

Unified Interpretation on Biofuels for MARPOL Annex VI

Amended Guidance

Guidance for Marine Pollution Prevention Systems

Reason for Amendment

The IMO Marine Environment Protection Committee (MEPC) originally approved MEPC.1/Circ.795 as the Unified Interpretation (UI) for various requirements of MARPOL Annex VI in 2012 and has subsequently amended the circular in the years since then as needed. NK has already incorporated this Unified Interpretation into its Rules.

Regulation 18.3.2.2 of MARPOL Annex VI stipulates that NO_x emission limits specified in Regulation 13 of Annex VI are not to be exceeded when fuels derived by methods other than petroleum refining oil are used.

Since the use of biofuels as a way of reducing CO₂ emissions is only expected to increase in the future, IACS developed a draft UI to clarify how NO_x emission limits are to be applied when biofuels are used by themselves or when biofuels are mixed with fossil fuels. After deliberations at the IMO, this draft UI was approved as MEPC.1/Circ.795/Rev.6 at the 78th Session of the IMO MEPC (MEPC78) held in June 2022.

Accordingly, relevant requirements are amended in accordance with MEPC.1/Circ.795/Rev.6.

Outline of Amendment

Clarify compliance with NO_x emission limits in consideration of the blending ratios of biofuels and whether NO_x technical files have been changed.

“Guidance for marine pollution prevention systems” has been partly amended as follows:

Part 8 EQUIPMENT FOR THE PREVENTION OF AIR POLLUTION FROM SHIPS

Chapter 1 GENERAL

1.2 General Requirement

Paragraph 1.2.3 has been amended as follows.

1.2.3 Delivery of Fuel Oil and Bunker Delivery Notes (*Regulation 18 of Annex VI*)

1 Biofuel blends are to be dealt with in accordance with the following.

- (1) The following apply according to the biofuel blending ratio.
 - (a) A fuel oil which is a blend of not more than 30 % by volume of biofuel is to satisfy 1.2.3-1(1), Part 8 of the Rules.
 - (b) A fuel oil which is a blend of more than 30 % by volume of biofuel is to satisfy 1.2.3-1(2), Part 8 of the Rules.
- (2) The biofuels subject to above (1) includes but are not limited to the following (a) to (g), which are fuel oils derived from biomass.
 - (a) Cooking Oils
 - (b) Fatty-Acid-Methyl-Esters (FAME)
 - (c) Fatty-Acid-Ethyl-Esters (FAEE)
 - (d) Straight Vegetable Oils (SVO)
 - (e) Hydrotreated Vegetable Oils (HVO)
 - (f) Glycerol or Other Biomass to Liquid (BTL)

(3) Bunker delivery notes are to include details as to whether or to what extent biofuels are blended.

2 Diesel engines certified in accordance with 2.1, Part 8 of the Rules that can operate on biofuels or biofuel blends without changes to their NO_x critical components, settings and operating values other than values specified in an engine’s approved Technical File are permitted to use such fuel oils without having to undertake the assessments required by 1.2.3-1(2)(b), Part 8 of the Rules. Furthermore, parent engine emissions tests undertaken for DM or RM grade fuels satisfying ISO 8217:2005, as required by paragraph 5.3.2 of the *NO_x Technical Code*, are valid for all DM or RM grade fuels used during operation, and engines may be specifically designed for or be capable of operating on such DM or RM grade fuels, including those meeting the successor standard to ISO 8217:2005.

3 The fuels specified in the following (1) may be regarded as complying with 1.2.3-1(2)(b), Part 8 of the Rules and IAPP Certificates may continue to be issued upon verification that the NO_x emissions do not exceed specified limits by the method described in the following (2).

- (1) Fuels falling under the any of the following.
 - (a) Fuel oils derived from methods other than petroleum refining.
 - (b) Fuel oils which are blends of more than 30 % by volume of biofuel and do not fall under - 2 above.
 - (c) Fuels for which NO_x emission limits have specified in accordance with 1.2.3-1(2)(b), Part 8 of the Rules but for which such limits have not been certified through testing on test beds for either the engine group or engine family intended to use the fuel.

(2) When the fuels indicated in (1) above are burned in engines by one of the following methods, it is to be verified that the NO_x emissions do not exceed limits applicable to said engine. However, when undertaking measurements on board, an allowance of 10 % of the applicable limit may be accepted.

(a) Onboard simplified measurement method (6.3 of the *NO_x Technical Code*)

(b) Onboard direct measurement and monitoring method (6.4 of the *NO_x Technical Code*)

(c) Measurement procedures for emission verification on a test bed.

~~14~~ 14 The “ship deemed necessary by the Society” referred to **1.2.3-2, Part 8 of the Rules** means all ships of 400 *gross tonnage* or above and, at the Administration’s discretion, ships of less than 400 *gross tonnage*.

~~25~~ 25 The wording “obtained in a way deemed appropriate by the Society” and “retained on board the ship in a way deemed appropriate by the Society” in **1.2.3-4, Part 8 of the Rules** mean that to be obtained in accordance with *IMO* resolution *MEPC.182(59)* and to be retained on board the ship in accordance with the resolution accompanied with the label of the sample required in the resolution respectively.