







Annual Report 2012-2013

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Executive Officer NEPC Service Corporation PO Box 787 Canberra ACT 2601

Image credits: (Back L To R) Soil testing near the Laratinga Wetlands in Mount Barker (John Baker) Rubbish washed up on the foreshore of Torrens Island (John Baker) Rangelands NRM region (Dragi Markovic) Urban buildings (Jenny Tomkins) Recycling in the suburbs (Jenny Tomkins) The Greater Blue Mountains Area (Mark Mohell) Natural Resource Management Officer doing water quality sampling at Boyagarra Pool on the Avon River near Brookton (Michael Marriott) Washed up tyres gathered for disposal (John Baker).

# Chair's Foreword

The National Environment Protection Council was established under the *National Environment Protection Council Act 1994* (NEPC Act). The NEPC Act has two primary objectives: first, to ensure that people enjoy the benefit of equivalent protection from air, water or soil pollution and from noise, wherever they live in Australia. Second, 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 (NEPM). These measures are nationally consistent environmental standards, goals, or protocols relating to air, water, noise, site contamination, hazardous waste and recycling.



The Assessment of Site Contamination NEPM, for example, establishes a

nationally consistent approach to the assessment of site contamination to ensure sound environmental management practices by the community. It is used by regulators, site assessors, consultants, environmental auditors, landowners, developers and industry. On the basis of extensive and sustained consultation and technical research led by Western Australia, the National Environment Protection Council approved an amendment to the Assessment of Site Contamination measure in early 2013. Application of the new guidance will improve consistency in assessment outcomes and provide greater certainty that the Australian community and environment are protected.

This is an example of the Council's work in 2012-2013 to deliver positive outcomes for communities, businesses and the environment.

eg Hurt

**Greg Hunt** *Chair* National Environment Protection Council

# Members of the National Environment Protection Council

# From 1 July 2012 to 30 June 2013

Jurisdiction	Member	Duration of membership
Commonwealth	The Hon Tony Burke MP — Minister for Sustainability, Environment, Water, Population and Communities	26 October 2010 onwards
New South Wales	The Hon Robyn Parker MP — Minister for the Environment; Minister for Heritage	10 June 2011 onwards
Victoria	The Hon Ryan Smith MP — Minister for Environment and Climate Change	28 March 2011 onwards
Queensland	The Hon Andrew Powell MP — Minister for Environment and Heritage Protection	17 May 2012 onwards
Queensiand	The Hon Mark McArdle MP — Minster for Energy and Water Supply	28 November 2012 onwards
	The Hon Albert Jacob MLA — Minister for Environment; Minister for Heritage	23 April 2013 onwards
Western Australia	The Hon Terry Redman MLA — Minister for Water	23 April 2013 onwards
	The Hon Bill Marmion MLA — former Minister for Environment; former Minister for Water	28 January 2011 to 21 March 2013
South Australia	The Hon Ian Hunter MLC — Minister for Sustainability, Environment and Conservation; Minister for Water and the River Murray	15 April 2013 onwards
South Austrana	The Hon Paul Caica MP — former Minister for Sustainability, Environment and Conservation; former Minister for Water and the River Murray	21 May 2010 to 21 January 2013
Tasmania	The Hon Brian Wightman MP — Minister for Environment, Parks and Heritage	12 April 2011 onwards
Australian Capital Territory	Mr Simon Corbell MLA — Minister for Environment and Sustainable Development	7 November 2008 onwards
Northern Territory	The Hon Peter Chandler MLA — Minister for Lands, Planning and Environment	21 February 2013 onwards

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# Executive Officer's Report

The Standing Council on Environment and Water (the Standing Council) and the National Environment Protection Council (NEPC) together with the Council's Senior Officials Committee and NEPC Committee, focused on furthering the Council of Australian Governments' (COAG) five environment and water priorities. These are:

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

#### **OVERVIEW**

#### About the National Environment Protection Council

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

The NEPC has two primary functions:

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

The members of the NEPC are ministers from the participating jurisdictions (i.e. Commonwealth, state or territory governments). A list of members can be found on page iv.

The National Environment Protection Council Act (Section 36 (aa)) states that the NEPC Service Corporation will provide assistance and support to other ministerial councils as directed by council. The Service Corporation also provides support to the Standing Council on Environment and Water.

#### About the Standing Council on Environment and Water

The COAG Standing Council on Environment and Water is a council of ministers responsible for environment and water from the Commonwealth, all states and territories and New Zealand. The Australian Local Government Association (ALGA) is also represented. The Commonwealth minister responsible for the environment chairs the Council.

The purpose of the Standing Council is to promote the protection of the environment and sustainable water management to enhance social and human health, and economic and environmental outcomes, in a sustainable manner for current and future generations. It provides a forum for governments to agree on actions to address key national environmental protection and water management issues. It also enables governments to coordinate environment and water-related programs and funding.

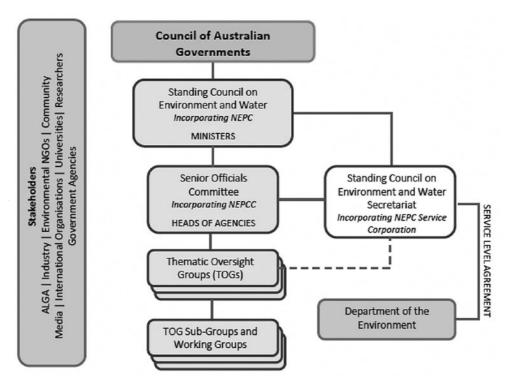
The Council addresses broad national policy issues relating to environmental management and protection, particularly in regard to air, land, water, waste and biodiversity matters. The scope of the Council also includes COAG's cross-cutting priorities, which cover natural, historic, and Indigenous heritage responsibilities.

The Council comprises an important part of the COAG council system.

# ABOUT THE NEPC SERVICE CORPORATION

The NEPC Service Corporation is a statutory authority which provides project-management services and administrative support to the Council and NEPC in the development of national environmental policy and NEPMs. The NEPC Service Corporation is funded by jurisdictional contributions and is hosted by the Commonwealth Department of the Environment. The statutory office of the Executive Officer has the responsibility of managing the NEPC Service Corporation and is accountable to ministers through the NEPC Committee (refer to governance structure below).

### Governance structure



### ABOUT NATIONAL ENVIRONMENT PROTECTION MEASURES

The National Environment Protection Council Act recognises the importance of communities and business in protecting Australia's environment, and that national outcomes are best achieved through regionally tailored approaches.

The National Environment Protection Council Act provides for the creation of 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. A National Environment Protection Measure 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, as explained below.

*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.

*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 programs 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).

# STANDING COUNCIL AND NEPC ACHIEVEMENTS

Report on Council-agreed priorities and legislative responsibilities

A substantial amount of work was completed during the reporting year with progress made on NEPM variations and other projects.

To date, there have been three reviews of the National Environment Protection Council Act. Each review found that NEPMs deliver positive outcomes for the community, business and the environment. The most recent review, completed in December 2012, recommended that the scope of the Act be broadened to enable coverage of a more comprehensive suite of environmental issues.

NEPC considered the third review and agreed on its response at its fourth meeting on 11 April 2013. Both documents were tabled in the Commonwealth Senate on 1 July 2013.

Council approved an amendment to the Assessment of Site Contamination NEPM in early 2013, after extensive consultation and research lead by Western Australia. The amended NEPM will improve consistency in assessment outcomes and provide greater certainty that the Australian community and environment are appropriately protected.

In May 2013, New South Wales, in leading the National Plan for Clean Air Thematic Oversight Group, commenced the development of a comprehensive report to Council on whether to vary the particle standards in the Ambient Air Quality NEPM.

Ministers released Australia's Native Vegetation Framework, which is a national policy document that sets directions and priorities across governments and the wider community to achieve sustainable management of native vegetation.

Ministers approved a minor variation to the Movement of Controlled Waste NEPM to rectify previous drafting errors and improve the readability of the NEPM.

Council agreed to develop a packaging impacts Decision Regulation Impact Statement (RIS) to analyse the seven options addressing packaging waste included in the Consultation RIS, and an additional three new options arising from public feedback.

Ministers agreed to the release of three Consultation Regulatory Impact Statements during the reporting year.

- a Consultation RIS on the management of chemical environmental risks which outlined options for the development of a national standard-setting body to better manage the environmental risks from chemicals
- a Consultation RIS on reducing emissions from wood heaters explored options for a national policy and/or regulatory framework for reducing emissions from wood heaters and is an important element in the development of a National Plan for Clean Air
- a Consultation RIS on the potential regulation of water market intermediaries which reviewed options to manage the risk of any misconduct by intermediaries to the integrity of Australian water markets.

#### **MEETINGS**

#### Councils

During 2012–13, the Standing Council and NEPC met concurrently on 24 August 2012 and 11 April 2013. Standing Council considered three items out of session.

#### Committees

The Senior Officials Committee and NEPC Committee met concurrently on 18 July 2012, 21 November 2012 and 15 March 2013 and considered 19 items out of session.

#### Thematic Oversight Groups (TOGs)

In September 2012, the Senior Officials Committee agreed that secretariat services for the TOGs would be provided by the lead jurisdictions (noting that project funds will continue to be managed by the Council's Secretariat). Lead jurisdictions are as follows:

- · National Plan for Clean Air TOG-New South Wales
- · Waste and Chemicals TOG-Commonwealth
- · Seamless Environmental Regulation TOG-Victoria
- Landscape and Ecosystem Scale Biodiversity TOG-Queensland
- National Water Reform TOG-Commonwealth

The National Plan for Clean Air TOG has overseen development, management, review and/or reporting on the Air Toxics, Ambient Air Quality, and Diesel Vehicle Emissions NEPMs. The TOG met four times and considered three items out of session.

The Waste and Chemicals TOG has overseen development, management, review and/or reporting on the Assessment of Site Contamination, Movement of Controlled Waste between States and Territories, National

Pollutant Inventory and Used Packaging Materials NEPMs. The TOG has met three times and considered five items out of session.

The Seamless Environmental Regulation TOG and the Landscape and Ecosystem Scale Biodiversity TOG did not meet nor consider any items out of session. The National Water Reform TOG met four times and considered seven items out of session.

#### WEBSITE

The COAG Standing Council on Environment and Water website continues to be a source of information for government, industry and the public on the range of projects and issues addressed by the Council.

#### NEPC SERVICE CORPORATION PERFORMANCE

#### Delivering efficiencies

During the reporting year, the Secretariat has systematically worked to define, clarify and improve the administrative processes supporting the effective operation of the Council and its subsidiary bodies.

It has:

- improved communication with jurisdictional coordination contact areas and with the secretariats of other standing councils
- · developed detailed guidance on the provision of secretariat services to the TOGs
- engaged regular external review services to improve financial administration and facilitate the annual audit process
- · developed a framework to support a standardised approach to the review of NEPMs.

#### Management of human resources

I filled the position of the Executive Officer for the reporting period. At the conclusion of the reporting period, six staff—including the Executive Officer—were engaged by the Service Corporation from the Department of the Environment.

#### **Risk management**

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

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

The Service Corporation previously reported that it developed a fraud control plan in accordance with the *Financial Management and Accountability Act 1997* (Cwlth). There were no cases of fraud reported during the financial year.

#### Governance arrangements

#### Audit and governance

The Audit and Governance Committee provided advice to the Executive Officer on matters related to prudential management, governance and risk management. The Audit and Governance Committee met once during the 2012–13 reporting year, on 12 September 2012. Subsequently, the Senior Officials Committee agreed to reconfigure the audit and governance arrangements. As a result, Malcolm Thompson (Commonwealth) and Jane Holden (New South Wales) were nominated to review the 2012–13 financial statements and provide oversight of the Secretariat's operations during transition to incorporation within the Department of the Environment.

#### **External scrutiny**

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

The Australian National Audit Office was again appointed auditor for the 2012–13 financial year (see Statement by Auditor, page 8).

#### **Financial performance**

Details of financials matters are contained in the Auditor's Report and financial statements (see page 7).

#### **Procurement and consultancies**

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

In 2012–13, the NEPC Service Corporation engaged Equity Partners to prepare the financial statements. The NEPC Service Corporation is excluded from AusTender. However, systems are in place to record and publicise details of all contracts and consultancies.

#### **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 complies 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*.

In conclusion, I would like to acknowledge the contributions of all stakeholders to the important work of the Council which contributes to better environmental practices and general well-being for all Australians. I would also like to thank the NEPC Annual Report Working Group for their input in producing this publication. My staff and I look forward to continuing this work with a renewed focus in the coming year.

Theo Hooy NEPC Executive Officer National Environment Protection Council

# Financial Statements

National Environment Protection Council 2012–13 Annual Report 7



#### **INDEPENDENT AUDITOR'S REPORT**

#### To the Minister for the Environment, Heritage and Water

I have audited the accompanying financial statements of the National Environment Protection Council Service Corporation for the year ended 30 June 2013, which comprise: a Statement by the Chief Executive Officer; the Statement of Comprehensive Income; Balance Sheet; 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.

#### **Executive Officer's Responsibility for the Financial Statements**

The Executive Officer of the National Environment Protection Council Service Corporation is responsible for the preparation of the financial statements that give a true and fair view in accordance with the Finance Minister's Orders made under the *Commonwealth Authorities and Companies Act 1997*, including the Australian Accounting Standards, and for such internal control as is necessary to enable the preparation of the 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 the Australian Auditing Standards. These auditing standards require that I comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the 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 Executive Officer, as well as evaluating the overall presentation of the financial statements.

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

#### Independence

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

#### **Opinion**

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

- (a) have been prepared in accordance with the Finance Minister's Orders made under the *Commonwealth Authorities and Companies Act 1997*, including the Australian Accounting Standards; and
- (b) give a true and fair view of the matters required by the Finance Minister's Orders including the National Environment Protection Council Service Corporation's financial position as at 30 June 2013 and of its financial performance and cash flows for the year then ended.

Australian National Audit Office

S Buchanan

Serena Buchanan Audit Principal

Delegate of the Auditor-General

Canberra 12 September 2013

# Statement by Executive Officer For the period ended 30 June 2013

In my opinion, the attached financial statements for the year ended 30 June 2013 are based on properly maintained financial records and give a true and fair view of the matters required by the Finance Minister's Orders made under the *Commonwealth Authorities and Companies Act 1997*, as amended.

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

This statement is made in accordance with a resolution of the Senior Officials Committee.

T. Hooy

NEPC Executive Officer 11 September 2013

# Statement of Comprehensive Income For the period ended 30 June 2013

	Note	2013	2012
		\$	\$
EXPENSES			
Supplier	3A	2,298,207	3,043,216
Write-down and impairment of assets	3B	13,551	8
Loss on disposal of assets	3C		6,057
Total expenses		2,311,758	3,049,281
LESS:			
OWN-SOURCE INCOME			
Own-source revenue			
Sale of goods and rendering of services	4A	-	70
Interest	4B	126,468	208,891
Total own-source revenue		126,468	208,961
GAINS			
Other gains	4C	-	115,300
Total gains			115,300
Total own-source income		126,468	324,261
Net cost of services		2,185,290	2,725,020
Contributions from jurisdictions	4D	2,410,966	1,102,464
Surplus/(Deficit) from continuing operations		225,676	(1,622,556)
Surplus (Denert) nom continuing operations			(1,022,330)
OTHER COMPREHENSIVE INCOME			
Items not subject to subsequent reclassification to profit or loss			
Changes in asset revaluation reserves		-	-
Total other comprehensive income		-	-
Total comprehensive income/(loss)		225,676	(1,622,556)

# Balance Sheet as at 30 June 2013

	Note	2013	2012
		\$	\$
ASSETS			
Financial Assets			
Cash and cash equivalents	5A	4,350,196	5,064,825
Trade and other receivables	5B	552,286	565,164
Total financial assets	-	4,902,482	5,629,989
	-		
Total assets	_	4,902,482	5,629,989
	-		
LIABILITIES			
Payables			
Suppliers	7A	365,815	1,336,361
Other payables	7B	17,363	-
Total payables		383,178	1,336,361
Total liabilities	-	383,178	1,336,361
	-		
Net assets	_	4,519,304	4,293,628
	-		
EQUITY			
Reserves		11,977	11,977
Retained surplus	_	4,507,327	4,281,651
Total equity	_	4,519,304	4,293,628

# Statement of Changes in Equity For the period ended 30 June 2013

	Retained	Earnings	Asset Rev Surj		Total Equity	
	2013	2012	2013	2012	2013	2012
	\$	\$	\$	\$	\$	\$
Opening Balance						
Balance carried forward from previous period	4,281,651	5,904,207	11,977	11,977	4,293,628	5,916,184
Adjusted opening balance	4,281,651	5,904,207	11,977	11,977	4,293,628	5,916,184
Comprehensive income						
Other comprehensive income	-	-	-	-	-	-
Surplus/(Deficit) for the period	225,676	(1,622,556)	-	-	225,676	(1,622,556)
Total comprehensive income	225,676	(1,622,556)	-	-	225,676	(1,622,556)
Closing balance as at 30 June	4,507,327	4,281,651	11,977	11,977	4,519,304	4,293,628

# Cash Flow Statement For the period ended 30 June 2013

	Note	2013	2012
		\$	\$
OPERATING ACTIVITIES			
Cash received			
Contribution from jurisdictions		2,614,270	1,974,256
Interest		123,959	235,678
Other		-	70
Net GST received			142,405
Total cash received		2,738,229	2,352,409
Cash used		((0.257)	
Net GST paid		(60,357)	-
Employees		-	(48,801)
Suppliers T. ( )		(3,392,501)	(2,047,372)
Total cash used		(3,452,858)	(2,096,173)
Net cash (used in)/received from operating activities	8	(714,629)	256,236
INVESTING ACTIVITIES			
Cash received			
Investments		-	3,318,270
Total cash received		-	3,318,270
Cash used			
Investments		-	(1,000,000)
Total cash used		-	(1,000,000)
Net cash recevied from investing activities		-	2,318,270
-			
Net (decrease)/increase in cash held		(714,629)	2,574,506
Cash and cash equivalents at the beginning of the reporting period		5,064,825	2,490,319
Cash and cash equivalents at the end of the reporting period	8	4,350,196	5,064,825
cash and each equivalents at the end of the reporting period	0		

# Schedule of Commitments As at 30 June 2013

	2013	2012
	\$	\$
BY TYPE		
Commitments receivable		
Net GST recoverable on commitments	(24,286)	(48,654)
Total commitments receivable	(24,286)	(48,654)
Commitments payable		
Project funding agreements	267,147	535,193
Total commitments payable	267,147	535,193
Net commitments by type	242,861	486,539
BY MATURITY		
Commitments receivable		
Net GST recoverable on commitments		
One year or less	(24,286)	(21,654)
From one to five years	-	(27,000)
Total GST recoverable on commitments	(24,286)	(48,654)
Commitments payable Project funding agreement commitments		
One year or less	267,147	238,193
From one to five years		297,000
Total project funding agreement commitments	267,147	535,193
Town project junning agreement communents		555,175
Net Commitments by Maturity	267,147	486,539

NB: Commitments are GST inclusive where relevant.

# Notes to and Forming Part of the Financial Statements For the period ended 30 June 2013

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### NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### 1.1 Objective of NEPC Service Corporation

The NEPC Service Corporation is an Australian Government Controlled entity. It is a not-for-profit entity.

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

- To provide assistance and support to the NEPC, the NEPC Committee, and any other committees; 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 continued existence of the Council in its present form and with its present programs is dependent on Government policy and on continuing funding by all jurisdictions for the Council's administration and programs.

#### 1.2 Basis of Preparation of the Financial Statements

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

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

#### 1.3 Significant Accounting Judgements and Estimates

In the process of applying the accounting policies listed in this note, the 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

The following new standards were issued by the Australian Accounting Standards Board prior to the sign-off date, which are expected to have a financial impact on the entity for future reporting periods:

- AASB 13 Fair Value Measurement December 2012 (Principal)
- AASB 1055 Budgetary Reporting March 2013 (Principal)

Other new standards, revised standards, and interpretations that were issued prior to the sign-off date and are applicable to the future reporting period are not 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.

#### **Resources Received Free of Charge**

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

#### **Contributions from Jurisdictions**

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

#### 1.6 Gains

#### **Resources Received Free of Charge**

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

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

#### Sale of Assets

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

#### 1.7 Transactions with Government as Owner

#### **Equity Injections**

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

#### **Restructuring of Administrative Arrangements**

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

#### Other Distributions to Owners

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

#### 1.8 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.

#### 1.9 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 end of each reporting periods.

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

#### 1.10 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).

#### 1.11 Contingent Liabilities and Contingent Assets

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

#### 1.12 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.

#### 1.13 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

There was no subsequent event that had the potential to significantly affect the ongoing structure and financial activities of the entity.

	2013	2012
	\$	ŝ
NOTE 3: EXPENSES		
Note 244 Sumpliar		
Note 3A: Supplier Goods and services		
Project expenses	000 724	1 2 (2 47)
Consultancy services	990,734	1,263,47
Legislative drafting	35,768	3,32
Travel and accommodation	14,005	20,37
Other project expenses	14,270	236,94
Total project expenses	1,054,777	1,524,11
Operational expenses		
Contracted human resources	961,628	1,140,04
Office accomodation and support provided by DSEWPaC	183,709	100,00
Financial services	43,525	85,16
Information technology	1,907	49,42
Travel and accommodation	7,824	14,07
Printing	33,708	25,17
Office expenses	11,129	21,81
Total operational expenses	1,243,430	1,435,68
Total goods and services	2,298,207	2,959,79
Goods and services are made up of:		
Provision of goods - external entities	33,708	24,14
Rendering of services - related entities	1,226,453	1,348,20
Rendering of services - external entities	1,038,046	1,587,44
Total goods and services	2,298,207	2,959,79
Other currelies errorses		
Other supplier expenses		
Operating lease rentals – external entities		02.41
Minimum lease payments		83,41
Total other supplier expenses		83,41
Total supplier expenses	2,298,207	3,043,21
Note 3B: Written Down and Impairment of Assets		
Asset write-downs and impairments from:		
Trade and other receviables	13,551	
Total write-down and impairment of assets	13,551	

	2013 \$	2012 \$
Note 3C: Disposal of assets		
Property, plant and equipment		
Proceeds from sale	_	_
Carrying value of assets disposed	_	6,057
Selling expense	_	0,037
Sennig expense		
Net loss from disposal of property, plant and equipment	-	6,057
Net loss from disposal of assets	-	6,057
NOTE 4: INCOME		
OWN SOURCE REVENUE		
Note 4A: Sale of Goods and Rendering of Services		
Rendering of services - related entities	-	70
Total sale of goods and rendering of services	-	70
Note 4B: Interest		
Cash at call	68,286	119,930
Term deposits	58,182	88,961
Total interest	126,468	208,891
GAINS		
Note 4C: Other gains		
Resources received free of charge	-	100,000
Reversal of makegood provision	-	15,300
Total other gains	-	115,300
Note 4D: Contributions from jurisdictions		
Contributions from jurisdictions	2,410,966	1,102,464
Contributions from Jurisdictions	2,110,200	1,102,101

196	4,507,456
-	557,369
196	5,064,825
300	505,604
526	34,383
326 326	539,987
-	23,726
960	1,451
960	25,177
286	565,164
286	565,164
286	565,164

2012

\$

2013

\$

### NOTE 5: FINANCIAL ASSETS

Note 5A: Cash and Cash Equivalents		
Cash at bank and on hand	4,350,196	4,507,456
Term deposits	-	557,369
	4,350,196	5,064,825
Note 5B: Trade and Other Receivables		
Goods and Services		
Goods and services - related entities	514,800	505,604
Goods and services - external parties	33,526	34,383
Total receivables for goods and services	548,326	539,987
Other receivables		
GST receivable from the Australian Taxation Office	-	23,726
Accrued income	3,960	1,45
Total other receivables	3,960	25,17
Total trade and other receivables (net)	552,286	565,164
Total trade and other receivables – are expected to be recovered in:		
No more than 12 months	552,286	565,164
Total trade and other receivables	552,286	565,164
Receivables are aged as follows:		
Not overdue	37,486	36,813
Overdue by:		
Less than 30 days	514,800	514,824
30 to 60 days	-	
60 to 90 days	-	13,52
More than 90 days	-	
	514,800	528,35
Total receivables	552,286	565,164

### NOTE 6: NON-FINANCIAL ASSETS

#### Note 6A: Property, Plant and Equipment

NEPCSC do not hold any property, plant and equipment during the financial year. In the 2012-13 financial year NEPSC disposed of property, plant and equipment to the value of \$6,057.

### NOTE 7: PAYABLES

Note 7A: Supplier Payables		
Trade creditors and accruals	365,815	1,336,361
Total supplier payables	365,815	1,336,361
Supplier payables expected to be settled within 12 months:		
Related parties	241,355	1,320,978
External parties	124,460	15,383
Total	365,815	1,336,361
Total supplier payables	365,815	1,336,361
Settlement was usually made within 30 days.		
Note 7B: Other Payables		
GST payable to Australian Taxation Office	17,363	-
Total other payables	17,363	-
Other payables – are expected to be recovered in:		
No more than 12 months	17,363	-
Total other payables	17,363	-

	2013	2012
	\$	\$
NOTE 8: CASH FLOW RECONCILIATION		
Reconciliation of cash and cash equivalents as per Balance Sheet to Cash Flow Statement		
Cash and cash equivalent as per:		
Cash flow statement	4,350,196	5,064,825
Balance sheet	4,350,196	5,064,825
Reconciliation of net cost of services to net cash from operating activities		
Net cost of services	(2,185,290)	(2,725,020)
Add revenue from Government	2,410,966	1,102,464
Adjustment for non-cash item		
Loss on sale on non current assets	-	6,057
Changes in assets/liabilities		
Decrease in net receivables	12,878	783,111
(Decrease) in provisions	-	(63,172)
(Decrease) /increase in supplier payables	(970,546)	1,204,765
Increase/(decrease) in other payables	17,363	(51,969)
Net cash (used in)/from operating activities	(714,629)	256,236

### NOTE 9: RELATED PARTY DISCLOSURE

Members of the National Environment Protection Council The Council Members during the year were: The Hon Tony Burke MP, Commonwealth The Hon Robyn Parker MP, New South Wales The Hon Ryan Smith MP, Victoria The Hon Bill Marmion MLA, Western Australia (resigned 31 March 2013) The Hon Albert Jacob MLA, Western Australia (commenced 23 April 2013) The Hon Terry Redman MLA, Western Australia (commenced 23 April 2013) The Hon Paul Caica MP, South Australia (resigned 21 January 2013) The Hon Ian Hunter MLC, South Australia (commenced 15 April 2013) The Hon Brian Wightman MP, Tasmania The Hon Mr Simon Corbell MLA, Australian Capital Territory The Hon Karl Hampton MLA, Northern Territory The Hon Peter Chandler MLA, Northern Territory (commenced 21 February 2013) The Hon Andrew Powell MP, Queensland The Hon Mark McArdle MP, Queensland (commenced 28 November 2012) 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 \$245,850 in costs for the services of an Executive Officer. These services were provided by the Department of Sustainability, Environment, Water, Population and Communities under a fee for service arrangement (2012: \$240,415).

#### Note 10C: Other Highly Paid Staff

During the reporting period, there were no employees whose salary plus performance bonus were \$180,000 or more (2012: Nil).

	2013	2012
	\$	\$
NOTE 11: REMUNERATION OF AUDITORS		

# Financial statement audit services were provided by the Australian National Audit Office (ANAO).

Remuneration to the ANAO for financial statement audit services	18,900	18,000
Total	18,900	18,000

No other services were provided by the ANAO.

### NOTE 12: FINANCIAL INSTRUMENTS

Note 12A: Categories of Financial Instruments		
Financial assets		
Loans and receivables:		
Cash and cash equivalents	4,350,196	5,064,825
Trade and other receivables	552,286	541,438
Total	4,902,482	5,606,263
Carrying amount of financial assets	4,902,482	5,606,263
Financial Liabilities		
At amortised cost:		
Suppliers	365,815	1,336,361
Total	365,815	1,336,361
Carrying amount of financial liabilities	365,815	1,336,361
Note 12B: Net Income and Expense from Financial Assets		
Loans and receivables		
Interest revenue	126,468	208,891
Net gain from loans and receivables	126,468	208,891
Net gain from financial assets	126,468	208,891

#### Note 12C: Net income and expense from financial liabilities

There were nil income/expenses from financial liabilities (2012: 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

2013	2012
\$	\$
4,350,196	5,064,825
37,486	13,087
4,387,682	5,077,912
	\$ 4,350,196 <u>37,486</u>

#### Past Due or Impaired

Trade and other receivables	514,800	528,351
Total	514,800	528,351

#### Ageing of financial assets that are past due but not impaired

Trade and other receivables		
less than 30 days	514,800	514,824
31 to 60 days	-	-
61 to 90 days	-	13,527
90+ days	-	-
Total	514,800	528,351

#### 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.

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

	On demand	Within 1 year	1 to 5 yrs	>5 yrs	Total
	\$	\$	\$	\$	\$
Suppliers	-	1,336,361	-		- 1,336,361
Total	-	1,336,361	-		- 1,336,361

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

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'.

	2013	2012
	\$	\$
NOTE 13: COMPENSATION AND DEBT RELIEF		
No payments were incurred during the reporting period (2012: Nil).	-	-

# NOTE 14: CONTINGENT ASSETS AND LIABILITIES

There were nil contingent assets or liabilities at or during the year ended 30 June 2013 (2012:Nil).

# NOTE 15: RESOURCES RECEIVED FREE OF CHARGE

During the current year the Service Corporation did not receive any services free of charge. In 2012 the Service Corporation received office accommodation, IT services and other office support service from the Department of Sustainability, Environment, Water, Population and Communities ("SEWPaC"). The fair value of the services received was \$100,000.

Resources received free of charge related to office accommodation, IT services and other office operations provided by SEWPaC. The Service Corporation has an agreement with SEWPaC that allows them to receive these services until 30 June 2014. This agreement required the Service Corporation to pay for these services in the 2013 financial year. This contract however does not give rise to a commitment as the Service Corporation may exit the agreement at any time.

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:

- 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.
- adopting a nationally consistent approach to monitoring air toxics at a range of locations (e.g. near major industrial sites, major roads, areas affected by wood smoke).

#### Evaluation criteria

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

# PART 2 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

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

Legislative, regulatory and administrative frameworks

Table 1: Summary	of implementation	frameworks
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Jurisdiction	Summary of implementation frameworks
Commonwealth	The NEPM is implemented administratively.
New South Wales	• The <i>Protection of the Environment Operations Act 1997</i> 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.
Victoria	• The key legislative instrument is the State Environment Protection Policy (Air Quality Management).
Queensland	• The NEPM is implemented under the <i>Environmental Protection Act 1994</i> (EP Act), the Environmental Protection Regulation 1998, and the Environmental Protection (Air) Policy 1998.
Western Australia	• The NEPM is implemented under the <i>National Environment Protection Council</i> ( <i>Western Australia</i> ) Act 1996, the Environmental Protection Act 1986 and by programs in the Perth Air Quality Management Plan.
South Australia	• The NEPM operates as an environment protection policy under the <i>Environment Protection Act 1993.</i>
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.
Tasiliallia	• Implementation is through the Environment Protection Policy (Air Quality) 2004 and the <i>Environmental Management Pollution Control Act 1994</i> .
Australian Capital Territory	• The NEPM is implemented under the Environment Protection Act 1997.
Northern Territory	• The key legislative instruments are the Northern Territory Environment Protection Authority Act 2012 and the National Environment Protection Council (Northern Territory) Act 2004.

#### Implementation issues arising

For the 2012–13 reporting year, jurisdictions continued to report on implementation issues arising (as opposed to reporting on implementation activities, as per previous reporting years). A summary of implementation issues arising can be found at Table 2. For implementation activities refer to jurisdictional reports as noted in Part 5.

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	No issues reported.
New South Wales	Monitoring was reported in previous Annual Reports
Victoria	No issues reported.
Queensland	• Due to other air quality monitoring priorities, no air toxics NEPM-compliant monitoring was conducted.
Western Australia	• No issues reported.

Jurisdiction	Summary of implementation issues arising
South Australia	No issues reported.
South Australia	No monitoring undertaken.
Tasmania	• Due to budgetary constraints, no air toxics monitoring was conducted.
Australian Capital Territory	<ul> <li>No issues reported.</li> <li>Previous desktop analysis shows that air toxics are not an issue for the Australian Capital Territory airshed and no monitoring sites have been identified.</li> </ul>
Northern Territory	<ul> <li>No issues reported.</li> <li>Previous desktop analysis shows that air toxics are not an issue for the Northern Territory airshed and no monitoring sites have been identified.</li> </ul>

# 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 two sites during the reporting period and began to include formaldehyde in its monitoring at Tullamarine due to the proximity of a major airport.

