

EXPLANATORY STATEMENT

Issued by the authority of the Minister for Climate Change and Energy

Fuel Quality Standards Act 2000

Fuel Quality Standards (Paraffinic Diesel) Determination 2025

Legislative Authority

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 (Paraffinic Diesel) Determination 2025* (the Determination) is made for the purposes of the relevant provisions in section 21 of the Act.

Purpose

The purpose of the Determination is to set out the parameters, specifications and testing methods for paraffinic diesel supplied in Australia.

Background

Paraffinic diesel is a fuel that is predominantly made up of paraffinic hydrocarbons. It is used as an alternative to conventional diesel and can be made from a range of source materials. Renewable diesel is a type of paraffinic diesel that is made from renewable sources and is used as a low-carbon alternative to conventional diesel. This Determination refers to paraffinic diesel and applies to all types of paraffinic diesel, regardless of source material. This aligns with the approach taken by the European Union to regulate the quality of paraffinic diesel.

Under section 13 of the Act, the Minister may grant to any person an approval in writing that varies a fuel standard in a specified way in respect of specified supplies of the fuel (section 13 approval). Section 13 approvals to the *Fuel Quality Standards (Automotive Diesel) Determination 2019* have been in place since 2022 to enable the supply of paraffinic diesel.

The Determination is being introduced concurrently with the *Fuel Quality Standards (Paraffinic Diesel) Information Standard 2025*, the *Fuel Quality Standards (Conventional Diesel) Determination 2025* and the *Fuel Quality Standards (Biodiesel) Determination 2025*.

Impact and Effect

The Determination allows suppliers to supply paraffinic diesel in Australia without applying for a section 13 approval. This Determination minimises additional administrative processes for suppliers, ensures consistency of quality for consumers and ensures the effective operation of engines. This Determination may lead to an increase in use of paraffinic diesel with renewable origin, which would assist in lowering emissions across the Australian economy and help meet climate targets.

Consultation

Consultation with the Office of Impact Analysis

The Office of Impact Analysis (OIA) was consulted in October 2023 on the development of a paraffinic diesel standard under the Act. OIA advised that the introduction of a paraffinic diesel standard is unlikely to have a more than minor regulatory impact, and therefore the preparation of an Impact Analysis was not required (OIA23-05845).

Public and industry consultation

Consultation was conducted on the development of a paraffinic diesel standard between November 2023 and November 2024. In November 2023, the Department of Climate Change, Energy, the Environment and Water (the department) published a consultation paper: *‘Enabling supply of renewable diesel’*. The department received 44 submissions from the public, peak industry groups, individual industry participants and government agencies. After consideration of comments from the public consultation process, the department undertook targeted consultation with key fuel and vehicle industry stakeholders. A further round of consultation was conducted in October–November 2024.

Consultation with the Fuel Standards Consultative Committee

Subsection 24A(1) of the Act provides that, with limited exceptions, the Minister must consult the Fuel Standards Consultative Committee (the Committee) prior to making a determination under section 21. In accordance with subsection 24A(1), the Minister consulted with the Committee on 4 February 2025, prior to making the Determination.

Details/ Operation

The Determination lists testing methods that are used to determine compliance with each parameter. These testing methods are identified in reference to codes developed by the international standards development organisations, ASTM International, the European Committee for Standardization and the Energy Institute, and describe procedures that analytical laboratories must follow. The use of such testing methods is necessary and consistent with the Australian Government’s policy of harmonisation with international standards where appropriate. The testing methods are intended to be incorporated as in force at the time the Determination commences, in line with section 14 of the *Legislation Act 2003*.

The incorporated testing methods are publicly available and may be purchased on the websites of the relevant international standards development organisations. While access to the standards is not free of charge, it is expected that the standards mentioned in the Determination would be industry best practice and would already be widely used and accessed by affected members of industry. Therefore, it can be reasonably expected that those who comply with the standards outlined in the Determination already have access to those standards to carry out their business or meet their professional obligations.

Additionally, the department will make the incorporated testing methods available to view free of charge at its offices throughout Australia on request.

