

EXPLANATORY STATEMENT

Fuel Quality Standards Act 2000

Fuel Quality Standards (Ethanol E85) Determination 2019

(Issued by the authority of the Minister for Energy and Emissions Reduction)

Purpose and operation

The *Fuel Quality Standards Act 2000* (Cth) (the Act) provides the legislative framework for regulating the quality of fuel supplied in Australia. The objectives of the Act are 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 and emission control technology; allow the more effective operation of engines and ensure that, where appropriate, information about fuel is provided when the fuel is supplied.

Section 21 of the Act provides that the Minister may, by legislative instrument, determine a fuel standard in respect of a specified kind of fuel.

The *Fuel Quality Standards (Ethanol E85) Determination 2019* (the Determination) sets out the parameters and testing methods for ethanol E85 supplied in Australia.

The purpose of the Determination is to replace the sunseting *Fuel Standard (Ethanol E85) Determination 2012*, and to provide certainty for the quality of ethanol E85 supplied in Australia.

E85 is defined as a fuel blend consisting of 70–85% ethanol and petrol that meets the requirements of the *Fuel Quality Standards (Petrol) Determination 2019*. This means that any percentage of ethanol between and including 70 and 85% may be present in E85.

The most significant changes in this updated standard are in the sulfur, inorganic chloride and higher alcohols parameters. From commencement of this Determination, E85 can contain no more than 52 mg/kg sulfur, and from 1 July 2027, no more than 10 mg/kg. This reflects the lowering of sulfur content in both petrol and ethanol in petrol in the new *Fuel Quality Standards (Petrol) Determination 2019*. The inorganic chloride limit has been raised to 10 mg/kg to align with the new standard for ethanol in petrol. The higher alcohols parameter has been withdrawn to align with the US ASTM ethanol E85 standard.

Some parameter names and units for specifications have been updated to improve consistency, and some testing methods have been changed as appropriate.

The E85 standard will operate independently of the *Fuel Quality Standards (Petrol) Determination 2019*, which allows for up to 10% ethanol in petrol (commonly known as E10) and specifies the ethanol parameters for E10.

This instrument is a legislative instrument for the purposes of the *Legislation Act 2003*.

Background

In October 2015, the Australian Government established the Ministerial Forum on Vehicle Emissions to coordinate a whole-of-government approach to reducing motor vehicle emissions. Part of this work is a measure to improve fuel quality standards which will assist in achieving better environmental, human health and engine operability outcomes.

Consultation

This Determination has been developed following extensive public consultation in relation to a range of policy options to improve Australia's fuel quality. Two rounds of public consultation were conducted, as well as targeted consultation with key industry stakeholders to finalise options for the legislative instruments that prescribe fuel standards. The stakeholders included fuel producers, fuel importers, vehicle manufacturers and automobile associations. Targeted consultation with key testing laboratories occurred to ensure the proposed changes reflected the most up-to-date testing methods for the relevant parameter.

Under the Act, before making a fuel standard, the Minister must also consult the Fuel Standards Consultative Committee. The committee provided advice on the exposure draft of the Determination.

Regulation impact analysis

The Office of Best Practice Regulation (OBPR) was consulted in relation to the remaking of this instrument under the Act. The *Better fuel for cleaner air regulation impact statement* was prepared to assess the impacts on industry, the community and the environment of various policy options to improve fuel standards. The OBPR advised that the *Better fuel for cleaner air regulation impact statement* is compliant with the Government's requirements and is consistent with best practice (OBPR ID 20699).

The *Better fuel for cleaner air regulation impact statement* is available under the *Supporting Material* tab of the www.legislation.gov.au page for this instrument.

Incorporation

The Determination lists testing methods to be used by the Department of the Environment and Energy (the Department) to determine compliance with the parameters. For example ASTM D5453 is used to test the sulfur content of Ethanol E85. Testing methods, developed by ASTM International and others, describe procedures that analytical laboratories must follow. The use of such standards is consistent with the Australian Government's policy of harmonisation with international standards where appropriate.

The parties most likely to access the referenced documents are analytical laboratories testing compliance under the Determination. The incorporation of the testing methods into the Determination does not place undue burden on fuel suppliers. Fuel suppliers can use alternative testing methods to test fuel. Suppliers should note that the Department will test compliance by using the test methods in the Determination. The listed testing methods are

incorporated as they are in force at the time the Determination commences on 1 October 2019. ASTM testing methods are available for purchase through ASTM International (www.astm.org). EN and CEN/TS testing methods are available for purchase through SAI Global (infostore.saiglobal.com) and other providers. A fee is charged to purchase each testing method in its entirety. The Department also make the incorporated testing methods available on request free of charge at its offices throughout Australia (ACT, Queensland, NSW, Victoria, NT and Tasmania).

Details of the *Fuel Quality Standards (Ethanol E85) Determination 2019*

Section 1 – Name of instrument

This section specifies that the name of the Determination is the *Fuel Quality Standards (Ethanol E85) Determination 2019* (the Determination).

Section 2 – Commencement

This section provides that the instrument commences on 1 October 2019.

Section 3 – Authority

This section sets out the provision of the *Fuel Quality Standards Act 2000* under which the Determination is made.

Section 4 – Definitions

This section provides for definitions of terms used in the Determination.

Section 5 – Fuel standard for ethanol E85

The table in this section details chemical and physical parameters and the specifications that must be met for each parameter in respect of the supply of ethanol E85 in Australia.

The following ethanol E85 components or additives are limited to reduce emissions and therefore improve air quality and human health: benzene, sulfate, sulfur and lead. Some of the above parameters also affect engine and vehicle operability. In addition, the following parameters are limited to improve the operation of engines and reduce emissions from tailpipes leading to improved air quality: acidity—as acetic acid, copper, distillation, ethanol, ethers, inorganic chloride, methanol, motor octane number (MON), oxidation stability, pHe, phosphorus, research octane number (RON), solvent washed gum, vapour pressure and water.

Compliance with the specification for a parameter is determined by the testing method specified in the table.

The note confirms that the testing methods listed in the table are the methods that will be used by inspectors and other persons authorised to conduct tests on fuel under the Act to determine whether the fuel complies with the relevant fuel standard. Subsection (2) does not prevent other persons (including persons supplying fuel) from using other test methods to ensure that the fuel complies with the relevant fuel standard.

STATEMENT OF COMPATIBILITY WITH HUMAN RIGHTS

Prepared in accordance with Part 3 of the Human Rights (Parliamentary Scrutiny) Act 2011

Fuel Quality Standards (Ethanol E85) Determination 2019

This Determination is compatible with the human rights and freedoms recognised or declared in the international instruments listed in section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Overview of the legislative instrument

The *Fuel Quality Standards (Ethanol E85) Determination 2019* sets out the parameters and testing methods for ethanol E85 supplied in Australia.

Human rights implications

This Determination does not engage any of the applicable rights or freedoms.

Conclusion

This Determination is compatible with human rights as it does not raise any human rights issues.