Queensland carried out alternative monitoring using a differential optical absorption spectroscopy (DOAS) technique at two ambient air quality sites. Queensland also began monitoring for polycyclic aromatic hydrocarbons (including Benzo[ $\alpha$ ]pyrene) at a new site in Woolloongabba that was identified during the previous reporting period.

Western Australia also commenced alternative monitoring and investigated levels of volatile organic compounds during 2012 using a Fourier Transform Infrared Spectrometer (FTIR).

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

Queensland previously identified two new monitoring sites. Limited monitoring took place at one site during the monitoring period and has planned to commence full monitoring at both sites in the 2013–14 reporting period.

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

Repeat identification of Stage 1 and Stage 2 sites

No new monitoring sites were identified.

# PART 4 — ASSESSMENT OF NEPM EFFECTIVENESS

Jurisdictions reported that the NEPM highlights the need to investigate air toxics concentrations and provides a nationally consistent benchmark for assessing and comparing the concentrations of ambient air toxics from a range of sites. Jurisdictions also agree on the important role the NEPM plays in protecting human health.

However, most jurisdictions did not carry out any NEPM-compliant monitoring during the reporting period. The primary reasons cited for this were a lack of resources or that prior monitoring indicated there was no need to continue.

A National Plan for Clean Air (NPCA) is being developed to improve air quality, and community health and well-being. The NPCA will include revised air quality standards, an exposure reduction framework, improved monitoring and reporting and an action list for ongoing implementation.

The NEPC Act has recently been reviewed, resulting in a number of recommendations dealing with the reporting of the data collected by jurisdictions, and the overall effectiveness of NEPMs.

# PART 5 - REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 1.

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

# PART 2 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

This part provides a summary of jurisdictional reports on, and the 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 <i>Protection of the Environment</i> <i>Operations Act 1997</i> and the Protection of the Environment Operations (Clean Air) Regulation 2010.

Iurisdiction	Summary of implementation frameworks
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 <i>Environment</i> <i>Protection Act 1970</i> .
Queensland	• The NEPM is implemented under the <i>Environmental Protection</i> <i>Act 1994</i> , the Environmental Protection Regulation 1998, the Environmental Protection (Air) Policy 2008 and by programs under the South East Queensland Regional Plan 2009–2031.
Western Australia	• The NEPM is implemented under the <i>National Environment</i> <i>Protection Council (Western Australia) Act 1996</i> , the <i>Environmental</i> <i>Protection Act 1986</i> and by programs under the Perth Air Quality Management Plan.
South Australia	• The transitional provisions in the <i>Environment Protection</i> ( <i>Miscellaneous</i> ) Amendment Act 2005 enable the NEPM to continue to operate as an environment protection policy.
Tasmania	• The NEPM is a state policy under the <i>State Policies and Projects Act 1993</i> . The management of ambient air quality is an objective of the Tasmanian Air Quality Strategy 2006.
lasmania	• Implementation is through the Environment Protection Policy (Air Quality) 2004 and the <i>Environmental Management Pollution Control</i> Act 1994.
Australian Capital Territory	• The NEPM is implemented by the Environment Protection Regulation 1997 under the <i>Environment Protection Act 1997</i> .
Northern Territory	• The key legislative instruments are the Northern Territory Environment Protection Authority Act 2012 and the National Environment Protection Council (Northern Territory) Act 2004.

# Implementation issues arising

Table 2 summarises the implementation issues that arose throughout the 2012–13 reporting year. For implementation activities refer to jurisdictional reports as noted in Part 5.

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	No issues reported.
	• Two new multi-parameter monitoring stations added at Wyong and Camden.
New South Wales	• Macarthur monitoring site replaced by new site at Campbelltown West.
	• Low data capture in the first quarter at Albion Park South due to technical problems with equipment.
Victoria	• Data capture targets not achieved at Alphington (all year) and Footscray (in the fourth quarter) due to technical problems with equipment.
Queensland	• Rocklea monitoring site sustained flood damage and did not come back online until May 2012.
Queensland	• Arundel monitoring site closed in February 2012 because compliance with NEPM standards has been demonstrated.
Western Australia	No issues reported.

Jurisdiction	Summary of implementation issues arising
South Australia	• Low data capture at Schutz Park during fourth quarter due to technical problems with equipment.
	• New monitoring station installed in Devonport in December 2012.
Tasmania	BLANkET program continued to be expanded.
	• Carbon monoxide station in Hobart decommissioned in February 2013.
Australian Capital Territory	• New monitoring site in Florey has been budgeted for and monitoring equipment secured.
Northern Territory	• First-year data has been included from monitoring stations at Winnellie and Palmerston.

# PART 3 - JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

Detailed monitoring data are available in jurisdictional compliance reports which are available from the COAG Standing Council of Environment and Water's website <a href="http://www.scew.gov.au">http://www.scew.gov.au</a>.

Jurisdictions report a continued focus on managing emissions from wood heaters, increasing motor vehicle use and large industry such as coal power stations and aluminium smelting, with some jurisdictions investigating and trialling a number of monitoring technologies.

One jurisdiction initiated a new grants program to encourage local council initiatives to reduce wood smoke pollution and another jurisdiction extended a program that includes targeted education of operators of smoky wood heaters in regional centres. In addition, in April 2013 the Council released a Consultation Regulation Impact Statement focusing on reducing emissions from domestic wood heaters.

One jurisdiction has also implemented a Transitional Environmental Program to assist smelting industries bring their particulate emissions into line with ambient air quality (AAQ) standards.

The National Plan for Clean Air (NPCA) to improve air quality and community health and well-being was further developed. The NPCA will include revised air quality standards, an exposure reduction framework, improved monitoring and reporting and an action list for ongoing implementation.

# 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 quality.

Monitoring results show that the NEPM standards are mostly being met and air quality in Australia 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 areas with smelting activities).

However, meeting the goals for ozone and particulates continues to be difficult in a number of regions across the country. Weather conditions continue to affect  $PM_{10}$  and  $PM_{25}$  levels both positively and negatively. Cooler and wetter conditions in NSW meant an improvement in air quality, whilst hotter and drier conditions than usual in South Australia decreased air quality in some regions due to dust.

Challenges for jurisdictions in meeting NEPM AAQ standards include impacts of the use of domestic wood heating, increasing economic activity and motor vehicle use and urban expansion. Bushfires and controlled burning continue to be sources of exceedences of particulate levels in a number of jurisdictions, particularly those in eastern Australia.

# PART 5 - REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 2.

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)

Amended (varied) by Council: 11 April 2013

Registered: 15 May 2013

#### NEPM goal (or purpose)

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

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

#### Desired environmental outcomes

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

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

#### Evaluation criteria

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

## PART 2 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

This part provides a summary of jurisdictional reports on, 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
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Jurisdiction	Summary of implementation frameworks
Commonwealth	• The NEPM is implemented administratively.
New South Wales	• The NEPM operates under guidelines approved under the <i>Contaminated Land Management Act 1997</i> .

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 <i>Sustainable Planning Act 2009</i> and the <i>Environment Protection Act 1994</i> are the key legislative instruments.
	• The NEPM is applied through the Guidelines for the Assessment and Management of Contaminated Land in Queensland, May 1998.
Western Australia	• The NEPM is implemented through the <i>Contaminated Sites Act 2003</i> and the Contaminated Sites Regulations 2006 and associated guidelines, including the revised Contaminated Sites Management Series guideline 'Assessment Levels for Soil, Sediment and Water' (2010).
South Australia	• The <i>Environment Protection Act 1993</i> enables the NEPM to operate as an environment protection policy.
South Australia	• Specific site contamination provisions of the <i>Environment Protection Act 1993</i> commenced in full on 1 July 2009.
	• The NEPM is a state policy under the State Policies and Projects Act 1993.
Tasmania	• The NEPM is implemented under the <i>Environmental Management and Pollution Control Act 1994</i> , and associated guidelines.
Australian Capital Territory	• The NEPM is implemented by the Contaminated Sites Environment Protection Policy (reviewed in 2009) made under the <i>Environment Protection Act 1997</i> .
Northern Territory	• The NEPM is implemented by audits of contaminated sites, the pollution control provisions of the <i>Waste Management and Pollution Control Act</i> .

# Implementation issues arising

A summary of implementation issues arising can be found in Table 2.

For implementation activities refer to jurisdictional reports as noted in Part 5.

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	• Site specific investigation levels are used in Australia's Antarctic Territories as very low levels of contamination are considered ecologically significant.
New South Wales	• Revision of existing approved guidelines and adoption of the NEPM as varied and associated schedules as guidelines under Section 105 of the <i>Contaminated Land Movement Act 1997</i> .
	• Transitional arrangements will apply for site assessments already substantially commenced at the time the guidelines are gazetted
Victoria	• In order to implement the amendments to the NEPM, Victoria is in the process of amending its State Environment Protection Policy (Prevention and Management of Contamination of Land) 2002.

Jurisdiction	Summary of implementation issues arising
Queensland	• The amended <i>Environmental Protection Act 1994</i> introduced a mechanism for the approval of contaminated land auditors which provides for statutory responsibilities for auditors.
Western Australia	• Department of Environment Regulation commenced the statutory five-year review of the <i>Contaminated Sites Act 2003</i> in 2012, which includes consideration of the amendments made to the NEPM in April 2013.
South Australia	• A detailed information sheet was published by the South Australian Environment Protection Authority to implement the transitional arrangements within South Australia.
Tasmania	• The amended NEPM automatically became a state policy in Tasmania under the <i>State Policies and Projects Act 1993</i> following its registration on the Federal Register of Legislative Instruments.
	<ul> <li>Measures to ensure stakeholders are well informed in relation to the content of the NEPM are ongoing.</li> </ul>
Australian Capital Territory	• The Australian Capital Territory Government is acting to implement the legislative and administrative steps that put the amendment into effect within the 12-month transition period.
Northern Territory	No issues reported.

# PART 3 - JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

All jurisdictions report a high level of compliance with the guidelines as set out in the NEPM. Government agencies in each relevant jurisdiction continue to work closely with local government to deal with potential contamination issues. Most jurisdictions have assumed the NEPM guidelines into legislation or planning codes to ensure greater compliance.

Since the amendment of the NEPM took effect in each jurisdiction on 16 May 2013, most jurisdictions are in the process of amending their implementation frameworks to meet the requirements of the amended NEPM.

Clause 9 of the NEPM sets out the information jurisdictions are required to report. Refer to jurisdictional reports as noted in Appendix 3.

# PART 4 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM continues to provide nationally consistent guidance to professional practitioners in the field of site contamination assessment.

The amendment of the NEPM took effect in each jurisdiction on 16 May 2013, the day after it was registered on the Federal Register of Legislative Instruments. The amendment included repealing all original schedules to the NEPM and the substitution of new schedules.

The amended NEPM continues to reinforce the existing framework for the management of contaminated sites, and is expected to result in improvements in site assessment procedures by environmental consultants and make contaminated site regulation more efficient.

Given the short time period since the amendments to the NEPM, the effectiveness of these improvements could not be assessed at 30 June 2013.

# PART 5 - REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 3.

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

# PART 2 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

This part provides a summary of jurisdictional reports on, 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
	• The NEPM is implemented administratively.
Commonwealth	• The NEPM is supported by the Australian Design Rules under the <i>Motor Vehicle Standards Act 1989, Fuel Quality Standards Act 2000</i> and fuel tax credit arrangements.
New South Wales	• The key legislative instruments are the <i>Protection of the Environment Operations Act</i> 1997 and the Protection of the Environment Operations (Clean Air) Regulation 2010.
Victoria	• The primary legislative tools are the Environment Protection (Vehicle Emissions) Regulations 2003 under the <i>Environment Protection Act 1970</i> .
Queensland	• The NEPM is implemented by the National Environment Protection Council (Queensland) Act 1994.

Jurisdiction	Summary of implementation frameworks
Western Australia	• The NEPM is implemented by the <i>National Environment Protection Council (Western Australia) Act 1996</i> , the <i>Environmental Protection Act 1986</i> , the Road Traffic (Vehicle Standards) Rules 2002 and through programs under the Perth Air Quality Management Plan.
South Australia	• The transitional provisions in the <i>Environment Protection (Miscellaneous) Amendment</i> <i>Act 2005</i> enable the NEPM to continue to operate as an environment protection policy.
Tasmania	• The NEPM is a state policy under the State Policies and Projects Act 1993.
Australian Capital Territory	• The key legislative instrument is the Road Transport (Vehicle Registration) Regulation 2000.
Northern Territory	• Vehicle performance standards are enforced under the <i>Motor Vehicles Act</i> and the Australian Vehicle Standard Rules.

## Implementation issues arising

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	No issues reported.
New South Wales	• In October 2011, the Commonwealth Department of Sustainability, Environment, Water, Population and Communities advised New South Wales Roads and Maritime Services that the NEPM funding agreement had expired and therefore NEPM projects were to be placed on hold. There was no change in this situation as at June 2013.
Victoria	No issues reported.
Queensland	No issues reported.
Western Australia	No issues reported.
South Australia	• The Regency Park Emissions Test Facility was not operational for the majority of the reporting period due to maintenance and reliability issues.
Tasmania	• No specific issues reported, however the NEPM is of limited relevance due to the limited diesel emissions in the region.
Australian Capital Territory	• No specific issues reported, however the NEPM is of limited relevance due to the limited diesel emissions in the region.
Northern Territory	Aggregate data on diesel emissions for the Northern Territory is not available.

# PART 3 - JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

Jurisdictions are undertaking a number of measures to implement the Diesel Vehicle Emissions NEPM. Most jurisdictions continue to run a smoky vehicle reporting program, with the exception of the Commonwealth, the Australian Capital Territory and South Australia. Several jurisdictions report there has been a decrease in the number of vehicles reported to their smoky vehicle program which could indicate that there are fewer smoky vehicles on Australian roads.

New South Wales is the only jurisdiction that operates a retrofit program. Queensland and Victoria are the only jurisdictions with diesel emission testing facilities that meet DT80 standards or higher.

There are also a number of training programs in place. A driver training program that promotes low emissions driving techniques is operated by the Commonwealth and Western Australia. Victoria is including ideas about the impact of pollution on the environment and emissions reduction techniques in training programs at TAFEs for operators, and fleet and warehouse managers. Western Australia is implementing both these types of training programs.

For further details of individual programs and initiatives, refer to jurisdictional reports as noted in Appendix 4.

# PART 4 – ASSESSMENT OF NEPM EFFECTIVENESS

Most jurisdictions report the NEPM continues to be beneficial in reducing emissions from diesel vehicles across Australia and a useful component of the broader framework to manage emissions.

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

Some jurisdictions, including the Australian Capital Territory, the Northern Territory and Tasmania, noted their diesel vehicle emissions are low and below the trigger levels for implementation of the NEPM, meaning the measure is of limited relevance in those jurisdictions.

Jurisdictions also reported some limitations on the ability to quantify and measure the effectiveness of the NEPM based initiatives implemented to date.

All jurisdictions are developing a National Plan for Clean Air (NPCA) to improve air quality, and community health and well-being. The NPCA will include revised air quality standards, an exposure reduction framework, improved monitoring and reporting, and an action list for ongoing implementation. The NPCA should be finalised by the end of 2014 and will consider measures to reduce air emissions, including from diesel engines.

## PART 5 - REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 4.

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

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

#### Desired environmental outcomes

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

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

#### Evaluation criteria

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

#### PART 2 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

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

# MOVEMENT OF CONTROLLED WASTE BETWEEN STATES AND T

# Legislative, regulatory and administrative framework

Jurisdiction	Summary of implementation frameworks
Commonwealth	• The NEPM is implemented administratively.
New South Wales	• The key legislative instruments are the <i>Protection of the Environment Operations Act</i> 1997 and the Protection of the Environment Operations (Waste) Regulation 2005.
Victoria	• The key legislative instruments are the <i>Environment Protection Act 1970</i> , 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 <i>Environmental Protection Act 1994</i> and the Environmental Protection (Waste Management) Regulation 2000.
Queensianu	• Requirements for the licensing of controlled waste transporters are included in the Environmental Protection Regulation 2008.
Western Australia	• The primary legislative instrument is the Environmental Protection (Controlled Waste) Regulations 2004.
South Australia	• The NEPM operates as an environment protection policy under the <i>Environment</i> <i>Protection Act 1993</i> and is implemented through conditions of licences.
	• The NEPM is a state policy under the State Policies and Projects Act 1993.
Tasmania	• The NEPM is implemented under the <i>Environmental Management and Pollution Control Act 1994.</i>
Australian Capital Territory	• The key legislative instruments are the <i>Environment Protection Act 1997</i> and the Environment Protection Regulations 2005.
Northern Territory	• The key legislative instruments are the <i>Waste Management and Pollution Control Act</i> and the <i>Dangerous Goods (Road and Rail Transport) Act</i> .

#### Table 1: Summary of implementation frameworks

# Implementation issues arising

During the reporting period the NEPC made a minor variation to the Movement of Controlled Waste NEPM to correct previous minor drafting errors. The minor variation was initiated in September 2011, made in August 2012 and was completed in February 2013.

Jurisdictions did not cite any further implementation issues.

# PART 3 - JURISDICTIONAL REPORT ON ACTIVITIES UNDER THE NEPM

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

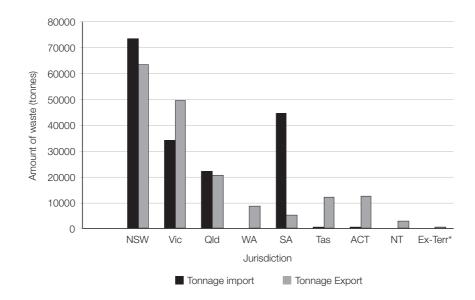
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\*Note: Information regarding external territories (Ex-terr\*) has been provided only since reporting year 2009-10.

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<sup>\*</sup>Note: Information regarding external territories (Ex-terr\*) has been provided only since the reporting year 2009-10.



\*Note: Information regarding external territories (Ex-terr\*) has been provided only since reporting year 2009–10. Figure 1: Tonnage of controlled waste moved within Australia 2012–13

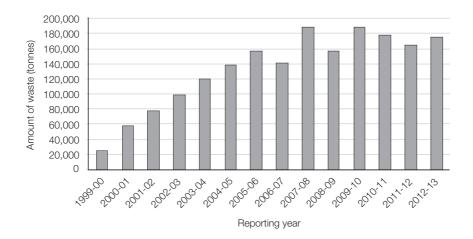
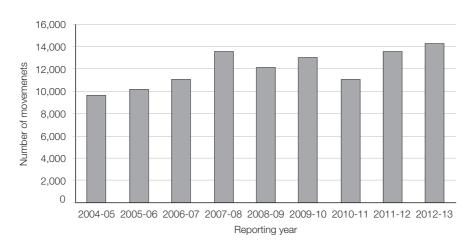


Figure 2: Tonnage of controlled waste moved within Australia 1999–2013



Note: Information regarding number of movements has been provided only since reporting year 2004-05.

Figure 3: Number of movements of controlled waste within Australia 2004–13

#### PART 4 — ASSESSMENT OF NEPM EFFECTIVENESS

Jurisdictions reported that the NEPM continues to provide an effective means of tracking the movement of controlled waste between states and territories. They also stated there are high levels of consultation and cooperation between jurisdictions with regards to this NEPM.

Some jurisdictions noted that some waste producers and handlers were not always cooperative, which can result in discrepancies in recording. This prompted the Commonwealth to suggest that a specific training program may be appropriate to promote better understanding of the NEPM.

More than 50 per cent of all controlled waste moved between jurisdictions during the reporting period was inorganic chemicals.

#### PART 5 - REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 5.

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) with the remaining provisions of the measure commencing on 1 July 1998

# NEPM goal (or purpose)

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

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

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

#### Desired environmental outcomes

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

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

#### Evaluation criteria

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

# PART 2 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

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

Legislative, regulatory and administrative framework

Table 1: Summa	y 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 <i>Protection of the Environment Operations Act 1997</i> .
Victoria	• The key legislative instrument is the Waste Management Policy (National Pollutant Inventory) 1998 under the <i>Environment Protection Act 1970</i> .
Queensland	• The NEPM is implemented under the <i>Environmental Protection Act 1994</i> and the Environmental Protection Regulation 2008.
Western Australia	• The key legislative instrument is the Environmental Protection (NEPM – NPI) Regulations 1998 under the <i>Environmental Protection Act 1986</i> .
South Australia	• The NEPM operates as an environment protection policy under the <i>Environment Protection Act 1993</i> .
Tasmania	• The NEPM is a state policy under the <i>State Policies and Projects Act 1993</i> and is implemented through the <i>Environmental Management and Pollution Control Act 1993</i> .
Australian Capital Territory	• The key legislative instrument is the <i>Environment Protection Act 1997</i> .
Northern Territory	• The NEPM is implemented by the Environment Protection (National Pollutant Inventory) Objective established under the <i>Waste Management and Pollution Control</i> <i>Act.</i>

## Implementation issues arising

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

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	• No issues reported.
New South Wales	• Nationally consistent guidance is recommended to improve reporting the transfer of NPI substances from facilities that generate waste streams.
Victoria	• No issues reported.
Queensland	<ul><li>The NEPM should be enhanced to meet contemporary stakeholder information requirements.</li><li>An increased emphasis needs to be placed on the collections and reporting of</li></ul>
	aggregated emissions data.
Western Australia	<ul> <li>The newly established Department of Environmental Regulation is responsible for administering the implementation of the NEPM.</li> </ul>
	• There is a need for ongoing review and development of industry emission estimation technique manuals.

Jurisdiction	Summary of implementation issues arising
South Australia	<ul><li>There are inadequate resources for updating aggregate emissions data.</li><li>NPI emission estimation technique manuals need to be updated regularly to remain relevant.</li></ul>
Tasmania	<ul> <li>A high level of staff turnover within reporting organisations has resulted in a continuing need to train reporters in the use of the online reporting system.</li> <li>Issues with staffing at the Commonwealth level continue to impact on implementation of the NEPM.</li> </ul>
Australian Capital Territory	<ul> <li>There was a continued need for training of reporters using the online reporting system due to staff turnover within facilities.</li> <li>Some reporters encountered information technology compatibility issues with the online calculation tools.</li> </ul>
Northern Territory	<ul> <li>No estimation of aggregated emissions data was done for the Northern Territory.</li> <li>Collaborative work has continued on standardising the desktop auditing of reports across all jurisdictions.</li> </ul>

# PART 3 - ASSESSMENT OF NEPM EFFECTIVENESS

#### Website and public awareness

Reporting information is available on the NPI website <http://www.npi.gov.au>. The number of visitors increased significantly from 213 856 in 2010–11 to 282 334 in 2011–12.

The free phone line and the public email box have continued to be used to inform the public. More than 10 calls a month, on average, were received and responses were provided to 124 emails received via the public email box.

# Online reporting

There continues to be a steady increase in the number of online reporters. The improved online reporting system ensures that industry reporting is streamlined and the data collected is accurate. While the online reporting system training has been well received, it is acknowledged that further training is essential.

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

## Industry facility reporting

- The total number of reporting facilities for all jurisdictions in 2011-12 was 4323, compared to 4299 in the previous year. There were 187 facilities that reported to the NPI for the first time in 2011–12. Figure 1 below shows the number of facility reports over the past 10 years.
- · Industry representatives have been supportive of improving NPI reporting tools and the emission factors.
- · The percentage of industry using the online reporting system continues to increase.

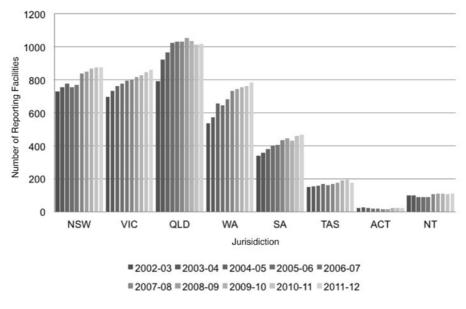


Figure 1: NPI facility reports received by jurisdictions 2002–12

PART 4 - REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 6.

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:** 14 July 1999 (advertised in *Commonwealth of Australia Gazette* No. GN 28, 14 July 1999, p 2114)

#### NEPM goal (or purpose)

The environment protection goal is established 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 Australian 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, which are:

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

#### Evaluation criteria

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

## PART 2 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

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

#### Legislative, regulatory and administrative framework

Jurisdiction	Summary of implementation frameworks
Commonwealth	The NEPM is implemented administratively.
New South Wales	• The NEPM is implemented by the Protection of the Environment Operations (Waste) Regulation 2005.
Victoria	• The NEPM is implemented by the Waste Management Policy (Used Packaging Materials) 2012, under the <i>Environment Protection Act 1970</i> .
Queensland	• The NEPM is implemented by the Waste Reduction and Recycling Regulation 2011.
Western Australia	• The NEPM is implemented by the Environmental Protection (NEPM Used Packaging Materials) Regulations 2007 under the <i>Environmental Protection Act 1986</i> .
South Australia	• The Environment Protection (Used Packaging Materials) Policy 2012 was gazetted in December 2012 and is the legal instrument to enforce the obligations of the NEPM.
Tasmania	• The NEPM is a state policy under the State Policies and Projects Act 1993.
Australian Capital Territory	• The NEPM is implemented by the Industry Waste Reduction Plan under the <i>Waste Minimisation Act 2001</i> .
Northern Territory	• The NEPM is implemented and reported by the <i>Waste Management and Pollution</i> <i>Control Act</i> and the <i>Environment Protection (Beverage Containers and Plastic Bags)</i> <i>Act</i> .

Table 1: Summary of implementation frameworks

### Implementation issues arising

Table 2: Summary of implementation issues arising

Jurisdiction	Summary of implementation issues arising
Commonwealth	• No issues reported.
New South Wales	• In 2012–13, the New South Wales Environment Protection Authority undertook large scale enforcement activities.
Victoria	• No issues reported.
Queensland	• No issues reported.
Western Australia	• The NEPM was implemented in Western Australia through the Environmental Protection (NEPM-UPM) Regulation 2007 made under the Western Australian <i>Environment Protection Act 1986</i> . This Regulation expired on 30 June 2012. Remaking of the Regulation commenced during the 2012–13 reporting period.
South Australia	• No issues reported.
Tasmania	• No issues reported.
Australian Capital Territory	• No issues reported.
Northern Territory	<ul> <li>A total of \$731000 in grants was offered to schools and not-for-profit organisations to conduct a range of projects and operations that deliver environmental benefits in the community.</li> <li>A further \$120000 was provided to Keep Australia Beautiful Council Northern Territory for waste and litter abatement programs.</li> </ul>

### 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 noted in Appendix 7.

Key achievements are outlined below.

- In 2012, the Australian Capital Territory conducted an interim review of the ban on lightweight plastic shopping bags which came into effect on 1 November 2011. The interim review was released in January 2013 and found a high level of consumer support and retailer compliance.
- In 2012–13, the New South Wales Environment Protection Authority undertook large scale enforcement activities which have significantly contributed to growth in New South Wales signatories in that period.
- In the Northern Territory, the Container Deposit Scheme (CDS) which commenced on 3 January 2012, provides for the collection of beverage containers to reduce litter, increase recycling across the Northern Territory and assists in the reduction of the amount of rubbish being disposed of to landfill.
- In the 2012–13 funding round, three new Queensland-based project proposals were assessed and received inprincipal approval for funding assistance in 2013.
- In 2012–13, South Australia continued to strengthen its relationship with industry and other jurisdictions to ensure national consistency in the enforcement of the NEPM/policy at a state level.

#### Table 3: Australian Packaging Covenant signatories at 30 June 2013

Jurisdiction	Australian Packaging Covenant signatories
New South Wales	403
Victoria	322
Queensland	76
Western Australia	52
South Australia	51
Tasmania	17
Australian Capital Territory	5
Northern Territory	0
TOTAL	926

#### Kerbside recycling

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

A link to local government data is provided at the end of each jurisdictional report.

Complaints, investigations and prosecutions

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

#### PART 4 - ASSESSMENT OF NEPM EFFECTIVENESS

At the end of June 2013, there were 926 Australian Packaging Covenant signatories, of which 876 were compliant.

There have been notable demonstrations of NEPM effectiveness across the jurisdictions. For example, the Australian Capital Territory Government's highly successful ACTSmart Office and ACTSmart Business programs that facilitate on-site waste reduction and recycling by Canberran businesses and offices continued to expand. Accredited sites have all achieved a reduction of waste-to-landfill, some by as much as 90 per cent.

In addition, the Northern Territory reported a rise in return rate of containers from 30.26 per cent at the end of June 2012 to 45.4 per cent at the end of June 2013.

#### PART 5 - REPORTING ON IMPLEMENTATION BY JURISDICTIONS

The annexes to this report are in Appendix 7.

## Appendices

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## Appendix 1: Jurisdictional Reports on the Implementation and Effectiveness of the

Effectiveness of the Air Toxics NEPM

### Commonwealth

Report to the National Environment Protection Council (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 2013.

#### 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 its obligations under the *National Environment Protection Act 1994* are met.

In the *NEPC Annual Report 2005–2006*, the Commonwealth reported on its desktop analysis, which identified there were no Commonwealth sites on which there was a potential for significant population exposure to elevated levels of air toxics. No reassessment of the information on air toxics levels and population exposure was undertaken in 2012–13, as no Commonwealth agency has reported that activities at their sites have varied significantly from the previous reporting year.

The Council of Australian Governments (COAG) established the Standing Council on Environment and Water as part of reforms to national ministerial council arrangements. As reported in the *NEPC Annual Report 2011–2012*, in 2011 COAG identified air quality as a priority issue of national significance and agreed the Standing Council would develop a National Plan for Clean Air to improve air quality, community health and well-being.

The National Plan for Clean Air represents a strategic approach to air quality management and will include new air quality standards, an exposure reduction framework, proposals for how emission and exposure reduction actions could be implemented, improved monitoring and reporting and an agreed jurisdiction action list for ongoing implementation. The National Plan for Clean Air is scheduled to be delivered for endorsement by COAG by the end of 2014.

In 2012–13, the Commonwealth continued to progress work to reduce emissions from nationally significant sources through the work program for developing the National Plan for Clean Air. 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 from non-road spark ignition engines and equipment (NRSIEE) such as lawnmowers and outboard engines, which emit high levels of  $PM_{10}$ , nitrogen dioxide and chemicals that lead to ozone formation. A Consultation Regulation Impact Statement on reducing emissions from domestic wood heaters was released in April 2013 and the timeframe for public consultation was scheduled to conclude on 15 July 2013. A NRSIEE consultation summary report was published on the NEPC website in November 2012 and further regulatory analysis, which considers new information gained through consultation, is continuing. This work aims to support compliance in all jurisdictions with the NEPM standards.

A review report of the National Environment Protection (Ambient Air Quality) Measure (Ambient Air Quality NEPM), publicly released by NEPC in September 2011, recommended that lead be removed from the Ambient Air Quality NEPM and included in the Air Toxics NEPM. The rationale in removing lead from the Ambient Air Quality NEPM is that lead is no longer widely spread in the environment and is linked primarily to industrial sources, and it no longer meets the definition of a 'criteria' pollutant. Including lead in the NEPM would allow for a national air quality standard for lead that could be used in communities impacted by industrial sources and where monitoring is focused. The review recommendations will be responded to through the development of the National Plan for Clean Air. NEPC's priority for the first stage is on particle pollution, recognising that current population exposure to particulate matter needs to be addressed and that significant health benefits can be achieved. The Commonwealth continued to undertake work with the states and territories to address these prioritised recommendations.

#### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM has provided a nationally consistent framework for assessing the ambient levels of specified air toxics in a range of locations.

From the perspective of participating Commonwealth Government agencies, the NEPM generally operates efficiently and provides an effective framework for assessing the ambient levels of specified air toxics in a range of locations.

Monitoring activities undertaken under the NEPM provides important data which can be used in the development of a National Plan for Clean Air.

### 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 Robyn Parker MP, Minister for Environment and Minister for Heritage, for the reporting year ended 30 June 2013.

#### 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 (Air Toxics 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. NSW completed the desktop analysis and reported the results in the implementation report for the reporting year ended 30 June 2005.

Under Part 3, Clause 9 of the NEPM, monitoring of air toxics is required at Stage 2 sites (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 one-day-in-six 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 (benzene, benzo[ $\alpha$ ]pyrene as a marker for polycyclic aromatic hydrocarbons, formaldehyde, toluene and xylenes) 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 $[\alpha]$ pyrene; and 41 volatile organic compounds including benzene, toluene and xylenes.

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

NEPM-compliant sampling and analysis methods were used.

Tables 1 to 5 of the implementation report for the reporting year ended 30 June 2010 <a href="http://www.scew.gov.au/nepms/air-toxics">http://www.scew.gov.au/nepms/air-toxics</a> summarise the monitoring results for the five air toxics.

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[ $\alpha$ ]pyrene, with levels of approximately 65 per cent of the NEPM monitoring investigation level.

