FS 2023 - 1 - Consultation Proposed Fuels Quality Standards



Launch Date: 1 November 2023

Closing Date for comments: 30 November 2023



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A. Introduction

- 1. The Utility Regulation and Competition Office ('OfReg' or the 'Office') is the independent multi-sector regulator with responsibility for the key utility providers in the Cayman Islands, including the fuel sector ('Fuel Sector'), in addition to the electricity, information and communications technology ('ICT'), water, and wastewater sectors.
- 2. Different decisions by the Office will affect persons and organisations throughout the country in different ways. It is therefore important that the Office makes regulatory decisions and proposes new regulations with the appropriate input from persons with sufficient interest or who are likely to be affected by the outcome of such decisions. Consultation is an essential aspect of regulatory accountability and transparency and provides the formal mechanism for these persons to express their views in this manner. The requirement for the Office to consult is mandated in its enabling legislation.
- 3. Under its enabling and foundational legislation, the Office is to establish a Fuel Standards Committee (FSC) to consider the quality standards of fuels imported and consumed in the Cayman Islands.
- 4. In order for the Office to effectively and efficiently carry out its duties regarding our regulatory remit, more specifically environmental safety, transparency, and product quality assurance; the Office sees it necessary to draft Fuel Quality Standards ("the Standards) for grades of gasoline, ethanol blended gasolines, propane, diesel, biodiesel blended diesel and biodiesel to guide the industry relating to fuel quality and how to treat fuels which do not meet the required standard.
- 5. The purpose of this consultation paper is for the Fuel Standards Committee's subcommittee members to study and make recommendations to the FSC on the Standards.

B. Legal Framework

- 6. The Office is guided by its statutory remit to ensure there are standards for fuels imported into the Cayman Islands.
- 7. The Utility Regulation and Competition Act (2021 Revision) (the 'URC Act') is the principal legislation governing the Office's mandate with respect to the Fuel Sector. Alongside the URC Act, the sector-specific legislation governing the Fuel Sector are the Dangerous Substances Act (2022 Revision) (the 'DS Act') and its supporting Regulations ('DSR'), and the Fuel Market Regulation Act (2017) (the 'FMR Act').
- 8. Regulation 31 of the DSR states:



31. The standards applicable to dangerous substances imported into the Islands shall be the standards set by the Fuel Standards Committee in accordance with the Law and every person to whom an import permit is granted shall ensure that the dangerous substance imported by him accords with such standards.

9. Section 9A (1) of the DS Act states:

"There is established a Fuel Standards Committee to carry out the duties specified in this Law and the Committee shall consist of –

- (a) the Chief Fuels Inspector who shall be chairperson;
- (b) the Director of the Department of Environmental Health or his nominee;
- (c) the Director of Environment or his nominee;
- (d) the Director of the Water Authority or his nominee; and
- (e) Repealed by section 8 of Law 52 of 2016.

10. Section 9A (3) of the DS Act states:

The Committee may appoint or empanel sub-committees, whether from among members of the Committee or from among persons outside of the Committee or both, to study and make recommendations to the Committee on any aspect of the regulation of fuel quality and related issues referred by the Committee.

11. Section 9A (4) of the DS Act states:

Members of a sub-committee who are not members of the Committee are required to have-

- (a) relevant scientific or technical knowledge in the area of fuel quality standards; or
- (b) qualifications in chemistry, biology or environmental studies,
- or both such knowledge and qualifications; and such members shall be paid allowances as the Board may determine.

12. Section 9B of the DS Act States:

The Committee shall carry out such duties as are specified in this Law and in regulations and such duties may include -

- (a) establishing the standards of certain types of fuel to be imported, distributed and used in the Islands:
- (b) publishing or causing to be published, in such medium as they determine, such standards and the testing methods to be used by importers and the Chief Fuels Inspector in the inspection of fuel in order to ensure compliance with the standards; and
- (c) providing quarterly, bi-annual, annual or such other periodic reports to the Minister on its operations.



13. Section 9(D) of the DS Act states

- (1) Where, after inspections are carried out in accordance with this Law, it is found by the Chief Fuels Inspector or by an inspector that an importer has been importing and distributing to operators fuel which does not accord with standards published under section 9B, the Chief Fuels Inspector shall require the importer to comply forthwith with any written direction not inconsistent with this Law which the Chief Fuels Inspector believes on reasonable grounds is necessary to ensure that the importation or distribution of such fuel is immediately discontinued.
- (2) An importer who fails to comply with a direction under subsection (1) commits an offence and is liable to an administrative penalty; and the relevant import permit of such person may be suspended, or revoked in accordance with the procedure set out in this Law.
- (3) An importer who, more than once in any period of one year, imports and distributes fuel which is found by the Chief Fuels Inspector not to be in accordance with the standards set by the Fuel Committee commits an offence and is liable to an administrative penalty; and the relevant import permit of such person may be suspended, or cancelled in accordance with the procedure prescribed by this Law.

C. Background

- 14. The draft Fuel Quality Standards are attached to this Consultation paper.
- 15. The fuels for consideration in the Standards are gasoline, ethanol blended gasoline, propane, diesel, biodiesel blended diesel and biodiesel.
- 16. Aviation turbine jet fuel (Avjet) and aviation gasoline (Avgas) shall continue to conform to the obligations relating to fuel standards for such fuels, to which they must conform to under International Air Transportation (IATA), Joint Inspection Group (JIG) 1 & 2 Standards and article 162 of the Air Navigation (overseas territories) Order 2013 (as amended).
- 17. All permitted fuel importers are to be guided by the Standards when consulting with their certified laboratory when ordering tests for their "certification of analysis" which must accompany all imports into the Islands.
- 18. The parameters, specifications and testing methods for each relevant fuel is detailed in section 6 of the Standards.
- 19. Requirements are prescribed for the processes for condemnation and requalification of fuels.
- 20. Fuels' classification relating to the different grades of gasolines and ethanolblended gasolines are given in relation to their anti-knock index (AKI) and the classifications requirements for the grades of diesel, biodiesel and propane are also provided. The labelling of all grades of products where they are being retailed is mandatory.



- 21. The required minimum documentation for fuel deliveries other than retail sale is also prescribed.
- 22. There is the provision for administrative fines under Schedule 7, where applicable, in the DSR.
- 23. The Office is seeking feedback on its proposed standards in order to ensure the right policy settings for fuel quality in the Cayman Islands.

