NEPC
National Environment Protection Council

annualreport

2013–2014

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Image credits

Front cover (clockwise from top left)
Shell Oil Refinery, Corio, Victoria (Alex Zuk)
Traffic on the Cahill Expressway, Sydney (Arthur Mostead)
Plastic and glass recycling bins at the Resource Management Centre in Symonston (Steve Wray)
Trams outside Flinders Street Railway Station, Melbourne (John Baker)
Views of Wolgan Valley in the Blue Mountains from a lookout on Wollemi National Park Road (John Baker)

Back cover (left to right)
Washed-up tyres gathered for disposal (John Baker)
Checking the results from one of five solar-powered dust monitoring stations on Lethro Station near Wentworth (John Baker)
Commonwealth fuel quality inspectors doing on-site fuel checks (Michelle McAulay)

Chair's Foreword

The National Environment Protection Council (NEPC) was established under the *National Environment Protection Council Act 1994* (NEPC Act). The NEPC Act has two primary objectives. The first is to ensure that people enjoy the benefit of equivalent protection from air, water or soil pollution and from noise, wherever they live in Australia. The second is to ensure that decisions of the business community are not distorted, and markets are not fragmented, by variations between jurisdictions in relation to the adoption or implementation of major environment protection measures.

The National Environment Protection Council fulfils the intent of the NEPC Act by creating and monitoring the effectiveness of National Environment Protection Measures (NEPMs). These measures are nationally consistent environmental standards, goals or protocols relating to air, water, noise, site contamination, hazardous waste and recycling.

The Ambient Air Quality NEPM, for example, establishes a nationally consistent approach to the development of benchmarks against which progress in managing air quality can be assessed. During 2013–14, the NEPC worked to develop national emission standards for wood heaters. It also continued the review of Australian particle standards, and set in train a review of the other air quality standards in the NEPM. This work will help to improve the management of ambient air quality, which is essential to the protection of the Australian community's health and wellbeing.

This is an example of the NEPC's work in 2013–14 to deliver positive outcomes for communities, businesses and the environment.

I would like to thank the National Environment Protection Council and Committee members and others who have worked hard to achieve significant outcomes for environmental issues of national significance during 2013–14.

Greg Hunt

Chair
National Environment Protection Council

Members of the National Environment Protection Council

From 1 July 2013 to 30 June 2014

Jurisdiction	Member	Duration of membership
Commonwealth	The Hon Mark Butler Minister for Environment and Water	1 July 2013–September 2013
	The Hon Greg Hunt Minister for the Environment	September 2013–30 June 2014
New South Wales	The Hon Robyn Parker Minster for the Environment and Minister for Heritage	1 July 2013–April 2014
	The Hon Rob Stokes Minister for the Environment	April 2014–30 June 2014
Victoria	The Hon Ryan Smith Minister for Environment and Climate Change	1 July 2013–30 June 2014
Queensland	The Hon Andrew Powell Minister for Environment and Heritage Protection	1 July 2013–30 June 2014
Western Australia	The Hon Albert Jacob Minister for Environment and Heritage	1 July 2013–30 June 2014
South Australia	The Hon Ian Hunter MLC Minister for Sustainability, Environment and Conservation	1 July 2013–30 June 2014
Tasmania	The Hon Brian Wightman MP Minister for Environment, Parks and Heritage	July 2013–April 2014
	The Hon Matthew Groom Minister for Environment, Parks and Heritage	April 2014–30 June 2014
Australian Capital Territory	Mr Simon Corbell MLA Minister for the Environment	1 July 2013–30 June 2014
Northern Territory	The Hon Peter Chandler MLA Minister for Lands, Planning and the Environment	1 July 2013–30 June 2014

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Executive Officer's Report

For the first half of the year the National Environment Protection Council (NEPC), together with the NEPC Committee of senior officials, focused on furthering the five environment and water priorities of the Council of Australian Governments (COAG):

- pursuing seamless environmental regulation and regulatory practice across jurisdictions
- progressing national water reform, including through implementing 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.

After the discontinuation of the Standing Council on Environment and Water on 13 December 2013 (see below), the roles of the NEPC and the NEPC Committee underwent a consolidation. The first Meeting of Environment Ministers (incorporating the National Environment Protection Council) on 24 April 2014 articulated the future governance arrangements and work programme for the NEPC. This streamlined the approach to multijurisdictional work, tailoring it to the nature and duration of the activity in question and, in some instances, agreeing that it should be progressed by other means.

OVERVIEW

About the National Environment Protection Council

The NEPC is a statutory body with law-making powers established under the *National Environment Protection Council Act 1994*, 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 portfolio ministers from the participating jurisdictions (i.e. Commonwealth, state and territory governments).

Abolition of the NEPC Service Corporation and transitional issues

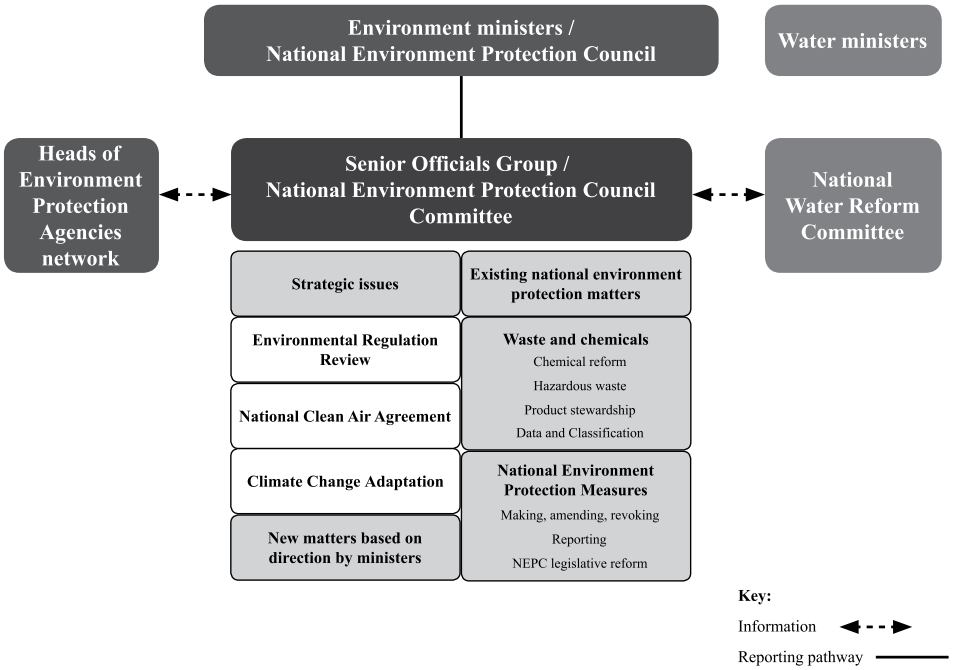
On 13 December 2013, COAG replaced its 22 standing councils with eight councils. As a consequence, the Standing Council on Environment and Water (SCEW) was discontinued. The decision led to a number of changes to the operations of the NEPC and its governance support structure, with a focus on streamlining operations to realise new efficiencies.

The NEPC Service Corporation provided support to the SCEW until the latter was discontinued in December 2013, and to the NEPC for the full financial year. The NEPC Service Corporation, a statutory authority, provided secretariat, project management, financial and administrative support to the SCEW and the NEPC in the development of national environmental policy and NEPMs. It was funded by jurisdictional contributions and was hosted by the Commonwealth Department of the Environment. Its executive officer, a statutory officeholder, had the responsibility of managing the NEPC Service Corporation and was accountable to ministers.

All jurisdictions agreed to abolish the NEPC Service Corporation with effect from 1 July 2014. They agreed that future operational support for the NEPC would be provided by the Commonwealth Department of the Environment, supported by operational areas within the department, and that all NEPC Service Corporation project and operational funds would be transferred to a Commonwealth special account established with a legislative amendment to the *National Environment Protection Council Act 1994*.

The decision of the Meeting of Environment Ministers (incorporating the National Environment Protection Council) of 24 April 2014 to streamline the future work programme included an agreement to proceed with a revised governance structure, as outlined below.

Governance structure



Interjurisdictional relationships

COAG decided that, where there are important areas of Commonwealth and state and territory cooperation outside its council system, ministers may meet on an ad hoc basis. The NEPC was not directly affected by the changes and, through its power to make National Environment Protection Measures, continues to provide a mechanism to deliver consistent environmental outcomes across Australia in a regulatory or non-regulatory manner.

In addition, the following streamlined approach to multijurisdictional environmental work was agreed by environment ministers:

- Meetings of environment ministers are to occur on an ad hoc basis and run concurrently with meetings of the NEPC as required. Agendas are to be focused on issues requiring multijurisdictional collaboration or decision.
- Meetings of the heads of jurisdictional environment agencies (Senior Officials Group) are to be held on a regular basis—at least annually—and, if required, concurrently with NEPC Committee meetings.
- Matters under consideration will be organised into three key streams of work:
  - Strategic issues
  - Key existing projects relating to waste and chemicals and the National Plan for Clean Air until their completion
  - Ongoing priorities relating to responsibilities under the National Environment Protection Council Acts.

- There will be ongoing communication between the Senior Officials Group, the NEPC Committee and the Heads of Environmental Protection Agencies (HEPA) network. Where relevant, the HEPA may be asked to take a role in progressing agenda items for the Senior Officials Group and the NEPC Committee.
- Water policy reforms and other activities are to be conducted independently, reporting to a National Water Reform Committee and, as required, to water ministers.
- Administrative infrastructure associated with the air and waste thematic oversight groups, led and supported by New South Wales and the Commonwealth respectively, will be retained as the Air Project Management Group and the Waste and Chemicals Project Management Group.
- New Zealand and the Australian Local Government Association will be invited to attend when relevant subject matter is to be discussed.
- Centralised secretariat support will continue—primarily relating to meeting administration and NEPC financial and legislative obligations.

About National Environment Protection Measures

The *National Environment Protection Council Act 1994* (NEPC Act) recognises that communities and business play an important role in protecting Australia's environment and that national outcomes are best achieved through regionally tailored approaches.

The NEPC Act provides for the creation of National Environment Protection Measures (NEPMs), which can be used to establish nationally consistent environmental standards, goals, guidelines or protocols in relation to air, water, noise, site contamination, hazardous waste and recycling. An NEPM is a legislative instrument and may be regulatory or non-regulatory in nature. Once a national objective is agreed, how it is achieved is the prerogative of each jurisdiction. Regulation is just one of a suite of implementation tools a jurisdiction may use.

NEPMs enable the development of a single national framework to address an environmental issue, with the flexibility for implementation to take into account variability between jurisdictions. This provides certainty and consistency for business and the community in managing these environmental issues, while reducing the need for regulation.

Currently there are seven NEPMs:

Air Toxics—sets out a nationally consistent approach to collection of data on toxic air pollutants (such as benzene) in order to deliver a comprehensive information base from which standards can be developed to manage these air pollutants to protect human health.

Ambient Air Quality—establishes a nationally consistent framework for monitoring and reporting on air quality, including the presence of pollutants such as carbon monoxide, lead and particulates. Work, including a public consultation, commenced in 2013–14 towards making a variation to this NEPM. It is expected that the final variation will be completed in 2015–16.

Assessment of Site Contamination—provides a nationally consistent approach to the assessment of site contamination to ensure sound environmental management practices by regulators, site assessors, environmental auditors, landowners, developers and industry. It has been highly effective in providing authoritative guidance to practitioners in this field.

Diesel Vehicle Emissions—supports reducing pollution from diesel vehicles. Several jurisdictions operate a suite of programmes to reduce exhaust emissions from diesel vehicles.

Movement of Controlled Waste—operates to minimise potential environmental and human health impacts related to the movement of certain waste materials, by ensuring that waste to be moved between states and territories is properly identified, transported and handled in ways consistent with environmentally sound management practices.

National Pollutant Inventory—provides a framework for collection and dissemination of information to improve ambient air and water quality, minimise environmental impacts associated with hazardous wastes and improve the sustainable use of resources.

Used Packaging Materials—operates to minimise environmental impacts of packaging materials, through design (optimising packaging to use resources more efficiently), recycling (efficiently collecting and recycling packaging) and product stewardship (demonstrating commitment by stakeholders).

Risk management

Occupational health and safety matters are covered by the Department of the Environment's policies and procedures and are reported on in the department's annual report.

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

As previously reported, the NEPC Service Corporation developed a fraud control plan in accordance with the *Financial Management and Accountability Act 1997*. There were no cases of fraud reported during the financial year.

OTHER GOVERNANCE ARRANGEMENTS

External scrutiny

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

The Australian National Audit Office was again appointed as auditor for the 2013–14 financial year.
(See 'Statement by Auditor', pages 6–7.)

Financial performance

Details of financial matters are contained in the auditor's report and financial statements (see page 5).

Procurement and consultancies

The NEPC Service Corporation strived to achieve the core principle of value for money in all of its procurement activities.

In 2013–14 the NEPC Service Corporation engaged Equity Partners to prepare the financial statements. The NEPC Service Corporation was excluded from AusTender.

Environmental performance

The NEPC Service Corporation previously reported that an environmental management system was in place to enhance the environmental sustainability of its operations.

The office in Canberra complied with ecologically sustainable development and environmental performance reporting as part of broader reporting by the Department of the Environment in accordance with section 516A of the *Environment Protection and Biodiversity Conservation Act 1999*.

Acknowledgments

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 well being for all Australians. I would also like to thank the Victorian Environmental Protection Authority for its assistance with the finalisation of this publication. The new NEPC business services team staff and I look forward to continuing this work with a renewed focus in the coming year.

Consul O'Reilly
Acting NEPC Executive Officer

National Environment Protection Council

Financial Statements

2013–2014

Australian National Audit Office

INDEPENDENT AUDITOR'S REPORT

To the Minister for the Environment

I have audited the accompanying financial statements of the former National Environment Protection Council Service Corporation (NEPC Service Corporation) for the year ended 30 June 2014, which comprise: the Statement by the former NEPC Service Corporation Executive Officer; the Statement of Comprehensive Income; Statement of Financial Position; Statement of Changes in Equity; Cash Flow Statement; Schedule of Commitments; and Notes to and forming part of the financial statements, including a Summary of Significant Accounting Policies and other explanatory information.

Former NEPC Service Corporation Executive Officer's Responsibility for the Financial Statements

The Minister for the Environment has requested the former NEPC Service Corporation Executive Officer to prepare 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. The former NEPC Service Corporation Executive Officer was responsible for such internal control as necessary to enable the preparation of financial statements that give a true and fair view and 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 have conducted my audit in accordance with the Australian National Audit Office Auditing Standards, which incorporate 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 National Environment Protection Council Service 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 National Environment Protection Council Service Corporation's internal control. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made by

the former NEPC Service Corporation 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 former 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 former National Environment Protection Council Service Corporation's financial position as at 30 June 2014 and its financial performance and cash flows for the year then ended.

Basis of accounting

I draw your attention to Notes 1.1 and 2 of the former National Environment Protection Council Service Corporation's financial statements which disclose as a result of the passing of the *Public Governance, Performance and Accountability (Consequential and Transitional) Provisions Act 2014*, the National Environment Protection Council Service Corporation ceased to exist on 30 June 2014. I also draw attention to Note 1.2, which describes the basis of preparation of the financial statements. My opinion, set out above, has not been modified in respect of these matters.

Australian National Audit Office

Kristian Gage
Audit Principal

Statement by Executive Officer for the year ended 30 June 2014

I was the Executive Officer of the former National Environment Protection Council Service Corporation for the year-ended 30 June 2014. I have been requested by the Minister for the Environment to prepare general purpose financial statements for the former National Environment Protection Council Service Corporation for the year-ended 30 June 2014 in accordance with the *Commonwealth Authorities and Companies Act 1997*.

In my opinion, the attached financial statements for the year ended 30 June 2014 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.

This statement is made in relation to the National Environment Protection Council Service Corporation, which ceased to exist on 1 July 2014 when the *Public Governance, Performance and Accountability (Consequential and Transitional) Provisions Act 2014* received royal assent.

P. Mitchell
Director of Regulatory Reform Section
Department of Environment

8 November 2014

Statement of Comprehensive Income for the period ended 30 June 2014

	Note	2014	2013
		$	$
NET COST OF SERVICES			
Expenses			
Supplier	3A	**1,850,440**	2,298,207
Write-down and impairment of assets	3B	**-**	13,551
Total expenses		**1,850,440**	2,311,758
Own-source revenue			
Interest	4A	**67,557**	126,468
Total own-source revenue		**67,557**	126,468
Net (cost) of services		**(1,782,883)**	(2,185,290)
Contributions from jurisdictions	4B	**1,449,172**	2,410,966
(Deficit)/Surplus from continuing operations		**(333,711)**	225,676
OTHER COMPREHENSIVE INCOME			
Changes in asset revaluation reserve		**-**	-
Total other comprehensive income		**-**	-
Total comprehensive (loss)/income		**(333,711)**	225,676

This statement should be read in conjunction with the accompanying notes.

Balance Sheet as at 30 June 2014

	Note	2014	2013
		$	$
ASSETS			
Financial assets			
Cash and cash equivalents	5A	**4,234,452**	4,350,196
Trade and other receivables	5B	**86,029**	552,286
Total financial assets		**4,320,481**	4,902,482
Total assets		**4,320,481**	4,902,482
LIABILITIES			
Payables			
Supplier	7A	**32,959**	365,815
Other payables	7B	**101,929**	17,363
Total payables		**134,888**	383,178
Total liabilities		**134,888**	383,178
Net assets		**4,185,593**	4,519,304
EQUITY			
Reserves		**11,977**	11,977
Retained surplus		**4,173,616**	4,507,327
Total equity		**4,185,593**	4,519,304

This statement should be read in conjunction with the accompanying notes.

Statement of Changes in Equity for the period ended 30 June 2014

	Retained Earnings		Asset Revaluation Surplus		Total Equity	
	2014	2013	**2014**	2013	**2014**	2013
	$	$	**$**	$	**$**	$
Opening Balance						
Balance carried forward from previous period	**4,507,327**	4,281,651	**11,977**	11,977	**4,519,304**	4,293,628
Adjusted opening balance	**4,507,327**	4,281,651	**11,977**	11,977	**4,519,304**	4,293,628
Comprehensive income						
(Deficit)/Surplus for the period	**(333,711)**	225,676	**-**	-	**(333,711)**	225,676
Other comprehensive income	**-**	-	**-**	-	**-**	-
Total comprehensive income	**(333,711)**	225,676	**-**	-	**(333,711)**	225,676
Closing balance as at 30 June	**4,173,616**	4,507,327	**11,977**	11,977	**4,185,593**	4,519,304

This statement should be read in conjunction with the accompanying notes.

Cash Flow Statement for the period ended 30 June 2014

	Note	2014	2013
		$	$
OPERATING ACTIVITIES			
Cash received			
Contribution from jurisdictions		**1,987,304**	2,614,270
Interest		**67,677**	123,959
Net GST received		**144,330**	-
Total cash received		**2,199,311**	2,738,229
Cash used			
Net GST paid		**-**	(60,357)
Suppliers		**(2,315,055)**	(3,392,501)
Total cash used		**(2,315,055)**	(3,452,858)
Net cash (used by) operating activities	8	**(115,744)**	(714,629)
Net (decrease) in cash held		**(115,744)**	(714,629)
Cash and cash equivalents at the beginning of the reporting period		**4,350,196**	5,064,825
Cash and cash equivalents at the end of the reporting period	5A	**4,234,452**	4,350,196

This statement should be read in conjunction with the accompanying notes.

Schedule of Commitments as at 30 June 2014

	2014	2013
	$	$
BY TYPE		
Commitments receivable		
GST recoverable on commitments	**(84,150)**	(24,286)
Total Commitments Receivable	**(84,150)**	(24,286)
Commitments payable		
Project funding agreements	**925,645**	267,147
Total commitments payable	**925,645**	267,147
Net commitments by type	**841,495**	242,861
BY MATURITY		
GST recoverable on commitments		
Within 1 year	**(82,100)**	(24,286)
Between 1 to 5 years	**(2,050)**	-
Total GST recoverable on commitments	**(84,150)**	(24,286)
Project funding agreement commitments		
Within 1 year	**903,095**	267,147
Between 1 to 5 years	**22,550**	-
Total project funding agreement commitments	**925,645**	267,147
Net Commitments by Maturity	**841,495**	242,861

NB: Commitments are GST inclusive where relevant.

Due to the abolition of NEPC per Schedule 5, Part 1 of the P*ublic Governance, Performance and Accountability (Consequential and Transitional Provisions) Bill 2014*, all commitments relating to NEPC will be honoured by the Commonwealth from 1 July 2014 as per section 292 of the Explanatory Memorandum to this Bill the liabilities and assets of the NEPC become liabilities and assets of the Commonwealth upon abolition.

Notes to and Forming Part of the Financial Statements for the period ended 30 June 2014

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

1.1 Objective of NEPC Service Corporation

The NEPC Service Corporation was an Australian Government Controlled entity that ceased to exist on 30 June 2014. It was a not-for-profit entity.

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

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

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

- People enjoy the benefit of equivalent protection from air, water or soil pollution and from noise, wherever they live in Australia; and
- 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 *Public Governance, Performance and Accountability (Consequential and Transitional) Provisions Act 2014* received Royal Assent on 1 July 2014. From this date, the NEPC Service Corporation ceased to exist and its functions, assets and liabilities transferred to the Department of Environment.

1.2 Basis of Preparation of the Financial Statements

As noted in note 1.1, NEPC Service Corporation ceased to exist on 30 June 2014. The assets, liabilities and functions of the NEPC Service Corporation were transferred to the Department of Environment with effect from 1 July 2014. All functions are continuing in the Department of Environment. The financial statements have been prepared on this basis.

The Minister for the Environment has requested the preparation of general purpose financial statements of the NEPC Service Corporation for the year-ended 30 June 2014 in accordance with 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 2011; 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 statement of financial position 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 NEPC Service Corporation (the Service Corporation) has not made any judgements that have significant impact on the amounts recorded in the financial statements.

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.

Future Australian Accounting Standard Requirements

No new standards, revised standards, interpretations, amending standards that were issued prior to the sign-off date and are applicable to the future reporting period are expected to have a future 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*.

Contributions from Jurisdictions

Contributions to the operating costs of the Service Corporation and to undertake projects are recognised in comprehensive income when the Service Corporation has a right to receive the contribution.

1.6 Gains

Sale of Assets

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

1.7 Cash

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

a) cash on hand; and

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.

1.8 Financial Assets

NEPC Service Corporation classifies its financial assets as 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.

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 the end of each reporting period.

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.

1.9 Financial Liabilities

Financial liabilities are classified as other financial liabilities. Financial liabilities are recognised and derecognised upon 'trade date'.

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).

1.10 Contingent Liabilities and Contingent Assets

Contingent Liabilities and Contingent Assets are not recognised in the statement of financial position 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.

1.11 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.

1.12 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.

NOTE 2: EVENTS AFTER THE REPORTING PERIOD

The *Public Governance, Performance and Accountability (Consequential and Transition) Provisions Act 2014* received Royal Assent on 1 July 2014. From this date, the NEPC Service Corporation ceased to exist and its functions, assets and liabilities transferred to the Department of Environment with effect from 1 July 2014. All functions are continuing in the Department of Environment.

NOTE 3: EXPENSES

	2014	2013
	$	$
3A: Supplier		
Goods and services		
Project expenses		
Consultancy services	**1,006,420**	990,734
Legislative drafting	**-**	35,768
Travel and accommodation	**25,884**	14,005
Other project expenses	**16,291**	14,270
Total project expenses	**1,048,595**	1,054,777
Operational expenses		
Contracted human resources	**609,196**	961,628
Office accommodation and support provided by the Department of Environment	**95,452**	183,709
Financial services	**65,959**	43,525
Information technology	**477**	1,907
Travel and accommodation	**1,918**	7,824
Printing	**16,915**	33,708
Office expenses	**11,928**	11,129
Total operational expenses	**801,845**	1,243,430
Total goods and services	**1,850,440**	2,298,207
Goods and services are made up of:		
Provision of goods—external entities	**16,915**	33,708
Rendering of services—related entities	**776,605**	1,226,453
Rendering of services—external entities	**1,056,920**	1,038,046
Total goods and services	**1,850,440**	2,298,207
Total supplier expenses	**1,850,440**	2,298,207
3B: Write-Down and Impairment of Assets		
Asset write-downs and impairments from:		
Trade and other receivables	**-**	13,551
Total write-down and impairment of assets	**-**	13,551

	2014	2013
	$	$

NOTE 4: INCOME

OWN-SOURCE REVENUE

4A: Interest revenue

Interest earned from cash at call	**46,221**	68,286
Interest earned from term deposits	**21,336**	58,182
Total Interest revenue	**67,557**	126,468

4B: Contributions from jurisdictions

Contributions from jurisdictions	**1,449,172**	2,410,966
Total contributions from jurisdictions	**1,449,172**	2,410,966

	2014	2013
	$	$

NOTE 5: FINANCIAL ASSETS

5A: Cash and cash equivalents

Cash on hand or on deposit	**4,234,452**	4,350,196
Total cash and cash equivalents	**4,234,452**	4,350,196

5B: Trade and other receivables

Goods and services receivables in connection with		
Related entities	**82,189**	514,800
External parties	**-**	33,526
Total goods and services receivables	**82,189**	548,326
Other receivables		
Accrued income	**3,840**	3,960
Total other receivables	**3,840**	3,960
Total trade and other receivables	**86,029**	552,286
Trade and other receivables expected to be recovered in		
no more than 12 months	**86,029**	552,286
Total trade and other receivables	**86,029**	556,246
Receivables are aged as follows:		
Not overdue	**86,029**	37,486
Overdue by:		
Less than 30 days	**-**	514,800
30 to 60 days	**-**	-
60 to 90 days	**-**	-
More than 90 days	**-**	-
	-	514,800
Total receivables	**86,029**	552,286

NOTE 6: FAIR VALUE MEASUREMENTS

The NEPC Service Corporation did not hold any non financial assets or non financial liabilities measured at fair value during the current and prior financial years. All carrying amounts of financial assets and financial liabilities are of a reasonable approximation to their fair value due to their short term nature, and as such no separate disclosure is shown in the financial statements for fair value.

NOTE 7: PAYABLES

	2014	2013
	$	$
7A: Suppliers		
Trade creditors and accruals	**32,959**	365,815
Total suppliers	**32,959**	365,815
Supplier payables expected to be settled within 12 months:		
Related parties	**19,800**	241,355
External parties	**13,159**	124,460
Total	**32,959**	365,815
Total suppliers	**32,959**	365,815

Settlement was usually made within 30 days (2013: 30 days)

7B: Other Payables		
GST payable to Australian Taxation Office	**101,929**	17,363
Total other payables	**101,929**	17,363
Other payables—are expected to be recovered in:		
No more than 12 months	**101,929**	17,363
Total other payables	**101,929**	17,363

	2014	2013
	$	$

NOTE 8: CASH FLOW RECONCILIATION

Reconciliation of cash and cash equivalents as per statement of financial position to cash flow statement

Cash and cash equivalent as per:		
Cash flow statement	**4,234,452**	4,350,196
Balance sheet	**4,234,452**	4,350,196
Reconciliation of net cost of services to net cash from operating activities		
Net cost of services	**(1,782,883)**	(2,185,290)
Add revenue from Government	**1,449,172**	2,410,966
Movements in assets and liabilities		
Assets		
Decrease in net receivables	**466,257**	12,878
Liabilities		
(Decrease) in supplier payables	**(332,856)**	(970,546)
Increase in other payables	**84,566**	17,363
Net cash (used) by operating activities	**(115,744)**	(714,629)

NOTE 9: RELATED PARTY DISCLOSURE

Members of the National Environment Protection Council

The Council Members during the year were:

The Hon Greg Hunt MP, Commonwealth

The Hon Rob Stokes MP, New South Wales

The Hon Ryan Smith MP, Victoria

The Hon Albert Jacob MLA, Western Australia

The Hon Ian Hunter MLC, South Australia

The Hon Andrew Powell MP, Queensland

The Hon Matthew Groom MP, Tasmania

The Hon Simon Corbell MLA, Australian Capital Territory

The Hon Peter Chandler MLA, Northern Territory

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

There were no related party transactions during the year.

NOTE 10: EXECUTIVE REMUNERATION

Note 10A: Payments for Senior Executive

The Service Corporation incurred $135,005 in costs for the services of an Executive Officer. These services were provided by the Department of Environment under a fee for service arrangement (2013: $245,850).

Note 10B: Other Highly Paid Staff

During the reporting period, there were no employees whose salary plus performance bonus were $180,000 or more (2013: Nil).

NOTE 11: REMUNERATION OF AUDITORS

	2014	2013
	$	$
Financial statement audit services were provided by the Australian National Audit Office (ANAO).		
Remuneration to the ANAO for financial statement audit services	**19,800**	18,900

No other services were provided by the ANAO.

NOTE 12: FINANCIAL INSTRUMENTS

	2014 $	2013 $
Note 12A: Categories of Financial Instruments		
Financial assets		
Loans and receivables:		
Cash and cash equivalents	**4,234,452**	4,350,196
Trade and other receivables	**82,189**	552,286
Total	**4,316,641**	4,902,482
Total financial assets	**4,316,641**	4,902,482
Financial Liabilities		
Financial liabilities measured at amortised cost:		
Suppliers	**32,959**	365,815
Total	**32,959**	365,815
Total financial liabilities	**32,959**	365,815
Note 12B: Net Income and Expense from Financial Assets		
Loans and receivables		
Interest revenue	**67,557**	126,468
Net gains on loans and receivables	**67,557**	126,468
Net gains on financial assets	**67,557**	126,468

Note 12C: Net income and expense from financial liabilities

There were nil income/expenses from financial liabilities (2013: nil).

Note 12D: 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.

Note 12E: Credit Risk

The Service Corporation is exposed to minimal credit risk as loans and receivables consist of cash, trade receivables and investments.

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 impaired

	2014	2013
	$	$
Not Past Due Nor Impaired		
Cash at bank or on deposit	**4,234,452**	4,350,196
Trade and other receivables	**82,189**	37,486
Total	**4,316,641**	4,387,682
Past Due or Impaired		
Trade and other receivables	**-**	514,800
Total	**-**	514,800
Ageing of financial assets that are past due but not impaired		
Trade and other receivables		
less than 30 days	**-**	514,800
31 to 60 days	**-**	-
61 to 90 days	**-**	-
90+ days	**-**	-
Total	**-**	514,800

Note 12F: 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 government funding and mechanisms available to the entity and internal policies and procedures put in place to ensure there were appropriate resources to meet its financial obligations.

	2014				
	On demand	**Within 1 year**	**1 to 5 yrs**	**>5 yrs**	**Total**
	$	$	$	$	$
Suppliers	**-**	**32,959**	**-**	**-**	**32,959**
Total	**-**	**32,959**	**-**	**-**	**32,959**

	2013				
	On demand	Within 1 year	1 to 5 yrs	>5 yrs	Total
	$	$	$	$	$
Suppliers	-	365,815	-	-	365,815
Total	-	365,815	-	-	365,815

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

Note 12G: Market risk

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

NEPC Report on the Implementation of the

National Environment Protection (Air Toxics) Measure

National Environment Protection (Air Toxics) Measure

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 effectiveness of the National Environment Protection (Air Toxics) Measure has been assessed against the evaluation criteria for this NEPM.

PART 2—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

This part provides a summary of jurisdictional reports on implementation and the National Environment Protection Council's overall assessment of the implementation of the NEPM.

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 (Clean Air) Regulation 2010 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, and the Environmental Protection (Air) Policy 2008.
Western Australia	• The NEPM is implemented under the *National Environment Protection Council (Western Australia) Act 1996*, the *Environmental Protection Act 1986* and programmes in the Perth Air Quality Management Plan.
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 Strategy) 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 summarises the implementation issues that arose throughout the 2013 reporting year (this NEPM has a calendar year reporting requirement). For implementation activities refer to the jurisdictional reports listed in Part 5.

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	• No monitoring undertaken because the NEPM is implemented administratively. • No issues reported.
New South Wales	• No issues reported.
Victoria	• No issues reported.
Queensland	• Non-NEPM-compliant monitoring undertaken.
Western Australia	• Non-NEPM-compliant monitoring undertaken.
South Australia	• No issues reported.
Tasmania	• No issues reported.
Australian Capital Territory	• Previous desktop analysis has shown that air toxics are not an issue for the ACT airshed, and no monitoring sites have been identified.
Northern Territory	• Previous desktop analysis has shown that air toxics are not an issue for the NT airshed, and no monitoring sites have been identified.

PART 3—JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

Identification of sites

No jurisdictions identified any new sites in the reporting period.