### Victoria

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Air Toxics) Measure for Victoria by the Hon Ryan Smith MP, 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 2012, air toxics monitoring was conducted and completed at Dandenong South<sup>1</sup> (a residential area surrounding a prescribed landfill and numerous small to medium enterprises) and Tullamarine<sup>2</sup> (a residential area surrounding a former prescribed landfill). The results show the levels of benzene, toluene, xylene and formaldehyde (formaldehyde was monitored only at Tullamarine) measured were below the monitoring investigations levels.

Formaldehyde was monitored only at Tullamarine due to the area's close proximity to Melbourne's international airport. The screening method used for formaldehyde monitoring correlated to the low levels estimated by the modelling surrounding the international airport in Tullamarine.

#### 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 National Environment Protection (Air Toxics) Measure (Air Toxics NEPM).

Past air monitoring results generally aligned with the levels estimated in our review of identification and prioritisation of potential Stage 1 and Stage 2 sites (further information below). The air modelling and air pollution inventory may not capture some specific areas and diffuse sources (such as emissions from some small to medium enterprises) effectively, and estimate the resulting local impact adequately. Therefore, monitoring at Dandenong South and Tullamarine was conducted during 2011 and 2012 to understand and evaluate potential impacts from industrial precincts where numerous small to medium enterprises are operating.

#### Identification of sites

There were no new Air Toxics NEPM monitoring sites identified in Victoria in 2012.

#### Reporting of monitoring of air toxics

During 2012, monitored sites were Tullamarine and Dandenong South. Pollutants monitored were benzene, toluene, xylene and formaldehyde at Tullamarine and benzene, toluene and xylene at Dandenong South. Monitoring was conducted one in every six days; 24-hour toluene, xylene and formaldehyde levels monitored were below the 24-hour monitoring investigation levels.

#### 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 programs.

<sup>1</sup> Environment Protection Authority Victoria, Dandenong South Air Monitoring Program: Final Report, publication 1496, Environment Protection Authority Victoria, Melbourne, 2012, viewed 19 November 2013, <a href="http://www.epa.vic.gov.au/~/media/Publications/1496.pdf">http://www.epa.vic.gov.au/~/media/Publications/1496.pdf</a>).

<sup>2</sup> Environment Protection Authority Victoria, Tullamarine Landfill Community Monitoring Program: Final Report, publication 1510, Environment Protection Authority Victoria, Melbourne, 2012, viewed 19 November 2013, < http://www.epa.vic.gov.au/~/ media/Publications/1510.pdf>.

#### Repeat identification of Stage 1 and Stage 2 sites

During 2010, Environment Protection Authority Victoria began a review of its Stage 1 and Stage 2 sites using the new procedures for the identification and prioritisation of Stage 1 and Stage 2 sites from the Air Toxics NEPM midterm 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[ $\alpha$ ]pyrene. In addition to modelling an air emissions inventory, analysis for the Port Phillip region was also conducted which included benzo[ $\alpha$ ]pyrene, benzene, toluene, xylene, formaldehyde and general polycyclic aromatic hydrocarbon sites.

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

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

### Queensland

Report to the National Environment Protection Council (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 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In Queensland, the National Environment Protection (Air Toxics) Measure (Air Toxics NEPM) is implemented under the *Environmental Protection Act 1994*, the Environmental Protection Regulation 1998 and the Environmental Protection (Air) Policy 1998, with the NEPM monitoring investigation levels incorporated as air quality objectives.

Air toxics emissions are also managed through effective land use planning. The Queensland Government released the South East Queensland Regional Plan 2009–2031 in July 2009 to provide a sustainable growth management strategy for South-East Queensland to the year 2031. A key policy principle is managing urban settlement and the use of transport, industry, energy and natural resources to minimise adverse impacts on the atmosphere.

#### Implementation issues arising

- Due to other ambient air quality monitoring priorities, monitoring at the Stage 2 sites identified in the 2005–06 desktop analysis was not able to be carried out during 2012–13. Monitoring of polycyclic aromatic hydrocarbons (including benzo[α]pyrene) commenced at the Woolloongabba roadside monitoring site in July 2013. Monitoring of other air toxics in accordance with the protocols specified in the Air Toxics NEPM will commence during 2013–14.
- During the 2012–13 reporting period the Department of Environment and Heritage Protection continued to
  monitor selected air toxics using open-path differential optical absorption spectroscopy instrumentation at
  Springwood in South-East Queensland and in central Gladstone. While the differential optical absorption
  spectroscopy 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 improves 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

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

#### Table 1: Stage 2 sites and proposed monitoring program

Location of Stage 2 sites	Air toxics with possible elevated levels	Air toxics to be monitored	Proposed timeframe for monitoring	Estimate of size of population likely to be exposed and identification of susceptible groups
Woolloongabba	Benzene, toluene, xylene, formaldehyde, benzo[a]pyrene	Benzene, toluene, xylene, formaldehyde, benzo[α]pyrene	2013–14	Residential population of 4700; 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	2015	Residential population of 12 200; close to major petrochemical industries

#### Reporting of monitoring of air toxics

Jurisdictions are required to submit a report, in accordance with clause 13, of the reporting year ending 31 December 2012. This includes results of desktop analysis identifying sites, any monitoring that has taken place, and assessment and action taken to manage air toxics (where exceedences have been reported).

No monitoring of air toxics was conducted at Stage 2 sites in South-East Queensland during the 2012–13 reporting period. However, levels of benzene, toluene, xylenes and formaldehyde were monitored using an alternative differential optical absorption spectroscopy (DOAS) technique at ambient air quality monitoring network sites at Springwood in South-East Queensland and in central Gladstone. The primary air toxics emission source at the Springwood site was motor vehicles. The Gladstone region contains a number of industrial facilities, including metals processing and power generation, and a major port. Results from these two monitoring sites for the 2012 year are provided below. Data collected (Tables 2 to 5) indicate that air toxics levels in Springwood and Gladstone are well below the NEPM investigation levels.

Table 2: Monitoring results for benzene

Region	South-East Queensland	Gladstone
Site	Springwood	Central Gladstone
Monitoring method	DOAS	DOAS
Period of monitoring	1/01/12 to 31/12/12	1/01/12 to 31/12/12
Number of valid results	247	59
Maximum 24-hour average concentration	0.0018 ppm	0.0025 ppm
Annual average concentration (as arithmetic mean)	0.0009 ppm	0.0011 ppm
Arithmetic standard deviation of 24-hour average concentrations	0.0002 ppm	0.0005 ppm
Number of times monitoring investigation level exceeded	0	0

#### Table 3: Monitoring results for toluene

Region	South-East Queensland	Gladstone
Site	Springwood	Central Gladstone
Monitoring method	DOAS	DOAS
Period of monitoring	1/01/12 to 31/12/12	1/01/12 to 31/12/12
Number of valid results	269	98
Maximum 24-hour average concentration	0.0091 ppm	0.0062 ppm
Annual average concentration (as arithmetic mean)	0.0034 ppm	0.0015 ppm
Arithmetic standard deviation of 24-hour average concentrations	0.0011 ppm	0.0009 ppm
Number of times monitoring investigation level exceeded	0	0

Table 4: Monitoring results for xylenes

Region	South-East Queensland	Gladstone
Site	Springwood	Central Gladstone
Monitoring method	DOAS	DOAS
Period of monitoring	1/01/12 to 31/12/12	1/01/12 to 31/12/12
Number of valid results	256	93
Maximum 24-hour average concentration	0.0129 ppm	0.0196 ppm
Annual average concentration (as arithmetic mean)	0.0061 ppm	0.0069 ppm
Arithmetic standard deviation of 24-hour average concentrations	0.0021 ppm	0.0033 ppm
Number of times monitoring investigation level exceeded	0	0

Table 5: Monitoring results for formaldehyde

Region	South-East Queensland	Gladstone
Site	Springwood	Central Gladstone
Monitoring method	DOAS	DOAS
Period of monitoring	1/01/12 to 31/12/12	1/01/12 to 31/12/12
Number of valid results	237	95
Maximum 24-hour average concentration	0.0160 ppm	0.0040 ppm
Annual average concentration (as arithmetic mean)	0.0079 ppm	0.0021 ppm
Arithmetic standard deviation of 24-hour average concentrations	0.0027 ppm	0.0008 ppm
Number of times monitoring investigation level exceeded	0	0

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

Progress toward improving the information base regarding ambient air toxics within the Queensland environment has occurred by way of the desktop analysis, identifying sites likely to have the highest population exposure to air toxics, and ambient monitoring of benzene, toluene, xylene and formaldehyde in Brisbane and Gladstone, and benzo[ $\alpha$ ]pyrene in 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-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 Bill Marmion MLA, Minister for Environment; Water (1 July 2012 to 20 March 2013) and the Hon Albert Jacob MLA, Minister for Environment; Heritage (21 March 2013 to 30 June 2013), for the reporting year ended 30 June 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

On 1 July 2013, the Western Australian Department of Environment and Conservation was restructured into two departments: Department of Parks and Wildlife and the Department of Environment Regulation.

#### Legislative, regulatory and administrative framework

In Western Australia, the National Environment Protection (Air Toxics) Measure (Air Toxics NEPM) is implemented by the Department of Environment Regulation 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 West 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 Perth AQMP are complementary to the Air Toxics NEPM.

#### Implementation issues arising

During 2012, there has been further investigations into levels of certain volatile organic compounds including benzene, toluene, ethylbenzene and xylenes undertaken during 2012 using a Fourier transform infrared spectrometer (FTIR) within urban areas adjacent to the Kwinana Industrial Area. It is anticipated that the FTIR monitoring will be completed in 2014, with an estimated 100 days of monitoring. The advantage of the FTIR is that it allows simultaneous monitoring of a range of volatile organic compounds 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 programs 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 programs. As a consequence, the NEPM monitoring protocol has not always been followed. The monitoring results from these studies 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 2007–08 and 2009 indicated that air toxics levels in Perth are low compared to international standards and below NEPM monitoring investigation levels. These studies have been summarised and published in the *Background Air Quality Monitoring in Kwinana 2005 to 2010*, which is available on the Department of Environment Regulation website <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 polycyclic aromatic hydrocarbons 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[ $\alpha$ ]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 National Environment Protection Council (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 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The National Environment Protection (Air Toxics) Measure 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 National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Air Toxics) Measure for Tasmania by the Hon Brian Wightman MP, Minister for Environment, Parks and Heritage for the reporting year ended 30 June 2013.

#### PART 1 — IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Tasmania has undertaken extensive preliminary screening monitoring of air toxics in the state between 2008 and 2011. Air toxics monitoring was not conducted during the 2012–13 period.

#### 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 accordance with the National Environment Protection (Air Toxics) Measure (Air Toxics NEPM) desktop analysis protocol.

Monitoring has now been 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 program, undertaken by the Tasmanian Environment Protection Authority Division, were reported in the 2010–11 annual report.

#### Reporting of monitoring of air toxics

Air toxics monitoring undertaken to date in Tasmania was conducted predominantly using 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.

The results of active sampling for polycyclic aromatic hydrocarbon at two sites were reported in 2011. A program of active sampling at peak sites, for benzene, toluene, xylenes and formaldehyde was completed in 2011 and the results were included in the 2010–11 annual report.

Due to budgetary constraints, no air toxics monitoring was conducted in Tasmania during the 2012–13 period. Consequently, the monitoring requirements for the Air Toxics NEPM must be evaluated as 'not demonstrated' for the 2012–13 period.

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

As there is no evidence to indicate that air toxic NEPM monitoring investigation levels would be exceeded at any of the previously monitored sites, no action to specifically reduce concentrations of air toxics was undertaken.

#### Repeat identification of Stage 1 and Stage 2 sites

Repeat identification has not been conducted.

### Australian Capital Territory

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Air Toxics) Measure for the Australian Capital Territory by Mr Simon Corbell MLA, Minister for the Environment and Sustainable Development, for the reporting year ended 30 June 2013.

#### 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 Australian Capital Territory Government has previously undertaken a desktop analysis which showed that air toxics are not an issue for the Territory airshed.

## Northern Territory

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Air Toxics) Measure for the Northern Territory by the Hon Peter Chandler MLA, Minister for Lands, Planning and the Environment, for the reporting year ended 30 June 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

#### Legislative, regulatory and administrative framework

The Northern Territory Environment Protection Authority is responsible for implementation of the National Environment Protection (Air Toxics) Measure (Air Toxics NEPM) in the Northern Territory through provisions of the Northern Territory Environment Protection Authority Act 2012 and the National Environment Protection Council (Northern Territory) Act 2004.

#### Implementation issues arising

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

A nine month monitoring program was completed in February 2006 to establish baseline conditions for Darwin. The results indicated 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 2012–13. 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 Northern Territory. Monitoring in 2005–06 has provided baseline data for further consideration.

In the reporting period of 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 National Environment Protection Council (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 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

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

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

The Council of Australian Governments (COAG) established the Standing Council on Environment and Water as part of reforms to national ministerial council arrangements. As reported in the *NEPC Annual Report 2011–2012*, in 2011 COAG identified air quality as a priority issue of national significance and agreed the standing council would develop a National Plan for Clean Air to improve air quality, and community health and well-being.

The National Plan for Clean Air represents a strategic approach to air quality management and will:

- bring Commonwealth, state and territory action together into a national plan to reduce the risk of health impacts of air pollution
- · integrate air quality standard setting with actions to reduce pollution and exposure to pollution
- modernise standards and respond to the latest science by introducing an exposure reduction framework for pollutants which have no safe threshold
- · prioritise measures that achieve a net benefit to the community
- · respond to emerging trends by working with sectors where emissions are growing.

The National Plan for Clean Air is scheduled to be delivered for endorsement by COAG by the end of 2014 and will include:

- · new air quality standards and an exposure reduction framework
- proposals for laws, regulations, incentives, guidance, partnerships or other actions for implementing emission and exposure reduction actions
- · improved monitoring and reporting
- · an agreed jurisdiction action list for ongoing implementation
- · all supported by integrated economic analysis.

In 2012–13, the Commonwealth continued to progress work to reduce emissions from nationally significant sources through the work program for developing the National Plan for Clean Air. 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<sub>10</sub>), and from non-road spark ignition engines and equipment (NRSIEE) such as lawnmowers and outboard engines, which emit high levels of PM<sub>10</sub>, nitrogen dioxide and chemicals that lead to ozone formation. A consultation regulation impact statement on reducing emissions from domestic wood heaters was released in April 2013 and the timeframe for public consultation was scheduled to conclude on 15 July 2013. A NRSIEE consultation summary report was published on the NEPC website in November 2012 and further regulatory analysis, which considers new information gained through consultation, is continuing. This work aims to support compliance in all jurisdictions with the NEPM standards.

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 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; and
  - ii. facilitate the adoption of better engine technology and emission control technology; and
  - iii. allow the more effective operation of engines; and
- b) ensure that, where appropriate, information about fuel is provided when the fuel is supplied.

In 2012–13, authorised fuel inspectors visited 944 sites and tested 2 962 samples for compliance with the Act. Compliance action undertaken in accordance with the Act resulted in a civil proceeding against a fuel supplier where the Federal Court granted an injunction to restrain the supply of non-compliant diesel and awarded a pecuniary penalty under section 12AA of the Act for the first time.

#### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM has been valuable in the management and assessment of air quality in Australia. It provides a nationally consistent framework. From the perspective of participating Commonwealth government agencies, the 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 Sustainable Australia Report 2013 - Conversations with the Future, noted that, in general, air quality has remained consistently very good over the past 15 years in most parts of Australia. The report does note that in some areas, air quality has been variable (<a href="http://www.environment.gov.au/sustainability/measuring/publications/sustainable-australia-report-2013.html">http://www.environment.gov.au/sustainability/measuring/publications/sustainable-australia-report-2013.html</a>).

The data collected for six criteria pollutants targeted by the Ambient Air Quality NEPM (carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), photochemical oxidants as ozone (O<sub>3</sub>), sulfur dioxide (SO<sub>2</sub>), lead (Pb) and particulate matter emissions with an equivalent aerodynamic diameter of 10 micrometres or less (PM<sub>10</sub>)) were essential for analysis and reporting in *State of the Air in Australia 1998-2008* and the discussion on ambient air quality in *Australia: State of the Environment 2011*.

A review of the NEPM was completed in May 2011 and publicly released by NEPC in September 2011. The review report considered that the implementation of the NEPM has led to a greater understanding of air quality in Australia which has, in turn, led to an improved understanding about the health impacts of air pollution on the community. The review identified 23 recommendations for changes to the NEPM in order to meet challenges to air quality in Australia, including from climate change and from population growth. NEPC noted that the review's recommendations will be prioritised and responded to through the development of the National Plan for Clean Air. The focus is initially on particles, due to the size of the health benefits to be gained, current population exposure and levels of particles in the atmosphere, and the range of cost-effective actions available to address particles. During 2012–13, the Commonwealth continued to undertake work in collaboration with the states and territories to address these prioritised recommendations.

The NEPM review report also recommended that lead be removed from the Ambient Air Quality NEPM and included in the Air Toxics NEPM. The rationale in removing lead from the NEPM is that lead is no longer widely spread in the environment and is linked primarily to industrial sources, and it no longer meets the definition of a 'criteria' pollutant. Including lead in the Air Toxics NEPM would allow for a national air quality standard for lead that could be used in communities that are impacted by industrial sources and where monitoring is focused.

### 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 Robyn Parker MP, Minister for the Environment and Minister for Heritage, for the reporting year ended 30 June 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

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.

In New South Wales, the Office of Environment and Heritage operates a comprehensive air quality monitoring network. The New South Wales Environment Protection Authority implements air quality management policies, programs, and strategies to protect and improve ambient air quality and public health. The Environment Protection Authority licenses scheduled industry activities, implements environmental regulatory requirements and conducts compliance and enforcement programs. The Office of Environment and Heritage and the Environment Protection Authority work together to reduce impacts of air pollution. The NEPM goals are a driver for these strategies and benchmarks against which progress in managing air quality can be assessed.

In 2012, an update to the New South Wales Greater Metropolitan Region Air Emissions Inventory for the 2008 calendar year was finalised. The inventory is a key source of information for air quality management. It includes more than 850 pollutants from natural and human sources. The inventory covers the metropolitan areas of Sydney, Newcastle and Wollongong and the surrounding non-urban areas. Approximately 75 per cent of the New South Wales population of seven million reside in the greater metropolitan region. Information from the inventory is available on the Environment Protection Authority website <www.epa.nsw.gov.au/air/airinventory.htm>.

In 2012, two new multi-parameter air quality monitoring stations at Wyong and Camden became operational in December, bringing the New South Wales network total to 40 stations. The Macarthur site was replaced by a new site at Campbelltown West. The 23 NEPM stations are a subset of the statewide network.

Air quality in the Upper Hunter region, with a particular focus on particle emissions from coal mining, is a priority for the Environment Protection Authority and the local community. In February 2013, requirements commenced under the Protection of the Environment Operations (General) Regulation 2009 for any industry bodies conducting coal mining and electricity generation in the Upper Hunter to pay a levy towards the ongoing operation of the Upper Hunter Air Quality Monitoring Network. The levy is calculated based on the amount of emissions (particles, sulfur dioxide and oxides of nitrogen) emitted and, for coal mines, additionally on the amount of materials moved at the mine. Hunter air quality monitoring sites were established to monitor regional air quality and are not NEPM sites for the purposes of NEPM reporting.

In April 2013, the Environment Protection Authority released the Upper Hunter Air Particles Action Plan which includes a range of measures in place or being developed to improve air quality in the Upper Hunter through 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 Upper Hunter Air Particles Action Plan can be viewed at <<a href="https://www.epa.nsw.gov.au/aqms/130158uphuntap.htm">www.epa.nsw.gov.au/aqms/130158uphuntap.htm</a>>.

In New South Wales, local councils are the regulatory authority for wood smoke issues. As part of its ongoing work to assist local councils reduce wood smoke pollution, the Environment Protection Authority invited councils to apply for and provided grants of up to \$60 000 per council for wood smoke reduction activities over the winter of 2013. The Woodsmoke Reduction Program has a budget of \$195 000 for 2012–13 and \$590 000 in 2013–14.

#### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

New South Wales's Air Quality Monitoring Program is currently 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. Current reporting on ambient air quality levels is referenced against the NEPM. The NEPM network is a sub-set 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 2012 for all pollutants. Levels of carbon monoxide, nitrogen dioxide and sulfur dioxide continue to be well below NEPM standards. 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.

New South Wales monitors compliance of all sites in the network with the NEPM goals. The ozone goal allows each site to exceed the standard for one day per year and the particles of 10 micrometres or less in diameter ( $PM_{10}$ ) goal allows each site to exceed the standard up to five days per year. While all sites in the NEPM network met the NEPM goals for photochemical smog (as ozone) and particles (as  $PM_{10}$ ), these pollutants continue to exceed the NEPM standards on some days at some sites in the network.

- Ozone: The NEPM network recorded one calendar day that exceeded the four-hour NEPM standard for ozone (maximum of 0.084 parts per million, where the four-hour average standard for ozone is 0.080 parts per million). The exceedances were observed at two south-west Sydney sites following the first significant heat wave during spring 2012. The ozone goal allows one exceedence day per year for a site.
- Particles as PM<sub>10</sub>: The PM<sub>10</sub> 24-hour standard of 50 micrograms per cubic metre of air (µg/m<sup>3</sup>) was exceeded on 11 distinct calendar days around the NEPM network, but all concerned sites had fewer than the five exceedence days per year allowed for compliance with the NEPM goal. Six of the 11 exceedences were recorded during hazard reduction burn and bushfire seasons. Particle events at the regional scale were responsible for three additional exceedence days observed at regional New South Wales sites.

Particulate matter of 2.5 micrometres in diameter or less ( $PM_{2.5}$ ) monitoring is currently focused in the Sydney, Illawarra and Lower Hunter regions of the NEPM network. Two different types of continuous monitoring instrument are used in the network for monitoring  $PM_{2.5}$ : tapered element oscillating microbalance (TEOM) and beta attenuation monitor.

For the advisory reporting standard for particles as  $PM_{2.5}$ , concentration in excess of the 24-hour advisory reporting standard of 25 µg/m<sup>3</sup> was recorded on one day in the greater metropolitan region at a NEPM site (Richmond) using a continuous TEOM monitor (without the United States Environmental Protection Agency (USEPA) equivalency factors, which adjust for potential evaporation of particulate matter from samples during testing). Concentration in excess of the annual advisory reporting standard of 8µg/m<sup>3</sup> was recorded at Liverpool, within the Sydney region of NEPM sites. Liverpool was one of the first sites in the network to be equipped with a beta attenuation monitor which has USEPA equivalency for reporting of daily averaged  $PM_{2.5}$  values. This instrumentation treats samples differently to a TEOM in that the heating of the sample to remove moisture is less severe, possibly reducing the loss of volatile components adsorbed onto particulates.

Data from the total New South Wales Air Quality Monitoring Network are reported by the Office of Environment and Heritage <a href="http://www.environment.nsw.gov.au/AQMS/aqi.htm">http://www.environment.nsw.gov.au/AQMS/aqi.htm</a>>.

While the NEPM goals for number of exceedence days for ozone and particles were met in 2012, a wetter La Niña pattern in the first half of the year and generally lower summer temperatures has probably contributed to lower exceedences. In most years, meeting the NEPM standards for ozone remains 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<sub>10</sub> and as PM<sub>2.5</sub>) goals present a similar challenge in Sydney and some regions in New South Wales, where relatively high use of solid fuel heaters produces elevated levels of particles in autumn and winter; in rural population centres in proximity to coal mining activities; and in rural centres where topography and climate combined with agricultural activities can result in elevated particle levels. Informed by air quality monitoring, the air emissions sources of ozone and particle pollution.

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 at a monitoring site 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<sub>10</sub>, which may be exceeded no more than five days per year) and at least 75 per cent of data are captured in each quarter (otherwise compliance is marked as 'not demonstrated').

The data are presented in greater detail on the Office of Environment and Heritage website <http://www.environment.nsw.gov.au/AQMS/search.htm>. The monitoring plan for New South Wales is available on the site <http://www.environment.nsw.gov.au/air/nepm/index.htm>.

#### PART 3 - COMPLIANCE DATA

## Carbon monoxide (NEPM standard 8 hours = 9.0ppm)

Station	Number of exceedences	NEPM goal compliance
Sydney		
Chullora	0	Met
Liverpool	0	Met
Macarthur	0	Not demonstrated
Campbelltown West	0	Not demonstrated
Camden	0	Not demonstrated
Prospect	0	Met
Rozelle	0	Met
Central Coast		
Wyong	0	Not demonstrated
Illawarra		
Wollongong	0	Met
Lower Hunter		
Newcastle	0	Met

Data availability criteria were not demonstrated at Macarthur and Campbelltown West. The Macarthur site was replaced by a new site at Campbelltown West.

Data availability criteria were not demonstrated at Camden and Wyong as they became operational in December 2012.

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

	1 hour		1 y	ear
Station	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Sydney				
Bringelly	0	Met	0.005	Met
Chullora	0	Met	0.013	Met
Liverpool	0	Met	0.009	Met
Macarthur	0	Not demonstrated	0.008	Not demonstrated
Campbelltown West	0	Not demonstrated	0.011	Not demonstrated
Camden	0	Not demonstrated	0.005	Not demonstrated
Prospect	0	Met	0.010	Met
Richmond	0	Met	0.005	Met
Rozelle	0	Met	0.012	Met
Illawarra				
Albion Park South	0	Not demonstrated	0.004	Not demonstrated
Wollongong	0	Met	0.009	Met
Central Coast				
Wyong	0	Not demonstrated	0.004	Not demonstrated
Lower Hunter				
Newcastle	0	Met	0.008	Met
Wallsend	0	Met	0.008	Met

Data availability criteria were not demonstrated at Macarthur and Campbelltown West. The Macarthur site was replaced by a new site at Campbelltown West.

Data availability criteria were not demonstrated at Camden and Wyong as they became operational in December 2012.

Data availability criteria were not demonstrated at Albion Park South due to a low data capture rate as a result of instrument failure.

# **O**<sub>3</sub>

### Ozone

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

	1 hour		4 ho	ours
	Number of	NEPM goal	Number of	NEPM goal
Station	exceedences	compliance	exceedences	compliance
Sydney				
Bringelly	0	Met	0	Met
Chullora	0	Met	0	Met
Liverpool	0	Met	0	Met
Macarthur	0	Not demonstrated	0	Not demonstrated
Campbelltown West	0	Not demonstrated	0	Not demonstrated
Camden	0	Not demonstrated	1	Not demonstrated
Oakdale	0	Met	1	Met
Prospect	0	Met	0	Met
Richmond	0	Met	0	Met
Rozelle	0	Met	0	Met
St Marys	0	Met	0	Met
Illawarra				
Albion Park South	0	Met	0	Met
Kembla Grange	0	Met	0	Met
Wollongong	0	Met	0	Met
Central Coast				
Wyong	0	Not demonstrated	0	Not demonstrated
Lower Hunter				
Newcastle	0	Met	0	Met
Wallsend	0	Met	0	Met

Data availability criteria were not demonstrated at Macarthur and Campbelltown West. The Macarthur site was replaced by a new site at Campbelltown West.

Data availability criteria were not demonstrated at Camden and Wyong as they became operational in December 2012.

### SO<sub>2</sub> Sulfur dioxide (NEPM standard: 1 hour = 0.20ppm, 1 day = 0.08ppm, 1 year = 0.02ppm)

	1 h	1 hour 1 day		1 day		vear
Station	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
Chullora	0	Met	0	Met	0.001	Met
Macarthur	0	Not demonstrated	0	Not demonstrated	0.000	Not demonstrated
Campbelltown West	0	Not demonstrated	0	Not demonstrated	0.000	Not demonstrated
Prospect	0	Met	0	Met	0.001	Met
Richmond	0	Met	0	Met	0.000	Met
Illawarra						
Albion Park South	0	Met	0	Met	0.000	Met
Wollongong	0	Met	0	Met	0.001	Met
Central Coast						
Wyong	0	Not demonstrated	0	Not demonstrated	0.001	Not demonstrated
Lower Hunter						
Newcastle	0	Met	0	Met	0.002	Met
Wallsend	0	Met	0	Met	0.001	Met

Data availability criteria were not demonstrated at Macarthur and Campbelltown West. The Macarthur site was replaced by a new site at Campbelltown West.

Data availability criteria were not demonstrated at Wyong as it became operational in December 2012.

### PM<sub>10</sub> Particles as PM<sub>10</sub> (NEPM standard 1 day = 50µg/m<sup>3</sup>)

Station	Number of exceedences	NEPM goal compliance	
Sydney			
Bringelly	0	Met	
Chullora	1	Met	
Liverpool	0	Met	
Macarthur	0	Not demonstrated	
Campbelltown West	0	Not demonstrated	
Camden	0	Not demonstrated	
Oakdale	0	Met	
Prospect	0	Met	
Richmond	3	Met	
Rozelle	0	Met	
Illawarra			
Albion Park South	0	Met	
Kembla Grange	3	Met	
Wollongong	0	Met	
Central Coast			
Wyong	0	Not demonstrated	
Lower Hunter			
Beresfield	1	Met	
Newcastle	0	Met	
Regional			
Albury	1	Met	
Bathurst	2	Met	
Tamworth	1	Met	
Wagga Wagga North	1	Met	

Data availability criteria were not demonstrated at Macarthur and Campbelltown West. The Macarthur site was replaced by a new site at Campbelltown West.

Data availability criteria were not demonstrated at Camden and Wyong as they became operational in December 2012.

### **Pine Price as PM** 2.5 (NEPM standard 1 day = $25\mu g/m^3$ , 1 year = $8\mu g/m^3$ )

	1 year				
Station	Number of exceedences	Annual average (μg/m³)			
Sydney					
Chullora	0	6.1			
Earlwood	0	5.6			
Liverpool	0	8.5			
Richmond	2	5.3			
Camden	0	7.8			
Illawarra					
Wollongong	0	4.6			
Central Coast					
Wyong	0	7.3			
Lower Hunter					
Beresfield	0	7.9			
Wallsend	0	5.1			

# **PM**<sub>2.5</sub> Particles as PM<sub>2.5</sub> – FRM data

	1 year			
Station	Number of exceedences	Annual average (μg/m³)		
Sydney				
Chullora	0	n/a		

There was insufficient data to calculate an annual average due to technical problems at Chullora.

## Victoria

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Ambient Air Quality) Measure for Victoria by the Hon Ryan Smith MP, 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 was performed in accordance with a modified state monitoring plan,<sup>1</sup> National Environment Protection (Ambient Air Quality) Measure (NEPM) technical papers and Environment Protection Authority Victoria's National Association of Testing Authorities' accreditation. Data capture targets were achieved at all stations, except for carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>) and sulfur dioxide (SO<sub>2</sub>) at Alphington (all of 2012), and nitrogen dioxide and ozone at Footscray (fourth quarter of 2012) due to technical problems with equipment

There were no other significant implementation issues.

#### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

Victoria's air quality in 2012 was generally good. The major impacts on Victoria's air quality during the year were associated with  $PM_{10}$  (particles less than 10 micrometres in diameter) on five days—local dust (23 March, 4 October), planned burning (5 April) and urban emissions (19 April, 1 June).

In the Port Phillip region in 2012 the goal was met for particles as  $PM_{10}$  at all NEPM stations for the third successive year. The goal for particles as  $PM_{10}$  was also met at Traralgon in the Latrobe Valley for the sixth successive year.

Other issue specific stations not included in the NEPM network were located at the Brooklyn industrial precinct; Francis Street, Yarraville; and Morwell East in the Latrobe Valley. Particle levels at Brooklyn were higher than the nearby Footscray station due to impacts from local sources. Air quality results at Francis Street, Yarraville were slightly higher than at Alphington and Footscray due to the impact of vehicles. Air quality at Morwell East was comparable to that measured at Traralgon.

The maximum number of days when the levels were measured above the  $PM_{10}$  air quality standard at a single station (three) occurred at the Footscray monitoring station in the Port Phillip region. This was still below the goal of no more than five days having levels above the standard in a year.

The causes at Footscray were local dust (23 March), planned burning (5 April) and urban emissions (19 April).

The 24 hour advisory reporting standard for particles as  $PM_{2.5}$  (particles less than 2.5 micrometres in diameter) was not exceeded at Alphington or Footscray in the Port Phillip region. The annual reporting standard for  $PM_{2.5}$  was met at both Alphington and Footscray.

The standards and goals for ozone  $(O_3)$  were met at all stations under typical summer smog formation conditions where sufficient air monitoring data was available.

Monitoring in 2012 showed the NEPM goals and standards were met for carbon monoxide, nitrogen dioxide and sulfur dioxide where sufficient air monitoring data was available.

<sup>1</sup> Ambient air quality NEPM monitoring plan Victoria (Environment Protection Authority Victoria publication 763), available from the authority's website <www.epa.vic.gov.au/publications>.

