

Operation of the *Fuel Quality Standards Act 2000*

This annual report is prepared in accordance with section 71 of the *Fuel Quality Standards Act 2000*. It covers the operation of the Act from 1 July 2007 to 30 June 2008.

Purpose of the Act

The purpose of the Act is to regulate the quality of fuel in Australia to:

- reduce the level of pollutants and emissions arising from the use of fuel that may cause environmental and health problems
- facilitate the adoption of better engine technology and emission control technology and allow for more effective operation of engines
- ensure that appropriate information about fuel is provided when the fuel is supplied.

The Fuel Quality Standards Regulations 2001 cover the regulation of fuel and fuel additives, the operations of the Fuel Standards Consultative Committee, the publication of notices about entries in the Register of Prohibited Fuel Additives, enforcement, and record keeping and reporting obligations.

Fuel quality standards

Fuel Standard Determinations set specific fuel quality standards for petrol, automotive diesel, biodiesel and autogas (liquefied petroleum gas). The determinations specify standards for a range of parameters, which address both environmental and operability performance.

The standards for petrol and diesel have been progressively tightened since they were first introduced in 2002. The regulated levels of sulphur in diesel will be further reduced in 2009.

Amendments were in preparation to provide a standard for the blending of up to ten per cent ethanol with petrol. Amendments to the *Fuel Standard (Petrol) Determination 2001* are close to completion. A Regulatory Impact Statement (RIS) has been approved by the Office of Best Practice Regulation (OBPR) and an Explanatory Statement has been completed. The standard became effective on 28 June 2008.

Oil Burn Systems

A discussion paper '*Management of Diesel Oil Burn Systems*' was released in February 2008. The paper outlined the department's proposal to accommodate the use of oil burn systems under the *Fuel Quality Standards Act 2000* in certain circumstances. Stakeholders were requested to provide further technical information about the operation of oil burn systems. Further policy development will be based on results from this consultation process.

Future fuel standards—research and consultation

Diesohol

Diesohol is a blend of 85-90 per cent automotive diesel, 10-15 per cent alcohol (usually ethanol, sometimes methanol) and a blending agent. Like diesel, it is used in compression ignition engines, however, vehicle engines must be modified as the addition of alcohol changes the properties of the fuel.

Diesohol is currently included as a fuel in its own right in the *Fuel Quality Standards Regulations 2001* (the Regulations). There is, however, currently no fuel standard controlling the quality of diesohol supplied in Australia. Public and industry consultation has indicated that it would not be desirable to set a fuel standard for diesohol at this time. Due to safety concerns, diesohol is best suited to niche markets, such as centrally refuelled fleets with modified engines and fit-for-purpose storage and handling infrastructure.

The department is in the process of amending the Regulations to remove diesohol from the definition of *fuel*. Suppliers will then need to be covered by a section 13 approval and supply the fuel in accordance with the conditions specified.

Ethanol

In a 2003 amendment to the *Fuel Standard (Petrol) Amendment Determination 2002* the ethanol content of petrol was capped at ten per cent but no standard was set for the quality of the ethanol. The department released a paper for public comment in July 2005 stating the Australian Government's position on setting a fuel standard for ethanol blended with petrol at five per cent (E5) or ten per cent (E10) and there was no public opposition to the introduction of a standard. A draft standard was circulated to stakeholders for final comment in May 2007.

The Fuel Standards Consultative Committee recommended a standard for fuel grade ethanol to be blended with petrol. The standard will harmonise with the American standard (ASTM D4806). The Regulation Impact Statement (RIS) was approved by the Office of Best Practice Regulation (OBPR). The standard became effective on 28 June 2008.

Health impacts of using ethanol blend fuels

In 2007 the department commissioned a \$3.9 million study by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and Orbital Australia to determine the health impacts of the use of up to ten per cent ethanol blended with petrol. It is envisaged that the final report will be released in the first quarter of 2008–09. The results will be used in conjunction with other studies, such as the vehicle compatibility study, to inform future ethanol policy decisions. Previous emissions studies have focused on cold climates and do not apply to Australian conditions. Stakeholders were consulted on the methodology for the study and the project steering committee assessed their comments for incorporation into the study.

