

EXPLANATORY STATEMENT

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

Fuel Quality Standards Act 2000

Fuel Quality Standards (Ethanol E85) Determination 2024

Legislative Authority

The *Fuel Quality Standards Act 2000* (the Act) provides the legislative framework for regulating the quality of fuel supplied in Australia. The Act seeks 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 2024* is made for the purposes of the relevant provisions in section 21 of the Act.

Purpose

The *Fuel Quality Standards (Ethanol E85) Determination 2024* (the 2024 Ethanol E85 Determination) regulates the quality of E85 supplied in Australia. The 2024 Ethanol E85 Determination sets out various chemical and physical properties of E85 (known as parameters), the specifications for each of those parameters, and testing methods to be used to ascertain whether the fuel has met the specification for each parameter.

The 2024 Ethanol E85 Determination adjusts the commencement date for the 10 milligrams per kilogram (mg/kg) (equivalent to 10 ‘parts per million’ or ‘ppm’ by mass) sulfur limit across all grades (also referred to as the ultra-low sulfur limit). The commencement date for the ultra-low sulfur limit is 15 December 2025, adjusted by 12 months from 15 December 2024.

Background

Poor fuel quality can damage the environment, vehicles, and our health. Fuel quality and vehicle noxious emissions standards are closely linked as fuel quality is critical to vehicle engine performance and effective emissions controls.

In 2019, the Government legislated a 10 ppm sulfur limit for E85 to commence from 2027. This aligned with the reduction of the sulfur limit in petrol, to account for the 15–30 per cent petrol content of E85.

In July 2022, the Government brought forward the reduction of the sulfur limit in petrol and E85 from 2027 to 2024. Since that time, Australia’s refineries have stated that unavoidable disruptions in global supply chains are impacting completion timeframes for the necessary infrastructure upgrades to produce ultra-low sulfur petrol. The refineries are unable to supply ultra-low sulfur petrol, and consequently, ultra-low sulfur E85 to the Australian market until these upgrades are complete.

The 2024 Ethanol E85 Determination adjusts the implementation date for ultra-low sulfur E85 by 12 months from 15 December 2024 to 15 December 2025. This maintains the policy of introducing ultra-low sulfur petrol (and E85) as soon as possible while maintaining Australia's fuel security and responding flexibly to the obstacles the fuel industry is facing.

Impact and Effect

The 2024 Ethanol E85 Determination makes changes to the sulfur parameter.

Between the date this instrument commences and 14 December 2025, the maximum sulfur limit for E85 is 52 ppm. From 15 December 2025, the maximum sulfur limit for E85 will be 10 ppm.

There have also been minor stylistic changes to bring the standard into line with best practice drafting styles, such as changing the formatting of column headings in the table.

Consultation

Consultation on sulfur changes

There has been longstanding and continual consultation with stakeholders regarding the sulfur level in Australian petrol. Any changes to the sulfur limit in petrol require subsequent changes to the sulfur limit in E85, as E85 contains 15–30 per cent petrol.

Extensive consultation in 2016–2018 with the fuel, vehicle, and community health sectors informed the original decision to introduce an ultra-low sulfur limit in petrol from 2027. Detailed information on the consultation can be found in the *Better Fuel for Cleaner Air* Regulation Impact Statement (2018 RIS) (OBPR ID 20699).

In 2022, at the time the decision was made to bring the ultra-low sulfur implementation date forward to 2024, there was unanimous support from industry (both the fuel and vehicle sectors). The Federal Chamber of Automotive Industries endorsed the changes, stating that the sulfur reduction was a 'very important step' towards the regulation of Australian fuels in line with advanced global automotive markets.

In 2023, the refineries stated they were facing unforeseen delays to capital works projects needed to produce ultra-low sulfur petrol. The Department of Climate Change, Energy, the Environment and Water engaged extensively with the fuel industry (refineries and importers) to understand the impact of this problem on fuel security and the fuel supply chain. The fuel industry supports the adjustment to the commencement date noting that no real alternative options exist and the change would not adversely affect them.

The Office of Impact Analysis (OIA) advised that an addendum to the 2018 RIS should be published regarding the adjustment to the sulfur commencement date. This is available at [*Better Fuel for Cleaner Air - December 2023 Addendum | The Office of Impact Analysis \(pmc.gov.au\)*](#).

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 prior to making a determination under section 21. In accordance with subsection 24A(1), the Minister consulted with the Committee

prior to making the 2024 Ethanol E85 Determination, including on the specific changes which have been introduced since the *Fuel Quality Standards (Ethanol E85) Determination 2019*.