Reporting of monitoring of air toxics

Victoria monitored benzo(α)pyrene for the NEPM-required 12 months at a roadside site on a major freight route in an inner Melbourne residential suburb.

Queensland continued to monitor selected air toxics using open-path differential optical absorption spectroscopy instrumentation at Springwood in south-east Queensland and in central Gladstone. Queensland also monitored benzo(α)pyrene at Woolloongabba.

Western Australia continued to monitor volatile organic compounds using a Fourier transform infrared spectrometer within urban areas adjacent to the Kwinana Industrial Area.

All monitoring results were below the NEPM monitoring investigation levels.

No other jurisdictions undertook monitoring during the reporting period.

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

As monitoring to date has shown air toxics in Australia to be well below monitoring investigation levels, no jurisdiction engaged in any specific strategies or actions to manage them.

Repeat identification of Stage 1 and Stage 2 sites

No new monitoring sites were identified.

PART 4—ASSESSMENT OF NEPM EFFECTIVENESS

The monitoring investigation levels continue to 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.

PART 5—REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 1 (see page 65).

NEPC Report on the Implementation of the

National Environment Protection (Ambient Air Quality) Measure

National Environment Protection (Ambient Air Quality) Measure

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 outcomes

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 effectiveness of the National Environment Protection (Ambient Air Quality) Measure has been assessed against the evaluation criteria for this NEPM.

PART 2—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

This part provides a summary of jurisdictional reports on implementation and the National Environment Protection Council's overall assessment of the implementation of the NEPM.

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 as well as commitments outlined in its forward plan: NSW 2021.
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*.

Jurisdiction	Summary of implementation frameworks
Queensland	• The NEPM is implemented under the *Environmental Protection Act 1994*, the Environmental Protection Regulation 1998, and the Environmental Protection (Air) Policy 2008.
Western Australia	• The NEPM is implemented under the *National Environment Protection Council (Western Australia) Act 1996* and the *Environmental Protection Act 1986* and by programmes 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 implemented under the *Environmental Management Pollution Control Act 1994*, 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 NEPM is a state policy under the *State Policies and Projects Act 1993*.
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 2013 reporting year (this NEPM has a calendar year reporting requirement). 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	• No issues reported.
New South Wales	• No issues reported.
Victoria	• Data capture targets were not achieved for some pollutants at Alphington and Footscray (first quarter) and Dandenong (fourth quarter) due to technical problems with equipment.
Queensland	• Data capture targets were not achieved for some pollutants at Deception Bay and The Gap due to technical problems with equipment.
Western Australia	• No issues reported.
South Australia	• A new monitoring site began operating at North Haven in March 2013. • A campaign monitoring station was installed in Adelaide's CBD in May 2014.
Tasmania	• TEOM instrument failure at Launceston limited validated data collection to 31%. • Completed the first full year of monitoring at the Devonport air monitoring station. • The peak carbon monoxide monitoring station in the Hobart CBD was closed in February 2013.
Australian Capital Territory	• A new performance monitoring station was established and became operational in February 2014.
Northern Territory	• Technical issues with nitrogen dioxide analysers and a TEOM resulted in reduced data.

PART 3—JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

Detailed monitoring data are in jurisdictional compliance reports available from http://www.nepc.gov.au.

During 2013–14, jurisdictions continued to work on a proposed variation to the AAQ NEPM for particle standards, and emission reduction projects including emission performance standards for wood heaters, non-road spark ignition engines and non-road diesel engines.

Most jurisdictions continued to focus on programmes that reduce emissions from motor vehicles and wood heaters, with several jurisdictions reporting improvements in winter particulate levels. A number of jurisdictions continued to investigate the sources, dispersal and management of emissions from mining, industry and planned burns to reduce their impact on local communities.

PART 4—ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM continues to be 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 air quality.

Monitoring results show that NEPM standards are mostly being met and that Australia's air quality is generally good compared with international standards. Most jurisdictions consistently meet the standards and goals for nitrogen dioxide, carbon monoxide and sulfur dioxide (except in some areas with industrial activities).

Meeting the AAQ NEPM standards for ozone and particulates continues to be a significant challenge for larger metropolitan areas of a number of jurisdictions, given pressures from growing populations, urban expansion and increased economic activity and associated vehicle use. Bushfires, controlled burning and windblown dust continue to be sources of particulate level exceedences in a number of jurisdictions, particularly those in eastern and southern Australia.

PART 5—REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 2 (see page 81).

NEPC Report on the Implementation of the

National Environment Protection (Assessment of Site Contamination) Measure

National Environment Protection (Assessment of Site Contamination) Measure

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

PART 2—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

This part provides a summary of jurisdictional reports on implementation and the National Environment Protection Council's overall assessment of the implementation of the NEPM.

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 and its associated guidelines are approved guidelines under section 105 of the *Contaminated Land Management Act 1997*. This requires the NEPM to be taken into consideration by the Environment Protection Authority, site auditors and consultants when assessing contaminated sites.

Jurisdiction	Summary of implementation frameworks
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. • The Contaminated Land Auditor system provides a statutory framework for assessing site contamination.
Western Australia	• The NEPM is implemented through the *Contaminated Sites Act 2003* and the Contaminated Sites Regulations 2006 and associated relevant technical guidelines.
South Australia	• The *Environment Protection Act 1993* provides a legislative framework to manage site contamination, including prescribed technical guidelines.
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*, the Environmental Management and Pollution Control (Underground Petroleum Storage Systems) Regulations and associated guidelines.
Australian Capital Territory	• The NEPM is implemented by the Contaminated Sites Environment Protection Policy made under the *Environment Protection Act 1997*.
Northern Territory	• The NEPM is implemented by audits of contaminated sites required under the Northern Territory planning process, legislative directive environmental audits and voluntary audits.

Implementation issues arising

The NEPM was amended in May 2013 and much jurisdictional activity in 2013–14 was focused on implementing these amendments.

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	• No issues reported.
New South Wales	• Continued to update the relevant Environment Protection Agency and guidelines to incorporate or refer to the amendments as needed. Clarified implementation queries from stakeholders.
Victoria	• Amended the State Environment Protection Policy (Prevention and Management of Contamination of Land). • Sought to resolve questions raised about the new focus on ecological values, how asbestos should be assessed and managed, and managing broader policy implications for other areas such as prescribed industrial waste.

Jurisdiction	Summary of implementation issues arising
Queensland	• Finalised amendments to the Sustainable Planning Regulation 2009 to reflect the amended NEPM. • Highlighted an apparent inconsistency created by the amended NEPM with Queensland environmental legislation when dealing with contaminated groundwater.
Western Australia	• Began a comprehensive review of its technical guidelines, particularly to ensure consistency with the new NEPM ecological investigation levels.
South Australia	• Developed draft revised guidance documents to ensure consistency with the amended NEPM and drafting an environment protection policy to give effect to the amended NEPM.
Tasmania	• Revised guidance for the decommissioning of underground petroleum storage tanks to ensure consistency with the NEPM. • Developed and delivered information and training programmes for practitioners about the amended NEPM.
Australian Capital Territory	• Fully implemented the amended NEPM by completing all necessary legislative and administrative steps.
Northern Territory	• No issues reported.

PART 3—JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

Most jurisdictions have amended their implementation frameworks to fully meet the requirements of the amended NEPM.

All jurisdictions continue to report a high level of compliance with the guidelines as set out in the NEPM in the assessment and management of their contaminated sites.

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, which was amended in May 2013 and is now almost fully implemented by all jurisdictions, continues to provide consistent, consolidated guidance to professional practitioners in assessing site contamination.

The recent amendments are well supported by environmental auditors and others in the site assessment industry, and the consistency of site assessments and human health risk assessments submitted to agencies continues to improve across the country. However, given the time taken to undertake site assessments it may still be too early to fully assess the effectiveness of the amended NEPM.

New South Wales, Victoria and Queensland are clarifying and resolving matters regarding the practical implications for practitioners and regulatory agencies about some aspects of the amended NEPM within their jurisdictions. These matters may not be completely resolved until there is a further revision of the NEPM, particularly relating to the management of contaminated groundwater.

PART 5—REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 3 (see page 123).

NEPC Report on the Implementation of the

National Environment Protection (Diesel Vehicle Emissions) Measure

National Environment Protection (Diesel Vehicle Emissions) Measure

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 effectiveness of the National Environment Protection (Diesel Vehicle Emissions) Measure has been assessed against the evaluation criteria for this NEPM.

PART 2—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

This part provides a summary of jurisdictional reports on implementation and the National Environment Protection Council's overall assessment of the implementation of the NEPM.

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*, the *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 2013 under the *Environment Protection Act 1970*.

Jurisdiction	Summary of implementation frameworks
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* and the *Environmental Protection Act 1986*. • Vehicle emissions in Western Australia are regulated under the *Road Traffic Act 1974* and the Road Traffic (Vehicle Standards) Regulations 2000.
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. • Vehicle emissions in South Australia are regulated under the Road Traffic (Vehicle Standards) Rules 1999.
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.

Implementation issues arising

Table 2 summarises the implementation issues that arose throughout the 2013–14 reporting year. For implementation activities refer to the jurisdictional reports listed in Part 5.

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	• No issues reported.
New South Wales	• No issues reported.
Victoria	• Due to the introduction of the Heavy Vehicle National Law that was agreed by the Council of Australian Governments in 2009, Victoria's Environment Protection (Vehicle Emissions) Regulations 2013, which were remade in this reporting year, no longer deal with heavy vehicles over 4.5 tonnes.
Queensland	• No issues reported.
Western Australia	• No issues reported.
South Australia	• The National Heavy Vehicle Law was enacted in South Australia in 2013. However, South Australia's Heavy Vehicle (Vehicle Standards) Regulation continues its existing emission standard. • The Regency Park emissions test facility closed during the reporting year due to high maintenance costs and reliability issues. Private sector involvement is being sought to provide alternative services.
Tasmania	• No specific issues were reported; however, the NEPM is of limited relevance because diesel vehicles are not major contributors to air emissions in urban areas.
Australian Capital Territory	• No specific issues were reported; however, the NEPM is of limited relevance because diesel vehicles are not major contributors to air emissions in the ACT airshed.
Northern Territory	• No specific issues were reported; however, the NEPM is of limited relevance because diesel vehicles are not major contributors to air emissions in urban areas.

PART 3—JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

Jurisdictions continue to run a number of programmes to monitor and reduce emissions from their diesel fleets. Most jurisdictions run a smoky vehicle reporting programme, with the exception of the Commonwealth, South Australia and the Australian Capital Territory.

New South Wales continued to run diesel retrofit programmes for both on- and off-road vehicles. New South Wales, Victoria, Queensland and Western Australia operated diesel vehicle emission testing and repair or maintenance programmes.

For details of individual programmes and initiatives, please refer to the jurisdictional reports listed in Part 5.

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 help reduce emissions from diesel vehicles across Australia and is a useful component of the broader framework to manage emissions.

A number of jurisdictions noted increases in the numbers of registered on- and off-road diesel vehicles resulting in their becoming an increasingly higher proportion of in-service fleets. Fleet turnover, combined with the introduction of more stringent vehicle emissions regulations, means considerable progress is being made towards achieving NEPM goals through national initiatives including the Australian Design Rules and fuel quality standards, particularly for smaller vehicles.

PART 5—REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 4 (see page 135).

NEPC Report on the Implementation of the

National Environment Protection (Movement of Controlled Waste between States and Territories) Measure

National Environment Protection (Movement of Controlled Waste between States and Territories) Measure

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

PART 2—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

This part provides a summary of jurisdictional reports on implementation and the National Environment Protection Council's overall assessment of the implementation of the NEPM.

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* through a transitional provision in the *Environment Protection (Miscellaneous) Amendment Act 2005* and is implemented through conditions attached to environmental authorisations.
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

No implementation issues were raised by jurisdictions.

PART 3—JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

In 2013–14, a number of jurisdictions updated, or were in the process of updating, their regulatory instruments following the minor variation of the NEPM in 2012.

Approval was given during the reporting period for a trial in Tasmania of cement kiln processing of spent cracking catalyst from Victoria as an alternate feed stock. The relocation of the cracking catalyst from Victoria resulted in an almost threefold increase in the total waste transported into Tasmania in 2013–14 from the 2012–13 level.

The Commonwealth continued to work in three areas related to hazardous waste—data collection, data reporting and infrastructure.

New South Wales, Queensland and the Australian Capital Territory all increased their compliance efforts associated with the movement of controlled wastes. Victoria focused on the transportation of industrial waste out of the state to both limit the possibility of the movement of that waste to other states and ensure that Victorian waste is taken to permitted Victorian facilities.

The tables below provide a national summary of the data for quantities of each waste category transported. The waste categories group the 73 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 2013 to 30 June 2014

Code	Description	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ex-Terr*	Total
A	Plating & heat treatment	0.00	0.00	140.28	0.00	0.50	0.00	0.00	0.00	n/a	140.78
B	Acids	11,839.13	23.77	2.00	0.00	66.13	6.00	0.00	0.00	n/a	11,937.03
C	Alkalis	1,366.30	254.78	6.50	0.00	415.03	0.20	0.00	0.00	n/a	2,042.81
D	Inorganic chemicals	48,851.28	10,558.94	889.82	0.00	140,156.63	601.22	0.00	0.00	n/a	20,1057.89
E	Reactive chemicals	18.39	11.54	173.78	0.00	4.13	0.02	0.00	0.00	n/a	207.86
F	Paints, resins, inks, organic sludges	1,943.76	1,950.97	643.13	0.00	1,748.48	2.00	0.00	0.00	n/a	6,288.34
G	Organic solvents	500.97	2,164.60	300.08	0.00	219.05	30.00	0.00	0.00	n/a	3,214.70
H	Pesticides	24.71	1,180.19	160.13	0.00	0.03	0.00	0.00	0.00	n/a	1,365.06
J	Oils	5,209.04	4,474.99	9,819.57	107.00	3,933.25	65.00	441.46	41.54	n/a	24,091.85
K	Putrescible/ organic waste	10,215.47	3,062.50	3,223.67	0.00	0.00	92.00	166.00	0.00	n/a	16,759.64
L	Industrial washwater	0.00	69.10	0.00	000	0.00	0.00	0.00	0.00	n/a	69.10
M	Organic chemicals	943.77	375.89	4,898.61	24.00	48.85	0.15	0.00	0.00	n/a	6,291.27
N	Soil/sludge	2,669.98	418.36	11,183.43	0.00	579.66	37.50	16.00	0.00	n/a	14,904.93
R	Clinical & pharmaceutical	391.93	572.07	233.19	0.00	159.24	0.60	237.00	0.00	n/a	1,594.03
T	Misc.	1,836.85	80.79	94.68	0.00	59.54	3.50	5.00	0.00	n/a	2,080.36
	Total (tonnes)	85,811.58	25,198.49	31,768.87	131.00	147,390.52	838.19	866.06	41.54	n/a	292,046.25

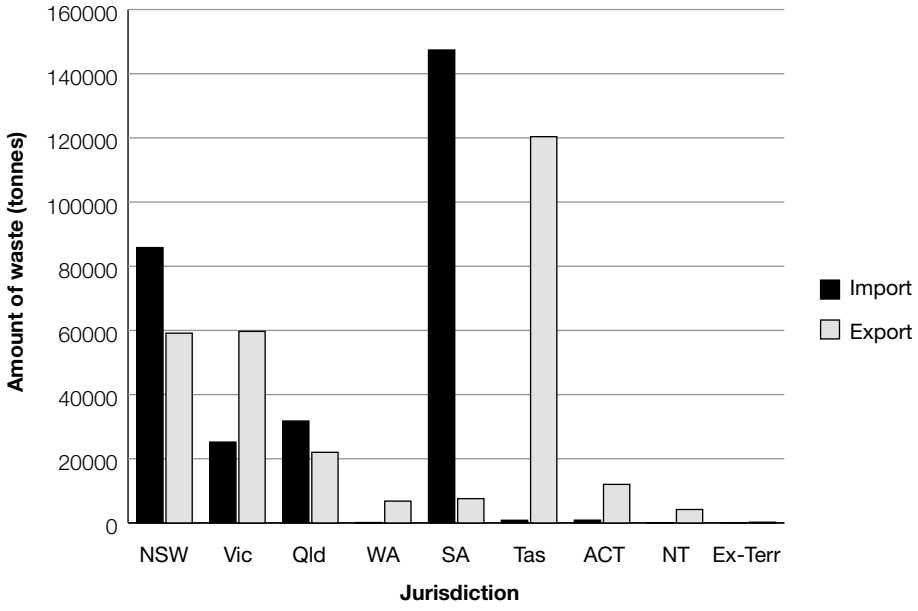
Note: information regarding external territories (Ex-Terr) has been provided only since the reporting year 2009–10.

Table 3: Summary of total movements of controlled waste within Australia, exports by states and territories for the period 1 July 2013 to 30 June 2014

Code	Description	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ex-Terr*	Total
A	Plating & heat treatment	38.78	0.00	0.00	0.00	0.00	86.00	0.00	16.00	0.00	140.78
B	Acids	23.28	11,822.60	25.17	27.82	3.36	1.03	0.53	27.24	6.00	11,937.03
C	Alkalis	235.89	1,099.36	73.48	6.01	64.01	0.28	232.61	330.97	0.20	2,042.81
D	Inorganic chemicals	23,744.91	31,117.58	14,523.06	5,022.21	5,956.6	119,337.27	321.59	1,033.45	1.22	201,057.89
E	Reactive chemicals	186.66	17.96	1.35	1.41	0.46	0.00	0.00	0.00	0.02	207.86
F	Paints, resins, inks, organic sludges	1,760.92	2,663.62	1,075.42	355.90	2,34.61	17.06	153.89	24.92	2.00	6,288.34
G	Organic solvents	1,551.73	161.87	677.08	184.10	98.12	409.90	63.90	38.00	30.00	3,214.70
H	Pesticides	161.07	45.55	716.56	402.50	39.11	0.00	0.27	0.00	0.00	1,365.06
J	Oils	10,645.64	3,960.75	3,769.26	615.66	321.2	236.49	1,986.99	2,490.86	65.00	24,091.85
K	Putrescible/ organic waste	6,214.37	3,819.44	0.00	0.00	237.80	0.00	6,396.03	0.00	92.00	16,759.64
L	Industrial washwater	33.10	0.00	36.00	0.00	0.00	0.00	0.00	0.00	0.00	69.10
M	Organic chemicals	4,970.88	225.48	848.38	6.81	7.09	101.65	34.25	29.77	0.15	6,291.27
N	Soil/sludge	8,864.72	4,759.14	222.22	170.07	73.16	118.80	653.06	6.26	37.50	14,904.93
R	Clinical & pharmaceutical	564.96	2.02	44.67	0.00	456.48	48.29	345.24	132.37	0.60	1,594.63
T	Misc.	144.22	2.37	1.15	8.55	12.04	25.39	1828.15	54.99	3.50	2,080.36
	Total (tonnes)	59,141.13	59,697.74	22,013.8	6,801.04	7,570.85	120,382.16	12,016.51	4,184.83	238.19	292,046.25

Note: information regarding external territories (Ex-Terr) has been provided only since the reporting year 2009–10.

*Figure 1: Tonnage of controlled waste moved within Australia 2013–14**



*Note: information regarding external territories (Ex-Terr) has been provided only since the reporting year 2009–10 (and in Figure 1 the scale of the vertical axis does not allow for the 239.19 tonnes of waste exported from Australia's external territories to be visually represented).

Figure 2: Tonnage of controlled waste moved within Australia 1999–2014

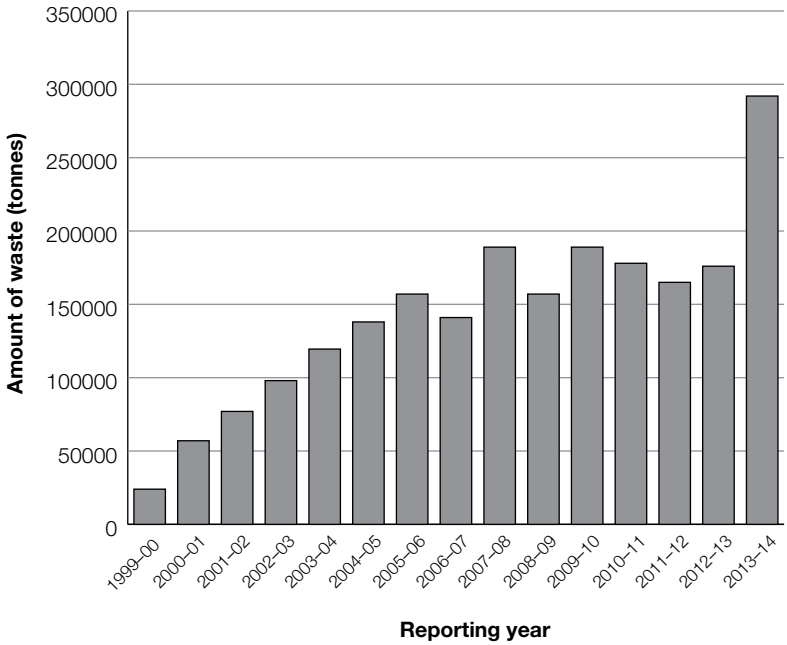
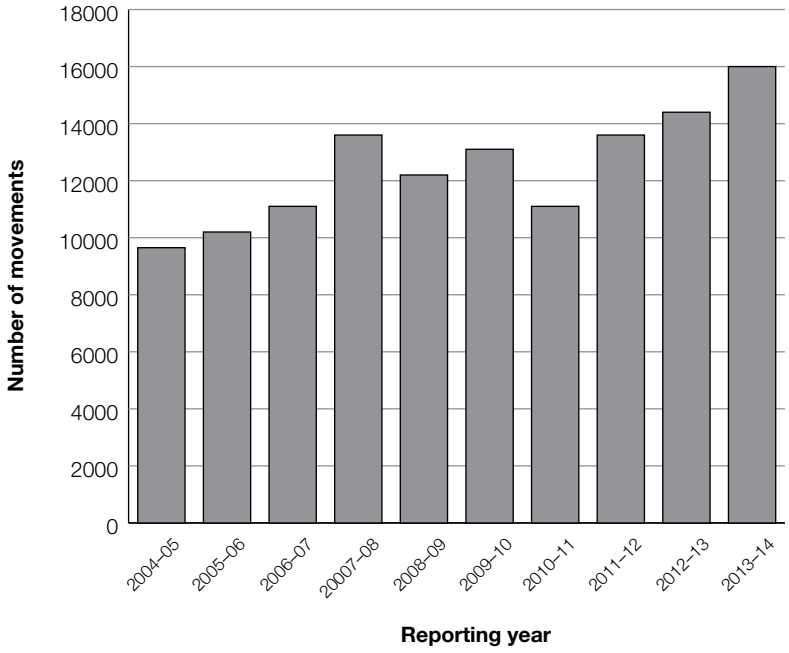


*Figure 3: Number of movements of controlled waste within Australia 2004–14**



*Note: information regarding number of movements has been provided only since the reporting year 2004–05.

PART 4—ASSESSMENT OF NEPM EFFECTIVENESS

Jurisdictions reported that the NEPM continues to provide an effective means of tracking the interstate movement of controlled waste between states and territories. The NEPM also continues to be an effective tool in minimising the potential for adverse impacts on human health and the environment associated with the movement of controlled waste. There remains a high level of communication and cooperation between jurisdictions for this NEPM, particularly regarding the appropriateness of issuing consignment authorisations and discrepancies in wastes moving between states and territories.

PART 5—REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 5 (see page 157).

NEPC Report on the Implementation of the

National Environment Protection (National Pollutant Inventory) Measure

National Environment Protection (National Pollutant Inventory) Measure

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 4 March 1998 (advertised in *Commonwealth of Australia Gazette* No. S 89, 4 March 1998, p. 1) and the remaining provisions of the measure commenced 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 effectiveness of the National Environment Protection (National Pollutant Inventory) Measure has been assessed against the evaluation criteria for this NEPM.

PART 2—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

This part provides a summary of jurisdictional reports on implementation and the National Environment Protection Council's overall assessment of the implementation of the NEPM.

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

A summary of implementation issues arising during 2012–13 (the NPI NEPM reporting year is a year behind the current annual report year) can be found in Table 2. For implementation activities refer to the jurisdictional reports listed in Part 5.

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	• No issues reported.
New South Wales	• Identified a number of opportunities for further improvements to the data collected and reported by the NPI, including an interactive online training programme.
Victoria	• No issues reported.
Queensland	• Identified further opportunities to improve the effectiveness of the NEPM, including the need to emphasise collecting and publishing aggregated emissions data.
Western Australia	• Updating the collection and reporting of aggregated emissions data.
South Australia	• High staff turnover within reporting organisations has resulted in a continuing need to train reporters in the use of the online reporting system, as well as inadequate communication of the programme and database issues.
Tasmania	• No issues reported.
Australian Capital Territory	• There was a continued need to train reporters using the online reporting system, due to staff turnover.
Northern Territory	• Insufficient funds to collect aggregated airshed emissions.

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, and expire on 30 June 2015.

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

Website and public awareness

Reporting information is available on the NPI website at http://www.npi.gov.au. The number of visitors to the NPI website decreased from 282,334 in 2011–12 to 205,451 in 2012–13.

The free phone line and the public email box continued to be used to inform the public. Approximately 10 calls a month were received and responses to 131 emails received were provided.

Online reporting

The Commonwealth continued to develop and maintain the NPI website and database search engine. This work ensured that relevant and up-to-date information was readily accessible to the public and other key stakeholders.

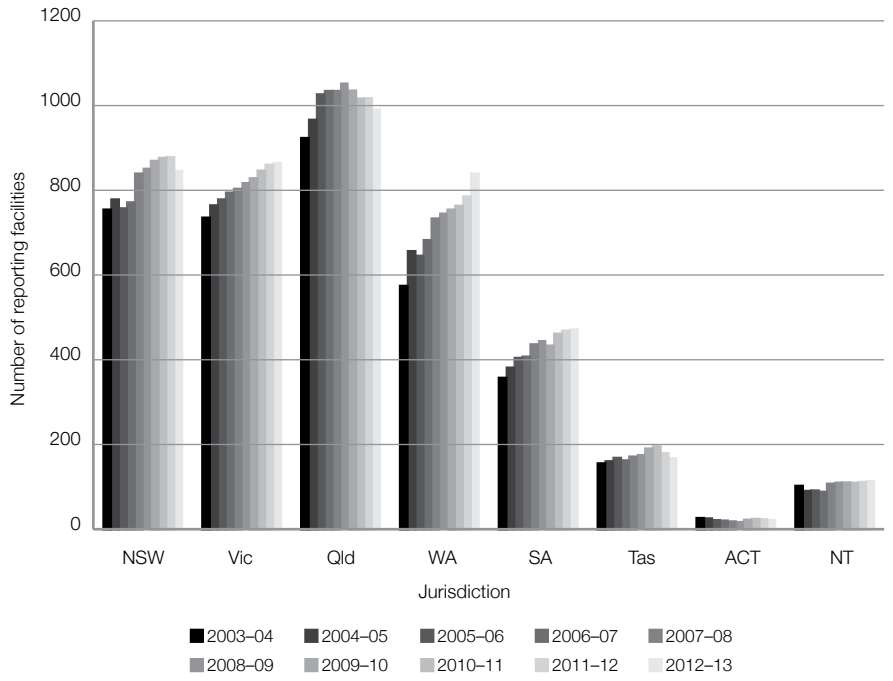
There continues to be a steady increase in the number of online reporters. While the online reporting system training has been well received, it is acknowledged that further training is essential.

Most jurisdictions have conducted industry training programmes to assist reporters to use the online reporting system. These training programmes vary from one-on-one sessions with new reporters to more formal group sessions. The high turnover in industry, new small business enterprises and staff within jurisdictions is the main reason for the need for continued training.

Industry facility reporting

- The total number of reporting facilities for all jurisdictions was 4,317, compared to 4,328 in the previous year. There were 218 facilities that reported to the NPI for the first time in 2012–13.
- The percentage of industry using the online reporting system continues to increase.

Figure 1: NPI facility reports received by jurisdictions 1999–2013



The annexes to this report are in Appendix 6 (see page 175).

NEPC Report on the Implementation of the

National Environment Protection (Used Packaging Materials) Measure

National Environment Protection (Used Packaging Materials) Measure

PART 1—GENERAL INFORMATION

NEPM details

Title: National Environment Protection (Used Packaging Materials) Measure

Made by Council: 2 July 1999

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 effectiveness of the National Environment Protection (Used Packaging Materials) Measure has been assessed against the evaluation criteria for this NEPM.

PART 2—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

This part provides a summary of jurisdictional reports on implementation and the National Environment Protection Council's overall assessment of the implementation of the NEPM.

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 2014.

Jurisdiction	Summary of implementation frameworks
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 Waste Reduction and Recycling Regulation 2011.
Western Australia	• The NEPM is implemented by the Environmental Protection NEPM-UPM) Regulations 2013 under the *Environmental Protection Act 1986*.
South Australia	• The NEPM is legally enforced by the Environment Protection (Used Packaging Materials) Policy 2012.
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 Used Packaging Materials Industry Waste Reduction Plan under the *Waste Minimisation Act 2001*.
Northern Territory	• The NT Government is not a signatory to the Australian Packaging Covenant, and there are no known major brand owners based in the NT who are likely to have obligations under the NEPM. • There is provision under the Waste Management and Pollution Control Act to enforce the NEPM if needed.

Implementation issues arising

Table 2 summarises the implementation issues that arose throughout the 2013–14 reporting year. 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	• No issues reported.
New South Wales	• No issues reported.
Victoria	• No issues reported.
Queensland	• No issues reported.
Western Australia	• The Environmental Protection (NEPM-UPM) Regulations 2013 were enacted on 25 September 2013.
South Australia	• No issues reported.
Tasmania	• No issues reported.
Australian Capital Territory	• The Used Packaging Materials Industry Waste Reduction Plan 2006 was updated in 2013.
Northern Territory	• No issues reported.

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).

A number of jurisdictions increased their NEPM advice, collaboration and compliance activities, while others focused on brand owner surveys or projects funded either by the Australian Packaging Covenant or under state-based waste reduction or recycling programmes.

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

Figure 1: Australian Packaging Covenant signatories at 30 June 2014

JURISDICTION	NUMBER OF SIGNATORIES
ACT	5
NSW	404
QLD	74
SA	51
TAS	17
VIC	324
WA	53
TOTAL	**848**

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 varies and, therefore, no direct comparison between jurisdictions can be made.

Further information is available in the jurisdictional reports 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 2014 there were 848 covenant signatories, of which 836 were compliant.

In line with Schedule 3 of the Australian Packaging Covenant, the covenant secretariat continues to refer non-signatory, non-compliant and potential brand owners to jurisdictions for further action. That there have been no complaints, investigations or prosecutions reported by jurisdictions indicates that the covenant is working well and the NEPM provides a sound statutory basis for it.

The NEPM remains a less effective mechanism in the Northern Territory, 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 7 (see page 191).

Appendices

Appendix 1:
Jurisdictional Reports on the Implementation and Effectiveness of the Air Toxics NEPM

Commonwealth

Report to the NEPC on the implementation of the National Environment Protection (Air Toxics) Measure for the Commonwealth by the Hon Greg Hunt MP, Minister for the Environment, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

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

In 2013–14 the Commonwealth identified no Commonwealth sites on which there was potential for significant population exposure to elevated levels of air toxics.

At the Meeting of Environment Ministers on 29 April, ministers recognised that, while Australia has very clean air by world standards, there are ongoing challenges and that governments, business and the community will need to be active to ensure a clean air future.

The environment ministers initiated work to identify strategic priorities and approaches as a basis for a National Clean Air Agreement and agreed to consider working towards finalising an agreement by 1 July 2016.

The National Clean Air Agreement represents a strategic approach to air quality management and will ork towards a sustained reduction in air pollution and exposure for all Australians, with associated health, environmental and economic benefits.

In 2013–14 the Commonwealth continued to progress work to reduce emissions from nationally significant sources. The Commonwealth 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 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.

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.

Since its inception, monitoring activities undertaken under the Air Toxics NEPM have provided important data which has been used towards achieving the goal of the Air Toxics NEPM to improve the information base regarding ambient air toxics in Australia.

New South Wales

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Air Toxics) Measure for New South Wales by the Hon Rob Stokes MP, Minister for Environment, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

The implementation of the National Environment Protection (Air Toxics) Measure (NEPM) in New South Wales is coordinated by the Environment Protection Authority. 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 NEPM commencement in 2004. New South Wales 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 (i.e. sites prioritised for monitoring based on the potential for significant population exposure). New South Wales conducted ambient monitoring for the five NEPM air toxics at two Stage 2 sites in the Sydney metropolitan area using a 1-day-in-6 cycle for a full year from October 2008 to October 2009, and reported the results in the implementation report for the reporting year ended 30 June 2010.