#### PART 3 - COMPLIANCE DATA

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 Air monitoring report 2012 - Compliance with the National Environment Protection (Ambient Air Quality) Measure <a href="http://www.epa.vic.gov.au/our-work/publications/">http://www.epa.vic.gov.au/our-work/publications/</a> publication/2013/july/1536>.

Environment Protection Authority Victoria 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>.



Carbon monoxide

(NEPM standard 8 hours = 9.0ppm)

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



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

	1 hour		1 year		
Station	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance	
Port Phillip region					
Alphington	0	Met	0.009	Met	
Brighton	0	Met	0.008	Met	
Footscray	0	Met	0.010	Met	
Geelong South	0	Met	0.006	Met	
Point Cook	0	Met	0.004	Met	
Latrobe Valley region					
Traralgon	0	Met	0.007	Met	

### Ozone

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

	1 hour		4 hours		
Station	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance	
Port Phillip region					
Alphington	0	ND	0	ND	
Brighton	0	Met	0	Met	
Dandenong	0	Met	0	Met	
Footscray	0	ND	0	ND	
Geelong South	0	Met	0	Met	
Melton	0	Met	0	Met	
Mooroolbark	0	Met	0	Met	
Point Cook	0	Met	0	Met	
Latrobe Valley region					
Traralgon	0	Met	0	Met	

Compliance was not demonstrated (ND) at Alphington (Q1, Q2, Q3 and Q4) and Footscray (Q4) due to technical problems with equipment. At all other stations operating during 2012, the one and four-hour ozone standards were not exceeded and compliance was demonstrated.



U<sub>3</sub>

SO<sub>2</sub> Sulfur dioxide (NEPM standard: 1 hour = 0.20ppm, 1 day = 0.08ppm, 1 year = 0.02ppm)

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

### Lead (NEPM standard 1 year = $0.50 \mu g/m^3$ )

Following the phasing out of leaded petrol, concentrations at the peak station, Collingwood, were below the level specified for discontinuing monitoring<sup>2</sup>. 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.



Station	Number of exceedences	NEPM goal compliance
Port Phillip region		
Alphington	0	Met
Brighton	0	Met
Dandenong	0	Met
Footscray	3	Met
Geelong South	1	Met
Mooroolbark	2	Met
Richmond	0	Met
Latrobe Valley region		
Traralgon	0	Met



	1 year			
Station	Number of exceedences Annual average (µg/m <sup>3</sup> )			
Port Phillip region				
Alphington	0	6.6		
Footscray	0	6.1		

<sup>2</sup> National Environment Protection (Ambient Air Quality) Measure Technical Paper No. 9, Lead Monitoring, available from <http://www.ephc.gov.au>

## Queensland

Report to the National Environment Protection Council (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 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

#### Legislation, regulatory and administrative framework

In relation to ambient air quality in Mount Isa, the Queensland Government passed legislation in 2008 which required all special agreement act mine operations, including smelter operations in Mount Isa, to come under contemporary environmental controls under the *Environmental Protection Act 1994* (EP Act). The legislation provided for a three year transition to the EP Act. In December 2011 the 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 program under the provisions of the EP Act was developed in April 2012. The program sets out a staged program of works to bring the site into compliance with National Environment Protection (Ambient Air Quality) Measure (NEPM) air quality standards by 2016.

#### Implementation issues arising

Implementation issues arising during the 2012-13 reporting period included the following.

- 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 three additional reporting sites were operational in 2012–13. Monitoring
  at four of the eight remaining sites concluded prior to 2011–12 due to completion of campaign monitoring or site
  closure following termination of the monitoring site lease by the property owner.
- The Rocklea trend monitoring site was damaged by severe flooding in Brisbane in January 2011 and was offline while site infrastructure was replaced. Monitoring recommenced at this site in May 2012.
- The Arundel monitoring site, in the Gold Coast sub-region of South-East Queensland, closed in February 2012 at the end of the campaign monitoring period. Monitoring had been conducted at this site since October 2010, and during this 16-month period no exceedences of the NEPM standards for nitrogen dioxide and ozone were measured. Exceedences of the NEPM 24-hour particle standards were observed only during a bushfire smoke event in September 2011.
- Collection of data on particulate matter of 2.5 micrometres diameter (PM<sub>2.5</sub>) using tapered element oscillating microbalance instrumentation continued at three sites in South-East Queensland (Rocklea, Springwood and Arundel) and one site in Gladstone (South Gladstone) during 2012. PM<sub>2.5</sub> monitoring at the Rocklea site recommenced in May 2012 following replacement of monitoring site infrastructure following flood damage in January 2011. Collection of PM<sub>2.5</sub> data at Arundel ceased in February 2012 at the end of the campaign monitoring period.

#### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM has provided the mechanism for a staged expansion of the Queensland Government's ambient air monitoring network throughout Queensland. On the basis of approved screening criteria, campaign monitoring of nitrogen dioxide and ozone in some smaller regional centres listed in the monitoring plan will now not proceed. It is reasonable to expect that levels of these pollutants will be consistently below the relevant NEPM standards in smaller regional centres. Monitoring has ceased in some locations where compliance with the NEPM standards has been demonstrated based on maximum measured concentrations.

Queensland's monitoring results for 2012 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 one hour NEPM sulfur

dioxide standard was unlikely to be achieved under previous regulatory controls. In May 2008 the Queensland Government amended the legislation regulating emissions from the Mount Isa smelters to bring these operations under the stricter controls contained within the EP Act. In December 2011 the environment department 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 program (TEP) under the provisions of the EP Act was developed in April 2012. The TEP sets out a staged program of works to bring the site into compliance with NEPM air quality standards by 2016.

The NEPM  $PM_{10}$  24-hour standard (the numerical threshold) was exceeded in South-East Queensland, Gladstone, Mackay and Mount Isa; and the  $PM_{2.5}$  24-hour standard (numerical threshold) was exceeded in Gladstone in 2012. Only in Mount Isa did  $PM_{10}$  levels fail to meet the NEPM goal of no more than five exceedences in a year. These exceedences were a result of smoke from bushfires or hazard-reduction burning, or windblown dust during dry conditions. There is no evidence that emissions from industrial, commercial and domestic activities on their own currently result in particle emissions above the NEPM standards. However, with increasing motor vehicle use, compliance with the  $PM_{2.5}$  advisory standards, particularly the annual average criterion, in the longer term it may be difficult to achieve in urban areas such as South-East Queensland.

#### PART 3 - COMPLIANCE DATA

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 *Queensland air monitoring report 2012* available at the Queensland Government website <a href="http://www.qld.gov.au/environment/pollution/monitoring/air-reports">http://www.qld.gov.au/environment/pollution/monitoring/air-reports</a>. The monitoring plan for Queensland is also available <a href="http://www.qld.gov.au/environment/pollution/monitoring/air-reports">http://www.qld.gov.au/environment/pollution/monitoring/air-reports</a>. The monitoring plan for Queensland is also available <a href="http://www.qld.gov.au/environment/pollution/monitoring/air-reports">http://www.qld.gov.au/environment/pollution/monitoring/air-reports</a>.

Concernment Concer

Station	Number of exceedences	NEPM goal compliance	
South-East Queensland			
Woolloongabba	0	Met	

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

	1 hour		1 year	
Station	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
South-East Queensla	and			
Mountain Creek	0	Met	0.004	Met
Deception Bay	0	Met	0.006	Met
Rocklea	0	Not demonstrated <sup>a</sup>	Insufficient data <sup>b</sup>	Not demonstrated <sup>a</sup>
Springwood	0	Not demonstrated <sup>a</sup>	0.006	Not demonstrated <sup>a</sup>
Arundel	0	Not demonstrated <sup>a</sup>	Insufficient datab	Not demonstrated <sup>a</sup>
Flinders View	0	Met	0.007	Met
Gladstone				
South Gladstone	0	Not demonstrated <sup>a</sup>	0.007	Not demonstrated <sup>a</sup>
Townsville				
Pimlico	0	Met	0.005	Met

<sup>a</sup>Not demonstrated due to less than 75 per cent of data in one or more quarters.

<sup>b</sup>Insufficient data to calculate value.



### Ozone

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

Station	1 hour		4 hours		
	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance	
South-East Queensla	ind				
Mountain Creek	0	Met	0	Met	
Deception Bay	0	Met	0	Met	
Rocklea	0	Not demonstrated <sup>a</sup>	0	Not demonstrated <sup>a</sup>	
Springwood	0	Not demonstrated <sup>a</sup>	0	Not demonstrated <sup>a</sup>	
Arundel	0	Not demonstrated <sup>a</sup>	0	Not demonstrated <sup>a</sup>	
Flinders View	0	Met	0	Met	
Townsville					
Pimlico	0	Met	0	Met	

<sup>a</sup>Not demonstrated due to less than 75 per cent of data in one or more quarters.

## SO<sub>2</sub> Sulfur dioxide (NEPM standard: 1 hour = 0.20ppm, 1 day = 0.08ppm, 1 year = 0.02ppm)

	1 h	our	1 day		1 y	ear
Station	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
South-East Qu	ieensland					
Springwood	0	Not demonstrated <sup>a</sup>	0	Not demonstrated <sup>a</sup>	0.001	Not demonstrated <sup>a</sup>
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	0.001	Met
Stuart	0	Met	0	Met	0.001	Met
Mount Isa						
Menzies	30	Not met	0	Met	0.005	Met
The Gap	29	Not met	0	Met	0.004	Met

<sup>a</sup>Not demonstrated due to less than 75 per cent of data in one or more quarters.



Station	Annual average (μg/m³)	NEPM goal compliance
Townsville		
Coast Guard	0.12	Met
Mount Isa		
The Gap	0.10	Met

## PPM<sub>10</sub> Particles as PM<sub>10</sub> (NEPM standard 1 day = 50µg/m<sup>3</sup>)

Station	Number of exceedences	NEPM goal compliance			
South-East Queensland					
Mountain Creek	1	Met			
Rocklea	0	Not demonstrated <sup>a</sup>			
Springwood	0	Not demonstrated <sup>a</sup>			
Arundel	0	Not demonstrated <sup>a</sup>			
Flinders View	2	Met			
Gladstone					
South Gladstone	1	Not demonstrated <sup>a</sup>			
Mackay					
West Mackay	1	Met			
Townsville					
Pimlico	0	Met			
Mount Isa					
The Gap	16	Not met			

<sup>a</sup>Not demonstrated due to less than 75 per cent of data in one or more quarters.



	1 year			
Station	Number of exceedences	Annual average (μg/m³)		
South-East Queensland				
Rocklea <sup>a</sup>	0	Insufficient data <sup>c</sup>		
Springwood <sup>b</sup>	0	4.4		
Arundel <sup>a</sup>	0	Insufficient data <sup>c</sup>		
Gladstone				
South Gladstone <sup>a</sup>	1	5.2		

<sup>a</sup>Monitoring by TEOM Model 1405 instrumentation fitted with Filter Dynamics Measurement System (FDMS). <sup>b</sup>Monitoring by TEOM Model 1400 instrumentation in accordance with the NEPC's Technical Paper on Monitoring for Particles as PM25

° Insufficient data to calculate values.

## Western Australia

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Ambient Air Quality) Measure for Western Australia by the Hon Bill Marmion MLA, Minister for Environment; Minister for Water (1 July 2012 to 20 March 2013); and the Hon Albert Jacob MLA, Minister for Environment; Heritage (21 March 2013 to 30 June 2013), for the reporting year ended 30 June 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

On 1 July 2013, the Western Australian Department of Environment and Conservation was restructured into two departments: Department of Parks and Wildlife and the Department of Environment Regulation. The Department of Environment Regulation is responsible for administering the implementation of the NEPM.

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 air quality is in compliance with the NEPM goal for each of the six pollutants within the specified 10-year period.

In the first category the Department of Environment Regulation has:

- continued to liaise with local governments and other organisations as required to facilitate the positioning and repositioning of fixed ambient monitoring stations
- continued progress towards meeting its goal of receiving National Association of Testing Authorities, Australia
  accreditation for ambient air quality monitoring
- maintained monitoring of particulate matter with a diameter of 2.5 micrometres (PM<sub>2.5</sub>) to facilitate the review and potential development of compliance NEPM standards for this pollutant in the future.

In the second category, the Department of Environment Regulation has:

- continued to implement the Perth Air Quality Management Plan (AQMP), which 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 programs. There continues to be a major
  focus on managing emissions from motor vehicles and wood heaters via the CleanRun and Burnwise programs,
  respectively. The Department of Environment Regulation continues to investigate and trial a number of
  monitoring technologies
- maintained community access to regularly updated air quality monitoring data via the Department of Environment Regulation's website (<www.der.wa.gov.au>).

#### 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 regulatory means. Carbon monoxide and nitrogen dioxide concentrations comply with the NEPM standards by comfortable margins due to clean fuel quality standards, national vehicle emissions standards and control of other sources. Ozone and  $PM_{10}$  remain pollutants of concern in the Perth region and are the focus of attention within the 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 shows that Western Australia has met the NEPM goals for the majority of pollutants in 2012. The NEPM goal for ozone averaged over four hours was not met at both the North East Metro and Outer North Coast sites. The NEPM goal for particles as PM<sub>10</sub> was not met at the regional site of Collie.

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 for the reporting year 1 January 2012 to 31 December 2012. 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<sub>102</sub> which may be exceeded no more than five days per year) and at least 75 per cent of data are captured in each quarter.

#### PART 3 - COMPLIANCE DATA

The data are presented in greater detail in the 2012 Western Australia Air Monitoring Report which will be made available on the Department of Environment Regulation website <www.der.wa.gov.au> upon its completion.

The monitoring plan for Western Australia is also available <a href="http://www.dec.wa.gov.au/pollution-prevention/air-">http://www.dec.wa.gov.au/pollution-prevention/air-</a> quality/publications.html>



### 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



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

	1 hour		1 year	
Station	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Perth				
North Metro	0	Met	0.007	Met
North East Metro	0	Met	0.006	Met
Outer North Coast	0	Met	0.003	Met
South Coast	0	Met	0.005	Met
Outer East Rural	0	Met	0.003	Met
South East Metro	0	Met	0.007	Met
Inner West Coast	0	Met	0.005	Met

### Ozone

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

	1 hour		4 hours	
Station	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance
Perth				
North East Metro	0	Met	2	Not met
Outer North Coast	1	Met	2	Not met
South Coast	0	Met	0	Met
Outer East Rural	1	Met	1	Met
South East Metro	0	Met	0	Met
Inner West Coast	1	Met	1	Met



U<sub>3</sub>

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

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

### Lead (NEPM standard 1 year = $0.50 \mu g/m^3$ )

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.

## PPV10 Particles as PM10 (NEPM standard 1 day = 50µg/m<sup>3</sup>)

Station	Number of exceedences	NEPM goal compliance
Perth		
North East Metro	4	Met
North Metro	2	Met
South East Metro	2	Met
Southwest		
Albany	0	Met
Bunbury	2	Met
Collie	6	Not met
Midwest		
Geraldton	3	Met

Tapered Element Oscillating Microbalance (TEOM) operating continuously (unadjusted for temperature) with Const A set to 3.000 and Const B set to 1.030.

**Pinticles as PM**<sub>2.5</sub> (NEPM standard 1 day =  $25\mu g/m^3$ , 1 year =  $8\mu g/m^3$ )

	1 year		
Station	Number of exceedences	Annual average (μg/m³)	
Perth			
North East Metro	3	7.8	
North Metro	3	8.2	
Outer North Coast	4	7.9	
South East Metro	4	8.9	
Southwest			
Bunbury	7	8.6	
Busselton	5	8.6	

Tapered Element Oscillating Microbalance (TEOM) operating continuously (unadjusted for temperature) with Const A set to 3.000 and Const B set to 1.030.

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 National Environment Protection Council (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 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

#### Dust monitoring at Whyalla

The Environment Protection Authority has analysed particulate matter of 10 micrometres diameter ( $PM_{10}$ ) data collected at Walls Street and Schultz Reserve and formed the view that weather conditions are a major determinant of  $PM_{10}$  levels and by implication the number of times in a year the daily average  $PM_{10}$  exceeds 50 µg/m<sup>3</sup>. In the current year, exceedences of the standard increased at both the reporting and non-reporting site and so it is likely that a lower rainfall and higher than average temperatures have resulted in a slight increase in particle concentrations.

#### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

Air quality in South Australia was generally good during the 2012–13 reporting year. The following observations were made following analysis of monitoring data for this period.

For carbon monoxide, the standard and goal were achieved at the Elizabeth Downs monitoring station.

For nitrogen dioxide, the one-hour and one-year standards and goals were met at all stations.

For ozone, the one-hour and four-hour standards and goals were met at all stations.

For sulfur dioxide, the one-hour, one-day and one-year standards and goals were met at the Adelaide metropolitan station (Northfield). The one-year standard and goal was also met at the Port Pirie Oliver Street station. There were a large number of exceedences of the one-hour standard and the 24-hour standard was exceeded on one occasion at Port Pirie so the one-hour and 24-hour goals were not achieved.

For lead, the goal was achieved at both National Environment Protection (Ambient Air Quality) Measure (NEPM) monitoring stations in Port Pirie. However, the Environment Protection Authority along with Nyrstar, is looking for continued reduction in lead emissions and thus a reduction in the impact on the community. An environment improvement program is to be developed.

For  $PM_{10}$  there was one exceedence of the standard at both Kensington and Netley and two exceedances at Elizabeth Downs monitoring stations in the Adelaide metropolitan area, but this was within the five exceedence days allowed per year. Therefore, the goal was achieved at all stations in the Adelaide metropolitan and Spencer regions.

For PM<sub>25</sub>, the advisory reporting standards were met at the Netley site.

It is worth noting that rainfall in 2012 was lower and the temperature higher than average which would have resulted in increased particle concentrations over the previous years.

#### PART 3 - COMPLIANCE DATA

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 the *Air Monitoring Report for South Australia 2012: Compliance with the National Environment Protection (Ambient Air Quality) Measure* which is available on the Council of Australian Government's Standing Council on Environment and Water website <a href="http://www.scew.gov.au/resource/national-environment-protection-ambient-air-quality-measure-annual-reporting">http://www.scew.gov.au/resource/national-environment Protection (Ambient Air Quality) Measure which is available on the Council of Australian Government's Standing Council on Environment and Water website <a href="http://www.scew.gov.au/resource/national-environment-protection-ambient-air-quality-measure-annual-reporting">http://www.scew.gov.au/resource/national-environment and Water website</a>

### **Carbon monoxide**

(NEPM standard 8 hours = 9.0ppm)

Station	Number of exceedences	NEPM goal compliance
Adelaide		
ELI01 (Elizabeth Downs)	0	Met

NO

### Nitrogen dioxide

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

	1 hour		1 year	
Station	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	0.005	Met
NET01 (Netley)	0	Met	0.008	Met
KEN01 (Kensington Gardens)	0	Met	0.004	Met
CHD01 (Christie Downs)	0	Met	0.004	Met

0,

### Ozone

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

	1 hour		4 hours	
Station	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance
Adelaide				
ELI01 (Elizabeth Downs)	0	Met	0	Met
NOR01 (Northfield)	0	Met	0	Met
NET01 (Netley)	0	Met	0	Met
KEN01 (Kensington Gardens)	0	Met	0	Met
CHD01 (Christie Downs)	0	Met	0	Met

SO<sub>2</sub> Sulfur dioxide (NEPM standard: 1 hour = 0.20ppm, 1 day = 0.08ppm, 1 year = 0.02ppm)

	1 hour		1 day		1 year	
Station	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Adelaide						
NOR01 (Northfield)	0	Met	0	Met	0.000	Met
Spencer						
PTP01 (Pt Pirie Oliver Street)	33	Not met	1	Not met	0.008	Met



Station	Annual average (µg/m³)	NEPM goal compliance
Spencer		
PTP01 (Pt Pirie Oliver Street)	0.3	Met
PTP05 (Pt Pirie Frank Green Park)	0.1	Met



Station	Number of exceedences	NEPM goal compliance
Adelaide		
ELI01 (Elizabeth Downs)	2	Met
NET01 (Netley)	1	Met
CHD01 (Christie Downs)	0	Met
KEN01 (Kensington Gardens)*	1	Met
Spencer		
WHY07 (Whyalla Schultz Park)	0	Not demonstrated**
PTP01 (Pt Pirie Oliver Street)	0	Met

\* Note: PM<sub>10</sub> monitoring recommenced at Kensington on 22 September 2011.

\*\* The annual data availability rate at Schutz Park, Whyalla for the last quarter of 2012 was only 70.7 per cent falling below the requirement of 75 per cent.

## **Pine Principal Particles as PM** (NEPM standard 1 day = $25\mu g/m^3$ , 1 year = $8\mu g/m^3$ )

	1 year		
Station	Number of exceedences	Annual average (μg/m³)	
Adelaide			
NET01 - Netley	0	7.3	

## Tasmania

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Ambient Air Quality) Measure for Tasmania by the Hon Brian Wightman MP, Minister for Environment, Parks and Heritage, for the reporting year ended 30 June 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

- National Environment Protection Measures are adopted as state policies under the *State Policies and Projects Act 1993*, and the National Environment Protection (Ambient Air Quality) Measure (NEPM) is put into effect through 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 process is implemented primarily through the Environment Protection Authority Division of the Department of Primary Industries, Parks, Water and the Environment.
- The Environment Protection Policy (Air Quality) includes specific reference to meeting the requirements of the NEPM through regulation of industry and management of diffuse sources such as planned burning activities. The policy is available on the Environment Protection Authority website <www.epa.tas.gov.au>.
- The Tasmanian Air Quality Strategy, published in June 2006, aims to assess compliance with the NEPM standards in Tasmania and specify strategies for achieving compliance where standards are not being met. The strategy addresses the management of air quality in Tasmania and includes programs to further reduce domestic and industrial emissions of respirable particles in critical regions of the state.
- Wood smoke continues to be the primary air quality issue for Tasmania. The Environmental Management and Pollution Control (Distributed Atmospheric Emissions) Regulations 2007 provide a legal framework for programs to reduce the emission of domestic wood smoke through controls on the import, sale and operation of wood heaters. The regulations also make the emission of excessive smoke from chimneys an offence and they restrict back-yard burning on suburban allotments.
- As part of the government's ongoing efforts to achieve improvements in air quality, the Environment Protection Authority Division, working with the Launceston and Hobart City Councils, successfully launched the Burn Brighter this Winter 2012 project, the first phase of the Domestic Smoke Management Program in June 2012. The second phase of this program, to reduce the impacts of smoke from domestic wood heaters, was expanded in June 2013 to regional centres which regularly experience high levels of wood smoke pollution during the winter. These include Geeveston in the Huon Valley in Southern Tasmania, and the Hadspen in the Meander Valley in the north of the state. The program focuses on managing emissions from wood heaters by utilising the provisions of the Environmental Management and Pollution Control (Distributed Atmospheric Emissions) Regulations and targeting education to the operators of smoky wood heaters.
- The Tasmanian air monitoring program operates under an ISO:17025 compliant quality system and holds National Association of Testing Authorities, Australia accreditation for the daily measurement of particulate matter of two-and-a-half micrometres diameter (PM<sub>2.5</sub>) and PM<sub>10</sub> using instruments and reference methods prescribed in the NEPM.
- An NEPM monitoring station at Devonport was commissioned in January 2013 after installation in December 2012. This station is equipped with gravimetric air samplers for reference measurements of daily averaged PM<sub>2.5</sub> and PM<sub>10</sub> particulate concentrations, as well as two tapered element oscillating microbalances TEOMs for hourly-averaged PM<sub>2.5</sub> and PM<sub>10</sub> data.
- An NEPM (peak) carbon monoxide 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 de-commissioned in February 2013.
- As previously reported, the Environment Protection Authority Division has established an online network of air monitoring stations called BLANKET. During the 2012–13 fiscal year, this network was expanded from 19 to 26 fixed stations, including those co-located with the NEPM reference stations at Hobart and Launceston. This network of optical particle monitors provides real-time information for understanding smoke movement and dispersal in the greater Tasmanian airshed.

#### Particulates (PM<sub>2.5</sub> and PM<sub>10</sub>)

The NEPM has made a contribution to improved urban air quality in Tasmania by raising community awareness of air quality issues and supporting programs 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 to less than a third of those experienced when the NEPM was introduced.

There was a marginal decline in winter air quality at both Launceston and Hobart sampling sites in 2012, with a single exceedence in Launceston of the 50 micrograms per cubic metre ( $\mu$ g/m<sup>3</sup>) 24-hour PM<sub>10</sub> standard in July 2012, for the first time in almost four years. However, Launceston's air quality has continued to meet the NEPM PM<sub>10</sub> goal of no more than five exceedence days a year, for the sixth successive year.

The 24-hour  $PM_{2.5}$  advisory reporting standard of 25 µg/m<sup>3</sup> was exceeded on 16 days at the Launceston sampling site in 2012. While this is higher than the six days observed in 2011, 11 in 2010, and 12 in 2009, it is still 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 measured in Launceston for 2012 of 8.4 µg/m<sup>3</sup> did not meet the annual average  $PM_{2.5}$  advisory standard of less than 8 µg/m<sup>3</sup>, but is comparable with the past few years (7.5 µg/m<sup>3</sup> in 2011, 8.3 µg/m<sup>3</sup> in 2010, and 7.9 µg/m<sup>3</sup> in 2009).

Ambient air quality at the Hobart sampling site continued to meet the NEPM  $PM_{10}$  goal in 2011, with no exceedence of the 50 µg/m<sup>3</sup> 24-hour  $PM_{10}$  standard. The 25 µg/m<sup>3</sup> advisory reporting standard for  $PM_{2.5}$  was exceeded on three winter days in 2012, compared with none in 2011. The annual average  $PM_{2.5}$  concentration of 6.5 µg/m<sup>3</sup>, was marginally higher than the 6.2 µg/m<sup>3</sup> measured in 2011, and met the annual average  $PM_{2.5}$  advisory standard of 8 µg/m<sup>3</sup> for the sixth consecutive year since  $PM_{2.5}$  monitoring started at the New Town station.

#### Carbon monoxide (CO)

2012 was the first year that a full year's validated CO monitoring data was available from a peak urban monitoring site in Tasmania. The highest hourly CO concentration measured at this high-traffic central business district site in 2012 was 3.7 parts per million, with the maximum eight-hour average of 1.8 parts per million. This data indicate that urban CO pollution is not a significant environmental problem in Tasmania, and CO concentrations are unlikely to exceed the NEPM eight-hour CO standard of nine parts per million in the foreseeable future, even in the central business district of the major cities.

#### PART 3 - COMPLIANCE DATA

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 demonstrating compliance with the NEPM will be presented in greater detail in Tasmania's air monitoring report for 2012 from the website <www.epa.tas.gov.au>.

# APPEN

### CO Carbon monoxide (NEPM standard 8 hours = 9.0ppm)

Station	Number of exceedences		NEPM goal compliance		pliance
Hobart					
CBD – Macquarie street	0		Met		
NO <sub>2</sub>	Nitrogen dioxide (NEPM standard: 1 hour = 0.12ppm, 1 year = 0.03ppm)				
	1 hour 1 year			ear	
Station	Number o exceedence			Annual average (ppm)	NEPM goal compliance
Not monitored in Tasmania					

Ozone

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

	1 hour		4 ho	ours
Station	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance
Not monitored in Tasmania				

Not monitored in Tasmania

 $\mathbf{O}_{3}$ 



## Sulfur dioxide

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

	<b>1</b> h	our	1 d	ay	1 ye	ear
Station	Number of exceedences					NEPM goal compliance
Not monitore	d in Tasmania					

Not monitored in Tasmania



(NEPM standard 1 year =  $0.50 \mu g/m^3$ )

Station	Annual average (μg/m³)	NEPM goal compliance
Monitoring discontinued in 1998		

## PPM\_10 Particles as PM\_10 (NEPM standard 1 day = 50µg/m<sup>3</sup>)

Station	Number of exceedences	NEPM goal compliance
Hobart		
Metro – New Town	0	Met
Launceston		
Metro – Ti Tree Bend	1	Met
Devonport		
Started January 2013	Insufficient data	Not demonstrated



	1 year			
Station	Number of day exceedences	Annual average (μg/m³)		
Hobart				
Metro – New Town	3	6.5		
Launceston				
Metro – Ti Tree Bend	16	8.4		
Devonport				
Started January 2013	Insufficient data	Not demonstrated		

## Australian Capital Territory

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Ambient Air Quality) Measure for the Australian Capital Territory by Mr Simon Corbell MLA, Minister for the Environment and Sustainable Development, for the reporting year ended 30 June 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Implementation issues arising during the 2012-13 reporting period included:

- the Environment and Sustainable Development Directorate continued to collaborate with the Health Directorate to fulfil the requirements of the NEPM
- the Health Directorate secured the budget in 2012–13 to establish another station that would be fully compliant with the NEPM. To minimise the delays, the site has been identified in accordance with the NEPM. The monitoring equipment for the additional monitoring station has already been procured.

#### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

Monitoring results demonstrate that the major impacts on Canberra's air quality in 2012, as in previous years, came from the accumulation of combustion particles from wood heaters in cold, highly stable air, hazard reduction burns and dust storms. With the exception of particulate matter with a diameter of 2.5 micrometres or less ( $PM_{2.5}$ ), all measured parameters are compliant with the ambient air quality NEPM standards.

There were three exceedences of the  $PM_{2.5}$  24-hour advisory reporting standard which occurred in May and July 2012. These exceedences were attributed to domestic wood heater emissions in winter.

The Australian Capital Territory Government acknowledges that wood smoke from domestic wood heaters is the largest source of air pollution in Canberra and has implemented a range of programs to address it. Monitoring results show these programs have been effective in reducing wood smoke with particle levels continuing to trend down. The figures have shown that the number of  $PM_{25}$  exceedences has fallen from 15 days in 2004 to two days in 2009 and remained at the similar level since then. It is also pleasing to note that the particulate matter with a diameter of 10 micrometres or less ( $PM_{10}$ ) standard was not exceeded in 2012 because of wood heater emissions, although monitoring clearly shows that particle levels increase during the winter months. Since 2003 the 95th percentile for  $PM_{10}$  at Monash station has fallen from 39.6 micrograms per cubic metre ( $\mu$ g/m<sup>3</sup>) to 19.7 $\mu$ g/m<sup>3</sup>.

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.

#### PART 3 - COMPLIANCE DATA

The data are presented in greater detail in the *ACT Air Quality Report 2012*, available on the Environment and Sustainable Development Directorate's website <a href="http://www.environment.act.gov.au/environment/environment\_protection\_authority/legislation\_and\_policies/>">http://www.environment.act.gov.au/environment/environment\_protection\_authority/legislation\_and\_policies/</a>

## **Carbon monoxide**

### (NEPM standard 8 hours = 9.0ppm)

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

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

	1 hour		1 year	
Station	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Canberra				
Monash	0	Met	0.006	Met
Civic	0	Met	0.008	Met



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

	1 hour		4 hours	
Station	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance
Canberra				
Monash	0	Met	0	Met
Civic	0	Met	0	Met



3

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

## PNT<sub>2.5</sub> Particles as PM<sub>2.5</sub> (NEPM standard 1 day = $25\mu g/m^3$ , 1 year = $8\mu g/m^3$ )

	1 year		
Station	Number of exceedences	Annual average (μg/m³)	
Canberra			
Monash	3	6.70	

## Northern Territory

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Ambient Air Quality) Measure for the Hon Peter Chandler, Minister for Lands Planning and the Environment, for the reporting year ended 30 June 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

#### Legislative, regulatory and administrative framework

The Northern Territory Environment Protection Authority was responsible for implementing the National Environment Protection (Ambient Air Quality) Measure (NEPM) in the Northern Territory through the provisions of the Northern Territory Environment Protection Authority Act 2012 and the National Environment Protection Council (Northern Territory) Act.

The major pollutants in the Darwin airshed are associated with vegetation burning. Although not directly aimed at managing air quality, the primary tool available to government is enforcement of the *Bushfires Act*. This Act has several objectives including minimising the opportunity for wildfires to propagate by enforcing fire-breaks on properties and promoting early dry season controlled burn-offs by fire authorities.

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

This report is the first to contain data from both the Winnellie and Palmerston ambient air quality stations. The stations monitor for nitric oxide, nitrogen dioxide, nitrogen oxide, carbon monoxide, sulfur dioxide, ozone, and particulate matter of 10 micrometres diameter ( $PM_{10}$ ) and 2.5 micrometres diameter ( $PM_{2,5}$ ).

Monitoring in Alice Springs was not conducted during the reporting period. The overriding pollutants of concern would be particulates caused by vegetation burning and in the winter months by household heating stoves or fireplaces. Natural gas pipelines have been extended throughout the town and more households have switched over to gas heating which is expected to reduce particulate levels.

#### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

Data from relevant monitoring stations are presented in tables 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. (Lead is not reported as the Northern Territory has no significant sources.)

The data are presented in greater detail at the Environment Protection Authority's website <a href="http://www.ntepa">http://www.ntepa</a>. nt.gov.au/waste-pollution/air>. The monitoring plan for the Northern Territory is also available there <a href="http://www.ntepa.nt.gov.au/waste-pollution/air">http://www.ntepa.nt.gov.au/waste-pollution/air</a>.

### PART 3 - COMPLIANCE DATA

### Carbon monoxide (NEPM standard 8 hours = 9.0ppm)

Station	Number of exceedences	NEPM goal compliance
Winnellie	0	met
Palmerston	0	met

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

	1 hour		1 year		
Station	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance	
Winnellie	0	met	0.003	met	
Palmerston	0	met	0.004	met	



### Ozone

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

	1 hour		4 hours		
Station	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance	
Winnellie	0	met	0	met	
Palmerston	0	met	0	met	

SO<sub>2</sub> Sulfur dioxide (NEPM standard: 1 hour = 0.20ppm, 1 day = 0.08ppm, 1 year = 0.02ppm)

	1 hour		1 day		1 year	
Station	Number of exceedences	NEPM goal compliance	Number of exceedences	NEPM goal compliance	Annual average (ppm)	NEPM goal compliance
Winnellie	0	met	0	met	0.0006	met
Palmerston	0	met	0	met	0.0009	met

## PPM10 Particles as PM10 (NEPM standard 1 day = 50µg/m<sup>3</sup>)

Station	Number of exceedences	NEPM goal compliance
Winnellie	2	not met
Palmerston	14	not met

**Pine Particles as PM**<sub>2.5</sub> (NEPM standard 1 day =  $25\mu g/m^3$ , 1 year =  $8\mu g/m^3$ )

	1 year		
Station	Number of exceedences	Annual average (µg/m³)	
Winnellie	4	9	
Palmerston	16	12	

## Appendix 3:

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

## Commonwealth

Report to the National Environment Protection Council (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 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Commonwealth implements the National Environment Protection (Assessment of Site Contamination) Measure (NEPM) as guidelines under the *National Environment Protection Council Act 1994*.

The NEPM is subject to review five years from the date of commencement. The review report was accepted in November 2006 by the NEPC. The NEPC directed the NEPC Committee to prepare a detailed proposal to initiate a variation to the NEPM based on the recommendations from the review. At its meeting on 2 June 2007, the NEPC agreed to initiate the variation process to ensure that the NEPM remains the premier methodology for the assessment of site contamination in Australia. Work continued on the variation process in 2012–13.

In 2012–13, the Commonwealth implemented a whole of government *Contamination in Commonwealth Land Decision-Making Project* to identify issues and better quantify the extent of the Commonwealth's contamination liability and associated risk.

Of those Commonwealth agencies which reported on their activities relevant to the NEPM, nine indicated responsibility for assessment and management of contaminated sites. Agencies used a variety of methods to implement the NEPM and ensure ongoing management of land-contamination issues, including:

- internal policies, guidelines and manuals that include the NEPM requirements and assist staff and contractors with identification, prioritisation and remediation of contaminated sites
- engaging with the research sector to build capacity and understanding about contamination pathways, remediation
  and clean up technologies
- · the use of geotechnical investigations as a tool for risk management
- · contamination assessment training for staff
- · the use of compliance registers and databases for incident notification
- the use of external suppliers qualified in environmental assessment and site remediation to meet the requirements of the NEPM on the agencies' behalf, or to provide independent verification of compliance, processes and procedures.

All agencies indicated their sites were managed in accordance with relevant legislation and that site assessments were conducted in line with the NEPM except for one instance where the current version of the NEPM was not relevant. In the case of Australia's Antarctic Territories, very low levels of contamination are considered to be ecologically significant and therefore levels are set according to that specific context rather than using the generic ones in the NEPM. Some agencies referenced internal guidelines, procedures and programs that incorporate the NEPM into their general environmental management programs.

#### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

Agencies have been successfully implementing the NEPM and achieving the desired environmental outcomes. From the perspective of participating Commonwealth government agencies, the NEPM provides a consistent national methodology which is beneficial for achieving agency goals of protecting human health and the environment. Some agencies proposed mechanisms to improve the operation of the NEPM at the Commonwealth level. These included:

- · periodic notices or specific training programs to increase agency involvement
- · guidance on how to derive remediation criteria
- guidance on the treatment of background concentrations in developing acceptable criteria for current and future land uses
- better alignment of NEPM guidance and property management decision making practices to improve the efficient
  and effective mitigation of contamination risk management while maximising value-for-money decision making
- an online assessment tool.

## 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 Robyn Parker MP, Minister for Environment and Minister for Heritage, for the reporting year ended 30 June 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

New South Wales has continued to fulfil all its obligations under the National Environment Protection (Assessment of Site Contamination) Measure (NEPM). There is substantial stakeholder compliance with the original NEPM (1999) as its requirements are integrated into the existing state contaminated land management framework. With the release of the amended NEPM in 2013, a transition period has been put in place to allow for any necessary updates to be made to the framework and relevant guidelines.

In June 2013, the amended NEPM and its associated guidelines were approved under section 105 of the *Contaminated Land Management Act 1997* (New South Wales) upon finalisation of the NEPM variation process. This requires the amended NEPM to be taken into consideration by the New South Wales Environment Protection Authority, site auditors and consultants when assessing the risks posed by contaminated sites.

The Environment Protection Authority considers the NEPM when making a decision on whether a contaminated site requires regulation under the Contaminated Land Management Act 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 due to:

- greater consistency in assessment approaches from applying the 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 methodologies resulting in fewer disputes between site assessors, auditors and regulators
- utilisation of joint resources for the development of guidance benefiting all jurisdictions.

During 2012–13, the Environment Protection Authority was notified of 62 potentially contaminated sites, finalised 46 site assessments, regulated nine new contaminated sites, and remediated 10 sites under the Contaminated Land Management Act.

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 184 audit statements: 149 statutory audits under the Contaminated Land Management Act and 35 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.

With the finalisation of the amended NEPM, the Environment Protection Authority has put in place transitional arrangements to allow for the uptake of the amendments in the first year of the amended NEPM. During this time the Environment Protection Authority will 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 National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for Victoria by the Hon Ryan Smith MP, Minister for Environment and Climate Change, for the reporting year ended 30 June 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Significant amendments were made to the National Environment Protection (Assessment of Site Contamination) Measure (NEPM) toward the end of this reporting year. In order to implement these amendments, Victoria is in the process of amending its State Environment Protection Policy (Prevention and Management of Contamination of Land) 2002.

The NEPM amendments are likely to involve more detailed site assessments being undertaken in some cases. While these are likely to increase costs in the assessment phase, they are expected to result in overall cost savings for business as a result of more effective, timely and targeted remediation works.

### 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 recent amendments to the NEPM are well supported by environmental auditors and others in the site assessment industry. However, given the short time period since these significant amendments to the NEPM commenced, it is too early to properly assess their effectiveness.

There are a number of practical implications arising from the amendments to the NEPM, which will need to be addressed over time. For example, the amended NEPM increases the focus on ecological values, but contains fewer ecological investigation levels and ecological screening levels. It is likely that an efficient way of assessing additional ecological investigation levels and screening levels will need to be determined in cooperation with the site assessment industry.

## Queensland

Report to the National Environment Protection Council (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 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Department of Environment and Heritage Protection is the central administering authority for contaminated land in Queensland. Local government is the assessment manager for the majority of developments, including directing applications to the state that involve contamination issues. In addition, local government plays an important role in notifying the Department of Environment and Heritage Protection of land with potential contamination issues for listing on the Environmental Management Register.

Until 30 March 2013, Queensland had an administrative system whereby third party reviewers provided a review and quality assurance role for contaminated land matters. Amendments to the *Environmental Protection Act 1994* (which came into effect on 2 April 2013) introduced a mechanism for the approval of contaminated land auditors which provides for statutory responsibilities for auditors under the Environmental Protection Act. Any application by an individual for approval to become a contaminated land auditor must be decided by the Department of Environment and Heritage Protection within six weeks of receipt. As a consequence third-party reviewers, while highly regarded peer reviewers, are no longer persons accepted by the department to fulfil the oversight role they previously held under the operational policy for third-party reviewers.

The following relevant operational data estimates associated with National Environment Protection (Assessment of Site Contamination) Measure (NEPM) implementation were collected in the reporting period 2012–13.

- Eighty-nine site assessment and validation reports, many involving multiple sites, were reviewed for compliance with NEPM Sections 7 (1) and (2) prior to statutory decisions regarding Environmental Management Register and Contaminated Land Register status of the subject land.
- The Department of Environment and Heritage Protection has 13 former third-party reviewers continuing to
  provide high level peer review services in Queensland to projects on hand and transitional arrangements are
  in place to bring into effect approved auditors in 2013–14. Approval of persons as auditors, including persons
  seeking mutual recognition on the basis of approvals held in other jurisdictions, commence in August 2013.
- Four hundred and eleven development applications were forwarded to the Department of Environment and Heritage Protection 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.
- There were 46 information requests for additional site-assessment information.
- One hundred and forty two sites were finalised as being adequately assessed according to the NEPM, decontaminated, and removed from the Environmental Management Register. The increase in the number of sites finalised relative to the lower assessment report submission in the period can be attributed to a data validation project undertaken by the Department of Environment and Heritage Protection.
- Sixty site management plans were issued for development or use of a site, including those that were assessed and partially decontaminated with management of residual contamination for restricted land uses.
- One hundred and forty three permits were issued for the transport and disposal of contaminated soil in accordance with NEPM Section 6 (4).

### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM (and the amended NEPM) is the central reference document for the assessment of site contamination in Queensland, supported by Queensland's guidelines on contaminated land. Its use is well established in contaminated land practices, leading to effective and practical site and development outcomes.

The use of the NEPM by contaminated land practitioners has been recognised by the Department of Environment and Heritage Protection through the provisions of the operational policy and guidelines relating to assessment of contaminated land. All applications to the department 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 a set of prescribed criteria under Section 115C of the Environmental Protection Regulation 2008, which will be used by approved auditors to evaluate if a report or plan can be certified by the auditor. These prescribed criteria are structured to ensure that all relevant activities are undertaken as part of a site assessment, remediation and management to measure compliance with best-practice standards.

The NEPM as it stood 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 the amended NEPM, 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 particular common types of contamination such as petroleum hydrocarbon compounds in groundwater and fragments of cement-bonded asbestos that are commonly encountered on contaminated sites. Statutory approval conditions related to land development require current NEPM adherence. The quality control procedures applied by the Department of Environment and Heritage Protection in internal review of assessment reports involve a review of the practitioner's adherence to the current NEPM.

During 2012–13, Queensland implemented administrative processes to transition from the former third-party reviewer operational policy to the assessment and approval of auditors under the recently introduced Chapter 12, Part 3 of the *Environmental Protection Act 1994*. Former third-party reviewers reviewed compliance with the NEPM by practitioners undertaking assessment and remediation work. The selection and approval of persons to be auditors is based on Schedule B9 of the amended NEPM. The acceptance of accredited auditors from other Australian jurisdictions continues to provide an additional check of consistency between Queensland and other Australian jurisdictions.

## 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 Bill Marmion MLA, Minister for Environment; Minister for Water (1 July 2012 to 20 March 2013) and the Hon Albert Jacob MLA, Minister for Environment; Heritage (21 March 2013 to 30 June 2013), for the reporting year ended 30 June 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

On 1 July 2013, the Western Australian Department of Environment and Conservation was restructured into two departments: Department of Parks and Wildlife and the Department of Environment Regulation. The Department of Environment Regulation is responsible for administering the implementation of the NEPM.

- The department continued to regulate the assessment of site contamination in Western Australia under the *Contaminated Sites Act 2003*. The department's technical guidelines in the *Contaminated Sites Management Series* are based on the NEPM. The series' technical guidelines are approved guidelines under the Contaminated Sites Act and must be taken into account by the Department of Environment Regulation in regulating contaminated sites, by contaminated sites auditors when conducting site audits, and by environmental consultants when assessing the human health and environmental risks posed by contaminated sites.
- During the year ended 30 June 2013, 171 known or suspected contaminated sites were reported to the
  Department of Environment Regulation compared with 121 in the previous year. In the same period, the
  department received and provided advice on 907 technical reports, including 51 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 of site assessment and audit reports with the *Contaminated Sites Management Series* guidelines (and principles of the NEPM) is assessed by the Department of Environment Regulation as part of the site classification/reclassification process. The department classified 476 sites (including some reclassifications) during the year, bringing the total number of sites classified under the Contaminated Sites Act to 2517. Soil and groundwater investigations have confirmed the presence of contamination at 604 sites which are listed on the publically available database on the department's website.

The Department of Environment Regulation commenced the statutory five year review of the Contaminated Sites Act in 2012. The review includes consideration of the amendments made to the NEPM in April 2013. The review report will be completed in 2013–14.

#### PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The amendment of the NEPM in April 2013 is expected to result in improvements in site assessment procedures by environmental consultants and result in efficiencies for contaminated site regulation. As the amended guidelines only became publically available in May 2013, the effectiveness of these improvements could not be assessed as at 30 June 2013.

Western Australia participated in a series of national training workshops on the amended NEPM (organised by the Co-operative Research Centre for Contamination Assessment for the Environment) in May 2013. The workshop in Perth was well attended by representatives from industry and regulators.

## South Australia

Report to the National Environment Protection Council (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 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

On 11 April 2013, the NEPC agreed to vary the National Environment Protection (Assessment of Site Contamination) Measure (NEPM) by approving an amending instrument. The amendment took effect in each jurisdiction on 16 May 2013.

In South Australia, the amended NEPM has implications for:

- policy and guidelines currently in use by the Environment Protection Authority and other state and local
  government agencies
- site contamination auditors, consultants and other environmental professionals carrying out and planning to carry
  out assessment, remediation and auditing
- state and local government, developers, industry, planners and the community involved in assessing, developing and managing land where site contamination has been and may be identified as a potential or known issue.

It is the responsibility of each jurisdiction to implement the NEPM. Regulators in the states and territories of Australia have agreed, in principle, to a transition period of up to 12 months for full implementation of the amended NEPM. The transitional period allows for the implementation of legislative and administrative steps required to put the amendments into effect.

A strategy for the implementation of the transitional arrangements within South Australia has been put in place by the South Australia Environment Protection Authority. The strategy is detailed in an information sheet published by the Environment Protection Authority in June 2013 and includes information about the following:

- the implementation of the amended NEPM during the transitional period to 16 May 2014 in the context of current Environment Protection Authority guidance and the key changes in the amended NEPM
- review of existing Environment Protection Authority 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 under section 29 of the Environment Protection Act 1993 to give effect to the amended NEPM, to come into effect following the end of the 12-month transition period.

The Environment Protection Authority is committed to providing clear, consistent and targeted advice on the implementation of the amended NEPM to stakeholders (including site contamination auditors and consultants, planning authorities, industry and the community) through its website, its own and industry publications and at industry seminars and workshops.

#### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

The key changes in the amended NEPM relate to the areas of human health risk assessment, ecological risk assessment, petroleum hydrocarbons and vapour assessment, and asbestos.

The South Australian Environment Protection Authority holds site-contamination information relating to approximately 1450 sites. This information includes sites where remediation has been completed. The number of sites where assessments have been conducted is expected to be greater as legislative requirements to notify the Environment Protection Authority of certain contamination only came into effect in July 2009.

The changes to the NEPM related to petroleum hydrocarbons and vapour assessment are expected to have the most significant impact in South Australia as more than 60 per cent of notifications of site contamination received by the Environment Protection Authority since July 2009 relate to sites where potentially contaminating activities have occurred or are occurring which involve petroleum hydrocarbons or volatile organic substances. The assessment of vapour intrusion is also required at an increasing number of sites. However, some aspects of the amended guidance are already applied to some extent. The amended NEPM is expected to provide greater certainty of adequate protection of human health and the environment through its use of integrated risk assessment, incorporating the

appropriate application of petroleum hydrocarbon health screening levels and interim soil gas health investigation levels for volatile organic carbon compounds, and through the revised and new ecological investigation levels, health investigation levels and updated groundwater investigation levels.

## Tasmania

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for Tasmania by the Hon Brian Wightman MP, Minister for Environment, Parks and Heritage, for the reporting year ended 30 June 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The amended National Environment Protection (Assessment of Site Contamination) Measure (NEPM) 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. 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 is undertaken in accordance with the NEPM, the amended NEPM must be used, although Tasmania refers to the nationally agreed transitional arrangements for assessments that have substantially commenced
- through the requirement in legislation that any reports received under the Environmental Management and Pollution Control (Underground Storage Systems) Regulations 2010 comply with the NEPM, 'Information Bulletin 109 – Underground Storage System Decommissioning Guidelines' is currently being redrafted to update the assessment process in accordance with the amended NEPM
- non statutory reports received by the Environmental Protection Authority Division for purposes such as to satisfy Planning Authority requirements prior to redevelopment must also comply with the NEPM
- CRC CARE coordinated training sessions in Hobart on 20 and 21 May, which were attended by industry, environmental consultants and state and local government
- measures to ensure stakeholders are well informed in relation to the content of the NEPM are ongoing. A targeted email has been sent to consultants on aspects of the NEPM and the website has been updated.

#### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM has provided highly useful guidance to professional practitioners in the field of site contamination assessment. The variation of the NEPM should increase its effectiveness as it takes account of recent developments in the field and clarifies certain aspects of the NEPM that have not been consistently applied by environmental practitioners.

## Australian Capital Territory

Report to the National Environment Protection Council (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 and Sustainable Development, for the reporting year ended 30 June 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Environment and Sustainable Development Directorate is responsible for implementation and administration of the National Environment Protection (Assessment of Site Contamination) Measure (the NEPM).

The provisions of the NEPM are implemented under the *Environment Protection Act 1994* (the Act). The Contaminated Sites Environment Protection Policy, made under the Act, is the primary policy document for the assessment and management of contaminated land in the Australian Capital Territory. The policy references the NEPM as the key resource for assessing contaminated land in the Territory.

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 directorate is taking the legislative and administrative steps required to put the amendment into effect within the 12 month transition period.

### 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 Australian Capital Territory and ensures the Territory contributes to a nationally consistent approach in the assessment of site contamination.

The amendments to the NEPM provide more contemporary and scientifically rigorous guidance to regulators and practitioners involved in site assessment in the Territory.

## Northern Territory

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Assessment of Site Contamination) Measure for Northern Territory by the Hon Peter Chandler MLA, Minister for Lands, Planning and the Environment, for the reporting year ended 30 June 2013.

#### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The National Environment Protection (Assessment of Site Contamination) Measure (NEPM) is implemented in the Northern Territory through the planning process. The Development Consent Authority can issue conditioned permits that require the development proponent to undertake formal site assessment with the engagement of an accredited site contamination auditor. This occurs at sites where preliminary contamination assessment, undertaken by credible environmental consultants, has established that investigation thresholds have been exceeded for contaminants of concern. In the Territory, the auditor also oversees the development and implementation of a remedial action plan to render the land fit for purpose. An auditor's Statement of Environmental Audit, for any particular site, then provides government with the necessary guidance to place on title a caution notice or administrative note that gives effect to the auditor's recommendations. The proponent cannot proceed with any development unless the Development Consent Authority is satisfied its conditions have been met. The Development Consent Authority relies on advice for such matters to be compiled and forwarded from the Northern Territory Environment Protection Authority.

There have been no significant issues encountered with the implementation of the NEPM in the Northen Territory.

#### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM provides consistent guidance for the assessment of site contamination. The Northern Territory Environment Protection Authority regularly engages with consultants and auditors who recognise and adhere to the guidance of the NEPM.

# Appendix 4:

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

## Commonwealth

Report to the National Environment Protection Council (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 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The National Environment Protection (Diesel Vehicle Emissions) Measure (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 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 Fuel Quality Standards 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; and
  - ii. facilitate the adoption of better engine technology and emission control technology; and
  - iii. allow the more effective operation of engines; and
- b) ensure that, where appropriate, information about fuel is provided when the fuel is supplied.

In 2012–13, authorised fuel inspectors visited 944 fuel supply sites and tested 2962 samples including 818 diesel fuel samples. Compliance action undertaken in accordance with the Fuel Quality Standards Act resulted in a civil proceeding against a fuel supplier where the Federal Court granted an injunction to restrain the supply of non-compliant diesel and awarded a pecuniary penalty under section 12AA of the Act for the first time.

According to the information provided by agencies for this reporting period, the Commonwealth's vehicle fleet is relatively new and well maintained. The Commonwealth operates approximately 8797 diesel vehicles. Approximately 98 per cent of diesel vehicles were manufactured in or after 1995 and more than 96 per cent were manufactured after 2005. All diesel vehicles were reported as being serviced according to manufacturers' specifications and at specified frequencies.

The Council of Australian Governments (COAG) established the Standing Council on Environment and Water as part of reforms to national ministerial council arrangements. As reported in the *NEPC Annual Report 2011–2012*, in 2011, COAG identified air quality as a priority issue of national significance and agreed that the Standing Council would develop a National Plan for Clean Air to improve air quality, and community health and well-being.

The National Plan for Clean Air represents a strategic approach to air quality management and will include new air quality standards, an exposure reduction framework, proposals for actions for implementing emission and exposure reduction actions, improved monitoring and reporting and an agreed jurisdiction action list for ongoing implementation. The National Plan for Clean Air is scheduled to be delivered for endorsement by COAG by the end of 2014.

## PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

The Commonwealth considers the Diesel NEPM has assisted in reducing emissions from diesel vehicles across Australia as a component of the broader framework to manage emissions. While the Commonwealth has no airshed responsibilities in regard to NEPM goals, considerable progress has been made toward achieving these goals through national initiatives including the Australian Design Rules and fuel-quality standards.

The Commonwealth is making strong progress towards reducing emissions from in-service diesel vehicles through:

- · ongoing administration of the Fuel Act Standards Act and the Motor Vehicle Standards Act
- · 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.

#### Audited maintenance programs for diesel vehicles

Commonwealth agencies that were operating diesel vehicles in the reporting period indicate that vehicles are serviced according to manufacturers' specifications at specified intervals, thus minimising emissions through regular maintenance and repair.

#### Other programs

Commonwealth agencies reported a variety of actions undertaken 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 programs which cover 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 the 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 Robyn Parker MP, Minister for Environment and Minister for Heritage, for the reporting year ended 30 June 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

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 emissions from the state's in-service diesel fleet.

In October 2011, the Commonwealth Department of the Environment 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 it considered options for dealing with the unspent funds.

By June 2013, Roads and Maritime Services had not received 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 programs to reduce diesel emissions. In 2012–13, the 12th year of NEPM implementation, New South Wales continued the Smoky Vehicle Program, and expanded the Clean Fleet Program and the Clean Machine (non-road diesel) Program, 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 the proportion of diesel vehicles in the fleet constituted 13.6 per cent of the total New South Wales fleet at 30 June 2013 (see Table 1 below). This is compared to 12.2 per cent in 2012, 13.7 per cent in 2011 and 12.7 per cent in 2010.

Roads and Maritime Services registration data indicate that between June 2012 and June 2013 the number of diesel vehicles registered in New South Wales increased by 82 375 or 10.4 per cent. Off-road passenger vehicles<sup>1</sup> increased by 11.2 per cent over the previous year and constitute the largest sector of the diesel fleet at 37.0 per cent. Light commercial vehicles account for 34.5 per cent of the diesel fleet. Together, these categories account for 71.5 per cent of the total diesel fleet in New South Wales. Table 2 shows changes in diesel vehicles by category between June 2012 and June 2013.

Registration data also show that in 2013, 12.8 per cent of the diesel fleet in New South Wales was manufactured prior to 1996. This is down from 15.5 per cent in 2012 and 18.3 per cent in 2011. Stricter emissions standards for new vehicles for oxides of nitrogen (NO<sub>x</sub>) 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 ADR/80.03.

<sup>1</sup> The off-road category includes vehicles designed with special features for off-road operation such as four-wheel drives and sports utility vehicles.

	Diesel vehicles												
New South Wales June 2013	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	1.41	5.01	4.68	1.34	0.41	0.13	0.23	0.33	13.6				
Vehicles by category in diesel fleet	10.42	37.0	34.54	9.89	3.0	0.97	1.73	2.45	100				

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

Source: Roads and Maritime Services registration data June 2013.

Table 2: Change in diesel vehicles by category

	No. of dies	el vehicles			Duonoution	Proportion of total
Vehicle type	Jun-12	Jun -13	Change	Percentage change (%)	Proportion of total decrease	increase (%)
Passenger vehicles	67 145	82 483	15 338	18.60	-	18.62
Off-road passenger vehicles	260 002	292 862	32 860	11.22	-	39.89
Light commercial vehicles	242 140	273 348	31 208	11.42	-	37.89
Heavy trucks	77 212	78 291	1079	1.38	-	1.31
Prime movers	23 317	23 726	409	1.72	-	0.50
Small buses	7600	7679	79	1.03	-	0.10
Buses	13 496	13 668	172	1.26	-	0.21
Other	18 198	19 428	1230	6.33	-	1.49
Total	709 110	791 485	82 375	10.41		

Source: Roads and Maritime Services registration data June 2013.

### Diesel vehicles emissions estimates

On-road mobile sources contribute approximately 62 per cent oxides of nitrogen (NO<sub>x</sub>) and 13 per cent of particle emissions of 10 micrometres in diameter or less (as  $PM_{10}$ ) from all anthropogenic sources in the Sydney<sup>2</sup> region. Diesel vehicles made up 13.6 per cent of the mobile fleet as at June 2013, however, they contribute disproportionately to the amount of air pollution produced by on-road mobile sources. Based on projections for 2012 from the 2008 Air Emissions Inventory for the New South Wales Greater Metropolitan Region, diesel vehicles contribute approximately 46 per cent of NO<sub>x</sub> and 33 per cent of particle emissions (as  $PM_{10}$ ) from all on-road mobile sources.

The New South Wales total diesel vehicle kilometres travelled are increasing due to both the underlying growth in total fleet vehicle kilometres travelled, and a trending increase in proportion of diesel vehicles in the fleet. According to Bureau of Transport statistics supplied for the Air Emissions Inventory, in the 2012 calendar year diesel vehicle kilometres travelled comprised 18.6 per cent of total fleet vehicle kilometres travelled for the greater metropolitan region.

With the exception of NO<sub>x</sub> emissions for the light vehicle fleet, the total per kilometre  $PM_{10}$  and NO<sub>x</sub> 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<sub>10</sub> emission rates are larger than the rate of increase in vehicle kilometres travelled, resulting in decreasing total PM<sub>10</sub> emissions from the diesel fleet.
- For heavy-duty diesel vehicles, NO<sub>x</sub> 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<sub>x</sub> emissions, and the percentage contribution to total vehicle fleet emissions.

### Smoky vehicles program

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 2012–13, authorised officers issued 109 penalty infringement notices (an average of nine per month) to the registered owners of diesel vehicles emitting excessive air impurities.

Prosecutions may also occur, usually where a person issued with a penalty infringement notice elects to have the matter heard before a court, or where a smoky vehicle has previously been observed by an authorised officer on a number of occasions. In 2012–13 there were 27 prosecutions, all involving diesel vehicles.

The public may also report smoky vehicles via the Environment Protect Authority's 'Environment Line', website or the newly developed mobile-phone application. An average of 122 smoky vehicle reports are received each month from the public (1464 public reports over the year), indicating a high level of awareness in the community of the unacceptability of excessive visible emissions. In 2012–13, 59 warning letters were issued to diesel vehicle owners based on public reports.

Fifteen warning letters were issued in 2012–13 to owners of vehicles observed by authorised officers as excessively smoky; of these, approximately 50 per cent 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 or warning letters as a proportion of all vehicles fined.

<sup>2 &#</sup>x27;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 <a href="http://www.epa.nsw.gov.au/air/airinventory.htm">http://www.epa.nsw.gov.au/air/airinventory.htm</a>.

Table 3: Smoky vehicles: actions taken

	July 00 – June 01	July 01 – June 02	July 02 – June 03	July 03 – June 04	July 04 – June 05	July 05 – June 06	July 06 – June 07	July 07 – June 08	July 08 – June 09	July 09 – June 10	July 10 - June 11	July 11 - June 12	July 12 - June 13
Total number of vehicles that received fines	2392	2042	1847	1545	1175	694	664	616	373	303	301	186	114
Diesel vehicles that received fines	2279	1896	1696	1448	1127	580	527	495	351	278	286	173	109
Percentage of all vehicles fined that were diesel vehicles	95.3	93	91.8	93.7	95.9	83.6	79.3	80	94.1	91.7	95	95	96
Total vehicles that received warning letters	2860	2880	2901	2398	2017	1405	1123	755	530	740	750	556	552
Diesel vehicles that received warning letters	672	523	520	450	303	174	161	103	123	133	135	96	74
Percentage of all vehicles that received warning letters that were diesel vehicles	23.5	18	17.9	18.8	15	12.4	14.3	14	23.2	17	18	17	11

Diesel vehicle emission testing and repair programs

Roads and Maritime Services is not currently operating a Diesel Vehicle Emissions Testing and Repair program. The development of a test and repair program has been put on hold at the direction of the Commonwealth Department of the Environment 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 Diesel Retrofit and Repair Initiative (discussed below).

#### Audited maintenance programs for diesel vehicles

Roads and Maritime Services is currently operating an audited maintenance program known as 'Clean Fleet'. Approximately 7000 vehicles have participated in the program since its launch in 2006.

Promotion to increase participation in the program was put on hold, pending resolution of funding with the Department of the Environment. During 2012–13 two new fleets joined this program.

#### Diesel vehicle retrofit programs

New South Wales diesel-retrofit programs continued in 2012–13. The programs are administered and implemented by Roads and Maritime Services and the Environment Protection Authority. More than 730 vehicles and machines have been retrofitted under diesel-retrofit programs in New South Wales since their inception in 2005, at a total cost of \$3.7 million.

Two diesel-retrofit programs are currently active in New South Wales. These are the M5 East Tunnel Diesel Retrofit and Repair Initiative and the Clean Machine Program targeting non-road diesel engines.

## M5 East Tunnel Diesel Retrofit and Repair Program

M5 East Tunnel Diesel Retrofit and Repair Initiative started on 1 March 2013 and it is planned that it will continue through to December 2015. The aim of this initiative is to reduce the level of particle emissions of 10 micrometres in diameter or less (as  $PM_{10}$ ) 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 frequently used in 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 2010–11 and has continued through 2012–13. It targets heavy non-road diesel equipment, such as cranes, gantries, bulldozers, loaders, and graders. Under the program, the Environment Protection Authority forms partnerships with public organisations and private businesses to encourage procurement of cleaner heavy-diesel equipment, best practice for management of diesel emissions from worksite operations and retrofitting of older more polluting in-service machines with diesel exhaust after-treatment devices.

In 2012–13, the retrofit element of the program was administered and implemented jointly by Roads and Maritime Services and the Environment Protection Authority. 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. Combined diesel oxidation catalysts and partial diesel particulate filters are being found to be the most successful strategy.

By the end of June 2013, 30 organisations had become partners to the program, including 20 that retrofitted 118 diesel machines. Retrofits alone will reduce about 2.6 tonnes of diesel particles per year, leading to an estimated public health benefit of \$629 000. Cleaner procurement and worksite practice will also result in significant diesel emissions reductions.

# Victoria

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for Victoria by the Hon Ryan Smith MP, 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 issues regarding the efficiency of the National Environment Protection (Diesel Vehicle Emissions) Measure (NEPM) administration or implementation arose during 2012–13.

## 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 Environment Protection Authority Victoria's smoky-vehicle program continue to provide some insight into the high level of community awareness and concern into diesel vehicle exhaust emissions. The continuing decline in the number of vehicles reported since the program began in 2005–06 could indicate there are fewer smoky vehicles being spotted on Victorian roads. In addition, the significant decline in the proportion of diesel-engined vehicles greater than 1.5 gross vehicle mass tonnes being reported could indicate there are fewer smoky diesel vehicles in this category.

The in-service diesel vehicle emissions testing facility at Vipac Engineers and Scientists Ltd continues to be a valuable mechanism to achieve the objectives of the NEPM by allowing heavy-duty diesel vehicles to be tested against the in-service emissions requirements of the Environment Protection (Vehicle Emissions) Regulations 2003. While the numbers of vehicles tested are low, the potential for this facility to evaluate emissions performance of in-service vehicles and provide an incentive for owners to undertake works to improve vehicle performance is significant.