D. Consultation Questions

24. Based on the above, the Office invites sub-committees members of the FSC to submit their comments, with supporting evidence, on the following questions:

Question 1:

Please review the Fuel Quality Standards thoroughly and provide any feedback, concerns, or questions you may have, as it relates to the various parameters, specifications and testing methods for each type and grade of fuel. Noting grades of gasoline are identified by the anti-knock index. Is your entity able to provide fuels which meet the specifications listed?

Question 2:

Does your entity believe that it can provide certified laboratory reports indicating test parameters and results for each batch of fuel imported as set out in the Standards to establish the fuel quality?

Question 3:

Is the AKI reproducibility limits and process for dispute resolution acceptable for the Standards?

Question 4:

What are your overall views on the condemnation and requalification of fuel? Are the processes and the responsibilities of the operators of retail, terminal or bulk plant facilities clear when a "stop-sale order" is issued? Do you think two attempts are adequate for requalifying the rejected fuel before disposal?

Question 5:

What are the suggested colours to identify the different fuels and grades for gasolines, diesel, biodiesel and ethanol blended gasolines at filling points on tanks, fill nozzle boots and labels on dispenser?

Fuel	Grade	Colour
Gasoline	Regular Unleaded (alone)	
	Midgrade, Plus	



	Premium, Supreme, High Test	
E10	E10 Regular Unleaded (alone)	
	Midgrade, Plus	
	Premium, Supreme, High Test	
Diesel	Diesel	
	Premium Diesel	
Biodiesel		

Question 6:

Do you agree to the labelling of dispensers to indicate type of product, grade of product and applicable automotive fuel rating?

Question 7:

Do you agree to the proposed requirements regarding invoices as detailed in the Standards?

E. Section 7 Statement

- 24. As noted above, section 7 of the URC Act states that, prior to issuing an administrative determination of public significance, the Office shall "issue the proposed determination in the form of a draft administrative determination."
- 25. The Office considers that, for the reasons set out in this document, the Appendix is the "draft administrative determination" for the purposes of section 7.

F. How to Respond to this Consultation

- 26. This consultation is conducted in accordance with the Consultation Procedure Guidelines determined by the Office which can be found on the Office's website¹.
- 27. The Office considers that because the Fuel Quality Standards are published as part of this consultation, this consultation will be conducted as a single-phase consultation over a period of thirty (30) days. Where, upon review of the

¹https://www.ofreg.ky/upimages/commonfiles/1507893545OF20171DeterminationandConsultationProcedureGuidelines.pdf



- responses to this consultation, it becomes clear that a second phase of consultation is required, a further notice will be issued accordingly.
- 28. All submissions on this consultation should be made in writing, and must be received by the Office by 5 p.m. on 30 November 2023 at the latest.
- 29. Submissions may be filed as follows:

By email to: fuels@ofreg.ky

or by post to: Utility Regulation and Competition Office P.O. Box 10189 Grand Cayman KY1-1002 Cayman Islands

or by courier to:
Utility Regulation and Competition Office 3rd Floor, Monaco Towers II
11 Dr. Roy's Drive, George Town
Grand Cayman
Cayman Islands

30. The Office expects to publish a determination regarding the Proposed Fuel Quality Standards by 30 January 2024.

Appendix



Proposed Fuel Quality Standards



DANGEROUS SUBSTANCES ACT (2017 REVISION)

FUEL QUALITY STANDARDS 20XX

Publication Date: [D] [M] 20[XX]

FUEL QUALITY STANDARDS 20XX

ARRANGEMENT OF STANDARDS

- 1. Citation
- 2. Commencement
- 3. Definitions
- 4. Application
- 5. Exempted Fuels
- 6. Standards and Specifications for Fuels
- 7. Re-producibility Limits
- 8. Condemnation and Requalification of Fuel
- 9. Classification and Labelling for Sale
- 10. Retail Storage Tanks and Dispenser Filters
- 11. Product Registration
- 12. General Matters Connected to Standards
- 13. Administrative Fines
- 14. Meeting of Fuel Standards Committee

ENDNOTES

In exercise of the powers conferred by sections 9A and 9B of the Dangerous Substances Act (2017 Revision), the Office, in conjunction with the Fuel Standards Committee, makes the following Standards -

1. Citation

These Standards may be cited as the Fuel Quality Standards 20XX.

2. Commencement

The Standards will come into effect on [D] [M] 20XX.

3. **Definitions**

"the Act" means the Dangerous Substances Act (2017 Revision).

- "Antiknock Index (AKI)" means the arithmetic average of the Research Octane Number (RON) and Motor Octane Number (MON): AKI = (RON+MON)/2. This value is called by a variety of names, in addition to antiknock index, including: octane rating, posted octane, (R+M)/2 octane;
- "ASTM (ASTM International)" means the international voluntary consensus standards organization formed for the development of standards on characteristics and performance of materials, products, systems, and services, and the promotion of related knowledge;
- "Automotive Fuel Rating" means the automotive fuel rating required under the amended Automotive Fuel Ratings, Certification and Posting Rule (or as amended, the Fuel Rating Rule), of the Codes of Federal Regulations16 CFR Part 306.
- "Aviation Gasoline (AvGas)" means a type of gasoline suitable for use as a fuel in an aviation spark-ignition internal combustion engine;
- "Aviation Turbine Fuel (AvJet)" means a refined middle distillate suitable for use as a fuel in an aviation gas turbine internal combustion engine;
- "Biodiesel" means a fuel comprised of at least 99 % by volume mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100 or B99;
- "Biodiesel Blend" means a fuel comprised of a blend of biodiesel with hydrocarbon diesel fuel;
- "Cetane Number" means a numerical measure of the ignition performance of a diesel fuel obtained by comparing it to reference fuels in a standardized engine test;
- "Chief Fuels Inspector" as defined in Dangerous Substance Act (2017 Revision);
- "Compressed Natural Gas (CNG)" means natural gas which has been compressed and dispensed into fuel storage containers and is suitable for use as an engine fuel;