Details/Operation

The 2024 Ethanol E85 Determination lists testing methods that are used to determine compliance with each parameter. The testing methods are intended to be incorporated as in force at the time the 2024 Ethanol E85 Determination commences, in line with section 14 of the *Legislation Act 2003*. These testing methods are developed by ASTM International, an internationally recognised standards development organisation, or the testing methods describe procedures for analytical laboratories to follow. The instrument also relies on testing methods developed by the European Committee for Standardization (CEN). The use of such standards is necessary and consistent with the Australian Government's policy of harmonisation with international standards where appropriate.

The standards are publicly available and may be purchased as a PDF on the ASTM International website (<https://www.astm.org/products-services/standards-and-publications.html>) and on the iTeh website ([CEN/TS 15293:2011 - Automotive fuels - Ethanol \(E85\) automotive fuel - Requirements and test methods](#)). CEN standards may also be purchased from [CEN National Members](#), [CEN Affiliates](#), [European Committee for Electrotechnical Standardization \(CENELAC\) National Committees](#) and [CENELEC Affiliates](#).

While access to the standards is not free of charge, it is expected that standards that are mentioned in the 2024 Ethanol E85 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 must comply with the standards outlined in the 2024 Ethanol E85 Determination would already have access to those standards to carry out their business or meet their professional obligations.

Consistent with subsection 21(5) of the Act, the Minister had regard to the objects of the Act in making this instrument.

The 2024 Ethanol E85 Determination commences on the day after registration.

The 2024 Ethanol E85 Determination is a legislative instrument for the purposes of the *Legislation Act 2003*.

Details of the 2024 Ethanol E85 Determination are set out in [Attachment A](#).

Other

The 2024 Ethanol E85 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 (Ethanol E85) Determination 2024*

Section 1 – Name

1. Section 1 provides that the name of the instrument is the *Fuel Quality Standards (Ethanol E85) Determination 2024* (the 2024 Ethanol E85 Determination).

Section 2 – Commencement

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

Section 3 – Authority

3. Section 3 provides that the 2024 Ethanol E85 Determination is made under section 21 of the *Fuel Quality Standards Act 2000* (the Act).

Section 4 – Definitions

4. Section 4 provides for definitions of terms used in the 2024 Ethanol E85 Determination.

Section 5 – Fuel standard for E85

5. Section 5 provides that E85 supplied in Australia must comply with specifications relating to the specified parameters. These parameters relate to certain physical and chemical properties found in E85.
6. Compliance with the specification for each parameter is determined using specified testing methods. These testing methods are identified by reference to codes developed by the international standards development organisation called ASTM International (except for copper, whose prescribed testing method has been developed by the European Committee for Standardization).
7. The table in this section details each parameter and its corresponding specification and testing method. The 2024 Ethanol E85 Determination adjusts the implementation date for of the ultra-low sulfur limit by 12 months from 15 December 2024 to 15 December 2025.
8. Any petrol component of E85 must meet the respective requirements of the fuel quality standard for petrol set out in the *Fuel Quality Standards (Petrol) Determination 2024*.
9. Any ethanol component of E85 must meet the requirements of the fuel quality standard for ethanol set out in the *Fuel Quality Standards (Petrol) Determination 2024*.

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 2024

This 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 instrument

The *Fuel Quality Standards (Ethanol E85) Determination 2024* (the 2024 Ethanol E85 Determination) sets out the parameters, specifications and testing methods for ethanol E85 supplied in Australia.

The 2024 Ethanol E85 Determination adjusts the implementation date for the 10 parts per million (ppm) sulfur limit in E85 from 15 December 2024 to 15 December 2025. This change is made due to unforeseen delays to the completion of capital works projects that are needed to produce ultra-low sulfur petrol, and consequently E85, faced by the refineries.

Human rights implications

Although the primary purpose of this instrument is to change the implementation date of the specification for the sulfur parameter in E85 fuel, the broad objective of the 2024 Ethanol E85 Determination is to regulate the quality of fuel sold in Australia to reduce noxious vehicle emissions (among other benefits), which would in turn promote healthier and cleaner air quality. To this end, the 2024 Ethanol E85 Determination engages the right to health in 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 2024 Ethanol E85 Determination seeks to promote the right to health under Article 12 of the ICESCR by reducing the level of pollutants and emissions arising from the use of Ethanol E85 fuel that may cause environmental and health problems. The 2024 Determination seeks to achieve this by reducing the sulfur limit to 10 ppm from 15 December 2025. This would reduce air pollution from the combustion of ethanol E85 fuel.

Conclusion

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

The Hon. Chris Bowen MP
Minister for Climate Change and Energy