### Smoky vehicles program

Environment Protection Authority Victoria has operated a public smoky vehicle reporting program for a number of years. This program allows members of the public to identify smoky vehicles (diesel, petrol or liquefied petroleum gas) using the '10-second' smoke rule, and report them to Environment Protection Authority Victoria. As a result of these reports, the owners of the offending vehicles are informed in writing of the report and are requested to have the problem fixed. They are also informed about the penalties that may apply if they are identified by officers from Environment Protection Authority Victoria, VicRoads or Victoria Police. The program resulted in 3910 smoky vehicles being reported by the public in 2012–13.

Environment Protection Authority Victoria also operates a separate official smoky vehicle enforcement program where the authority or police officers can report vehicles identified as emitting greater than 10 seconds of continuous smoke. Cautionary letters advise the vehicle owner that the vehicle has breached regulations, and if reported again, will be liable to receive an infringement notice. In 2012–13, 554 cautionary letters were issued under this program. Infringement notices are issued only to repeat offenders.

The following table indicates the number of smoky vehicles being reported in the public reporting program and the number of cautionary letters issued under the official program over the past eight years. Generally, there appears to be a downward trend in the number of vehicles being reported over recent years in both programs.

Table 1: Number of smoky vehicles being reported in the public reporting program and the number of cautionary letters issued under the official smoky vehicle program over the past eight years.

Year	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Number of public reports	10 315	7068	6443	5884	6177	5766	4895	3910
Number cautionary letters	1538	849	946	708	445	630	495	554

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

### Diesel vehicle emission testing and repair programs

Vipac Engineers and Scientists has installed a custom made Cirrus/CP Engineering AC-drive transient chassis dynamometer (which can be used in either two-wheel drive or four-wheel drive 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.

Victoria uses Vipac's test facility to support the Environment Protection Authority's regulatory infrastructure. Under the authority's official smoky-vehicle program, diesel-engine smoky vehicles registered in a defined Melbourne metropolitan area will be directed to the Vipac facility for vehicle testing. The initial vehicle test will be paid for by Environment Protection Authority Victoria (from NEPM funds). Any subsequent test, if the vehicle fails the initial test, would be borne by the vehicle owner (\$550 plus goods and services tax).

During 2012–13, 49 vehicles were tested at the Vipac facility as part of its official smoky-vehicle reporting program.

#### Audited maintenance programs for diesel vehicles

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

#### Diesel vehicle retrofit programs

Victoria does not have a diesel vehicle retrofit program.

#### Other programs

#### Heavy vehicle maintenance training program

The Kangan-Batman Institute of TAFE chassis diesel emission testing facility is used for training heavy-vehicle mechanic apprentices, industry courses, owner-driver's courses, research, conducting DT80 tests, and diploma students. The TAFE provides training for 90 per cent of diesel vehicle apprentice mechanics in Victoria, as well as some training in New South Wales and South Australia.

A survey carried out by Kangan-Batman Institute of TAFE on a small sample of recently qualified apprentices indicates that 75 per cent of students agreed that the course provided clearly communicated concepts and ideas about emission control and the environment.

The TAFE will continue to use the dynamometer in practical programs and continue to run courses that consider vehicle emissions.

## Queensland

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for Queensland by the Hon Scott Emerson MP, Minister for Transport and Main Roads, for the reporting year ended 30 June 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The National Environmental Protection Council (Queensland) Act 1994 provides the framework for implementing the National Environment Protection (Diesel Vehicle Emissions) Measure (NEPM) in Queensland. The Department of Transport and Main Roads is responsible for implementing and reporting on the NEPM. Queensland has a number of programs 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 monitor air quality in Queensland, with 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 (NOx) and fine particles: NOx 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 2012–13 reporting year, the goal of the NEPM was met for both particulate matter of 10 micrometres diameter  $(PM_{10})$  and NOx, with the exception of Mount Isa, where  $PM_{10}$  levels were above acceptable limits more than five times. These exceedences were a result of smoke from bushfires or hazard-reduction burning, or windblown dust during dry conditions. There is no evidence that emissions from diesel vehicles on their own currently result in particle emissions above the NEPM standards. In the past five years Queensland air quality has improved 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 with the ongoing introduction of new Australian Design Rules 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.

Currently, the Commonwealth Department of Infrastructure and Transport is working towards a new Australian Design Rule to support the introduction of the equivalent to Euro VI emission standards for heavy vehicles. These new standards will require new heavy vehicles to comply with more stringent emission standards and assist in further reducing the diesel emissions related to road transport in Queensland. However, consideration of the increase in the diesel-powered light vehicle fleet needs to be considered. Other programs currently in place to complement the design rules and reduce diesel-vehicle emissions are described below.

### Smoky-vehicles program

The smoky-vehicle hotline provides the community with an avenue to report vehicles exceeding the 10 second smoke rule, via the internet or telephone. Following a data match of the information provided, a letter is sent to the owner advising them of the report and suggesting ways to identify and remedy the problem. If the vehicle is reported three times, within a four month period, the owner is issued with a Present Vehicle Order which requires their vehicle to be checked for defects by a transport inspector.

For the period of 1 July 2012 to 30 June 2013, a total of 800 diesel vehicles were reported to the smoky-vehicle program, out of a total of 1776 vehicles reported. This compares to 616 vehicles reported last year. This increase may be due to the increased number of diesel powered vehicles on the road. The Australian Bureau of Statistics found that in the five year period from 2008, the number of passenger vehicles and light commercial vehicles

registered with diesel fuel increased by 103.7 per cent and 64.8 per cent respectively. The trend in Queensland prior to this year has been a steady reduction in diesel vehicles reported. The 2012–13 result may be an anomaly, resulting from other factors, as generally newer diesel-powered vehicles do not emit smoke. Alternatively, the result could indicate that older vehicles that tend to emit more visible emissions are being retained for longer.

The Department of Transport and Main Roads does not have the technology to test emissions of reported diesel vehicles therefore there is no data retained beyond the number of diesel vehicles reported to the smoky-vehicle hotline. There were no Present Vehicle Orders issued in the time period indicating there were no vehicles reported more than three times in a four month period.

Diesel vehicle emission testing and repair programs

#### Annual inspection regime

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 and public passenger vehicles, such as buses, are inspected every six months. The department inspected approximately 81 661 heavy vehicles, while private accredited inspection stations inspected approximately 79 000 vehicles in the 2012–13 financial year. This allows defective engine performance, which contributes to increased diesel exhaust emissions, to be identified and rectified.

#### DT80 diesel emission testing

Brisbane City Council operates the only registered DT80 diesel emission-testing facility in Queensland. The cost is more than \$600 per test and there continues to be a limited uptake of vehicle testing facilities by the public.

During the 2012–13 financial year, Brisbane City Council tested a total of 171 vehicles. Of these, 159 were diesel powered and therefore reportable for NEPM purposes. The remaining vehicles were testing alternative fuels, fuel blends and natural gas.

Of the 159 diesel-powered vehicles tested, 98 per cent passed. Assessment of the 159 diesel-powered vehicles tested indicated 88 were pre the implementation of Australian Design Rule 70, manufactured prior to January 1996; and 71 were post the rule, manufactured after December 1995.

Of the 159 tested, only 34 vehicles had not been previously tested with 125 presented for retesting after a two-year period to verify continued compliance in order to claim fuel tax credits under the fuel tax credit scheme. Sixteen previously untested vehicles were made available from external operators.

#### Audited maintenance programs for diesel vehicles

The Queensland Government encourages heavy vehicle industry to participate in the National Heavy Vehicle Accreditation Scheme, which encourages heavy-vehicle operators to take more responsibility for servicing their vehicles and ensuring vehicles are compliant with scheme-accreditation requirements. Compliance with an accredited maintenance scheme removes the requirement for certificates of inspection to be obtained for vehicles in the scheme. The vehicles under the scheme use diesel as their primary fuel source.

Currently, under the National Heavy Vehicle Accreditation Scheme maintenance scheme there are 34 500 vehicles registered by 828 operators, while the National Heavy Vehicle Accreditation Scheme mass scheme has 7000 vehicles registered by 822 operators. This is another moderate increase on last year's accredited registrations.

#### Diesel vehicle retrofit programs

Queensland does not have any diesel vehicle retrofit programs at this time.

### Other programs

Queensland has no other specific programs aimed at the reduction of diesel emissions at this time.

## Western Australia

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for Western Australia by the Hon Bill Marmion MLA, Minister for Environment, Minister for Water (1 July 2012 to 20 March 2013); and the Hon Albert Jacob MLA, Minister for Environment; Heritage (21 March 2013 to 30 June 2013), for the reporting year ended 30 June 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

On 1 July 2013, the Western Australian Department of Environment and Conservation was restructured into two departments: Department of Parks and Wildlife and the Department of Environment Regulation.

In Western Australia, the National Environment Protection (Diesel Vehicle Emissions) Measure (NEPM) is implemented by the Department of Environment Regulation under the *National Environment Protection Council* (*WA*) *Act 1996* and the Western Australian *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 and is administered by the Department of Transport.

The Perth Air Quality Management Plan is a non-statutory management plan established by the Government of Western Australia. The objective of the plan is to ensure clean air is achieved and maintained throughout the Perth metropolitan region. The Perth AQMP identifies that the management of emissions from the in-service petrol and diesel vehicles is critical to achieving clean air, and contains a range of initiatives that target on-road vehicles. The implementation of vehicle emissions reduction initiatives of the Perth Air Quality Management Plan 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 NEPM provides a framework for the development of programs by jurisdictions to ensure that in-service diesel vehicles are adequately maintained.

The introduction of the new vehicle emission standards for both diesel and petrol vehicles, supplemented by improvements in fuel quality, has clearly delivered significant emission benefits over the longer term.

To complement and improve the effectiveness of the NEPM, communication and training components of CleanRun continue to be implemented through the CleanRun Ecodrive program.

CleanRun EcoDrive was developed through collaboration with the road transport industry. Ecodriving incorporates a number of safer, smarter driving techniques that maximise fuel economy by operating the engine as efficiently as possible. CleanRun EcoDrive includes a resource kit for fleet operators who want to reduce fuel use and related emissions by working with their drivers to make changes to their driving habits. The kit outlines an easy-to-follow process and provides the resources to develop an in-house ecodrive training program. The kit includes driver-training materials developed with experts in the transport industry.

CleanRun EcoDrive's point of difference with other driver-training programs is the focus on driver engagement as a determining factor in achieving long-term voluntary behavioural change. CleanRun EcoDrive focuses on 10 techniques and principles, improving fuel economy—and reducing associated vehicle emissions—by up to 20 per cent.

During the reporting period stakeholders have been engaged through direct contact, a new CleanRun e-bulletin, the website and a CleanRun EcoDrive workshop. CleanRun workshops have proved very effective in communicating key messages, introducing the resources to key stakeholders and sharing experiences of positive action to reduce emissions. The CleanRun EcoDrive resources continue to be provided to organisations and individuals who have requested a copy of the package and are considering incorporating the training resources into their fleets.

The continued implementation of the smoky-vehicle reporting program has resulted in a significant number (around 40 per cent) of respondents repairing their vehicle since receiving a report of their smoky vehicle. Approximately 60 per cent of respondents indicated their vehicle was diesel.

Planning for the next phase of vehicle exhaust emissions testing using the CleanRun Remote Sensor is continuing. This emission testing will help to quantify the emissions performance of the Perth motor vehicle fleet including diesel vehicles. The CleanRun Remote Sensor is also being used in Western Australia to identify specific vehicles that may require additional investigation, or general vehicle characteristics which are likely to be considered when developing broader vehicle initiatives.

The Department of Environment Regulation continued implementation of the vehicle emissions reduction initiatives of the Perth Air Quality Management Plan, and the CleanRun program continues to strengthen all vehicle emissions reduction strategies undertaken by the Department of Environment Regulation. The department will continue to work with the Department of Transport, other government agencies and industry associations to investigate and implement motor vehicle related policies and management actions where appropriate to reduce the impact of diesel vehicle emission in Western Australia.

#### Smoky vehicles program

Currently the smoky-vehicle reporting program receives an average of 30 reports per month. The total number of reports received and information packs sent out for the 12 months from July 2012 to June 2013 was 381. During the reporting period the online smoky-vehicle reporting form was also developed and is now operational.

Table 1 below summarises the responses from 232 owners of the 381 reported vehicles from July 2012 to June 2013. Vehicle owners were able to select more than one response. The results show that 39 per cent of respondents have had their vehicle repaired since receiving a report. However, a considerable amount of respondents (40 per cent) believe their vehicle does not smoke. Fifty eight per cent of respondents reported their vehicle as diesel. The responses received in the "other" category are generally related to "my vehicle doesn't smoke" and includes the reasons why, such as "my vehicle was under excessive load", or "going up a steep hill". Comments such as "my vehicle is old and smokes, but not for 10 seconds" and "my vehicle smokes and will be repaired soon" were also common "other reasons" given.

Vehicle repaired	91 (39%)
Vehicle does not smoke	94 (41%)
Can't afford to repair	7 (3%)
Disposed of vehicle	12 (5%)
Wrong vehicle	9 (4%)
Other	19 (8%)
Petrol	47 (20%)
Diesel	135 (58%)
LPG	1 (<1%)
Fuel type not reported	49 (21%)

#### Table 1 - Responses from owners of reported vehicles

Diesel vehicle emission testing and repair programs

The CleanRun Remote Sensor program includes the utilisation of a portable roadside gas analyser that provides an efficient, cost-effective method of characterising vehicle emissions and raising community awareness of vehicle emissions.

The CleanRun Remote Sensor will be used to conduct on-road vehicle emission testing at various sites around the Perth metropolitan and regional areas in the coming years and will also be incorporated into future community-engagement activities. Community members and local businesses will be invited to have their vehicle emissions checked using the CleanRun RS and will be able to find out what factors may be influencing their vehicle's emission performance.

The objective of the vehicle emissions testing program 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 programs. In addition, vehicle testing was used to detect, identify and encourage the emission performance improvement of gross emitting vehicles.

Analysis of CleanRun Remote Sensor testing to date indicates there is a need to further monitor and manage in-service diesel and petrol-vehicle emissions. In general, the emissions performance of the overall diesel fleet appears to be improving and is likely be attributed to the increase in dominance of newer diesel vehicles into the fleet. In particular, the monitoring results suggest effort should be focused on older vehicles, which on average have considerably larger emissions when compared to the newer vehicles. Results point to a number of reasons for poor emission performance. Most notably, the age, fuel type, engine capacity, driving behaviour (e.g. severe acceleration) and use of vehicle (e.g. government, commercial, private) correlate strongly with emission performance.

#### Audited maintenance programs for diesel vehicles

The National Heavy Vehicle Accreditation Scheme encourages heavy vehicle operators to take more responsibility for servicing their vehicles and ensuring vehicles are compliant with scheme-accreditation requirements.

In Western Australia, operators of certain types of heavy vehicles must become accredited to gain a permit from Main Roads Western Australia. The majority of these vehicles use diesel as their primary fuel source. Western Australian heavy-vehicle accreditation is mandatory for individuals and organisations that perform any transport task as part of a commercial business or for profit within Western Australia, including interstate operators.

Two accreditation modules are 'Fatigue' and 'Vehicle Maintenance', which operators are required to incorporate into their daily work practices. Maintenance management encourages heavy vehicle operators to take responsibility for servicing their vehicles regularly and ensuring their vehicles are safe at all times. The standards for this module are identical to that required under the nationally endorsed National Heavy Vehicle Accreditation Scheme.

Accredited operators must ensure their vehicles are maintained and meet all relevant safety standards. A record of the maintenance and servicing work done to each vehicle must be kept to prove the vehicles are safe at all times.

Compliance and enforcement activities are key factors in ensuring effective and safe management of heavy vehicles on the road network. Transport inspectors in Western Australia are authorised by law to intercept and inspect vehicles for roadworthiness, load security and vehicle-licencing conditions. Compliance also performs the important role of educating and working with the transport industry and other agencies and stakeholders to improve standards.

#### Diesel vehicle retrofit programs

The Western Australian Government, through the Department of Environment Regulation, is currently focusing on diesel vehicle emissions, primarily through the CleanRun EcoDrive and Remote Sensing programs.

#### Other programs

#### Communication

The CleanRun program was developed to make the overall vehicle emission-reduction actions immediately identifiable and to facilitate the promotion of key NEPM messages in Western Australia. Web pages, posters, fact sheets and brochures are developed and produced to disseminate information on the CleanRun program. All of these documents continue to be made available on the Department of Environment Regulations website <</www.der. wa.gov.au/your-environment/air>. Attention continues to be focused on promoting key NEPM messages through established community involvement programs.

#### **Behaviour Change Initiative**

A major initiative of the community education strategy is the CleanRun Behaviour Change Initiative. The initiative aims to reduce diesel emissions through encouraging driver behaviour change.

The Department of Environment Regulation worked with industry partners to develop the CleanRun EcoDrive resource kit. Ecodriving incorporates a number of safer, smarter driving techniques that maximise fuel economy by operating the engine as efficiently as possible.

CleanRun EcoDrive 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 program in-house, including driver training materials developed by experts in the transport industry. It's estimated that fleet operating organisations that implement the CleanRun EcoDrive program can reduce fuel use and related emissions by up to 20 per cent. All resources are available to download free-of-charge from the Department of Environment Regulations website <<wa href="https://www.der.wa.gov.au/your-environment/air">www.der.wa.gov.au/your-environment/air</a>.

#### **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 National Environment Protection Council (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 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

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

The 10-second smoke rule regulated as Rule 147 in Road Traffic (Vehicle Standards) Rules 1999 is one of the inservice standards that can currently be applied to contribute to achieving NEPM outcomes.

The South Australian Government has a provision to regulate emissions from diesel vehicles in the Road Traffic (Vehicle Standards) Rules 1999: Rule 147A- Exhaust Emissions – diesel-powered vehicles. Rule 147A sets emission limits for nitrogen oxides and particulate matter for diesel vehicles that are in service.

South Australia will implement the National Heavy Vehicle Legislation in the 2013–14 financial year. It is pleasing to note that this rule has been included (Rule 96) in the Heavy Vehicle (Vehicle Standards) Regulation. This inclusion continues the existing standard for South Australian heavy vehicles to comply with the provision, in addition to requiring heavy vehicles in each participating jurisdiction to comply with the standard.

Compliance with the standard can be tested within the Regency Park Vehicle Inspection Emissions Test Facility. Vehicle inspectors have the discretion to test vehicles that fail the 10-second smoke rule, or have sufficient deficiencies such that they are in breach of vehicle standards and/or maintenance requirements.

Vehicles that fail the emissions test will be defected, and required to return to Regency Park for re-testing for compliance with the standard. Only a few vehicles will be tested in the first 18 months of the program to minimise the costs to industry.

South Australia has continued its commitment to use biodiesel in a significant portion of its government-owned public transport bus fleet. Currently, all buses operate on either a 5 per cent or 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 not operational for the majority of the 2012–13 calendar year due to maintenance and reliability issues. It is anticipated that the facility will resume operation in the future.

Smoky vehicles program

Not applicable.

Diesel vehicle emission testing and repair programs

Not applicable.

Audited maintenance programs for diesel vehicles

Not applicable.

Diesel vehicle retrofit programs

Not applicable.

## Other programs

A diesel electric hybrid bus is currently being trialled by the Adelaide Metro bus fleet to assess the benefits compared to compressed natural gas and diesel vehicles. The vehicle is expected to have lower diesel fuel usage and emissions, and in addition, is operated on a biodiesel blend.

The Department of Planning, Transport and Infrastructure is currently implementing measures under South Australia's low-emissions vehicle strategy 2012–16, 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 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 National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for Tasmania by the Hon Brian Wightman MP, Minister for Environment, Parks and Heritage for the reporting year ended 30 June 2013.

### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Under section 12A of the Tasmanian *State Policies and Projects Act 1993*, National Environmental Protection Measures made under Section 14(1) of the *National Environment Protection Council (Tasmania) Act 1995* are taken to be state policies which have been passed by both Houses of Parliament.

In 2006 and 2007, a contract between the then Department of Tourism, Arts and the Environment and the Commonwealth Department of the Environment and Water Resources facilitated the funding of a series of dieselengine 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 program, TasTAFE has continued to utilise this equipment in light and heavy-vehicle training courses. The equipment has been 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 liquefied natural gas conversions.

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 2013 there were 12 289 diesel-powered heavy vehicles (that is vehicles weighing more than 4.5 tonnes) and 81 897 diesel-powered light vehicles registered in the state. This represents a decrease of 1.1 per cent and an increase of 7.5 per cent respectively since 1 July 2012. Of the total of 551 420 vehicles registered in Tasmania on 30 June 2013, 17.1 per cent were diesel powered.

### Smoky vehicles program

The Department of Infrastructure, Energy and Resources maintains a strong focus on road safety rather than on vehicle emissions. It does not possess vehicle-emission measurement facilities, and does not actively target vehicle emissions.

The Department 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 Tasmania Police.

Records are not compiled showing the number of traffic infringement notices issued for smoky vehicles.

#### Diesel vehicle emission testing and repair programs

The Department of Infrastructure, Energy and Resources does not possess vehicle emission measurement facilities and does not compile records of vehicle testing or repairs

### Audited maintenance programs for diesel vehicles

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

#### Diesel vehicle retrofit programs

Statistics are not compiled on diesel vehicle retrofitting.

#### Other programs

There were no other programs implemented during the reporting year to manage emissions from in-service diesel vehicles.

# Australian Capital Territory

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for the Australian Capital Territory by Mr Simon Corbell MLA, Minister for the Environment and Sustainable Development, for the reporting year ended 30 June 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Australian Capital Territory's 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 Australian Capital Territory. Therefore, no actions are taken in the Territory as a result of measures against the NEPM.

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

- adoption of the Australian Design Rules, as requirements under sch. 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 sch. 1 of the Road Transport (Vehicle Registration) Regulation 2000
- · random on-road and car park inspections
- arrangements enabling members of the community to report vehicles they consider unroadworthy, including those that emit excessive smoke, and enabling appropriate action against those vehicles
- Australian Capital Territory Government subscription to Greenfleet for the planting of trees to offset its fleet
  vehicles' emissions
- · supporting Australian Capital Territory representation on the fuel standards consultative committee.

While statistics on the number of inspections and how many defects and warnings are collected, at this stage the reasons for these enforcement actions are not collated. In general, Australian Capital Territory inspectors would not normally issue an infringement notice to a vehicle emitting excessive smoke. The Australian Capital Territory 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 Australian Capital Territory Government Fleet Efficiency Program, the Territory has purchased 70 compressed natural gas powered buses, which are currently in service. Two buses that were converted to operate on gas have been returned to diesel operation as the trial of these two vehicles was unsuccessful.

## PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

As indicated above, the Australian Capital Territory airshed quality does not approach NEPM trigger points and therefore no action is taken within the Australian Capital Territory as a result of the NEPM. As such, the NEPM has limited, if any, effectiveness within the Territory.

Therefore, the programs identified under the NEPM are not applicable within the Australian Capital Territory. Any actions taken in relation to diesel vehicles are not taken as a result of the NEPM, but the overriding road transport laws that apply standards to individual vehicles based on type, age and roadworthiness.

Smoky vehicles program

Not applicable.

Diesel vehicle emission testing and repair programs Not applicable.

Audited maintenance programs for diesel vehicles Not applicable.

Diesel vehicle retrofit programs Not applicable.

Other programs Not applicable.

## Northern Territory

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Diesel Vehicle Emissions) Measure for the Northern Territory by the Hon Peter Chandler MLA, the Minister for Lands, Planning and the Environment, for the reporting year ended 30 June 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Aggregate data on diesel emissions for the Northern Territory are not available. However, air quality studies and the National Pollutant Inventory indicate that motor vehicle traffic is not a major contributor to air emissions in the larger urban areas.

## PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

A number of initiatives are implemented to control diesel-vehicle emissions. Vehicle standards are enforced through the general provisions of the *Motor Vehicles Act* and the Australian Vehicle Standard Rules which require all vehicles to comply with Australian Design Rules when in service.

In the Northern Territory, there are approximately 57 000 diesel vehicles registered, representing around 34 per cent of the total vehicle fleet, which is much higher than the national level of approximately 16 per cent of the vehicle fleet. Australian Bureau of Statistics data indicates that diesel vehicles registered in the Territory represent approximately 1.7 per cent of all diesel vehicles in Australia.

Of the four major regions in the Northern Territory, 68 per cent of all diesel vehicles registered in the Territory are registered in the Darwin region, while 14 per cent are registered in Alice Springs, 9 per cent in Katherine and 2 per cent in Tennant Creek.

In the Darwin region, approximately 31 per cent of all registered vehicles are diesels; this is slightly higher in Alice Springs, with diesels representing 34 per cent of the total vehicle fleet. In Katherine and Tennant Creek the diesel portion of the total fleet is 47 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, 65 per cent are registered in the Darwin region, 17 per cent in Alice Springs and 9 per cent in Katherine. The distribution of light diesel vehicle registrations in the Territory differs slightly, with 68 per cent of all light diesel vehicles registered in the Darwin region, 14 per cent in Alice Springs and 9 per cent in Katherine.

### Smoky-vehicles program

A smoky-vehicle program 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 received a defect notice due to engine smoke.

### Diesel vehicle emission testing and repair programs

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 in the Territory. The Northern Territory will continue to monitor the need for action on diesel emissions and will take appropriate action as required.

### Audited maintenance programs for diesel vehicles

Vehicle roadworthy inspections are undertaken periodically for light and heavy vehicles and these inspections include checking that all required emission-control equipment is fitted as well as the detection of smoky vehicles. Periodic roadworthy inspections are required at registration renewal and the frequency of inspections is determined by the vehicle type, age and category. During the reporting period, light vehicles up to three years old did not require inspection and for vehicles between three and 10 years old, a biennial inspection was required. From 1 July 2013, light vehicle inspections will be required at five years, 10 years and then annually. All heavy vehicles require an annual roadworthy inspection.

### Diesel vehicle retrofit programs

The majority of the Northern Territory road train fleet is less than five years old and employs the latest technology in engine management systems to minimise fuel consumption. On a payload per emission basis, road trains operating line-haul operations in remote Australia are considered to be some of the most environmentally efficient road freight vehicles in the world.

### Other programs

The 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 Territory's innovative vehicle policy promotes the development of high productivity innovative vehicle combinations which can deliver further efficiency benefits.

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# Appendix 5:

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

# Commonwealth

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 the Commonwealth by the Hon Greg Hunt MP, Minister for the Environment, for the reporting year ended 30 June 2013.

### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

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

Through its involvement in the Implementation Working Group, the Commonwealth is working with the states and territories to continue to implement the NEPM in a consistent manner. Members of the group communicate regularly through email and meetings.

During this reporting period a minor variation was made to the NEPM to correct drafting errors introduced in the previous minor variation in 2010 and to undertake additional editorial changes that enhance the clarity of the NEPM. The minor variation was initiated in September 2011, made by the NEPC in August 2012 and was completed in February 2013.

For the reporting year, relevant Commonwealth agencies indicated that the management of waste services as well as the movement of controlled waste between states and territories are managed mainly through contract arrangements. These contract arrangements require the contractors to comply with all Commonwealth, state, territory and local legislation, regulations, guidelines and standards.

The reporting agencies indicated that they had incorporated activities under the NEPM in their environmental management systems and plans, including risk management, waste management tracking systems, standard operating procedures, formal training programs and auditing. These activities under the NEPM were also applied and implemented by the contractors engaged by the agencies to provide waste management services.

## PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

From the perspective of participating Commonwealth government agencies, the NEPM generally operates efficiently and is an effective framework for states and territories to implement. Agencies did not report problems in meeting the requirements of the NEPM, however, some called for improved awareness or specific training programs to increase understanding of the NEPM.

Projects conducted during the reporting year included the first ever attempt to compile a comprehensive national hazardous waste data set for Australia, and an analysis of Australia's performance against its international waste-related reporting obligations. Commonwealth work on, and with, waste data and reporting has indicated opportunities to improve the usefulness of the NEPM to participants in waste markets. In particular, markets' participants would benefit from access to data against the NEPM's 75 waste categories, in addition to the current 15 high level summary categories that are currently reported.

# 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 Robyn Parker MP, Minister for Environment and Minister for Heritage, for the reporting year ended 30 June 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The National Environment Protection (Movement of Controlled Waste between States and Territories) Measure (NEPM) has been in place for more than 10 years and is operating smoothly, without any significant issues. Minor changes to the NEPM which were recommended following its 10-year review are expected to be introduced in New South Wales in 2013–14, when the Protection of the Environment Operations (Waste) Regulation 2005 is due to be re-made.

## PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM continues to provide an effective tool in minimising the potential for adverse impacts associated with the movement of controlled waste on the environment and human health. A total of 73 325 tonnes of controlled waste in 5907 movements was reported this period as having been transported into New South Wales (Tables 2 and 4). This is a 3 per cent decrease on the 75 643 tonnes but a 10 per cent increase on the 5370 movements in 2011–12.

After some substantial changes in the amount of controlled waste being transported into New South Wales between 2009 and 2012, the amount being transported into New South Wales in the past two years has stabilised. There has been a noticeable shift from large bulk movements to smaller regional interstate collections, resulting in a significant increase in the number of waste movements despite a small decrease in the overall tonnage.

There has been a substantial reduction (39 per cent) in the amount of controlled waste received from Queensland, mostly caused by a major collector of waste oil no longer sending it to New South Wales for treatment, and a return to 2010–11 levels for used lead acid batteries.

The decrease in controlled waste from Queensland has been largely offset by increases in waste acid from Victoria (22 per cent), non-toxic salts from Tasmania (one major new consignor), and contaminated soil from a remediation site in the Australian Capital Territory.

A number of compliance campaigns related to the transport of dangerous goods and controlled waste were undertaken during 2012–13. These campaigns did not identify any specific compliance issues for the interstate movement of controlled waste.

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

Reporting year	Consignment authorisations issued
2011–12	803
2012–13	946

Code	Description	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext- terr*	Total (tonnes)
А	Plating & heat treatment	n/a	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
В	Acids	n/a	8585.68	11.11	0.60	0.00	0.00	0.55	0.00	0.00	8597.94
С	Alkalis	n/a	454.64	1.25	0.00	79.46	0.00	245.65	0.00	0.00	781.00
D	Inorganic chemicals	n/a	12721.41	11824.07	5181.14	3223.30	4131.11	227.52	99.28	0.00	37407.83
Е	Reactive chemicals	n/a	0.00	8.61	1.67	1.18	0.00	0.23	0.00	0.00	11.69
F	Paints, resins, inks organic sludges	n/a	1647.54	535.94	250.76	224.54	0.00	182.17	0.00	0.00	2840.95
G	Organic solvents	n/a	178.30	455.61	14.85	40.97	0.00	63.80	0.00	0.00	753.53
Н	Pesticides	n/a	3.91	19.88	0.56	14.40	0.00	0.50	0.00	0.00	39.25
J	Oils	n/a	3117.57	920.71	67.66	4.40	68.59	2499.69	0.00	0.00	6678.62
K	Putrescible/ organic waste	n/a	2774.93	0.00	0.00	0.00	0.00	5599.51	0.00	0.00	8374.44
L	Industrial washwater	n/a	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
М	Organic chemicals	n/a	28.95	1258.00	78.80	61.98	18.93	41.31	70.50	0.00	1558.47
Ν	Soil/sludge	n/a	1797.21	324.49	6.00	358.10	0.00	2013.59	0.00	0.00	4499.39
R	Clinical & pharmaceutical	n/a	0.31	14.98	27.49	18.17	0.00	293.84	0.00	0.00	354.79
Т	Misc.	n/a	6.16		12.58	0.71	0.00	1407.22	0.00	0.00	1426.67
	State totals (tonnes)	0.00	31316.61	15374.65	5642.11	4027.21	4218.63	12575.59	169.78	0.00	73324.58

Table 2: Quantity of controlled waste into New South Wales for the period 1 July 2012 to 30 June 2013 (Tonnes per waste category by state/territory)

Table 3: Discrepancies in movements of controlled waste into New South Wales for the period 1 July 2012 to 30 June 2013 (Percentage of total movements)

Discrepancy type	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext terr *
Consignment non-arrival	n/a	0	0	0	0	0	0	0	0
Transport without authorisation	n/a	0	0	0	0	0	0	0	0
Non-matching documentation	n/a	0	0.36	0	0	0	0.25	0	0
Waste data	n/a	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 2012 to 30 June 2013

NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext terr*
n/a	2064	1102	320	199	233	1980	9	0

\* The 2010 review of this NEPM recommended the addition of an "External territories" column to report on waste movements from external territories where these movements must be reported.

# Victoria

Report to the National Environment Protection Council (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 MP, for the reporting year ended 30 June 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Consultation between the state and territory agencies, established under the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure (NEPM) agreement, continues to ensure that waste is directed to appropriate facilities within a jurisdiction. Close cooperation was maintained with all agencies. However, there has been a decline in the level of compliance by the waste producers.

## PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

For the 2012–13 reporting period, 440 authorisations were issued. This is a decrease of 130 approvals from the previous year. Most authorisations were principally for the recycling and energy recovery of controlled waste.