- "DEH" means the Cayman Islands Department of Environmental Health;
- "DOE" means the Cayman Islands Department of Environment;
- "Denatured Fuel Ethanol" means an ethanol blend component for use in gasolineethanol blends and ethanol flex fuel. The ethanol is rendered unfit for beverage use by the addition of denaturants under formulas approved by the Fuel Standards Committee, by the latest version of ASTM D4806, "Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark Ignition Engine Fuel" which describes the acceptable denaturants for denatured fuel ethanol to be blended into spark ignition engine fuels;
- "Diesel Exhaust Fluid (DEF)" means a preparation of aqueous urea [(NH2)2CO], containing 32.5 % by mass of technically-pure urea in high-purity water with quality characteristics defined by the latest version of ISO 22241, "Diesel engines NOx reduction agent AUS 32.";
- "Diesel Fuel" means a refined hydrocarbon suitable for use as a fuel in a compression-ignition diesel internal combustion engine that may contain a combination of biodiesel, renewable diesel, and fuel additives;
- "Distillate" means any product obtained by condensing the vapours given off by boiling petroleum or its products;
- "EN" means the European Standards;
- "Engine Fuel" means any liquid or gaseous matter used for the generation of power in an internal combustion engine;
- "Engine Fuels Designed for Special Use" means Engine fuels designated by the Fuel Standards Committee as requiring registration. These fuels normally do not have ASTM or other national consensus standards applying to their quality or usability; common special fuels are racing fuels and those intended for agricultural and other off-road applications;
- "EPA" means the United States Environmental Protection Agency;
- "Ethanol" (Also known as "ethyl alcohol") means ethanol that is provided in gasolineethanol blends by blending denatured fuel ethanol;
- "Ethanol Flex Fuel" means blends of ethanol and hydrocarbons restricted for use as fuel in ground vehicles equipped with flexible-fuel spark-ignition engines;
- "Fuel" means the same as the definition in the Dangerous Substances Regulations (2022 Revision):
- "Fuel Additive" means A material added to a fuel in small amounts to impart or enhance desirable properties or to suppress undesirable properties;

- "Fuel Oil" means refined oil middle distillates, heavy distillates, or residues of refining, or blends of these, suitable for use as a fuel for heating or power generation;
- "Fuel Standards Committee (FSC)" means the Fuel Standards Committee established under section 9A of the Dangerous Substances Act (2017 Revision) chaired by the Chief Fuels Inspector;
- "Gallon" means an Imperial Gallon, which is the equivalent of 4.55 litres or 1.20 US Gallons;
- "Gasoline (Petrol)" means a volatile mixture of liquid hydrocarbons containing small amounts of additives suitable for use as a fuel in a spark-ignition internal combustion engine;
- "Gasoline-Oxygenate Blend" means a fuel consisting primarily of gasoline along with a substantial amount (more than 1 % by volume oxygenate, not to exceed the total oxygen content;
- "Internal Combustion Engine" means a device used to generate power by converting chemical energy bound in the fuel via spark-ignition or compression ignition combustion into mechanical work to power a vehicle or other device;
- "International Organization for Standardization (ISO)" means the independent international organization with a membership of national standards and bodies;
- "Lead Substitute Additive Importer" means a fuel importer who adds a lead substitute additive to their fuel intended for sale.
- "Lead Substitute" means an EPA-registered gasoline additive suitable, when added in small amounts to fuel, to reduce or prevent exhaust valve recession (or seat wear) in automotive spark-ignition internal combustion engines designed to operate on leaded fuel;
- "Lead Substitute Engine Fuel" means, for labelling purposes, a gasoline or gasoline-oxygenate blend that contains a "lead substitute";
- "Liquefied Natural Gas (LNG)" means natural gas that has been liquefied at 162 °C (– 260 °F) and stored in insulated cryogenic tanks for use as an engine fuel;
- "Liquefied Petroleum Gas (LPG)" means a mixture of normally gaseous hydrocarbons, predominantly propane, or butane, or both, that has been liquefied by compression or cooling, or both to facilitate storage, transport, and handling;
- "Low Temperature Operability" means A condition which allows the uninterrupted operation of a diesel engine through the continuous flow of fuel throughout its fuel delivery system at low temperatures. Fuels with adequate low temperature operability characteristics could avoid wax precipitation and clogging in fuel filters;

- "Lubricity" means a qualitative term describing the ability of a fluid to affect friction between, and wear to, surfaces in relative motion under load;
- "Motor Octane Number" means a numerical indication of a spark-ignition engine fuel's resistance to knock obtained by comparison with reference fuels in a standardized ASTM D2700, "Standard Test Method for Motor Octane Number of Spark-Ignition Engine Fuel;
- "MTBE" means Methyl tertiary-butyl ether, the chemical compound $(CH_3)_3COCH_3$ $[C_5H_{12}O]$;
- "Natural Gas" means a mixture of naturally occurring hydrocarbons, primarily methane, that exist in a gaseous phase in underground reservoirs and remains as a gas at atmospheric pressure.
- "Office" means the Utility Regulation and Competition Office established under section 4 of the Utility Regulation and Competition Act (as revised);
- "Oxygenate" means an oxygen-containing, ashless, organic compound, such as an alcohol or ether, which can be used as a fuel or fuel supplement;
- "Racing Gasoline" means a specialty fuel typically used in non-road racing vehicles that is generally of lower volatility, has a narrower boiling range and a higher octane rating than gasolines made for use in conventional passenger vehicles;
- "Research Octane Number (RON)" means a numerical indication of a spark-ignition engine fuel's resistance to knock obtained by comparison with reference fuels in a standardized in the latest version of ASTM D2699, "Standard Test Method for Research Octane Number of Spark-Ignition Engine Fuel."
- "SAE (SAE International)" means a technical organization for engineers, scientists, technicians, and others who cooperate closely in the engineering, design, manufacture, use, and maintainability of self-propelled vehicles;
- "Thermal Stability" means the ability of a fuel to resist the thermal stress which is experienced by the fuel when exposed to high temperatures in a fuel delivery system. Such stress can lead to the formation of insoluble gums or organic particulates. Insolubles (e.g., gums or organic particulates) can clog fuel filters and contribute to injector deposits;
- "Unleaded" means, when used in conjunction with "engine fuel" or "gasoline", any gasoline or gasoline-oxygenate blend to which no lead or phosphorus compounds have been intentionally added and which contains not more than 0.013 g of lead per litre (0.059 g lead per gallon) and not more than 0.0013 g of phosphorus per litre (0.0059 g phosphorus per gallon);
- "Water Authority Cayman" means Water Authority established under section 3 of the Water Authority Act (2022 Revision); and

"Wholesale Purchaser" means any person who is not an ultimate consumer of gasoline, ethanol-blend fuel, diesel fuel, biodiesel, biodiesel blends, kerosene, aviation turbine fuels, natural gas, compressed natural gas, or liquefied petroleum gas and who purchases or obtains the product from a supplier.

