Unified Interpretations for MARPOL ANNEX VI

Amended Guidance

Guidance for Marine Pollution Prevention Systems

Reason for Amendment

MEPC.1/Circ.795/Rev.1 was adopted by the IMO in April 2014 to serve as the unified interpretation of regulations related to the prevention of air pollution from ships specified in MARPOL Annex VI. The circular has been reviewed and revised by the IMO a number of times over the years since then and its contents (as amended) have already been incorporated into the Guidance for Marine Pollution Prevention Systems.

In December 2022, the circular was reviewed yet again by the IMO at the 79th session of its Marine Environment Protection Committee (MEPC79). The MEPC approved a revised version of the circular as MEPC.1/Circ.795/Rev.7 to not only amend already existing interpretations but to also add some new interpretations.

- (1) Amendment of unified interpretations related to Regulation 18.3, MARPOL Annex VI Unified interpretations related to the application of NOx emission standards previously only applied to the use of mixtures of biofuels and conventional fossil fuel oils. In recent years, the use of synthetic fuels as a way of reducing GHG emissions has become increasingly adopted and the use of such fuels is only expected to increase in the future. The MEPC, therefore, decided to add synthetic fuels to the relevant interpretations.
- (2) Amendment of unified interpretations related to Regulation 27 and Appendix IX, MARPOL Annex VI Although unified interpretations related to data collection and reporting with respect to Fuel Oil Consumption Reporting (IMO DCS) have always included data on boil-off gas consumed for propulsion and other ship operations, the MEPC decided to clarify that ship operation data also includes data on boil-off gas consumed by gas combustion units for cargo tank pressure control and other operational purposes to further facilitate uniform implementation of the system on energy efficiency.
- (3) New unified interpretations of Regulations 26.3.1 and 28.7, MARPOL Annex VI Regarding evaluations of the Operational Carbon Intensity Indicator (Operational CII), the MEPC developed new unified interpretations for cases where delivery is slow and the collection period is shorter than the calendar year data collection period, and for cases where the shipowner, management company, or country of registry have been changed.

Accordingly, relevant requirements are amended based on MEPC.1/Circ.795/Rev.7.

Outline of Amendment

- (1) Specifies that fuel oil mixed with synthetic fuel is to be listed on bunker delivery note (BDN).
- (2) Specifies that boil-off gas consumed by gas combustion units for cargo tank pressure controls and other operational purposes is to be included in the data required to be collected and reported for the fuel consumption requirements for ships whose gross tonnage is 5,000 or more.
- (3) Clarifies the evaluation of Operational CII as follows:
 - (a) For new ships delivered on or after 1 October (which means there is only a short period

of time remaining in the calendar year collection period), the year following the year of delivery is to be considered the first year of the implementation plan to achieve the Required Annual Operational CII for the next three years in SEEMP Part III, and a CII rating of D or E given in the year of delivery is not to be included in the criteria for determining whether a Corrective Action Plan needs to be developed.

- (b) For ships changing management companies or simultaneously changing their flag state administration and management company on or after 1 January 2023, a new SEEMP Part III is required to be prepared describing a three-year implementation plan for achieving the Required Annual Operational CII with the year of change considered to be the first year of the plan.
- (c) A rolling three-year plan* is to be used for the "Methods for calculating attained annual operational CII, required annual operational CII for the next three years, an implementation plan to achieve required annual operational CII, procedures for self-evaluation and improvement."
- (d) When renewing a SEEMP for the "Methods for calculating attained annual operational CII, required annual operational CII for the next three years, an implementation plan to achieve required annual operational CII, procedures for self-evaluation and improvement", the three-year implementation plan may remain in effect.
- (e) If the data collected for a calendar year is rated as D for three consecutive years or rated as E, a revised SEEMP containing the Corrective Action Plan for achieving the required annual operational CII for the next two years is to be developed and then validated in the year following the year in which the data was collected.
 - * A medium- to long-term plan that spans multiple fiscal years, in which the plan is reviewed and necessary revisions are made in consideration of yearly environmental changes.