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

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

New South Wales has achieved the NEPM goal to estimate human exposure to the five NEPM air toxics using a consistent national framework, by conducting ambient monitoring at two Stage 2 monitoring sites in the Sydney metropolitan area. The monitoring demonstrated that the five NEPM air toxics are within monitoring investigation levels at all monitoring sites.

Reporting of monitoring of air toxics

New South Wales 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(α)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 New South Wales implementation report for the reporting year ended 30 June 2010 (http://www.scew.gov.au/system/files/resources/ee20bb51-e1cd-82b4-559c-699771b152e7/files/nepc-annual-report-09-10.pdf) summarise the monitoring results for the five air toxics: benzene, benzo(α)pyrene as a marker for polycyclic aromatic hydrocarbons, 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 most significant results were for benzo(α)pyrene, with levels of approximately 65 per cent of the NEPM monitoring investigation level.

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 2013

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

During 2013 the Environment Protection Authority (EPA) Victoria undertook an air quality monitoring project that measured major air pollutants associated with motor vehicle emissions including benzo(α)pyrene at a roadside site in Francis St, Yarraville[1]. Monitoring for benzo(α)pyrene was undertaken for 12 months as required by the NEPM.

Francis St was independently selected as one of the sites most heavily affected by road diesel emissions in Melbourne. It is a major route for road freight—approximately 20,000 vehicles (approximately 5,000 of which are trucks) per working day travel along the street. Francis St is a two-way traffic single-lane street with residential dwellings on each side, located in the inner west suburb of Yarraville near the Melbourne Port area. Diesel particle emissions is the main air pollution issue of concern. Other roadside air toxics monitoring for benzene, toluene, xylene and formaldehyde has measured levels well below the monitoring investigation levels and therefore was not included in the Francis St monitoring.

The findings are summarised below. The Francis St final report is available at http://www.epa.vic.gov.au/~/media/Publications/1546%201.pdf on EPA Victoria's website.

The benzo(α)pyrene levels (see table below) were below the annual NEPM air toxics monitoring investigation level criterion of 0.3 ng/m^3.

Table 1: Annual benzo(α)pyrene levels measured at Francis St, 31 May 2012 to 29 May 2013

	Average (ng/m^3)
Francis St level	0.06
Monitoring and investigation level	0.30

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Since 2003, air toxics monitoring has not measured levels exceeding the monitoring investigation levels (air quality objectives) in the NEPM.

Past air monitoring results generally aligned with the levels estimated in the EPA's review of identification and prioritisation of potential Stage 1 and Stage 2 sites (see below). The air modelling and air pollution inventory may not capture some specific areas and diffuse sources (such as emissions from small to medium enterprises) effectively or estimate the resulting local impact adequately.

Identification of sites

There were no new Air Toxics NEPM monitoring sites identified in Victoria in 2013.

Reporting of monitoring of air toxics

During 2012 and 2013, EPA Victoria undertook an air quality monitoring project that measured major air pollutants associated with motor vehicle emissions including benzo(α)pyrene at a roadside site in Francis St, Yarraville. Monitoring for benzo(α)pyrene was undertaken for 12 months as required by the NEPM.

1 Francis St Monitoring Program (EPA publications 1460, 1500, 1520, 1532 and 1546.1) available from http://www.epa.vic.gov.au/our-work/publications?q=yarraville&s=Relevance&f=%7bEAE81923-D0E0-4EFE-B371-BFA0C6F361EE%7d&page=1#resultsAnchor

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

The results of monitoring at all sites show that the monitoring investigation levels have not been exceeded. Therefore it has not been necessary to take any action to manage air toxics beyond existing programmes.

Repeat identification of Stage 1 and Stage 2 sites

During 2010, a review of Stage 1 and Stage 2 sites commenced using the new procedures for the identification and prioritisation of those sites from the Air Toxics NEPM Mid-Term Review. The review, completed by June 2011, included the analyses of predicted concentrations for benzene, toluene, xylene and formaldehyde from modelling using the 2006 and most current air emissions inventory, meteorology and population for 2006 for Victoria. No modelling was conducted for benzo(α)pyrene. In addition to modelling an air emissions inventory, analysis for the Port Phillip region was also conducted; this included benzo(α)pyrene, benzene, toluene, xylene, formaldehyde and general PAH sites.

The review found that all of the predicted concentrations of ambient air toxics or estimated emissions were below the monitoring investigation level 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, the highest predicted concentrations relative to each air toxic monitoring investigation level were 22 per cent for benzene, 15 per cent for formaldehyde, 0.05 per cent and 1.5 per cent for toluene, and 0.7 per cent and 2.2 per cent for xylene. The highest benzo(α)pyrene emissions were estimated to be 66 per cent of the monitoring investigation level 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 per cent of the monitoring investigation level. The benzo(α)pyrene and toluene sites identified will be considered in future monitoring programmes.

Past air monitoring results generally aligned with the levels estimated in the review.

Queensland

Report to the NEPC on the implementation of the National Environment Protection (Air Toxics) Measure for Queensland by the Hon Andrew Powell MP, Minister for Environment and Heritage Protection, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In Queensland the Air Toxics NEPM is implemented under the *Environmental Protection Act 1994* (EP Act), the Environmental Protection Regulation 2008 and the Environmental Protection (Air) Policy 2008, with the NEPM monitoring investigation levels incorporated as air quality objectives.

Monitoring of polycyclic aromatic hydrocarbons (including benzo(α)pyrene) commenced at the Stage 2 Woolloongabba roadside monitoring site in July 2013. Monitoring of other air toxics in accordance with the protocols specified in the NEPM at this site is planned to commence in 2014–15.

During the 2013–14 reporting period the then Department of Environment and Heritage Protection continued to monitor selected air toxics using open-path differential optical absorption spectroscopy (DOAS) instrumentation at Springwood in south-east Queensland and in central Gladstone. While 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, the data collected improve the department's knowledge of ambient concentrations of the majority of the toxic pollutants in schedule 1 of the NEPM.

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, and to identify the locations most likely to experience significant population exposure to elevated ambient concentrations of air toxics.

Identification of sites

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 programme

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(α)pyrene	Benzene, toluene, xylene, formaldehyde, benzo(α)pyrene	2013–14	Residential population of 4,700; employed population of 10,000; inner city close to major roads and freeway
Wynnum	Benzene, toluene, xylene, formaldehyde, benzo(α)pyrene	Benzene, toluene, xylene, formaldehyde, benzo(α)pyrene	2016	Residential population of 12,200; close to major petrochemical industries

Reporting of monitoring of air toxics

Monitoring of air toxics at Stage 2 sites in south-east Queensland during the 2013–14 reporting period was limited to measurement of polycyclic aromatic hydrocarbons (including benzo(α)pyrene) at the Woolloongabba roadside monitoring site. Levels of benzene, toluene, xylenes and formaldehyde were monitored using a 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 Woolloongabba and Springwood sites was motor vehicles. The Gladstone region contains a number of industrial facilities, including metals processing and power generation, and a major port. Results from these three monitoring sites for the 2013 year are provided below. Data collected (tables 2 to 6) indicate that air toxics levels in Woolloongabba, Springwood and Gladstone are well below the NEPM investigation levels.

Table 2: Monitoring results for benzene

Site	Springwood	Central Gladstone
Monitoring method	DOAS	DOAS
Period of monitoring	1/1/13 to 31/12/13	1/1/13 to 31/12/13
Number of valid results	326	130
Maximum 24-hour average concentration	0.0012 ppm	0.0019 ppm
Annual average concentration (as arithmetic mean)	0.0008 ppm	0.0012 ppm
Arithmetic standard deviation of 24-hour average concentrations	0.0001 ppm	0.0002 ppm
Number of times monitoring investigation level exceeded	0	0

Table 3: Monitoring results for toluene

Site	Springwood	Central Gladstone
Monitoring method	DOAS	DOAS
Period of monitoring	1/1/13 to 31/12/13	1/1/13 to 31/12/13
Number of valid results	338	152
Maximum 24-hour average concentration	0.0091 ppm	0.0043 ppm
Annual average concentration (as arithmetic mean)	0.0039 ppm	0.0018 ppm
Arithmetic standard deviation of 24-hour average concentrations	0.0012 ppm	0.0004 pm
Number of times monitoring investigation level exceeded	0	0

Table 4: Monitoring results for xylenes

Site	Springwood	Central Gladstone
Monitoring method	DOAS	DOAS
Period of monitoring	1/1/13 to 31/12/13	1/1/13 to 31/12/13
Number of valid results	336	136
Maximum 24-hour average concentration	0.0128 ppm	0.0189 ppm
Annual average concentration (as arithmetic mean)	0.0057 ppm	0.0089 ppm
Arithmetic standard deviation of 24-hour average concentrations	0.0017 ppm	0.0018 ppm
Number of times monitoring investigation level exceeded	0	0

Table 5: Monitoring results for formaldehyde

Site	Springwood	Central Gladstone
Monitoring method	DOAS	DOAS
Period of monitoring	1/1/13 to 31/12/13	1/1/13 to 31/12/13
Number of valid results	318	174
Maximum 24-hour average concentration	0.0141 ppm	0.0043 ppm
Annual average concentration (as arithmetic mean)	0.0074 ppm	0.0029 ppm
Arithmetic standard deviation of 24-hour average concentrations	0.0025 ppm	0.0009 ppm
Number of times monitoring investigation level exceeded	0	0

Table 6: Monitoring results for benzo(α)pyrene

Site	Woolloongabba
Monitoring method	TO-13A
Period of monitoring	1/7/13 to 31/12/13
Number of valid results	6
Maximum monthly average concentrationa	0.077 ng/m^3
Annual average concentration (as arithmetic mean)[b]	0.041 ng/m^3
Arithmetic standard deviation of monthly average concentrations[a]	0.026 ng/m^3
Number of times monitoring investigation level exceeded	0

a Monthly, rather than 24-hour, sampling was conducted at Woolloongabba

b Average for six-month period July to December 2013

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

Progress towards improving the information base regarding ambient levels of air toxics within the Queensland environment has occurred by way of a desktop analysis identifying sites likely to have the highest population exposure to air toxics, and by ambient monitoring of benzene, toluene, xylene, formaldehyde and benzo(α)pyrene in Brisbane and Gladstone. Past and 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-to-medium-density residential area with potential for significant population exposure to air toxics from industrial emissions.

Western Australia

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Air Toxics) Measure for Western Australia by the Hon Albert Jacob MLA, Minister for Environment; Heritage, for the reporting year ended 31 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

In Western Australia, the National Environment Protection (Air Toxics) Measure is implemented by the Department of Environment Regulation (DER) under the *National Environment Protection Council (WA) Act 1996* and the *Environmental Protection Act 1986*.

Air toxics emissions are also managed through the Perth Air Quality Management Plan (AQMP), a non-statutory mechanism established by the Western Australian Government. The objective of the AQMP is to ensure that clean air is achieved and maintained throughout the Perth metropolitan region. The 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 AQMP are complementary to the Air Toxics NEPM.

Implementation issues arising

In Western Australia the monitoring of air toxics using methods recommended by the NEPM has been limited due to the cost of such methods; however, there has been further investigation into levels of certain volatile organic compounds (VOCs), including BTEX, undertaken during 2013 using a Fourier transform infrared spectrometer (FTIR) within urban areas adjacent to the Kwinana industrial area. A number of quality control samples have also been taken in parallel with these FTIR measurements. These samples were analysed for a number of VOCs, including BTEX. It is anticipated that the FTIR monitoring will be completed in 2014. The advantage of the FTIR is that it allows simultaneous monitoring of a range of VOCs at a higher temporal resolution than passive sampling or NEPM-compliant monitoring.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The 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 programmes on appropriate abatement actions.

Monitoring for air toxics in Western Australia has primarily been undertaken as part of specific studies. This has meant there are often a number of objectives to be satisfied when developing and implementing the monitoring programmes. As a consequence, the NEPM monitoring protocol has not always been followed. The monitoring results from these studies, however, are invaluable when assessing ambient air toxic concentrations across Western Australia.

Reporting of monitoring of air toxics

The results of NEPM-compliant monitoring as well as the additional complementary air quality studies in 2007, 2008 and 2009 indicated that air toxics levels in Perth are low compared to international standards and are below NEPM monitoring investigation levels. These studies have been summarised and published in 'Background Air Quality Monitoring in Kwinana 2005 to 2010', which is available at www.der.wa.gov.au. Owing to these findings, no additional NEPM-compliant monitoring has been undertaken during the past 12 months.

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

Past monitoring has indicated that levels of air toxics are below monitoring investigation levels and no further action is currently indicated.

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(α)pyrene were below 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 Ian Hunter MLC, Minister for Sustainability, Environment and Conservation, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The NEPM operates as an environment protection policy under the *Environment Protection Act 1993*.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

As monitoring in other jurisdictions has shown, air toxics in Australia are well below monitoring investigation levels. South Australia has not engaged in any specific monitoring of air toxics during the reporting period.

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 (1 July 2013 to 31 March 2014) and the Hon Matthew Groom MP, Minister for Environment, Parks and Heritage (31 March 2014 to 30 June 2014) for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

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

National Environment Protection Measures are adopted as state policies under the *State Policies and Projects Act 1993*, and the Air Toxics NEPM is put into effect under the Environment Protection Policy (Air Quality) 2004 (Air Policy) and the Tasmanian Air Quality Strategy 2006.

Tasmania undertook extensive preliminary screening monitoring of air toxics in Tasmania between 2008 and 2011. Air toxics monitoring was discontinued in November 2011 as previous monitoring had not identified any issues worthy of ongoing monitoring. No air toxics monitoring was undertaken in Tasmania during the reporting year ending 30 June 2014.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The monitoring conducted to date has improved the information base available in relation to ambient concentrations of air toxics in Tasmania.

Identification of sites

In 2005, 14 Stage 2 sites were identified in a desktop analysis conducted in accord with the Air Toxics NEPM desktop analysis protocol.

Monitoring was conducted at nine of these sites in the period 2008 to 2011. Some of the sites monitored were considered representative of other identified sites in terms of land use (e.g. residential), proximity to traffic and geography. This has allowed an indicative evaluation of some unmonitored sites.

Monitoring was also undertaken at selected sites to determine concentrations of air toxics in areas affected by:

- domestic wood smoke emissions
- motor vehicle emissions in Hobart
- industrial emissions.

The results of the last air toxics monitoring programme undertaken by the Tasmanian EPA Division, during the 2011 calendar year, were reported in the 2011–12 annual implementation report.

Reporting of monitoring of air toxics

Air toxics monitoring undertaken to date in Tasmania was conducted predominantly using non-reference passive sampling techniques. Passive sampling allows for the possibility of longer sampling periods. As the levels of air toxic pollutants are likely to be low in Tasmania, the extended deployment period associated with passive samplers increased the likelihood of detection of these species.

A programme of active sampling at peak sites for benzene, toluene, xylenes and formaldehyde was completed in 2011 and the results were included in the 2011–12 annual implementation report.

Also included in this report are the results of active sampling for PAH at two sites.

No air toxics monitoring was conducted in Tasmania during the 2013–14 period.

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

There is no evidence to indicate that Air Toxics NEPM monitoring investigation levels would be exceeded at any of the sites monitored in Tasmania in previous years. No action to specifically reduce concentrations of air toxics has been taken.

Repeat identification of Stage 1 and Stage 2 sites

Repeat identification of Stage 1 and Stage 2 sites 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, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

No implementation issues have arisen during the reporting year.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The ACT Government has previously undertaken a desktop analysis which showed that air toxics are not an issue for the ACT airshed.

Northern Territory

Report to the NEPC on the implementation of the National Environment Protection (Air Toxics) Measure for the Northern Territory by the Minister for Lands, Planning and the Environment for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Northern Territory Environment Protection Authority is responsible for implementation of the NEPM in the Northern Territory through provisions of the Waste Management and Pollution Control Act and the National Environment Protection Council (Northern Territory) Act.

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 programme has not been implemented.

A nine-month monitoring programme 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 2013–14. 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. Monitoring in 2005–06 has provided baseline data for further consideration.

In 2012–13 no sites were evaluated or selected and no analyses were performed.

Appendix 2:
Jurisdictional Reports on the Implementation and Effectiveness of the Ambient Air Quality NEPM

Commonwealth

Report to the NEPC on the implementation of the National Environment Protection (Ambient Air Quality) Measure for the Commonwealth by the Hon Greg Hunt MP, Minister for the Environment, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Commonwealth implements the National Environment Protection (Ambient Air Quality) Measure (Ambient Air Quality 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 Ambient Air Quality NEPM protocol threshold. The monitoring plan for the Commonwealth is available from www.environment.gov.au/atmosphere/airquality/publications/cmp.html.

At the Meeting of Environment Ministers on 29 April, ministers recognised that, while Australia has very clean air by world standards, there are ongoing challenges and that governments, business and the community will need to be active to ensure a clean air future.

The environment ministers initiated work to identify strategic priorities and approaches as a basis for a National Clean Air Agreement and agreed to consider working towards finalising an agreement by 1 July 2016.

The National Clean Air Agreement represents a strategic approach to air quality management and will work towards a sustained reduction in air pollution and exposure for all Australians, with associated health, environmental and economic benefits.

In this context the environment ministers signalled their intention to vary the Ambient Air Quality NEPM standards for particles, reflecting the latest scientific understanding on health risks arising from particle pollution. The measure seeks to establish a more stringent reporting standard for particle pollution ($PM_{2.5}$ and PM_{10}). Public consultation on the proposed variation concludes on 10 October 2014.

In 2013–14 the Commonwealth continued to progress work to reduce emissions from nationally significant sources. The Commonwealth 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 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.

The Commonwealth monitors fuel quality at all stages of the fuel supply chain to ensure it complies with the *Fuel Quality Standards Act 2000* (the Act). The objects of the Act are to:

a) regulate the quality of fuel supplied in Australia in order to:

   i. reduce the level of pollutants and emissions arising from the use of fuel that may cause environmental and health problems

   ii. facilitate the adoption of better engine technology and emission control technology

   iii. allow the more effective operation of engines

b) ensure that, where appropriate, information about fuel is provided when the fuel is supplied.

In 2013–14, authorised fuel inspectors visited 403 sites and tested 1,305 samples for compliance with the Act. Compliance action undertaken in accordance with the Act resulted in civil proceedings against two fuel suppliers, where the Federal Court granted injunctions to restrain the supply of non-compliant diesel. The Federal Court also imposed a pecuniary penalty under section 12AA against one of the fuel suppliers.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The Ambient Air Quality NEPM has been valuable in the management and assessment of air quality in Australia. It provides a nationally consistent framework.

The Ambient Air Quality NEPM generally operates efficiently and provides an effective framework for the monitoring and reporting of air quality and nationally consistent benchmarks against which to assess quality. The National Sustainability Council considers that, in general, air quality has remained consistently very good over the past 15 years in most parts of Australia. It does note that in some areas air quality has been variable (see http://www.environment.gov.au/sustainability/measuring/publications/sustainable-australia-report-2013.html).

A review completed in May 2011 of the Ambient Air Quality NEPM found that it had led to a greater understanding of air quality in Australia which resulted in an improved understanding of the health impacts of air pollution on the community.

The data collected for six pollutants targeted by the Ambient Air Quality 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 and the discussion of ambient air quality in Australia: State of the Environment 2011.

New South Wales

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Ambient Air Quality) Measure for New South Wales by the Hon Rob Stokes MP, Minister for the Environment, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The New South Wales Government outlined its commitments to improving air quality under Goal 22 in its forward plan for New South Wales, NSW 2021.

The National Environment Protection (Ambient Air Quality) Measure (NEPM) is implemented under the *Protection of the Environment Operations Act 1997* and the Protection of the Environment Operations (Clean Air) Regulation 2010.

The Protection of the *Environment Operations Act 1997* provides the regulatory framework for managing air emissions in New South Wales, establishes a licensing scheme for major industrial premises and provides economic incentives for licensed businesses and industry to reduce pollution, including emissions to air.

The Protection of the Environment Operations (Clean Air) Regulation 2010 provides measures to control emissions from industry, motor vehicles and fuels, domestic solid fuel heaters and open burning.

In New South Wales, the Office of Environment and Heritage and the Environment Protection Authority work together to reduce impacts of air pollution. The Office of Environment and Heritage operates a comprehensive air quality monitoring network. The Environment Protection Authority develops and implements regulations, policies and programmes to improve compliance with NEPM goals and protect public health.

The NEPM goal is a driver for these strategies and a benchmark against which progress in managing air quality can be assessed.

Air quality management in the greater metropolitan region and regional New South Wales

The Environment Protection Authority delivers a number of actions that target the pollutants of most concern in New South Wales. These include particles in the Greater Metropolitan Region and some regional centres and ground-level ozone (and its precursors) during summer. These efforts are designed to reduce air emissions from industry, motor vehicles, commercial businesses and domestic sources. Industry emissions of oxides of nitrogen and sulfur dioxide are also a focus for action in some regional locations.

The following outlines key mechanisms for managing air quality and activities undertaken in 2013–14.

Managing particle emissions

In December 2013 the Environment Protection Authority released Managing Particles and Improving Air Quality in NSW. This document provides information on the management of particle pollution in New South Wales and details a set of principles and actions to reduce particle emissions, targeting priority locations and sources to achieve the greatest public health benefit.

Air emissions inventory

To improve community access to information and understanding of air pollution sources in local areas, the Environment Protection Authority released the Air Emissions in My Community Web Tool in December 2013. The web tool presents aggregated data and charts for different geographic areas down to local council and postcode level.

Coal mines and Hunter region air quality

Coal mining and air quality in the Hunter region were a particular focus for the Environment Protection Authority's air quality management during 2013. This included the Environment Protection Authority continuing to implement the Dust Stop programme to reduce dust from coal mining activities.

In April 2013, the Environment Protection Authority released The Upper Hunter Air Particles Action Plan, which outlines a range of measures in place or being developed to improve air quality in the Upper Hunter. It includes actions to engage communities, improve planning decisions, reduce particle emissions from coal mines and other sources and improve the evidence base for action through monitoring and research.

The results of the Upper Hunter Fine Particle Characterisation Study were released in September 2013. This study, conducted over a year, was undertaken to provide communities in Muswellbrook and Singleton with scientific information about the sources of fine particles (as 2.5 microns and smaller in diameter, or $PM_{2.5}$) in their local environment.

Wood smoke reduction

As part of its ongoing work to reduce wood smoke, the Environment Protection Authority commenced the Wood Smoke Reduction Program in late 2013. This comprehensive two-year programme assists New South Wales local councils to raise awareness about the health impacts of wood smoke and the benefits of correct wood heater operation and help their communities shift away from wood heaters to cleaner forms of heating. Sixteen councils and one regional organisation of councils participated in the 2013 winter season programme. During winter 2014, 17 councils and four regional organisations of councils have taken part in the programme. The Wood Smoke Reduction Program has a budget of $930,000 for 2013–14 and $280,000 in 2014–15.

The Environment Protection Authority continued working with the Commonwealth and other jurisdictions towards developing national measures for wood heater management, as well as participating in a review of the Australian Standards for wood heaters.

Smoky vehicle enforcement

In New South Wales it is an offence for a vehicle to emit excessive air impurities for a continuous period of more than 10 seconds, so a smoky vehicle programme is used to target highly polluting vehicles. In 2013 the enforcement programme was enhanced with a mobile app to enable members of the public to use their mobile devices to report smoky vehicles.

In March 2013, New South Wales Roads and Maritime Services commenced a smoky vehicle enforcement programme, supported by retrofit and repair, targeting heavy vehicles emitting excessive smoke in Sydney's M5 East Tunnel.

Clean Machine Program

Under the New South Wales Clean Machine Program (which commenced in 2011), the Environment Protection Authority forms partnerships with local councils and private businesses to encourage procurement of cleaner diesel equipment, best worksite practice for diesel emissions management, and subsidised retrofitting of heavily polluting equipment with exhaust after-treatment devices.

The New South Wales Government offers co-funding of between 50 per cent and 90 per cent for the retrofitting of older and more polluting diesel equipment. Roads and Maritime Services was involved until June 2013 but since 2013–14 the programme has been managed solely by the Environment Protection Authority.

By the end of June 2014, more than 30 organisations had participated and 137 diesel machines were retrofitted. Retrofits have been estimated to reduce about 36 tonnes of diesel particles over the next 10 years, leading to an estimated public health benefit of $8.1 million. Cleaner procurement and best worksite practice will also result in significant diesel emissions reductions and public health benefits.

Locomotives

In March 2013 a scoping study was completed for the Environment Protection Authority on locomotive emissions and potential control measures. The study report, Locomotive Emissions Project: Scoping Study of Potential Measures to Reduce Emissions from New and In-Service Locomotives in NSW and Australia has been published on the Environment Protection Authority website, together with a summary of stakeholder feedback.

Vapour recovery at service stations

Stage 1 vapour recovery (VR1) captures volatile organic compound emissions expelled from underground petrol storage tanks at service stations as they are filled by road tankers. Regulatory changes made in 2009 extended VR1 to all parts of the Sydney, Illawarra, Lower Hunter and Central Coast areas.

The VR1 requirements took effect from July 2010 for new and modified service stations and will apply to all but the smallest existing service stations from 1 January 2015. At the end of June 2014, almost half of the service stations required to install or upgrade VR1 had done so.

Stage 2 vapour recovery (VR2) captures VOC emissions expelled from vehicle petrol tanks during refuelling at petrol bowsers. VR2 requirements took effect from July 2010 for new and modified service stations. As required by the regulation, the largest existing service stations in Sydney, Newcastle, Wollongong and the Central Coast had installed VR2 equipment by the end of 2013.

In Sydney other service stations supplying over 3.5 million litres per year are required to install VR2 by 1 January 2017, while smaller service stations are required to install VR2 when they are upgraded. VR2 is also required for all but the smallest existing service stations in Newcastle, Wollongong and Central Coast metropolitan areas. At the end of June 2014, VR2 had been installed at around 9 per cent of NSW service stations subject to VR2 requirements.

Once fully implemented, vapour recovery is expected to reduce VOC emissions in the Greater Metropolitan Region by approximately 5,000 tonnes per year.

Summer low-volatility petrol

To manage ozone formation in the Sydney region, regulatory requirements limit petrol volatility to 62 kiloPascals (kPa) (a measure of vapour pressure) over the summer period from 15 November to 15 March each year. Petrol refiners, importers and blenders must test and report to the Environment Protection Authority on batch volatility. The petrol volatility limits reduce VOC emissions in the Sydney region by approximately 4,000 tonnes each summer.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The New South Wales Air Quality Monitoring Program is the largest in Australia, with a comprehensive monitoring network operated by the Office of Environment and Heritage. Sydney's air has been monitored for a range of pollutants since the 1960s. Monitoring for lead as a regional pollutant ceased in New South Wales from January 2005 in response to the extremely low concentrations of lead found in ambient air. Current reporting on ambient air quality levels is referenced against the NEPM. The NEPM network is a subset of the total Air Quality Monitoring Network operated by the Office of Environment and Heritage.

New South Wales achieved compliance with the NEPM goals in 2013 for carbon monoxide, nitrogen dioxide and sulfur dioxide, which remain well below NEPM standards. However, NEPM goals were not met at five sites for ozone and at two sites for PM_{10} (10 microns and smaller in diameter), and the annual $PM_{2.5}$ Advisory Reporting Standard was exceeded at four stations measuring continuous $PM_{2.5}$.

The ozone goal allows each site to exceed the standard one day per year and the PM_{10} goal allows each site to exceed the standard up to five days per year. In late 2013, New South Wales experienced a major bushfire emergency event (17 October–11 November), which impacted on the number of exceedences of particle and ozone standards and goals. These exceedences are summarised below.

Ozone

Overall, the 1-hour and 4-hour standards were exceeded on four and six distinct calendar days respectively within the NEPM network.

- All three Illawarra region stations did not meet NEPM goals for the 1-hour and 4-hour ozone standards, having recorded exceedences on three distinct calendar days, twice during the bushfire emergency period and once during hot summer conditions.
- The 1-hour goal was met at all Sydney sites; however, the 4-hour goal was not met at Camden (four calendar days) and St Marys (two calendar days).

Particles

- The 24-hour particle standard (as PM_{10}) was exceeded on 39 calendar days, with 12 of these occurring during the widespread bushfire emergency. Two sites did not comply with the NEPM goal of five allowable exceedence days (Wollongong and Wagga Wagga North).

  At Wollongong the standard was exceeded on six days of the year, three of these during the bushfire emergency.

  At Wagga Wagga North, 15 exceedence days were recorded, one of which occurred during the bushfire emergency (19 October). Fire records suggest that grass fires nearby coincided with approximately half of the remainder.

- All sites in the network measuring $PM_{2.5}$ recorded concentrations in excess of the 24-hour $PM_{2.5}$ Advisory Reporting Standard. On a total of 20 calendar days levels exceeded the Advisory Reporting Standard, mostly during the bushfire emergency (13 days).

  Annual average $PM_{2.5}$ concentrations in excess of the 1-year Advisory Reporting Standard were found at three Sydney sites (Chullora, Liverpool and Richmond) and one Lower Hunter site (Beresfield).

Fine particles (as $PM_{2.5}$) were measured exclusively using beta attenuation monitors in 2013. This monitoring is currently focused in the Sydney, Illawarra and Lower Hunter regions of the NEPM network.

Despite the additional number of exceedences caused by the bushfire emergency, the NEPM goals for ozone and particles were met for a large majority of the NEPM stations during 2013. However, in most years, meeting the NEPM standards for ozone has remained a challenge for Sydney, given pressures from increasing economic activity, increased motor vehicle use, growing population and urban expansion, and an upward 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 Sydney and some regions of New South Wales where relatively high use of solid fuel heaters produces elevated levels of particles in autumn and winter. Elevated particle levels can also affect rural population centres near coal mining and agricultural activities, due to the effects of these emission sources combined with the local climate and topography. Informed by air quality monitoring, the air emissions inventory and other research studies, New South Wales has a range of programmes in place that target the primary emission sources of ozone and particle pollution.

Data from NEPM monitoring stations are presented below to enable an evaluation of whether the NEPM standards and goals were met at each 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)
- at least 75 per cent of data are captured in each quarter of the year.

Hourly updated data from the total New South Wales Air Quality Monitoring Network are reported at http://www.environment.nsw.gov.au/AQMS/aqi.htm.

Current and historical data is searchable and downloadable from http://www.environment.nsw.gov.au/AQMS/search.htm.

The New South Wales Air Quality Monitoring Plan is located at http://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		
Camden	0	Met
Campbelltown W	0	Met
Chullora	0	Met
Liverpool	0	Met
Prospect	0	Met
Rozelle	0	Met
Central Coast		
Wyong	0	Met
Illawarra		
Wollongong	0	Met
Lower Hunter		
Newcastle	0	Met

During 2013 compliance with the Ambient Air Quality NEPM goal for carbon monoxide was demonstrated at all sites in the Sydney, Illawarra and Lower Hunter regions.

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
Camden	0	Met	0.011	Met
Campbelltown W	0	Met	0.004	Met
Chullora	0	Met	0.013	Met
Liverpool	0	Met	0.010	Met
Prospect	0	Met	0.011	Met
Richmond	0	Met	0.005	Met
Rozelle	0	Met	0.011	Met
Central Coast				
Wyong	0	Met	0.005	Met
Illawarra				
Albion Park Sth	0	Met	0.004	Met
Wollongong	0	Met	0.008	Met
Lower Hunter				
Newcastle	0	Met	0.008	Met
Wallsend	0	Met	0.008	Met

No exceedences of the nitrogen dioxide 1-hour and annual standards were recorded in New South Wales during 2013. Compliance with the Ambient Air Quality NEPM goal was met at all sites in the Sydney, Illawarra and Lower Hunter regions.

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	1	Met	1	Met
Camden	1	Met	4	Not met
Campbelltown W	0	Met	1	Met
Chullora	1	Met	1	Met
Liverpool	1	Met	1	Met
Oakdale	0	Met	1	Met
Prospect	1	Met	1	Met
Richmond	0	Met	0	Met
Rozelle	0	Met	0	Met
St Marys	1	Met	2	Not met
Central Coast				
Wyong	0	Met	0	Met
Illawarra				
Albion Park Sth	3	Not met	3	Not met
Kembla Grange	2	Not met	2	Not met
Wollongong	2	Not met	2	Not met
Lower Hunter				
Newcastle	0	Met	0	Met
Wallsend	0	Met	0	Met

Ozone levels above the 1-hour and 4-hour standards were recorded in Sydney and the Illawarra during 2013. High ozone levels were widespread in both regions on 21 October during the bushfire emergency and also on 20 December during hot summer conditions.