4. Application

- 4.1. The relevant markets in which fuels are imported and marketed to which the Standards apply are:
 - The entire fuel sector, including the various segments and relevant markets within the sector for which the applicable fuels outlined in Section 6 are sold or marketed. The Standards apply uniformly to all three Islands of the Cayman Islands.
 - ii. Aviation Turbine Jet Fuel (AvJet) and Aviation Gasoline (AvGas) shall continue to conform to the obligations relating to fuel standards for such fuels, to which they must confirm to under International Air Transport Association (IATA), Joint Inspection Group (JIG) 1 & 2 Standards and Article 162 of the Air Navigation (oversees territories) Order 2013 (as amended).
 - iii. For the avoidance of doubt, all other fuels supplied to the aviation sector other than AvJet and AvGas shall confirm to the Standards.
- 4.2. The Standards shall apply to the following fuels which are defined under Section 6 and marketed in the relevant markets set out under Section 9. Further, the Grades of applicable fuel shall be defined in the manner set out below:
 - i. Gasoline Regular Grade (including Ethanol Blends up to 10%)
 - ii. Gasoline Mid Grade (including Ethanol Blends with 5% 10%)
 - iii. Gasoline Super Grade (including Ethanol Blends up to 15%)
 - iv. Diesel Monograde Ultra Low Sulfur (including Biodiesel Blends up to 20%)
 - v. Liquefied Petroleum Gas Propane HD 5
 - vi. Racing Gasoline

5. Exempted Fuels

All other fuels not defined under Section 4 and not listed under Section 6 shall remain exempted. The quality of exempted fuel shall be subject to the import permit regime or as determined from time to time by the FSC.

6. Standards and Specifications for Fuels

The standards and specifications in this Section shall conform with the ASTM standards and testing methods or such other standards and testing methods as included in this Section, or with such equivalent standards and testing methods, as approved by the Chief Fuels Inspector or in consultation with Fuel Standards Committee.

The test methods in this Section shall be used to determine the compliance of the fuel with the standards and specifications.

The testing methods listed 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. The acceptance of the results is at the discretion of the Chief Fuels Inspector.

(1) Gasoline

- (a) In relation to any parameter in the following table, gasoline must comply with the specification for that parameter.
- (b) Compliance with the specification for a parameter is determined by using the testing method for that parameter listed in the table.
- (c) Specifications set out in the table apply to all grades of gasoline unless otherwise stated.
- (d) Any ethanol component of gasoline must comply with the fuel standard for ethanol in subsection 6.2.
- (e) Compounds containing phosphorous must not be added to gasoline.

Item Parameter	Specification	Testing Method
Aromatics	45% v/v maximum with a 42% v/v maximum pool average across all grades	
	45% v/v maximum with a 35% v/v maximum pool average across all grades	
Benzene	1.0% v/v maximum	ASTM D3606
Copper corrosion—3 h at 50°C	Class 1	ASTM D130
Diisopropyl ether (DIPE, CAS no. 108-20-3)	1% v/v maximum	ASTM D4815
Distillation—final boiling point	210°C maximum	ASTM D86
Ethanol	10% v/v maximum	ASTM D4815

Item	Parameter	Specification	Testing Method
	Ethyl tertiary butyl ether (ETBE, CAS no. 637-92-3)	1% v/v maximum	ASTM D4815
	Existent gum— washed	5 mg/100 mL maximum	ASTM D381
	Induction period—oxidation stability	360 minutes minimum	ASTM D525
	Lead	5 mg/L maximum	ASTM D3237
	Methyl tertiary butyl ether (MTBE, CAS no. 1634-04-4)	1% v/v maximum	ASTM D4815
	Motor octane number (MON)	91 RON grade: 81.0 minimum 95 RON grade: 85.0 minimum	ASTM D2700
	Olefins	18% v/v maximum	ASTM D1319
	Oxygen	Gasoline without ethanol: 2.7% m/m maximum Gasoline with ethanol: 3.9% m/m maximum	ASTM D4815
	Phosphorous	1.3 mg/L maximum	ASTM D3231
	Research octane number (RON)	91 RON grade: 91.0 minimum 95 RON grade: 95.0 minimum	ASTM D2699
	Sulfur	Between commencement and 30 June 2027: 91 RON grade: 150 mg/kg maximum 95 RON grade: 50 mg/kg maximum On and from 1 July 2027:	ASTM D5453
		All grades: 10 mg/kg maximum	

Item	Parameter	Specification	Testing Method
	Tertiary butyl alcohol (TBA, CAS no. 75-65-0)	0.5% v/v maximum	ASTM D4815

(2) Ethanol

- (a) In relation to any parameter in the following table, ethanol in gasoline must comply with the specification for that parameter.
- (b) Compliance with the specification for a parameter is determined by using the testing method for that parameter listed in the table.
- (c) The denaturant component of ethanol must be gasoline.

Item	Parameter	Specification	Testing Method
	Acidity—as acetic acid	0.006% m/m maximum	ASTM D7795
	Appearance	Clear and bright and visibly free of suspended or precipitated contaminants	ASTM D4806
	Copper	0.1 mg/kg maximum	EN 15837 (as modified in CEN/TS 15293)
	Denaturant	1-1.5% v/v denaturant	ASTM D5501
	Ethanol	95.6% v/v minimum	ASTM D5501
	Inorganic chloride	10 mg/kg maximum	ASTM D7328
	Methanol	0.5% v/v maximum	ASTM D5501
	рНе	6.5–9.0	ASTM D6423
	Solvent washed gum	5.0 mg/100 mL maximum	ASTM D381
	Sulfate	4.0 mg/kg maximum	ASTM D7328
	Sulfur	10 mg/kg maximum	ASTM D5453
	Water	1.0% m/m maximum	ASTM E1064

(3) Diesel Fuel

- (a) In relation to any parameter in the following table, diesel must comply with the specification for that parameter.
- (b) Compliance with the specification for a parameter is determined by using the testing method for that parameter listed in the table.
- (c) Specifications set out in the table apply to all types of diesels unless otherwise stated.
- (d) Any biodiesel component of diesel must meet the requirements of the fuel quality standard for biodiesel set out in the Standards for Biodiesel

Item	Parameter	Specification	Testing Method
	Ash	0.01% m/m maximum	ASTM D482
	Biodiesel	5.0% v/v maximum	EN 14078
	Carbon residue—10% distillation residue	0.2% m/m maximum	ASTM D4530
	Cetane number	46 minimum	ASTM D613
	Cetane index	46 minimum	ASTM D976
	Conductivity at ambient temperature	Diesel held by a terminal or refinery for sale or distribution: 50 pS/m minimum at ambient temperature	ASTM D2624
	Copper corrosion—3 h at 50°C	Class 1	ASTM D130
	Density at 15°C	820–850 kg/m ³	ASTM D1298
	Derived cetane number	Diesel containing biodiesel: 51 minimum	ASTM D6890
	Distillation—T95	360°C maximum	ASTM D86
	Flash point	61.5°C minimum	ASTM D93
	Filter blocking tendency	2.0 maximum	IP 387 & ASTM 2068
	Kinematic viscosity	2.0-4.5 mm ² /s at 40°C	ASTM D445
	Lubricity	460 µm maximum	ASTM D6079
	Oxidation stability	2.5 mg/100 mL maximum	ASTM D2274
	Polycyclic aromatic hydrocarbons (PAH)	11% m/m maximum	IP 391