Setting standards for biodiesel blends

A position paper on proposed management of diesel/biodiesel blends was released in January 2008. To meet the objectives of the *Fuel Quality Standards Act 2000* and to ensure the quality of diesel fuel available to Australian consumers, an amendment to the diesel standard was proposed, to allow the inclusion of up to five per cent biodiesel. In the short term for circumstances where the use of blends with more than five per cent biodiesel is appropriate, suppliers will need to apply to the government for approval. In the longer term consideration of the use of higher blends more broadly under Australian conditions will be undertaken.

Biodiesel demonstration trial

A biodiesel demonstration trial is underway in Booderee National Park and is being managed by Parks Australia. The trial was delayed by a number of issues, including locating a suitable supplier of fuel storage infrastructure and diesel/biodiesel (B5) blended fuel. Parks Australia commenced use of B5 fuel in March 2008 and the demonstration trial is due for completion in October 2009.

Statutory review of the *Fuel Quality Standards Act 2000*—implementing recommendations

The statutory review of the *Fuel Quality Standards Act 2000* was completed in April 2005. In 2007–08 proposals were developed to implement the review’s recommendations and to address a number of separate issues that had arisen through the day-to-day operation of the Act. (A draft Bill is scheduled to be introduced into parliament during the 2008 spring sittings.)

Fuel Standards Consultative Committee

Section 24 of the Act establishes the Fuel Standards Consultative Committee as a formal consultation mechanism. The committee is required to include one representative from each state and territory, and the Australian Government. It must also include at least one person representing fuel producers, one representing a non-government body with an interest in the protection of the environment and one representing the interests of consumers. The minister may also appoint other members to the committee, which in 2007–08 included representatives from the motor vehicle manufacturing industry, independent fuel importers and suppliers, the alternative and renewable fuels industry, and the trucking industry.

Table 1 lists members of the committee during 2007–08.

Under section 24A the minister must consult the committee before:

- granting an approval
- making a fuel quality standard
- making a fuel quality information standard
- deciding whether to enter a fuel additive on, or remove a fuel additive from, the Register of Prohibited Fuel Additives
- preparing guidelines for more stringent fuel standards.

Under section 13 of the Act, the committee also provides advice on applications to vary fuel standards including recommendations on the conditions to be applied. In 2007–08 the committee considered and made recommendations on nine new applications under section 13 (see Table 2).

Table 1 Membership of the FSCC 2007-08

First Name	Surname	Representing	Start Date	Finish Date
Paul	Barrett	Fuel producers	16-Apr-07	16-Apr-10
John	Bortolussi	Trucking industry	16-Apr-07	16-Apr-10
David	Bowman	Environment non-government organisation	16-Apr-07	16-Apr-10
Bruce	Harrison	Alternative fuels industry	04-Jan-08	04-Jan-11
James	Hurnall	Automotive industry	30-Mar-08	30-Mar-11
James	Hurnall	Consumer interests	16-Apr-07	15-Feb-08
Bob	Hyde	Tasmanian Government	27-Nov-06	27-Nov-09
Paul	Kesby	Acting Chair Australian Government Department of the Environment, Water, Heritage and the Arts	07-Jun-07	31-Jul-07
Geoff	Latimer	Victorian Government	16-Apr-07	16-Apr-10
Mike	McCullagh	Independent fuel producers	16-Apr-07	16-Apr-10
Scott	McDowall	Queensland Government	16-Apr-07	16-Apr-10
Craig	Newland	Consumer interests	17-Jun-08	20-Jun-11
Kelly	Pearce	Chair Australian Government Department of the Environment, Water, Heritage and the Arts	04-Jan-08	04-Jan-11
David	Power	ACT Government	09-Oct-06	09-Oct-09
Jon	Real	Australian Government Department of Infrastructure, Transport, Regional Development and Local Government	16-Apr-07	16-Apr-10
Nigel	Routh	New South Wales Government	16-Apr-07	16-Apr-10
Steven	Sanderson	Northern Territory Government	16-Apr-07	16-Apr-10
Stephen	Schuck	Alternative fuels industry	03-Feb-03	03-Feb-07
Keith	Seyer	Automotive industry	16-Apr-07	14-Dec-07
Kelvyn	Steer	South Australian Government	09-Oct-06	09-Oct-09
John	Sutton	Western Australian Government	16-Apr-07	16-Apr-10
Marie	Taylor	Australian Government Department of Resources, Energy and Tourism	16-Apr-07	16-Apr-10