None of the Illawarra region stations met either of the 1-hour or 4-hour standards and goals, while two Sydney sites (Camden and St Marys) failed to meet the 4-hour ozone NEPM goal.

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	Met	0	Met	0.000	Met
Campbelltown W	0	Met	0	Met	0.001	Met
Chullora	0	Met	0	Met	0.001	Met
Prospect	0	Met	0	Met	0.001	Met
Richmond	0	Met	0	Met	0.000	Met
Central Coast						
Wyong	0	Met	0	Met	0.001	Met
Illawarra						
Albion Park Sth	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	Met	0	Met	0.001	Met

The 1-hour, 24-hour and annual standards for sulfur dioxide were not exceeded in New South Wales during 2013. The Ambient Air Quality NEPM goal was met throughout the Sydney, Lower Hunter and Illawarra regions.

PM_{10} Particles as PM_{10}

(NEPM standard: 1 day = 50µg/m^3)

Station	Number of exceedences	NEPM goal compliance
Sydney		
Bringelly	3	Met
Camden	2	Met
Campbelltown W	1	Met
Chullora	4	Met
Liverpool	3	Met
Oakdale	4	Met
Prospect	4	Met
Richmond	5	Met
Rozelle	3	Met
Central Coast		
Wyong	1	Met
Illawarra		
Albion Park Sth	2	Met
Kembla Grange	4	Met
Wollongong	6	Not met
Lower Hunter		
Beresfield	5	Met
Newcastle	4	Met
Regional		
Albury	2	Met
Bathurst	3	Met
Tamworth	0	Met
Wagga Wagga Nth	15	Not met

In 2013, while PM_{10} levels above the national standard were recorded at most monitoring stations, only Wagga Wagga Nth (15 days) and Wollongong (six days) recorded levels above the standard on more than five NEPM allowable days.

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

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

Station	Number of exceedences of daily standard	Annual average (µg/m^3)
Sydney		
Camden	3	6.5
Chullora	3	8.4
Earlwood	4	7.9
Liverpool	2	9.5
Richmond	14	8.4
Central Coast		
Wyong	1	6.6
Illawarra		
Wollongong	4	7.7
Lower Hunter		
Beresfield	1	8.3
Wallsend	6	7.7

Daily $PM_{2.5}$ levels above the 24-hour advisory reporting standard (ARS) (25 µg/m^3) were recorded at all $PM_{2.5}$ monitoring stations. Richmond recorded 14 days above the standard, all due to prevalent bushfires. Annual average $PM_{2.5}$ levels above the ARS (8 µg/m^3) were recorded at a number of stations.

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 2013

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Monitoring in Victoria was performed in accordance with a modified state monitoring plan, Ambient Air Quality (AAQ) NEPM technical papers and the Environment Protection Authority's (EPA's) National Association of Testing Authorities accreditation. Data capture targets were achieved at all stations, except for carbon monoxide, nitrogen dioxide, ozone and sulfur dioxide at Alphington (Q1), nitrogen dioxide and ozone at Footscray (Q1) and ozone at Dandenong (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 2013 was generally good. The major impacts on air quality during the year were associated with PM_{10} particles (particles less than 10 μm in diameter)

- All 11 of the days in the Port Phillip region when exceedences of the PM_{10} standard in the AAQ NEPM occurred (i.e. days when the daily average concentration of these particles was greater than 50 $\mu g/m^3$) were attributed to dust, fire or urban emissions.
- All eight exceedences at Geelong South were due to dust.
- Dandenong's single exceedence was also due to dust.
- Footscray's two exceedences were due to urban emissions—particles accumulating in stable atmospheric conditions, typically from motor vehicles or domestic wood heaters.
- PM_{10} also exceeded an average concentration of 50 $\mu g/m^3$ on four days at Traralgon in the Latrobe Valley. Three of the exceedences were due to planned burns and the remaining one was due to a bushfire.

In 2013 the AAQ NEPM goal for particles as PM_{10} (no more than five exceedences) was met at all NEPM air monitoring stations in the Port Phillip region except Geelong South.

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

The AAQ NEPM 1-hour ozone standard was met at all stations during 2013 in the Port Phillip region and at Traralgon in the Latrobe Valley, where there was sufficient data captured.

However, during 2013 the 4-hour standard for ozone was exceeded for one hour at Alphington, Dandenong, Melton, Mooroolbark and Traralgon on five separate days.

The 24-hour advisory reporting standard for $PM_{2.5}$ was exceeded in the Port Phillip region at Alphington on one day. However, the annual reporting standard (8 $\mu g/m^3$) was met for $PM_{2.5}$.

Monitoring in 2013 showed that all AAQ NEPM goals and standards were met for carbon monoxide (CO), nitrogen dioxide (NO_2) and sulfur dioxide (SO_2)

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 carbon monoxide, nitrogen dioxide, ozone and sulfur dioxide at Alphington (Q1), nitrogen dioxide and ozone at Footscray (Q1) and ozone at Dandenong (Q4) due to technical problems with equipment.

1 Ambient Air Quality NEPM Monitoring Plan Victoria (EPA publication 763) available from http://www.epa.vic.gov.au/~/media/Publications/763.pdf

Issue-specific (non-AAQ NEPM) air quality reporting

A non-AAQ NEPM monitoring station in Brooklyn is being used to measure dust being generated from a nearby industrial precinct. The region did not report good air quality, exceeding the PM_{10} air quality standard on 28 days during the year due to local sources.[2] This is a decrease of two days compared with 2012, an increase on the 13 days for 2011 and less than the 32 days in 2010. The increase in the number of days exceeding the PM_{10} air quality objective in Brooklyn is linked to an increase in the number of dry days with northerly winds. Previous analysis has shown that these weather conditions lead to more dust being raised from unsealed areas.

Monitoring at another issue-specific station, Francis St in Yarraville, a street through a residential area used by a large number of trucks, finished in June 2013.[3] Monitoring results showed that PM_{10} exceeded the daily standard three times in 12 months. The annual goal for PM_{10}—no more than five days of exceedences annually—was met. $PM_{2.5}$ levels did not breach the daily advisory reporting standard but were slightly above the annual advisory reporting standard (8 mg/m^3) during the 12 months of monitoring.

The issue-specific station at Morwell East, which was used to establish background pollutant concentrations, ceased operation in May 2013. In the 15 months when air monitoring was undertaken,[4] levels of PM_{10} or $PM_{2.5}$ were above the objectives at both sites from four to seven days, mainly due to significant smoke impacts from a local bushfire in January 2013 and planned burning in May 2013.

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 per cent of data is captured in each quarter.

The data are presented in greater detail in Victoria's Monitoring Report 2013—Compliance with the National Environment Protection (Ambient Air Quality) Measure:

http://www.epa.vic.gov.au/our-work/publications/publication/2013/july/1536

The EPA also produces an annual air quality summary and data tables on its website:
http://www.epa.vic.gov.au/our-work/monitoring-the-environment/monitoring-victorias-air

CO Carbon monoxide

(NEPM standard: 8 hours = 9.0ppm)

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

Compliance was not demonstrated (ND) at Alphington (Q1) due to technical problems with equipment.

2 Environment Report—Air monitoring at Brooklyn, Year 3, November 2011 to October 2012 available from http://www.epa.vic.gov.au/our-work/current-issues/odour-and-air-quality/brooklyn-industrial-precinct

3 Francis St Monitoring Program (EPA publications 1460, 1500, 1520, 1532 and 1546.1) available from http://www.epa.vic.gov.au/our-work/publications?q=yarraville&s=Relevance&f=%7bEAE81923-D0E0-4EFE-B371-BFA0C6F361EE%7d&page=1#resultsAnchor

4 Air Monitoring at Morwell East – February 2012 to May 2013 (EPA publication 1547) available from http://www.epa.vic.gov.au/our-work/publications/publication/2013/september/1547

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	0.010	ND
Brighton	0	Met	0.008	Met
Footscray	0	Met	0.011	ND
Geelong South	0	Met	0.006	Met
Point Cook	0	Met	0.005	Met
Latrobe Valley region				
Traralgon	0	Met	0.006	Met

Compliance was not demonstrated (ND) at Alphington and Footscray (Q1) due to technical problems with equipment.

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	1	ND
Brighton	0	Met	0	Met
Dandenong	0	Met	1	ND
Footscray	0	ND	0	ND
Geelong South	0	Met	0	Met
Melton	0	Met	1	Met
Mooroolbark	0	Met	1	Met
Point Cook	0	Met	0	Met
Latrobe Valley region				
Traralgon	0	Met	1	Met

Compliance was not demonstrated (ND) at Alphington (Q1), Dandenong (Q3, Q4) and Footscray (Q1, Q2) 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	ND	0	ND	<0.001	ND
Altona North	0	Met	0	Met	0.001	Met
Geelong South	0	Met	0	Met	0.001	Met
Latrobe Valley region						
Traralgon	0	Met	0	Met	0.001	Met

Compliance was not demonstrated (ND) at Alphington (Q1) due to technical problems with equipment.

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.[5] 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.

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

PM_{10} Particles as PM_{10}

(NEPM standard: 1 day = 50µg/m³)

Station	Number of exceedences	NEPM goal compliance
Port Phillip region		
Alphington	0	Met
Brighton	0	Met
Dandenong	1	Met
Footscray	2	Met
Geelong South	8	Met
Mooroolbark	0	Met
Richmond	0	Met
Latrobe Valley region		
Traralgon	4	Met

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

(NEPM standard: 1 day = 25µg/m³, 1 year = 8µg/m³)

	1 year	
Station	Number of exceedences	Annual average (µg/m³)
Port Phillip region		
Alphington	1	7.0
Footscray	0	6.2

Queensland

Report to the NEPC on the implementation of the National Environment Protection (Ambient Air Quality) Measure for Queensland by the Hon Andrew Powell MP, Minister for Environment and Heritage Protection, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In Queensland the Ambient Air Quality NEPM (AAQ NEPM) is implemented under the *Environmental Protection Act 1994* (EP Act), the Environmental Protection Regulation 2008, and the Environmental Protection (Air) Policy 2008, with the NEPM standards incorporated as air quality objectives.

Monitoring was conducted in five of the 10 regions identified in the monitoring plan. Eleven of the 19 sites nominated in the monitoring plan, and two additional reporting sites, were operational in 2013–14. Monitoring at four of the eight remaining sites concluded prior to 2012–13 due to completion of campaign monitoring or site closure following termination of the monitoring site lease by the property owner.

Collection of $PM_{2.5}$ data using tapered element oscillating microbalance (TEOM) instrumentation continued at two sites in south-east Queensland (Rocklea and Springwood) and one site in Gladstone (South Gladstone) during 2013.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Queensland's monitoring results for 2013 indicate that the goal of the AAQ NEPM was met for all pollutants at all monitoring stations where there was sufficient data capture to assess compliance, except for sulfur dioxide and PM_{10} 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 NEPM one-hour 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 December 2011 the government issued an environmental authority to the smelter operator that applies contemporary environmental conditions to the site. Recognising that considerable further work and investment is required before smelter operations can achieve contemporary air quality standards, a transitional environmental programme under the provisions of the EP Act was developed in April 2012 setting out a staged programme of works to bring the site into compliance with NEPM air quality standards by 2016.

The AAQ NEPM PM_{10} 24-hour standard (the numerical threshold) was exceeded at Mountain Creek in south-east Queensland and in Mount Isa in 2013. Only in Mount Isa did PM_{10} levels fail to meet the NEPM goal of no more than five exceedances in a year. The exceedances in Mount Isa were all caused by windblown dust during dry conditions, with minimal or no contribution from industrial activities. The single exceedance at Mountain Creek was the result of smoke from a fire at a nearby green waste recycling facility.

There is no evidence that, on their own, particle emissions from industrial, commercial and domestic activities currently result in ambient concentrations above NEPM standards. However, with increasing motor vehicle use, compliance with the $PM_{2.5}$ advisory standards, particularly the annual average criterion, may be difficult to achieve in urban areas like south-east Queensland in the longer term.

MONITORING RESULTS

Data from relevant monitoring stations are presented in tabular form below to enable an evaluation of whether the NEPM standards and goals 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 per cent of data are captured in each quarter.

The data are presented in greater detail in the Queensland 2013 air monitoring report, available at http://www.qld.gov.au/environment/pollution/monitoring/air-reports.

The monitoring plan for Queensland is available from http://www.qld.gov.au/environment/pollution/monitoring/air-reports.

CO Carbon monoxide

(NEPM standard: 8 hours = 9.0ppm)

Station	Number of exceedences	NEPM goal compliance
South-east Queensland		
Woolloongabba	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
South-east Queensland				
Mountain Creek	0	Met	0.004	Met
Deception Bay	0	Not demonstrated[a]	insufficient data[b]	not demonstrated[a]
Rocklea	0	Met	0.007	Met
Springwood	0	Met	0.006	Met
Flinders View	0	Met	0.008	Met
Gladstone				
South Gladstone	0	Met	0.007	Met
Townsville				
Pimlico	0	Met	0.004	Met

a Not demonstrated due to less than 75 per cent of data in one or more quarters

b Insufficient data to calculate value

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
South-east Queensland				
Mountain Creek	0	Met	0	Met
Deception Bay	0	Not demonstrated[a]	0	Not demonstrated[a]
Rocklea	0	Met	0	Met
Springwood	0	Met	0	Met
Flinders View	0	Met	0	Met
Townsville				
Pimlico	0	Not demonstrateda	0	Not demonstrated[a]

a not demonstrated due to less than 75 per cent 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 exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
South-east Queensland						
Springwood	0	Met	0	Met	0.001	Met
Flinders View	0	Met	0	Met	0.001	Met
Gladstone						
South Gladstone	0	Met	0	Met	0.002	Met
Townsville						
Pimlico	0	Met	0	Met	0.000	Met
Stuart	0	Met	0	Met	0.001	Met
Mount Isa						
Menzies	34	Not met	1	Met	0.006	Met
The Gap	21	Not met	0	Not demonstrated[a]	0.005	Not demonstrated[a]

a Not demonstrated due to less than 75 per cent 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		
Coast Guard	0.24	Met
Mount Isa		
The Gap	0.14	Not demonstrated[a]

a Not demonstrated due to less than 75 per cent of data in one or more quarters

PM_{10} Particles as PM_{10}

(NEPM standard: 1 day = 50µg/m^3)

Station	Number of exceedences	NEPM goal compliance
South-east Queensland		
Mountain Creek	1	Met
Rocklea	0	Met
Springwood	0	Met
Flinders View	0	Met
Gladstone		
South Gladstone	0	Met
Mackay		
West Mackay	0	Met
Townsville		
Pimlico	0	Met
Mount Isa		
The Gap	13	Not 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 (µg/m^3)
South-east Queensland		
Rocklea[a]	0	6.6
Springwood[b]	0	4.5
Gladstone		
South Gladstone[a]	0	5.6

a Monitoring by TEOM model 1405 instrumentation fitted with filter dynamics measurement system

b Monitoring by TEOM model 1400 instrumentation in accordance with Technical Paper on Monitoring for Particles as $PM_{2.5}$

Western Australia

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Ambient Air Quality) Measure (NEPM) for Western Australia by the Hon Albert Jacob MLA, Minister for Environment; Heritage, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Implementation activities may be viewed in two categories:

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

In the first category, the Department of Environment Regulation (DER) has:

- continued to liaise with local governments and other organisations as required to facilitate the positioning and repositioning of fixed ambient monitoring stations
- maintained monitoring of $PM_{2.5}$ to facilitate the review and potential development of compliance with NEPM standards for this pollutant in the future.

In the second category, DER:

- has continued to implement the Perth Air Quality Management Plan (AQMP). The 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 AQMP has commenced in addition to a number of ongoing programmes. There continues to be a major focus on managing emissions from motor vehicles and wood heaters, via the CleanRun and Halt the Haze programmes respectively.
- continues to investigate and trial a number of monitoring technologies designed to establish a better understanding of the sources and emissions of pollutants and the dispersion of these pollutants in targeted areas. This includes monitoring campaigns that survey air quality in residential and other sensitive areas, particularly where these areas may be impacted by industrial emissions.
- has maintained community access to a regularly updated air quality index via DER's webpage at www.der.wa.gov.au/your-environment/air.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM has provided a focus for air quality issues and driven 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 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 NEPM goals in most circumstances. Sulfur dioxide and lead have been effectively controlled by industry regulatory means. Carbon monoxide, lead and nitrogen dioxide concentrations comply with the NEPM standards by comfortable margins due to clean fuel quality standards, national vehicle emissions standards and regulatory control of other sources. Ozone and PM_{10} remain pollutants of concern in the Perth region and are the focus of attention within the AQMP, particularly the management of domestic PM_{10} sources. In other regions, PM_{10} is the pollutant of most significance with respect to the NEPM standards.

The data presented below show that Western Australia has met the NEPM goals for all pollutants in 2013.

Data from relevant monitoring stations are presented in tabular form below to enable an evaluation of whether the NEPM standards and goals 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 per cent of data are captured in each quarter.

The data are presented in greater detail in the 2013 Western Australia Air Monitoring Report available on the DER website, along with the Western Australian monitoring plan, at www.der.wa.gov.au/your-environment/air.

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	0.006	Met
North East Metro	0	Met	0.006	Met
Outer North Coast	0	Met	0.003	Met
South Coast	0	Met	0.005	Met
Outer East Rural	0	Met	0.002	Met
South East Metro	0	Met	0.007	Met
Inner West Coast	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
Perth				
North East Metro	1	Met	0	Met
Outer North Coast	0	Met	0	Met
South Coast	0	Met	0	Met
Outer East Rural	0	Met	1	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	0.002	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)

Lead monitoring ceased on 31 December 2001 following the introduction of unleaded petrol and subsequently lead replacement petrol. These management initiatives consequently sustained measurements at analytical limits of detection well below the standard.

PM_{10} Particles as PM_{10}

(NEPM standard: 1 day = 50µg/m³)

Station	Number of exceedences	NEPM goal compliance
Perth		
North East Metro[1]	1	Met
North Metro[1]	0	Met
South East Metro[1]	0	Met
South-west		
Albany[1]	3	Met
Bunbury[1]	0	Met
Collie1	3	Met
Mid-west		
Geraldton[1]	2	Met

1 Measured using tapered element oscillating microbalance (TEOM) operating continuously (unadjusted for temperature); includes the manufacturer's recommended equivalency factor of 1.03x + 3.00

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

(NEPM standard: 1 day = 25µg/m³, 1 year = 8µg/m³)

Station	1 year	
	Number of exceedences	Annual average (µg/m³)
Perth		
North East Metro[1]	0	7.9
North Metro[1]	0	7.6
Outer North Coast[1]	0	7.8
South East Metro[1]	0	8.0
South-west		
Bunbury[1]	1	7.8
Busselton[1]	0	7.7

1 Measured using TEOM operating continuously (unadjusted for temperature); includes the manufacturer's recommended equivalency factor of 1.03x + 3.00

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
South East Metro	South Lake

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

South Australia

Report to the NEPC on the implementation of the National Environment Protection (Ambient Air Quality) Measure for South Australia by the Hon Ian Hunter MLC, Minister for Sustainability, Environment and Conservation, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Dust monitoring at Whyalla

The Environment Protection Authority (EPA) has analysed the PM_{10} data collected at Walls Street and Schultz Park 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 $\mu g/m^3$. In the current year exceedences of the standard have increased at both the reporting and non-reporting sites, so it is likely that a lower rainfall and higher than average temperatures have resulted in a slight increase in particle concentrations.

Le Fevre Peninsula air quality improvement plan

The North Haven monitoring station is a new addition to the NEPM monitoring network. It is located in the north-western region of Adelaide on Le Fevre Peninsula. Commissioning the North Haven monitoring station is an important component in a comprehensive long-term air quality framework for South Australia, currently under development. The station started operating in late March 2013, so the data capture rates for the first quarter of the year were below 75 per cent; hence performance against the NEPM standard was not demonstrated.

CBD campaign monitoring station

Development of monitoring stations continues to meet the jurisdictional requirements for air monitoring. A new campaign station in the central business district of Adelaide was installed in May 2014.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Data for South Australia show that air quality was generally good during 1 January to 31 December 2013. The following observations were made following analysis of monitoring data for this period:

- For CO the standard and goal were achieved at 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 stations. The 1-day and 1-year standards and goals were also met at Port Pirie Oliver Street station; however, there were 43 exceedences of the 1-hour standard at Oliver Street station, so the 1-hour goal was not achieved.
- For Pb the goal was achieved at both NEPM monitoring stations in Port Pirie; however, the EPA, along with the Nyrstar smelter, is looking for continued reduction in lead emissions and thus a reduction in the health impact on the community.
- For PM_{10} there was one exceedence of the standard each at the Elizabeth Downs, Netley, Christie Downs and Kensington monitoring stations and three exceedences at North Haven. In the Spencer region there were two exceedences of the standard at Schultz Park and three at Oliver Street. The NEPM goal allows for five exceedence days per year; therefore the goal was achieved at all stations in both the Adelaide metropolitan and Spencer regions.
- For $PM_{2.5}$ the advisory reporting standards were met at the Netley and North Haven monitoring stations.

It is worth noting that during the summer months in 2013 rainfall was lower and temperatures generally higher than average. These factors are likely to have contributed to high particle concentrations recorded this calendar year.

Data from relevant monitoring stations for the period of 1 January to 31 December 2013 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 per cent of data is captured in each quarter.

The data are presented in greater detail in the Air Monitoring Report for South Australia, in compliance with the NEPM, at http://www.scew.gov.au/system/files/resources/7c4e85af-5d11-9074-d171-0184e06fc243/files/sa-aaq-nepm-sir-monitoring-report-2013.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	0.003	Met
NOR01—Northfield	0	Met	0.006	Met
NET01—Netley	0	Met	0.007	Met
KEN01—Kensington Gardens	0	Met	0.004	Met
CHD01—Christie Downs	0	Met	0.004	Met
NHV01—North Haven	0	Not demonstrated	0.005	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
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
NHV01—North Haven	0	Not demonstrated	0	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
Adelaide						
NOR01—Northfield	0	Met	0	Met	0.000	Met
NHV01—North Haven	0	Not demonstrated	0	Not demonstrated	0.000	Not demonstrated
Spencer						
PTP01—Pt Pirie Oliver Street	43	Not met	0	Met	0.010	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	0.45	Met
PTP05—Pt Pirie Frank Green Park	0.21	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	1	Met
CHD01—Christie Downs	1	Met
KEN01—Kensington Gardens	1	Met
NHV01—North Haven	3	Not demonstrated
Spencer		
WHY07—Whyalla Schultz Park	2	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)

	1 year	
Station	Number of exceedences	Annual average (µg/m^3)
Adelaide		
NET01—Netley	0	7.2
NHV01—North Haven	0	7.3

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 (1 July 2013 to 31 March 2014) and the Hon Matthew Groom MP, Minister for Environment, Parks and Heritage (31 March 2014 to 30 June 2014) for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

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

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

The Air Policy 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.epa.tas.gov.au.

Wood smoke from domestic wood heaters and from planned burning activities continues to be the primary air quality issue for Tasmania.

In the Tasmanian Air Quality Strategy, published in June 2006, a five-year process to assess compliance with the Air NEPM standards in Tasmania is detailed and strategies for achieving compliance where standards are not being met are specified. The strategy addresses the management of air quality in Tasmania and includes programmes to further reduce domestic and industrial emissions of respirable particles in critical regions of the state.

The Environmental Management and Pollution Control (Distributed Atmospheric Emissions) Regulations 2007, gazetted in August 2007, provide a legal framework for programmes to reduce the emission of domestic wood smoke through controls on the import, sale and installation of wood heaters. The regulations also make the emission of excessive smoke from chimneys an offence and restrict backyard burning on suburban allotments.

In 2009 the EPA Division established a state-wide network of indicative level air monitoring stations, referred to as the BLANkET (Base-Line Air Network of EPA Tasmania) network. During 2013–14 this network was expanded to 29 fixed stations, including those co-located with the reference level stations at Hobart, Launceston and Devonport. This network of optical particle monitors, calibrated against reference level instruments, provides real-time information for understanding smoke concentration, movement and dispersal in the greater Tasmanian airshed. Air quality and meteorological data from the BLANkET network are published in near real time on the EPA Division website.

Since 2009, planned burning activities undertaken by the forestry industry and by the Parks and Wildlife Service have been conducted using the Coordinated Smoke Management Strategy (CSMS) administered by the Forest Practices Authority. The CSMS requires burners to make daily bids for burn units in a given airshed. Bidding is managed by an automated web-based system. The total burn unit allocation is set with reference to meteorological and other considerations. Air quality data from the EPA Division's state-wide BLANkET network is used to facilitate an annual review process to increase the strategy's effectiveness. Monitoring data from the BLANkET network shows that the severity of planned burn smoke impacts has decreased since the implementation of the CSMS. Feedback from the users of the CSMS indicates that their ability to make more informed decisions concerning smoke movement and dispersion is facilitated by the BLANkET air quality monitoring network and the analyses carried out by the EPA Division.

In response to the growing understanding that poor winter-time air quality is widespread in many Tasmanian towns and urban areas, the Domestic Smoke Management Program (DSMP), an initiative of the EPA Division, was started in 2012. The focus of the programme is community education on air quality issues and how smoke emissions from domestic wood heaters can be significantly reduced through proper operation. The DSMP is realised through collaborative projects with local government known as the Burn Brighter this Winter projects. Presently officers of the EPA Division and the Northern Midlands Council are working together on the Burn Brighter this Winter 2014 project, which is focused in Longford. The education and information campaign is backed up with air quality data from nearby BLANkET stations, from mobile air quality monitoring and from smoky chimney surveys. These kinds of data enable appropriate information to be conveyed to specific households.

The Tasmanian reference level air monitoring programme operates under an ISO:17025 compliant quality system and holds National Association of Testing Authorities accreditation for the daily measurement of $PM_{2.5}$ and PM_{10} using the reference instruments and methods prescribed in the Air NEPM.

A reference level air monitoring station at Devonport was commissioned in December 2012. This station is equipped with gravimetric air samplers for reference measurements of daily averaged $PM_{2.5}$ and PM_{10} particulate concentrations, as well as two tapered element oscillating microbalances (TEOMs) to provide hourly averaged $PM_{2.5}$ and PM_{10} data.

A reference level peak carbon monoxide (CO) monitoring station was established in Macquarie Street, Hobart, at the end of 2010. Regular monitoring commenced in February 2011 and continued until the station was decommissioned in February 2013.

No exceedences of the NEPM standard for CO were recorded in this interval.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Particulates ($PM_{2.5}$ and PM_{10})

The Air NEPM has made a significant contribution to improved urban air quality in Tasmania, by raising community awareness of air quality issues and supporting programmes aimed at reducing wood smoke pollution during winter. This has been particularly effective in Launceston, where a combination of a reduction in the number of wood heaters and improved community cooperation has reduced winter PM_{10} levels.

Other ongoing programmes to reduce the impacts of air pollution in Tasmania, driven at least in part by the Air NEPM and the associated air quality standards and goals, have been introduced in more recent years. These include the Domestic Smoke Management Program started in 2012 to address issues related to smoke from domestic wood heaters, and the Coordinated Smoke Management Strategy established in 2009 to address issues related to smoke from planned burning activities.

Launceston

PM_{10}

No exceedences of the 24-hour PM_{10} standard of 50 µg/m^3 were measured in Launceston in 2013. It is important to note, however, that the validated PM_{10} data for the year was limited to only 31 per cent due to failure of the PM_{10} TEOM instrument at the Launceston station. Due to the limited availability of validated data the zero number of exceedences for 2013 must be regarded as unreliable. Also it has not been possible to demonstrate, in accordance with the requirements of the Air NEPM, that Launceston met the PM_{10} goal of no more than five exceedences of the PM_{10} standard in 2013.

$PM_{2.5}$

The 24-hour $PM_{2.5}$ advisory reporting standard of 25 µg/m^3 was exceeded on 12 days in Launceston in 2013. This is an improvement on the 16 days observed in 2012 but comparable with the results from the previous three years (6 in 2011, 11 in 2010, and 12 in 2009). Overall the 2013 result is a considerable improvement on the 35 exceedence days observed when $PM_{2.5}$ monitoring was introduced in 2006. The annual average $PM_{2.5}$ concentration in 2013 of 8.1 µg/m^3 did not meet the $PM_{2.5}$ advisory standard of less than 8 µg/m^3 but is comparable with the past few years (8.4 µg/m^3 in 2012, 7.5 µg/m^3 in 2011, 8.3 µg/m^3 in 2010 and 7.5 µg/m^3 in 2009).

Hobart

PM_{10}

Ambient air quality in Hobart continued to meet the Air NEPM PM_{10} goal in 2013, with only a single exceedence of the 50 µg/m^3 24-hour PM_{10} standard, which occurred in January 2013 as a result of smoke from bushfires in Tasmania. The validated data demonstrates, in accordance with the requirements of the Air NEPM, that Hobart met the PM_{10} goal of no more than five exceedences of the PM_{10} standard in 2013.

$PM_{2.5}$

The 25 µg/m³ advisory reporting standard for $PM_{2.5}$ was exceeded in Hobart on three winter days in 2013, compared with three in 2012 and none in 2011. The annual average $PM_{2.5}$ concentration of 6.1 µg/m³ was similar to that of the previous two years (6.5 µg/m³ in 2012 and 6.2 µg/m³ in 2011) and met the annual average $PM_{2.5}$ advisory standard of 8 µg/m³ for the seventh consecutive year since $PM_{2.5}$ monitoring started at the New Town station.

Devonport

PM_{10}

2013 was the first full year of operation of the Devonport air monitoring station, and no exceedences of the 24-hour PM_{10} standard were measured. The validated data demonstrates, in accordance with the requirements of the Air NEPM, that Devonport met the PM_{10} goal of no more than five exceedences of the PM_{10} standard in 2013.

$PM_{2.5}$

The 24-hour $PM_{2.5}$ concentrations measured in Devonport did not exceed the advisory reporting standard of 25 µg/m³ on any day during 2013. The annual average $PM_{2.5}$ concentration of 6.4 µg/m³ met the advisory standard of 8 µg/m³.

Carbon monoxide

The peak urban CO monitoring site in Macquarie Street, Hobart, was closed in February 2013 after almost two years continuous operation. During this period the highest hourly CO concentration measured at this high-traffic CBD site never exceeded 4 ppm and the highest 8-hour average was 1.8 ppm. These data indicate that CO concentrations generated by urban traffic in Tasmania are unlikely to exceed the Air NEPM 8-hour CO standard of 9 ppm in the foreseeable future.

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 per cent of data are captured in each quarter.

The data are presented in greater detail in Air Monitoring Report 2013—Compliance with the National Environment Protection (Ambient Air Quality) Measure.

The monitoring plan for Tasmania is available from http://www.epa.tas.gov.au.

CO Carbon monoxide

(NEPM standard: 8 hours = 9.0ppm)

Station	Number of exceedences	NEPM goal compliance
Hobart		
CBD—Macquarie Street	Station closed February 2013	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
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 Sulphur 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
Monitoring discontinued in 1998		

PM_{10} Particles as PM_{10}

(NEPM standard 1 day = 50µg/m^3)

Station	Number of exceedences	NEPM goal compliance
Hobart		
Metro—New Town	1	Met
Launceston		
Metro—Ti Tree Bend	None observed Insufficient data	Not demonstrated
Devonport		
Metro—Devonport TAFE	0	Met

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

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

	1 year	
Station	Number of exceedences	Annual average (µg/m^3)
Hobart		
Metro—New Town	3	6.1
Launceston		
Metro—Ti Tree Bend	12	8.1
Devonport		
Metro—Devonport TAFE	0	6.4

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, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The ACT's ambient air quality monitoring was performed in accordance with the ACT's monitoring plan, the National Environment Protection (Ambient Air Quality) Measure (NEPM) technical papers and ACT Health's National Association of Testing Authorities accreditation.

The NEPM monitoring network in the ACT consisted of two monitoring stations in 2013. Another fully compliant performance monitoring station was established and has been operational since 28 February 2014. Data from this station will be used for the 2014 annual report as well.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Monitoring results demonstrate that the major impacts on Canberra's air quality in 2013, as in previous years, came from the accumulation of combustion particles from wood heaters in winter and hazard reduction burns.

The ACT Government acknowledges that woodsmoke from domestic wood heaters is the largest source of air pollution in Canberra and has implemented a range of programmes to address it. The monitoring results show that these programmes have been effective in reducing woodsmoke, with particle levels continuing to trend down.