The total amount of controlled waste that was brought into Victoria during the reporting year was 34084 tonnes. This was a decrease of 520 tonnes, compared with the amount reported in 2011–12.

Due to the implementation this year of Environment Protection Authority Victoria's new integrated information management system, the data for discrepancies in movements of controlled waste into Victoria in 2012–13 (refer to Table 3 below) is unavailable at the time of reporting. Victoria will resume reporting in 2013–14.

Inorganic chemicals remain a large percentage of the total tonnage transported to Victoria, with a large increase in the amount (262 to 3393 tonnes) being transported from Tasmania. The inorganic chemicals waste stream, consisting of metallic constituents, again accounted for almost 50 per cent of the total volume in 2012–13. Resource recovery, energy recovery and recycling were the most common fate for controlled waste transported into Victoria.

#### Table 1: Number of consignment authorisations issued by Victoria

Reporting year	Consignment authorisations issued
2011–12	570
2012–13	440

Code	Description	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext- Terr*	Total (tonnes)
А	Plating & heat treatment	22	n/a	23	0	1	0	0	0	0	46.00
В	Acids	1058	n/a	0	0	0	2	0	0	0	1060.01
С	Alkalis	127	n/a	0	0	0	0	0	0	0	127.00
D	Inorganic chemicals	15994	n/a	3	26	241	262	0	0	0	16526.39
Е	Reactive chemicals	3	n/a	0	0	0	0	0	0	0	3.00
F	Paints, resins, inks organic sludges	1582	n/a	443	217	144	2	0	0	0	2388.12
G	Organic solvents	1045	n/a	107	63	96	273	0	0	0	1584.40
Н	Pesticides	83	n/a	718	260	10		0	4	0	1075.00
J	Oils	4428	n/a	1492	73	9	80	0	0	0	6081.53
К	Putrescible/ organic waste	3151	n/a	0	0	173	0	0	0	0	3323.53
L	Industrial washwater	299	n/a	215	0	0	0	0	0	0	513.50
М	Organic chemicals	67	n/a	2	0	0	22	0	0	0	91.00
Ν	Soil/sludge	439	n/a	50	0	212	2	0	0	0	702.90
R	Clinical & pharmaceutical	253	n/a	66	0	193	24	0	0	0	536.03
Т	Misc.	15	n/a	0	0	0	11	0	0	0	26.06
	State Totals (tonnes)	28566	n/a	3118	639	1079	678	0.00	4.00	0	34084.46

Table 2: Quantity of controlled waste into Victoria for the period 1 July 2012 to 30 June 2013 (Tonnes per waste category by state/territory)

Table 3: Discrepancies in movements of controlled waste into Victoria for the period 1 July 2012 to 30 June 2013 (Percentage of total movements)

Discrepancy type	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext-terr *
Consignment non-arrival	0	n/a	0	0	0	0	0	0	0
Transport without authorisation	0	n/a	0	0	0	0	0	0	0
Non-matching documentation	0	n/a	0	0	0	0	0	0	0
Waste data	0	n/a	0	0	0	0	0	0	0

Table 4: Number of movements of controlled waste into Victoria for the period 1 July 2012 to 30 June 2013

NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext-terr*
1756	n/a	209	79	308	95	0	1	0

\* The 2010 review of this NEPM recommended the addition of an "External territories" column to report on waste movements from external territories where these movements must be reported.

# Queensland

Report to the National Environment Protection Council (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 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Queensland Department of Environment and Heritage Protection is responsible for the administration of the National Environment Protection (Controlled Waste) Measure (NEPM) in Queensland. The NEPM is implemented under the *Environmental Protection Act 1994* 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 into Queensland. Legislative requirements for the licensing of controlled waste transporters are included in the Environmental Protection Act and detailed in Schedule 2 of the Environmental Protection Regulation. The NEPM administration is integrated with intrastate tracking and regulated waste licensing and compliance activities in Queensland.

- The Department of Environment and Heritage Protection has continued to administer the NEPM to help ensure that controlled wastes are managed appropriately.
- The prior approval process through consignment authorisation and consultation with other jurisdictions, generators and receiving facilities in Queensland has helped to ensure controlled wastes are consigned to the appropriate facility.
- The total amount of waste moved into Queensland (Table 2) for the period 2012–13 was 22 347.49 tonnes which is 8195.99 tonnes more than the amount received in 2011–12 (14 151.50 tonnes).
- The main reason for this overall increase of waste is the increased movement of waste from New South Wales (12 197.28 up to 19 780.17 tonnes), Victoria (1154.73 up to 2040.34 tonnes). The increase from New South Wales related to soil/sludge and pesticides. The increase from Victoria related to soil/sludge and paint, resins, inks and organic sludge.
- Discrepancies listed in Table 3 were associated with failures of waste handlers, in the near border regions, to
  obtain consignment authorisation and the overestimation by the waste handler applying for the consignment
  authorisation. The percentage of waste transactions from NSW that did not have a consignment authority was
  48 per cent. However, this related to a very small number of waste handlers transporting oils, grease, tyres and
  clinical wastes from the Tweed Coast in Northern New South Wales.

## PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

Table 1: Number of consignment authorisations issued by Queensland

Reporting year	Consignment authorisations issued
2011–12	228
2012–13	189

Code	Description	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext-Terr*	Total (tonnes)
А	Plating & heat treatment	0.00	0.00	n/a	0.00	0.00	112.00	0.00	0.00	0.00	112.00
В	Acids	272.19	0.00	n/a	2.00	2.51	0.00	0.00	3.16	0.00	279.86
С	Alkalis	98.56	0.00	n/a	0.00	0.00	0.00	0.00	0.00	0.00	98.56
D	Inorganic chemicals	603.83	0.00	n/a	0.00	1.16	0.00	0.00	0.00	0.00	604.99
Е	Reactive chemicals	21.69	0.00	n/a	0.00	0.00	0.00	0.00	0.00	0.00	21.69
F	Paints, resins, inks organic sludges	479.14	836.29	n/a	0.00	0.00	0.00	0.00	0.00	0.00	1315.43
G	Organic solvents	1,172.17	0.00	n/a	0.00	0.00	0.00	0.00	0.00	0.00	1172.17
Н	Pesticides	685.82	0.00	n/a	0.00	21.96	0.00	0.00	0.00	0.00	707.79
J	Oils	6,170.40	27.00	n/a	0.00	69.50	19.80	0.00	14.22	5.00	6305.92
K	Putrescible/ organic waste	2,022.58	0.00	n/a	0.00	12.00	0.00	0.00	0.00	0.00	2034.58
L	Industrial washwater	0.00	0.00	n/a	0.00	0.00	0.00	0.00	0.00	0.00	0.00
М	Organic chemicals	961.07	30.75	n/a	19.05	48.97	0.00	0.00	0.21	0.00	1060.05
Ν	Soil/sludge	6,110.27	1,092.00	n/a	0.00	0.00	195.44	0.00	0.00	0.00	7397.71
R	Clinical & pharmaceutical	318.59	0.00	n/a	0.00	0.00	0.00	0.00	0.00	0.00	318.59
Т	Misc.	863.86	54.30	n/a	0.00	0.00	0.00	0.00	0.00	0.00	918.16
	State Totals (tonnes)	19780.17	2040.34	n/a	21.05	156.10	327.24	0.00	17.59	5.00	22347.49

Table 2: Quantity of controlled waste into Queensland for the period 1 July 2012 to 30 June 2013 (Tonnes per waste category by state/territory)

Table 3: Discrepancies in movements of controlled waste into Queensland for the period 1 July 2012 to 30 June 2013 (Percentage of total movements)

Discrepancy type	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext- terr *
Consignment non-arrival	42	37	n/a	50	4	33	0	15	-
Transport without authorisation	48	60	n/a	0	11	0	0	20	-
Non-matching documentation	5	4	n/a	25	15	38	0	0	0
Waste data	0	0	n/a	0	0	0	0	0	0

Table 4: Number of movements of controlled waste into Queensland for the period 1 July 201.	2
to 30 June 2013	

NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext-terr*
3332	96	n/a	4	26	21	0	5	1 (NZ)

\* The 2010 review of this NEPM recommended the addition of an "External territories" column to report on waste movements from external territories where these movements must be reported.

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 the Hon Bill Marmion MLA, Minister for Environment; Minister for Water (1 July 2012 to 20 March 2013); and the Hon Albert Jacob MLA, Minister for Environment; Heritage (21 March 2013 to 30 June 2013), for the reporting year ended 30 June 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

On 1 July 2013, the Western Australian Department of Environment and Conservation was restructured into two departments: the Department of Parks and Wildlife and Department of Environment Regulation. The Department of Environment Regulation is responsible for administering 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 provide for the licensing of waste carriers, drivers and vehicles, and the use of tracking forms to ensure waste is delivered to an appropriate disposal site or treatment plant.

The Department of Environment Regulation is currently implementing a phased amendment program for the Environmental Protection (Controlled Waste) Regulations. Phase I was completed in April 2012 and related solely to waste tracking fee amendments. Phase II is currently under way and includes amendments to ensure clear, consistent and enforceable provisions that are consistent with the NEPM. Other minor amendments to ensure better harmonisation with the NEPM will also be made. It is expected that the Phase II amendments will be made by early 2014. Phase III amendments will involve significant industry consultation and examine ways to better regulate controlled waste through increased effectiveness and reduced complexity.

The Department of Environment Regulation is also currently upgrading its electronic controlled waste tracking system with a suite of usability enhancements being rolled out that will increase the accuracy and reliability of tracking data.

The Department of Environment Regulation issued no consignment authorisations for the movement of controlled waste into Western Australia during 2012–13 and carried no consignment authorisations from the previous reporting period into 2012–13.

## PART 2 — ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM continues to provide an effective framework for the management of controlled waste movements across jurisdictions. The Implementation Working Group is considered an efficient and necessary mechanism for identifying and addressing any cross-jurisdictional issues and seeking inter-jurisdictional feedback.

Western Australia's distance from other jurisdictions limits the viability of transporting controlled wastes into the state for treatment and disposal. In the 2012–13 reporting period, no consignment authorisations for waste into Western Australia were issued by the then Department of Environment and Conservation and no controlled waste was received.

Reporting year	Consignment authorisations issued
2010–11	2
2011–12	7
2012–13	0

Table 1: Number of consignment authorisations issued by Western Australia

Code	Description	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext-terr*	Total (tonnes)
А	Plating & heat treatment				n/a						0.00
В	Acids				n/a						0.00
С	Alkalis				n/a						0.00
D	Inorganic chemicals				n/a						0.00
Е	Reactive chemicals				n/a						0.00
F	Paints, resins, inks organic sludges				n/a						0.00
G	Organic solvents				n/a						0.00
Н	Pesticides				n/a						0.00
J	Oils				n/a						0.00
K	Putrescible/ organic waste				n/a						0.00
L	Industrial washwater				n/a						0.00
М	Organic chemicals				n/a						0.00
Ν	Soil/sludge				n/a						0.00
R	Clinical & pharmaceutical				n/a						0.00
Т	Misc.				n/a						0.00
	State totals (tonnes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 2: Quantity of controlled waste into Western Australia for the period 1 July 2012 to 30 June 2013 (Tonnes per waste category by state/territory)

Table 3: Discrepancies in movements of controlled waste into Western Australia for the period 1 July 2012 to 30 June 2013 (Percentage of total movements)

Discrepancy type	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext- terr *
Consignment non-arrival	0	0	0	n/a	0	0	0	0	0
Transport without authorisation	0	0	0	n/a	0	0	0	0	0
Non-matching documentation	0	0	0	n/a	0	0	0	0	0
Waste data	0	0	0	n/a	0	0	0	0	0

Table 4: Number of movements of controlled waste into Western Australia for the period 1 July 2012 to 30 June 2013

NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext-terr*
0	0	0	n/a	0	0	0	0	0

\* The 2010 review of this NEPM recommended the addition of an "external territories" column to report on waste movements from external territories where these movements must be reported.

# South Australia

Report to the National Environment Protection Council (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 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In South Australia, the National Environment Protection (Movement of Controlled Waste) Measure (NEPM) has operated as an environment protection policy 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 environment protection policy 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 environment protection policy needs to be remade subject to the transitional provision. South Australia is currently undertaking this process.

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 involves consultation and communication with other jurisdictions in regard 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
2011–12	180
2012–13	161

Code	Description	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext-terr*	Total (tonnes)
А	Plating & heat treatment	0.00	0.06	2.29	0.00	n/a	0.00	0.00	0.00	0.00	2.35
В	Acids	0.00	0.00	0.00	41.22	n/a	0.00	0.00	49.00	0.00	90.22
С	Alkalis	3.40	0.00	0.00	23.20	n/a	0.00	0.00	177.32	0.00	203.92
D	Inorganic chemicals	14197.40	13524.65	28.56	574.82	n/a	6746.53	30.88	208.63	0.00	35311.47
Е	Reactive chemicals	0.00	0.00	0.00	3.11	n/a	0.00	0.00	0.00	0.00	3.11
F	Paints, resins, inks organic sludges	320.91	1970.44	568.49	287.63	n/a	0.00	0.00	131.02	0.00	3278.49
G	Organic solvents	36.80	194.48	246.98	454.28	n/a	0.00	0.00	0.00	0.00	932.54
Н	Pesticides	0.00	0.00	0.01	0.00	n/a	0.00	0.00	0.00	0.00	0.01
J	Oils	73.72	174.69	1013.00	763.43	n/a	0.00	0.00	1820.81	0.00	3845.65
K	Putrescible/ organic waste	0.00	0.00	0.00	0.00	n/a	0.00	0.00	0.00	0.00	0.00
L	Industrial washwater	0.00	0.00	0.00	0.00	n/a	0.00	0.00	0.00	0.00	0.00
М	Organic chemicals	0.00	5.64	0.00	18.60	n/a	0.00	0.00	83.50	0.00	107.74
Ν	Soil/sludge	0.00	219.23	0.00	208.41	n/a	0.00	0.00	63.66	0.00	491.30
R	Clinical & pharmaceutical	0.00	0.00	0.00	0.00	n/a	20.33	0.00	138.83	0.00	159.16
Т	Misc.	0.00	0.00	0.00	18.80	n/a	0.00	0.00	80.80	0.00	99.60
	State totals (tonnes)	14632.23	16089.19	1859.33	2393.50	n/a	6766.86	30.88	2753.57	0.00	44525.56

Table 2: Quantity of controlled waste into South Australia for the period 1 July 2012 to 30 June 2013 (Tonnes per waste category by state/territory)

Table 3: Discrepancies in movements of controlled waste into South Australia for the period 1 July 2012 to 30 June 2013 (Percentage of total movements)

Discrepancy type	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext- terr *
Consignment non-arrival	43	38	35	27	n/a	46	0	22	0
Transport without authorisation	0	0	0	0	n/a	0	0	0	0
Non-matching documentation	55	15	64	88	n/a	64	100	79	0
Waste data	13	3	18	21	n/a	9	0	11	0

Table 4: Number of movements of controlled waste into South Australia for the period 1 July 2012 to 30 June 2013

NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext-terr*
428	603	99	282	n/a	33	1	296	0

\* The 2010 review of this NEPM recommended the addition of an "External territories" column to report on waste movements from external territories where these movements must be reported.

## Tasmania

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure for Tasmania by the Hon Brian Wightman MP, Minister for Environment, Parks and Heritage, for the reporting year ended 30 June 2013.

## 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 (NEPM) is a state policy under the *State Policies and Project Acts 1993*. The key legislative instrument for implementation of the NEPM is the *Environmental Management and Pollution Control Act 1994*. 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.

As controlled waste received from external territories is reported separately, this has particular significance for Tasmania as most of the controlled waste consignment authorisations issued by Tasmania are for controlled wastes returned to Australia from Antarctica.

## 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 associated with transport of controlled waste on the environment and human health has been achieved through improved waste management and tracking.

There have been additional and ongoing consultations between jurisdictions in relation to the appropriateness of issuing consignment authorisations.

Reporting year	Consignment authorisations issued
2011–12	24
2012–13	24

#### Table 1: Number of consignment authorisations issued by Tasmania

Code	Description	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Ext-Terr*	Total (tonnes)
А	Plating & heat treatment	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	0.00	0.00
В	Acids	0.00	0.00	0.00	0.00	10.00	n/a	0.00	0.00	6.00	16.00
С	Alkalis	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	0.20	0.20
D	Inorganic chemicals	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	1.22	1.22
Е	Reactive chemicals	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	0.02	0.02
F	Paints, resins, inks organic sludges	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	2.00	2.00
G	Organic solvents	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	30.00	30.00
Н	Pesticides	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	0.00	0.00
J	Oils	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	65.00	65.00
К	Putrescible/ organic waste	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	92.00	92.00
L	Industrial washwater	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	0.00	0.00
М	Organic chemicals	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	0.15	0.15
Ν	Soil/sludge	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	37.50	37.50
R	Clinical & pharmaceutical	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	0.60	0.60
Т	Misc.	0.00	0.00	0.00	0.00	0.00	n/a	0.00	0.00	8.00	8.00
	State Totals (tonnes)	0.00	0.00	0.00	0.00	10.00	n/a	0.00	0.00	242.69	252.69

Table 2: Quantity of controlled waste into Tasmania for the period 1 July 2012 to 30 June 2013 (Tonnes per waste category by state/territory)

Table 3: Discrepancies in movements of controlled waste into Tasmania for the period 1 July 2012 to 30 June 2013 (Percentage of total movements)

Discrepancy type	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext-terr *
Consignment non-arrival	0	0	0	0	0	n/a	0	0	0
Transport without authorisation	0	0	0	0	0	n/a	0	0	0
Non-matching documentation	0	0	0	0	0	n/a	0	0	0
Waste data	0	0	0	0	0	n/a	0	0	0

Table 4: Number of movements of controlled waste into Tasmania for the period 1 July 2012 to 30 June 2013

NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext-terr*
0	0	0	0	1	n/a	0	0	23

\* The 2010 review of this NEPM recommended the addition of an "External territories" column to report on waste movements from external territories where these movements must be reported.

## Australian Capital Territory

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure for the Australian Capital Territory by Mr Simon Corbell MLA, Minister for the Environment and Sustainable Development, for the reporting year ended 30 June 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The NEPM has been fully implemented and operational in the Australian Capital Territory since March 2000, no major issues have been identified with its operation. Environment Protection and Water Regulation continued to work with industry during 2012–13 to ensure efficient implementation of the NEPM.

NEPM documents (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.

A facility of Energy Services Invironmental Pty Ltd for the treatment of polychlorinated biphenyl contaminated oil was destroyed by fire on 16 September 2011 and there have been no movements of polychlorinated biphenyl contaminated oil into the Australian Capital Territory since this date.

A large number of movements have continued into the Australian Capital Territory from most jurisdictions for the treatment of polychlorinated biphenyl free waste oil at a Transformer Maintenance Services Australia Pty Ltd facility.

Environment Protection and Water Regulation continued to participate in the Implementation Working Group for the NEPM.

## PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

The NEPM continues to provide an effective means of tracking hazardous waste between jurisdictions, and minimising environmental risk from interstate transportation of controlled waste.

Table 1: Number of consignment authorisations issued by the Australian Capital Territory

Reporting year	Consignment authorisations issued
2011–12	33
2012–13	44

Code	Description	NSW	Vic	Old	WA	SA	Tas	АСТ	NT	Ext terr*	Total (tonnes)
А	Plating & heat treatment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
В	Acids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
С	Alkalis	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
D	Inorganic chemicals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Е	Reactive chemicals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
F	Paints, resins, inks organic sludges	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
G	Organic solvents	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Н	Pesticides	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
J	Oils	151.00	38.00	132.00	0.00	0.00	0.00	0.00	0.00	0.00	321.00
K	Putrescible/ organic waste	0.00	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	0.00
М	Organic chemicals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ν	Soil/sludge	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00
R	Clinical & pharmaceutical	217.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	217.00
Т	Misc.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	State totals (tonnes)	418.00	38.00	132.00	0.00	0.00	0.00	0.00	0.00	0.00	588.00

Table 2: Quantity of controlled waste into the Australian Capital Territory 1 July 2012 to 30 June 2013 (Tonnes per waste category by state/territory)

Table 3: Discrepancies in movements of controlled waste into the Australian Capital Territory 1 July 2012 to 30 June 2013 (% of total movements)

Discrepancy type	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext terr *
Consignment non-arrival	0	0	0	0	0	0	n/a	0	0
Transport without authorisation	0	0	0	0	0	0	n/a	0	0
Non-matching documentation	0	0	0	0	0	0	n/a	0	0
Waste data	0	0	0	0	0	0	n/a	0	0

Table 4: Movements of controlled waste into the Australian Capital Territory 1 July 2012 to 30 June 2013

NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext terr*
667	3	9	0	0	0	n/a	0	0

\* The 2010 review of this NEPM recommended the addition of an "External territories" column to report on waste movements from external territories where these movements must be reported.

## Northern Territory

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure for Northern Territory by the Hon Peter Chandler MLA, Minister for Lands, Planning and the Environment, for the reporting year ended 30 June 2013.

## 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 National Environment Protection (Movement of Controlled Waste between States and Territories) Measure (NEPM). The Northern Territory Environment Protection Authority currently administers the Territory's obligations through licensing of scheduled activities that involve the movement of controlled wastes across state and territory boundaries, and the issuing and receipt of waste transport certificates. This level of involvement is commensurate with the terms of the agreement between states and territories on matters relating to the implementation of the NEPM. The level of environmental safeguard is further bolstered within the Territory by NT WorkSafe's administration of the Dangerous Goods (Road and Rail Transport) Act.

## PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

Implementation of the NEPM is limited in the Northern Territory as the movement of controlled waste tends to be from the Territory to other states. The NEPM does however provide a consistent system for use in the Territory when required. The Territory continues to operate a paper-based system, however the Northern Territory Environment Protection Authority is committed to establishing an online tracking system similar to that used by New South Wales. The Territory is unaware of any consignments entering its borders, other than transiting through the Territory to other jurisdictions, and has not been in receipt of any requests to dispose of or treat controlled wastes. The Territory is not aware of and has not been in receipt of reports of discrepancies in reporting requirements.

I	Reporting year	Consignment authorisations issued

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

Reporting year	Consignment authorisations issued
2011–12	0
2012–13	0

Code	Description	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext-terr*	Total (tonnes)
А	Plating & heat treatment								n/a		0.00
В	Acids								n/a		0.00
С	Alkalis								n/a		0.00
D	Inorganic chemicals								n/a		0.00
Е	Reactive chemicals								n/a		0.00
F	Paints, resins, inks organic sludges								n/a		0.00
G	Organic solvents								n/a		0.00
Н	Pesticides								n/a		0.00
J	Oils								n/a		0.00
K	Putrescible/ organic waste								n/a		0.00
L	Industrial washwater								n/a		0.00
М	Organic chemicals								n/a		0.00
Ν	Soil/sludge								n/a		0.00
R	Clinical & pharmaceutical								n/a		0.00
Т	Misc.								n/a		0.00
	State totals (tonnes)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## Table 2: Quantity of controlled waste into Northern Territory for the period 1 July 2012 to 30 June 2013 (Tonnes per waste category by state/territory)

Table 3: Discrepancies in movements of controlled waste into the Northern Territory for the period 1 July 2012 to 30 June 2013 (Percentage of total movements)

Discrepancy type	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext- terr*
Consignment non-arrival	0	0	0	0	0	0	0	n/a	0
Transport without authorisation	0	0	0	0	0	0	0	n/a	0
Non-matching documentation	0	0	0	0	0	0	0	n/a	0
Waste data	0	0	0	0	0	0	0	n/a	0

Table 4: Number of movements of controlled waste into Northern Territory for the period 1 July 2012 to 30 June 2013

NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Ext-terr*
0	0	0	0	0	0	0	n/a	0

\* The 2010 review of this NEPM recommended the addition of an "External territories" column to report on waste movements from external territories where these movements must be reported.

## Appendix 6:

Jurisdictional Reports on the Implementation and Effectiveness of the National Pollutant Inventory NEPM

## Commonwealth

Report to the National Environment Protection Council (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 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Commonwealth implements the National Environment Protection (National Pollutant Inventory) Measure (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 rose from 4299 in 2010–11 to 4323 in 2011–12.

The graph below shows that the number of facilities reporting to the Inventory has steadily increased in nearly all jurisdictions over the past 10 years.

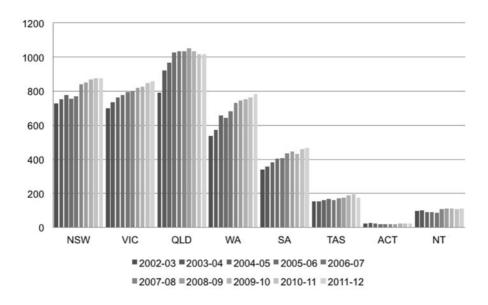


Figure 1: Number of reporting facilities in each jurisdiction by year since 2002–03

The Commonwealth continued to work cooperatively with all jurisdictions to implement the 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 National Pollutant Inventory (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
	industry and government	enectiveness
<ul> <li>Public</li> <li>282 334 visitors on website</li> </ul>	• The number of visitors increased significantly from 213 856 visitors in the previous reporting year. This indicates continuing support from the community, industry, researchers and government for the NPI.	<ul> <li>More than 10 calls a month, on average, were received through the free call phone line.</li> <li>Responses were provided to 124 emails received through the public email address.</li> <li>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.</li> </ul>
Industry		
<ul> <li>4323 reports for 2011–2012</li> <li>4299 reports for 2010–2011</li> <li>1187 new reporters</li> <li>2 new sectors reporting</li> <li>No confidentiality claims submitted</li> </ul>	<ul> <li>Industry representatives contributed to updates of NPI reporting tools and emission factors, which were well- received by NPI reporters and industry organisations.</li> <li>The NPI continued to build positive relationships with key industry stakeholders, researchers and the community.</li> <li>The NPI provided sponsorship and organisational support for the 2nd annual conference of the Australian Institute of Environmental Accounting, which was an important forum for the exchange of ideas between government and industry.</li> </ul>	<ul> <li>Work was undertaken to update a number of industry manuals, including for oil and gas, potable water; poultry and ferrous foundries.</li> <li>The NPI responded to a number of industry queries related to reporting and technical issues.</li> <li>The online reporting system underwent maintenance to improve compatibility with desktop software.</li> </ul>
Government		
<ul> <li>16 facilities from 5 Commonwealth departments reported to the NPI in 2011–12.</li> <li>0 desktop audits</li> <li>0 on-site audits</li> <li>0 regulatory actions</li> </ul>	<ul> <li>Jurisdictions noted that aggregated emissions data should be updated more regularly to ensure their usefulness and relevance for environmental management purposes.</li> <li>CSIRO noted the NPI could draw upon existing datasets to improve emissions estimates from shipping.</li> <li>CSIRO also noted that NPI and National Greenhouse Gas Inventory data need to be comparable to increase the utility of both datasets as research tools.</li> </ul>	• The Commonwealth chaired and provided secretariat support for the NPI Implementation Working Group, which oversaw the implementation 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 Robyn Parker MP, Minister for Environment and Minister for Heritage, for the reporting year ended 30 June 2013.

### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

#### Implementation

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.

#### Significant issues

Reporting the transfer of National Pollutant Inventory substances from facilities that generate waste streams could be improved by jurisdictions developing nationally consistent guidance in emission estimation technique manuals. This would ensure that stakeholders have access to more reliable information on the management of inventory substances in waste streams.

### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

#### National Pollutant Inventory reporting

The New South Wales Environment Protection Authority conducts an annual face-to-face training program, which includes a series of one day training courses to assist facility reporters with:

- · understanding key elements about 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 90 per cent in 2010–11 to 95 per cent in 2011–12.

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 inventory substances in waste streams from key industry sectors
- · emission factors for non-standard fuels
- · improved fugitive emission estimation methods
- · an interactive online training program.

### Public activities

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Public		
	The number of community member visits to the NPI website was recorded nationally at 282 334 in 2012–13, up from 213 856 in 2011–12.	• Comprehensive presentation at Australian Institute of Environmental Accounting Conference in November 2012.
	<ul> <li>academics and researchers continue to use the NPI data for modelling and other studies.</li> </ul>	
	• the media utilises NPI 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.	

## Industry and government activities

There were 36 new reporters in 2011–12.

The New South Wales 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		
<ul> <li>880 reports for 2011–12</li> <li>Compared to 877 reports for 2010–111</li> <li>36 new reporters in 2011–12 (33 facilities no longer reporting)</li> <li>No new sectors reporting</li> <li>No confidentiality claims submitted</li> </ul>	<ul> <li>Continued uptake of the NPI online reporting system. In 2011–12, 95% of facilities used the NPI online reporting system, compared with 90% in 2010–11.</li> <li>Training and support provided by the Environment Protection Authority to facility reporters has improved data quality and reduced costs to NPI facility reporters.</li> </ul>	<ul> <li>During 2011–12, the Environment Protection Authority trained 80 new reporters, including to use the NPI online reporting system plus calculation and validation tools.</li> <li>Ongoing industry requests to the Environment Protection Authority for training and guidance material on transfers of NPI substances in waste streams.</li> </ul>
Government		
<ul> <li>880 desktop audits</li> <li>6 site visits</li> </ul>	<ul> <li>The Environment Protection Authority continues to use the NPI to inform policy and regulatory approaches.</li> <li>The Environment Protection Authority continues to use the NPI to analyse environmental outcomes in relation to the regulation of substances at industrial facilities.</li> </ul>	<ul> <li>The Environment Protection Authority continues to utilise an internal communication program to inform staff about the importance of the NPI and the emission estimation techniques.</li> <li>Regular NPI 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.</li> </ul>

## Victoria

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for Victoria by the Hon Ryan Smith MP, 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 the 2012–13 reporting year.

## PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

The National Environment Protection (National Pollutant Inventory) Measure (NPEM) continues to be effectively implemented in Victoria.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Public		
	• No specific feedback was received from the community, industry or government.	
Industry		
• 860 reports for 2011–12	• No specific feedback was received	• 93% of published industry
• 846 reports for 2010–11	from the community, industry or government.	reports were submitted online (a slight increase on
• 29 new reporters		the 92% for 2010–11).
• 1 new sector reporting		One industry training
• 0 confidentiality claims submitted		session was conducted (combined with other EPA regulatory programs).
Government		
• 426 desktop audits	No specific feedback was received	Approximately 50%
• 5 on-site audits	from the community, industry or government.	of reports underwent a desktop analysis.
2 regulatory actions	government.	desktop analysis.

## Queensland

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for Queensland by the Hon Andrew Powell MP, Minister for Environment and Heritage Protection, for the reporting year ended 30 June 2013. Implementation of the NEPM and any significant issues.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

Queensland has identified potential areas where National Environment Protection (National Pollutant Inventory) Measure (NEPM) administration can be enhanced. These include:

- the timely enhancement of the NPI NEPM to meet contemporary stakeholder information requirements
- · an increased emphasis on the collections and reporting of aggregated emissions data.

### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

The National Pollutant Inventory continues to be effective in achieving the goals stated in the NEPM particularly in terms of disseminating information in an understandable format for the broader community. By improving the coverage of aggregated emissions data the program will appeal to a broader audience, improving uptake and use of the information.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Public		
	<ul> <li>There has been minimal direct contact from the general community in Queensland during the reporting period.</li> <li>There appears to be a continuing decline in the awareness of NPI among the media, evidenced by a steady reduction in the number of NPI-related media articles.</li> </ul>	• Two papers with an NPI focus were presented at the Australian Institute of Environmental Accounting 2012 conference.
Industry		
<ul> <li>1014 reports for 2011–12</li> <li>1018 reports for 2010–11</li> <li>46 new reporters</li> <li>0 new sectors reporting</li> <li>0 confidentiality claims submitted</li> </ul>	<ul> <li>There continues to be a high level of interest in the industry training sessions held by the Queensland Government. For the 2012–13 period a total of 97 industry representatives attended the training.</li> <li>NPI auditing activities conducted by the Queensland industry reporting team continue to be received positively by industry.</li> </ul>	<ul> <li>Brisbane, Rockhampton and Townsville.</li> <li>1 on-site NPI audit was conducted during the 2012–13 period to a zinc refinery.</li> <li>The Queensland industry reporting team completed the first phase of a project investigating levels of compliance across sectors within the NPI framework. The project has found good levels of compliance across reporting sectors in Queensland.</li> </ul>

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Government		
<ul><li>1014 desktop audits</li><li>1 on-site audit</li></ul>	<ul> <li>The Compliance Services Branch of the Department of Environment and Heritage Protection (DEHP), is interested in the use of the information for supporting planning and decision making.</li> <li>Air Quality Sciences Branch within the Department of Science, Information Technology, Innovation and the Arts (DSITIA) utilises NPI data in the development of airshed inventories.</li> </ul>	• DEHP in collaboration with DSITIA are conducting combined licensing/NPI audits through a project published in the DEHP's Annual Compliance Plan 2013–14.

