



NEPC Report on the Implementation of the  
**Diesel Vehicle Emissions NEPM**

2 0 0 2 – 2 0 0 3

*‘Smoky vehicle programs continue to be one of the key implementation activities. These programs play an important role in raising awareness among motorists about the impact of emissions from their vehicles and motivating them to take action to reduce those emissions.’*



## 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:

- 10 National environment protection goal
- 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:

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

### Evaluation criteria

The assessment of the effectiveness of the National Environment Protection (Diesel Vehicle Emissions) Measure is based on the following criteria.

### General criteria (Specified in the NEPC Implementation Reporting Protocol)

- progress in implementing the NEPM
- compliance by parties bound by the NEPM with NEPM protocols and/or other NEPM reporting requirements
- progress toward achievement of the NEPM goal, the desired environmental outcomes and any NEPM standards
- issues arising that reflect on the efficiency and simplicity of NEPM administration.

### Specific criteria

Reporting requirements set out in clause 15(1) of the NEPM are as follows:

It is intended that each participating jurisdiction submit a report to the Council on the following matters:

- (a) Assessment of the need to take action to manage emissions from the in-service diesel fleet, utilising the criteria specified in clause 13
- (b) Description of actions taken.

A brief report of all programs implemented during the reporting year to manage emissions from in-service diesel vehicles, including any programs implemented that are not covered by the guidelines in Schedule A of this Measure.

This description should take account of:

- the scope of action required to achieve the Goal and the Desired Environmental Outcome specified in this Measure; and
- any action taken and progress made to reduce emissions from in-service diesel vehicles prior to the commencement of this Measure (relevant to the first year of reporting).\*

- (c) Assessment of the effectiveness of any actions taken.

Participating jurisdictions must assess their progress in reducing emissions from in-service diesel vehicles identified as significant contributors to air quality problems. This assessment should include:

- an estimation of any change in the proportion of diesel vehicles out of compliance with in-service emissions standards; and
- an estimation of the reduction in diesel vehicle emissions to ambient air.

\* This dashpoint was only relevant to the first year of reporting.



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

This part provides a summary of jurisdictional reports on implementation, discussion of any issues of concern raised by jurisdictions, and Council's overall assessment of the implementation of the NEPM.

### Legislative, regulatory and administrative framework

Table (15): Summary of Implementation Frameworks

Jurisdiction	Summary of Implementation Frameworks
Commonwealth	<ul style="list-style-type: none"> <li>New Vehicle Emission Standards and Fuel Quality Standards are specified in Commonwealth legislation.</li> <li>Under the <i>Fuel Quality Standards Act 2000</i> the amount of sulfur permissible in Australian automotive diesel was reduced to 500 mg/kg on 31 December 2002.</li> <li>Australian Design Rules have significantly reduced emissions of diesel particulates and other pollution.</li> </ul>
New South Wales	<ul style="list-style-type: none"> <li>The key legislative instruments are the <i>Protection of the Environment Operations Act 1997</i>, and the Protection of the Environment Operations (Clean Air) Regulation 2002.</li> </ul>
Victoria	<ul style="list-style-type: none"> <li>The Environment Protection (Vehicle Emissions) Regulations 2003 are the primary legislative tool under the <i>Environment Protection Act 1970</i> that addresses the in-service performance of the motor vehicle fleet in Victoria.</li> </ul>
Queensland	<ul style="list-style-type: none"> <li>The key legislative instrument is the <i>National Environment Protection Council (Queensland) Act 1994</i>.</li> </ul>
Western Australia	<ul style="list-style-type: none"> <li>The key legislative instruments are the <i>National Environment Protection Council (Western Australia) Act 1996</i>, Environmental Protection (Diesel and Petrol) Regulations 1999 and Road Traffic (Vehicle Standards) Rules 2002.</li> <li>The '10-second rule for smoky vehicles' was introduced from 1 November 2002 under the Road Traffic (Vehicle Standards) Rules 2002.</li> </ul>
South Australia	<ul style="list-style-type: none"> <li>The Diesel NEPM has come into operation as an Environment Protection Policy under the legal framework provided by section 28A of the <i>Environment Protection Act 1993</i>.</li> </ul>
Tasmania	<ul style="list-style-type: none"> <li>The key legislative instrument is the <i>State Policies and Projects Act 1993</i>.</li> </ul>
Australian Capital Territory	<ul style="list-style-type: none"> <li>The key legislative instrument is the Road Transport Reform (Vehicle Standards) Regulations 1999.</li> </ul>
Northern Territory	<ul style="list-style-type: none"> <li>The key legislative instrument is the <i>Motor Vehicles Act</i>.</li> </ul>

