brochures are developed and produced to disseminate information on the CleanRun program. All of these documents continue to be made available on DEC's website: www.dec.wa.gov.au/airquality. Attention continues to be focused on promoting key Diesel NEPM messages through activities such as the CleanRun Community Awareness Days as well as integrating learning materials with established community involvement programs such as AirWatch and TravelSmart.

Behaviour Change Initiative

A major initiative of the community education strategy is the CleanRun Behaviour Change Initiative (BCI). The CleanRun BCI aims to reduce diesel emissions through encouraging driver behaviour change.

CleanRun worked with industry partners over 2009/10 to develop the CleanRun EcoDrive resource kit. Ecodriving incorporates a number of safer, smarter driving techniques that maximise fuel economy by operating the engine as efficiently as possible. CleanRun EcoDrive integrates the key learnings from the behaviour-change trial working with professional drivers during the pilot stage in 2007/08.

CleanRun EcoDrive is essentially a do-it-yourself resource package for fleet operators who want to reduce fuel use and related emissions by working with drivers to make small changes to their driving habits. The package provides the resources to develop an ecodrive training program in-house, including driver training materials developed by experts in the transport industry. The ideal target market for this package is heavy vehicle fleets, such as transport companies; however, most ecodrive principles can be applied by all drivers. The point of difference of CleanRun EcoDrive is the provision of a framework to engage drivers in developing depot-specific ecodrive strategies. This draws heavily on proven social science research and change management theory. It's estimated that fleet operating organisations who implement the CleanRun EcoDrive program can reduce fuel use and related emissions by up to 10%.

CleanRun EcoDrive was officially launched by the Western Australia Minister for Environment, the Hon. Bill Marmion MLA, on 25 May 2011. All resources will be available to download free-of-charge from DEC's website: www.dec.wa.gov.au/airquality

The CleanRun EcoDrive launch was attended by approximately 60 people including representatives from transport companies, training groups, media, interstate government transport departments and DSEWPC. Following the launch, CleanRun held an interactive workshop to introduce the resource kit, give assistance on 'getting started' and to determine what ongoing assistance CleanRun should provide to help fleet operators implement this comprehensive resource. To date, CleanRun EcoDrive resources have been mailed to over 50 organisations and individuals who have requested a copy of the package since its launch date.

Industry training

Polytechnic West colleges continued industry training to achieve improved maintenance practices and emissions performance. Polytechnic West (formally Swan TAFE) and DEC entered into a Memorandum of Understanding in 2006, where DEC provided funding for Polytechnic West to purchase emission testing, control and abatement equipment to enhance delivery of their apprentice mechanic training programs.

Polytechnic West has purchased and installed diesel engine exhaust catalytic converters, particulate filters, a portable diesel engine and exhaust emission analyser (5 gas analyser) and have upgraded current technology to meet emission legislation with the purchase of electronic geometry turbo chargers. Polytechnic West has also installed a Euro 4 heavy duty diesel engine. Courses provide information on emission reduction measures, the impacts of pollution, fault finding methods and maintenance for truck owners, operators, diesel mechanics, and fleet and workshop managers.

Between July 2010 and June 2011, Polytechnic West has had 172 students successfully complete unit W5049 (AURT304666A) Repair and Replace Emission Control Systems, and 180 students successfully complete unit W5573 (MEM18029B) Tune Diesel Engines.

South Australia

Report to the NEPC on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for South Australia by the Hon. Paul Caica MP, Minister for Environment and Conservation, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In South Australia, the National Environment Protection (Diesel Vehicles Emissions) Measure (Diesel NEPM) came into operation as an environment protection policy under repealed section 28A of the *Environment Protection Act 1993*. Section 4 of the transitional provisions in the *Environment Protection (Miscellaneous) Amendment Act 2005*, Sch 1, enables the continued operation of the Diesel NEPM as an Environment Protection Policy.

The 10-second smoke rule regulated as Rule 147 in the Road Traffic (Vehicle Standards) Rules 1999 is one of the in-service standards that can currently be applied to contribute to achieving the Diesel NEPM outcomes.

In March 2011, the South Australian Government introduced a new provision in the Road Traffic (Vehicle Standards) Rules 1999: Rule 147A — Exhaust Emissions — diesel-powered vehicles. Rule 147A sets emission limits for NO_x and particulate matter for diesel vehicles which are in service.

Compliance with the standard can be tested within the Regency Park Vehicle Inspection Emissions Test Facility. Vehicle inspectors have the discretion to test vehicles which fail the 10-second smoke rule, or have sufficient deficiencies such that they are in breach of vehicle standards and/or maintenance requirements.

Vehicles that fail the emissions test will be defected, and required to return to Regency Park for re-testing for compliance with the standard. Only a few vehicles will be tested in the first 18 months of the program to minimise the costs to industry.

South Australia has continued its commitment to use biodiesel in a significant portion of its government-owned public transport bus fleet. Currently, all buses operate on either a biodiesel blend or compressed natural gas.

While the Environment and Conservation portfolio has responsibility for leading South Australia's response to this NEPM, the Department for Transport Energy and Infrastructure (DTEI) is investigating and developing relevant strategies for the management of emissions from diesel vehicles.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The Department for Transport, Energy and Infrastructure has implemented Rule 147A. Its effectiveness will be reviewed at the end of 2012.

Smoky vehicles program

Not applicable.

Diesel vehicle emission testing and repair programs

Not applicable.

Audited maintenance programs for diesel vehicles

The Department for Transport, Energy and Infrastructure is currently investigating the application of a maintenance and eco-driving program for South Australian heavy vehicle companies.

Diesel vehicle retrofit programs

Not applicable.

Other programs

Not applicable.

Tasmania

Report to the NEPC on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for Tasmania by the Hon. Brian Wightman MP, Minister for Environment, Parks and Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Under section 12A of the *Tasmanian State Policies and Projects Act 1993*, National Environmental Protection Measures made under section 14(1) of the *National Environment Protection Council (Tasmania) Act 1995* are taken to be State Policies which have been passed by both houses of parliament.

In 2006 and 2007, a contract between the then Department of Tourism, Arts and the Environment and the Commonwealth Department of the Environment and Water Resources facilitated the funding of a series of diesel engine skill-gap training workshops in the south, north and northwest of the state. Funding provided for the purchase of diesel emissions testing equipment and the delivery of free three-hour training courses for 321 qualified mechanics.

Since the end of this program, the Tasmanian Skills Institute has continued to utilise this equipment in light and heavy vehicle training courses. Recently the equipment has been used in both training and commercial activities to test emissions from diesel vehicles that have been converted to LNG and CNG fuels.

A limitation of the equipment is that it is not certified to perform the DT80 emission test. The DT80 test is the Australian Transport Council's in-service emission standard for diesel vehicles.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

As of 1 July 2011 there were 12,511 diesel powered heavy vehicles (i.e. vehicles over 4.5 tonnes) and 71,281 diesel powered light vehicles registered in the state. This represents an increase of 1.9% and an increase of 8.9% respectively since 1 July 2010. Of the total of 435,824 vehicles registered in Tasmania on 1 July 2011, 19.2% were diesel powered.

Smoky vehicles program

The Department of Infrastructure, Energy and Resources maintains a strong focus on road safety rather than on vehicle emissions. They do not possess vehicle emission measurement facilities, and do not actively target vehicle emissions.

They do, however, utilise the '10-second rule' for smoky exhausts and issue Traffic Infringement Notices requiring identified vehicles to undergo servicing to reduce smoke emissions. Traffic Infringement Notices for smoky exhausts are issued by departmental Vehicle Inspection Officers and can also be issued by the police.

Records are not compiled showing the number of Traffic Infringement Notices issued for smoky vehicles.

Diesel vehicle emission testing and repair programs

The Department of Infrastructure, Energy and Resources does not possess vehicle emission measurement facilities, and does not compile records of vehicle testing or repairs.

Audited maintenance programs for diesel vehicles

There is no audited maintenance program for diesel vehicles in Tasmania.

Diesel vehicle retrofit programs

Statistics are not compiled on diesel vehicle retrofitting.

Other programs

There were no other programs implemented during the reporting year to manage emissions from in-service diesel vehicles.

Australian Capital Territory

Report to the NEPC on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for the Australian Capital Territory by Mr Simon Corbell MLA, Minister for the Environment and Sustainable Development, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Road Transport (Vehicle Registration) Regulation 2000 requires emission control systems supplied by vehicle manufacturers to remain fitted and functional. This is consistent with NEPM goals.

Aggregate air quality data indicates that air pollution caused by diesel emissions is not a significant contributor to the urban airshed in the ACT. Pollutants associated with diesel emissions in the ACT are low. Therefore, no actions are taken in the ACT as a result of measures against the Diesel NEPM.

Notwithstanding the above, the ACT has introduced a number of measures consistent with achieving the goal of the NEPM. These include:

- adoption of the Australian Design Rules, as requirements under Schedule 1 of the Road Transport (Vehicle Registration) Regulation 2000
- requiring emission control equipment fitted to a vehicle to remain fitted and be maintained in a condition to ensure that it operates essentially in accordance with the system's original design, under Schedule 1 of the Road Transport (Vehicle Registration) Regulation 2000
- implementation of random on-road and car park inspections
- implementation of arrangements enabling members of the community to report vehicles that they consider unroadworthy, including those that emit excessive smoke, and enabling appropriate action against those vehicles
- ACT Government subscription to Greenfleet for the planting of trees to offset its vehicles fleet emissions
- supporting ACT representation on the fuel standards consultative committee.

While statistics on the number of inspections and how many defects and warnings are collected at this stage, the reasons for these enforcement actions are currently not collated. In general, ACT inspectors would not normally issue an infringement notice to a vehicle emitting excessive smoke. The ACT has found it more beneficial to require a vehicle to be repaired than to impose a monetary penalty. Issuing a monetary penalty is likely to delay repairs or make it more difficult for owners to repair their vehicles.

In addition to the above, as part of the ACT Government Fleet Efficiency Program, the ACT has purchased 70 compressed natural gas (CNG) powered buses, which are currently in service. It is not proposed to purchase any more CNG buses before 2013. Two buses that were converted to operate on CNG have been returned to diesel operation as the trial of these two vehicles was unsuccessful.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

As indicated above, the ACT airshed quality does not approach the NEPM trigger points and therefore no action is taken within the ACT as a result of the Diesel NEPM. As such, the NEPM has limited, if any, effectiveness within the ACT.

Therefore the programs identified under the NEPM are not applicable within the ACT, as any actions taken in relation to diesel vehicles are not taken as a result of the NEPM but by the overriding road transport laws that apply standards to individual vehicles based on type, age, and roadworthiness.

Smoky vehicles program

Not applicable.

Diesel vehicle emission testing and repair programs

Not applicable.

Audited maintenance programs for diesel vehicles

Not applicable.

Diesel vehicle retrofit programs

Not applicable.

Other programs

Not applicable.

Northern Territory

Report to the NEPC on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for the Northern Territory by Mr Karl Hampton MLA, Minister for Natural Resources, Environment and Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Aggregate data on diesel emissions for the Northern Territory is not available. However, air quality studies and the National Pollutant Inventory indicate that motor vehicle traffic is not a major contributor to air emissions in the larger urban areas.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

A number of initiatives are implemented to control diesel vehicle emissions. Vehicle standards are enforced through the general provisions of the Motor Vehicles Act and the Australian Vehicle Standard Rules which require all vehicles to comply with Australian Design Rules when in service.

In the Territory, there are approximately 44,000 diesel vehicles registered, representing over a quarter of the total vehicle fleet, which is much higher than the national level of approximately 15% of the vehicle fleet. The Australian Bureau of Statistics estimates that diesel vehicles registered in the Northern Territory represent less than 1% of all diesel vehicles in Australia.

Of the four major regions in the Territory, 66% of all diesel vehicles registered in the Territory are registered in the Darwin region, while 14% are registered in Alice Springs, 9% in Katherine and 2% in Tennant Creek.

In the Darwin region, approximately 25% of all registered vehicles are diesels; this is slightly higher in Alice Springs, with diesels representing 28% of the total vehicle fleet. In Katherine and Tennant Creek, the diesel portion of the total fleet is 35% and 44% respectively, indicating a higher reliance on diesel vehicles in remote areas.

Of the heavy vehicle diesels registered in the Territory, 64% are registered in the Darwin region, 18% in Alice Springs and 9% in Katherine. The distribution of light diesel vehicle registrations in the Territory differs, with 67% of all light diesel vehicles registered in the Darwin region, 13% in Alice Springs and 8% in Katherine.

Smoky vehicles program

A smoky vehicle program is undertaken as part of the Territory's vehicle registration and roadworthiness testing procedures. Records of diesel vehicles issued with defect orders show that only a minor fraction of vehicles checked as part of the vehicle registration process received a defect notice due to engine smoke.

Diesel vehicle emission testing and repair programs

Pollutants associated with diesel emissions in the Territory are well below emission standards. Therefore, the current air quality is not considered a 'trigger' for change in relation to managing diesel emissions in the Territory. The Northern Territory will continue to monitor the need for action on diesel emissions and will take appropriate action as required.

Audited maintenance programs for diesel vehicles

Vehicle roadworthy inspections are undertaken for all light and heavy vehicles and these inspections include checking that all required emission control equipment is fitted as well as the detection of smoky vehicles. Periodic roadworthy inspections are required at registration renewal and the frequency of inspections is determined by the vehicle type and category. Light vehicles up to three years old do not require inspection and, for vehicles between three and 10 years old, a biennial inspection is required. Light vehicles greater than 10 years old and all heavy vehicles require an annual roadworthy inspection.

Diesel vehicle retrofit programs

The majority of the Northern Territory road-train fleet is less than five years old and employs the latest technology in engine management systems to minimise fuel consumption. On a payload per emission basis, road trains operating line haul operations in remote Australia are considered to be some of the most environmentally efficient road freight vehicles in the world.

Other programs

The Territory's open access policy provides for 'as of right' access for road trains and 100% network access for vehicles operating at higher mass limits. In addition the Territory's innovative vehicle policy promotes the development of high-productivity innovative vehicle combinations that can deliver further efficiency benefits.

The Darwin region *Heavy Vehicle Task Force Report* (June 2011) has made a number of recommendations to improve the safety of sharing our roads with heavy vehicles in the greater Darwin area. The 29 recommendations include approved road-train routes into industrial areas and continued 'as of right' access for heavy vehicles (excluding road trains).

Jurisdictional Reports on the implementation of the

Movement of Controlled Waste between States and Territories NEPM

2010–2011

Commonwealth

Report to the NEPC on the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure for the Commonwealth by the Hon. Tony Burke MP, Minister for Sustainability, Environment, Water, Population and Communities, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Commonwealth implements the NEPM administratively and ensures that its obligations under the *National Environment Protection Act 1994* are met.

Through its involvement in the Implementation Working Group (IWG), the Commonwealth is working with the states and territories to continue to implement the NEPM in a consistent approach. Members of the IWG communicate regularly through email and meetings. The NEPM has been under review during this reporting period. In late 2010, the NEPC made a minor variation to the NEPM to provide greater clarity, remove unnecessary regulatory burden and remove clauses that are no longer required.