One exceedence of the PM_{10} 24-hour standard was measured, on 19 October 2013. The cause of this exceedence was a controlled burn in New South Wales. There were six exceedences of the $PM_{2.5}$ 24-hour advisory reporting standard measured. Four exceedences occurred between May and July and can be attributed to domestic wood heater emissions. The other two exceedences occurred on 19 and 20 October and are associated with the previously mentioned hazard reduction burn.

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 per cent of data are captured in each quarter.

The data are presented in greater detail in the ACT Air Quality Report 2013, available through http://www.environment.act.gov.au/environment/environment_protection_authority/legislation_and_policies/air_quality_monitoring_reports.

CO Carbon monoxide

(NEPM standard: 8 hours = 9.0ppm)

Station	Number of exceedences	NEPM goal compliance
Canberra		
Monash	0	Met
Civic	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				
Monash	0	met	0.005	Met
Civic	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
Canberra				
Monash	0	met	0	Met
Civic	0	met	0	Met

PM_{10} Particles as PM_{10}

(NEPM standard: 1 day = 50µg/m^3)

Station	Number of exceedences	NEPM goal compliance
Canberra		
Monash	0	Met
Civic	1	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 (µg/m^3)
Canberra		
Monash	6	6.90

Northern Territory

Report to the NEPC on the implementation of the National Environment Protection (Ambient Air Quality) Measure for Northern Territory by the Minister for Lands, Planning and the Environment for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Northern Territory Environment Protection Authority was responsible for implementing the Air 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.

The major pollutants in the Darwin airshed are associated with controlled and uncontrolled bushfire activities in surrounding bushland.

The Northern Territory's ambient air monitoring programme is undertaken in accordance with the approved monitoring plan. The administrative frameworks for implementation of the NEPM are in place.

During 2013–14 there were a number of technical issues with oxides of nitrogen (NO_x) analysers and a tapered element ocsillating microbalance (TEOM), resulting in reduced data for these parameters. Consultants engaged to provide technical support to the ambient air programme were changed in early 2014.

Monitoring in Alice Springs was not conducted during the reporting period. Particulates caused by vegetation burning, and in the winter months by household heating, have been noted as occasional issues in the area. Particulate levels in winter have declined as natural gas pipelines have been extended throughout the town, leading to reduced dependence on wood as a heat source.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Data from relevant monitoring stations are presented in tabular form below to enable an evaluation of whether the NEPM standards and goals 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 per cent of data are captured in each quarter.

The data are presented in greater detail in http://www.ntepa.nt.gov.au/waste-pollution/air.

The monitoring plan for the Northern Territory is available from http://www.ntepa.nt.gov.au/waste-pollution/air.

CO Carbon monoxide

(NEPM standard: 8 hours = 9.0ppm)

Station	Number of exceedences	NEPM goal compliance
Winnellie	0	Met
Palmerston	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
Winnellie	0	Not met (56% data)	0.003	Not met (56% data)
Palmerston	0	Not met (74% data)	0.005	Not met (74% data)

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
Winnellie	0	Met	0	Met
Palmerston	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
Winnellie	0	Met	0	Met	0.005	Met
Palmerston	0	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
The Northern Territory does not report on lead as there are no significant sources		

PM_{10} Particles as PM_{10}

(NEPM standard: 1 day = 50µg/m³)

Station	Number of exceedences	NEPM goal compliance
Winnellie	3	Not met
Palmerston	1	Not met (54% data)

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

(NEPM advisory standard: 1 day = 25µg/m³, 1 year = 8µg/m³)

	1 year	
Station	Number of exceedences	Annual average (µg/m³)
Winnellie	8	Met
Palmerston	6	Not met (54% data)

Appendix 3:
Jurisdictional Reports on the Implementation and Effectiveness of the Assessment of Site Contamination NEPM

Commonwealth

Report to the NEPC on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for the Commonwealth by the Hon Greg Hunt MP, Minister for the Environment, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Commonwealth implements the NEPM as guidelines under the *National Environment Protection Council Act 1994*.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The Assessment of Site Contamination NEPM provides a consistent national methodology which is beneficial for achieving agency goals.

New South Wales

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for New South Wales by the Hon Rob Stokes MP, Minister for Environment, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Environment Protection Authority considers the National Environment Protection (Assessment of Site Contamination) Measure (NEPM) when making a decision on whether a contaminated site requires regulation under the *Contaminated Land Management Act 1997* (NSW) and when conducting performance reviews of accredited contaminated site auditors. Improvements in the efficiency of regulating contaminated sites as a result of the NEPM are anticipated from:

- greater consistency in assessment approach from applying the variation methodologies and improved guidance on assessing asbestos, petroleum hydrocarbon compounds and ecological risks
- submission of fewer detailed site-specific risk assessments, reducing the necessity to audit methodologies and assumptions
- improved confidence in assessment outcomes from application of the variation methodologies, resulting in fewer disputes between site assessors, auditors and regulators
- utilisation of joint resources for the development of guidance benefiting all jurisdictions.

There has been considerable stakeholder acceptance of the revisions implemented in the amendment of the NEPM that was finalised in 2013. The Environment Protection Authority has maintained a list of questions and answers on their public website to ensure consistent implementation across New South Wales. The Heads of Asbestos Coordinating Authorities (New South Wales Government) published guidance in early 2014 on managing asbestos in or on soils to ensure consistent practices are used across the state, including the implementation of the relevant information in the NEPM.

During the year ending 30 June 2014, the Environment Protection Authority was notified of 43 potentially contaminated sites , finalised 39 site assessments, regulated eight new contaminated sites, and remediated nine sites under the *Contaminated Land Management Act 1997*.

The Environment Protection Authority verifies that site audits and site audit statements have been undertaken with due regard to the NEPM. Accredited site auditors have issued a total of 201 audit statements: 142 statutory audits under the *Contaminated Land Management Act 1997* and 59 non-statutory audits.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM has led to increased coordination between the Environment Protection Authority and equivalent agencies in other jurisdictions. This process allows issues relating to the assessment of land contamination to be consistently managed.

Since the finalisation of the amended NEPM in 2013, the Environment Protection Authority has continued to update relevant legislative instruments and guidance to incorporate or refer to the amendments, as needed.

Updating New South Wales guidance to reflect the technical changes in the amended NEPM is likely to improve the effectiveness of the NEPM and the assessment of site contamination in New South Wales.

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 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In order to implement the 2012–13 amendments to the Assessment of Site Contamination (ASC) NEPM, Victoria amended its State Environment Protection Policy (Prevention and Management of Contamination of Land) 2002. This amendment was gazetted on 26 September 2013.

Given the significant time periods involved with undertaking site assessments, it is still too early to completely assess the effectiveness of the amended NEPM. Three identified key issues have been:

- the increased focus on ecological values directed by the amendment, but fewer ecological investigation levels and ecological screening levels being presented
- clarifying where the NEPM ends and other Victorian legislation begins—for example, occupational health and safety requirements in relation to asbestos
- flow-on implications for other policy areas that had been reliant on the original NEPM approaches and values not yet being resolved—for example, landfill values.

In response Victoria has sought to:

- support two industry working groups to resolve the concerns raised in relation to the ecological values
- clarify how asbestos should be assessed and managed
- resolve the policy implications for other areas as those areas undergo their own broader policy reviews—for example, a prescribed industrial waste policy review.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The amended NEPM continues to reinforce 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 amendments were considered likely to involve more detailed site assessments being undertaken in some cases. While these were likely to increase costs in the assessment phase, they were expected to result in overall cost savings for business as a result of more effective, timely and targeted remediation works. There has been no feedback to suggest that the use of the amendment has resulted in any other outcome. Indeed, the recent amendments to the NEPM are well supported by environmental auditors and others in the site assessment industry.

As noted, there have been several practical implications arising from the amendments to the NEPM; however, it is considered that the workshops convened and future policy work for indirectly impacted areas will resolve these. Further, it is anticipated that Victoria's Contaminated Environment Policy Reform efforts will also help to consolidate the use of the amended NEPM within the state.

Queensland

Report to the NEPC on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for Queensland by the Hon Andrew Powell MP, Minister for Environment and Heritage Protection, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Department of Environment and Heritage Protection (EHP) is the central administering authority for contaminated land in Queensland under the *Environmental Protection Act 1994* (EP Act). Prior to 4 July 2014, EHP also assessed contaminated land development under the Sustainable Planning Regulation 2009 (SP Reg).

As part of a suite of regulatory reform projects being carried out for contaminated land, the SP Reg has recently been amended to replace the previous development triggers with 'compliance assessment' under schedule 18 of the SP Reg for a 'material change of use' on contaminated or potentially contaminated land (i.e. listed on the Environmental Management Register or the Contaminated Land Register) to a sensitive land use or a commercial use involving an accessible underground facility, such as a car park. Compliance assessment must be carried out by a contaminated land auditor, approved under Chapter 12, Part 3A, division 2 of the EP Act. Development triggers will remain for unexploded ordnance under schedule 7 of the SP Reg.

The SP Reg amendments target the assessment of high-risk land-use changes on contaminated land by approved expert auditors. The development triggers that have been removed relate to lot reconfiguration or land use change to a non-sensitive use. There are existing environmental duties and mechanisms under the EP Act to manage the risks to human health and the environment for these lower risk activities.

In July 2013, EHP successfully replaced the third party reviewers (TPRs) administrative system with the contaminated land auditor statutory framework. Since then, EHP has appointed nine contaminated land auditors to perform the compliance assessment role under schedule 18 of the SP Reg and the regulatory functions under section 568 of the EP Act.

The following relevant operational data estimates associated with NEPM implementation were collected in the 2013–14 reporting period:

- 121 site assessment and validation reports, many involving multiple sites, reviewed for compliance with NEPM sections 7(1) and 7(2) prior to statutory decisions regarding the Environmental Management Register and Contaminated Land Register status of the subject land
- nine contaminated land auditors appointed through mutual recognition on the basis of approvals held in other jurisdictions. These auditor applications are assessed by an EHP-approved technical panel engaged to review contaminated land auditor applications on behalf of EHP
- 371 development applications forwarded to EHP under the *Sustainable Planning Act 2009* involving conditions for contaminated land issues relating to material change of use or lot reconfiguration of contaminated or potentially contaminated land
- 94 information requests for additional site assessment information
- 146 sites finalised as being adequately assessed according to the NEPM, decontaminated, and removed from the Environmental Management Register
- 92 site management plans 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
- 154 permits issued for the transport and disposal of contaminated soil in accordance with NEPM section 6(4).

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM is a central reference document for the assessment of site contamination in Queensland, supported by Queensland's guidelines on contaminated land and, in instances of surface and groundwater contamination, the Environmental Protection Water Policy 2009. 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 has been recognised by EHP through the provisions of the operational policy and guidelines relating to assessment of contaminated land. All applications to EHP for statutory decisions about site contamination and changing the status of land on the Environmental Management Register and Contaminated Land Register must demonstrate compliance with the current NEPM. This has been strengthened by the introduction of the prescribed criteria under section 115C of the Environmental Protection Regulation 2008, which has been used by approved auditors to evaluate whether a report or plan can be certified by the auditor. These prescribed criteria are structured to ensure that all relevant issues are considered as part of a site assessment, remediation and management to measure compliance with best practice standards.

The NEPM in its 1999 form was used as an effective technical basis for site assessment for contaminated site professionals operating in Queensland. The amended NEPM took effect on 16 April 2013. Queensland moved to immediately implement it, which was possible because the statutory approvals process in Queensland is applied once works (or stages of works) are completed. References to the amended NEPM are in full use in Queensland on the basis that all submissions must reflect best practice at the time of submission.

The introduction of the amended NEPM has addressed previous limitations around adequate guidance for selected types of contamination affecting terrestrial ecosystems; vapour flux; and aesthetic and management impacts of petroleum hydrocarbon compounds and fragments of cement-bonded asbestos, issues commonly encountered on contaminated sites. Statutory approval conditions related to land development require current NEPM adherence. The quality control procedures applied by EHP in internal review of assessment reports involve a review of the practitioner's adherence to the current NEPM.

The establishment and implementation of the contaminated land auditor approval framework has successfully led to the certification of nine auditors. The selection and approval of the auditors has been based on schedule B9 of the amended NEPM. In addition, the acceptance of accredited auditors from other Australian jurisdictions continues to provide an additional check of consistency between Queensland and other Australian jurisdictions.

Instances where the effectiveness of the NEPM could be improved relate primarily to assessment of groundwater contamination. Under the Environmental Protection (Water) Policy 2009 (Water EPP), all Queensland waters, including groundwater, have prescribed environmental values and water quality objectives. These include site-specific environmental values and water quality objectives for many waters in schedule 1 of the Water EPP and default values and objectives for other waters under section 6(2) of the policy. These include protection of aquatic ecosystems, farm supply, irrigation, stock water, drinking use, human consumption of aquatic food, industrial use, recreational use, and cultural and spiritual use. Public amenity and safety are also environmental values prescribed under the EP Act that may be adversely affected by contaminated groundwater. Breach of prescribed water quality objectives constitutes environmental harm that, depending on its scale, location and circumstances, may attract a significant penalty.

The amended NEPM has in some cases created—most likely through a lack of clarity—inconsistency with the Queensland environmental legislation when dealing with contaminated groundwater. This creates issues and inefficiencies for the regulatory agency and practitioners. Examples are:

- Groundwater investigation levels for drinking water in NEPM schedule B1 acknowledge health effects but omit aesthetic criteria adopted for drinking water under the National Health and Medical Research Council's 2011 drinking water guidelines. Aesthetic quality of drinking water resources, such as taste and odour effects from hydrocarbon fuel contamination, is, however, protected under the Water EPP. Some practitioners omit aesthetic considerations from their assessments and create inconsistency with the Water EPP.
- Groundwater investigation levels listed for marine and fresh waters in NEPM schedule B1 exclude interim trigger levels for many toxicants under ANZECC (2000) section 8.3.7. These trigger levels and the risk-based decision trees supporting them are adopted under the Water EPP. Having blank entries in schedule B1 for these contaminants leads some practitioners to omit these contaminants of potential concern from their assessments and create inconsistency with the Water EPP.
- Difficulty with the NEPM concept of 'realistic future use' of groundwater occurs as some practitioners do not focus on the inherent capacity of the aquifer to support future use, such as whether the aquifer is not excessively saline or radioactive. Rather, some practitioners interpret realistic future use as existence of an established bore on nearby lands, or hazard a guess as to whether an adversely impacted off-site occupier is likely to install a bore. Potential viable uses of Queensland groundwaters are protected under the Water EPP, irrespective of an intention by a current occupier to use the water for a prescribed protected use.

- Although the ANZECC (2000) National Water Quality Guidelines and National Health and Medical Research Guidelines (2008) for recreation are mentioned in schedule B6, some practitioners focus on groundwater investigation levels in NEPM schedule B1, which do not account for stock watering or recreation, such as filling swimming pools with groundwater as occurs in many Queensland rural areas.
- A relatively common type of incident in marine and estuarine areas is leakage of diesel from underground fuel storage tanks and dispensing infrastructure to groundwater in marina, port and riverside locations. The diesel groundwater contamination typically discharges into marine and estuarine environments via seepage. The ANZECC (2000) National Water Quality Guidelines provide toxicity ranges for diesel in terms of total petroleum hydrocarbons for fish, crustaceans, molluscs, annelids and algae, and recommend derivation of trigger values 100 times less than these toxicities. The NEPM provides no specific groundwater investigation levels in respect of such fuel spills affecting waterways. Also the recommended equivalent analytical test in the NEPM, total recoverable hydrocarbons, has limits to reporting for equivalent carbon fractions of between 25 and 100 µg/L, concentrations that exceed the recommended trigger levels.

Clarification of these issues in any future revision of the NEPM would assist jurisdictions and practitioners.

An emerging issue in Queensland is contamination of groundwater and sediments with perfluorinated compounds such as PFOS and PFOA, primarily from firefighting training activities. These compounds are considered persistent organic pollutants and are not specifically addressed by the NEPM. The contamination of groundwater can be widespread and affect receptors not typically addressed in the NEPM such as use of water for agriculture, swimming pool filling, and stock watering. Inclusion of advice on these contaminants and likely impacts in future updates of the NEPM would be highly desirable.

Western Australia

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for Western Australia by the Hon Albert Jacob MLA, Minister for Environment; Heritage, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Department of Environment Regulation regulates the assessment of site contamination in Western Australia under the *Contaminated Sites Act 2003* and the Contaminated Sites Regulations 2006. The NEPM and other relevant technical guidelines are taken into account by the department in regulating contaminated sites, by contaminated site auditors when conducting site audits, and by environmental consultants when assessing the human health and environmental risks posed by contaminated sites.

The department operated a 12-month transition period from the amendment of the NEPM in May 2013. During this period, reports consistent with the original NEPM and the department's Contaminated Sites Management Series guidelines were accepted; however, all site contamination reports submitted on or after 16 May 2014 must be consistent with the amended NEPM.

- During the year ended 30 June 2014, 152 known or suspected contaminated sites were reported to the department, compared with 171 in the previous year. In the same period, the department received 48 audit reports relating to contaminated sites. These reports were submitted to comply with conditions imposed under a written law (such as planning conditions) or as part of the investigation or remediation of reported sites.
- Compliance with the NEPM and department guidelines is assessed in the site classification/reclassification process under the Contaminated Sites Act. The department classified 413 sites (including reclassifications) during the year, bringing the total number of sites classified to 2,783. Soil and groundwater investigations have confirmed the presence of contamination at 661 sites, which are listed on the publicly accessible database on the department's website.

The department commenced a comprehensive revision of its technical guidelines in 2013–14 and these are expected to be published in 2014–15.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The amended NEPM is well supported by contaminated site auditors and other environmental professionals. There was an improvement in the general standard of human health risk assessments submitted to the department during 2013–14.

Some implementation issues have occurred in the application of the revised NEPM, particularly in relation to the ecological investigation levels. The revision of the department's guidelines is expected to lead to increased consistency in application of the NEPM guidance.

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 Ian Hunter MLC, Minister for Sustainability, Environment and Conservation, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Environment Protection Authority (EPA) is responsible for administering the implementation of the Assessment of Site Contamination NEPM (the NEPM) in South Australia.

In South Australia, site contamination is managed through a legislative framework established under the *Environment Protection Act 1993*. The principles of the NEPM have been and continue to be introduced into guidelines, licence conditions and advice issued by the EPA.

Selected technical guidelines prescribed under the Environment Protection Act must be taken into account in the regulation, auditing and assessment of site contamination by relevant persons including site contamination auditors and consultants.

Following the amendment of the NEPM that took effect on 16 May 2013, the EPA put in place a strategy for implementation of the transitional arrangements. In addition to guidance for the transition period, the strategy included information about the following actions to be undertaken by the EPA to support NEPM implementation:

- review of existing EPA guidance to ensure consistency with the amended NEPM. Revised guidance is planned to be available to coincide with the end of the transition period.
- development of an environment protection policy (EPP) under section 29 of the *Environment Protection Act 1993* to give effect to the amended NEPM.

Draft revised guidance documents were released for consultation with key stakeholders and are in the process of being finalised. The development of the EPP is also being progressed by the EPA.

During the 2013–14 reporting period the EPA recorded 86 notifications of site contamination that affects or threatens underground water on the public register it is required to keep under the Environment Protection Act. In the same period, the EPA recorded 32 audit reports.

As of 30 June 2014 there were 24 site contamination auditors accredited by the EPA.

The EPA provides written and verbal guidance and information with respect to site contamination and the NEPM guidelines to accredited auditors, environmental consultants, planning authorities, peak industry groups and the community.

Guidance which describes the NEPM is available to the public from the EPA website.

An index of information on site contamination notifications and audit reports is also available to the public on the EPA website.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The ongoing implementation of the NEPM amendment will continue to greatly improve the reliability and quality of assessments being undertaken, which is already being observed by the EPA in assessment reports submitted to the EPA. This will be instrumental in achieving the NEPM's purpose and desired environmental outcomes in South Australia.

The NEPM addresses a complex and multidisciplinary area that is particularly subject to new developments in scientific knowledge and technology—for example soil vapour. The NEPM includes an inbuilt review period. Active and ongoing review of the NEPM is considered essential to ensure that it continues to:

- incorporate new scientific knowledge and updated technical information
- maintain credibility as the premier authoritative source of technical guidance on health and environmental outcomes related to site contamination in Australia
- provide increased certainty that human health and the environment are adequately protected.

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 (1 July 2013 to 31 March 2014) and the Hon Matthew Groom MP, Minister for Environment, Parks and Heritage (31 March 2014 to 30 June 2014) for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The amended National Environment Protection (Assessment of Site Contamination) Measure automatically became a state policy in Tasmania under the *State Policies and Projects Act 1993* following its registration on the Federal Register of Legislative Instruments in the last NEPM reporting period. The NEPM is implemented in the following ways:

- Where a notice issued under the *Environmental Management and Pollution Control Act 1994* requires that an environmental site assessment be undertaken in accordance with the NEPM, the amended NEPM must be used.
- The requirement in legislation that any reports received under the Environmental Management and Pollution Control (Underground Petroleum Storage Systems) Regulations 2010 comply with the NEPM. Revised underground petroleum storage systems (UPSS) guidance for decommissioning of storage systems was published in June 2014 to bring it in line with the assessment approach provided by the amended NEPM; compliance with the guidance is mandatory under the regulations. UPSS Guideline 1 provides a list of required report content. UPSS Guideline 2 relates to sampling and risk assessment and provides minimum sampling numbers.
- Non-statutory reports received by the EPA Division for purposes such as to satisfy planning authority requirements prior to redevelopment must also comply with the NEPM.
- Measures to ensure stakeholders are well informed in relation to the content of the NEPM are ongoing. In November 2013 the EPA Division provided training for consultants and local government in relation to the development of a conceptual site model.

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 has increased its effectiveness as it takes account of recent developments in the field, particularly in relation to assessment of asbestos contamination and hydrocarbon vapour intrusion, and clarifies 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 the Australian Capital Territory by Mr Simon Corbell MLA, Minister for the Environment, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Environment and Planning Directorate (EPD) is responsible for implementing and administering the National Environment Protection (Assessment of Site Contamination) Measure (the NEPM).

The provisions of the NEPM are implemented under the *Environment Protection Act 1994*. 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.

The National Environment Protection Council agreed to vary the NEPM by approving an amending instrument to the NEPM on 11 April 2013. The amendment of the NEPM took effect in each jurisdiction on 16 May 2013. The EPD has undertaken the necessary legislative and administrative steps required to fully implement the amended NEPM in the ACT. From 16 May 2014 all site contamination assessments undertaken in the ACT were required to be undertaken in accordance with the amended NEPM.

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 territory contributes to a nationally consistent approach to the assessment of site contamination.

While some elements of the amended NEPM have sparked discussion between regulators and practitioners, promoting the need for clarification on some aspects from NEPM review project team members, practitioners involved in site assessment in the ACT have generally embraced and welcomed the more contemporary guidance.

Northern Territory

Report to the NEPC on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for the Northern Territory by the Minister for Lands, Planning and the Environment for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The NEPM may be implemented in the Northern Territory 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 New South Wales accredited site contamination auditor. This would be triggered at sites where there is a change of land use to a more sensitive use (i.e. commercial to residential), and/or where preliminary contamination assessment undertaken by credible environmental consultants has established that investigation thresholds have been exceeded for contaminants of concern.

In the Northern Territory the auditor also oversees the development and implementation of a remediation action plan to render the land fit for purpose and/or determines clean-up to the extent practicable (CUTEP). An auditor's statement of environmental audit for any particular site then provides the Northern Territory Environment Protection Authority (EPA) with the necessary guidance to place on title a pollution abatement notice if required and/or an 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 EPA.

The NEPM may also be implemented through a legislative directive environmental audit or a voluntary environmental audit of a site to meet fit-for-purpose current or future zoning of a site. On both scenarios it is required that the client engage a Victorian or New South Wales accredited site contamination auditor.

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 Northern Territory. Additionally, it ensures that all parties are aware of their requirements and responsibilities within the site assessment and remediation process, and assists in developing clean-up end points in relationship to potential risk to environmental receptors and human health.

The EPA, to the end of financial year 2014, is involved with or has completed a review of the following contaminated land audited sites:

- Ausco Temporary Accommodation Village Stage 1
- Ausco Temporary Accommodation Village Stages 2/3
- 41 Boulter Road residential development
- 485 Pioneer Drive residential development;
- Waterfront Corporation Stage 2—assessment and remediation for mixed zone development (residential and light commercial)
- Mobil Oil Australia Pty Ltd Fuel Storage Terminal—assessment and remediation
- Viva Energy Australia Ltd Fuel Storage Terminal—assessment and remediation
- Caltex Oil Australia Fuel Storage Terminal—assessment and remediation
- Transpacific Industries Pty Ltd—assessment and remediation
- Darwin Correctional Centre—development for agricultural use
- Wadeye South Airport Redevelopment—residential development

During the 2013–14 reporting period the EPA has issued four pollution abatement notices relating to contaminated land.

Appendix 4:
Jurisdictional Reports on the Implementation and Effectiveness of the Diesel Vehicle Emissions NEPM

Commonwealth

Report to the NEPC on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for the Commonwealth by the Hon Greg Hunt MP, Minister for the Environment, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The National Environment Protection (Diesel Vehicle Emissions) Measure (Diesel NEPM) is supported by the following Commonwealth legislative, regulatory and administrative framework:

- Australian Design Rules under the *Motor Vehicle Standards Act 1989*
- *Fuel Quality Standards Act 2000* (the Act) and fuel quality standards
- fuel tax credit arrangements.

The Commonwealth monitors fuel quality at all stages of the fuel supply chain to ensure it complies with the Act. The objects of the Act are to:

a) regulate the quality of fuel supplied in Australia in order to:

i. reduce the level of pollutants and emissions arising from the use of fuel that may cause environmental and health problems

ii. facilitate the adoption of better engine technology and emission control technology

iii. allow the more effective operation of engines

b) ensure that, where appropriate, information about fuel is provided when the fuel is supplied.

In 2013–14, authorised fuel inspectors visited 403 fuel supply sites and tested 1,305 samples, including 343 diesel fuel samples, for compliance with the Act. Compliance action undertaken in accordance with the Act resulted in civil proceedings against two fuel suppliers, where the Federal Court granted injunctions to restrain the supply of non-compliant diesel. The Federal Court also imposed a pecuniary penalty under section 12AA against one of the fuel suppliers.

The Commonwealth's vehicle fleet is relatively new and well maintained. Servicing of vehicles is conducted according to manufacturers' specifications and at specified frequencies.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The Commonwealth considers the Diesel 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 with regard to NEPM goals, considerable progress has been made towards 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 2000* and the *Motor Vehicle Standards Act 1989*
- 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.

Other programmes

The Commonwealth utilises a variety of actions to reduce emissions from diesel vehicles, including:

- offsetting fuel emissions through Greenfleet
- selecting vehicles with Green Vehicle Guide ratings above a certain minimum level
- replacement of six-cylinder and above vehicles with four-cylinder vehicles
- replacement of fleet diesel vehicles with hybrid vehicles
- environmental driver training programmes covering issues such as harsh braking, engine over-revving, idling and economical driving

- installation of diesel particulate filters
- tracking and analysis of fuel usage to minimise wastage
- implementation of a tyre pressure standard to ensure line-haul vehicles' tyre pressure is maintained to the manufacturer's specifications
- driver training in safe and efficient operation of vehicles
- installation of new technology such as aerodynamic scoops for rigid trucks and prime mover vehicles
- trialling of low-rolling resistant tyres and cleaner, more energy-efficient diesel.

New South Wales

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for New South Wales by the Hon Rob Stokes MP, Minister for Environment, for the reporting year ended 30 June 2014

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) provide the regulatory framework for action to address emissions from the in-service diesel fleet.

In October 2011 the then Commonwealth Department of Sustainability, Environment, Water, Population and Communities advised New South Wales Roads and Maritime Services that, as the National Environment Protection (Diesel Vehicle Emissions) Measure (NEPM) Funding Agreement had expired, NEPM projects were to be placed on hold and no further funds were to be expended while the department considered options for dealing with the unspent funds.

By 30 June 2014, Roads and Maritime Services had not received any further information regarding the funding agreement and, as a result, all NEPM projects remain on hold.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

In New South Wales the Environment Protection Authority and Roads and Maritime Services continue to implement a range of New South Wales Government funded programmes to reduce diesel emissions. In 2013–14, New South Wales continued the Smoky Vehicle Program and expanded the Clean Fleet Program and the Clean Machine (non-road diesel) programme, which retrofits particle filters to older non-road diesel plant and equipment.

New South Wales diesel fleet profile

Diesel vehicles as a percentage of total New South Wales vehicle fleet

Roads and Maritime Services registration data show that diesel vehicles constituted 17.3 per cent of the total New South Wales fleet at 30 June 2014 (see Table 1 below). This is compared to 15.9 per cent in 2013, 14.6 per cent in 2012 and 13.4 per cent in 2011. (Note: these figures for all years have been calculated excluding light and heavy registered trailers. Figures reported in previous NEPC annual reports included trailers.)

Roads and Maritime Services registration data indicate that, between June 2013 and June 2014, the number of diesel vehicles registered in New South Wales increased by 85,244, or 10.8 per cent. Off-road passenger vehicles increased by 11.9 per cent over the previous year and constitute the largest sector of the diesel fleet, at 37.38 per cent. Light commercial vehicles account for 34.94 per cent of the diesel fleet. Together these categories account for 72.3 per cent of the total diesel fleet in New South Wales. Table 2 shows changes in diesel vehicles by category between June 2013 and June 2014.

Registration data also show that, in 2014, 10.7 per cent of the diesel fleet in New South Wales was manufactured prior to 1996. This is down from 12.8 per cent in 2013 and 15.5 per cent in 2012. Stricter new vehicle emissions standards for oxides of nitrogen (NO_x) and particles were introduced in 1996 under Australian Design Rule 70 (ADR70). Tighter emissions standards have been introduced for diesel vehicles manufactured from 2002 under ADR80.00, from 2007 under ADR80.02, and from 2010 under ADR80.03.

Table 1: Diesel vehicles by category as a proportion of the total fleet and diesel fleet

Diesel vehicles (%)									
New South Wales June 2014	Passenger vehicles	Off-road passenger vehicles	Light commercial vehicles	Heavy trucks	Prime movers	Small buses	Buses	Other	Total
Diesels in total New South Wales fleet	1.88	6.45	6.03	1.74	0.37	0.18	0.24	0.36	17.3
Vehicle categories in diesel fleet	10.92	37.38	34.94	10.1	2.14	1.04	1.38	2.1	100

Source: Roads and Maritime Services registration data (June 2014).

Note: Calculations exclude both light and heavy registered trailers.

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 2013	June 2014				
Passenger vehicles	82,483	95,742	13,259	16.07	–	15.55
Off-road passenger Vehicles	292,862	327,710	34,848	11.90	–	40.88
People movers	6,790	7,792	1,002	14.76	–	1.18
Small buses	7,679	9,127	1,448	18.86	–	1.70
Light trucks	273,348	306,327	32,979	12.06	–	38.69
Light plants	1,880	1,962	82		–	–
Buses	13,668	12,141	–1,527	–11.17	–1.79	–
Heavy trucks	78,291	88,516	10,225	13.06	–	11.99
Prime movers	23,726	18,724	–5,002	–21.08	–5.87	–
Heavy plants	5,888	4,177	–1,711	–29.06	–2.01	–
Other	4,870	4,511	–359	–7.37	–0.42	–
Total	791,485	876,729	85,244	10.77	–	–

Source: Roads and Maritime Services registration data (June 2014).

Diesel vehicles emissions estimates

Diesel vehicles made up 17.3 per cent of the total New South Wales fleet as at 30 June 2014; however, they contribute disproportionately to the amount of air pollution produced by on-road mobile sources.

On-road mobile sources contribute approximately 62 per cent of NO_x and 13 per cent of particle emissions of 10 micrometers in diameter or less (as PM_{10}) from all anthropogenic sources in the Sydney[1] region.

Based on projections for 2013–14 from the 2008 Air Emissions Inventory for the New South Wales Greater Metropolitan Region, diesel vehicles contribute approximately 49 per cent of NO_x and 32 per cent of particle emissions (as PM_{10}) from all on-road mobile sources in the Sydney region.

1 'Sydney region' is as defined in the Air Emissions Inventory for the New South Wales Greater Metropolitan Region in New South Wales, which can be found on the Environment Protection Authority's website http://www.epa.nsw.gov.au/air/airinventory.htm.

The New South Wales total diesel vehicle kilometres travelled are increasing due to increases in both the underlying total fleet vehicle kilometres travelled and the proportion of diesel vehicles in the fleet. According to Bureau of Transport statistics supplied for the Air Emissions Inventory, in the 2013 calendar year diesel vehicle kilometres travelled comprised 19.8 per cent of the total fleet vehicle kilometres travelled for the Greater Metropolitan Region.