### Council assessment of Implementation Frameworks

Jurisdictions are still in the process of determining appropriate implementation frameworks and assessing data and have provided more specific information about the major sources of diesel emissions. The Commonwealth, States and Territories are yet to establish the level of management and enforcement required.

The diesel fuel quality standard has direct implications for the improvement of diesel vehicle operations and emissions. The amount of sulfur permissible in Australian automotive diesel was reduced to 500 mg/kg on 31 December 2002 under the *Fuel Standard (Automotive Diesel) Determination 2001*.



## Implementation activities

*Table (16): Summary of Jurisdictional Implementation Activities*

Jurisdiction	Summary of Implementation Activities
Commonwealth	<ul style="list-style-type: none"> <li>• The Commonwealth Department of the Environment and Heritage has funded a number of in-service emissions testing programs implemented by jurisdictions under the Diesel NEPM in the year to 30 June 2003.</li> <li>• As the Commonwealth Department of the Environment and Heritage has no airshed responsibilities in respect of Diesel NEPM goals, the main area for attention is operation of its diesel fleet.</li> <li>• Funding under the Measures for a Better Environment program has continued for:               <ul style="list-style-type: none"> <li>– the NSW Government to establish Australia’s first In-service Vehicles Emissions Reduction Program</li> <li>– the Brisbane City Council to establish a mobile vehicle emissions testing facility for South East Queensland</li> <li>– the National Road Transport Commission to develop an industry education and training package.</li> </ul> </li> <li>• Other relevant programs relate to:               <ul style="list-style-type: none"> <li>– implementation of the <i>Fuel Quality Standards Act 2000</i> and the <i>Motor Vehicle Standards Act 1989</i></li> <li>– new Australian Design Rules that set out Design Standards for Vehicle Safety and Emissions Standards</li> <li>– the Alternative Fuels Conversion Program for the conversion of heavy commercial vehicles and buses or to purchase new vehicles operating on alternative fuels.</li> </ul> </li> </ul>
New South Wales	<ul style="list-style-type: none"> <li>• The focus of the New South Wales Government agencies has been on the development and implementation of strategies to improve diesel vehicle maintenance.</li> <li>• As well as a continuation of the Smoky Vehicle Program, over the reporting period, the Roads and Traffic Authority has developed audited maintenance guidelines for diesel fleets, worked with TAFE to develop a training program for diesel repairers, and, with the EPA, has provided funding to trial biodiesel in council vehicles.</li> </ul>
Victoria	<ul style="list-style-type: none"> <li>• The focus of implementation activity in Victoria continued to be the long-standing Smoky Vehicle Spotting and Enforcement Program. This program saw 12 476 smoky petrol and diesel vehicles identified by the public, police, VicRoads and EPA officers during the year.</li> <li>• The Ecomaintenance Program, a partnership between EPA Victoria and the National Road Transport Commission, received funding from the Commonwealth Government to undertake a training program for diesel mechanics.</li> <li>• ‘Hot spot’ roadside monitoring continued.</li> <li>• A recently acquired mobile dynamometer has been used for preliminary roadside and fleet testing.</li> </ul>
Queensland	<ul style="list-style-type: none"> <li>• The Air Emissions Inventory (South East Queensland region) was released in 2002.</li> </ul>