For the reporting year, Commonwealth agencies indicated that the management of waste services and the movement of controlled waste between states are managed mainly through contract arrangements. These contract arrangements require the contractor to comply with all Commonwealth, state, territory and local legislation, regulations, guidelines and standards.

The reporting agencies indicated that they had incorporated activities under the NEPM in environmental management systems (EMS), waste management tracking systems, in-house training and standard operating procedures. These EMS and policies were also applied and implemented by the contractors engaged by the agencies to provide waste management services.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

From the perspective of participating government agencies, the NEPM generally operates efficiently and provides an effective framework for implementation across the states and territories. No Commonwealth agency reporting on the NEPM indicated any problems in meeting the requirements of the NEPM. As a result of consultation between reporting agencies, the IWG and the states and territories, the reporting of movements of waste from external territories will now be captured in a separate reporting column. The review of the NEPM, which began in 2009, was completed by November 2010 and has provided an opportunity for wider industry and public consultation on the efficiency and effectiveness of the NEPM.

One agency suggested that templates for data capture may improve the effective administration of the NEPM.

New South Wales

Report to the NEPC on the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure for New South Wales by the Hon. Robyn Parker MP, Minister for the Environment and Minister for Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The NEPM has been in place for more than 10 years and is operating smoothly, without any significant issues. The introduction of online waste tracking in 2006 for waste being received at NSW facilities has greatly reduced errors in documentation and more than 99% of transport certificates are now completed correctly. Minor changes to the NEPM were recommended following the 10-year review, and these are expected to be introduced in NSW in 2012 when the Protection of the Environment Operations (Waste) Regulation is due to be re-made.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM continues to provide an effective tool in minimising the potential for adverse impacts associated with the movement of controlled waste on the environment and human health. A total of 63,921 tonnes of controlled waste in 4394 movements was reported this period as having been transported into NSW (Tables 2 and 4). This is a 34% reduction on the 97,304 tonnes and a 31% reduction on the 6325 movements in 2009–10.

There was a significant reduction in controlled waste received from interstate for landfill disposal in NSW, notably a 23,224 tonnes reduction in asbestos contaminated soil from the ACT and 8113 tonnes reduction in non-metallic product from Victoria. These reductions were due to the end of major development projects in the ACT and options for dealing with non-metallic product becoming available in Victoria.

There was also a net reduction of 939 tonnes of lead, mostly lead acid batteries, with significant reductions in lead waste from Queensland and South Australia partly offset by an increase from Western Australia. Other significant changes included a reduction in aluminium dross from Queensland (2895 tonnes) and tyres from the ACT (1546 tonnes) and an increase in waste oil from Queensland (1528 tonnes).

A number of compliance campaigns related to waste and the transport of dangerous goods were undertaken during 2010–11. These campaigns did not identify any compliance issues for the interstate movement of controlled waste.

Table 1: Number of consignment authorisations issued by New South Wales

Reporting year	Consignment authorisations issued
2009–10	991
2010–11	730

Table 2: Quantity of controlled waste into New South Wales for the period

1 July 2010 to 30 June 2011

Tonnes per waste category by state/territory

Code	Description	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext Terr*	Total (tonnes)
A	Plating & heat treatment		4.00								**4.00**
B	Acids		10,903.45	65.11				0.49			**10,969.05**
C	Alkalis		489.20	53.98	2.38	1.39		1.07			**548.02**
D	Inorganic chemicals		7,747.34	10,936.05	5,804.35	397.77	3,591.28	30.82	264.02		**28,771.63**
E	Reactive chemicals			0.09	4.75						**4.84**
F	Paints, resins, inks, organic sludges		588.27	795.70		209.40		34.64			**1,628.01**
G	Organic solvents		98.04	359.36	3.21	156.02		17.99			**634.62**
H	Pesticides			35.77	2.85			0.30			**38.92**
J	Oils		2,765.27	4,040.14	45.48	28.80	210.37	1,655.95			**8,746.01**
K	Putrescible/organic waste		4,144.30					4,882.28			**9,026.58**
L	Industrial washwater										**0.00**
M	Organic chemicals		6.75	971.01	16.00	84.46	27.30	172.68			**1,278.20**
N	Soil/sludge		415.10	136.80			371.17	1,071.49			**1,994.56**
R	Clinical & pharmaceutical		1.69	38.90				143.00			**183.59**
T	Misc.			1.81	1.44			90.02			**93.27**
State Totals (tonnes)			**27,163.41**	**17,434.72**	**5,880.46**	**877.84**	**4,200.12**	**8,100.73**	**264.02**	**0.00**	**63,921.30**

Table 3: Discrepancies in movements of controlled waste into New South Wales for the period

1 July 2010 to 30 June 2011

Percentage of total movements

Discrepancy type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext Terr *
Consignment non-arrival	n/a								
Transport without authorisation	n/a								
Non-matching documentation	n/a	0.51	0.95	0.31					
Waste data	n/a								

Table 4: Number of movements of controlled waste into New South Wales for the period

1 July 2010 to 30 June 2011

NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext Terr*
n/a	1782	1048	328	143	203	877	13	0

* The 2010 review of this measure recommended the addition of an ‘External Territories’ column to report on waste movements from external territories where these movements must be reported.

Victoria

Report to the NEPC on the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure for Victoria by the Hon. Ryan Smith, Minister for Environment and Climate Change, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

There were no implementation issues arising.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM continues to be effective in tracking the movements of controlled wastes into Victoria.

Table 1: Number of consignment authorisations issued by Victoria

Reporting year	Consignment authorisations issued
2009–10	508
2010–11	472

Table 2: Quantity of controlled waste into Victoria for the period

1 July 2010 to 30 June 2011

Tonnes per waste category by state/territory

Code	Description	NSW	Qld	WA	SA	Tas	ACT	NT	Ext-Terr*	Total (tonnes)
A	Plating & heat treatment	0.00	7.88	0.00	0.00	0.00	0.00	0.00		**7.88**
B	Acids	59.56	1.70	0.00	1.87	1.77	0.20	0.00		**65.10**
C	Alkalis	34.56	0.00	0.00	0.00	1.21	0.00	2.22		**37.99**
D	Inorganic chemicals	11,552.13	0.00	2,607.86	3,511.33	2,682.38	0.00	363.39		**20,717.09**
E	Reactive chemicals	1.79	0.00	0.00	0.00	0.00	0.00	0.21		**2.00**
F	Paints, resins, inks, organic sludges	2,170.55	540.27	216.48	25.56	0.14	0.00	0.00		**2,953.00**
G	Organic solvents	1,172.15	27.10	98.70	138.22	366.82	1.70	0.07		**1,804.76**
H	Pesticides	48.69	572.07	34.29	11.48	0.16	0.00	11.85		**678.54**
J	Oils	3,441.30	1,768.79	34.20	45.85	149.21	0.00	0.00		**5,439.35**
K	Putrescible/organic waste	2,760.97	22.20	0.00	4.50	0.00	0.00	0.00		**2,787.67**
L	Industrial washwater	116.91	0.00	0.00	3.00	0.00	0.00	0.00		**119.91**
M	Organic chemicals	8.00	0.00	4.00	1.15	36.75	0.00	7.73		**57.63**
N	Soil/sludge	102.18	0.90	0.00	54.14	13.20	0.00	0.00		**170.42**
R	Clinical & pharmaceutical	304.48	59.86	0.00	333.01	0.06	0.00	0.00		**697.41**
T	Misc.	74.69	24.57	0.00	0.00	11.55	0.20	0.00		**111.01**
State Totals (tonnes)		**21,847.96**	**3,025.34**	**2,995.53**	**4,130.11**	**3,263.25**	**2.10**	**385.47**		**35,649.76**

Table 3: Discrepancies in movements of controlled waste into Victoria for the period

1 July 2010 to 30 June 2011

Percentage of total movements

Discrepancy type	NSW	Qld	WA	SA	Tas	ACT	NT	Ext Terr *
Consignment non-arrival	4.4	11.05	8.10	5.8	15.26	20.00	7.50	-
Transport without authorisation	2.95	0.50	-	0.75	1.14	-	-	-
Non-matching documentation	0.31	2.51	-	0.25	0.38	20.00	5.00	-
Waste data	9.81	-	-	43.28	3.82	40.00	-	-

Table 4: Number of movements of controlled waste into Victoria for the period

1 July 2010 to 30 June 2011

NSW	Qld	WA	SA	Tas	ACT	NT	Ext Terr*
1590	199	222	396	262	5	40	

* The 2010 review of this measure recommended the addition of an External Territories column to report on waste movements from external territories where these movements must be reported.

Queensland

Report to the NEPC on the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure for Queensland by the Hon. Vicky Darling MP, Minister for Environment, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Queensland Department of Environment and Resource Management (DERM) is responsible for the administration of the Controlled Waste NEPM in Queensland. The NEPM is implemented under the *Environmental Protection Act 1994* (EP Act) principally through the Environmental Protection (Waste Management) Regulation 2000. As per the NEPM, the regulation includes provisions for the tracking of controlled waste and requirements for the prior approval of consignments of controlled waste into Queensland. Legislative requirements for the licensing of controlled waste transporters are included in the EP Act and detailed in Schedule 2 of the Environmental Protection Regulation 2008. The NEPM administration is integrated with intrastate tracking and regulated waste licensing and compliance activities in Queensland.

- DERM has continued to administer the NEPM to help ensure that controlled wastes are managed appropriately.
- The prior approval process through consignment authorisation and consultation with other jurisdictions, generators and receival facilities in Queensland has helped to ensure that controlled wastes are consigned to the appropriate facility.
- While the number of controlled movements into Queensland (Table 1) was slightly lower than the previous year, the amount of waste transported into Queensland increased by 19,856.90 tonnes to 38,757.23. This increase was associated with a 57% increase in movements from New South Wales and a 3.12% increase from Victoria. There was also a significant increase in movements from Tasmania.
- Discrepancies listed in Table 3 were associated with failures of transporters in the near border regions to obtain consignment authorisation or to complete waste transport certificates correctly. Discrepancies have been corrected and waste handlers advised of their responsibilities under the Environmental Protection (Waste Management) Regulation 2000.
- Investigations and compliance activities are ongoing in relation to the movement of controlled waste without consignment authorisation.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM is continuing to provide an effective monitoring framework for inter-jurisdictional movement of controlled waste. Jurisdictional cooperation on the administration of the NEPM continues to help ensure an efficient and effective system for the protection of the environment from environmentally hazardous wastes.

Table 1: Number of consignment authorisations issued by Queensland

Reporting year	Consignment authorisations issued
2009–10	150
2010–11	132

Table 2: Quantity of controlled waste into Queensland for the period

1 July 2010 to 30 June 2011

Tonnes per waste category by state/territory

Code	Description	NSW	Vic	Qld	SA	Tas	ACT	NT	Ext-Terr*	Total (tonnes)
A	Plating & heat treatment	45.31								**45.31**
B	Acids	204.88	9.15	2.97	4.96	0.29		7.47		**229.72**
C	Alkalis	11,634.00						209.64		**11,843.64**
D	Inorganic chemicals	4.59	5.02		42.54	18.10				**70.25**
E	Reactive chemicals									**0.00**
F	Paints, resins, inks, organic sludges	393.05								**393.05**
G	Organic solvents	0.22								**0.22**
H	Pesticides	3.93			15.20					**19.13**
J	Oils	9,637.69	732.62		0.21			16.80		**10,387.32**
K	Putrescible/organic waste	467.82						144.50		**612.32**
L	Industrial washwater									**0.00**
M	Organic chemicals	228.70	352.81		37.80			1.25		**620.56**
N	Soil/sludge	10,355.02	787.82			2,863.72				**14,006.56**
R	Clinical & pharmaceutical	529.15								**529.15**
T	Misc.									**0.00**
State Totals (tonnes)		**33,504.36**	**1,887.42**	**2.97**	**100.71**	**2,882.11**	**0.00**	**379.66**		**38,757.23**

* New Zealand.

Table 3: Discrepancies in movements of controlled waste into Queensland for the period

1 July 2010 to 30 June 2011
Percentage of total movements

Discrepancy type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext Terr *
Consignment non-arrival	1.94%	3.22%	N/A	0	13.63%	3.10%	0	0	N/A
Transport without authorisation	7.96%	12.90%	N/A	100%	22.72%	1.24%	0	94.73%	N/A
Non-matching documentation	1.94%	3.22%	N/A	0	13.63%	3.10%	0	0	N/A
Waste data			N/A						N/A

Table 4: Number of movements of controlled waste into Queensland for the period

1 July 2010 to 30 June 2011

NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext Terr*
1231	93	N/A	1	22	161	0	38	N/A

* The 2010 review of this measure recommended the addition of an 'External Territories' column to report on waste movements from external territories where these movements must be reported.

Western Australia

Report to the NEPC on the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure for Western Australia by the Hon. Bill Marmion MLA, Minister for the Environment, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Environmental Protection (Controlled Waste) Regulations 2004 provide for the licensing of the transport of controlled wastes and the provision of permits detailing what waste is carried by whom and where it is taken. This is the mechanism by which implementation of the Movement of Controlled Waste NEPM has been achieved in Western Australia.

The Environmental Protection (Controlled Waste) Regulations 2004 are presently under review and changes will be made to ensure alignment with the NEPM.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

Table 1: Number of consignment authorisations issued by Western Australia

Reporting year	Consignment authorisations issued
2009–10	11
2010–11	2

Table 2: Quantity of controlled waste into Western Australia for the period

1 July 2010 to 30 June 2011

Tonnes per waste category by state/territory

Code	Description	NSW	Vic	Qld	SA	Tas	ACT	NT	Ext-Terr*	Total (tonnes)
A	Plating & heat treatment									**0.00**
B	Acids									**0.00**
C	Alkalis									**0.00**
D	Inorganic chemicals									**0.00**
E	Reactive chemicals									**0.00**
F	Paints, resins, inks, organic sludges									**0.00**
G	Organic solvents									**0.00**
H	Pesticides									**0.00**
J	Oils	40.00								**40.00**
K	Putrescible/organic waste									**0.00**
L	Industrial washwater									**0.00**
M	Organic chemicals									**0.00**
N	Soil/sludge								1002.00	**0.00**
R	Clinical & pharmaceutical									**0.00**
T	Misc.									**0.00**
State Totals (tonnes)		**40.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**		**40.00**

No discrepancies were reporting for the period 1 July 2010 to 30 June 2011

Table 3: Number of movements of controlled waste into Western Australia for the period

1 July 2010 to 30 June 2011

NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext Terr*
1			n/a					1

* The 2010 review of this measure recommended the addition of an 'External Territories' column to report on waste movements from external territories where these movements must be reported.

South Australia

Report to the NEPC on the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure for South Australia by the Hon. Paul Caica MP, Minister for Environment and Conservation, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The South Australian Environment Protection Authority (SA EPA) administers the implementation of the measure. The measure operates as an Environment Protection Policy in South Australia pursuant to provisions of the *Environment Protection Act 1993* (the Act). It is primarily implemented through conditions attached to an Environmental Authorisations, in accordance with the Act.

In South Australia, waste producers, transporters and operators of waste facilities are required to

- complete Waste Transport Certificates
- where necessary, apply for a consignment authorisation for the transport and receipt of controlled waste into or out of South Australia.