Item	Parameter	Specification	Testing Method
•	Sulfur	10 mg/kg maximum	ASTM D5453
	Water and sediment	0.05% v/v maximum	ASTM D2709
	Water	Diesel containing biodiesel: 200 mg/kg maximum	ASTM D6304
		200 mg/kg maximam	

(4) Biodiesel

- (a) In relation to any parameter in the following table, biodiesel must comply with the specification for that parameter.
- (b) Compliance with the specification for a parameter is determined by using the testing method for that parameter listed in the table.

Item	Parameter	Specification	Testing Method
	Acid value	0.50 mg KOH/g	ASTM D664
	Carbon residue—10% distillation residue	maximum 0.30% m/m maximum	ASTM D4530
	Cold soak filterability	360 seconds maximum	ASTM D7501
	Copper corrosion—3 h at 50°C	Class 1 maximum	ASTM D130
	Density at 15°C	860–900 kg/m ³	ASTM D1298
	Derived cetane number	51.0 minimum	ASTM D6890
	Distillation—T90	360°C maximum	ASTM D1160
	Ester content	96.5% m/m minimum	EN 14103
*	Flash point	120.0°C minimum	ASTM D93
	Glycerides—monoglycerides	0.7% m/m maximum	ASTM D6584
	Glycerides—diglycerides	0.2% m/m maximum	ASTM D6584
	Glycerides—triglycerides	0.2% m/m maximum	ASTM D6584
	Glycerol—free	0.020% m/m maximum	ASTM D6584
	Glycerol—total	0.250% m/m maximum	ASTM D6584
	Kinematic viscosity at 40°C	3.5–5.0 mm ² /s	ASTM D445
	Metals—Group I—Na, K	5 mg/kg maximum	EN 14538
	Metals—Group II—Ca, Mg	5 mg/kg maximum	EN 14538

Item	Parameter	Specification	Testing Method
	Methanol	0.20% m/m maximum	EN 14110
	Oxidation stability at 110°C	8.0 hours minimum	EN 14112
	Phosphorus	4.0 mg/kg maximum	EN 14107
	Sulfated ash	0.020% m/m maximum	ASTM D874
	Sulfur	10 mg/kg maximum	ASTM D5453
	Total contamination	24 mg/kg maximum	EN 12662
	Water	500 mg/kg maximum	ASTM D6304

(5) Propane/Autogas

- (a) In relation to any parameter in the following table, propane must comply with the specification for that parameter.
 - (b) Compliance with the specification for a parameter is determined by using the testing method for that parameter listed in the table.

Item	Parameter	Specification	Testing Method
	Copper corrosion	Class 1	EN ISO 6251
	Dienes	0.3% molar maximum	ISO 7941
	Hydrogen sulfide	Negative	EN ISO 8819
	Motor octane number (MON)	90.5 minimum	Composition by ISO 7941
			Calculation by EN 589 Annex B
	Odour	Detectable in air at 20% lower flammability limit	EN 589 Annex A
	Residue on evaporation	60 mg/kg maximum	JLPGA-S-03 by mass method at 105°C
	Sulfur—after stenching	50 mg/kg maximum	ASTM D6667
	0 1	800–1,530 kPa	ISO 8973
	0 0 .	2.0% molar maximum	ISO 7941
	Water	Pass	EN 15469

- (6) Gasoline and Gasoline-Oxygenate Blends
 - (a) Gasoline and Gasoline-Oxygenate Blends (as defined in this document) shall meet the latest version of ASTM D4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel" except for the permissible offsets for ethanol blends as provided in Section 4 (2).
 - (b) Gasoline-Ethanol Blends.
 - The maximum concentration of oxygenates contained in gasolineoxygenate blends shall not exceed those permitted by the FSC in accordance with EPA rules under Section 211 of the US Clean Air Act and applicable waivers, as adopted by FSC.
 - II. Gasoline-Ethanol Blends. When gasoline is blended with denatured fuel ethanol, the denatured fuel ethanol shall meet the latest version of ASTM D4806, "Standard Specification for Denatured Fuel Ethanol for Blending with Gasolines for Use as Automotive Spark-Ignition Engine Fuel," and the blend shall meet the latest version of ASTM D4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel," with the following permissible exceptions:
 - III. The maximum vapor pressure shall not exceed the latest version of ASTM D4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel," limits by more than 1.0 psi for blends as allowed by the FSC.
 - IV. Minimum Antiknock Index (AKI). The AKI shall not be less than the AKI posted on the product dispenser or as certified on the invoice, bill of lading, shipping paper, or other documentation;
 - V. Minimum Motor Octane Number. The minimum motor octane number shall not be less than 82 for gasoline with an AKI of 87 or greater;
 - VI. Lead Substitute Gasoline. Where lead substitutes are approved by the FSC, Gasoline and gasoline-oxygenate blends sold as "lead substitute" gasoline shall contain a lead substitute which provides protection against exhaust valve seat recession equivalent to at least 0.026 g lead per litre (0.118 g lead per Gallon).
- (7) Documentation of Exhaust Valve Seat Protection. Upon the request of the FSC, the lead substitute additive importer shall provide documentation to the FSC that demonstrates that the treatment level recommended by the additive manufacturer provides protection against exhaust valve seat recession equivalent to or better than 0.026 g lead per litre (0.118 g lead per Gallon) The FSC may review the documentation and approve the lead substitute additive before such additive is blended into gasoline.

