



Australian Government

Department of the Environment and Heritage



*Fuel Quality Standards Act 2000*

## **CLEAN FUELS BULLETIN**

**August 2004**

### **NEW MINISTER**

In July, Senator the Hon Ian Campbell succeeded the Hon Dr David Kemp MP as the Minister for the Environment and Heritage. Senator Campbell is also *Manager of Government Business in the Senate*. The Hon Dr Sharman Stone MP continues as Parliamentary Secretary.

### **POST-2006 FUEL STANDARDS**

On 22 July 2004, the Minister for the Environment and Heritage announced new sulfur limits for premium unleaded petrol (PULP) of 50 parts per million (ppm) from 1 January 2008 (down from the current 150 ppm), and diesel capped at 10 ppm from 1 January 2009 (currently 500 ppm, and 50 ppm from 1 January 2006); see press release at <http://www.deh.gov.au/minister/env/2004/mr22jul04.html>. Incentives for cleaner fuels were announced by the Government in May 2003 to bring forward the benefits from these new standards. These are likely to become available two years earlier, ie for 10 ppm sulfur PULP from 1 January 2006 and for 10 ppm sulfur diesel from 1 January 2007.

The new sulfur limits were as recommended by the Fuel Standards Consultative Committee, and followed a major public review by the Land Transport Environment Committee (LTEC) into Vehicle Emissions and Fuel Quality Standards for Post-2006. LTEC is a joint body of the National Environment Protection Council and the National Transport Commission.

Stakeholder submissions on the Draft Regulation Impact Statement (RIS) have been published in the "News" section of the LTEC web-site at <http://www.ephc.gov.au/ltec/index.html>. The final RIS was tabled in the Commonwealth Parliament on 11 August 2004 and will also be available on the LTEC web-site shortly.

### **CONSULTANCY PROJECT: USE OF LEADED PETROL AND SPECIALIST PETROLEUM-BASED UNLEADED RACING FUEL IN MOTOR AND WATER SPORTS**

The Department has recently engaged SWB Consulting to undertake this project. As outlined in the May edition of the *Clean Fuels Bulletin*, the objective of the project is to evaluate the type and quantities of fuels that will be required for motor and water sport applications in Australia in



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light of the expiration on 30 June 2005 of the approvals granted by the Minister under section 13 of the *Fuel Quality Standards Act 2000* permitting the use of leaded petrol and specialist-petroleum based unleaded racing fuel. The outcomes of the consultant's review will assist Government deliberations on the best approach to managing access to, and the supply of, leaded and unleaded racing fuels after 30 June 2005.

SWB Consulting are now seeking the views of stakeholders on the following issues:

- Any relevant defining technical or other criteria that give rise to motor/water sport (or any other specialist vehicles) requiring *leaded petrol* or *unleaded racing fuel* beyond 30 June 2005;
- Motor/water sport (or specialist vehicle events) that are held in Australia where participants are required to use either *leaded petrol* or *unleaded racing fuel* under international competition rules;
- Comment on the most appropriate method of controlling the supply and use of *leaded petrol*, having regard to the objects of the *Fuel Quality Standards Act*;
- Information on available substitute fuels for *leaded petrol* and the *unleaded racing fuels* permitted under the current Approvals which would be suitable for motor/water/specialist vehicles, and would align more closely with the standard for petrol as prescribed in the *Fuel Quality (Petrol) Determination 2001*.

Stakeholders wishing to comment on these or related issues are encouraged to express their interest by emailing [fuel.quality@deh.gov.au](mailto:fuel.quality@deh.gov.au). Submissions must be received by Monday 13 September 2004.

The departmental contact for this project is Marguerite Carrington, telephone 02-6274 2026 ([marguerite.carrington@deh.gov.au](mailto:marguerite.carrington@deh.gov.au)).

## **THE PHASE OUT OF LEAD REPLACEMENT PETROL**

Fuel suppliers are continuing the gradual phase-out of lead replacement petrol (LRP) as market demand decreases. Consumer demand for LRP has fallen to approximately 5-6% in the majority of states.