Information received from Waste Certificates and consignment authorisations enables the SA EPA to reconcile wastes transported against wastes received. It also enables the SA EPA to compile summary information of the type and amount of wastes moved, in accordance with the measure.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The implementation of the Measure continues to provide a medium for consultation and communication with other jurisdictions in regard to waste management. The Measure also provides the waste industry with clear requirements for the transport of waste into and out of South Australia. In addition it enables the Environment Protection Authority to ensure that controlled wastes entering South Australia are transported and treated in a manner that minimises the potential for adverse impacts on the environment or human health.

Table 1: Number of consignment authorisations issued by South Australia

Reporting year	Consignment authorisations issued
2009–10	173
2010–11	171

Table 2: Quantity of controlled waste into South Australia for the period

1 July 2010 to 30 June 2011

Tonnes per waste category by state/territory

Code	Description	NSW	Vic	Qld	WA	Tas	ACT	NT	Ext-Terr*	Total (tonnes)
A	Plating & heat treatment	0.25	27.62	1.14						**29.01**
B	Acids		237.20					81.11		**318.31**
C	Alkalis		2.60					137.22		**139.82**
D	Inorganic chemicals	7,253.23	11,978.64		285.92	148.19		155.36		**19,821.34**
E	Reactive chemicals		0.50					8.00		**8.50**
F	Paints, resins, inks, organic sludges	558.34		657.85				12.00		**1,228.19**
G	Organic solvents	101.32	2,683.83	1.60	341.99			85.02		**3,213.76**
H	Pesticides							0.25		**0.25**
J	Oils	93.94	140.80	547.80	536.69			3,724.10		**5,043.33**
K	Putrescible/organic waste							4		**4.00**
L	Industrial washwater									**0.00**
M	Organic chemicals		20.89							**20.89**
N	Soil/sludge		4.93		216.00	5509.90		286.30		**6,017.13**
R	Clinical & pharmaceutical					25.84		141.99		**167.83**
T	Misc.	22.95						402.51		**425.46**
State Totals (tonnes)		**8,030.03**	**15,097.01**	**1,208.39**	**1,380.60**	**5,683.93**	**0.00**	**5,037.86**		**36,437.82**

Table 3: Discrepancies in movements of controlled waste into South Australia for the period

1 July 2010 to 30 June 2011

Percentage of total movements

Discrepancy Type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext Terr *
Consignment non-arrival	40	38	56	36	n/a	45	100	41	0
Transport without authorisation	2	4	0	0	n/a	0	0	3	0
Non-matching documentation	66	20	75	93	n/a	38	0	78	0
Waste data	20	20	11	14	n/a	18	0	11	0

Table 4: Number of movements of controlled waste into South Australia for the period

1 July 2010 to 30 June 2011

NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext Terr*
330	508	55	86	n/a	21	0	409	0

* The 2010 review of this measure recommended the addition of an External Territories column to report on waste movements from external territories where these movements must be reported.

Tasmania

Report to the NEPC on the implementation of the National Environment Protection (Used Packaging Materials) Measure for Tasmania by the Hon. Brian Wightman MP, Minister for Environment, Parks and Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

In Tasmania the NEPM is a State Policy under the *State Policies and Project Acts 1993*. The key legislative instrument for implementation of the NEPM is the *Environmental Management and Pollution Control Act 1994*. In February 2010, the Environmental Management and Pollution Control (Controlled Waste Tracking) Regulations were gazetted. One of the objectives of these regulations is to further strengthen the regulatory framework of the NEPM. The Department of Primary Industries, Parks, Water and Environment is the responsible agency for the purposes of implementation of the NEPM.

Implementation issues arising

The NEPM is fully implemented in Tasmania. Until April 2010 it was delivered primarily through specific requirements on waste transport companies by issuing Waste Transport Business-Environment Protection Notices (WTB-EPNs) under the *Environmental Management and Pollution Control Act 1994*. New controlled waste transport regulations were introduced in February 2010, requiring registration of controlled waste handlers and compliance with conditions of registration.

Tasmania regularly consults with the other jurisdictions on NEPM matters such as issuing Consignment Authorisations and the appropriateness of treatment/disposal facilities. Tasmania continues to participate in all implementation aspects of the NEPM, including exchange of relevant information, through active membership in the Implementation Working Group which has met face-to-face during the reporting period. Issues raised by industry, waste transport companies and other agencies continue to be satisfactorily resolved through this forum.

Last year was the first year that controlled wastes received from External Territories was reported separately. This has particular significance for Tasmania, as most of the Controlled Waste Consignment Authorisations issued by Tasmania are for controlled wastes returned to Australia from Antarctica.

There are a number of jurisdictional issues associated with the movement of controlled wastes between Tasmania and Antarctica, which are currently being considered by Tasmania and the Commonwealth.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

A significant impetus in achieving the NEPM goal has been ongoing consultation between waste producers, transporters and the EPA on controlled waste matters, particularly in ensuring that controlled wastes are being adequately treated.

There have been additional and ongoing consultations between jurisdictions in relation to the appropriateness of issuing consignment authorisations.

Table 1: Number of consignment authorisations issued by Tasmania

Reporting year	Consignment authorisations issued
2009–10	23
2010–11	22

Table 2: Quantity of controlled waste into Tasmania for the period

1 July 2010 to 30 June 2011

Tonnes per waste category by state/territory

Code	Description	NSW	Vic	Qld	WA	SA	ACT	NT	Ext-Terr*	Total (tonnes)
A	Plating & heat treatment									**0.00**
B	Acids					52.00			0.30	**52.30**
C	Alkalis									**0.00**
D	Inorganic chemicals								0.10	**0.10**
E	Reactive chemicals									**0.00**
F	Paints, resins, inks, organic sludges									**0.00**
G	Organic solvents								27.10	**27.10**
H	Pesticides									**0.00**
J	Oils								9.60	**9.60**
K	Putrescible/organic waste								27.00	**27.00**
L	Industrial washwater									**0.00**
M	Organic chemicals									**0.00**
N	Soil/sludge								16.70	**16.70**
R	Clinical & pharmaceutical									**0.00**
T	Misc.									**0.00**
State Totals (tonnes)		**0.00**	**0.00**	**0.00**	**0.00**	**52.00**	**0.00**	**0.00**	**80.80**	**132.80**

Table 3: Discrepancies in movements of controlled waste into Tasmania for the period

1 July 2010 to 30 June 2011

Percentage of total movements

Discrepancy type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext Terr *
Consignment non-arrival	0	0	0	0	0	6	0	0	0
Transport without authorisation	0	0	0	0	0	n/a	0	0	0
Non-matching documentation	0	0	0	0	0	n/a	0	0	0
Waste data	0	0	0	0	0	n/a	0	0	0

Table 4: Number of movements of controlled waste into Tasmania for the period

1 July 2010 to 30 June 2011

NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext Terr*
0	0	0	0	3	0	0	0	13

* The 2010 review of this measure recommended the addition of an 'External Territories' column to report on waste movements from external territories where these movements must be reported.

Australian Capital Territory

Report to the NEPC on the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure for the Australian Capital Territory by Mr Simon Corbell MLA, Minister for the Environment and Sustainable Development, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The National Environment Protection (Movement of Controlled Waste between States and Territories) Measure (the NEPM) has been fully implemented and operational in the ACT since March 2000, and no major issues have been identified with its operation. The Environment and Sustainable Development Directorate (ESDD) continued to work with industry during 2010–11 to ensure efficient implementation of the NEPM.

NEPM documents (which include explanation of producer, transporter and waste facility responsibilities and instructions on how to complete a waste transport certificate) produced by the ESDD continue to be of great benefit to stakeholders in ensuring compliance with their statutory requirements.

All parties bound by the NEPM have complied with the NEPM's protocols and information reporting requirements. Regular contact has been maintained with other jurisdictions to ensure cooperative administration of the NEPM.

A large number of movements have continued into the ACT for the treatment of polychlorinated biphenyl contaminated oil by the Energy Services Invironmental facility.

The ESDD continued to participate in the Implementation Working Group for the NEPM.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM continues to provide an effective means of tracking hazardous waste between jurisdictions, and minimising environmental risk from interstate transportation of controlled waste.

Table 1: Number of consignment authorisations issued by Australian Capital Territory

Reporting year	Consignment authorisations issued
2009–10	45
2010–11	54

Table 2: Quantity of controlled waste into Australian Capital Territory for the period

1 July 2010 to 30 June 2011

Tonnes per waste category by state/territory

Code	Description	NSW	Vic	Qld	WA	SA	Tas	NT	Ext-Terr*	Total (tonnes)
A	Plating & heat treatment									**0.00**
B	Acids									**0.00**
C	Alkalis									**0.00**
D	Inorganic chemicals									**0.00**
E	Reactive chemicals									**0.00**
F	Paints, resins, inks, organic sludges									**0.00**
G	Organic solvents									**0.00**
H	Pesticides									**0.00**
J	Oils	53.70	43.43	17.00						**114.13**
K	Putrescible/organic waste									**0.00**
L	Industrial washwater									**0.00**
M	Organic chemicals	448.51	41.06	11.90		40.00				**541.47**
N	Soil/sludge	18.56								**18.56**
R	Clinical & pharmaceutical	267.36								**267.36**
T	Misc.									**0.00**
State Totals (tonnes)		**788.13**	**84.49**	**28.90**	**0.00**	**40.00**	**0.00**	**0.00**		**941.52**

Table 3: Discrepancies in movements of controlled waste into Australian Capital Territory for the period

1 July 2010 to 30 June 2011

Percentage of total movements

Discrepancy type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext Terr *
Consignment non-arrival							N/A		
Transport without authorisation	2						N/A		
Non-matching documentation							N/A		
Waste data							N/A		

Table 4: Number of movements of controlled waste into Australian Capital Territory for the period

1 July 2010 to 30 June 2011

NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext Terr*
917	10	3		1		N/A		

* The 2010 review of this measure recommended the addition of an 'External Territories' column to report on waste movements from external territories where these movements must be reported.

Northern Territory

Report to the NEPC on the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure for Northern Territory by Mr Karl Hampton MLA, Minister for Natural Resources, Environment and Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The *Waste Management and Pollution Control Act 1998* provides the legislative basis to regulate and administer the NEPM. The Department Natural Resources, Environment, The Arts and Sports (NRETAS) currently administers the NT's obligations through licensing of scheduled activities that involve the movement of controlled wastes across state/territory boundaries and the issuing and receipt of Waste Transport Certificates. This level of involvement is commensurate with the terms of the Agreement between States and Territories on matters relating to the implementation of the NEPM. The level of environmental safeguard is further bolstered within the Territory by the NT Worksafe administration of the Dangerous Goods (Road and Rail Transport) Act.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

Implementation of the NEPM has been limited in the Northern Territory as the movement of controlled waste tends to be from the NT to other states. The NEPM does, however, provide a consistent system for use in the NT when required. Talks are underway with NSW to seek a copy of their electronic database to be implemented in the NT with local IT support to facilitate better cohesion with tracking requirements under the NEPM. It is hoped that this will be in place by the end of the financial year. The Northern Territory is unaware of any consignments entering the Territory, other than transiting through the NT to other jurisdictions, and has not been in receipt of any requests to dispose of or treat controlled wastes in the Territory The Territory is not aware of or having been in receipt of reports of discrepancies in reporting requirements.

Jurisdictional Reports on the implementation of the

National Pollutant Inventory NEPM

2010–2011

Commonwealth

Report to the NEPC on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for the Commonwealth by the Hon. Tony Burke MP, Minister for Sustainability, Environment, Water, Population and Communities, for the reporting year ended 30 June 2011.

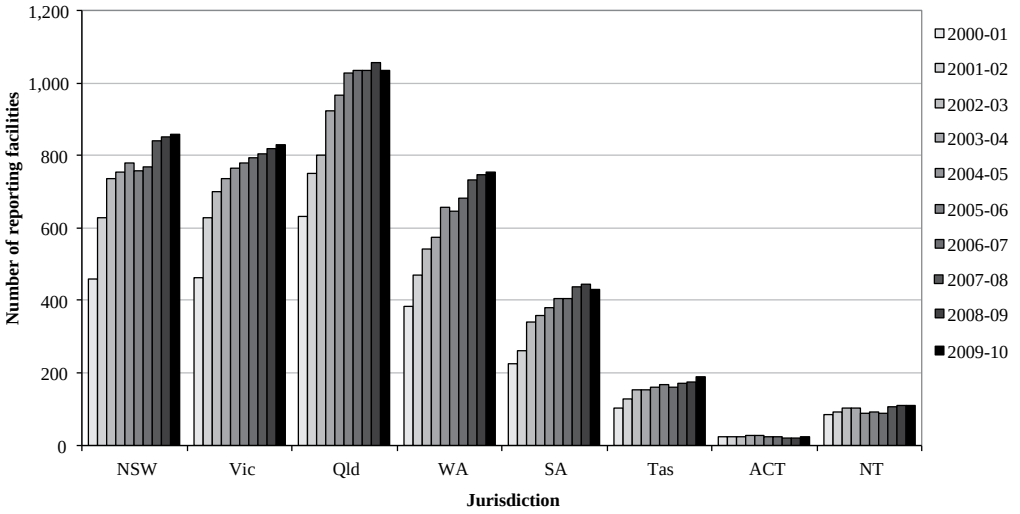
PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Commonwealth implements the NEPM administratively and ensures that its obligations under the *National Environment Protection Act 1994* and *National Environment Protection Measures (Implementation) Act 1998* are met.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The Commonwealth continues to work cooperatively with all jurisdictions to implement the NPI NEPM, and to improve the online inventory so that reporting is easier for industry, data accuracy is upgraded, and its use by the community, industry and government is increased.

Figure 1: Number of reporting facilities per jurisdiction



Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Public		
• 182,103 visitors on website	• Widespread support from industry, community advocates and government for the NPI. • Development of new industry guidance materials and updates to existing materials have been well received. • Ongoing review and development of the industry guidance materials is required to ensure that material is up to date and useful.	• The free call phone line has received on average more than 10 calls a month. In addition, responses have been provided to 123 emails received through the public email inbox. • The department was a silver sponsor of the 20th International Clean Air and Environment Conference which was hosted by the Clean Air Society of Australia and New Zealand in Auckland, New Zealand.
Industry		
• 4227 reports for 2009–10 • 4226 reports for 2008–09 • 199 new reporters • 2 new sectors reporting • 0 confidentiality claims submitted	• Industry representatives have been supportive of improving NPI reporting materials and emission factors. • The NPI continues to cultivate a positive working relationship with industry and associations. • 43 facilities from 3 Commonwealth departments reported to the NPI in 2010–11.	• Updates were made to the NPI guide and four other industry manuals. • A new manual for the crematoria industry was developed and published in March 2011. • Responded to industry queries for assistance relating to reporting and technical issues.
Government		
• 0 desktop audits • 0 on-site audits • 0 regulatory actions	• Participated in the Geoscience Australia project to develop a National database and map of waste management facilities. • Preparation of data that were used in the State of the Environment report.	• Ongoing maintenance and development of the NPI website and database search engine to ensure that relevant information is easy to find.