Table 2 Approvals granted in 2007-08

Name of Approval Holder	Period of Operation		Approved Variation of Fuel Standard
	FROM	TO	
ACB Group Pty Ltd	25/05/2008	31/12/2008	Variation of the Fuel Standard (Petrol) Determination 2001 to permit the supply of: leaded petrol, containing lead greater than 0.005g/L; and unleaded petrol containing: aromatics up to 78% v/v; ethanol up to 20% v/v; and oxygen up to 7% m/m in petrol containing ethanol.
VP Racing Fuels Pty Ltd	25/05/2008	31/12/2008	Variation of the Fuel Standard (Petrol) Determination 2001 to permit the supply of: leaded racing fuel containing: MTBE up to 40% v/v, lead up to 1 g/l, and oxygen up to 7.6% m/m.
ET Racing Fuels & Lubricants Pty Ltd	17/03/2008	31/12/2008	Variation of the Fuel Standard (Petrol) Determination 2001 to permit the supply of: leaded petrol, containing lead greater than 0.005g/L and benzene greater than 1% v/v; and unleaded petrol containing: aromatics up to 80% pool average; benzene up to 5% v/v; oxygen up to 8% m/m; and ethanol up to 35% v/v.
Caltex Australia Petroleum Pty Ltd	12/12/2007	17/02/2008	Variation of the Fuel Standard (Petrol) Determination 2001 to permit supply of unleaded petrol with an olefin content of up to 25%
National Biofuels Group Pty Limited	22/09/2007	30/09/2009	Variation of the Fuel Standard (Biodiesel) Determination 2003 to allow a minimum cetane number of 47
IOR Energy Pty Ltd	01/01/2008	30/06/2009	Variation of the Fuel Standard (Automotive Diesel) Determination 2001 to allow the supply of diesel with a sulphur content of up to 125 mg/kg (Eromanga Underground Mining Fuel) for underground mining applications only.
Western Australian Jet Sprint Club	13/09/2007	31/12/2008	Variation of the Fuel Standard (Petrol) Determination 2001 to permit the supply of petrol with a lead content of greater than 0.005g/L.
Bathurst Regional Council	13/09/2007	31/12/2008	Variation of the Fuel Standard (Petrol) Determination 2001 to permit the supply of petrol with a lead content of greater than 0.005g/L.
IOR Energy Pty Ltd	01/07/2007	31/12/2007	Variation of the Fuel Standard (Automotive Diesel) Determination 2001 to allow the supply of diesel with a sulphur content of 125ppm (Eromanga Underground Mining Fuel) for underground mining purposes only.

Monitoring and Compliance

The Australian Government runs a fuel sampling program to monitor the quality of fuels sold in Australia. Fuel samples of all grades of fuel covered by the standards are taken throughout the fuel supply chain in all states and territories. The monitoring program aims to take representative samples in each of the fuel markets around Australia and respond to complaints made by consumers about fuel.

Fuel sampling is undertaken at distribution terminals, depots, service stations and other outlets. Samples are screened for compliance with the standards and, if required, are further tested at an independent laboratory accredited by the National Association of Testing Authorities. Testing methods are accredited to international standards.

Fuel quality inspectors directly employed by the department and by some state and territory agencies took a record number of samples during 2007–08. Inspectors took a total of 4,214 petrol, diesel, biodiesel and autogas samples from approximately 1300 sites around Australia. A total of 230 compliance incident reports were received. In comparison 2,321 samples were taken during 2006–07 from 750 sites, and 145 compliance incident reports were received.

Test results indicate a high level of compliance with the fuel standards. Where non-compliance with a standard is detected, further investigation is undertaken with a view to prosecution where an offence can reasonably be proven.

On 27 July 2007 the department was successful in obtaining the first conviction under the Act. Southeast Petroleum (Aust) Pty Ltd, was found guilty of three breaches of the fuel quality standards and was fined a total of \$150,000. The company supplied automotive diesel fuel to the public that failed to meet the standards for sulphur, distillation temperature and viscosity.

The department also used the Act's injunction powers for the first time. On 3 December 2007, Green Fuel Park Pty Ltd was restrained for five years from supplying or selling petrol with an ethanol content in excess of 10 percent and ordered to pay costs of \$11,000.

Audits of variations to fuel standards under section 13 of the Act are also conducted by fuel quality inspectors. During 2007–08 four audits were completed; three for racing fuels at motor and water sports events and one for retail diesel at various sites. The results indicate a high level of compliance with approved conditions.

Freedom of information

In 2007–08, one freedom of information request was received in relation to the Act and Regulations.