## Western Australia

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for Western Australia by the Hon Bill Marmion MLA, Minister for Environment; Minister for Water (1 July 2012 to 20 March 2013) and the Hon Albert Jacob MLA, Minister for Environment; Heritage (21 March 2013 to 30 June 2013), for the reporting year ended 30 June 2013.

### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

On 1 July 2013 the Western Australian Department of Environment and Conservation was restructured into two departments: Department of Parks and Wildlife and the Department of Environment Regulation. The Department of Environment Regulation is responsible for administering the implementation of the National Environment Protection (National Pollutant Inventory) Measure (NEPM).

One significant issue during the year was ongoing review and development of industry emission estimation technique manuals.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Public		
	<ul> <li>Very few enquiries received from the public regarding NPI database information.</li> <li>There remains a general lack of public awareness of the NPI program.</li> </ul>	• Presentation at Australian Institute of Environmental Accounting Conference November 2012.
Industry		
<ul> <li>785 reports for 2011–12</li> <li>763 reports for 2010–11</li> <li>41 new reporters</li> <li>No new sectors reporting</li> <li>No confidentiality claims submitted</li> </ul>	<ul> <li>Widespread acceptance of the online reporting system; 93% uptake in WA for 2011–12 (2% increase).</li> <li>Reporting of transfers largely successful, though new reporting scenarios continue to require attention.</li> <li>Some smaller facilities require above-average reporting guidance due to abilities of facility personnel.</li> </ul>	<ul> <li>Information session for industry held in Perth.</li> <li>Continued follow-up of potential reporters in several industry sectors.</li> <li>Reporters regularly reminded of reporting deadlines and supplied with additional reporting information to that available on website.</li> </ul>
	<ul> <li>Major industrial facilities maintain awareness of community interest in their emissions, and ensure reports truly reflect site emissions.</li> <li>Support given by Department of Environment and Conservation NPI Section commended by reporters.</li> </ul>	<ul> <li>Three generic industry and one specific industry- training session(s) held for online reporting.</li> <li>Increased number of on- site audits conducted with positive industry feedback on the audit process.</li> </ul>

Government		
<ul><li>785 desktop audits</li><li>10 on-site audits</li><li>No regulatory actions</li></ul>	• Identification and ranking of WA's major emitters and comparison with national data.	<ul> <li>Details of major emitters provided to DEC licensing personnel for information, data cross-checking and follow-up as required.</li> </ul>
		• NPI facility data is automatically loaded to the DEC GIS system.

## South Australia

Report to the National Environment Protection Council (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 2013.

## 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 program and South Australia's Environment Protection Authority. In accordance with the National Pollutant Inventory Memorandum of Understanding, acquisition and publishing of facility emission data remains the priority, to ensure maximum national benefit from the National Environment Protection (National Pollutant Inventory) Measure (NEPM). However, aggregate emissions data are also required for reliable comparison with industry emissions. Currently, there are inadequate resources for updating aggregate emissions data (last done in 2003). Other pressures on National Pollutant Inventory resources include updates to emission estimation technique manuals and a continued need for training of reporters using the online system due to staff turnover within business and industry.

## PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

The five National Pollutant Inventory industry audits undertaken have led to improvement in the accuracy and better understanding of inventory reporting. The South Australian National Pollutant Inventory team has been actively involved in the inventory's 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 program among the general public.	
Industry		
<ul> <li>482 reports for 2011–12</li> <li>463 reports for 2010–11</li> <li>27 new reporters</li> <li>One new sector reporting</li> <li>No confidentiality claims submitted</li> </ul>	<ul> <li>Online reporting training has been well received by industry.</li> </ul>	<ul> <li>A newsletter was published on the SA EPA website to inform reporters about updates to industry guidance material and provide general information about NPI reporting.</li> <li>Industry enquiries have been followed up.</li> <li>Online reporting training, workshops on NPI procedures and drop-in sessions were held in Adelaide.</li> </ul>

#### Government

- · 482 desktop audits
- Five on-site audits
- · No regulatory actions
- The EPA utilises NPI data to implement the resource efficiency component of load-based licensing
- The Marine Parks Project team in the Department of Environment, Water and Natural Resources uses NPI data in conjunction with other data including aquaculture, recreational fishing, boat ramps, jetties, mining and shack settlements. The NPI data aids assessments of activities and uses within draft marine park zones and is an important component of the marine parks' monitoring and evaluation program.
- NPI data have been used by the legislation and policy branch of the EPA to highlight industry sources of PM<sub>10</sub> in the Adelaide airshed, to support changes in legislation.
- NPI validation highlighted the need for review of licence conditions for power-generation facilities. This has lead to the SA EPA reviewing licence conditions of this sector leading to greater consistency in monitoring requirements.

 Participation in the NPI Implementation Working Group is important to discuss policy and strategy issues and technical implementation details.

## Tasmania

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for Tasmania by the Hon Brian Wightman MP, Minister for Environment, Parks and Heritage, for the reporting year ended 30 June 2013. Implementation of the NEPM and any significant issues.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

- The National Environment Protection (National Pollutant Inventory) Measure (NEPM) continues to be successfully implemented in Tasmania.
- A high level of staff turnover within reporting organisations has resulted in a continuing need to train reporters in the use of the online reporting system.
- Issues with staffing at the Commonwealth level continue to impact on implementation of the program. This has particularly affected updating of emission estimation technique manuals.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Public		
	• There is limited use and awareness of NPI data in Tasmania. Data is used when specific issues are being considered and mostly by interest groups.	
	• It appears that in many instances the public do not understand NPI data and some misinterpretation occurs.	
Industry		
<ul> <li>179 reports for 2011–12</li> <li>195 reports for 2010–11</li> <li>4 new reporters</li> </ul>	• There is widespread acceptance of the online reporting system and associated calculation tools.	
• 1 new sector reporting	<ul> <li>Data quality, with respect to reporting of transfers, is improving</li> </ul>	
• No confidentiality claims submitted	due to improved understanding of what is required.	
Government		
• 179 desktop audits	• Staff within the EPA access	Education programs to
• 1 on-site audit	NPI data to assist with relevant enquiries.	inform users about NPI data are ongoing.
No regulatory actions	enquines.	uuu ure ongoing.

## Australian Capital Territory

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for the Australian Capital Territory by Mr Simon Corbell MLA, Minister for the Environment and Sustainable Development, for the reporting year ended 30 June 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Environment and Sustainable Development Directorate implemented and enforced the National Environment Protection (National Pollutant Inventory) Measure under the provisions of the *Environment Protection Act 1997*.

Implementation issues arising during the 2012-13 reporting period included:

- · a continued need for training of reporters using the online reporting system due to staff turnover within facilities
- some reporters encountering information technology compatibility issues with the online calculation tools these have been resolved for the upcoming reporting period.

Participation levels	Feedback from the community, industry and government	Implementation activity effectiveness
Public		
	• No specific feedback was received from the community.	
Industry		
<ul> <li>23 reports for 2011–12</li> <li>24 reports for 2010–11</li> <li>2 new reporters</li> <li>No new sectors reporting</li> <li>No confidentiality claims submitted</li> </ul>	• Online reporting system training was considered essential for understanding of the reporting requirements.	<ul> <li>All published industry reports were submitted online.</li> <li>One-on-one training sessions continued to work successfully.</li> <li>Industry enquiries related to reporting and technical issues were responded to in a timely manner.</li> </ul>
Government		
<ul><li>23 desktop audits</li><li>1 on-site audit</li><li>No regulatory actions</li></ul>	• No specific feedback was received from the government.	<ul> <li>Every National Pollutant Inventory report underwent a desktop validation.</li> <li>The Australian Capital Territory liaised with other jurisdictions to achieve a nationally consistent validation process.</li> </ul>

## Northern Territory

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (National Pollutant Inventory) Measure for the Hon Peter Chandler MLA, Minister for Lands, Planning and the Environment, for the reporting year ended 30 June 2013.

### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The National Pollutant Inventory program 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 inventory rests with the Northern Territory Environment Protection Authority.

Reporting data for transfers of National Pollutant Inventory substances has become more accurate as industry understanding of these reporting requirements has improved over recent years.

No estimation of aggregated emissions data was done for the Northern Territory this year.

Collaborative work has continued on standardising the desktop auditing of reports across all jurisdictions.

Participation levels Public Industry	<ul> <li>Feedback from the community, industry and government</li> <li>Media used website to attempt to find information on legacy emissions.</li> </ul>	Implementation activity effectiveness
<ul> <li>110 reports for 2012–13</li> <li>110 reports for 2011–12</li> <li>0 new reporters</li> <li>0 new sectors reporting</li> <li>0 confidentiality claims submitted</li> </ul>	<ul> <li>Industry feedback indicated that interaction with the online reporting system was generally positive with the exception of 6 reporters which needed a high degree of assistance in lodging reports.</li> <li>100% of NT reporters used the online reporting system.</li> </ul>	• 6 reporters needed a high level of assistance in reporting using the online system. They will likely need less assistance next year. Issues with compatibility between tools and operating systems created the majority of issues.
Government <ul> <li>110 desktop audits</li> </ul>	• Training of the NPI officer assisted	NT NPI officer went to WA
<ul><li> 0 on-site audits</li><li> 0 regulatory actions</li></ul>	reporters in better understanding their responsibilities and the reporting process.	for training in using the ORS and NPI manuals.

# Appendix 7:

Jurisdictional Reports on the Implementation and Effectiveness of the Used Packaging Materials NEPM

## Commonwealth

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Used Packaging Materials) Measure for the Commonwealth by the Hon Greg Hunt MP, for the reporting year ended 30 June 2013.

### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The National Environment Protection (Used Packaging Materials) Measure (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 market place 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 state and territory jurisdiction. If they are not exempt from the NEPM and covenant, brand owners must become covenant signatories, or become subject to NEPM requirements. The covenant and state and territory jurisdictions carry out monitoring of packaged products each year to find brand owners who are not yet covenant signatories. These brand owners are then followed up to determine if they are exempt or not.

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 more than 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 and 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 Department of the Environment reports annually on actions undertaken by Commonwealth agencies to implement the Australian Government's *Australian Packaging Covenant Action Plan 2010–2015*.

The annual report details the Australian Government's progress in implementing its action plan through:

- · office-based and non-office-based recycling systems
- · litter reduction measures
- sustainable procurement policies and instructions and sustainable procurement guidance for Commonwealth
   agencies
- the Australian Government's Information and Communication Technology Sustainability Plan 2010–15, including use of an increasing percentage of post-consumer recycled content in office paper
- · relevant principles in the Sustainable Packaging Guidelines for packaging design and procurement.

The Australian Government, as a member of the Australian Packaging Covenant Management Committee, and the covenant council, participates in governance and development of the covenant's annual budget for the council's endorsement. In 2012–13, the Australian Government provided 50 per cent of the total government funds required for the Australian Packaging 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.

The *Australian Packaging Covenant Annual Report 2013* will provide this information and will be available on the covenant website <www.packagingcovenant.org.au>.

## PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

At the end of June 2013 there were 925 Australian Packaging Covenant signatories in total nationally, of which 876 (95 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 an action plan within three months of becoming a signatory that includes the information set out in Schedule 1 of the covenant
- · implement the submitted action plan and the 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.

Reporting year	Number of covenant signatories
2011–12	795 signatories (775 compliant)
2012–13	925 signatories (876 compliant)

## 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 Robyn Parker MP, Minister for Environment and Minister for Heritage, for the reporting year ended 30 June 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

In 2012–13 the New South Wales Environment Protection Authority undertook large-scale enforcement activities to implement the National Environment Protection (Used Packaging Materials) Measure (NEPM), which have significantly contributed to growth in New South Wales's Australian Packaging Covenant signatories of 76 brand owners in that period.

Efforts have been focused on pursuing companies either identified through a search of Environment Protection Authority records or referred to the authority by the Australian Packaging Covenant, with a view to encouraging those companies to join the covenant. Activity has included bulk mail-outs and liaison with potential signatories on an ongoing basis including large businesses that are industry leaders in their sectors.

In addition, the Environment Protection Authority has met with a number of industry associations to answer questions and build engagement with the Australian Packaging Covenant.

The Environment Protection Authority continued its close work with other jurisdictions to build consistency of enforcement and to share information regarding brand-owners that may fall under the Australian Packaging Covenant.

## PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

In 2012–13, New South Wales communicated with more than 240 organisations regarding their obligations under the NEPM and how they could best meet them. New South Wales sent out approximately 350 letters, including both first approaches and follow ups. New South Wales has also worked closely with the Australian Packaging Covenant Secretariat regarding the applicability of the NEPM to potential signatories.

Signatory numbers in New South Wales have grown from the previous year:

Reporting year	Number of covenant signatories
2011–12	327
2012–13	403

#### Recovery data

Nil (no brand-owner was subject to record-keeping obligations under the New South Wales Regulation).

#### Supporting data

Clause 18 of the NEPM requires jurisdictions to carry out surveys of packaged products to ascertain the effectiveness of the NEPM in preventing free riding. New South Wales carried out the survey in July 2012, in cooperation with other jurisdictions.

#### Complaints, investigations and prosecutions

No complaints in relation to specific businesses were received.

#### Statement of interpretation of the information

New South Wales focused on large-scale enforcement activity and follow-up with businesses contacted as well as working with other jurisdictions and the Australian Packaging Covenant Secretariat to build consistency of enforcement, and to take action on businesses referred to it, including sector-leading companies.

#### Local government data

Local government data is available on the Environment Protection Authority's website <a href="http://www.epa.nsw.gov.au/warr/datareport.htm">http://www.epa.nsw.gov.au/warr/datareport.htm</a>>.

## Victoria

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Used Packaging Materials) Measure for Victoria by the Hon Ryan Smith MP, Minister for Environment and Climate Change, for the reporting year ended 30 June 2013.

## PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

There were no significant implementation issues arising in 2012-13.

### PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

The primary purpose of the National Environment Protection (Used Packaging Materials) Measure (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 Australian Packaging 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 2013, there were 322 Victorian signatories (up from 272 on 30 June 2012), including 282 brand owners registered in Victoria (up from 233).

Reporting year	Number of covenant signatories
2011–12	272
2012–13	322

In Victoria, the NEPM is implemented through the Waste Management Policy (Used Packaging Materials), a statutory policy made under the Victorian *Environment Protection Act 1970*. The current version of the policy was published in the Victorian Government Gazette on 26 April 2012.

#### Recovery data

Clause 18 of the 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.

A brand owner survey was commenced by jurisdictions in June 2012. The names of brand owners (and potential brand owners) identified through the Victorian component of this survey were provided to the Australian Packaging Covenant Secretariat in August 2012.

Another brand owner survey was commenced by jurisdictions in April 2013, with the Victorian component of the survey results provided to the Covenant Secretariat in May 2013.

#### Supporting data

As noted above, two brand owner surveys were conducted in 2012-13.

#### Complaints, investigations and prosecutions

No complaints were received during the reporting period.

#### Statement of interpretation of the information

Nil.

#### Local government data

In early 2013, local government recycling data for 2011–12 was published on Environment Protection Authority Victoria's website <a href="http://www.epa.vic.gov.au/your-environment/waste/local-government-kerbside-recycling">http://www.epa.vic.gov.au/your-environment/waste/local-government-kerbside-recycling</a>.

Data for 2012–13 is expected to be published on Environment Protection Authority Victoria's website in late 2013.

## Queensland

Report to the National Environment Protection Council (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 2013.

### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

There were no significant implementation issues arising in 2012-13.

## 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.

By 30 June 2013, there were 76 Queensland signatories (an increase of eight from 2011-12).

Reporting year	Number of covenant signatories
2011–12	68
2012–13	76

Jurisdictional activities

- · Queensland was chair of the Australian Packaging Covenant Council.
- The state actively contributing to and supported the administration processes of the Australian Packaging Covenant.
- · Queensland continued support for and provision of funding towards compilation of the National Litter Index.
- · The state completed the annual brand owner survey (department stores) and submission of the report of findings.

#### Project funding

In the 2012–13 funding round, three new Queensland-based project proposals were assessed and received inprincipal approval for funding assistance. The supported projects are:

- · Hamilton Island-installation of a mini material recovery facility
- · Burdekin Shire Council-'Getting Burdekin businesses busy recycling' project
- North Queensland Local Government Association-visitor phone app recycling guide for North Queensland.

#### 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: 203 products were surveyed, 183 brand owners were identified, of which 141 are non-signatories. The results of this survey were provided to the Australian Packaging Covenant Secretariat.

#### Complaints, investigations and prosecutions

No complaints were received during the reporting period.

#### Statement of Interpretation of the information

Nil.

#### Local government data

All local governments provided information in relation to paper and packaging collection in 2012–13. Of the 74 councils, 35 collected paper and packaging for recycling. Twenty-eight councils provided a kerbside recycling service to 1 497 974 households. Nineteen councils also provided a kerbside collection service to a collective total of 24 915 non-residential premises, including 606 schools.

In early 2013, Queensland's waste and recycling data for 2011–12 was published on the Department of Environment and Heritage Protection's website <a href="http://www.ehp.qld.gov.au">http://www.ehp.qld.gov.au</a>. Detailed data for 2012–13 is expected to be available on the website in early 2014.

## Western Australia

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Used Packaging Materials) Measure for Western Australia by the Hon Bill Marmion MLA, Minister for Environment, Minister for Water (1 July 2012 to 20 March 2013); and the Hon Albert Jacob MLA, Minister for Environment; Heritage (21 March 2013 to 30 June 2013), for the reporting year ended 30 June 2013.

### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

On 1 July 2013 the Western Australian Department of Environment and Conservation was restructured into two departments: Department of Parks and Wildlife and the Department of Environment and Regulation. The Department of Environment Regulation is responsible for administering the implementation of the National Environment Protection (Used Packaging Materials) Measure (NEPM).

The NEPM was implemented in Western Australia through the Environmental Protection (NEPM-UPM) Regulations 2007, made under the Western Australian *Environmental Protection Act 1986*. These Environmental Protection (NEPM-UPM) Regulations expired on 30 June 2012.

Remaking of the Environmental Protection (NEPM-UPM) Regulations commenced during the 2012–13 reporting period.

## PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

The Department of Environment Regulation continued to provide advice to brand owners and encouraged participation in the Australian Packaging Covenant during the 2012–13 reporting period.

During the reporting period the number of Western Australian signatories increased from 51 to 52. There was also an increase from three to six non-compliant signatories.

Reporting year	Number of covenant signatories
2011–12	51 including 3 non-compliant
2012–13	52 including 6 non-compliant

#### Recovery data

No Western Australian based companies have been required to provide records for auditing.

#### Supporting data

In collaboration with other jurisdictions, a national survey was undertaken in June 2013 to identify brand owners that are not signatories to the Australian Packaging Covenant.

In Western Australia, the 2013 brand owner survey targeted the food retailing sector. Brand owner details were provided to the Australian Packaging Covenant Secretariat for follow up.

#### Complaints, investigations and prosecutions

No complaints were received, or investigations or prosecutions undertaken during the 2012-13 reporting period.

#### Statement of interpretation of the information

Not applicable.

#### Local government data

Local government data will be available on the Waste Authority's website <a href="http://www.wasteauthority.wa.gov.au/">http://www.wasteauthority.wa.gov.au/</a> from mid January 2014.

## South Australia

Report to the National Environment Protection Council (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 2013.

### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

#### Legislative, regulatory and administrative framework

The Environment Protection (Used Packaging Materials) Policy 2012 was gazetted in December 2012. The policy is the legal instrument to enforce the obligations of the National Environment Protection (Used Packaging Materials) Measure (NEPM). The policy provides the regulatory underpinning for the Australian Packaging Covenant. The alignment of the NEPM/policy and the covenant is the key to providing national consistency in regulatory support for packaging.

In 2012–13, South Australia continued to strengthen its relationship with industry and other jurisdictions to ensure national consistency around the enforcement of the NEPM/policy at a state level.

#### Implementation issues arising

No significant issues arose with the implementation of the Environment Protection (Used Packaging Materials) Policy in South Australia.

### PART 2-ASSESSMENT OF NEPM EFFECTIVENESS

South Australia has continued to promote and support the implementation of the Australian Packaging 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 Environment Protection (Used Packaging Materials) Policy, should they choose not to join the covenant.

During this reporting period (2012–13) 15 companies were referred to the Environment Protection Authority by the Australian Packaging Covenant Secretariat to enforce the obligations of the South Australian policy. South Australia continues to contact companies that are referred to the Environment Protection Authority for action to advise them of their requirement to comply with the Environment Protection (Used Packaging Materials) Policy in this state.

Reporting year	Number of covenant signatories
2011–12	49
2012–13	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. A brand owners survey was undertaken in June 2013 to identify those companies. The survey was undertaken at various retail outlets in Adelaide in accordance with the brand owners survey methodology that was agreed to by all jurisdictions in 2011. The list of companies identified as non-signatories in South Australia to the Australian Packaging Covenant were forwarded to the Australian Packaging Covenant Secretariat.

#### 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 (Used Packaging Materials) Policy. South Australia continues to promote and support the implementation of the Australian Packaging 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

Data is available on the Environment Protection Authority's website <www.epa.sa.gov.au/environmental\_info/ legislation>.

## Tasmania

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Used Packaging Materials) Measure for Tasmania by the Hon Brian Wightman MP, Minister for Environment, Parks and Heritage, for the reporting year ended 30 June 2013.

### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

#### Legislative, regulatory and administrative framework

The National Environment Protection (Used Packaging Materials) Measure (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 14 company signatories and 17 covenant signatories overall.

Reporting year	Number of covenant signatories
2011–12	18
2012–13	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 Australian Packaging 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

None reported for 2012–13, financial data below is based on 2010–11 local government surveys.

**Other** type of recycling services (e.g. drop-off) by number of councils: All councils provide alternative drop-off facilities either at the landfills or waste transfer stations.

#### Total number of premises/households:

Residential	131 704 premises
Non-residential	9344 premises

#### Number of households/premises serviced by recycling collections:

Kerbside:	Drop off (optional)	
Residential	119 981 premises	48 227 premises
Non-residential	4951 premises	2908 premises

#### Average premises fee charged by council for recycling services

Residential \$78.70 Non-residential \$180.35

#### Annual per premise cost to council to provide a recycling service

Residential \$73.10 Non-residential \$108.00

#### Proportion of household/premises with access to a recycling service. 94 per cent

Average participation rate: 73 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 2012 to 30 June 2013

TOTAL PACKAGING PAPER i.e. cardboard and liquid paper board"		24698	
TOTAL NON PACKAGING PAPER i.e. paper mixed, paper white office, newspaper and magazines		18583	
TOTAL GLASS		15442	
TOTAL PLASTICS		2865	
TOTAL ALUMINIUM (cans)		650	
TOTAL STEEL (cans, tins etc.)		863	
TOTAL	67 688	63101	4587

The above data represents the total amount of recyclables processed in Tasmania and includes kerbside recycling and recycling-away-from-home statistics.

## Australian Capital Territory

Report to the National Environment Protection Council (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 and Sustainable Development, for the reporting year ended 30 June 2013.

### PART 1 - IMPLEMENTATION OF THE NEPM AND ANY SIGNIFICANT ISSUES

The Australian Capital Territory Government carries out both the functions of state and local government. In the Territory, the Environment and Sustainable Development 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 was approved in November 2006 as an instrument developed under the Australian Capital Territory *Waste Minimisation Act 2001* to implement the NEPM requirements in the Territory. The plan was updated in 2013 to ensure consistency with the new Australian Packaging Covenant and the NEPM.

The goal of the Used Packaging Materials Industry Waste Reduction Plan is to reduce environmental degradation from disposal of used packaging, and conserve virgin materials by encouraging waste avoidance, reuse and recycling, complementing the strategies in the Australian Packaging Covenant. The plan aims to ensure that covenant signatories are not competitively disadvantaged in the Australian Capital Territory marketplace.

The Australian Capital Territory is a signatory to the Australian Packaging Covenant and is implementing a range of measures as part of its five-year action plan (2011–16) (the action plan can be accessed on the Environment and Sustainable Development Directorate website <a href="http://www.environment.act.gov.au/waste">http://www.environment.act.gov.au/waste</a>.

The ACT Waste Management Strategy 2011–25 (the waste strategy) has the goal of achieving full resource recovery and a carbon neutral waste sector with more than 90 per cent of resources recovered by 2025. Measures pursued to achieve these targets are:

- the introduction of a material recovery facility to process mixed-dry commercial waste, which is the subject of an agreement between the Australian Capital Territory Government and SITA Australia
- the rollout of the ACTSmart Office and Business programs that facilitate the on-site sorting of waste at offices and business to increase recycling—there are now more than 650 sites participating in this program including major shopping centres and sporting venues <a href="http://www.actsmart.act.gov.au/your\_business/actsmart\_business\_and\_office\_map">http://www.actsmart.act.gov.au/your\_business/actsmart\_business\_ and\_office\_map</a>>
- the introduction of public place recycling in Civic—the public place recycling trial has resulted in more than 20 000 kilograms of recyclable material taken to the material recycling facility at Hume. All material delivered to the facility has been accepted as this material contains less than 8 per cent contamination
- the introduction of public event recycling to 49 events in the Australian Capital Territory in 2012–13, including all major Centenary of Canberra events, and as a result 34 805 kilograms of waste were diverted from landfill into recycling and 906 000 patrons were given the opportunity to recycle at these events
- · investigation of material recovery facility for municipal solid waste.

In 2012, the Australian Capital Territory conducted an interim review of the ban on lightweight plastic shopping bags which came into effect on 1 November 2011. The interim review was released in January 2013 and found a high level of consumer support and retailer compliance. Data collected for the review indicates that plastic bag material to landfill has been reduced and that plastic bag litter has also fallen, however, more time will be required to confirm these trends. The full review of the ban will be conducted after two years of operation, in accordance with the *Plastic Bags Ban Act 2010*.

The Australian Capital Territory Government is working constructively within the Council of Australian Governments Standing Council on Environment and Water to develop more effective mechanisms to regulate packaging waste.

## PART 2 - ASSESSMENT OF NEPM EFFECTIVENESS

Reporting year	Number of covenant signatories
2011–12	5 (non-brand owners)
2012–13	5 (non-brand owners)

#### Recovery data

There are no known major brand owners based in the Australian Capital Territory who are likely to have responsibilities under the NEPM and hence none have been audited in 2012–13. Five signatories to the Australian Packaging Covenant based in the Territory are industry and/or government bodies.

Under the Used Packaging Materials Industry Waste Reduction Plan, brand owners must demonstrate that reasonable steps have been taken to ensure customers are adequately advised as to how the packaging is to be recovered.

The Government's highly successful ACTSmart Office and ACTSmart Business programs that facilitate on-site waste reduction and recycling by Canberran 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 programs have not only reduced waste to landfill but have reduced their waste management costs. This program was extended through a cross-border agreement with the council of the close by New South Wales town of Queanbeyan to allow Queanbeyan based businesses and offices to participate in the program.

#### Supporting data

No retailer survey of packaged products was conducted in the Australian Capital Territory in 2012–13. However, data provided for the ACTSmart sites shows they are presently diverting the equivalent of 1100 domestic wheelie bins of waste from landfill every week and the number of participants is growing strongly.

#### Complaints, investigations and prosecutions

Since the implementation of the updated Used Packaging Materials Industry Waste Reduction Plan, no complaints, investigations, prosecutions or enforcement actions were recorded.

#### Local government data

Local government data for the Australian Capital Territory is available on the Territory and Municipal Services Directorate website: <a href="http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/reports\_data\_forms>">http://www.tams.act.gov.au/recycling-waste/recyc

## Northern Territory

Report to the National Environment Protection Council (NEPC) on the implementation of the National Environment Protection (Used Packaging Materials) Measure for the Northern Territory by the Hon Peter Chandler MLA, Minister for Lands, Planning and the Environment, for the reporting year ended 30 June 2013.

### 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 Territory.

There are no known major brand owners based in the Northern Territory who are likely to have responsibilities under the National Environment Protection (Used Packaging Materials) Measure (NEPM). In the event that 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 in the Territory.

In February 2011, the Northern Territory Parliament passed the *Environment Protection (Beverage Containers and Plastic Bags) Act 2011*, which prohibits retailers from providing customers with lightweight polyethylene shopping bag handles. The phase out commenced on 1 May 2011, with the ban commencing on 1 September 2011. *The Environment Protection (Beverage Containers and Plastic Bags) Act* also establishes the legislative framework for the container deposit scheme which commenced on 3 January 2012. This Territory scheme provides for the collection of beverage containers to reduce litter, increase recycling across the Territory and assists in the reduction of the amount of rubbish being disposed of to landfill.

#### Mutual Recognition Act 1992

The Commonwealth's *Mutual Recognition Act 1992* applies as a law of the Northern Territory by virtue of the *Mutual Recognition (Northern Territory) Act.* The primary purpose of the mutual recognition legislation is to promote the goal of freedom of movement of goods and service providers in a national market in Australia. The Acts establish the 'mutual recognition principle' that provides, subject to certain stated exemptions, goods produced in or imported into the first state that may lawfully be sold in that state, may be sold in the mutually-recognised state without having to comply with certain further requirements. Those further requirements include requirements relating to the goods themselves (such as requirements relating to their packaging, labelling, date stamping or age).

A temporary exemption from the mutual-recognition principle in relation to the Northern Territory container deposit scheme expired on 3 January 2013.

On 4 March 2013, Justice Griffiths of the Federal Court ruled certain components of the container deposit scheme as being inconsistent with the Mutual Recognition Act. Consequently, beverages manufactured or imported into other states and territories of Australia may be sold in the Northern Territory without complying with sections 13 or 14 of the *Environment Protection (Beverage Containers and Plastic Bags) Act.* An application for a permanent exemption from the Mutual Recognition Act is being progressed.

Following the withdrawal of major drink manufacturers in late March, rendering the container deposit scheme ineffective, the Northern Territory Government funded the scheme to keep it operating. This has been in place since 27 March 2013, while the application for permanent exemption from the Mutual Recognition Act is still pending. Exemption to the Mutual Recognition Act is expected to be finalised in early August. Northern Territory Government funding will cease at the close of business, 13 August 2013.

In 2012–13 a total of \$731 000 in grants was offered to schools and not-for-profit organisations in the Northern Territory to conduct a range of projects and operations that deliver environmental benefits in the community. One of the target categories focuses on 'waste and resource recovery' in which funding was provided to support projects which promote awareness of litter abatement and resource recovery across the Northern Territory.

A further \$120000 was provided to Keep Australia Beautiful Council Northern Territory for waste and litter abatement programs.

## 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 2012–13 under clause 18 of the NEPM. No complaints have been received, investigations undertaken nor prosecution mounted pursuant to this measure. Of the 16 councils and shires in the Northern Territory only two provide kerbside recycling services.

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 there. Brand owners who are covenant signatories are able to meet their national targets more cost effectively in other larger jurisdictions where well-established recycling infrastructure and high volumes of recyclable material are available.

Due to the small, dispersed population and distance to markets, kerbside recycling is only financially viable in the major population 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 programs.

A total of 111962166 approved containers were sold into the Northern Territory between July 2012 and June 2013. A rise in return rate was seen from 30.26 per cent at the end of June 2012 to 45.4 per cent at the end of June 2013.

For the period 1 April 2013 to 30 June 2013, 17649419 containers were redeemed at collection depots.

As the Northern Territory Government was underwriting the scheme over the April 2013 to June 2013 period, manufactures and container deposit scheme coordinators did not provide data. Collection depots have provided redemption data, however sales figures have been based upon the same period last year to enable a return rate to be calculated.

Reporting year	Number of covenant signatories
2011–12	0
2012–13	0

#### Supporting data

There have been no brand-owners identified in the Northern Territory who would have obligations under clause 18 of the NEPM in 2012–13.

#### Complaints, investigations and prosecutions

Thirteen officers are appointed under the *Environment Protection (Beverage Containers and Plastic Bags) Act* to monitor compliance and undertake enforcement action.

#### Container deposit scheme

Procedural audits with container deposit scheme coordinators, collection depots and retailers will continue to ensure that legal requirements are met. There will be specific focus on the smaller retail sector, particularly where retailers supply small, boutique product lines that may be imported by the individual retailer.

Removal of products and enforcement action will be taken where repeated breaches of the legislation are identified.

#### Plastic bag ban

Thirteen authorised officers respond to complaints and conduct audits concurrently with container deposit scheme retailer audits. No offenders have been identified following initial warnings and no infringement notices have been issued.

Authorised officers will continue to respond to complaints as and when they are reported.

#### 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 Service Corporation

John Gorton Building King Edward Terrace, Parkes ACT 2600 Phone: 02 6274 1819 Fax: 02 6274 2505 Email: NEPC@environment.gov.au