New South Wales

Report to the NEPC on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for New South Wales by the Hon. Robyn Parker MP, Minister for the Environment and Minister for Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Implementation

The Office of Environment and Heritage (OEH), Department of Premier and Cabinet, implements the National Pollutant Inventory (NPI) NEPM through the Protection of Environment Operations (General) Regulation 2009. The Regulation gives effect to the NEPM, establishes reporting and record keeping requirements and prescribes the offences for which penalty notices may be issued, including failure to lodge a report by the due date and failure to produce records.

Significant issues

The requirement for reporters to provide information on transfers was a relatively recent addition to the NPI program. Many NPI reporters seek guidance from OEH in relation to transfers and appropriate techniques to estimate the quantity of NPI substances in transfers.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

Adoption of online reporting

OEH conducts an annual training program each July to assist reporters to use the Online Reporting System. There has been a steady increase in the number of online reporters. 75% of reporters used the online reporting system in 2009–10 reporting year compared to 65% of reporters in 2008–09.

During 2011 OEH commenced a number of industry sector specific online reporting system training sessions in regional NSW. The industries include piggeries, galvanisers, chicken processing plants and coal mines. The aim of the regional training program is to increase the proportion of online reporters by targeting those that are unable to attend training in Sydney. Regional training will be provided for NPI reporters in Tamworth, Armidale, Bathurst and Griffith.

Online reporting improves reported data quality due to the validation and estimation tools available through online reporting. Online reporting minimises the need for OEH to undertake data entry of the information submitted on paper reports by NPI reporters. The regional training program should result in 80–85% of reporters using the online system for the 2010–11 reporting year.

New reporters

OEH undertakes sector-by-sector reviews to identify potential reporters who may be required to report through the NPI. Generally these reviews are based on facilities that currently hold an Environment Protection licence under NSW legislation. There were eleven new reporters in 2009–10.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Public		
	• Academics and researchers are using NPI data for modelling and other studies. • The media and public are using the NPI database to investigate emissions in locations of interest.	• Use of the NPI data by the media illustrates growing awareness of the dataset.
Industry		
• 856 reports for 2009–10 • 847 reports for 2008–09 • 11 new reporters • No new sectors reporting • No confidentiality claims submitted	• Online Reporting System training provides valuable information for understanding the requirements to report successfully. • NPI support service continues to be essential for new or inexperienced reporters. • Industry often seeks additional guidance material and 'transfer emission techniques' (TETs) for different industry sectors. • Industry requests that NPI manuals be updated regularly to remain relevant and to provide guidance on transfers. • Online tools for estimating emissions should also incorporate non-standard fuels such as macadamia husks.	• OEH has undertaken an Online Reporting System training program to help facilities complete reports successfully online. Approximately 80 reporters were trained in July 2010. • OEH has planned a number of sector targeted training sessions in regional NSW. • Growing industry need for additional training and guidance materials regarding Transfers.
Government		
• 852 desktop audits • 1 on-site audit • 1 regulatory action	• Policy and regulatory approaches continue to be informed by the data collected in the NPI. • OEH has continued to use NPI emissions data to analyse environmental outcomes in relation to the regulation of substances from industrial facilities.	• OEH continues its internal communications program to inform staff of the importance of NPI data and emission estimation tools. • NPI officer meetings facilitate the knowledge sharing between jurisdictions and the collaborative and consistent approach to NPI implementation across Australia.

Victoria

Report to the NEPC on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for Victoria by the Hon. Ryan Smith, Minister for Environment and Climate Change, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

No implementation issues arose during the 2010–11 year.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NPI NPEM continues to be effectively implemented in Victoria.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Public		
	• No specific feedback was received from the community, industry or government to Victoria.	
Industry		
• 828 reports for 2009–10 • 818 reports for 2008–09 • 44 new reporters • 0 new sectors reported • 0 confidentiality claims submitted	• No specific feedback was received from the community, industry or government.	• 88% of industry reports were submitted online (a slight increase on the 86.5% from 2008–09) • Due to significant demand, nine industry training sessions were conducted
Government		
• 828 desktop audits • 6 on-site audits • 0 regulatory actions	• No specific feedback was received from the community, industry or government	• Every industry report underwent a desktop analysis

Queensland

Report to the NEPC on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for Queensland by the Hon. Vicky Darling MP, Minister for Environment, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

A new Memorandum of Understanding (MOU) was signed between the Australian Government and Queensland Government that extends the certainty of state program implementation until 2014. The total funding for state implementation of the program now stands at $420,000 per annum.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Public		
	• By assessing the number of articles published by Fairfax, News Corporation and the ABC with reference to the National Pollutant Inventory, we can see that media interest has declined over the past 3 years. There were six news items in 2010–11, twelve in 2009–10, and nineteen in 2008–09.	• Work commenced on the 2009–10 update of the Queensland Pollutant Emissions Report Card, a publication that has successfully increased public awareness of the NPI.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Industry		
• reports for 2009–10 • 1053 reports for 2008–09 • 26 new reporters • 0 new sectors reporting • 0 confidentiality claims submitted	• Feedback from industry training sessions has been positive, with attendees indicating that they appreciated the face-to-face opportunities to ask questions relating to their specific processes. • Approximately 70% of reporters are now using the online reporting system. The remainder are generally using the simplified reporting forms that were developed for the Intensive Livestock sectors • The number of reporting facilities in Queensland was increasing for several years, but has recently levelled out at around 1030 reporting facilities.	• Queensland conducted four training sessions for interested NPI reporters, with a total 86 people attending. This training was aimed at providing attendees with an overview of the NPI program; what reporting triggers apply; and how to estimate and report emissions and transfers. • All industry reports were processed in accordance with national data verification procedures. This included checking that the emissions and transfer data were consistent with the size and nature of the facility and the amount of fuel burned during the reporting period; and comparing the new data with historical data. • Telephone and email support was offered to all NPI reporters, with the vast majority being contacted during the data validations process.
Government		
• 1034 desktop audits • 2 on-site audits • 0 regulatory actions	• Queensland actively participated in the national Implementation Working Group for the NPI to ensure a nationally consistent approach to implementation.	• The Queensland Government continued to actively promote the innovative use of NPI data for strategic planning and compliance planning purposes within the Department of Environment and Resource Management.

Western Australia

Report to the NEPC on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for Western Australia by the Hon. Bill Marmion MLA , Minister for Environment, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

- Some problems have arisen due to lack of clarity and emission factor shortcomings in selected Emission Estimation Technique Manuals and published electronic reporting tools.
- The requirement to report transfers has resulted in a number of scenarios being identified which have not been totally resolved, though environmental outcomes have not been seriously compromised.
- Commonwealth staffing levels have resulted in a slowdown of reporting material updates.
- Overall funding of program may limit collection of Aggregated Emissions Data (AED).

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Public		
	• Very few calls received from the public regarding NPI database information. • There remains a general lack of awareness of the NPI program.	• NPI program's 'Kids' section introduced to Teachers' Workshop.
Industry		
• 749 reports for 2009–10 • 746 reports for 2008–09 • 65 new reporters • No new sectors reporting • No confidentiality claims submitted	• Widespread acceptance of the online reporting system; 87% uptake in WA for 2009–10. • Reporting of transfers largely successful, though new reporting scenarios continue to require attention. • Some smaller facilities require above-average reporting guidance due to abilities of facility personnel. • Major industrial facilities maintain awareness of community interest in their emissions, and ensure reports truly reflect site emissions. • Support given by DEC NPI Section commended by reporters.	• Information session for industry held in Perth. • Continued follow-up of potential reporters in several industry sectors. • Reporters regularly reminded of reporting deadlines and supplied with additional reporting information to that available on website. • Relatively low usage of online reporting system training offered by DEC reflects increasing acceptance and knowledge of this form of reporting. • Two industry training sessions held for online reporting.
Government		
• 749 desktop audits • 7 on-site audits • No regulatory actions	• Comparison made of emissions reported to NPI with facility licensing reports. • Identification and ranking of WA's major emitters, and comparison with national data.	• NPI segment included in the DEC Regulatory Training Course. • Details of major emitters provided to DEC licensing personnel for information, data cross-checking and follow-up as required. • NPI facility data is automatically loaded to the DEC GIS system.

South Australia

Report to the NEPC on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for South Australia by the Hon. Paul Caica MP, Minister for Environment and Conservation, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

- Ongoing Commonwealth resourcing issues have resulted in outdated Emission Estimation Technique Manuals. Various manuals have a range of issues that need addressing in order for facilities to report accurately.
- The South Australian Environment Protection Authority (SA EPA) uses a load based licensing system that incorporates NPI data when calculating Resource Efficiency Fees. Resource Efficiency Fees are payable for the emission of certain pollutants above a threshold level. It is essential that Emission Estimation Technique Manuals are updated regularly to ensure accurate emission data.
- Updated aggregate emissions data are required for reliable comparison with industry emissions and this is an area in SA that requires additional funding and resources to implement. A detailed air emissions inventory remains a strategic priority for both the NPI program and the SA EPA; however, in accordance with the NPI Memorandum of Understanding, the acquiring and publishing of facility emission data remain the priority to ensure the maximum national benefit derived from the NPI Measure.
- There is a continued need for training of reporters using the online system due to staff turnover within business and industry.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Industry		
• 438 reports for 2009–10 • 447 reports for 2008–09 • Ten new reporters • No new sectors reporting • No confidentiality claims submitted	• Online reporting training has been well received by industry. • NPI Emission Estimation Technique Manuals need to be updated regularly to remain relevant.	• A newsletter, a summary report for 2010 and brochure were released on the website to inform reporters about legislative changes, online reporting and updates to industry guidance material. • Industry enquiries via email and phone have been followed up on a one-on-one basis. • Online reporting training was held in Adelaide and Mt Gambier.
Government		
• 438 desktop audits • One on-site audit • Eleven regulatory actions	• The EPA utilises NPI data to implement the resource efficiency component of load based licensing.	• An internal presentation was held to raise awareness about the NPI within the EPA.

Tasmania

Report to the NEPC on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for Tasmania by the Hon. Brian Wightman MP, Minister for Environment, Parks and Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Implementation of the NPI NEPM was carried out in accordance with the MOU signed between the Commonwealth and Tasmania. One staff member was responsible for implementing the NPI in Tasmania. Specialist advice is also provided from staff members from within the EPA Division of the Department of Primary Industries, Parks, Water and Environment.

The accuracy of some Emission Estimation Technique Manuals is still of concern. There is a need to effectively resource the updating of these manuals as this directly affects data quality.

Consistency of approach to data validation across jurisdictions has been an issue. Work is currently being undertaken to address this issue.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Public		
	• Continued increase in community use of NPI data where environmental issues arise in their community.	• NPI webpage developed on EPA website.
Industry		
• No confidentiality claims submitted	• Positive feedback from industry uses of the online reporting system. • Small industry still relies on direct assistance to complete reports. • Industry welcomes local assistance from within jurisdiction.	• Continued one-on-one training provided to industry is very well received. • Ongoing advice and assistance provided, particularly relating to recent updates to reporting material and new industry sectors. • Encouraging paper reporters to convert to online reporting where possible.
Government		
• 188 desktop audits • 5 on-site visits • No on-site audits • No regulatory actions	• NPI data continues to be used within government.	• Liaison with government officers to outline usefulness of NPI data.

Australian Capital Territory

Report to the NEPC on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for the Australian Capital Territory by Mr Simon Corbell MLA, Minister for the Environment and Sustainable Development, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Environment and Sustainable Development Directorate (ESDD) implements and enforces the NPI NEPM under the provisions of the *Environment Protection Act 1997* (the Act). Section 159A of the Act establishes reporting requirements for industrial facilities in the ACT and prescribes penalties of up to 10 penalty units for non-compliance with a reporting requirement.

There were a few issues identified in the reporting period:

- The ESDD experienced a temporary loss of knowledge and expertise about the NPI since the only NPI officer left in 2010. In order to minimise the risks from loss of key staff, the ESDD is working proactively and collaboratively with counterparts from other jurisdictions to develop a nationally consistent handover package and data validation procedural manuals.
- There were two late reporters in the ACT in the reporting period due to the loss of key staff. The ESDD is working closely with industrial reporters to develop facility-specific reporting procedural manuals to address this issue.
- The update of aggregated emission data (AED) in the ACT is essential for reliable comparison with industry emissions. Due to the limited resources, this task has not been performed to date. A business case will be developed to obtain funds for this work.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The ESDD worked closely with industry to ensure the effective implementation of the NPI NEPM in the ACT under the Act. The implementation activities conducted in the reporting period are detailed in the tables below.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Public		
	• One call was received from the media regarding NPI database information.	• Updating NPI information on the ESDD homepage.
Industry		
• 22 reports for 2009–10 • 22 reports for 2008–09 • No new reporters • No new sectors reporting • No confidentiality claims submitted	• Online reporting system has been accepted by the majority of reporters. • The NPI report provides an opportunity for reporters to improve their performance as they gained deeper understanding of the environmental implications from their routine activities.	• One-on-one training sessions were conducted to assist new reporters to understand the NPI reporting requirements. • Ongoing support was provided to reporters to facilitate their reporting process.
Government		
• 22 desktop audits • No on-site audits • No regulatory actions	• Database access, navigation, information exchange and download continued to operate satisfactorily.	• New Memorandum of Understanding between the Australian Government and the ACT for the implementation of the NPI NEPM was signed in May 2011, which secured the funds for the NPI NEPM implementation until 2014. • The ACT continued to actively participate in the activities of the Implementation Working Group for the NPI.

Northern Territory

Report to the NEPC on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for Northern Territory by Mr Karl Hampton MLA, Minister for Natural Resources, Environment and Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The NPI program is implemented in the Northern Territory (NT) through an Environmental Protection Objective (EPO) established under the Waste Management and Pollution Control Act. Overall responsibility for implementation of the NPI rests with the Environment and Heritage Division, Department of Natural Resources, Environment, The Arts and Sport (NRETAS).

- Transfers reporting data is more consistent as industry gains an understanding of the reporting requirements.
- The NT does not have sufficient funding to perform aggregate airshed emissions but is attempting to collate existing data obtained from industry studies.
- Collaborative work has begun on standardising the desktop auditing of reports across all jurisdictions.
- There remain issues with staffing at the Commonwealth level impacting on uploading of aggregate emission data and the updating of manuals.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Public		
	• There were no NT public enquiries about the NPI data.	
Industry		
• 110 reports for 2009–10 • 111 reports for 2008–09 • 2 new reporters • One new sector reporting • No confidentiality claims submitted	• Industry feedback indicated that interaction with the online reporting system was generally positive. • Over 97% of NT reporters used the online reporting system. • One reporter used paper form reporting and two reports were supplied as simplified information.	• The sole paper reporter encouraged to convert to online reporting. • Availability of online tools emphasised to reporters. • One-on-one training sessions with reporters as required.
Government		
• 117 desktop audits • 2 on-site visits • No regulatory actions	• NRETAS environment officers accessed the NPI database to review emissions data and facilities within the Northern Territory.	• NRETAS environment officers were assisted in accessing the NPI database and interpreting data. • Advice was given to this department of other Australian jurisdiction use of the database for pollution-based license fees.