- (8) Blending. Lead substitute and unleaded gasoline-oxygenate blends shall be blended according to the EPA "substantially similar" rule, or an EPA waiver adopted by the FSC. The term "substantially similar" is used in the Clean Air Act (USA) to distinguish which fuels and fuel additives are prohibited by EPA.
- (9) Diesel Fuel. Shall meet the following requirements, based on the biodiesel concentration of the fuel:
 - (a) Diesel fuel that contains less than or equal to 5 % by volume biodiesel shall meet the latest version of ASTM D975, "Standard Specifications for Diesel Fuels" and shall be sold as diesel fuel.
 - (b) Diesel fuel that contains greater than or equal to 6 % by volume biodiesel and that contains less than or equal to 20 % by volume shall meet the latest version of ASTM D7467, "Standard Specifications for Diesel Fuel Oil, Biodiesel Blend (B6 to B20)".
 - (c) Only fuel additives registered with the Fuel Standards Committee may be used to additive diesel fuel, and the final product shall meet the latest version of ASTM D975 and/or ASTM D7467.
- (10) Premium Diesel Fuel. All diesel fuels identified on retail dispensers as premium, super, supreme, or premier must conform to the following minimum requirements:
 - (a) Cetane Number. A minimum cetane number of 47.0 as determined by the latest version of ASTM D613, "Standard Test Method for Cetane Number of Diesel Fuel Oil."
 - **NOTE:** ASTM D613, "Standard Test Method for Cetane Number of Diesel Fuel Oil" is the referee method; however, the following methods can be used to determine cetane number: the latest version of ASTM D6890, "Standard Test Method for Determination of Ignition Delay and Derived Cetane Number" (DCN) of Diesel Fuel Oils by Combustion in a Constant Volume Chamber"; and ASTM D7668, "Standard Test Method for Determination of Derived Cetane Number (DCN) of Diesel Fuel Oils—Ignition Delay and Combustion Delay Using a Constant Volume Combustion Chamber Method."
 - (b) Low Temperature Operability. A cold flow performance measurement which meets the latest version of ASTM D975, "Standard Specification for Diesel Fuel," tenth percentile minimum ambient air temperature charts and maps by the latest version of either ASTM D2500, "Standard Test Method for Cloud Point of Petroleum Products and Liquid Fuels" or ASTM D4539, "Standard Test Method for Filterability of Diesel Fuels by Low Temperature Flow Test, (LTFT)." The latest version of ASTM D6371, "Standard Test Method for Cold Filter Plugging Point of Diesel and Heating Fuels" may be used when the test results are a maximum of 6 °C below the Cloud Point. Low temperature operability is only applicable October 1 to March 31 of each year.

- (c) Lubricity. A maximum wear scar diameter of 460 micrometres (μm) as determined by the latest version ASTM D6079, "Standard Test Method for Evaluating Lubricity of Diesel Fuels by the High-Frequency Reciprocating Rig (HFRR)."
 - *NOTE:* The latest version of ASTM D6079, "Standard Test Method for Evaluating Lubricity of Diesel Fuels by the High-Frequency Reciprocating Rig (HFRR)" is the referee method; however, the latest version of ASTM D7688, "Standard Test Method for Evaluating Lubricity of Diesel Fuels by the High-Frequency Reciprocating Rig (HFRR) by Visual Observation" can be used.
- (d) Corrosion. A minimum rating of B+ as determined by the latest version of National Association of Corrosion Engineers ('NACE') TM0172, "Determining Corrosive Properties of Cargoes in Petroleum Product Pipelines."
 - *NOTE:* The latest version of National Association of Corrosion Engineers NACE TM0172 "Determining Corrosive Properties of Cargoes in Petroleum Product Pipelines" is the referee method. The latest version of ASTM D7548 "Standard Test Method for Determination of Accelerated Iron Corrosion in Petroleum Products" can be used.
- (e) Filter Blocking Tendency (FBT). A maximum of 2.2 by the latest version of ASTM D2068, "Standard Test Method for Determining Filter Blocking Tendency", following procedure B.
- (f) Injector Deposit Control. Maximum power loss in keep-clean mode of 2 % by the latest version of Coordinating European Council, CEC F-98-08, "Direct Injection, Common Rail Diesel Engine Nozzle Coking Test."
- I.Thermal Stability. The latest version of ASTM D6468, "Standard Test Method for High Temperature Stability of Middle Distillate Fuels" (180 min, 150 °C).
- (11) Use of Other Diesel Terminology. For any terms other than premium, super, supreme, or premier included in the diesel fuel product or grade name and/or advertisements and claims displayed on dispensers, pump toppers, pole signs and bollard signs which imply improved performance, the product must have a clearly-defined fuel property with a substantiated functional benefit. Such property must be measurable utilizing industry accepted test methodologies developed by recognized standards organizations such as ASTM, SAE, and Coordinating European Council (CEC) to allow verification of the improved performance.
- (12) Liquefied Petroleum (LP) Gases. Shall meet the latest version ASTM D1835, "Standard Specification for Liquefied Petroleum (LP) Gases."
 - **NOTE:** Also reference Gas Processors Association 2140, Liquefied Petroleum Gas Specification and Test Methods.
- (13) Racing Gasoline. Shall meet the following requirements:

- (a) the Minimum Antiknock Index (AKI) shall not be less than the AKI posted on the product dispenser or as certified on the invoice, bill of lading, shipping paper, or other documentation.
- (b) the product specification limits shall be those as declared by the manufacturer's product specifications. Upon the request of the Chief Fuels Inspector, each importer of racing gasoline shall provide a copy of the manufacturer's product specifications.
- (14) Biodiesel Blendstock. Biodiesel intended for blending with diesel fuel shall meet the latest version of ASTM D6751, "Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels." Any blend stock less than 99 % by volume (no more than 1% by volume diesel oil) shall not be used as a commercial blend stock for biodiesel blends without the permission of the Chief Fuels Inspector.
- (15) Diesel Exhaust Fluid (DEF). Shall meet the latest version of the ISO 22241, "Diesel engines NOx reduction agent AUS 32."

7. Reproducibility Limits

- (1) AKI Limits. When determining the antiknock index (AKI) acceptance or rejection of a gasoline sample, the AKI reproducibility limits as outlined in the latest version of ASTM D4814, "Standard Specification for Automotive Spark-Ignition Engine Fuel."
- (2) Reproducibility. The reproducibility limits of the standard test method used for each test performed shall be acknowledged for enforcement purposes, except as indicated for Premium Diesel Fuel and AKI Limits.
- (3) Dispute Resolution. In the event of a dispute over a reported test value, the guidelines presented in the latest version of ASTM D3244, "Standard Practice for Utilization of Test Data to Determine Conformance with Specifications," shall be used to determine the acceptance or rejection of the sample.
- (4) Enforcement Action. The Chief Fuels Inspector may initiate enforcement action in the event that, based upon a statistically significant number of samples, the average test result for products sampled from the same source location is greater than the legal maximum or less than the legal minimum limits (specification value), posted values, certified values, or registered values.