With the exception of NO_x emissions for the light vehicle fleet, the total per kilometre PM_{10} and NO_x exhaust emissions from diesel vehicles are predicted to fall significantly from 2011 to 2021, following the introduction of more stringent vehicle emissions regulations combined with fleet turnover.

- For both light and heavy duty diesels, the predicted reductions in PM_{10} emission rates are larger than the rate of increase in vehicle kilometres travelled, resulting in decreasing total PM_{10} emissions from the diesel fleet.
- For heavy-duty diesel vehicles, NO_x emissions are predicted to decrease from 2011 to 2021 in spite of projected increases in vehicle kilometres travelled.
- For light diesel vehicles, a very strong increase in the proportion of diesel vehicles is projected, resulting in large increases in both absolute NO_x emissions and the percentage contribution to total vehicle fleet emissions.

Smoky vehicles programme

In New South Wales, it is an offence for a vehicle to emit excessive air impurities for a continuous period of more than 10 seconds. In 2013–14, authorised officers issued 283 penalty infringement notices (an average of 24 per month) to 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 2013–14 there were 24 prosecutions, all involving diesel vehicles.

The public may also report smoky vehicles via the Environment Protection Authority's Environment Line, website or newly developed mobile phone application. An average of 126 smoky vehicle reports are received each month from the public (1,517 public reports over the year), indicating a high level of awareness in the community of the unacceptability of excessive visible emissions.

In 2013–14 the Environment Protection Authority issued 453 advisory letters to diesel vehicle owners, based on public reports.

In 2013–14 the Environment Protection Authority issued nine warning letters to the owners of diesel vehicles that were observed by authorised officers to be excessively smoky. A warning letter requires the vehicle owner to carry out any necessary repairs so that the vehicle no longer emits excessive smoke and to provide evidence to the Environment Protection Authority that those repairs were carried out. Failure to provide evidence that the vehicle is no longer emitting excessive smoke may result in a penalty notice being issued to the registered vehicle owner. The nine vehicles were observed by authorised officers and found to be excessively smoky. Four of these were returned with evidence of subsequent repair.

Annual statistics for smoky diesel vehicles

Table 3 shows a breakdown of the percentage of diesel vehicle owners that received fines, advisory letters or warning letters as a proportion of all vehicles fined.

Table 3: Smoky vehicles—actions taken

	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	July 11–June 12	July 12–June 13	July 13–June 14
Total number of vehicles that received fines	1,175	694	664	616	373	303	301	186	114	289
Diesel vehicles that received fines	1,127	580	527	495	351	278	286	173	109	283
Percentage of all vehicles fined that were diesel vehicles	95.9%	83.6%	79.3%	80%	94.1%	91.7%	95%	95%	96%	98%
Total number of vehicles that received advisory and warning letters	2,017	1,405	1,123	755	530	740	750	556	552	891
Diesel vehicles that received advisory and warning letters	303	174	161	103	123	133	135	96	74	462
Percentage of all vehicles that received advisory and warning letters that were diesel vehicles	15%	12.4%	14.3%	14%	23.2%	17%	18%	17%	11%	52%

Diesel vehicle emission testing and repair programmes

Roads and Maritime Services is not currently operating a Diesel Vehicle Emissions Testing and Repair programme.

The development of a test and repair programme has been put on hold at the direction of the then Commonwealth Department of Sustainability, Environment, Water, Population and Communities pending resolution of the funding agreement and the finalisation of Recommendation 5 of the 2007 review of the NEPM.

The existing Roads and Maritime Services Heavy Diesel Vehicle Testing Facility is currently used to support the M5 East Tunnel Diesel Retrofit and Repair Initiative (discussed below).

Audited maintenance programmes for diesel vehicles

Roads and Maritime Services is currently operating an audited maintenance programme known as Clean Fleet. This was launched in 2006 and currently has approximately 7,000 vehicles participating.

Promotion to increase participation in the programme was put on hold pending resolution of funding with the Department of the Environment. During 2013–14 only two new fleets joined this programme.

Diesel vehicle retrofit programmes

The New South Wales Diesel Vehicle Retrofit Program continued in 2013–14. The programme is administered and implemented by Roads and Maritime Services and the Environment Protection Authority. More than 730 vehicles and machines have been retrofitted since the programme's inception in 2005, at a total cost of $3.7 million.

Roads and Maritime Services is currently implementing the M5 East Tunnel Diesel Retrofit and Repair Initiative. This initiative started on 1 March 2013 and it is planned that it will continue through to December 2015. The aim of the initiative is to reduce the level of PM_{10} present in the M5 East tunnel, by removing PM_{10} exhaust emissions at their source.

This will be achieved by identifying the smoky vehicles that are frequent users of the M5 East Tunnel through the use of camera technology. Operators of these vehicles will be offered a 50 per cent subsidy (up to a capped amount) to repair emissions-related engine faults and to install particle traps in the exhaust systems of these vehicles.

Clean Machine Program (non-road diesel engines)

The New South Wales Clean Machine Program commenced in 2011 to raise awareness and reduce emissions from heavy non-road diesel equipment such as cranes, loaders or graders in the infrastructure maintenance and construction sector, waste operations, ports and quarries. Under the programme, the Environment Protection Authority forms partnerships with local councils and private businesses to encourage procurement of cleaner diesel equipment, best worksite practice for diesel emissions management, and subsidised retrofitting of heavily polluting equipment with exhaust after-treatment devices.

The New South Wales Government offers co-funding of between 50 per cent and 90 per cent for the retrofitting of older and more polluting diesel equipment. Partial diesel particulate filters are being found to be the most successful strategy. Roads and Maritime Services was involved in retrofit administration until June 2013 but since 2013–14 the entire programme, including the retrofit element, has been managed solely by the Environment Protection Authority.

By the end of June 2014, more than 30 organisations partnered with the Environment Protection Authority on this programme and 137 diesel machines have been retrofitted. Retrofits alone have been estimated to reduce about 36 tonnes of diesel particles over the next 10 years, leading to an estimated public health benefit of $8.1 million. Cleaner procurement and best worksite practice will also result in significant diesel emissions reductions and public health benefits.

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 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

A change in the administration and implementation of the NEPM occurred during 2013–2014 with the update of the Environment Protection (Vehicle Emissions) Regulations 2013, which replaced the 2003 regulations. The regulations no longer deal with heavy vehicles over 4.5 tonnes due to the introduction of the Heavy Vehicle National Law agreed by the Council of Australian Governments in 2009. The in-service diesel vehicle emissions testing facility at VIPAC Engineers & Scientists Ltd (Vipac) continues to be used to achieve the objectives of the Diesel NEPM by allowing heavy-duty diesel vehicles to be tested against the in-service emissions requirements of the Environment Protection (Vehicle Emissions) Regulations 2013.

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, it has provided significant value in a number of areas.

The numbers of vehicles reported in the Environment Protection Authority's (EPA's) smoky vehicle programme continue to provide some insight into the high level of community awareness and concern about diesel vehicle exhaust emissions. The continuing decline in the number of vehicles reported since the programme began in 2005–06 could indicate that there are fewer smoky vehicles being spotted on Victorian roads. Prior to the reporting of heavy vehicles to the National Heavy Vehicle Regulator there was a significant decline in the proportion of diesel-engined vehicles greater than 1.5 GVM tonnes being reported. This could indicate that there are fewer smoky diesel vehicles in this category.

Smoky vehicles programme

EPA Victoria has operated a public smoky vehicle reporting programme for a number of years. This programme allows members of the public to identify smoky vehicles (diesel, petrol or LPG) using the '10-second smoke rule', and report them to the EPA. The owners of the offending vehicles are then 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 the EPA, VicRoads or the police. The programme resulted in 1,193 smoky vehicles being reported by the public in 2013–14.

The EPA also operates a separate official smoky vehicle enforcement programme whereby EPA or Victoria Police officers can report vehicles identified as emitting continuous smoke for more than 10 seconds. 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 2013–14, 87 cautionary letters were issued under this programme. Infringement notices are issued only to repeat offenders. No instances were recorded in 2013–14.

The following table indicates the number of smoky vehicles being reported in the public reporting programme and the number of cautionary letters issued under the official programme over the past nine years. Generally there appears to be a downward trend in the number of vehicles being reported over recent years in both programmes. The significant drop in reports in 2013–14 was also affected by a redirection of resources during the financial year which focused on making improvements to the programme that will become evident over the next couple of financial years.

Table 1: Number of smoky vehicles being reported in the public reporting programme and number of cautionary letters issued under the official smoky vehicle programme over the last nine years

Year	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11	2011–12	2012–13	2013–14
Number of public reports	10,315	7,068	6,443	5,884	6,177	5,766	4895	3,910	1,296
Number of cautionary letters	1,538	849	946	708	445	630	495	554	107

Note: These numbers include all vehicles in the official programme, not just diesel-engined vehicles.

Diesel vehicle emission testing and repair programmes

Victoria uses Vipac's test facility to support the EPA's regulatory infrastructure. 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.

Under the EPA's official smoky vehicle programme, diesel engine smoky vehicles registered in a defined Melbourne metropolitan area have been directed to the Vipac facility for vehicle testing. With the introduction of the new regulations in December 2013, the EPA ceased issuing DT80 emission test notices to vehicles over 4.5 tonnes. The initial vehicle test is paid for by the EPA (from Diesel NEPM funds). Any subsequent test, if the vehicle fails the initial test, is paid for by the vehicle owner ($550 plus GST).

During 2013–14, 27 vehicles were tested at the Vipac facility as part of its official smoky vehicle reporting programme.

Audited maintenance programmes for diesel vehicles

Victoria does not have an audited maintenance programme for diesel vehicles.

Diesel vehicle retrofit programmes

Victoria does not have a diesel vehicle retrofit programme.

Other programmes

Not applicable.

Queensland

Report to the NEPC on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for Queensland by the Hon Scott Emerson, Minister for Transport and Main Roads, for the reporting year ended 30 June 2014

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 is responsible for implementing and reporting on the NEPM. Queensland has a number of programmes in place to ensure air quality is maintained and diesel vehicle emissions are managed appropriately, as specified in the NEPM.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Transport is a major contributor to air pollution in south-east Queensland. The Department of Environment and Heritage Protection, with the assistance of the Department of Science, Information Technology, Innovation and the Arts, is responsible for monitoring air quality in Queensland. It uses a network of 25 stations around the state containing instruments capable of recording and storing meteorological and air pollutant data.

The air pollutants of most interest in relation to diesel vehicles are oxides of nitrogen (NO_x) and fine particles. NO_x is a precursor to the formation of photochemical smog, and fine particles have been identified as a health risk.

Monitoring indicates air quality is generally good in Queensland. In the past five years Queensland air quality has continued to improve slightly and air quality standards have rarely been exceeded. These results have been achieved against a backdrop of population growth and an increase in vehicle kilometres travelled.

Queensland supports the Commonwealth in the ongoing introduction of new Australian Design Rules (ADRs) to improve vehicle emission standards. In Queensland the most significant reduction in diesel vehicle emissions has been achieved through the introduction of improved fuel quality and vehicle emission standards for new vehicles. Diesel vehicle emissions are expected to continue to decrease as the number of newer, less polluting diesel vehicles increases within the fleet, replacing higher polluting older vehicles. Gradual tightening of emission standards to harmonise with European Union standards is considered one of the most cost-effective means to reduce diesel emissions and improve air quality.

The Commonwealth Department of Infrastructure and Transport is continuing work on the proposed new ADR for heavy vehicle emission standards, ADR-80/03, which will introduce the equivalent to Euro VI emission standards for heavy vehicles. These new standards will require all new heavy vehicles to comply with more stringent emission levels and assist in further reducing the diesel emissions related to road transport in Queensland. Other programmes currently in place to complement the ADRs and reduce diesel vehicle emissions are described below.

Smoky vehicles programme

The Department of Transport and Main Roads 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' requiring their vehicle to be checked for defects by a transport inspector.

For the period of 1 July 2013 to 30 June 2014 a total of 1,767 vehicles were reported to the Smoky Vehicle Hotline—347 by phone and 1,384 through the online reporting form. There were 601 diesel-powered vehicles reported, which is a significant decrease on the 800 diesel vehicles reported out of a total of 1,776 for the previous financial year. However, the figure aligns with the trend of the previous five years of a gradual but steady reduction in the numbers of diesel vehicles reported. This supports the suggestion in last year's annual report that the reported figure of 800 diesel vehicles may have been an anomaly.

The Department of Transport and Main Roads does not have the technology to test emissions of reported diesel vehicles; therefore no data are retained beyond the number of diesel vehicles reported to the Smoky Vehicle Hotline. The department issued 232 initial warning letters and six secondary warning letters requesting that drivers

have their vehicles checked. No present vehicle orders were issued, indicating that drivers are responding to the initial requests and rectifying defects in their vehicles.

Diesel vehicle emission testing and repair programmes

The Department of Transport and Main Roads operates a compulsory annual inspection regime. The standard of mufflers on the vehicle is checked at this inspection, and any vehicle with a faulty muffler is issued with a defect notice to have it repaired or replaced. Heavy vehicles are inspected every 12 months, prior to renewal of registration, and public passenger vehicles such as buses are inspected every six months.

The Department of Transport and Main Roads inspected approximately 78,731 heavy vehicles, while private accredited inspection stations inspected approximately 58,315 vehicles in the 2013–14 financial year. This ensured that defective engine performance, which contributes to increased diesel exhaust emissions, could be identified and rectified.

In Queensland Brisbane City Council owns and operates the only facility for testing diesel-powered vehicles for emissions under the DT80 testing regime. During 2013–14 the council tested a total of 109 heavy vehicles. Of the vehicles tested, 93 were diesel powered and therefore reportable for Diesel NEPM purposes. The remaining vehicles were testing alternative fuels, fuel blends and gas. Thirty-six of the diesel powered vehicles tested were manufactured prior to 1996 under the ADR70 emission standard. The remaining 57 vehicles were manufactured after December 1995, or post ADR70.

Brisbane City Council tested a total of 93 diesel vehicles. Of these, 91 passed the in-service emission standard that they were manufactured to, and two vehicles failed. The vehicles that failed were both manufactured prior to January 1996. One failed due to excessive levels of particulate matter while the other failed due to excessive levels of both particulate matter and opacity (or smoke). Both vehicles have now been retired from service and will not be returning for retesting.

Of the 93 vehicles tested, only 31 were previously untested; 62 were heavy vehicles presented for retesting after a two-year period to verify continued compliance in order to claim fuel tax credits under criterion 3 of the fuel tax credit scheme.

Of the previously untested vehicles 18 were presented by external operators and 13 were from Brisbane City Council's own fleet. There are significant costs involved with the DT80 test—over $700 per vehicle—which may contribute to the limited uptake of the service.

Audited maintenance programmes for diesel vehicles

The Queensland Government encourages the heavy vehicle industry to participate in the National Heavy Vehicle Accreditation Scheme (NHVAS), which is now fully administered by the National Heavy Vehicle Regulator. The scheme 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 removes the requirement for certificates of inspection for renewal of registration for vehicles in the scheme. The vehicles in the NHVAS use diesel as their primary fuel source.

Currently the NHVAS maintenance scheme covers 35,400 vehicles, registered by 848 operators, while the NHVAS mass scheme has 7,480 vehicles, registered by 836 operators. This is another moderate increase on last year's accredited registrations.

Diesel vehicle retrofit programmes

Queensland did not run any diesel retrofit programmes in the reporting period.

Other programmes

In 2013 the Queensland Government released Moving Freight, a 10-year strategy to develop a more efficient multi-modal freight network that is sustainable and productive. This strategy will support the Queensland Plan and the Queensland Government's governing for growth framework by providing direction to business and industry for managing freight. Importantly, Moving Freight identifies a broad range of freight, supply chain and logistics issues confronting the industry. It outlines short-, medium- and long-term actions to move freight onto rail and improve the efficiency of road freight. Any improvements in freight efficiency and transport logistics will reduce transport-related diesel emissions.

Western Australia

Report to the National Environmental Protection Council (NEPC) on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for Western Australia by the Hon Albert Jacob MLA, Minister for Environment; Heritage, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In Western Australia the National Environment Protection (Diesel Vehicle Emissions) Measure is implemented by the Department of Environment Regulation (DER) 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 aims to target visually polluting diesel and petrol vehicles. The smoky vehicle reporting programme is administered jointly by the Department of Transport and DER.

The Perth Air Quality Management Plan (AQMP) is a non-statutory management plan established by the Western Australian Government. The objective of the AQMP is to ensure that clean air is achieved and maintained throughout the Perth metropolitan region. The AQMP identifies that the management of emissions from in-service petrol and diesel vehicles is critical to achieving clean air, and contains a range of initiatives that target on-road vehicles. The vehicle emissions reduction initiatives of the AQMP are largely complementary to the desired environmental outcomes of the NEPM, and are being undertaken in an integrated fashion.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The introduction of vehicle emission standards for diesel and petrol vehicles and improvements in fuel quality, supplemented by the implementation of programmes under the AQMP and CleanRun, has delivered significant emission benefits over the longer term. However, the growing number of vehicles on Western Australian roads threatens to offset the gains in vehicle emissions technology.

In 2014, diesel vehicles account for 22.5 per cent of the Western Australian vehicle fleet. The number of diesel vehicles has increased by 54 per cent since 2009, while the total number of vehicles increased 17.2 per cent during the same period. The passenger and light commercial vehicle sectors account for the majority of this increase. The increasing popularity of diesel vehicles, particularly passenger and light commercial vehicles and the growing vehicle fleet, will have ongoing impacts on oxides of nitrogen (NO_x) and particulate emissions (PM_{10}).

Although they account for a small proportion of the Western Australian diesel fleet, heavy rigid trucks and articulated trucks, which are mainly diesel powered, are older than the national average. For example, 58 per cent of total on-road heavy rigid trucks were manufactured before 2003 (older than 11 years). Similarly 44 per cent of total on-road articulated trucks were manufactured before 2003.

Vehicle emissions inventory data from 2012 indicates that heavy-duty vehicles account for less than 4 per cent of the Western Australian vehicle fleet but account for over 40 per cent of NO_x and nearly 30 per cent of PM_{10} road transport emissions.

The continued implementation of the Smoky Vehicle Reporting Program has resulted in a number of respondents (46 per cent) repairing their vehicle since receiving a smoky vehicle report. Approximately 67 per cent of respondents indicated their vehicle was diesel.

DER's continued implementation of vehicle emissions reduction initiatives of the AQMP and the CleanRun programme continue to strengthen all vehicle emissions reduction strategies undertaken by DER. DER 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 emissions in Western Australia.

Smoky vehicles programme

In 2013–14 the Smoky Vehicle Reporting Program received an average of 42.5 reports per month, which is an increase on 2012–13 figures by 12.5 reports per month. The total number of reports received and information packs sent out for the 12 months from July 2013 to June 2014 was 510.

Table 1 summarises the responses from 330 owners of the 510 reported vehicles from July 2013 to June 2014. Vehicle owners were able to select more than one response. The results show that 46 per cent of respondents have had their vehicle repaired since receiving a report of their smoky vehicle. However, a considerable proportion of respondents (39 per cent) believe their vehicle does not smoke. Over 67 per cent of respondents reported their vehicle as diesel. The responses received in the 'other' category are generally related to 'vehicle does not smoke' and include the reasons why, such as: 'my vehicle was under excessive load', or 'my car does not smoke excessively for a diesel'. Comments in relation to why it is normal for diesel vehicles to smoke were common, indicating that education for vehicle owners about correct maintenance of diesel engines may be beneficial.

Table 1: Responses from owners of reported vehicles

Vehicle repaired	152 (46%)
Vehicle does not smoke	128 (39%)
Cannot afford to repair	3 (1%)
Disposed of vehicle	13 (4%)
Wrong vehicle	9 (3%)
Other	25 (7%)
Petrol	54 (16%)
Diesel	222 (67%)
LPG	1 (<1%)
Fuel type not reported	53 (16%)

Diesel vehicle emission testing and repair programmes

The CleanRun Remote Sensing Program (RSP) 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. In 2014 the CleanRun RSP underwent software upgrades and equipment repairs. Because of this the CleanRun RSP was not deployed in the 2013–14 reporting period.

In 2014–15 the CleanRun RSP will be used to conduct on-road vehicle emission testing at various sites around the Perth metropolitan and regional areas and be incorporated into future community engagement activities. Community members and local businesses will be invited to have their vehicle emissions checked using the CleanRun RSP and will be able to find out which factors may be influencing their vehicle's emission performance.

The objective of the vehicle emissions testing programme for Western Australia is to enable collection of emission data, targeting diesel vehicles, to enable vehicle fleet characterisation, which will ultimately be used to determine ongoing in-service vehicle emissions control programmes. In addition, vehicle testing can be used to detect, identify and encourage the emission performance improvement of gross emitting vehicles.

Audited maintenance programmes for diesel vehicles

The National Heavy Vehicle Accreditation Scheme (NHVAS) encourages heavy vehicle operators to take 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 or notice 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 require a permit or notice to perform any transport task as part of a commercial business or for profit within Western Australia, including interstate operators.

There are currently two accreditation 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 similar to those 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 licensing conditions. Compliance also includes the important role of educating and working with the transport industry and other agencies and stakeholders to improve standards.

Diesel vehicle retrofit programmes

The Western Australian Government, through DER, is currently focusing on diesel vehicle emissions, primarily through the CleanRun EcoDrive and Remote Sensing programmes.

Other programmes

Communication

The CleanRun programme was developed to make the overall vehicle emission reduction actions immediately identifiable and to facilitate the promotion of key NEPM messages in Western Australia. Webpages, fact sheets and brochures are developed and produced to disseminate information on the CleanRun programme. All of these documents continue to be made available on DER's website, www.der.wa.gov.au. Attention continues to focus on promoting NEPM messages through established programmes.

CleanRun EcoDrive

A major initiative of the NEPM communication strategy is the CleanRun Behaviour Change Initiative (BCI). The CleanRun BCI aims to reduce diesel emissions through encouraging driver behaviour change.

DER worked with industry partners to develop the CleanRun EcoDrive resources. Ecodriving incorporates a number of safer, smarter driving techniques that maximise fuel economy by operating the engine as efficiently as possible.

CleanRun EcoDrive provides a resource package for fleet operators 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 programme in-house, including driver training materials developed by experts in the transport industry. It is estimated that fleet operating organisations that implement the CleanRun EcoDrive programme can reduce fuel use and related emissions by up to 20 per cent. All resources are available to download free of charge from DER's website, www.der.wa.gov.au.

Industry training

Polytechnic West continues industry training to achieve improved maintenance practices and emissions performance. Specific 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.

South Australia

Report to the NEPC on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for South Australia by the Hon Ian Hunter MLC, Minister for Sustainability, Environment and Conservation, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In South Australia the National Environment Protection (Diesel Vehicles Emissions) Measure (Diesel NEPM) became an environment protection policy under the repealed Section 28A of the *Environment Protection Act 1993*. Section 4 of the transitional provisions in schedule 1 of the *Environment Protection (Miscellaneous) Amendment Act 2005* enables the continued operation of the Diesel NEPM as an environment protection policy.

The South Australian Government made provision to regulate emissions from diesel vehicles under the Road Traffic (Vehicle Standards) Rules 1999: Rule 147A: Exhaust emissions—diesel-powered vehicles. Rule 147A set emission limits for NO_x and particulate matter for diesel vehicles that are in service.

The 10-second smoke rule regulated as Rule 147 in the Road Traffic (Vehicle Standards) Rules 1999 has also been applied as an in-service standard towards the achievement of Diesel NEPM outcomes.

The National Heavy Vehicle Law was enacted in South Australia in 2013, including adoption of the national regulations. Rule 96 of the Heavy Vehicle (Vehicle Standards) Regulation continues the existing diesel emission standard for South Australian heavy vehicles (in addition to requiring heavy vehicles in each participating jurisdiction to comply with the standard).

Compliance with Rule 147A and Rule 96 was previously tested at the Regency Park Vehicle Inspection Emissions Test Facility; however, the facility has now been closed due to high maintenance costs and low throughput of vehicles. Arrangements are now being sought to undertake this testing within the private sector.

When a testing service is identified and operational, vehicles that fail the emissions test will be defected and then required to submit for re-testing for compliance with the standard.

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 5 per cent or a 20 per cent biodiesel blend or compressed natural gas.

While the Environment Protection Authority has responsibility for leading South Australia's response to this NEPM, the Department for Planning, Transport and Infrastructure is investigating and developing relevant strategies for the management of emissions from diesel vehicles.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The Regency Park Emissions Test Facility was closed during 2013–14 due to high maintenance costs and reliability issues. Private sector providers are being sought to provide alternative emissions testing services, including diesel emissions.

Smoky vehicles programme

Not applicable.

Diesel vehicle emission testing and repair programmes

Not applicable.

Audited maintenance programmes for diesel vehicles

Not applicable.

Diesel vehicle retrofit programmes

Not applicable.

Other programmes

Two diesel electric hybrid buses are currently being trialled in the Adelaide Metro bus fleet to assess the benefits compared to compressed natural gas and diesel vehicles. The vehicles, which operate on a biodiesel blend, are expected to have lower diesel fuel usage and emissions.

The Department of Planning, Transport and Infrastructure is currently implementing measures under South Australia's Low Emissions Vehicle Strategy 2012–2016, which are aimed at reducing greenhouse gas emissions and air toxic emissions by increasing the proportion of low-emission vehicles on our roads. The strategy includes actions to directly combat motor vehicle emissions and respond to emerging vehicle technologies, as well as to support activities to maximise the benefits to the state. This includes addressing emissions from fleets, which purchase around 50 per cent of vehicles sold in South Australia.

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 (1 July 2013 to 31 March 2014) and the Hon Matthew Groom MP, Minister for Environment, Parks and Heritage (31 March 2014 to 30 June 2014) for the reporting year ended 30 June 2014

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 that have been passed by both houses of parliament.

In 2006 and 2007 a contract between the Tasmanian and Commonwealth environment departments facilitated the funding of a series of diesel engine skill gap training workshops in the south, north and north-west 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 programme, TasTafe has continued to utilise this equipment in training courses for automotive apprentices. The equipment is used in both training and commercial activities to test the operation and repairs of emission controls/devices on vehicles and to check the emission outputs of LNG conversions. However, the equipment has not been used for commercial purposes in the current period.

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 30 June 2014 there were 13,351 diesel-powered heavy vehicles (i.e. vehicles over 4.5 tonnes) and 88,538 diesel-powered light vehicles registered in the state. This represents increases of 7.9 per cent and 7.5 per cent respectively since 1 July 2013. Of the total 562,365 vehicles registered in Tasmania on 30 June 2013, 18.1 per cent were diesel powered.

Smoky vehicles programme

The Department of State Growth maintains a strong focus on road safety rather than on vehicle emissions. It does not possess vehicle emission measurement facilities and does not actively target vehicle emissions.

It does, 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 programmes

The Department of State Growth does not possess vehicle emission measurement facilities and does not compile records of vehicle testing or repairs.

Audited maintenance programmes for diesel vehicles

There is no audited maintenance programme for diesel vehicles in Tasmania.

Diesel vehicle retrofit programmes

Statistics are not compiled on diesel vehicle retrofitting.

Other programmes

There were no other programmes 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, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Australian Capital Territory's (ACT) Road Transport (Vehicle Registration) Regulation 2000 requires emission control systems supplied by vehicle manufacturers to remain fitted and functional. This is consistent with the goals in the National Environment Protection (Diesel Vehicle Emissions) Measure (the NEPM).

Aggregate air quality data indicates that air pollution caused by diesel emissions is not a significant contributor to the urban airshed in the ACT. Therefore, no actions are taken in the ACT as a result of measures addressing the NEPM.

Notwithstanding the above, the ACT has introduced a number of measures consistent with achieving the goals of the NEPM, including:

- 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 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' emissions
- supporting ACT representation on the fuel standards consultative committee.

While statistics on the numbers of inspections, defects and warnings are collected, at this stage the reasons for these enforcement actions are 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. Two buses that were converted to operate on CNG have been returned to diesel operation as the trial of these two vehicles was unsuccessful. There are 10 Euro 6 buses in the ACTION bus fleet.

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 NEPM. As such, the NEPM has limited, if any, effectiveness within the ACT.

It follows that the programmes identified under the NEPM are not applicable within the ACT, as any actions taken in relation to diesel vehicles are taken as a result not of the NEPM but of the overriding road transport laws that apply standards to individual vehicles based on type, age and roadworthiness.

Smoky vehicles programme

Not applicable.

Diesel vehicle emission testing and repair programmes

Not applicable.

Audited maintenance programmes for diesel vehicles

Not applicable.

Diesel vehicle retrofit programmes

Not applicable.

Other programmes

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 the Minister for Lands, Planning and the Environment for the reporting year ended 30 June 2014

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 in the Northern Territory. Vehicle standards are enforced through the general provisions of the Northern Territory Motor Vehicles Act and the Australian Vehicle Standard Rules, which require all vehicles to comply with the Australian Design Rules when in service.

In the Northern Territory there are approximately 55,000 diesel vehicles registered, representing around 36 per cent of the total vehicle fleet. This is much higher than the national level of diesel vehicles, which is approximately 18.5 per cent of the vehicle fleet. Australian Bureau of Statistics data indicates that diesel vehicles registered in the Northern Territory represent approximately 1.6 per cent of all diesel vehicles in Australia.

Of the four major regions in the Northern Territory, 67 per cent of all registered diesel vehicles are registered in the Darwin region, 14 per cent in Alice Springs, 9 per cent in Katherine and 2 per cent in Tennant Creek.

In the Darwin region approximately 33 per cent of all registered vehicles are diesels; the proportion is slightly higher in Alice Springs, where diesels represent 36 per cent of the total vehicle fleet. In Katherine and Tennant Creek the diesel portion of the total fleet is 50 per cent and 51 per cent respectively, indicating a higher reliance on diesel vehicles in remote areas.

Of the heavy vehicle diesels registered in the Northern Territory, 63 per cent are registered in the Darwin region, 18 per cent in Alice Springs and 10 per cent in Katherine. The distribution of light diesel vehicle registrations differs slightly: 68 per cent of all registered light diesel vehicles are registered in the Darwin region, 14 per cent in Alice Springs and 9 per cent in Katherine.

Smoky vehicles programme

A smoky vehicle programme is undertaken as part of the Northern 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 receive a defect notice due to engine smoke.

Diesel vehicle emission testing and repair programmes

Pollutants associated with diesel emissions in the Northern Territory are well below emission standards. Therefore, the current air quality conditions are not considered a trigger for change in relation to managing diesel emissions. The Northern Territory will continue to monitor the need for action on diesel emissions and will take appropriate action as required.

Audited maintenance programmes for diesel vehicles

Vehicle roadworthy inspections are undertaken periodically for light and heavy vehicles; these inspections include checking that all required emission control equipment is fitted, as well as detecting smoky vehicles. Periodic roadworthy inspections are required at registration renewal, the frequency of inspections being is determined by the vehicle type, age and category. Since 1 July 2013, light vehicle inspections are required at five years, 10 years and then annually. All heavy vehicles require an annual roadworthy inspection.

Diesel vehicle retrofit programmes

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 programmes

The Northern Territory's open access policy provides for 'as of right' access for road trains and 100 per cent network access for vehicles operating at higher mass limits. In addition the Northern Territory's innovative vehicle policy promotes the development of high-productivity innovative vehicle combinations that can deliver further efficiency benefits.

Appendix 5:
Jurisdictional Reports on the Implementation and Effectiveness of the Movement of Controlled Waste between States and Territories NEPM

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 Greg Hunt MP, Minister for the Environment, for the reporting year ended 30 June 2014

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 working with the states and territories through the implementation working group (IWG) to continue to implement the NEPM in a consistent manner. Members of the IWG communicate regularly through email and meetings.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM provides an effective framework for implementation across the states and territories.

During the 2013–14 year the Commonwealth continued to work in three areas related to hazardous waste: data, reporting and infrastructure. Work commenced on a second, comprehensive national hazardous waste dataset, which includes, for the first time, analysis of the sources and fates of hazardous wastes as well as amounts and types of hazardous wastes generated. A baseline dataset of Australia's hazardous waste infrastructure was developed and work commenced on using this in an assessment of Australia's current and future hazardous waste infrastructure capacity and needs. A major project on the cost of hazardous waste to the Australian economy (including the costs of hazardous waste regulation) was completed. A specific analysis of contaminated soil wastes, including the extent to which these were covered by tracking arrangements under the NEPM, was also conducted.