Jurisdictional Reports on the implementation of the

Used Packaging Materials NEPM

2010–2011

Commonwealth

Report to the NEPC on the implementation of the National Environment Protection (Used Packaging Materials) Measure for the Commonwealth by the Hon. Tony Burke MP, Minister for Sustainability, Environment, Water, Population and Communities, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In June 2010, Ministers agreed to endorse the new Australian Packaging Covenant (APC) and approve the 2010 Minor Variation to the NEPM.

Late in 2010, administrative issues were identified with the registration of the 2005 and 2010 Minor Variations to the NEPM. The NEPM had an expiry date of 30 June 2010, while the 2010 Minor Variation was registered on 9 August 2010. In order to put the question of validity beyond doubt the NEPM is being re-made. Ministers noted and NEPC Committee agreed out-of-session in December 2010 to formally re-make the NEPM. This administrative process will ensure the NEPM continues to provide regulatory underpinning for the Australian Packaging Covenant.

On 21 February 2011, ministers delegated powers to the Executive Officer of the NEPC Service Corporation to undertake the re-make of the NEPM.

The Australian Government led the re-make of the NEPM and in accordance with the NEPC Act, a notice of intention to prepare a draft NEPM was published in February 2011. The draft NEPM and an Impact Statement were subsequently released for public consultation in June 2011. The new NEPM has been drafted to be effective retrospectively and take all variations made to date into account.

Australian Government implementing legislation only applies to brand owner companies with over 50 per cent government ownership, and to its jurisdictional territories. Australia Post is the only company that is considered a brand owner under the definition of the Used Packaging Materials NEPM. Christmas and Cocos Keeling Islands are the only territories where the NEPM could be applied.

Implementation issues arising

The Australian Government and Australia Post are signatories to the Australian Packaging Covenant. The Australian Government encourages Covenant activities across all Commonwealth organisations, including agencies and Australia Post. The Department of Sustainability, Environment, Water, Population and Communities (DSEWPaC) reports actions undertaken by agencies to reduce the environmental impacts of packaging and Australian Government progress against: implementation of office-based and non-office recycling systems; litter reduction measures; creation of Chief Executive Instructions on sustainable procurement; implementation of ICT Sustainability Plan 2010-15 procurement actions, including the percentage of post-consumer recycled content paper; and implementation of relevant principles of Sustainable Packaging Guidelines in the Australian Government APC Action Plan Annual Report.

The Australian Government, as a member of the Covenant Council Steering Committee, participates in developing the Covenant's annual budget for Covenant Council's endorsement. The Australian Government provided 50% of the government funds required for administration and communication activities.

The NEPM requires the Australian Government to provide information annually on the progress of the Covenant to the NEPC. Information is to be provided by the Covenant Council regarding:

- membership of the Covenant expressed as both the number of signatories and the proportion of consumer packaging used in Australia represented by those signatories
- the number of action plans lodged with the Covenant Council
- recovery and utilisation rates reported by Covenant signatories in accordance with their Action Plans under the Covenant, by material type
- a statement of interpretation of the information.

The *Australian Packaging Covenant Council Annual Report 2010–11* provides this information and is available on the Australian Packaging Covenant website at www.packagingcovenant.org.au

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

At the end of June 2011, there were 666 Covenant signatories, of which 658 were compliant.

Reporting year	Number of covenant signatories
2009–10	783 signatories (724 compliant)
2010–11	666 signatories (658 compliant)

Note: The number of signatories reduced in 2010–11 from the previous reporting year. This reduction may be attributed to the introduction of the new Australian Packaging Covenant from 1 July 2010 and the need for signatories to re-sign on to the Covenant. Other factors in the market such as company mergers will also have an impact on the number of signatories.

New South Wales

Report to the NEPC on the implementation of the National Environment Protection (Used Packaging Materials) Measure for New South Wales by the Hon. Robyn Parker MP, Minister for the Environment and Minister for Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

- NSW amended Part 5B of the Protection of the Environment Operations (Waste) Regulation 2005 in March 2011 to underpin the new Australian Packaging Covenant. Provisions relating to reporting requirements are to commence in July 2011.
- In 2010–11 NSW enforcement action was held in abeyance as a result of transition processes to the new Covenant and procedures to remake the Used Packaging Materials NEPM. Specifically:
  - NSW enforcement action is dependent on advice from the Covenant Secretariat regarding the status of businesses that have re-signed or are non-compliant. The first advice was received in April 2011.
  - Enforcement action was further impacted following advice from the Commonwealth in 2010 that administrative issues were identified with the registration of the 2005 and 2010 Minor Variations to the Used Packaging Materials NEPM, which may call its validity into question.
  - In order to put the question of validity beyond doubt and provide certainty to the packaging industry and to jurisdictions regarding enforcement, the NEPM is being re-made. Public consultation on the NEPM commenced on 15 June 2011.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

No enforcement action was undertaken in the reporting year, firstly as a result of both transition requirements to allow previous signatories to re-sign, and action to re-make the NEPM.

Reporting year	Number of covenant signatories
2009–10	326
2010–11	281

Recovery data

Nil (no brand owner was subject to record-keeping obligations under the NSW Regulation).

Supporting data

Clause 18 of the NEPM requires jurisdictions to carry out surveys of packaged products to ascertain its effectiveness in preventing free riding. In 2010–11 NSW and other jurisdictions discussed and agreed on a consistent methodology. NSW will carry out the survey in August 2011.

Complaints, investigations and prosecutions

No complaint was received in relation to specific businesses.

Statement of interpretation of the information

Activity in NSW in the reporting period was affected by transition arrangements for the new Australian Packaging Covenant. NSW was not able to act until advice had been received from the Covenant Secretariat regarding businesses that may be in breach of the Covenant. This occurred in April 2011.

NSW then delayed enforcement activity while administrative issues associated with the registration of the 2005 and 2010 minor variations were resolved.

Local government data

Year (reporting period): 1 July 2010 – 30 June 2011

Total number of Councils reporting: 150

Percentage of total Councils: 99%

Container types and collection frequencies for all containers provided for kerbside collection by number of Councils (e.g. **crate/split bin/bag):**

Container type	Material type collected in container	Frequency of service	Total no. of Councils
Crate	Commingled	Weekly	7
Crate	Commingled	Fortnightly	1
MGB 55L	Commingled	Weekly	1
MGB 120L	Commingled	Weekly	2
MGB 120L	Commingled	Fortnightly	2
MGB 2 x 120L	Paper/Cardboard / Containers	Fortnightly	2
MGB 140L	Commingled	Weekly	3
MGB 140L	Commingled	Fortnightly	3
MGB 240L	Commingled	Weekly	8
MGB 240L	Split (Paper / Containers)	Fortnightly	4
MGB 240L	Split (Waste / Recycling)	Fortnightly	1
MGB 240L	Commingled	Fortnightly	93

Other type of recycling services (e.g. **Drop off) by number of Councils:**

Drop off service only: 24

Drop off service plus kerbside service: 83

Additional Sydney Councils within range of a commercial drop off facility: 30

No service: 15

Total number of premises/households:

Residential	2,720,646 premises
Non-residential	44,332 premises

Number of households/premises serviced by recycling collections:

	Kerbside:	Drop off (optional):
Residential	2,567,907 premises	41,443 premises
Non-residential	12,160 premises	N/A premises

Average premises fee charged by Council for recycling services:

Residential	$94.22	Non-residential	$109.62

Annual per premise cost to Council to provide a recycling service:

Residential	$254 (incl. waste & recycling services)
Non-residential	$N/A

Proportion of household/premises with access to a recycling service: 96.3%

Average participation rate: 84.2%

Table 1: Amounts of materials collected at the kerbside, sent for secondary use/energy recovery and contamination (waste) disposed of to landfill
1 July 2010 to 30 June 2011

Material Types collected at kerbside	Kerbside recycling collected (in tonnes)	Kerbside recycling sold or sent for secondary use including energy recovery by material type (in tonnes)	Kerbside recycling residual waste (contaminants) disposed to landfill (only report total tonnes)
TOTAL PACKAGING PAPER i.e. cardboard and liquid paper board	168,880	154,907	13,972
TOTAL NON PACKAGING PAPER i.e. paper mixed, paper white, office, newspaper and magazines	252,842	233,216	19,626
TOTAL GLASS	205,128	189,241	15,887
TOTAL PLASTICS	47,412	44,127	3,284
TOTAL ALUMINIUM (cans)	4,967	4,598	369
TOTAL STEEL (cans, tins etc.)	22,300	20,585	1,715
TOTAL	**701,529**	**646,675**	**54,854**

Table 2: Amounts of materials dropped off, sent for secondary use/energy recovery and contamination (waste) disposed of to landfill
1 July 2010 to 30 June 2011

Material Types collected at drop-off	Drop-off recycling collected (in tonnes)	Drop-off recycling sold or sent for secondary use including energy recovery by material type (in tonnes)	Drop-off recycling residual waste (contaminants) disposed to landfill (only report total tonnes)
TOTAL PACKAGING PAPER i.e. cardboard and liquid paper board	24,630	23,448	1,182
TOTAL NON PACKAGING PAPER i.e. paper mixed, paper white, office, newspaper and magazines	3,277	3,111	166
TOTAL GLASS	5,919	5,783	136
TOTAL PLASTICS	1,055	1,025	30
TOTAL ALUMINIUM (cans)	443	436	6
TOTAL STEEL (cans, tins etc.)	967	954	13
TOTAL	**36,290**	**34,756**	**1,533**

Victoria

Report to the NEPC on the implementation of the National Environment Protection (Used Packaging Materials) Measure for Victoria by the Hon. Ryan Smith, Minister for Environment and Climate Change, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

There were no implementation issues arising in 2010–11.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The primary purpose of the Used Packaging Materials NEPM is to establish a statutory basis for ensuring that signatories to the Packaging Covenant are not competitively disadvantaged in the marketplace by fulfilling their commitments under the Covenant.

The National Packaging Covenant expired on 30 June 2010, and was replaced by the Australian Packaging Covenant from 1 July 2010.

Previous signatories to the National Packaging Covenant did not automatically become signatories to the Australian Packaging Covenant. Instead, they have been required to re-sign. In 2010–11, the Secretariat of the Covenant took lead responsibility for approaching brand owners to encourage them to become signatories to the new version of the Covenant. By 30 June 2011, there were 218 Victorian signatories, including 184 brand owners registered in Victoria.

In 2011–12, the Secretariat of the Covenant will refer non-signatory brand owners and non-compliant signatory brand owners to jurisdictions. This is done in line with compliance procedures set out in Schedule 3 of the Australian Packaging Covenant. EPA will recommence its contact with brand owners in 2011–12.

Reporting Year	Number of Victorian signatories to the Packaging Covenant
2009–10 (30 June 2010)	264
2010–11 (30 June 2011)	218

In Victoria, the Used Packaging Materials NEPM is implemented through the Waste Management Policy (WMP) (Used Packaging Materials), a statutory policy made under the Victorian *Environment Protection Act 1970*. A new version of the Victorian WMP (Used Packaging Materials) was gazetted on 28 October 2010. It was made to align with the mid-2010 minor variation to the Used Packaging Materials NEPM.

Late in 2010, administrative issues were identified with the registration of the 2005 and mid-2010 minor variations to the Used Packaging Materials NEPM which could call into question the validity of the NEPM. In order to put the question of validity beyond doubt and provide certainty to the packaging industry, the NEPM is being re-made. On 16 September 2011, NEPC approved the making of a new NEPM. Accordingly, the Victorian WMP (Used Packaging Materials) will now need to be re-made.

Recovery data

Clause 18 of the Used Packaging Materials NEPM requires jurisdictions to carry out surveys of packaged products (‘brand owner surveys’) to ascertain the effectiveness of the measure in preventing free riding. A brand owner survey was commenced in May 2011.

Supporting data

As noted above, a brand owner survey was commenced in May 2011.

Complaints, investigations and prosecutions

No complaints were received during the reporting period.

Statement of interpretation of the information

Nil.

Local government data

Year (reporting period):
1 July 2010 – 30 June 2011

Total number of Councils reporting: 79

Percentage of total Councils: 100%

Container types and collection frequencies for all containers provided for kerbside collection by number of Councils (e.g. **crate/split bin/bag):**

Container type	Material type collected in container	Frequency of service	Total no. of Councils
120L	Commingled	Weekly	6
240L	Commingled	Fortnightly	70
240L	Commingled	Weekly	1
Crate & Tied bundle	Containers Paper	Weekly Monthly	1
240L & Tied bundle	Containers Paper	Weekly Monthly	1

Other type of recycling services (e.g. Drop off) by number of Councils: 57 Councils had drop off services

Total number of premises/households:

Residential	2,269,933 premises
Non-residential	195,397 premises

Number of households/premises serviced by recycling collections:

	Kerbside:	Drop off (Optional):
Residential	2,160,920 premises	432,749 premises
Non-residential	86,746 premises	52,664 premises

Average premises fee charged by Council for recycling services:

Residential	$61.38
Non-residential	$69.38

Annual per premise cost to Council to provide a recycling service:

Residential	$29.69
Non-residential	$n/a

Proportion of household/premises with access to a recycling service: 95%

Average participation rate: 86%

Table 1: Amounts of materials collected at the kerbside, sent for secondary use/energy recovery and contamination (waste) disposed of to landfill
1 July 2010 to 30 June 2011

Material Types collected at kerbside	Kerbside recycling collected (in tonnes)	Kerbside recycling sold or sent for secondary use including energy recovery by material type (in tonnes)	Kerbside recycling residual waste (contaminants) disposed to landfill (only report total tonnes)
TOTAL PACKAGING PAPER i.e. cardboard and liquid paper board	138,219	116,327	21,892
TOTAL NON PACKAGING PAPER i.e. paper mixed, paper white, office, newspaper and magazines	245,324	225,272	20,052
TOTAL GLASS	161,113	138,194	22,919
TOTAL PLASTICS	56,703	49,535	7,169
TOTAL ALUMINIUM (cans)	7,059	6,278	781
TOTAL STEEL (cans, tins etc.)	30,586	28,130	2,456
TOTAL	**639,004**	**563,736**	**75,269**

Table 2: Amounts of materials dropped off, sent for secondary use/energy recovery and contamination (waste) disposed of to landfill
1 July 2010 to 30 June 2011

Material Types collected at drop-off	Drop-off recycling collected (in tonnes)	Drop-off recycling sold or sent for secondary use including energy recovery by material type (in tonnes)	Drop-off recycling residual waste (contaminants) disposed to landfill (only report total tonnes)
TOTAL PACKAGING PAPER i.e. cardboard and liquid paper board	12,940	11,994	946
TOTAL NON PACKAGING PAPER i.e. paper mixed, paper white, office, newspaper and magazines	6,204	5,994	210
TOTAL GLASS	1,870	1,677	193
TOTAL PLASTICS	4,462	1,306	156
TOTAL ALUMINIUM (cans)	280	248	32
TOTAL STEEL (cans, tins etc.)	5,117	4,764	353
TOTAL	**30,873**	**25,983**	**1,890**

Queensland

Report to the NEPC on the implementation of the National Environment Protection (Used Packaging Materials) Measure for Queensland by the Hon. Vicky Darling MP, Minister for Environment, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administration framework

The Queensland legislative provisions relating to the management of used packaging are contained in the Environmental Protection (Waste Management) Regulation 2000, administered by the Department of Environment and Resource Management (DERM). This regulation was extended to the end of August 2011 in order to ensure continued regulatory support for the Australian Packaging Covenant (the covenant) and to give effect to the provisions of the NEPM (Used Packaging Materials).