Jurisdiction	Summary of Implementation Activities
Queensland (continued)	<ul style="list-style-type: none"> <li>• Queensland Transport continues to support a range of initiatives to reduce diesel emissions.</li> <li>• The Smoky Vehicle Program continues to provide an avenue for the community to report vehicles exceeding the 10-second smoke rule.</li> </ul>
Western Australia	<ul style="list-style-type: none"> <li>• The Department of Environment has undertaken detailed planning for a Vehicle Emissions Testing Pilot Program for WA. A funding proposal for the program has been submitted to the Commonwealth Department of the Environment and Heritage.</li> <li>• The Smoky Vehicle Reporting Scheme allows members of the public to report excessively smoking vehicles.</li> <li>• A review is being undertaken on the Smoky Vehicle Reporting Scheme in conjunction with the Perth Air Quality Management Plan. The review will investigate the use of public complaints as a trigger to issue orders for rectification work.</li> </ul>
South Australia	<ul style="list-style-type: none"> <li>• The Department of Transport and Urban Planning (DTUP), with assistance from the EPA and the University of South Australia, has developed a proposal to establish a Diesel NEPM Test and Repair Demonstration Program.</li> <li>• An enhanced version of the existing Smoky Vehicle Program has been developed after significant consultation with the relevant government agencies.</li> <li>• DTUP is currently evaluating the use of biodiesel in the operation of public transport buses. A number of in-service vehicles have undergone a retrofit program to enable the use of the fuel. A trial of biodiesel in one public transport bus has been completed.</li> <li>• A project has been established to develop a retrofit module to control diesel engine driving patterns with the aim of minimising emissions.</li> </ul>
Tasmania	<ul style="list-style-type: none"> <li>• A submission to establish a Diesel NEPM Test and Repair Demonstration Program in Tasmania has been submitted to the Commonwealth Department of the Environment and Heritage.</li> <li>• Through the Department of Infrastructure, Energy and Resources, a program of vehicle inspections is being continued.</li> </ul>
Australian Capital Territory	<ul style="list-style-type: none"> <li>• Under the Fleet Efficiency Program, the ACT Government has commenced replacement of diesel ACTION buses with compressed natural gas-powered vehicles.</li> <li>• Other implementation activities consistent with the goal of the NEPM include:               <ul style="list-style-type: none"> <li>– requiring emission control equipment fitted to a vehicle to remain fitted and be maintained in a condition that ensures that it operates essentially in accordance with the original system design under Schedule 1 of the Road Transport (Vehicle Registration) Regulations 2000</li> <li>– implementation of random on-road and car park inspections.</li> </ul> </li> </ul>
Northern Territory	<ul style="list-style-type: none"> <li>• A Smoky Vehicle Program is undertaken as part of the vehicle registration and roadworthiness testing procedures.</li> </ul>



### **Council evaluation and assessment of Jurisdictional Implementation Activities**

Jurisdictions continue to implement the NEPM through Smoky Vehicle Programs. Most jurisdictions are either implementing or have submitted funding applications for diesel vehicle emissions testing and repair programs, vocational training and awareness-raising activities.

Several jurisdictions continue to revise their air emissions inventories to understand and manage diesel emissions better.

### **PART 3 — ASSESSMENT OF NEPM EFFECTIVENESS**

At this stage in the implementation of the NEPM, it is difficult to assess its effectiveness although the range of programs that jurisdictions have in place or have proposed should assist in meeting the Goal of the NEPM. Results from implementation of proposed testing and repair programs will assist in the evaluation of the effectiveness of the NEPM.

Jurisdictional Smoky Vehicle Programs are a popular public participation activity and continue to be one of the key implementation activities. These programs play an important role in raising awareness among motorists about the impact of emissions from their vehicles and in motivating them to take action to reduce those emissions.

### **PART 4 — REPORTING REQUIRED BY THE NEPM**

Reporting requirements are set out under Specific Criteria in Part 1 of this report. Such information is contained in Part 2 of this report.

### **PART 5 — REPORTS ON IMPLEMENTATION BY JURISDICTIONS**

The Annexes to this report are attached in Appendix 6:

Annex 1: Commonwealth	page 245
Annex 2: New South Wales	page 247
Annex 3: Victoria	page 252
Annex 4: Queensland	page 255
Annex 5: Western Australia	page 257
Annex 6: South Australia	page 259
Annex 7: Tasmania	page 262
Annex 8: Australian Capital Territory	page 264
Annex 9: Northern Territory	page 265