New South Wales

Report to the National Environment Protection Council (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 Rob Stokes MP, Minister for Environment, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The National Environment Protection (Movement of Controlled Waste) Measure has been in place for more than 10 years and is operating smoothly, without any significant issues. Minor changes to the NEPM recommended following the 10-year review are expected to be introduced in New South Wales in September 2014 when the Protection of the Environment Operations (Waste) Regulation is remade.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM continues to provide an effective tool in minimising the potential for adverse impacts on the environment and human health associated with the movement of controlled waste. A total of 85,812 tonnes of controlled waste in 6,813 movements was reported this period as having been transported into New South Wales (tables 2 and 4). This is a 17 per cent increase on the 73,325 tonnes and a 15 per cent increase on the 5,907 movements in 2012–13.

Controlled wastes from Victoria accounted for the bulk of the increase in controlled waste imported into New South Wales in 2013–14, up by 10,576 tonnes. There were also significant increases from South Australia (2,145 tonnes) and Queensland (1,529 tonnes), partially offset by a decrease from Western Australia (1,310 tonnes).

The biggest component of the increase was lead and lead compounds, primarily used lead acid batteries, up 5,870 tonnes, with Victoria (3,746 tonnes) and South Australia (1,303 tonnes) being the major contributors. The other main waste streams contributing to the increase were acids, up 3,242 tonnes (mostly Victoria), and putrescible/organic waste, up 1,841 tonnes (Victoria and the Australian Capital Territory).

A number of compliance campaigns related to the transport of dangerous goods and controlled waste were undertaken during 2013–14. While compliance levels are generally very high (98.7 per cent), there has been a modest increase in discrepancies reported in 2013–14 compared to 2012–13. This increase is due primarily to one facility not completing transport certificates properly. The Environment Protection Authority is following up with this facility, which accounted for 63 per cent of all non-compliances, to ensure it improves its performance.

Table 1: Number of consignment authorisations issued by New South Wales

Reporting year	Consignment authorisations issued
2012–13	946
2013–14	1,113

Table 2: Quantity of controlled waste into New South Wales for the period 1 July 2013 to 30 June 2014—tonnes per waste category by state/territory

Code	Description	Vic	Qld	WA	SA	Tas	ACT	NT	Ex-Terr	Total (tonnes)
A	Plating & heat treatment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
B	Acids	11810.60	23.17	3.01	1.82	0.00	0.53	0.00	0.00	11839.13
C	Alkalis	1077.88	0.98	1.01	53.82	0.00	232.61	0.00	0.00	1366.30
D	Inorganic chemicals	19511.55	14481.47	4211.60	5919.26	3885.94	321.59	519.87	0.00	48851.28
E	Reactive chemicals	16.10	1.35	0.94	0.00	0.00	0.00	0.00	0.00	18.39
F	Paints, resins, inks organic sludges	1224.72	448.72	19.97	96.46	0.00	153.89	0.00	0.00	1943.76
G	Organic solvents	108.98	301.19	4.67	22.23	0.00	63.90	0.00	0.00	500.97
H	Pesticides	0.45	3.28	0.00	20.71	0.00	0.27	0.00	0.00	24.71
J	Oils	2317.32	752.27	84.59	0.00	67.87	1986.99	0.00	0.00	5209.04
K	Putrescible/ organic waste	3819.44	0.00	0.00	0.00	0.00	6396.03	0.00	0.00	10215.47
L	Industrial washwater		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M	Organic chemicals	134.49	700.08	0.21	53.49	21.25	34.25	0.00	0.00	943.77
N	Soil/sludge	1866.32	145.37	1.07	4.16	0.00	653.06	0.00	0.00	2669.98
R	Clinical & pharmaceutical	2.02	44.67	0.00	0.00	0.00	345.24	0.00	0.00	391.93
T	Misc.	2.37	0.95	5.36	0.02	0.00	1828.15	0.00	0.00	1836.85
	State Totals (tonnes)	**41892.24**	**16903.50**	**4332.43**	**6171.97**	**3975.06**	**12016.51**	**519.87**	**0.00**	**85811.58**

Table 3: Discrepancies in movements of controlled waste into New South Wales for the period 1 July 2013 to 30 June 2014—percentage of total movements

Discrepancy type	Vic	Qld	WA	SA	Tas	ACT	NT	Ex-Terr
Consignment non-arrival	0	0	0	0	0	0	0	0
Transport without authorisation	0	0	0	0	0	0	0	0
Non-matching documentation	0.56	0.93	0	0	0	2.73	0	0
Waste data	0	0	0	0	0	0	0	0

Table 4: Number of movements of controlled waste into New South Wales for the period 1 July 2013 to 30 June 2014

Vic	Qld	WA	SA	Tas	ACT	NT	Ex-Terr
2,515	1,187	238	292	214	2,341	26	0

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 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

There continues to be close consultation between the state and territory agencies as established under the NEPM agreement. However, there continues to be a decline in compliance by the waste industry.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

In the 2013–14 reporting period, 430 authorisations were issued. This is a decrease of 10 approvals from the previous year. Most authorisations were principally for the recycling and energy recovery of controlled waste.

The total amount of controlled waste brought into Victoria during the reporting year was 25,198 tonnes. This was a decrease of 8,886 tonnes compared with the amount reported in 2012–13.

Due to the continuing implementation of the Environment Protection Authority's (EPA's) new integrated information management system, the data for discrepancies in movements of controlled waste into Victoria in 2013–14 (see Table 3 below) remains unavailable at the time of reporting. The agency will resume reporting in 2014–15.

Inorganic chemicals remain a large percentage of the total tonnage transported to Victoria. The inorganic chemicals waste stream, consisting of metallic constituents, again accounted for almost 50 per cent of the total volume in 2013–14.

EPA Victoria is currently focusing on the transportation of industrial waste from Victoria to both limit the possibility of the movement of waste from Victoria and ensure that Victorian waste is taken to permitted facilities in Victoria. This is a multifaceted strategy that targets generators, consignors and transporters of industrial waste. Victoria will work with its counterparts in New South Wales and Queensland to deliver this strategy.

Table 1: Number of consignment authorisations issued by Victoria

Reporting year	Consignment authorisations issued
2012–13	440
2013–14	430

Table 2: Quantity of controlled waste into Victoria for the period 1 July 2013 to 30 June 2014—tonnes per waste category by state/territory

Code	Description	NSW	Qld	WA	SA	Tas	ACT	NT	Ex-Terr	Total (tonnes)
A	Plating & heat treatment									0.00
B	Acids	19	2		2	1				23.77
C	Alkalis	228	16		10	0				254.78
D	Inorganic chemicals	10234	42	179	37	61		6		10558.94
E	Reactive chemicals	12								11.54
F	Paints, resins, inks organic sludges	1029	484	277	138	17		7		1950.97
G	Organic solvents	1269	362	47	76	410				2164.60
H	Pesticides	64	713	403						1180.19
J	Oils	2289	1643	221	158	161		3		4474.99
K	Putrescible/ organic waste	2825			238					3062.50
L	Industrial washwater	33	36							69.10
M	Organic chemicals	128	148	7	13	80				375.89
N	Soil/sludge	196	77		69	77				418.36
R	Clinical & pharmaceutical	94			456	21				572.07
T	Misc.	43			12	25				80.79
	State Totals (tonnes)	**18464**	**3523**	**1132**	**1210**	**854**	**0**	**16**		**25198.49**

Table 3: Discrepancies in movements of controlled waste into Victoria for the period 1 July 2013 to 30 June 2014—percentage of total movements

Discrepancy type	NSW	Qld	WA	SA	Tas	ACT	NT	Ex-Terr *
Consignment non-arrival	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Transport without authorisation	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Non-matching documentation	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Waste data	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Table 4: Number of movements of controlled waste into Victoria for the period 1 July 2013 to 30 June 2014

NSW	Qld	WA	SA	Tas	ACT	NT	Ex-Terr*
2,485	417	239	732	296		25	

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 Andrew Powell MP, Minister for Environment and Heritage Protection, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Queensland Department of Environment and Heritage Protection (EHP) is responsible for the administration of the Controlled Waste NEPM in Queensland. The NEPM is implemented under the *Environmental Protection Act 1994* (EP Act) through Part 4 of the Environmental Protection (Waste Management) Regulation 2000. As per the NEPM, the regulation includes provisions in relation to obligations for the tracking of controlled waste into and out of Queensland, as well as requirements for the prior approval of consignments of controlled waste being transported 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, controlled waste licensing and compliance activities in Queensland.

- EHP 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 and waste handlers has helped to ensure that controlled wastes are consigned to appropriate facilities.
- The total amount of waste moved into Queensland (Table 2) for the period 2013–14 was 31,769 tonnes which is 9,421 tonnes more than the amount received in 2012–13 (22,347 tonnes).
- The main reason for this overall increase in waste received is an increase in waste movements from New South Wales (19,780 tonnes up to 27,320 tonnes). This was primarily due to an increase transported amounts of organic chemicals, soil/sludge and oils.
- Discrepancies in waste being transported into Queensland were mainly due to waste handlers transporting waste without consignment authorisation (5 per cent of all transportations). Of the total waste transportations undertaken without authorisation, 47 per cent (with a high proportion of asbestos, oils and grease trap wastes) was from northern New South Wales.
- During the 2013–14 the department increased its compliance effort associated with the transportation of controlled wastes. During the year, 11 penalty infringement notices (i.e. fines) were issued to waste transporters for transporting waste into Queensland without a consignment authorisation. A further 15 warning notices were issued.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Table 1: Number of consignment authorisations issued by Queensland

Reporting year	Consignment authorisations issued
2012–13	189
2013–14	195

Table 2: Quantity of controlled waste into Queensland for the period 1 July 2013 to 30 June 2014—tonnes per waste category by state/territory

Code	Description	NSW	Vic	WA	SA	Tas	ACT	NT	Ex-Terr	Total (tonnes)
A	Plating & heat treatment	38.28	0.00	0.00	0.00	86.00	0.00	16.00	0.00	140.28
B	Acids	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00
C	Alkalis	6.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.50
D	Inorganic chemicals	889.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	889.82
E	Reactive chemicals	173.32	0.00	0.00	0.46	0.00	0.00	0.00	0.00	173.78
F	Paints, resins, inks organic sludges	617.73	25.40	0.00	0.00	0.00	0.00	0.00	0.00	643.13
G	Organic solvents	262.08	0.00	0.00	0.00	0.00	0.00	38.00	0.00	300.08
H	Pesticides	96.64	45.09	0.00	18.40	0.00	0.00	0.00	0.00	160.13
J	Oils	8,186.60	24.35	0.00	163.00	0.00	0.00	1,445.62	0.00	9819.57
K	Putrescible/ organic waste	3,223.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3223.67
L	Industrial washwater	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M	Organic chemicals	4,842.65	45.91	0.00	7.41	0.64	0.00	2.00	0.00	4898.61
N	Soil/sludge	8,652.36	2,489.07	0.00	0.00	42.00	0.00	0.00	0.00	11183.43
R	Clinical & pharmaceutical	233.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	233.19
T	Misc.	94.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	94.68
	State Totals (tonnes)	**27319.52**	**2629.82**	**0.00**	**189.27**	**128.64**	**0.00**	**1501.62**	**0.00**	**31768.87**

Table 3: Discrepancies in movements of controlled waste into Queensland for the period 1 July 2013 to 30 June 2014—percentage of total movements

Discrepancy type	NSW	Vic	WA	SA	Tas	ACT	NT	Ex-Terr
Consignment non-arrival **	11%	0%	2%	1%	1%	0%	6%	0%
Transport without authorisation ***	4%	1%	0%	0%	0%	0%	0%	0%
Non-matching documentation	0%	0%	0%	0%	0%	0%	0%	0%
Waste data	0%	0%	0%	0%	0%	0%	0%	0%

** The figures stated are for consignment non-arrivals as a percent of the total number of consignment approved in 2013–14. However, some of the consignments are still open; thus the waste may be transported into Queensland during 2014–15.

*** The figures are for transportations into Queensland without authorisation as a percentage of the total number of waste movements into Queensland (not as a percentage of the total number of waste movements for each individual jurisdiction).

Table 4: Number of movements of controlled waste into Queensland for the period 1 July 2013 to 30 June 2014

NSW	Vic	WA	SA	Tas	ACT	NT	Ex-Terr
2,119	88	0	20	8	0	32	0

Western Australia

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure for Western Australia by Hon Albert Jacob MLA, Minister for the Environment; Heritage, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

On 1 July 2013 the Western Australian Department of Environment Regulation became responsible for administrating the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure (NEPM). This occurs through the provisions of the Environmental Protection (Controlled Waste) Regulations 2004.

The Environmental Protection (Controlled Waste) Regulations 2004 provide for the licensing of carriers, drivers, vehicles and/or tanks, and the use of controlled waste tracking forms to ensure controlled waste is delivered to an appropriate waste facility.

During 2013–14 the department completed the second phase of a review and amendment programme for the management of controlled waste in Western Australia. The amendments to the regulations were gazetted on 1 August 2014 and will be reported in the next NEPM reporting period.

The controlled waste tracking system has undergone a suite of usability enhancements that increase the accuracy and reliability of tracking data.

The department issued five consignment authorisations for the movement of controlled waste into Western Australia during 2013–14. Subsequent commercial decisions resulted in no controlled waste being transported under two of the consignment authorisations.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Table 1: Number of consignment authorisations issued by Western Australia

Reporting year	Consignment authorisations issued
2011–12	7
2012–13	0
2013–14	5

Table 2: Quantity of controlled waste into Western Australia for the period 1 July 2013 to 30 June 2014—tonnes per waste category by state/territory

Code	Description	NSW	Vic	Qld	SA	Tas	ACT	NT	Ex-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							107.00		107.00
K	Putrescible/ organic waste									0.00
L	Industrial washwater									0.00
M	Organic chemicals							24.00		24.00
N	Soil/sludge									0.00
R	Clinical & pharmaceutical									0.00
T	Misc.									0.00
	State Totals (tonnes)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**131.00**		**131.00**

Table 3: Discrepancies in movements of controlled waste into Western Australia for the period 1 July 2013 to 30 June 2014—percentage of total movements

Discrepancy type	NSW	Vic	Qld	SA	Tas	ACT	NT	Ex-Terr
Consignment non-arrival							0	
Transport without authorisation							0	
Non-matching documentation							0	
Waste data							0	

Table 4: Number of movements of controlled waste into Western Australia for the period 1 July 2013 to 30 June 2014

NSW	Vic	Qld	SA	Tas	ACT	NT	Ex-Terr
						5	

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 Ian Hunter MLC, Minister for Sustainability, Environment and Conservation, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In South Australia the Movement of Controlled Waste NEPM has operated as an environment protection policy (EPP) under the now-repealed section 28A of the *Environment Protection Act 1993* through a transitional provision in the *Environment Protection (Miscellaneous) Amendment Act 2005*. It is primarily implemented through conditions attached to environmental authorisations, in accordance with the Environment Protection Act.

The transitional provision allows the EPP to continue in operation but does not make provision for amendment of the policy in the event that the NEPM itself is amended, as it was in 2012. To incorporate any amendments, the EPP needs to be remade subject to the transitional provision. South Australia has been undertaking this process through 2013–14.

In South Australia, waste producers, transporters and operators of waste facilities are required to complete waste transport certificates and, where necessary, apply for consignment authorisation for the transport and receipt of controlled waste into or out of the state.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The implementation of the NEPM continues to provide a medium for consultation and communication with other jurisdictions in relation to waste management. The NEPM 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
2012–13	161
2013–14	202

Table 2: Quantity of controlled waste into South Australia for the period 1 July 2013 to 30 June 2014—tonnes per waste category by state/territory

Code	Description	NSW	Vic	Qld	WA	Tas	ACT	NT	Ex-Terr	Total (tonnes)
A	Plating & heat treatment	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
B	Acids	2.08	12.00	0.00	24.81	0.00	0.00	27.24	0.00	66.13
C	Alkalis	1.08	21.48	56.50	5.00	0.00	0.00	330.97	0.00	415.03
D	Inorganic chemicals	12620.74	11006.03	0.00	631.65	115390.72	0.00	507.49	0.00	140156.63
E	Reactive chemicals	1.80	1.86	0.00	0.47	0.00	0.00	0.00	0.00	4.13
F	Paints, resins, inks organic sludges	114.43	1413.50	142.89	59.30	0.00	0.00	18.36	0.00	1748.48
G	Organic solvents	20.40	52.89	13.43	132.33	0.00	0.00	0.00	0.00	219.05
H	Pesticides	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.03
J	Oils	37.91	1338.03	1345.98	268.91	7.18	0.00	935.24	0.00	3933.25
K	Putrescible/ organic waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
L	Industrial washwater	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
M	Organic chemicals	0.00	45.08	0.00	0.00	0.00	0.00	3.77	0.00	48.85
N	Soil/sludge	0.65	403.75	0.00	169.00	0.00	0.00	6.26	0.00	579.66
R	Clinical & pharmaceutical	0.00	0.00	0.00	0.00	26.87	0.00	132.37	0.00	159.24
T	Misc.	1.16	0.00	0.20	3.19	0.00	0.00	54.99	0.00	59.54
	State Totals (tonnes)	**12800.75**	**14294.63**	**1559.02**	**1294.66**	**115424.77**	**0.00**	**2016.69**	**0.00**	**147390.52**

Table 3: Discrepancies in movements of controlled waste into South Australia for the period 1 July 2013 to 30 June 2014 Percentage of total movements

Discrepancy Type	NSW	Vic	Qld	WA	Tas	ACT	NT	Ex-Terr
Consignment non-arrival	20	30	31	30	17	0	34	0
Transport without authorisation	0	1	1	1	0	0	1	0
Non-matching documentation	51	28	73	86	25	0	80	0
Waste data	12	8	0	9	8	0	12	0

Table 4: Number of movements of controlled waste into South Australia for the period 1 July 2013 to 30 June 2014

NSW	Vic	Qld	WA	Tas	ACT	NT	Ex-Terr
540	618	130	225	52	0	353	0

Tasmania

Report to the NEPC on the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure by the Hon Brian Wightman MP, Minister for Environment, Parks and Heritage (1 July 2013 to 31 March 2014) and the Hon Matthew Groom MP, Minister for Environment, Parks and Heritage (31 March 2014 to 30 June 2014) for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In Tasmania the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure is a state policy under the *State Policies and Projects Act 1993*. The key legislative instrument for implementation of the NEPM is the *Environmental Management and Pollution Control Act 1994*. The Department of Primary Industries, Parks, Water and Environment is the responsible agency for the purposes of implementation of the NEPM.

The NEPM is fully implemented in Tasmania.

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.

Controlled waste received from external territories is reported separately. Most of the controlled waste consignment authorisations issued by Tasmania are for controlled wastes returned to Australia from Antarctica.

Approval was given during the reporting period, for a Tasmanian trial to be conducted for the cement kiln processing of spent cracking catalyst from Victoria as an alternate feed stock. The trial was conducted in accordance with the approval given, and an additional trial has since been approved.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

A significant impetus in achieving the NEPM goal has been ongoing consultation between waste producers, transporters and the Department of Primary Industries, Parks, Water and Environment on controlled waste matters, particularly in relation to reducing the amount of controlled waste generated at source. A reduction in risks of adverse impacts on the environment and human health associated with transport of controlled waste has been achieved through improved waste management and tracking.

There has been additional and ongoing consultation 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
2012–13	24
2013–14	24

Table 2: Quantity of controlled waste into Tasmania for the period 1 July 2013 to 30 June 2014 —tonnes per waste category by state/territory

Code	Description	NSW	Vic	Qld	WA	SA	ACT	NT	Ex-Terr	Total (tonnes)
A	Plating & heat treatment									0.00
B	Acids								6.00	6.00
C	Alkalis								0.20	0.20
D	Inorganic chemicals		600.00						1.22	601.22
E	Reactive chemicals								0.02	0.02
F	Paints, resins, inks organic sludges								2.00	2.00
G	Organic solvents								30.00	30.00
H	Pesticides									0.00
J	Oils								65.00	65.00
K	Putrescible/ organic waste								92.00	92.00
L	Industrial washwater									0.00
M	Organic chemicals								0.15	0.15
N	Soil/sludge								37.50	37.50
R	Clinical & pharmaceutical								0.60	0.60
T	Misc.								3.50	3.50
	State Totals (tonnes)	**0.00**	**600.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**238.19**	**838.19**

Table 3: Discrepancies in movements of controlled waste into Tasmania for the period 1 July 2013 to 30 June 2014—percentage of total movements

Discrepancy type	NSW	Vic	Qld	WA	SA	ACT	NT	Ex-Terr
Consignment non-arrival								
Transport without authorisation								
Non-matching documentation								
Waste data								

Table 4: Number of movements of controlled waste into Tasmania for the period 1 July 2013 to 30 June 2014

NSW	Vic	Qld	WA	SA	ACT	NT	Ex-Terr
	1						23

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, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The NEPM has been fully implemented and operational in the ACT since March 2000, with no major issues having been identified with its operation. The ACT Government's Environment Protection and Water Regulation division continued to work with industry during 2013–14 to ensure efficient implementation of the NEPM.

Information sheets (which include an explanation of producer, transporter and waste facility responsibilities and instructions on how to complete a waste transport certificate) produced by Environment Protection and Water Regulation continued 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.

There has been an increase in the number of consignment authorisations issued and the quantity of controlled waste reported as transported into the ACT. This is due to compliance campaigns undertaken by the ACT during the reporting period.

Environment Protection and Water Regulation continued to participate in the implementation working group for the NEPM.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Table 1: Number of consignment authorisations issued by Environment Protection and Water Regulation

Reporting year	Consignment authorisations issued
2012–13	44
2013–14	57

Table 2: Quantity of controlled waste into the Australian Capital Territory for the period 1 July 2013 to 30 June 2014—tonnes per waste category by state/territory

Code	Description	NSW	Vic	Qld	WA	SA	Tas	NT	Ex-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	132.01	281.05	28.40						441.46
K	Putrescible/ organic waste	166.00								166.00
L	Industrial washwater									0.00
M	Organic chemicals									0.00
N	Soil/sludge	16.00								16.00
R	Clinical & pharmaceutical	237.60								237.60
T	Misc.	5.00								5.00
	State Totals (tonnes)	**556.61**	**281.05**	**28.40**	**0.00**	**0.00**	**0.00**	**0.00**		**866.06**

Table 3: Discrepancies in movements of controlled waste into the Australian Capital Territory for the period 1 July 2013 to 30 June 2014—percentage of total movements

Discrepancy type	NSW	Vic	Qld	WA	SA	Tas	NT	Ex-Terr
Consignment non-arrival								
Transport without authorisation								
Non-matching documentation								
Waste data								

Table 4: Number of movements of controlled waste into the Australian Capital Territory for the period 1 July 2013 to 30 June 2014

NSW	Vic	Qld	WA	SA	Tas	NT	Ex-Terr
816	15	1					

Northern Territory

Report to the NEPC on the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure for the Northern Territory by the Minister for Lands, Planning and the Environment for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Waste Management and Pollution Control Act provides the legislative basis to regulate and administer the NEPM. The Northern Territory Environment Protection Authority currently administers these 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 by Northern Territory WorkSafe's administration of the Transport of Dangerous Goods by Road and Rail (National Uniform Legislation) Act.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Movement of controlled waste tends to be from the Northern Territory to other states. The NEPM does provide a consistent system for use in the Northern Territory when required, and the Northern Territory has implemented a paper-based system for consignment authorisations and waste tracking certificates. The Northern Territory is exploring options for an electronic database to facilitate better cohesion with tracking requirements under the NEPM.

Table 1: Number of consignment authorisations issued by the Northern Territory

Reporting year	Consignment authorisations issued
2012–13	Nil
2013–14	2

Table 2: Quantity of controlled waste into the Northern Territory for the period 1 July 2013 to 30 June 2014—tonnes per waste category by state/territory

Code	Description	NSW	Vic	Qld	WA	SA	Tas	ACT	Ex-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				41.54					41.54
K	Putrescible/ organic waste									0.00
L	Industrial washwater									0.00
M	Organic chemicals									0.00
N	Soil/sludge									0.00
R	Clinical & pharmaceutical									0.00
T	Misc.									0.00
	State Totals (tonnes)	**0.00**	**0.00**	**0.00**	**41.54**	**0.00**	**0.00**	**0.00**		**41.54**

Table 3: Discrepancies in movements of controlled waste into the Northern Territory for the period 1 July 2013 to 30 June 2014—percentage of total movements

Discrepancy type	NSW	Vic	Qld	WA	SA	Tas	ACT	Ex-Terr
Consignment non-arrival								
Transport without authorisation								
Non-matching documentation								
Waste data								

Table 4: Number of movements of controlled waste into the Northern Territory for the period 1 July 2013 to 30 June 2014

NSW	Vic	Qld	WA	SA	Tas	ACT	Ex-Terr
			2				

Appendix 6:
Jurisdictional Reports on the Implementation and Effectiveness of the National Pollutant Inventory NEPM

Commonwealth

Report to the NEPC on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for the Commonwealth by the Hon Greg Hunt MP, Minister for the Environment, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

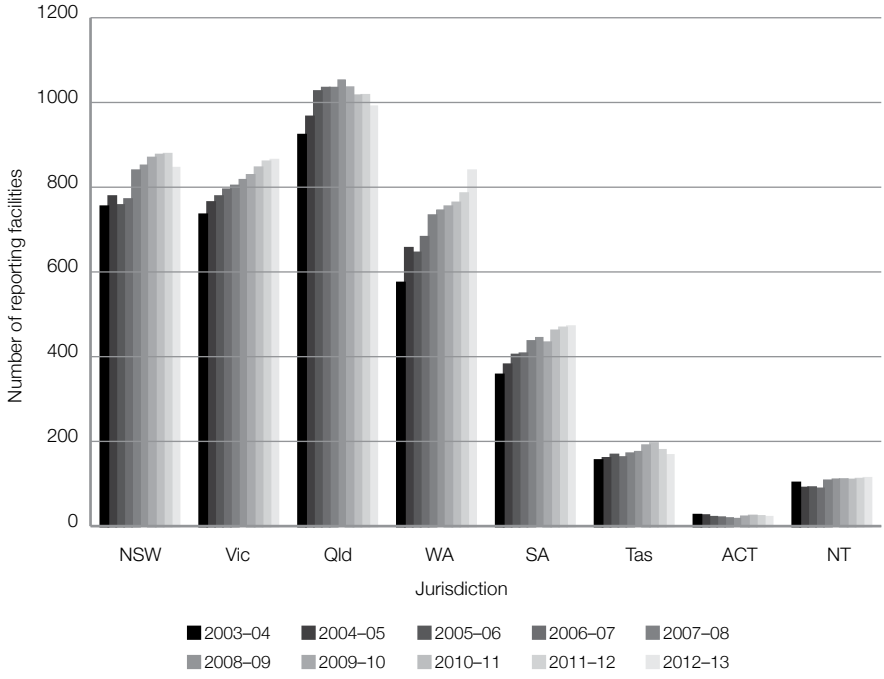
The Commonwealth implements the NEPM administratively and ensures that its obligations under the *National Environment Protection Act 1994* and *National Environment Protection Measures (Implementation) Act 1998* are met.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The number of facilities reporting to the National Pollutant Inventory (NPI) fell from 4,328 in 2011–12 to 4,317 in 2012–13.

Figure 1 below shows the number of facilities reporting to the NPI in all jurisdictions over the past 10 years.

Figure 1: Number of reporting facilities in each jurisdiction by year since 2003–04



The Commonwealth continued to work cooperatively with all jurisdictions to administer the NPI NEPM and improve the online reporting system to ensure that industry reporting is streamlined and the data collected is accurate. The Commonwealth also improved the accessibility of the NPI website to the community, industry, researchers and government, and led work with jurisdictions to update key industry guidance manuals.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
PUBLIC		
• 205,451 visitors on website	• The number of visitors decreased from 282,334 in the previous reporting year.	• 108 calls were received directly to the Commonwealth through the freecall phone line. • Responses were provided to 131 emails received through the Commonwealth public email inbox. • Significant work was undertaken by the Commonwealth to develop and maintain the NPI website and database search engine. This work ensured that relevant and up-to-date information is readily accessible to the public and other key stakeholders.
INDUSTRY		
• 4,317 reports for 2012–2013 • 4,328 reports for 2011–2012 • 4,299 reports for 2010–2011 • 218 new reporters • 1 new sector reporting • No confidentiality claims submitted	• Industry representatives contributed to updates of NPI reporting tools and emission factors; these were well received by NPI reporters and industry organisations. • The NPI continued to build positive relationships with key industry stakeholders, researchers and the community. • The NPI provided sponsorship and organisational support for the 3rd annual conference of the Australian Institute of Environmental Accounting, which was an important forum for the exchange of ideas between government and industry.	• Work was undertaken to update a number of industry manuals, including the NPI Guide, Combustion Engines, Maritime Operations, and Mining and Processing of Non-Metallic Minerals. • The NPI responded to a number of industry queries related to reporting and technical issues. • The Online Reporting System underwent maintenance to improve compatibility with desktop software.
GOVERNMENT		
• 16 facilities from 5 Commonwealth departments reported to the NPI in 2012–13. • 0 desktop audits • 0 on-site audits • 0 regulatory actions	• Government environment and research agencies noted that the NPI was a valuable tool for informing environmental management but could be improved to maximise its value. Key areas for improvement include more robust emission estimation methods, better spatial information and more comprehensive datasets, particularly in relation to diffuse data.	• The Commonwealth chaired and provided secretariat support for the NPI Implementation Working Group, which oversights administration of key NPI activities.

New South Wales

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for New South Wales by the Hon Rob Stokes MP, Minister for Environment, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The New South Wales Environment Protection Authority implements the National Environment Protection (National Pollutant Inventory) Measure (NEPM) through the provisions in chapter 4 of the Protection of the Environment Operations (General) Regulation 2009, including:

- definition of reporting premises and substance thresholds
- reporting and record-keeping requirements
- compliance and penalty requirements
- emission estimation techniques
- exemptions.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

National Pollutant Inventory reporting

The Environment Protection Authority conducts an annual face-to-face training programme, which includes a series of half-day training courses to assist facility reporters with:

- understanding key elements of National Pollutant Inventory reporting
- using the inventory online reporting system
- applying calculation and validation tools rather than emission estimation technique manuals to reduce time and improve accuracy.

The number of facility reporters using the National Pollutant Inventory online reporting system increased from 95 per cent in 2011–12 to 98 per cent in 2012–13.

The National Pollutant Inventory online reporting system has led to improvements in the quality and accuracy of facility data by including estimation and validation tools and minimising the need for manual data entry. There are opportunities for further improvements, including:

- additional calculation tools to estimate the transfer of NPI substances in waste streams from key industry sectors
- emission factors for non-standard fuels
- improved fugitive emission estimation methods
- an interactive online training programme.

Public activities

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
PUBLIC		
The number of community member visits to the National Pollutant Inventory website was recorded nationally at 282,334 in 2012–13, up from 213,856 in 2011–12.	• Academics and researchers continue to use the National Pollutant Inventory data for modelling and other studies. • The media utilises National Pollutant Inventory data where environmental issues of concern are identified. Some issues have been identified: • community users of NPI data frequently fail to access 'transfer' data as the 'search by form' screen does not incorporate 'transfer' destination searches. • enquiries from public and media continue to demonstrate a growing awareness of the dataset; however, there continues to be a need to provide contextual information about the data.	• Presentation to stakeholders during consultation.

Industry and government activities

There were 31 new reporters in 2012–13.

The Environment Protection Authority undertakes industry sector reviews to identify facilities that may be required to report data to the National Pollutant Inventory. Generally, these industry sector reviews include facilities that currently hold an environment protection licence issued under the *Protection of the Environment Operations Act 1997*.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
INDUSTRY		
• 869 reports for 2012–13 • Compared to 880 reports for 2011–12 • 31 new reporters in 2012-13 • 1 new sector reporting • No confidentiality claims submitted	• Uptake of the National Pollutant Inventory online reporting system continued. In 2012–13, 98% of facilities used the National Pollutant Inventory online reporting system, compared with 95% in 2011–12. • Training and support provided by the Environment Protection Authority to facility reporters has improved data quality and reduced costs to National Pollutant Inventory facility reporters.	• During 2012–13, the Environment Protection Authority provided training to 75 new reporters including use of the National Pollutant Inventory online reporting system. • There were ongoing industry requests to the Environment Protection Authority for training and guidance material on transfers of National Pollutant Inventory substances in waste streams.
GOVERNMENT		
• 869 desktop audits • 3 site visits	• The Environment Protection Authority continues to use the National Pollutant Inventory to inform policy and regulatory approaches. • The Environment Protection Authority continues to use the National Pollutant Inventory to analyse environmental outcomes in relation to the regulation of substances at industrial facilities.	• The Environment Protection Authority continues to utilise an internal communication programme to inform staff about the importance of the National Pollutant Inventory and the emission estimation techniques. • Regular National Pollutant Inventory officer meetings facilitate information exchange and knowledge sharing between jurisdictions and seek to ensure a consistent 'harmonised' approach for reporters with multiple facilities 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 2013

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

No implementation issues arose during 2012–13.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The National Pollutant Inventory NPEM continues to be effectively implemented in Victoria.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
PUBLIC		
	• Specific feedback was received from the community, industry or government.	
INDUSTRY		
• 864 published reports for 2012–13 • 859 published reports for 2011–12 • 32 new reporters • 0 confidentiality claims submitted	• No specific feedback was received from the community, industry or government.	• 93% of published industry reports for 2012–13 were submitted online (the same as for 2011–12). • Three industry training sessions were conducted.
GOVERNMENT		
• 178 desktop audits • 10 on-site audits • 2 regulatory actions	• No specific feedback was received from the community, industry or government.	• Approximately 21% of reports underwent a desktop analysis.