Under the Environmental Protection (Waste Management) Regulation 2000, Part B, Used Packaging Materials, local governments undertaking kerbside recycling services are required to provide data on recycling in their jurisdiction. DERM coordinates the collection and compilation of this data for Queensland.

Implementation of the NEPM

- Queensland facilitates product stewardship by promoting the covenant as a more flexible and appealing option for businesses than the NEPM (Used Packaging Materials), with additional benefits that come by undertaking actions to improve management of packaging under a company's Covenant Action Plan, together with the information and networking benefits.
- Queensland also ensures enforcement of legislation to implement the NEPM (Used Packaging Materials) by taking compliance action against non-signatories referred by the Covenant Secretariat, or identified by other signatories or by informal investigation of brand owners in the marketplace.
- As part of the routine process to determine brand owners who are not signatories to the Australian Packaging Covenant, each state undertakes a brand owner survey in their jurisdiction using a methodology agreed by all jurisdictions. The survey requires each jurisdiction to gather product information from the retail sector, using the Australian Bureau of Statistics categories of Food Retailing, Department Stores, Clothing and Soft Goods Retailing, Household Goods Retailing, Recreational Goods Retailing, Hospitability and Services, and Other Retailing. This year it is the responsibility of Queensland to survey the Hospitality and Services sector. This survey has not yet been completed for the 2010–11 reporting period; as such, the results of this survey will be presented in the 2012 annual NEPM report.

Implementation issues

The changeover from the National Packaging Covenant (NPC) to the Australian Packaging Covenant (the covenant) during this reporting year presented some NEPM implementation issues due to administrative changes and the finalisation of the new covenant:

- A 2010–11 funding round for new covenant projects was not undertaken. However, in September 2010 the Queensland Government and the Covenant Secretariat entered into a funding agreement with the Cherbourg Aboriginal Shire Council to support a project introducing kerbside recycling and undertake resource recovery in Cherbourg.

Implementation activities

During the reporting period the Queensland Government continued to support the achievement of the NEPM goals by:

- raising awareness of the NEPM and the covenant through presentations to industry and signatories, and meetings with individual companies. In particular DERM conducted a site visit to the Good Guys, Capalaba, to assist in the implementation of a zero waste company project, which included innovative used packaging material recycling processes
- actively contributing to, and supporting, the administration processes of the new Australian Packaging Covenant
- developing a new four year Action Plan, the first under the new covenant, demonstrating how the Queensland Government intends to promote covenant principles, undertakings and signatory benefits, and work with other signatories to achieve covenant targets
- implementing projects that support the promotion and undertaking of recycling used packaging materials by consumers in an away-from-home context, specifically in Queensland schools and shopping centres.

No new projects relevant to the NEPM were initiated in the last reporting year due to the changeover from the National Packaging Covenant to the Australian Packaging Covenant. However, there are currently a number of ongoing Queensland and national projects supporting the aim of the NEPM, as well as several that have been successfully completed during this reporting period.

Ongoing Queensland and national projects include:

- Cairns Regional Council — Glass Crusher Demonstration Project
- Townsville City Council — conversion of used kerbside collection trucks to cardboard compactors
- Cherbourg Aboriginal Shire Council — introduction of kerbside recycling and resource recovery
- Cook Shire Council — remote areas recycling through the use of four purpose-built segmented recycling collection trailers
- Amcor and Moreton Bay Regional Council — 'Recycling at Work', focusing on small to medium enterprises
- Transpacific — Harvest Commercial and Industrial Recycling Program, focusing on small to medium enterprises
- South East Queensland Glass Recovery Plant — glass recovery plant in Brisbane
- YUM Restaurants (KFC) — public place recycling project for KFC restaurants
- Hamilton Island Recycling Project — establish a recycling culture on Hamilton Island, implementation of bailing and glass reprocessing facilities, use of glass sand as aggregate substitute.

Projects that were completed:

- Warraber Island (Torres Strait) — an Integrated Waste Management Demonstration Initiative
- Islander Board of Industry and Service — Torres Strait region cardboard recycling project
- Central Qld Local Government Association — Regional Integrated Recycling
- Colmax Glass — establishing a glass fines processing plant in Brisbane
- Westfield and Packaging Stewardship Forum — public place recycling in shopping centres
- DERM's Away from Home Recycling program — public place recycling initiative
- Advanced Plant Nutrition — using glass fines in manufacture of plant fertiliser
- Amcor's national 'Recycle@Work' program — small to medium enterprise, commercial and industrial recycling project.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM contributes to improved sustainability outcomes for packaging by encouraging brand owners to become signatories to the covenant. Queensland has continued to promote brand owner participation in the covenant during this reporting period but there have been significant changes to the covenant requirements of signatories and this has had an impact on both the number of signatories as well as the consistency of data gathered by the covenant over this period.

Under the new strengthened covenant, Queensland now has a total of 57 signatories, a decrease of 13 from the previous reporting period. Of these 57 signatories, 54 are in compliance with the covenant signatory requirements and three are non-compliant due to their failure to submit an Action Plan demonstrating their intention and ability to meet the requirements of the new covenant. A decrease of 13 signatories from the previous reporting period is a significant loss; however, seven of these 13 companies have either closed or experienced financial losses that have brought them under the $5 million covenant threshold, making them exempt. Of the remaining six, two companies have either formally withdrawn or do not intend to re-sign the covenant and will follow the requirements of the NEPM instead, one intends to sign, and the outstanding three are being followed up by the Covenant Secretariat.

Reporting year	Number of covenant signatories
2009–10	70
2010–11	57

Recovery data

As two of the brand owners in Queensland, who are above the $5 million threshold, are now non-signatories, and are not intending to sign the covenant, they are now subject to regulation and any resultant statutory obligations imposed (including possible penalties) under Queensland's Environmental Protection (Waste Management) Regulation 2000, which gives effect to the provisions of the NEPM (UPM). These two brand owners, non-signatories to the covenant as of July 2010 and May 2011, are now subject to record-keeping requirements under the Queensland regulation, and will be required to provide used packaging material recovery data during the next reporting period.

Supporting data

Clause 16 of the NEPM (UPM) requires jurisdictions to carry out surveys of packaged products to ascertain the effectiveness of the measure in preventing free riding. Jurisdictions agreed to defer the 2010–11 survey pending the finalisation of the Australian Packaging Covenant and the NEPM (UPM) arrangements. These arrangements were confirmed by the EPHC on 25 June 2010. As the new covenant has now been finalised, the jurisdictions have established an agreed framework for the brand owner auditing survey and reporting, as per clause 18, and will commence this activity shortly. Until the results of the annual survey have been collated and released, jurisdictions will use data derived from previous surveys for NEPM (UPM) implementation.

Complaints, investigations and prosecutions

The Queensland Government has not dealt with any complaints or undertaken any investigations or prosecution activities for this reporting period.

Statement of interpretation of the information

The NEPM has proven itself an effective mechanism to encourage brand owners, who have significant impact in the marketplace on the creation and use of packaging, to join the covenant and undertake actions to improve the sustainability of their packaging and the recycling rates of used packaging.

Local government data

Note: Data as supplied by Councils at 17 October 2011

Year (reporting period): 1 July 2010 – 30 June 2011

Total number of Councils reporting: 40

Percentage of total Councils: 55% (representing 93% of Queensland's population)

Container types and collection frequencies for all containers provided for kerbside collection by number of Councils (e.g. **crate/split bin/bag):**

Container type	Material type collected in container	Frequency of service	Total no. of Councils
240L WGB	Comingled	Fortnightly	21
360L WGB	Comingled	Fortnightly	3
240L Split WGB	Comingled	Weekly	2
Bulk Bin	Comingled	Weekly	5
Bulk Bin	Comingled	Daily	1
Bulk Bin	Comingled	Twice Weekly	1
140L WGB	Comingled	Weekly	1

Other type of recycling services (e.g. **drop off) by number of Councils:** 31

Total number of premises/households:

Residential:	1,583,454 premises (number of households in reporting Councils with a waste collection service)
Non-residential:	unknown premises

Number of households/premises serviced by recycling collections:

	Kerbside:	Drop off (optional):
Residential	1,388,932 premises	1,576,156 premises
Non-residential	20,822 premises	Unknown premises

Average premises fee charged by Council for recycling services:

Residential	$75
Non-residential	$114

Annual per premise cost to Council to provide a recycling service:

Residential	$114
Non-residential	$144

Proportion of household/premises with access to a recycling service: 99.5% (households only)

Average participation rate: 92%

(These averages are the means of the rates reported by Councils. They have not been weighted according to the number of households/premises in each Council.)

Table 1: Amounts of materials collected at the kerbside, sent for secondary use/energy recovery and contamination (waste) disposed of to landfill
1 July 2010 to 30 June 2011

Material Types collected at kerbside	Kerbside recycling collected (in tonnes)	Kerbside recycling sold or sent for secondary use including energy recovery by material type (in tonnes)	Kerbside recycling residual waste (contaminants) disposed to landfill (only report total tonnes)
TOTAL PACKAGING PAPER i.e. cardboard and liquid paper board	15,781	15,781	0
TOTAL NON PACKAGING PAPER i.e. paper mixed, paper white, office, newspaper and magazines	52,539	52,539	0
PAPER AND CARDBOARD	44,172	44,147	25
TOTAL GLASS	72,314	60,142	12,172
TOTAL PLASTICS	9,963	9,941	22
TOTAL ALUMINIUM (cans)	1,534	1,534	0
TOTAL STEEL (cans, tins etc.)	3,089	3,089	0
COMINGLED MATERIALS	118,591	112,461	6,130
TOTAL	**317,983**	**299,634**	**18,349**

Table 2: Amounts of materials dropped off, sent for secondary use/energy recovery and contamination (waste) disposed of to landfill
1 July 2010 to 30 June 2011

Material Types collected at drop-off	Drop-off recycling collected (in tonnes)	Drop-off recycling sold or sent for secondary use including energy recovery by material type (in tonnes)	Drop-off recycling residual waste (contaminants) disposed to landfill (only report total tonnes)
TOTAL PACKAGING PAPER i.e. cardboard and liquid paper board	664	664	0
TOTAL NON PACKAGING PAPER i.e. paper mixed, paper white, office, newspaper and magazines	2,209	2,209	0
PAPER AND CARDBOARD	1,858	1,857	1
TOTAL GLASS	3,041	2,529	512
TOTAL PLASTICS	419	418	1
TOTAL ALUMINIUM (cans)	64	64	0
TOTAL STEEL (cans, tins etc.)	130	130	0
COMINGLED MATERIALS	4,987	4,729	258
TOTAL	**13,372**	**12,600**	**772**

Comments:

It is important to note that the natural disasters affecting Queensland over the summer of 2010–11 (southern and central Queensland floods, and Cyclone Yasi) disrupted the collection, sorting, transport and recycling of paper and packaging over periods of weeks in affected areas. The amount of paper and packaging that would normally be recycled but was landfilled is unknown.

Several Councils were unable to supply full material breakdown or separate paper and cardboard figures.

Few if any Councils have detailed data on kerbside vs drop-off amounts of individual materials. A weighted average was determined, by combining the amount of kerbside material collected with the proportion collected via drop-off, and used as a pro rata to allocate materials to kerbside vs drop-off.

Most Councils do not have data on contamination. In many cases, recyclables are collected by a contractor who takes them to an externally operated Materials Resource Facility (MRF) that does not supply data on contamination. As such, the amounts reported as recycled are often actually the amounts collected/sent for recycling, including contaminates.

Contamination is not the only reason materials are disposed of to landfill. Large amounts of glass, for example, were disposed of because it was uneconomic to send for recycling, particularly in northern Queensland.

Western Australia

Report to the NEPC on the implementation of the National Environment Protection (Used Packaging Materials) Measure for Western Australia by the Hon Bill Marmion MLA, Minister for Environment, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The NEPM is implemented in Western Australia (WA) through the Environmental Protection (NEPM-UPM) Regulations 2007 (the Regulations), under the Western Australian *Environmental Protection Act 1986.* The Regulations were gazetted on 27 April 2007.

No significant issues arose in the implementation of the NEPM in WA.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

State responsibilities under the NEPM are administered in WA by the Department of Environment and Conservation (DEC). DEC has developed a compliance procedure for implementing the Regulations.

The transition from the National Packaging Covenant to the Australian Packaging Covenant progressed through the reporting period, and the compliance activities of DEC were curtailed pending informed advice on signatories from the Australian Packaging Covenant Secretariat. On-going updated information is now being provided by the Secretariat and compliance issues are now able to be followed up in 2011–2012.

During the reporting period, DEC followed up eight brand owners that were identified in 2009–2010 to whom the NEPM and associated Regulations potentially applied.

Of these eight companies:

- three were confirmed as exempt
- four became signatories
- one has failed to respond to registered correspondence and will be further pursued in 2011–12

A reduction in the number of WA signatories from 49 to 43 during the reporting period is considered a consequence of the transition by signatories to the Australian Packaging Covenant.

Reporting year	Number of covenant signatories
2009–10	49
2010–11	43 including 2 non-complying signatories

Recovery data

No WA based companies have been required to provide records for auditing.

Supporting data

The WA brand owner survey was initially deferred in 2009–2010 pending the NEPM (UPM) variation. Following the delay in the variation process the survey was subsequently scheduled for August 2011.

Complaints, investigations and prosecutions

No complaints were received, investigations undertaken or prosecutions mounted during the reporting period pursuant to the NEPM.

Statement of interpretation of the information

Not applicable.