8. Condemnation and Requalification of Fuel

- (1) Where a fuel is deemed to not have met the minimum specifications standard of the relevant grade of fuel under Section 6, Section 7(3) shall apply.
- (2) Stop-Sale Order at Retail. A stop-sale order may be issued to retail establishment dealers for fuels failing to meet specifications or when a condition exists that causes product degradation. A release from a stop-sale order will be awarded only

after final disposition has been agreed upon by the Chief Fuels Inspector. Confirmation of disposition shall be submitted in writing on form(s) provided by the Chief Fuels Inspector and contain an explanation for the fuel's failure to meet specifications. Upon discovery of fuels failing to meet specifications, meter readings and physical inventory shall be taken and reported in confirmation for disposition.

- (3) Stop-Sale Order at Terminal or Bulk Plant Facility. A stop-sale order may be issued when products imported or held in storage or maintained at terminals or bulk plant facilities fail to meet specifications or when a condition exists that may cause product degradation. The terminal or bulk storage plant shall immediately notify all customers that received those product(s) and make any arrangements necessary to replace or adjust to specifications those product(s). A release from a stop-sale order will be awarded only after final disposition has been agreed upon by the Chief Fuels Inspector. Confirmation of disposition of products shall be made available in writing to the Chief Fuels Inspector.
- (4) Where an applicable fuel is determined not to meet the standards as set out in Section 6, the Operator shall set out in writing, the process and method to requalify and recertify or dispose of the fuel so that it conforms to the Standards.
- (5) In consideration of an application by an Operator to be granted permission to requalify fuel which is deemed to have not met the minimum Fuel Standards, the Chief Fuels Inspector in consultation with FSC shall set out in writing, the minimum information it requires to grant its approval.
- (6) Where a fuel cannot be requalified after two attempts under this provision, the fuel shall be rejected and downgraded for disposal, alternative use where practical, or reexport. Downgraded or rejected fuel shall be used or disposed under the strict control of the Operator as per a plan approved by Chief Fuels Inspector. The Operator shall produce a manifest of its use or disposal to the Chief Fuels Inspector within seven (7) days after its use.

9. Classification and Labelling for Sale

(1) Documentation. – When products subject to these Standards are sold, an invoice, delivery note or other documentation must accompany each delivery other than a retail sale. As a minimum, this document must identify the quantity, the name of the product, the particular grade of the product, the applicable automotive fuel rating, and oxygenate type and content (if applicable), the name and address of the seller and buyer, and the date and time of the sale. Documentation must be retained at the retail establishment for a period not less than one year.

- (2) Retail Dispenser Labelling. All retail dispensing devices must identify conspicuously the type of product, the particular grade of the product, and the applicable automotive fuel rating.
- (3) Grade Name. The sale of any product under any grade name that indicates to the purchaser that it is of a certain automotive fuel rating or ASTM grade shall not be permitted unless the automotive fuel rating or grade indicated in the grade name is consistent with the value and meets the requirements of Section 6.
- (4) Nozzle Requirements for Automotive Gasoline, Gasoline-Oxygenate Blends, and Diesel Fuel Dispensers. Each retail dispensing device from which fuel products are sold shall be equipped with a nozzle spout having a diameter that conforms with the specification set out below:
 - o Diesel 15/16 inches
 - Gasoline 13/16 inches (all grades including blends).
- (5) Automotive Gasoline and Automotive Gasoline-Oxygenate Blends (Including Racing Gasoline).
 - (a) Posting of Antiknock Index Required. Automotive gasoline and automotive gasoline-oxygenate blends shall post the minimum antiknock index in accordance with applicable regulations.
 - (b) Use of Lead Substitute Must be Disclosed. Each dispensing device from which gasoline or gasoline-oxygenate blends containing a lead substitute is dispensed shall display the following legend: "Contains Lead Substitute." The lettering of this legend shall not be less than 12.7 mm ($^{1}/_{2}$ in) in height and the colour of the lettering shall be in definite contrast to the background colour to which it is applied.
 - (c) Prohibition of Terms. It is prohibited to use specific terms to describe a grade of gasoline or gasoline-oxygenate blend unless it meets the minimum antiknock index requirement shown in Table 1. Minimum Antiknock Index Requirements.

Table 1. Minimum Antiknock Index Requirements

Term	ASTM D4814
Premium, Supreme, High Test	91
Midgrade, Plus	89
Regular, Unleaded (alone)	87
Blendstock	82

(d) Method of Retail Sale. – Type of Oxygenate must be disclosed. All automotive gasoline or automotive gasoline-oxygenate blends or racing gasoline kept, offered, or exposed for sale, or sold at retail containing more than one volume percent

oxygenate shall be identified as "with" or "containing" (or similar wording) the predominant oxygenate in the engine fuel. For example, the label may read "contains ethanol" or "with methyl *tertiary*-butyl ether (MTBE)." The oxygenate contributing the largest mass percent oxygen to the blend shall be considered the predominant oxygenate. Where mixtures of only ethers are present, the retailer may post the predominant oxygenate followed by the phrase "or other ethers" or alternatively post the phrase "contains MTBE or other ethers." This information shall be posted on the upper 50 % of the dispenser front panel in a position clear and conspicuous from the driver's position in a type at least 12.7 mm (1 / 2 in) in height, 1.5 mm (1 / 1 6 in) stroke (width of type).

- (6) Documentation for Dispenser Labelling Purposes. For automotive gasoline, automotive gasoline-oxygenate blends or racing gasoline, the retailer shall be provided, at the time of delivery of the fuel, product transfer documents such as an invoice, bill of lading, shipping paper, or other documentation:
 - a) Information that complies with documentation requirement set out by the Chief Fuels Inspector when the fuel contains ethanol.
 - b) For fuels that do not contain ethanol, information that complies with documentation requirement set out by the Chief Fuels Inspector which shall clearly state the predominant oxygenate or combination of oxygenates present in concentrations sufficient to yield an oxygenate content of at least 1.0 % by volume in the fuel. Where mixtures of only ethers are present, the fuel supplier may identify either the predominant oxygenate in the fuel (i.e., the oxygenate contributing the largest mass percent oxygen) or alternatively, use the phrase "contains MTBE or other ethers."
 - c) Gasoline containing more than 0.3 % by volume methanol shall be identified as "with" or "containing" methanol.
 - d) EPA Labelling Requirements. Retailers and wholesale purchaser of gasoline shall comply with the EPA pump labelling requirements for gasoline containing greater than 10 volume percent (v%) up to 15 volume percent (v%) ethanol (E15) under 40 CFR 80.1501.

(7) Diesel Fuel.