The Federal Chamber of Automotive Industries, the Australian Automobile Association and the Australian Institute of Petroleum have recently released a brochure entitled *The phase out of lead replacement petrol (LRP): Information for motorists*.

As explained in the brochure, only motorists whose pre-1986 cars required LRP to protect against valve seat recession would require the anti-valve seat recession (AVSR) additive, available at service station forecourts. These cars might also require Premium Unleaded Petrol.

Copies of the brochure can be obtained by contacting the above organisations.

## **PHASE 2 FUEL OPERABILITY STANDARDS FOR PETROL AND AUTOMOTIVE DIESEL**

Further testing and consultations will be undertaken before the introduction of the second phase of operability standards. The Phase 2 operability standards could include the following parameters:

### *Petrol*

- Drivability Index
- Flexible Volatility Index (FVI)
- Colour
- Appearance

### *Diesel*

- Appearance
- Acidity
- Cloud Point & Cold filter plugging

The Department of Industry, Tourism and Resources, together with this Department, are currently undertaking further assessment and industry consultation of these remaining operability parameters. This will include a consultancy to assess technical issues surrounding FVI. This process will culminate in the preparation of a Regulatory Impact Statement collectively for all eight parameters.

## **NATIONAL IN-SERVICE EMISSIONS [NISE 2] - UPDATE**

The second National In-service Emissions (NISE 2) study is now underway. The study will provide emissions data on the Australian light duty petrol fleet, including passenger vehicles, four wheel drives and light commercial vehicles. Current, robust emission data is essential for emissions modelling and to inform policy development with respect to vehicle emissions management.

NISE 2 will comprise two Phases, a Preliminary and a Main Phase. The Preliminary Phase will establish an Australian composite urban emissions drive cycle for light duty petrol vehicles and a short test which can provide a reliable measure of emissions performance. The Main Phase will follow the Preliminary Phase and involves testing a range of vehicles built in the period 1986-2002 for emissions performance.

The Department of the Environment and Heritage (DEH) recently awarded two contracts for the Preliminary Phase of the study. The University of South Australia's Transport Systems Centre will provide statistical support to the study, including sample design and data analysis. Orbital Engine Company have been commissioned to develop an Australian composite urban emissions drive cycle for light duty petrol vehicles and a short test which can provide a reliable measure of emissions performance. Orbital will conduct vehicle emissions testing and has subcontracted the Transport Systems Centre to develop the drive cycle.

In this Phase, a sample of sixty vehicles will be tested on a range of emissions tests, including the newly derived Australian drive cycle and short test. Results from the preliminary phase will guide subsequent development of the Main Phase. It is expected that the Preliminary Phase will conclude mid-2005.

The Department's contact officer for this study is Mr Michael Ward ([michael.ward@deh.gov.au](mailto:michael.ward@deh.gov.au))

## DIESOHOL DISCUSSION PAPER

Consistent with the Government's policy of encouraging the development of alternative fuels, the Department is currently evaluating technical issues associated with the use of Diesohol (a blend of diesel and alcohol) as a transport fuel, and options for regulating its quality.

On 27 May 2004, DEH released the discussion paper, *Setting National Fuel Quality Standards, Paper 7: Discussion Paper on Diesohol*, for public comment. The closing date for submissions was 7 July 2004. Responses to the paper have been received from a range of stakeholders. These have been posted on the Department's website at <http://www.deh.gov.au/atmosphere/cleaner-fuels/diesohol.html>

While the responses cover a range of viewpoints, the majority support the development of a national standard for Diesohol under the *Fuel Quality Standards Act 2000*. Respondents noted, *inter alia*, that setting a national standard would

- provide a platform for market growth;
- remove the risk of opportunistic blending of diesel and alcohol;
- enable engine manufacturers to focus on a narrower set of engineering parameters in addressing differences between diesohol and standard diesel fuels;
- assist in resolving warranty issues; and
- draw attention to the need for a nationally consistent approach to storing, transporting and handling the fuel.

Many respondents raised issues associated with Diesohol's low flash point, particularly flammability risks in connection with transport, storage and handling of the fuel. Engine manufacturers highlighted a number of unresolved vehicle operability issues, eg fuel system corrosion, lower fuel economy, etc.