Local government data

Year (reporting period): 1 July 2010 – 30 June 2011

Total number of Councils reporting: 124

Percentage of total Councils: 87.94%

Container types and collection frequencies for all containers provided for kerbside collection by number of Councils (e.g. **crate/split bin/bag):**

Container type	Material type collected in container	Frequency of service	Total no. of Councils
240L MGB	Co-mingled dry recyclables	Weekly	3
240L MGB	Co-mingled dry recyclables	Fortnightly	65
240L MGB	Co-mingled dry recyclables	Other	1
120 MGB	Containers	Weekly	1
Other	Containers	Weekly	1
50L Bag	Containers	Fortnightly	1
Other	Containers	On Demand	1
Other	Paper & Cardboard Collection	Weekly	2
240L MGB	Paper & Cardboard Collection	Fortnightly	1
Bulk Skip	Paper & Cardboard Collection	On Demand	1
Other	Paper & Cardboard Collection	Other	3
Other	Paper & Cardboard Collection	On Demand	3

Other type of recycling services (e.g. **Drop off) by number of Councils:** 52 Councils provide Drop-off

Total number of premises/households in WA:

Residential	933,843 premises
Non-residential	40,049 premises

Number of households/premises serviced by recycling collections:

	Kerbside:	Drop off (Optional):
Residential	727,078 premises	277,395 premises
Non-residential	18 882 premises	N/A

Average premises fee charged by Council for recycling services:

Residential	$85.83
Non-residential	$159.16

Annual per premise cost to Council to provide a recycling service:

Residential	$97.77
Non-residential	$147.81

Proportion of household/premises with access to a recycling service: 77.86%

Average participation rate: 79.04%

Table 1: Amounts of materials collected at the kerbside, sent for secondary use/energy recovery and contamination (waste) disposed of to landfill
1 July 2010 to 30 June 2011

Material Types collected at kerbside	Kerbside recycling collected (in tonnes)	Kerbside recycling sold or sent for secondary use including energy recovery by material type (in tonnes)	Kerbside recycling residual waste (contaminants) disposed to landfill (only report total tonnes)
TOTAL PACKAGING PAPER i.e. cardboard and liquid paper board	N/A	18,498	N/A
TOTAL NON PACKAGING PAPER i.e. paper mixed, paper white, office, newspaper and magazines	N/A	87,464	N/A
TOTAL GLASS	N/A	17,350	N/A
TOTAL PLASTICS	N/A	4,958	N/A
TOTAL ALUMINIUM (cans)	N/A	1,054	N/A
TOTAL STEEL (cans, tins etc.)	N/A	2,320	N/A
TOTAL	**191,480**	**563,736**	**59,836**

Table 2: Amounts of materials dropped off, sent for secondary use/energy recovery and contamination (waste) disposed of to landfill
1 July 2010 to 30 June 2011

Material Types collected at drop-off	Drop-off recycling collected (in tonnes)	Drop-off recycling sold or sent for secondary use including energy recovery by material type (in tonnes)	Drop-off recycling residual waste (contaminants) disposed to landfill (only report total tonnes)
TOTAL PACKAGING PAPER i.e. cardboard and liquid paper board	N/A	1,168	N/A
TOTAL NON PACKAGING PAPER i.e. paper mixed, paper white, office, newspaper and magazines	N/A	1,696	N/A
TOTAL GLASS	N/A	822	N/A
TOTAL PLASTICS	N/A	171	N/A
TOTAL ALUMINIUM (cans)	N/A	41	N/A
TOTAL STEEL (cans, tins etc.)	N/A	63	N/A
TOTAL	**4,778**	**3,961**	**817**

South Australia

Report to the NEPC on the implementation of the National Environment Protection (Used Packaging Materials) Measure for South Australia by the Hon. Paul Caica MP, Minister for Environment and Conservation, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

On 30 June 2010 the National Environment Protection (Used Packaging Materials) Measure 2005 expired. On 25 June 2010 the National Environment Protection Council approved the variation to the National Environment Protection (Used Packaging Materials) Measure 2010 (the 2010 Minor Variation to the NEPM).

Late in 2010, administrative issues were identified with the registration of the 2005 and 2010 minor variations to the Used Packaging Materials NEPM which could call into question the validity of the measure. In order to put the question of validity beyond doubt and provide certainty to the packaging industry, the NEPM is currently being re-made.

The South Australian Environment Protection (Used Packaging Materials) Policy 2007 (EPP) also expired on 30 June 2010. Following the remake of the Used Packaging NEPM, South Australia will implement a revised EPP to ensure the continuation of the statutory requirements of the NEPM within South Australia.

Implementation issues arising

During this reporting period, four companies were referred to the Environment Protection Authority (EPA) by the Covenant Secretariat to enforce the obligations of the EPP. One company has an annual turnover of less than $5 million and therefore comes under the threshold and is not required to meet the requirements of the EPP. South Australia will contact the remaining three companies to advise them of their requirement to comply with the EPP once the Used Packaging Materials NEPM and EPP have been validated. The EPP has applied to one South Australian company that chose not sign the Covenant, and this company continues to demonstrate compliance with the EPP.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

South Australia will continue to implement this measure within the SA legislative framework once the Used Packaging Materials NEPM has been re-made and validated.

South Australia has continued to promote and support the implementation of the Covenant, and has been represented on national and jurisdictional bodies. South Australia has also promoted the Covenant through the South Australian Jurisdictional Projects Group and by taking part in industry and public seminars to advise brand owners of their obligations should they choose not to join the Covenant.

Reporting year	Number of covenant signatories
2009–10	48
2010–11	43

Recovery data

Only one brand owner has elected to comply with the EPP in South Australia; in 2010 they reported against their action plan for the 2009–10 period. The EPA conducted an assessment of the brand owner's report against the EPP and they were deemed to be compliant.

Supporting data

Clause 18 of the NEPM(UPM) requires jurisdictions to carry out surveys of packaged products to ascertain the effectiveness of the measure in preventing free riding. Jurisdictions agreed to defer the Brand Owner Audit for this reporting period. The Brand Owners Survey Methodology was reviewed to take into consideration changes as a result of the new Australian Packaging Covenant and will be used for the 2011–12 reporting period.

Complaints, investigations and prosecutions

No complaints were received during this reporting period; all companies referred to the South Australian EPA by the Covenant Secretariat were deemed to be either under the brand owners threshold or will be required to ensure they meet the requirements of the EPP once the Used Packaging Materials NEPM has been re-made.

Statement of interpretation of the information

South Australia continues to implement this measure although the Used Packaging Materials NEPM expired on 30 June 2010 and South Australia is currently awaiting the re-make of the Used Packaging Materials NEPM in order to re-make the South Australian EPP which also expired on 30 June 2010.

South Australia has promoted and supported the implementation of the Covenant. South Australia has also promoted the Covenant through many of its activities and by taking part in industry and public seminars to advise brand owners of their obligations should they choose not to join the Covenant.

Local government data

Year (reporting period): 1 July 2010–30 June 2011

Total number of Councils reporting: 49

Percentage of total Councils: 69%

Container types and collection frequencies for all containers provided for kerbside collection by number of Councils (e.g. **crate/split bin/bag):**

Container type	Material type collected in container	Frequency of service	Total no. of Councils
140L Bin	Cardboard, liquid paper board, mixed paper, newspaper/magazines, mixed glass, mixed plastics, aluminium and steel	Fortnightly	2
240L Bin	Cardboard, liquid paper board, mixed paper, newspaper/magazines, mixed glass, mixed plastics, aluminium and steel	Fortnightly	43
240L Split MGB	Cardboard, liquid paper board, mixed paper, newspaper/magazines, mixed glass, mixed plastics, aluminium and steel	Weekly	3
60L Crate	Cardboard, liquid paper board, mixed paper, newspaper/magazines, mixed glass, mixed plastics, aluminium and steel	Fortnightly	1

Other type of recycling services (e.g. Drop off) by number of Councils: Drop off: 20

Total number of premises/households:

Residential	655,730 premises
Non-residential	80,040 premises

Number of households/premises serviced by recycling collections:

	Kerbside:	Drop off (Optional):
Residential	638,748 premises	48,113 premises
Non-residential	80,040 premises	10,017 premises

Average premises fee charged by Council for recycling services:

Residential	$76.13
Non-residential	$87.66

Annual per premise cost to Council to provide a recycling service:

Residential	$72.83
Non-residential	$84.36

Proportion of household/premises with access to a recycling service: 100%

Average participation rate: 82.86%

Table 1: Amounts of materials collected at the kerbside, sent for secondary use/energy recovery and contamination (waste) disposed of to landfill
1 July 2010 to 30 June 2011

Material Types collected at kerbside	Kerbside recycling collected (in tonnes)	Kerbside recycling sold or sent for secondary use including energy recovery by material type (in tonnes)	Kerbside recycling residual waste (contaminants) disposed to landfill (only report total tonnes)
TOTAL PACKAGING PAPER i.e. cardboard and liquid paper board	44,826	32,291	1,659
TOTAL NON PACKAGING PAPER i.e. paper mixed, paper white, office, newspaper and magazines	46,694	32,378	1,526
TOTAL GLASS	9,415	7,244	525
TOTAL PLASTICS	3,401	2,664	127
TOTAL ALUMINIUM (cans)	815	712	36
TOTAL STEEL (cans, tins etc.)	3,472	2,695	767
COMINGLED	29,849	35,986	19,861
TOTAL	**191,480**	**563,736**	**59,836**

Table 2: Amounts of materials dropped off, sent for secondary use/energy recovery and contamination (waste) disposed of to landfill
1 July 2010 to 30 June 2011

Material Types collected at drop-off	Drop-off recycling collected (in tonnes)	Drop-off recycling sold or sent for secondary use including energy recovery by material type (in tonnes)	Drop-off recycling residual waste (contaminants) disposed to landfill (only report total tonnes)
TOTAL PACKAGING PAPER i.e. cardboard and liquid paper board	1,553	1,530	0.2
TOTAL NON PACKAGING PAPER i.e. paper mixed, paper white, office, newspaper and magazines	469	462	0.1
TOTAL GLASS	128	119	4.3
TOTAL PLASTICS	46	44	0
TOTAL ALUMINIUM (cans)	19	17	0
TOTAL STEEL (cans, tins etc.)	1,331	1,328	0
COMINGLED	3,548	2,667	922
TOTAL	**4,778**	**3,961**	**926.6**

Tasmania

Report to the NEPC on the implementation of the National Environment Protection (Used Packaging Materials) Measure for Tasmania by the Hon. Brian Wightman MP, Minister for Environment, Parks and Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

The NEPM is a State Policy under the *State Policies and Projects Act 1993.*

Implementation issues arising

Nil.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

Negotiations with companies that fall within the NEPM threshold to become signatories to the Covenant have not been completed during the reporting period due to a change in staff. The NEPM has provided a strong incentive for them to join the Covenant. Tasmania has 15 company signatories and seventeen Covenant signatories overall.

Reporting year	Number of covenant signatories
2009–10	18
2010–11	18

Recovery data

No recovery data to report under Clause 16 of the NEPM.

Supporting data

No surveys completed during the reporting period.

Compaints, investigations and prosecutions

No complaints regarding brand owners or Covenant signatories were received in the reporting period, and no investigations or prosecutions were necessary.

Statement of interpretation of the information

Not applicable.

Local government data

Year (reporting period): 1 July 2010 – 30 June 2011

Total number of Councils reporting: 11 of 29

Percentage of total Councils: 38%

Container types and collection frequencies for all containers provided for kerbside collection by number of Councils (e.g. crate/split bin/bag):

Container type	Material type collected in container	Frequency of service	Total no. of Councils[1]
MGB 240L	Commingled	Fortnightly	8
MGB 240L	Commingled	Monthly	1
MGB 140L	Commingled	Fortnightly	4

[1]Some Councils provide both 140 and 240L MGB collection services.

Other type of recycling services (e.g. Drop off) by number of Councils: All Councils provide alternative drop off facilities either at the landfills or Waste Transfer Stations.

Total number of premises/households:

Residential	131,704 premises
Non-residential	9,344 premises

Number of households/premises serviced by recycling collections:

	Kerbside:	**Drop off (Optional):**
Residential	119,981 premises	48,227 premises
Non-residential	4,951 premises	2,908 premises

Average premises fee charged by Council for recycling services:

Residential	$78.70
Non-residential	$180.35

Annual per premise cost to Council to provide a recycling service:

Residential	$73.10
Non-residential	$108.00

Proportion of household/premises with access to a recycling service: 94%

Average participation rate: 73%

Table 1: Amounts of materials collected at the kerbside, sent for secondary use/energy recovery and contamination (waste) disposed of to landfill
1 July 2010 to 30 June 2011

Material Types collected at kerbside (packaging paper (i.e. **Cardboard and liquid paper board), non-packaging paper (**i.e. **Paper mixed, paper white office, newspaper and magazines), glass, plastics, aluminium (cans), steel (cans, tins, etc.))***	**Kerbside recycling collected (in tonnes)**	**Kerbside recycling sold or sent for secondary use including energy recovery by material type (in tonnes)**	**Kerbside recycling residual waste (contaminants) disposed to landfill (only report total tonnes)**
TOTAL	**21,892.34**	**10,580.36**	**629**

*Caution should be used in interpreting the level of significance of the total figures provided for materials collected at the kerbside. Only 2 of the 11 Councils that reported gave an estimate of the breakdowns, 8 Councils provided total proportion of collected recyclables at the kerbside, 4 gave an estimate of the total kerbside recycling sold or sent for secondary use and only 2 Councils provided an estimate of total kerbside recycling disposed to landfill.

Table 2: Amounts of materials dropped off, sent for secondary use/energy recovery and contamination (waste) disposed of to landfill
1 July 2010 to 30 June 2011

Material Types collected at drop-off (packaging paper (i.e. **Cardboard and liquid paper board), non-packaging paper (**i.e. **Paper mixed, paper white office, newspaper and magazines), glass, plastics, aluminium (cans), steel (cans, tins, etc.))****	**Drop-off recycling collected (in tonnes)**	**Drop-off recycling sold or sent for secondary use including energy recovery by material type (in tonnes)**	**Drop-off recycling residual waste (contaminants) disposed to landfill (only report total tonnes)**
TOTAL	**21,892.34**	**10,580.36**	**629**

**Caution should be used in interpreting the level of significance of the total figures provided for materials collected at drop-off. Only six of the 11 Councils who provided information gave an estimate of the total proportion of collected recyclables received via drop off points, two gave an estimate of the total proportion of collected recyclables sold or sent for secondary use and one Council gave an estimate of the total proportion of collected recyclables disposed to landfill.

Australian Capital Territory

Report to the NEPC on the implementation of the National Environment Protection (Used Packaging Materials) Measure for the Australian Capital Territory by Simon Corbell MLA, Minister for the Environment and Sustainable Development, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

NEPM details

Title: National Environment Protection (Used Packaging Materials) Measure.

Made by Council: 2 July 1999.

Commencement date: 14 July 1999 (advertised in *Commonwealth of Australia Gazette*, no. GN 28, 14 July 1999, p. 2114).

NEPM goal (or purpose)

The environment protection goal is established in clause 6 of this measure as follows:

6. *National Environment Protection Goal*

The goal of the National Environment Protection (Used Packaging Materials) Measure (the NEPM) is to reduce environmental degradation arising from the disposal of used packaging and conserve virgin materials through the encouragement of reuse and recycling of used packaging materials by supporting and complementing the voluntary strategies in the Australian Packaging Covenant (APC).

Desired environmental outcomes

The desired environmental outcomes from the combination of the APC and the NEPM are to optimise resource use and recovery and encourage the conservation of virgin materials.

Legislative, regulatory and administrative framework

The Environment and Sustainable Development Directorate has responsibility for the implementation and administration of the NEPM while the Territory and Municipal Services Directorate is responsible for the operational aspects of the NEPM.

The Used Packaging Materials Industry Waste Reduction Plan (IWPR) was approved in November 2006 as an instrument developed under the ACT *Waste Minimisation Act 2001* to implement the NEPM requirements in the ACT. The IWRP Instrument was updated on 22 April 2010 to ensure that the regulatory arrangements reflect the ACT's commitments made through the Standing Council on Environment and Water.

The goal of this plan is to reduce environmental degradation arising from the disposal of used packaging and conserve virgin materials through the encouragement of waste avoidance and the reuse and recycling of used packaging material by supporting and complementing the voluntary strategies in the APC and by assisting the assessment of the performance of the APC. The plan aims to ensure that covenant signatories are not competitively disadvantaged in the ACT marketplace.