- (a) Labelling of Grade Required. Diesel Fuel other than No 2-D shall be identified by grade.
- (b) Automotive Fuel Rating. Diesel fuel containing 6 % to 20 % by volume biodiesel shall be labelled with its automotive fuel rating specifying the maximum blend is no greater than 20% biodiesel. The FSC shall publish standards from time to time specifying the requirement for labelling of biodiesel blends.

- (c) Delivery Documentation for Premium Diesel. Before or at the time of delivery of premium diesel fuel, the retailer or the wholesale purchaser shall be provided on an invoice, bill of lading, shipping paper, or other documentation a declaration of all performance properties that qualifies the fuel as premium diesel fuel as required in subsection 6 (10) Premium Diesel Fuel.
- (8) Liquefied Petroleum Gas (LPG).
 - (a) Liquefied petroleum gases shall be identified by grades Commercial Propane, Commercial Butane, Commercial Propane/Butane Mixtures or Special-Duty Propane (HD5).
 - (b) The relevant labelling requirements as specified in NFPA 58 apply.
- (9) Biodiesel and Biodiesel Blends.

Biodiesel Blendstock shall be identified by the term "biodiesel" with the designation "B100" or "B99."

- (a) Labelling of Retail Dispensers.
 - Labelling of Grade Required. Biodiesel shall be identified by the grade B20 Diesel
 - II. Automotive Fuel Rating. Biodiesel and biodiesel blends shall be labelled with its automotive fuel rating on or near the nozzle from which the grade of fuel is dispensed.
 - III. Biodiesel Blends. When biodiesel blends greater than 5 % by volume are offered by sale, each side of the dispenser where fuel can be delivered shall have a label conspicuously placed that states "Consult Vehicle Manufacturer Fuel Recommendations."
 - IV. The lettering of this legend shall not be less than 6 mm (¹/₄ in) in height by 0.8 mm (¹/₃₂ in) stroke; block style letters and the colour shall be in definite contrast to the background colour to which it is applied.
 - V. Documentation for Dispenser Labelling Purposes. The retailer shall be provided, at the time of delivery of the fuel, a declaration of the volume percent biodiesel on an invoice, bill of lading, shipping paper, or other document. This documentation is for dispenser labelling purposes only; it is the responsibility of any potential blender to determine the amount of biodiesel in the diesel fuel prior to blending.
 - VI. Exemption. Biodiesel blends that contain less than or equal to 5 % biodiesel by volume are exempted from the requirements of subsection (12a, iii) above when it is sold as "diesel fuel".

- (10) Diesel Exhaust Fluid (DEF).
 - (a) DEF shall be labelled.
 - (b) Retail Dispenser Labelling. A label shall be clearly and conspicuously placed on the front panel of the DEF dispenser stating, "for operation of selective catalytic reduction (SCR) converters in motor vehicles with diesel engines."
 - (c) Documentation for Retailers of Bulk Product. A DEF supplier shall provide, at the time of delivery of the bulk shipment of DEF, identification of the fluid's origin including the name of the fluid manufacturer, the brand name, trade name, or trademark, and a statement identifying the fluid as DEF conforming to specifications given in the latest version of ISO 22241, "Diesel engines – NOx reduction agent AUS 32." This information shall be provided by the supplier on an invoice, bill of lading, shipping paper, or another document.
 - (d) Labelling Packaged Product. Any DEF retail package shall bear a label that includes the name of the fluid manufacturer, the brand name, trade name, or trademark, a statement identifying the fluid as DEF conforming to specifications given in the latest version of ISO 22241, "Diesel engines NOx reduction agent AUX 32." And the statement, "It is recommended to store DEF between 5 °C to 30 °C (23 °F to 86 °F)."

10. Retail Storage Tanks and Dispenser Filters

- (1) No water phase greater than 6 mm (½ in) as determined by an appropriate detection paste or other acceptable means, is allowed to accumulate in any tank utilized in the storage of gasoline-alcohol blend, biodiesel, biodiesel blends and ethanol flex fuel.
- (2) Water shall not exceed 25 mm (1 in) in depth when measured with water indicating paste or other acceptable means in any tank utilized in the storage of diesel, gasoline, gasoline-ether blends, and kerosene sold at retail.
- (3) Dispenser Filters.
 - (a) Engine Fuel Dispensers.
 - i. All gasoline, gasoline-alcohol blends, dispensers shall have a 10 micron or smaller nominal pore-sized filter.
 - ii. All biodiesel, biodiesel blends, and diesel dispensers shall have a 30 micron or smaller nominal pore-sized filter.
- (4) Product Storage Identification.
 - (a) The fill connection for any fuel product storage tank or vessel supplying enginefuel devices shall be permanently, plainly, and visibly marked as to the product contained.

(b) When the fill connection device is marked by means of a colour code, the colour code shall be conspicuously displayed at the place of business and the colour codes as specified and agreed by the Office and Fuels Suppliers using the approved Colour-Symbol System to Identify Equipment and Transfer Points for Petroleum Fuels and Related Products at Dispensing and Storage Facilities and Distribution Terminals shall be used.

(5) Volume of Product Information.

Each retail location shall maintain on file a calibration chart or other means of determining the volume of each regulated product in each storage tank and the total capacity of such storage tank(s). If so, requested this information shall be supplied immediately to the Chief Fuels Inspector.

11. Product Registration

All engine fuels designed for special use that do not meet ASTM specifications or standards addressed in Section 6 Standard Specifications shall be registered with the Chief Fuels Inspector by submitting an import permit form in accordance with Regulations 30 & 31 of the Dangerous Substances Regulation (2022 Revision). The application shall be submitted to the Chief Fuels Inspector 60 days prior to the time the applicant wishes to engage in sales. The application form shall be accompanied with the following information:

- (a) Product brand name and product description; and
- (b) A product specification sheet shall be attached.

12. General Matters Connected to Standards

General matters related to the Standards shall be submitted to the Fuel Standard Committee in writing. The Committee shall meet to consider the submission and determine whether it requires further review and action and shall respond to such matters in writing.

13. Administrative Fines

Where the Office is satisfied that there are reasonable grounds for believing that an Operator may have failed to comply with or contravened one or more of the Standards, the Office may impose an administrative fine under Schedule 7 of the Dangerous Substances Regulations (2022 Revision) as revised where applicable.

14. Meeting of Fuel Standards Committee

The FSC shall meet at least twice annually to consider matters relating to these Standards.

ENDNOTES

[To record publications and amendments.]

Made by the Fuel Standards Committee, Utility Regulation and Competition Office the [X] day of [M], 20[2X]

[X]

Chair