The Department's contact officer for this project is Marguerite Carrington, telephone 02-6274 2026 ([marguerite.Carrington@deh.gov.au](mailto:marguerite.Carrington@deh.gov.au)).

## REVIEW OF THE FUEL QUALITY STANDARDS ACT 2000

Significant progress on the statutory review of the Fuel Quality Standards Act, as required by Section 72 of the Act, has been made. The Review Panel responsible for ensuring that the two consultants selected for this important task comprehensively address the requirements of the review has recently examined a draft report.

It is expected that this report will be finalised in the near future. Fuel standards, or fuel quality information standards that have been made under the Act, have not be examined during the review.

## FUEL STANDARDS CONSULTATIVE COMMITTEE

The Committee met on 16 June 2004 in Canberra for its 7<sup>th</sup> meeting. Matters considered included:

- Operability standards for petrol and diesel
- Development of fuel standards for Diesohol
- Cetane measurement

- Fuel standards Post-2006
- Approvals under section 13 of the Act
- Review of the *Fuel Quality Standards Act 2000*

### Approvals Granted under the Act

Since the May 2004 *Clean Fuels Bulletin*, and after consultation with the Fuel Standards Consultative Committee, the Minister has granted one new approval under Section 13 of the *Fuel Quality Standards Act 2000*.

Name of Approval Holder	Period of Operation	Approved Variation of Fuel Standard
Caltex Refineries (Qld) Ltd	13 July 2004 - 30 December 2005	Variation of the <i>Fuel Standard (Diesel) Determination 2001</i> to permit the supply of fuel certified by a minimum cetane number of 46 instead of a minimum cetane index of 46.

The Minister has also made the following amendments to existing approvals:

Name of Approval Holder	Period of Operation	Approved Variation of Fuel Standard	Amendment
Caltex Australia Petroleum Pty Ltd	21 March 2004-31 December 2004	Variation of the <i>Fuel Standard (Automotive Diesel) Determination 2001</i> to permit the supply of (wintermix) diesel with the following parameters: <ul style="list-style-type: none"> <li>• viscosity 1.2cSt @ 40°C</li> <li>• density 800kg/m<sup>3</sup></li> <li>• lubricity 0.700mm</li> <li>• sulfur 1000ppm</li> </ul> Conditions attached.	List of regulated persons extended on 8 August 2004

### MONITORING COMPLIANCE AND ENFORCEMENT

The program for the 2003/04 financial year was completed with a total of 854 petrol and diesel samples taken nationally. This brings the total number of samples taken since the program commenced in April 2002 to 2,122. A number of cases are being discussed with the Commonwealth Director of Public Prosecutions (CDPP) and briefs of evidence are being prepared. The compliance incident reporting process continues to provide information on possible supplies of non-compliant fuel. Most of the reports received resulted from vehicle operability problems experienced by consumers after refueling. The sites concerned were scheduled for sampling by inspectors.

The first audits of documentation and record keeping requirements were also carried out at a number of service stations in Sydney. There will be more of a focus on these audits in the future with inspectors not only taking fuel samples, but also asking to see documentation relating to fuel supplies. It appears that many fuel suppliers are not aware of the legal requirements in this area.

On 30 July 2004, a presentation on the program was provided to the National Petroleum Marketers Symposium held at Surfers Paradise. The Symposium provided an excellent opportunity to create awareness among service station operators and petroleum distributors of

the documentation and record keeping requirements of the *Fuel Quality Standards Act 2000*. A copy of the presentation notes can be obtained by emailing the Clean Fuels and Vehicles Section on [fuel.quality@deh.gov.au](mailto:fuel.quality@deh.gov.au).

During the second half of the financial year, a significant effort was made to tighten sampling procedures and the sampling manuals issued to all inspectors were updated and improved. An audit of the inspectorate has been underway to ensure that correct procedures are being followed in all jurisdictions. The procedures under the program will be continually monitored and improved where needed, to ensure that any briefs of evidence submitted to the CDPP are supported by a reliable and robust sampling and testing regime that can withstand the scrutiny of a court process.

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#### CONTACT DETAILS

For more information about any of the items in this Bulletin, please contact:

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