Implementation issues arising

The ACT brand owners of packaging were initially advised of their obligation to either join the APC or comply with the requirements of the NEMP. The ACT brand owners who chose not to join the voluntary APC are regulated by the IWRP.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The IWRP imposes greater responsibility for consumer packaging waste and other waste associated with used consumer packaging in the ACT to ensure that the Territory has no free riders who refuse to take up their responsibility to reduce waste from packaging. Additionally, under the IWRP, brand owners must demonstrate that reasonable steps have been taken to ensure that customers are adequately advised as to how the packaging is to be recovered.

There has been no movement in ACT signatories, with the exception of one signatory, who was deemed non-compliant in September 2009 but has since been reinstated in June 10 after completing its overdue requirement.

Reporting year	Number of covenant signatories
2009–10	8*
2010–11	6

*This figure was incorrectly reported last year and this is the correct figure.

Recovery data

Under the IWRP, brand owners must demonstrate that reasonable steps have been taken to ensure that customers are adequately advised as to how the packaging is to be recovered. The ACTSmart Office and Business Recycling programs provide assistance and accreditation to businesses and offices in the ACT to encourage and support the adoption of efficient waste management and recycling. The programs focus on encouraging participants to improve the way they deal with their waste, to redirect waste away from landfill.

Supporting data

Surveys of business in the commercial sector are being undertaken to identify where in the system the barriers to improved recycling rates are, with the aim of diverting waste to the high-value recoverable streams.

Complaints, investigations and prosecutions

The NEPM was implemented through an updated IWRP, under the *Waste Minimisation Act 2001*, to ensure consistency in existing measures underpinning the APC. Since the implementation of the updated IWPR, no complaints, investigations, prosecutions or enforcement action were recorded.

Statement of interpretation of the information

The ACT aims to increase rate of resource recovery by redirecting readily recyclable waste from landfill to recycling markets.

The ACT continues to work with businesses and the community to encourage reduced packaging of products. Resource recovery surveys and audits of waste composition will be maintained and improved to provide ongoing reporting and analysis of trends in waste to landfill, and resource recovery rates.

Local government data

Year (reporting period): 1 July 2010 – 30 June 2011

Total number of Councils reporting: 1

Percentage of total Councils: 100%

Container types and collection frequencies for all containers provided for kerbside collection by number of Councils (e.g. **crate/split bin/bag):**

Container type	Material type collected in container	Frequency of service	Total no. of Councils
240L recycling bin	Domestic recyclables	Fortnightly	1
140L garbage bin	Domestic non-recyclables	Weekly	1
Large recycling hoppers (for multi-unit properties)	Domestic recyclables	Fortnightly	1
Large garbage hoppers (for multi-unit properties)	Domestic non-recyclables	Weekly	1

Other type of recycling services (e.g. **drop off) by number of Councils:** Drop-off recycling centres at regional centres and transfer stations.

Total number of premises/households:

Residential	140,962 premises
Non-residential	0 premises

Number of households/premises serviced by recycling collections:

	Kerbside:	Drop off (optional):
Residential	140,962 premises	140,962 premises
Non-residential	0 premises	0 premises

Average premises fee charged by Council for recycling services:

Residential	$0.00
Non-residential	$0.00

Annual per premise cost to Council to provide a recycling service:

Residential	$0.00
Non-residential	$0.00

Proportion of household/premises with access to a recycling service: 99.90%

Average participation rate: 95%

Table 1: Amounts of materials collected at the kerbside, sent for secondary use/energy recovery and contamination (waste) disposed of to landfill
1 July 2010 to 30 June 2011

Material Types collected at kerbside	Kerbside recycling collected (in tonnes)	Kerbside recycling sold or sent for secondary use including energy recovery by material type (in tonnes)	Kerbside recycling residual waste (contaminants) disposed to landfill (only report total tonnes)
TOTAL PACKAGING PAPER i.e. cardboard and liquid paper board	770.92	770.92	
TOTAL NON PACKAGING PAPER i.e. paper mixed, paper white office, newspaper and magazines	1,487.25	1,487.25	
TOTAL GLASS	1,139.76	1,139.76	
TOTAL PLASTICS	146.29	146.29	
TOTAL ALUMINIUM (cans)	17.2	17.2	
TOTAL STEEL (cans, tins etc.)	84.46	84.46	
TOTAL	**3,645.88**	**3,645.88**	**324.81**

Note: No separate data is available for materials from drop-off centres as they are derived from many sources such as commercial, domestic and regional centres. The data from drop-off centres is included in Table 1 (above). Also, some mixed waste from drop-off centres that are then sorted through a Materials Recovery Facility are not identifiable. Sources of the materials are also not recorded.

Northern Territory

Report to the NEPC on the implementation of the National Environment Protection (Used Packaging Materials) Measure for the Northern Territory by the Hon Karl Hampton, MLA, Minister for Natural Resources, Environment and Heritage, for the reporting year ended 30 June 2011.

PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Northern Territory (NT) Government is not a signatory to the Australian Packaging Covenant as the current Covenant remains unlikely to deliver cost effective outcomes relevant to the unique demographic position of the Territory.

There are no known major brand owners based in the NT who are likely to have responsibilities under the NEPM. In the event that NT-based brand owners with obligations under the NEPM were found to be non-compliant, there is provision under the Waste Management and Pollution Control Act to apply an Environmental Protection Objective to ensure the NEPM can be applied legislatively in the NT.

In early 2011 the development of a whole of government waste strategy commenced with a key aim of developing strategies to reduce the amount of waste going to landfill by 50% by 2020 in accordance with commitments in the Northern Territory Climate Change Policy and Territory 2030 Strategic Plan.

In February 2011 the Northern Territory Parliament passed the *Environment Protection (Beverage Containers and Plastic Bags) Act 2011* which prohibits retailers from providing customers with light weight polyethylene shopping bags handles; the phase out commenced on 1 May 2011, with the ban to commence on 1 September 2011. The Act also establishes the legislative framework for a Container Deposit Scheme (CDS). The NT CDS will target collection of beverage containers to reduce litter, increase recycling across the NT and help reduce the amount of rubbish being disposed of to landfill. The scheme will commence on 3 January 2012.

Latest updates on the CDS are available on the Department of Natural Resources, Environment, The Arts and Sport website at www.cashforcontainers.nt.gov.au/.

In 2010–2011 a total of $759,000 in grants was offered to schools and not-for-profit organisations in the Northern Territory to conduct a range of projects and operations that deliver environmental benefits in the community. One of the target categories focuses on 'Waste and resource recovery' in which funding was provided to support projects which promote awareness of litter abatement and resource recovery across the Northern Territory. Examples include a recycling project by the Mindil Beach Sunset Markets Association to expand all areas of reuse and recycling and a Ngaliwurru-Wuli Association project to empower and educate the 18 local communities to take control of a problem identified by the traditional elders: litter and rubbish lying around, coupled with a lack of understanding of the benefits of recycling. The benefits will be a cleaner community, improved self and community esteem and flow-on effect to reduce some health issues associated with rubbish lying around the community.

PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

There have been no brand-owners identified in the Northern Territory who would have obligations under the NEPM. No reporting has been required under clause 16 of the NEPM. No supporting data surveys were conducted in 2010–11 under clause 18 of the NEPM. No complaints have been received, investigations undertaken nor prosecution mounted pursuant to this measure. Of the 16 Councils and shires in the Northern Territory only two provide kerbside recycling services and are required to provide reports.

The NEPM is considered a less effective mechanism in the Northern Territory as the major contributors to the waste stream are brand-owners not based in the NT. Brand-owners who are Covenant signatories are able to meet their national targets more cost effectively in other more populous jurisdictions where well-established recycling infrastructure and high volumes of recyclable material are available.

Due to the small, dispersed population and distance to markets, kerbside recycling is only financially viable in the major population centre of Darwin and its satellite city Palmerston. Recycling activities in other areas face significant barriers and costs and may be both environmentally and economically unviable. Voluntary local drop-off recycling schemes are in place in a number of remote communities but collecting reliable data from these communities is problematic. Where kerbside recycling exists, the NEPM does provide a useful mechanism for obtaining data on kerbside recycling.

The Northern Territory continues to be committed to the NEPM Goal and Desired Environmental Outcomes through the implementation of the Container Deposit Scheme and the plastic bag ban.

Reporting year	Number of covenant signatories
2009–10	0
2010–11	0

Recovery data

0

Supporting data

0

Complaints, investigations and prosecutions

0

Statement of interpretation of the information

As there are no signatories to the covenant, no local brand owners and no investigation or prosecutions have been mounted pursuant to the NEPM, no interpretation of this data is required.

Local government data

Year (reporting period): 1 July 2010 – 30 June 2011

Total number of Councils reporting: 2

Percentage of total Councils: 12%

Container types and collection frequencies for all containers provided for kerbside collection by number of Councils (e.g. crate/split bin/bag):

Container type	Material type collected in container	Frequency of service	Total no. of Councils
240 L wheelie bin	Co-mingled recyclable material (cardboad/paper; aluminium and steel cans and aerosols; plastics 1 to 7; glass	Houses fortnightly Unit complexes weekly	1
240 L wheelie bin	Co-mingled recyclable material (cardboard/paper; aluminium and steel cans and aerosols; plastics 1 & 2; glass.	Houses fortnightly Unit complexes weekly	1

Other type of recycling services (e.g. **Drop off) by number of Councils:** Other Recycling Service

Total number of premises/households:

Residential	39,339 premises
Non-residential	5,058 premises

Number of households/premises serviced by recycling collections:

	Kerbside:	Drop off (Optional):
Residential	34,650 premises	39,339 premises
Non-residential	0 premises	5,058 premises

Average premises fee charged by Council for recycling services:

Residential	$106.73
Non-residential	$NA

Annual per premise cost to Council to provide a recycling service:

Residential	$82.28
Non-residential	$NA

Proportion of household/premises with access to a recycling service: 89% (kerbside) 100% drop off

Average participation rate: 80%

Table 1: Amounts of materials collected at the kerbside, sent for secondary use/energy recovery and contamination (waste) disposed of to landfill
1 July 2010 to 30 June 2011

Material Types collected at kerbside	Kerbside recycling collected (in tonnes)	Kerbside recycling sold or sent for secondary use including energy recovery by material type (in tonnes)	Kerbside recycling residual waste (contaminants) disposed to landfill (only report total tonnes)
TOTAL PACKAGING PAPER i.e. cardboard and liquid paper board		3376	
TOTAL NON PACKAGING PAPER i.e. paper mixed, paper white office, newspaper and magazines		N/A	
TOTAL GLASS		1574	
TOTAL PLASTICS		248.4	
TOTAL ALUMINIUM (cans)		106.7	
TOTAL STEEL (cans, tins etc.)		122.4	
TOTAL	**6,498**	**5,427.5**	**1,070.5**

Appendix 2: Glossary

AAD	Australian Antarctic Division
ADRs	Australian Design Rules
AED	Aggregated Emissions Data
AHMAC	Australian Health Ministers Advisory Committee
ANZSIC	Australian and New Zealand Standard Industrial Classification
ANZECC	Australia New Zealand Environment and Conservation Council
AQMP	Air Quality Management Plan
ARC	Australian Research Council
BCC	Brisbane City Council
BCI	Behaviour Change Initiative
CAC	Commonwealth Authorities and Companies Act 1999
CLM	Contaminated Land Management Act 1997
CLR	Contaminated Land Register
CNG	Compressed natural gas
CO	Carbon monoxide
COAG	Council of Australian Governments
CRC CARE	Cooperative Research Centre for Contamination Assessment and Remediation of the Environment
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CSMS	Coordinated Smoke Management Scheme
CUEDC	Combined Urban Emissions Drive Cycle
Cwlth	Commonwealth
DCA	Development Consent Authority
DEC	Department of Environment and Conservation
DECC	Department of Environment and Climate Change
DECCEW	Department of the Environment, Climate Change, Energy and Water
DERM	Department of Environment and Resource Management
DSEWPaC	Department of Sustainability, Environment, Water, Population and Communities
DOAS	Differential Optical Absorption Spectroscopy
DoT	Department of Transport
DTEI	Department for Transport Energy and Infrastructure
DTMR	Department of Transport and Main Roads
EET	Emission Estimation Technique
EHA	Environment, Heritage and Arts
EIP	Environment Improvement Program
EMPCA	Environmental Management and Pollution Control Act 1994
EMR	Environmental Management Register
EPA	Environment Protection Authority / Environmental Protection Agency

EPHC	Environment Protection and Heritage Council
EPO	Environment Protection Objective
EPPs	Environment Protection Policies
ERU	Environmental Reporting Unit
GIS	Geographic Information System
HPS	Health Protection Services
ILG	Industry Liaison Group
IRTP	Integrated Regional Transport Plan
IWG	Implementation Working Group
IWMP	Industrial Waste Management Policy (Movement of Controlled Waste between States and Territories)
IWMP NPI	Industrial Waste Management Policy (National Pollutant Inventory)
IWRP	Industry Waste Reduction Plan
KBAQS	Kwinana Background Air Quality Study
KBIT	Kangan-Batman Institute of TAFE
LCVs	Light commercial vehicles
LFS	Licence Fee Structure
LPG	Liquefied petroleum gas
LTEC	Land Transport Environment Committee
MBAQS	Midland Background Air Quality Study
MEA	Maximum extent achievable
MIL	Monitoring Investigation Level
MoU	Memorandum of Understanding
NATA	National Association of Testing Authorities
NEPC	National Environment Protection Council
NEPM	National Environment Protection Measure
NHMRC	National Health and Medical Research Council
NHVAS	National Heavy Vehicle Accreditation Scheme
NISE 2	National In-Service Emissions
NO_2	Nitrogen dioxide
NO_x	Nitrogen oxides
NPI	National Pollutant Inventory
NRETAS	Department of Natural Resources, Environment, The Arts, and Sport
NRT	National Reporting Tool
O_3	Ozone
ORS	Online Reporting System
PAH	Polycyclic aromatic hydrocarbons
Pb	Lead

PCBs	Polychlorinated biphenyls
PM_{10}	Particles with an equivalent aerodynamic diameter less than or equal to 10 micrometres
$PM_{2.5}$	Particles with an equivalent aerodynamic diameter less than or equal to 2.5 micrometres
PPLIP	Port Pirie Lead Implementation Program
ppm	Parts per million
PRC	Peer Review Committee
PTRMS	Proton Transfer Reaction—Mass Spectronomy Instrument
RSD	Remote Sensing Device
RTA	Roads and Traffic Authority
SEP	State Environment Policy
SEPP	State Environment Protection Policy
SEPP (AAQ)	State Environment Protection Policy (Ambient Air Quality)
SEPP (AQM)	State Environment Protection Policy (Air Quality Management)
SEQ	South-East Queensland
SEQIPP	South East Queensland Infrastructure Plan and Program 2009–2026
SEQRP	South East Queensland Regional Plan 2009–2031
SO_2	Sulfur dioxide
SVRP	Smoky Vehicle Reporting Program
TAPM	The Air Pollution Model
TEOM	Tapered Element Oscillating Microbalance
TNP	TransLink Network Plan
TPH	Total petroleum hydrocarbons
TPR	Third Party Reviewer
TSP	Total suspended particles
UPSS	Underground Petroleum Storage Systems
USEPA	United States Environmental Protection Agency
VOC	Volatile organic compounds
VR1	Stage 1—Vapour Recovery
VR2	Stage 2—Vapour Recovery

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