Any biodiesel component of paraffinic diesel must meet the requirements of the *Fuel Quality Standards (Biodiesel) Determination 2025*.

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

Consistent with subsection 21(5) of the Act, the Minister had regard to the objects of the Act in making this instrument. The Determination commences on the day after registration.

Details of the Determination are set out in Attachment A.

Other

The Determination is compatible with the human rights and freedoms recognised or declared under section 3 of the *Human Rights (Parliamentary Scrutiny) Act 2011*. A full statement of compatibility is set out in Attachment B.

Details of the *Fuel Quality Standards (Paraffinic Diesel) Determination 2025*

Section 1 – Name

1. Section 1 provides that the name of the instrument is the *Fuel Quality Standards (Paraffinic Diesel) Determination 2025* (the Determination).

Section 2 – Commencement

2. Section 2 provides that the Determination commences on the day after registration.

Section 3 – Authority

3. Section 3 provides that the Determination is made under section 21 of the *Fuel Quality Standards Act 2000*.

Section 4 – Definitions

4. Section 4 provides for the definitions of terms used in the Determination.
5. Paraffinic diesel is defined as a fuel that: a) consists of a minimum of 95% paraffinic (alkane) hydrocarbons before any blending with biodiesel; and b) is suitable for use as a substitute for conventional diesel.
6. Paraffinic (alkane) hydrocarbons is taken to mean all classes of paraffins, including normal-paraffins, iso-paraffins and cyclo-paraffins (naphthenes).
7. Production methods for paraffinic diesel have not been specified in the definition. This is to enable the supply of paraffinic diesel produced from all current methods at the time of commencement, as well as any future methods, provided it meets the parameters in this Determination.

Section 5 – Fuel standard for paraffinic diesel

8. The table in section 5 details the chemical and physical parameters and the specifications that must be met for each parameter before paraffinic diesel can be supplied for use in Australia.
9. The following parameters are specified to reduce emissions and therefore improve air quality and human health: derived cetane number, total aromatics and sulfur. Some of these parameters may also affect engine and vehicle operability.
10. The following parameters are specified to ensure engine and vehicle operability and to ensure that engines can operate optimally, which ensures the best efficiency and lowest emissions from tailpipes: ash content, biodiesel content, carbon residue, copper

corrosion, density, distillation, filter blocking tendency, kinematic viscosity, lubricity, oxidation stability, total contamination and water.

11. The following parameters are specified for safety and handling purposes: flash point and conductivity.

Statement of Compatibility with Human Rights

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

Fuel Quality Standards (Paraffinic Diesel) Determination 2025

This Legislative Instrument 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 (Paraffinic Diesel) Determination 2025* (the Determination) sets out the parameters, specifications and testing methods for paraffinic diesel supplied in Australia.

Human rights implications

The Determination engages the right to health in Article 12(1) of the International Covenant on Economic, Social and Cultural Rights (the ICESCR).

Right to health

Article 12(1) of the ICESCR makes provision in relation to the right to health, specifically the right to the enjoyment of the highest attainable standard of physical and mental health. Article 12(2)(b) includes the improvement of all aspects of environmental hygiene as a step to be taken to achieve the full realisation of the right to health. In its *General Comment No 14 (August 2000)*, the United Nations Committee on Economic, Social and Cultural Rights stated that this encompasses the prevention and reduction of human exposure to harmful substances (at [15]).

The Determination seeks to promote the right to health under Article 12 of the ICESCR by enabling the supply of paraffinic diesel, which reduces the level of pollutants and emissions arising from diesel combustion that can have harmful impacts on human health and the environment. The Determination seeks to achieve this as paraffinic diesel has a lower aromatics content which improves how the fuel combusts in the engine, leading to increased engine efficiency and reduced emissions of known carcinogens. Renewable diesel also contains less sulfur, resulting in reduced emissions of sulfur oxides, which are harmful to human health and contribute to acid rain.

Conclusion

This Legislative instrument is compatible with human rights as it promotes the right to health.

The Hon. Chris Bowen MP

Minister for Climate Change and Energy