Queensland

Report to the NEPC on the implementation of the National Environment Protection Measure (National Pollutant Inventory) for Queensland by the Hon Andrew Powell MP, Minister for Environment and Heritage Protection, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

- There remain opportunities to improve the effectiveness of the National Pollutant Inventory (NPI) NEPM.
- Queensland supports the current review of the NPI NEPM scheduled for completion by March 2015.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
PUBLIC		
	There have been several media articles during the period in relation to NPI implementation.	
INDUSTRY		
986 reports for 2012–13 1,014 reports for 2011–12 55 new reporters 2 new sectors reporting 0 confidentiality claims submitted	The majority of industry continues to support the online reporting system for submitting emissions and transfer data as opposed to paper reporting. Two new sectors reporting are the waste remediation and motor vehicle manufacturing sectors. There continued to be interest in industry receiving NPI training.	Three NPI industry training sessions were held in Brisbane, with a total of 60 representatives attending. Seven on-site audits were held to assess the thoroughness and accuracy of facility reporting.
GOVERNMENT		
986 desktop audits 7 on-site audits 0 regulatory actions	The Department of Environment and Heritage Protection, in collaboration with the Department of Science, Information Technology, Innovation and the Arts (DSITIA), conducted combined NPI and environmental licence inspections to ensure a consistent approach to environmental regulation from the Queensland Government. NPI facility data has substantially contributed to regional air quality studies conducted by DSITIA within Queensland.	Every facility report was subject to a desktop evaluation. Reminders were sent to all eligible facilities in advance of the due date for reporting (with two emails sent to those who provided an email address). An overview presentation was provided to key government stakeholders in relation to the latest facility emissions data.

Western Australia

Report to the National Environmental Protection Council (NEPC) on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for Western Australia by the Hon Albert Jacob MLA, Minister for Environment; Heritage, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Department of Environment Regulation (DER) is responsible for implementing the National Environment Protection (National Pollutant Inventory) Measure (NPI NEPM) under the Environmental Protection (NEPM-NPI) Regulations 1998. The implementation of the NEPM continues to be successful in Western Australia.

DER has identified that the administration of the NEPM will be enhanced though increased emphasis on the collection and reporting of aggregated emissions data. The Perth Air Emissions Study 2011–12 was commenced to update aggregated emissions data for the greater Perth metropolitan region.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The 12 NPI industry audits undertaken have led to improved accuracy and better understanding of inventory reporting. DER has been actively involved in the NPI implementation working group to continually improve industry reporting material and ensure programme implementation is nationally consistent.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
PUBLIC		
	• Few direct enquiries received from the public regarding NPI database information. • Environment groups and the media utilise NPI data where environmental issues of concern are identified. • There was significant media and community interest in emissions from coal-fired power stations in the Collie region.	
INDUSTRY		
• 839 reports for 2012–13 • 785 reports for 2011–12 • 65 new reporters • No new sectors reporting • No confidentiality claims submitted	• Widespread compliance with the online reporting system: 94% uptake in WA for 2012–13 (1% increase). • Some smaller facilities require above-average reporting guidance due to the lack of dedicated personnel. • Major industrial facilities maintain awareness of community interest in their emissions, and ensure reports truly reflect site emissions. • Support given by DER staff is acknowledged by reporters.	• Training sessions provided to industry reporters included information sessions, a webinar and online reporting training. • Continued follow-up of potential reporters in several industry sectors. • Reporters regularly reminded of reporting deadlines and supplied with reporting information additional to that available on website. • Increased number of on-site audits conducted, with positive industry feedback on the audit process.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
GOVERNMENT		
• 839 desktop audits • 12 on-site audits • No regulatory actions	• Identification and ranking of WA's major emitters, and comparison with national data. • DER uses the NPI to inform policy development and programme implementation and support regulatory activity. • DER uses NPI data for the development of emissions inventory for the greater Perth metropolitan region.	• Details of major emitters provided to DER licensing personnel for information, data cross-checking and follow-up as required. • Commencement of Perth Air Emissions Study for 2011–12.

South Australia

Report to the NEPC on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for South Australia by the Hon Ian Hunter MLC, Minister for Sustainability, Environment and Conservation, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

A detailed air emissions inventory remains a strategic priority for both the National Pollutant Inventory (NPI) programme and the South Australian Environment Protection Authority (EPA). In accordance with the NPI memorandum of understanding, the acquisition and publishing of facility emission data remains the priority to ensure that maximum national benefit is derived from the NPI NEPM.

Aggregate emissions data are required for reliable comparison with industry emissions; however, inadequate funding levels do not currently permit appropriate resourcing for the updating of aggregate emissions data (last done in 2003). In an attempt to harness national efforts on this issue, South Australia and New South Wales organised an aggregate emissions data workshop held in March 2014 in Sydney, which was attended by environment protection, air quality and NPI staff from across Australia.

Other pressures on NPI resources include timely updates to emission estimation technique manuals. A decrease in NPI staffing has led to inadequate communication of the programme, issues with the database user interface such as maps not working, and limited updates to manuals.

Within South Australia a high staff turnover within reporting organisations has resulted in a continuing need to train reporters in the use of the online reporting system.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The three NPI industry audits undertaken have led to improvement in the accuracy and better understanding of NPI reporting. The South Australian NPI team has been actively involved in the NPI implementation working group to continually improve industry reporting material.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
PUBLIC		
	• There is a lack of awareness of the NPI programme among the general public. • The media use NPI data in reports.	• South Australia presented at the Australian Institute of Environmental Accounting Conference in November 2013. • The South Australian 2012–13 NPI dataset was provided to the open data portal at www.data.sa.gov.au to create greater awareness of and access to NPI data.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
INDUSTRY		
• 489 reports for 2012–13 • 482 reports for 2011–12 • 22 new reporters • No new sector reporting • No confidentiality claims submitted	• Online reporting training has been well received by industry.	• A newsletter was published on the EPA website to inform reporters about updates to industry guidance material and provide general information about NPI reporting. • Industry enquiries have been followed up. • Training and drop-in sessions on NPI requirements and online reporting were held in Adelaide. • South Australia updated the ferrous foundries and the poultry raising manuals.
GOVERNMENT		
• 489 desktop audits • 3 on-site audits • 1 expiation (fine) issued for late reporting	• The EPA uses NPI data to implement the resource efficiency component of its load-based, or 'polluter pays', licensing system. • NPI data have been used by the Legislation and Policy branch to highlight industry sources of PM_{10} in the Adelaide airshed, to support changes in legislation. • PM_{10} NPI data were used by the Legislation and Policy branch for the regulatory impact statement on impacts arising from the Proposed Draft Environment Protection (Air Quality) Policy. • NPI data were used in the 2013 State of the Environment Report to show emission trends of key pollutants. • Licence coordinators use NPI data to check whether licensees have provided correct information on emissions from fuel burning and whether emissions require that a higher activity level be applied for licence renewals. • NPI data are vital for developing air quality modelling to provide comprehensive spatially distributed diffuse and industrial point pollutant emission data across all South Australian airsheds. • Specific NPI data have been provided on request to EPA senior management and to the Minister for Sustainability, Environment and Conservation.	• Participation in the NPI implementation working group is important to discuss policy and strategy issues and technical implementation details.

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 (1 July 2013 to 31 March 2014) and the Hon Matthew Groom MP, Minister for Environment, Parks and Heritage (31 March 2014 to 30 June 2014) for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The National Pollutant Inventory Environment Protection Measure (NPI NEPM) continues to be successfully implemented in Tasmania.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
PUBLIC		
	• NPI data are used when specific issues are being considered, mostly by interest groups.	• There is a general lack of awareness of the NPI at the community level in Tasmania.
INDUSTRY		
• 172 reports for 2013–14 • 179 reports for 2012–13 • 8 new reporters • No new sectors reporting • No confidentiality claims submitted	• 98% of reports received via the online reporting system. • Small facilities require reporting guidance due to understanding of reporting requirements.	• Emails sent to reporters to remind them of reporting obligations. • Ongoing training and site visits to assist reporters.
GOVERNMENT		
• 160 desktop audits • 12 on-site audits • No regulatory actions	• Staff within the EPA Division access NPI data to assist with relevant projects.	• Participation in the NPI implementation working group.

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, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Environment and Planning Directorate implemented and enforced the NEPM under the provisions of the *Environment Protection Act 1997*.

There was a continued need for training of reporters using the online reporting system due to staff turnover.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
PUBLIC		
	• No specific feedback was received from the community.	
INDUSTRY		
• 21 reports for 2012–13 • 23 reports for 2011–12 • No new reporters • No new sectors reporting • No confidentiality claims submitted	• Training was considered essential for understanding of the programme and the online reporting system.	• Online reporting system was utilised by all ACT reporters. • One-on-one training sessions continued to work successfully. • Industry enquiries were responded to in a timely manner.
GOVERNMENT		
• 21 desktop audits • No on-site audits • No regulatory actions	• No specific feedback was received from the government.	• Every NPI report underwent a desktop validation. • The ACT liaised with other jurisdictions to achieve nationally consistent implementation.

Northern Territory

Report to the NEPC on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for the Northern Territory by the Minister for Lands, Planning and the Environment for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The National Pollutant Inventory (NPI) programme is implemented in the Northern Territory through an environmental protection objective established under the Waste Management and Pollution Control Act. Overall responsibility for implementation of the NPI rests with the Northern Territory Environment Protection Authority.

Reporting data on transfers of NPI substances is more consistent as industry gains an understanding of the reporting requirements.

The NT does not have sufficient funding to perform aggregate airshed emissions. Emissions captures in aggregate emissions include diffuse sources such as motor vehicles and garden equipment.

Collaborative work has continued on standardising the desktop auditing of reports across all jurisdictions.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
PUBLIC		
• Unknown	n/a	n/a
INDUSTRY		
• 110 reports for 2013–14 • 110 reports for 2012–13 • 0 new reporters • 0 new sectors reporting • 0 confidentiality claims submitted	• Industry feedback indicated that interaction with the online reporting system was generally positive, with the exception of 4 reporters that needed a high degree of assistance in lodging reports. • 100% of reporters used the online reporting system	n/a
GOVERNMENT		
• 0 desktop audits • 0 on-site audits • 0 regulatory actions	• The NT EPA used emissions data from the NPI to assist in environmental licensing issues.	n/a

Appendix 7:
Jurisdictional Reports on the Implementation and Effectiveness of the Used Packaging Materials NEPM

Commonwealth

Report to the NEPC on the implementation of the National Environment Protection (Used Packaging Materials) Measure for the Commonwealth by the Hon Greg Hunt MP, Minister for the Environment, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Used Packaging Materials NEPM is implemented and enforced by participating jurisdictions through necessary laws and other administrative arrangements. It requires participating jurisdictions to establish a statutory basis for ensuring that signatories to the Australian Packaging Covenant are not competitively disadvantaged in the marketplace by fulfilling their commitments under the covenant.

The covenant is an agreement entered into by governments and industry participants in the packaging supply chain, based on the principles of product stewardship and shared responsibility for reducing the environmental impacts of consumer packaging.

The majority of packaging brand owners in Australia fall within one or more state and territory jurisdiction. If they are not exempt from the NEPM and the covenant, brand owners must become covenant signatories or become subject to NEPM requirements.

The NEPM requires participating state and territory jurisdictions to report annually on brand owners that are subject to NEPM requirements, carry out surveys of packaged products to ascertain the effectiveness of the NEPM, and report local government collection and participation data for kerbside or other municipal material recovery systems.

The Commonwealth NEPM applies to packaging brand owner companies with over 50 per cent Commonwealth ownership, and to the Commonwealth's jurisdictional territories. Australia Post is the only Commonwealth brand owner under the definition of the NEPM, and Christmas Island and the Cocos Keeling Islands are the only Commonwealth territories where the NEPM could be applied.

The Australian Government and Australia Post are signatories to the covenant and therefore are not subject to the requirements of the NEPM. The Australian Government encourages all Commonwealth agencies, including Australia Post, to undertake covenant activities.

The Australian Government, as a member of the covenant's management committee and council, participates in governance of the covenant. In 2013–14 the Australian Government provided 50 per cent of the total government funds required for covenant secretariat operating costs.

The NEPM requires the Commonwealth to provide information annually to the NEPC on the overall national performance of the covenant. In accordance with Section 19 of the NEPM, the covenant council is to provide information to the Commonwealth in relation to:

- 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, with reference to the key performance indicators and targets specified in the covenant
- a statement of interpretation of the information.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

At the end of June 2014 there were 928 covenant signatories in total nationally, of which 860 (93 per cent) were compliant. Non-compliant signatories are removed from the register of covenant signatories and referred to the relevant state and territory government for follow-up under the NEPM in each jurisdiction.

Compliant brand owner signatories fulfil the following covenant requirements:

- submit within three months of becoming a signatory an action plan that includes the information set out in Schedule 1 to the covenant
- implement the submitted action plan and the convenant's sustainable packaging guidelines
- by 31 March each year (following the year in which a company becomes a signatory) submit an annual report that includes the information set out in Schedule 1 to the covenant
- agree to an independent audit of annual report and action plan implementation if required
- pay the required contribution to the covenant fund
- maintain and make available records of the implementation of action plans, which can validate the data submitted in annual reports
- assist the Covenant Council in responding to complaints about action plans or the design and use of signatory packaging.

Key highlights of activities managed under the Convenant include:

- an improvement across all key performance indicators, including an increase in the packaging recycling rate from 39 per cent in 2003 to 64.2 per cent in 2013
- a focus on capacity building to assist signatories in meeting their obligations under the convenant and enhancing communications
- streamlining of processes to minimise impact and duplication on signatories.

New South Wales

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Used Packaging Materials) Measure for New South Wales by the Hon Rob Stokes MP, Minister for Environment, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

New South Wales maintained its signatories during 2013–14 and focused in the implementation of the Waste Less, Recycle More initiative, which includes a $250 million investment in new waste and recycling infrastructure.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Reporting year	Number of covenant signatories
2012–13	403
2013–14	404

Recovery data

Nil: no brand owner was subject to record-keeping obligations under the New South Wales regulation.

Supporting data

Nil

Complaints, investigations and prosecutions

No complaints in relation to specific businesses were received.

Statement of interpretation of the information

Nil

Local government data

Local government data is available on the Environment Protection Authority's website http://www.epa.nsw.gov.au/warr/datareport.htm.

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 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

There were no significant implementation issues arising in 2013–14.

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 Australian Packaging Covenant are not competitively disadvantaged in the marketplace by fulfilling their commitments under the covenant.

The secretariat of the covenant is responsible for initially approaching companies that are identified as brand owners (and potential brand owners) to encourage them to become signatories to the covenant. The secretariat then refers 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 covenant. Jurisdictions then write to, and speak with, representatives of the companies referred to them.

By 30 June 2014 there were 324 Victorian signatories (up slightly from 322 on 30 June 2013), including 285 brand owners registered in Victoria (up slightly from 282).

The number of Victorian signatories is expected to increase further in 2014–15 as a result of EPA compliance activity in mid-2014.

Reporting year	Number of covenant signatories
2012–13	322
2013–14	324

Recovery data

Clause 18 of the Used Packaging Materials NEPM requires jurisdictions to carry out surveys of packaged products ('brand owner surveys') at least once every year to ascertain the effectiveness of the measure in preventing free riding.

Two brand owner surveys were undertaken in 2012–13, with results provided to the covenant secretariat in August 2012 and May 2013. The timing of the next brand owner survey is not yet confirmed.

Supporting data

Nil

Complaints, investigations and prosecutions

Nil

Statement of interpretation of the information

Nil

Local government data

In early 2014, local government recycling data for 2012–13 was published on EPA Victoria's website (http://www.epa.vic.gov.au/your-environment/waste/local-government-kerbside-recycling).

Data for 2014 is expected to be published on EPA's website in late 2014.

Queensland

Report to the NEPC on the implementation of the National Environment Protection (Used Packaging Materials) Measure for Queensland by the Hon Andrew Powell, Minister for Environment and Heritage Protection, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

There were no significant implementation issues arising in 2013–14.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

The primary purpose of the National Environment Protection (Used Packaging Materials) Measure (NEPM) is to establish a statutory framework to ensure that signatories to the Australian Packaging Covenant are not competitively disadvantaged in the marketplace as a result of fulfilling their signatory commitments.

In Queensland the NEPM is given effect through the Waste Reduction and Recycling Regulation 2011. Covenant activities in Queensland are administered by the Department of Environment and Heritage Protection.

As at 30 June 2014 there were 74 Queensland signatories (a decrease of two from 2012–13).

Reporting year	Number of covenant signatories
2012–13	76
2013–14	74

Jurisdictional activities:

- Chair of the Australian Packaging Covenant Council
- Actively contributing to and supporting the administration processes of the Australian Packaging Covenant
- Continued support for and provision of funding towards national and state-based projects
- Continued support for and provision of funding towards compilation of the National Litter Index.

Project funding:

In the 2013–14 funding round, seven new project proposals were assessed under round 1 of funding applications. Six of these were supported to move into round 2 with a request to provide a detailed breakdown of the project and funding arrangements. In-principle support has been provided for:

- Hamilton Island Materials Recovery Facility—installation of a mini materials recovery facility, introduction of co-mingled recycling bins to key locations across the island, and a comprehensive waste education programme on Hamilton Island
- Burdekin Shire Council—Getting Burdekin Business Busy Recycling programme engaging industry and business within Burdekin Shire to increase the level of understanding and knowledge of correct recycling practices, improve recycling rates and reduce litter.

Recovery data

Nil: no brand owner was subject to record-keeping obligations under the Queensland regulation.

Supporting data

Clause 18 of the NEPM requires jurisdictions to undertake annual brand owner surveys. In June 2013 a survey of retail department stores was completed in which 203 products were surveyed. The survey identified 183 brand owners, of which 141 are non-signatories. The results of this survey were provided to the covenant secretariat.

Complaints, investigations and prosecutions

No complaints were received during the reporting period.

In April 2014, under section 41H of the Waste Reduction and Recycling Regulation 2011, written notices were sent to 32 brand owners that had been identified as non-signatories to the covenant. This resulted in three new signatories and three brand owners providing statutory declarations that their turnover was less than $5 million per year.

Of the 74 Queensland signatories, eight are non-compliant as at 30 June 2014.

Statement of interpretation of the information

Nil

Local government data

All local governments are required to provide information relating to paper and packaging collection by 30 September of each year. It is not possible to collect and analyse the detailed data and meet the publishing timeframe of this report, so the information will be published on the Department of Environment and Heritage Protection website by December 2014 at http://www.ehp.qld.gov.au.

Western Australia

Report to the National Environmental Protection Council (NEPC) on the implementation of the National Environment Protection (Used Packaging Materials) Measure for Western Australia by the Hon Albert Jacob MLA, Minister for Environment; Heritage, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

On 1 July 2013 the Western Australian Department of Environment Regulation (DER) became responsible for administering the implementation of the National Environment Protection (Used Packaging Materials) Measure (UPM NEPM).

The NEPM is implemented in Western Australia through the Environmental Protection (NEPM-UPM) Regulations 2013 made under the *Western Australian Environmental Protection Act 1986*. These regulations were enacted on 25 September 2013.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

DER continued to provide advice to brand owners and encourage participation in the Australian Packaging Covenant during the 2013–14 reporting period.

During the reporting period, DER contacted 15 brand owners in relation to the UPM NEPM. These brand owners were referred by the covenant secretariat for being non-compliant with the covenant, or for failing to respond to requests to join the covenant.

Of these 15 companies:

- five were confirmed as exempt
- eight became new signatories or compliant signatories
- one was referred to another jurisdiction
- one was no longer operating.

During the reporting period, the number of Western Australian signatories increased from 52 to 53. There was also a decrease from six to four non-compliant signatories.

Reporting year	Number of covenant signatories
2011–12	51 including 3 non-compliant
2012–13	52 including 6 non-compliant
2013–14	53 including 4 non-compliant

Recovery data

No Western Australian based companies have been required to provide records for auditing.

Supporting data

The brand owner survey was not undertaken during the 2013–14 reporting period. The survey is scheduled to be finalised by September 2014 in accordance with the UPM NEPM requirement for an annual survey to be undertaken within the calendar year.

Complaints, investigations and prosecutions

No complaints were received, or investigations or prosecutions undertaken, during the 2013–14 reporting period.

Statement of interpretation of the information

Not applicable.

Local government data

Local government data will be available at www.der.wa.gov.au from March 2015.

South Australia

Report to the NEPC on the implementation of the National Environment Protection (Used Packaging Materials) Measure for South Australia by the Hon Ian Hunter MLC, Minister for Sustainability, Environment and Conservation, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Legislative, regulatory and administrative framework

The Environment Protection (Used Packaging Materials) Policy 2012 is the legal instrument to enforce the obligations of this NEPM within South Australia and provides the regulatory underpinning for the Australian Packaging Covenant. The alignment of the NEPM, the policy and the covenant is the key to providing national consistency in regulatory support for packaging.

In 2013–14, South Australia continued to strengthen its relationships with industry and other jurisdictions to ensure national consistency around the enforcement of the NEPM and the policy at state level.

Implementation issues arising

No significant issues arose in relation to the implementation of the policy in South Australia.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

South Australia has continued to promote and support the implementation of the covenant, and has been represented on national and jurisdictional bodies. South Australia also promoted the covenant through participation in industry and public seminars to advise brand owners of their obligations under the state policy should they choose not to join the covenant.

During the 2013–14 reporting period 19 companies were referred to the Environment Protection Authority (EPA) by the covenant secretariat to enforce the obligations of the South Australian policy. South Australia continues to contact companies that are referred to the EPA for action to advise them of their requirement to comply with the policy in this state.

Reporting year	Number of covenant signatories
2012–13	51
2013–14	51

Recovery data

Nil: no brand owner was required to report during this reporting period.

Supporting data

Clause 18 of the NEPM requires jurisdictions to carry out surveys of packaged products to ascertain the effectiveness of the measure in preventing free riding. The South Australian brand owner survey has been scheduled to be conducted in September 2014. The list of companies in South Australia identified as non-signatories to the covenant will be forwarded to the covenant secretariat upon completion of the survey.

Complaints, investigations and prosecutions

No complaints were received during this reporting period.

Statement of interpretation of the information

South Australia continued to implement the NEPM through the South Australian Environment Protection (Used Packaging Materials) Policy 2012. South Australia continues to promote and support the implementation of the covenant through a range of initiatives such as collaboration with industry and other jurisdictions on consistent application of the covenant and NEPM/policy requirements.

Local government data

To be provided at a later date (not required until November of each year).

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 (1 July 2013 to 31 March 2014) and the Hon Matthew Groom MP, Minister for Environment, Parks and Heritage (31 March 2014 to 30 June 2014) for the reporting year ended 30 June 2014

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 Australian Packaging Covenant have not been completed during the reporting period. The NEPM has provided a strong incentive for them to join the covenant. Tasmania has 15 company signatories and 17 covenant signatories overall.

Reporting year	Number of covenant signatories
2012–13	17
2013–14	17

Recovery data

No recovery data to report under clause 16 of the NEPM.

Supporting data

No surveys completed during the reporting period.

Complaints, 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 2013–30 June 2014
Total number of councils reporting:	19
Percentage of total councils:	73.08 per cent of total
Percentage of total councils reporting, broken down into the regional waste management groups:	Northern Tasmanian Waste Management Group—100 per cent (two of eight councils did not provide a kerbside recycling service) Cradle Coast Waste Management Group—42.86 per cent Southern Waste Strategy Authority—83.33 per cent Independent councils—0 per cent (one of two councils did not provide a kerbside recycling service)

Container types and collection frequencies for all containers (e.g. crate, split bin or bag) provided for kerbside collection by number of councils

Container type	Material type collected in container	Frequency of service	Total no. of councils
Crate	Comingled	Weekly	1
MGB 140L	Comingled	Fortnightly	2
MGB 240L	Comingled	Fortnightly	13
Offer both MGB 140L & 240L options	Comingled	Fortnightly (for both options)	3

Other types of recycling services (e.g. drop-off) by number of councils

All councils provide alternative drop-off facilities either at landfills or at waste transfer stations. Several councils offer recycling bins at council parks and grounds.

Total number of premises/households

Residential	176,572
Non-residential	6,623

Number of households/premises serviced by recycling collections

	Kerbside	Drop-off (optional)
Residential	153,408	131,139
Non-residential	3,558	3,547

Average premises fee charged by council for recycling services

Residential	$93.57
Non-residential	$117.17

Annual per premise cost to council to provide a recycling service

Residential	$80.21
Non-residential	$108.64

Proportion of households/premises with access to a recycling service

81.93 per cent

Average participation rate

82.06 per cent

Table 1: Amounts of materials collected at the kerbside sent for secondary use / energy recovery and contamination (waste) disposed of to landfill 1 July 2013 to 30 June 2014

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 of to landfill (only report total tonnes)
TOTAL PACKAGING PAPER i.e. cardboard and liquid paper board		17,643	
TOTAL NON PACKAGING PAPER i.e. paper mixed, paper white office, newspaper and magazines		12,579	
TOTAL GLASS		14,397	
TOTAL PLASTICS		4,212	
TOTAL ALUMINIUM (cans)		372	
TOTAL STEEL (cans, tins etc.)		729	
TOTAL	**54,993**	**49,932**	**5,061**

The above data represent the total amount of recyclables processed in Tasmania, including kerbside recycling.

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 Mr Simon Corbell MLA, Minister for the Environment, for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The ACT Government carries out the functions of both state and local government. In the ACT the Environment and Planning Directorate has responsibility for the implementation and administration of the National Environment Protection (Used Packaging Materials) Measure (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 (IWRP) 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 in 2013 to ensure consistency with the new Australian Packaging Covenant (APC) and the NEPM.

The ACT is a signatory to the APC and is implementing a range of measures as part of its five-year Action Plan 2011–2016. The Action Plan can be accessed at www.environment.act.gov.au/waste.

The ACT Waste Management Strategy 2011–2025 has the goal of achieving full resource recovery and a carbon neutral waste sector with over 90 per cent of resources recovered by 2025. Measures being pursued to achieve these targets are:

- ACTSmart office and business programmes—these programmes facilitate the on-site sorting of waste at offices and business to increase recycling. There are now more than 686 sites participating in this programme, including major shopping centres and sporting venues.
  http://www.actsmart.act.gov.au/your_business/actsmart_business_and_office_map
- Public place recycling in the city centre. The public place recycling trial has resulted in around 28.5 tonnes of recyclable material taken to the material recycling facility (MRF) at Hume. All material delivered to the MRF has contained less than 8 per cent contamination and has therefore been accepted
- Public event recycling for events in the ACT. The programme has been utilised by 51 events held in 2013–14, including all major Centenary of Canberra events. As a result 72,617 kilograms of waste were diverted from landfill into recycling and 946,250 patrons were given the opportunity to recycle at these events.
- Investigation of an MRF for municipal solid waste.

In accordance with the *Plastic Bags Ban Act 2010* the ACT conducted a legislated review in 2014 of the ban on lightweight plastic shopping bags. The review found a high level of ongoing consumer support and retailer compliance. Data collected for the review indicates that the amount of plastic bag material to landfill has been reduced and that plastic bag litter has also fallen. The review was released in June 2014.

The ACT Government is working constructively within the Council of Australian Governments to develop more effective mechanisms to regulate packaging waste.

PART 2—ASSESSMENT OF NEPM EFFECTIVENESS

Recovery data

There are no known major brand owners based in the ACT that are likely to have responsibilities under the NEPM; hence none have been audited in 2013–14. Five signatories to the APC based in the ACT are industry and/or government bodies.

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 ACT Government's highly successful ACTSmart Office and ACTSmart Business programmes to facilitate on-site waste reduction and recycling by Canberra businesses and offices continued to grow. Accredited sites have all achieved a reduction of waste to landfill, some by as much as 90 per cent. Many participants in the ACTSmart programmes have not only reduced waste to landfill but also reduced their waste management costs. This programme was extended through a cross-border agreement with Queanbeyan City Council to allow Queanbeyan-based businesses and offices to participate.

Supporting data

No retailer survey of packaged products was conducted in the ACT in 2013–14. However, data provided for the ACTSmart sites shows that they are presently diverting the equivalent of 2,911 domestic waste wheelie bins from landfill every week and the number of participants is growing strongly.

Complaints, investigations and prosecutions

Since the implementation of the updated IWPR no complaints, investigations, prosecutions or enforcement actions were recorded.

Local government data

Local government data for the ACT is available on the Territory and Municipal Services Directorate website www.tams.act.gov.au/recycling-waste/reports_data_forms.

Northern Territory

Report to the NEPC on the implementation of the National Environment Protection (Used Packaging Materials) Measure for the Northern Territory by the Minister for Lands, Planning and the Environment for the reporting year ended 30 June 2014

PART 1—IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Northern Territory 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 Northern Territory.

There are no known major brand owners based in the Northern Territory who are likely to have responsibilities under the NEPM. In the event that Northern Territory 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.

The Environment Protection (Beverage Containers and Plastic Bags) Act prohibits retailers from providing customers with lightweight polyethylene shopping bags with handles and establishes the legislative framework for a container deposit scheme.

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 2013–14 under clause 18 of the NEPM. No complaints have been received, investigations undertaken or prosecution mounted pursuant to this measure.

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 Northern Territory. 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.

Only two councils in the Northern Territory provide kerbside recycling services. Due to the small, dispersed population and distance to markets, kerbside recycling is only financially viable in the major population centres of Darwin and 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 its existing programmes.

Reporting year	Number of covenant signatories
2012–13	n/a
2013–14	n/a

Recovery data

A total of 153,906,094 beverage containers approved under the Container Deposit Scheme were sold into the Northern Territory during 2013–14. A return rate of 41.79 per cent was achieved over this period. During the 2013–14 reporting period, 64,315,721 containers were reused, recycled or appropriately disposed of.

In June 2014, an external review of the Northern Territory plastic bag ban's first two years of operation was completed. A high-level analysis conducted on overall plastic bag use suggested that a reduction of approximately 10.3 million plastic bags has occurred as a result of the ban, which commenced in September 2011.

Supporting data

There have been no brand owners identified in the Northern Territory in 2013–14 that would have obligations under clause 18 of the NEPM.

Complaints, investigations and prosecutions

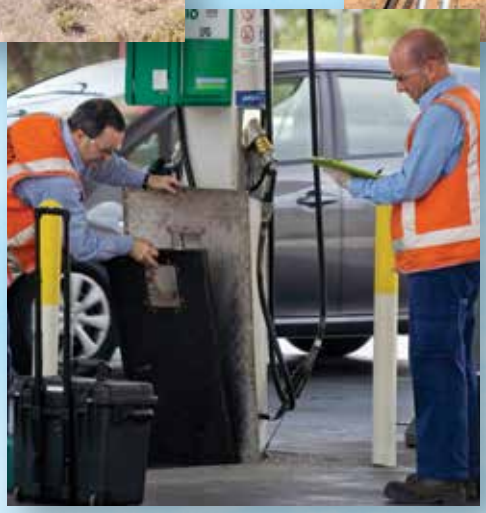
During 2013–14, 14 officers were appointed under the Environment Protection (Beverage Containers and Plastic Bags) Act to monitor compliance and undertake enforcement action.

Statement of interpretation of the information

The Northern Territory Government imposes an investigative approach to the legislation under the National Environment Protection (Used Packaging Materials) Measure and the Environment Protection (Beverage Containers and Plastic Bags) Act. Prosecution will be mounted pursuant to the NEPM where required.

Local government data

Not available.



National Environment Protection Council
GPO Box 787
CANBERRA ACT 2601
Tel: 02 6274 1111
Email: NEPC@environment.gov.au