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 <u>and synthetic fuel</u> are to be dealt with in accordance with the following.
- (1) The following apply according to the biofuel <u>or synthetic fuel</u> blending ratio.
 - (a) A fuel oil which is a blend of not more than 30 % by volume of biofuel <u>or synthetic fuel</u> 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 <u>or synthetic fuel</u> is to satisfy **1.2.3-1(2)**, **Part 8 of the Rules**.
- (2) The biofuels subject to above (1) include but are not limited to the following (a) to (f), 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) Synthetic fuel subject to above (1) is a fuel oil from synthetic or renewable sources similar in composition to petroleum distillate fuels.
- (<u>34</u>) Bunker delivery notes are to include details as to whether or to what extent biofuels <u>or synthetic</u> <u>fuel</u> are blended.

2 Diesel engines certified in accordance with 2.1, Part 8 of the Rules that can operate on biofuels or biofuel blends a synthetic fuel, or blends containing these fuels without changes to their NOx 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 *NOx 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 NOx 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 <u>or synthetic fuel</u> and do not fall under -2 above.
 - (c) Fuels for which NOx 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 NOx 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 NOx Technical Code)
 - (b) Onboard direct measurement and monitoring method (6.4 of the NOx Technical Code)
 - (c) Measurement procedures for emission verification on a test bed.

Chapter 3 ENERGY EFFICIENCY FOR SHIPS

3.6 Ship Energy Efficiency Management Plan (SEEMP) (*Regulation 26 of Annex VI*)

Sub-paragraphs -5 to -8 have been added as follows.

5 For ships to which 3.6-4, Part 8 of the Rules applies delivered on or after 1 January 2023, the starting year of the three-year implementation plan referred to in 3.6-4(1), Part 8 of the Rules will be the year of delivery. If delivered on or after 1 October or later, the following year will then be the first year of the three-year implementation plan and an inferior rating (D or E) given for the remainder of the calendar year of delivery needs not to be counted in for the determination of whether the ship is to develop a Corrective Action Plan required by 3.6-4(2), Part 8 of the Rules. Nothing in this interpretation relieves obligations of reporting data required by 3.8, Part 8 of the Rules and reporting operational carbon intensity required by 3.9, Part 8 of the Rules.

6 A ship to which 3.6-4, Part 8 of the Rules applies changing company, or changing from one Administration to another and from one company to another concurrently, on or after 1 January 2023 are required to make a new SEEMP which includes the items indicated in 3.6-4, Part 8 of the Rules. The year of change is to be the first year of the next three-year implementation plan.

7 In order to document how the required annual operational CII required by 3.9, Part 8 of the **Rules** is to be achieved during the next three years, the items required by 3.6-4(1), Part 8 of the **Rules** are to be a rolling three-year plan that begins the first year of the implementation plan and lasts for three years.

8 In the case of updating the items required by 3.6-4(1), Part 8 of the Rules, the original threeyear plan may remain.

3.8 Data Collection, Reporting and Retained related to Fuel Oil Consumption Reporting, etc. (*Regulations 27 of Annex VI*)

Sub-paragraph -1 has been amended as follows.

1 The data required to be collected and reported set forth in **3.8-1**, **Part 8 of the Rules** includes data relating to boil-off gas consumed on board for propulsion or operation (e.g. boil-off gas (BOG) used for propulsion, operational needs such as in a boiler, or burnt in a Gas Combustion Unit (GCU) for cargo tank pressure control or other operational purposes).

3.9 Operational Carbon Intensity (*Regulations 28 of Annex VI*)

Paragraph 3.9.4 has been added as follows.

3.9.4 Corrective Actions

In case an inferior rating (i.e. rated as D for three consecutive years or rated as E) are given for data collected in a calendar year, the revised SEEMP, including the plan of corrective actions referred to in **3.9.4-1**, **Part 8 of the Rules**, is to be verified in the year following the year in which the data is collected, and it is to be developed to achieve the required annual operational CII by two years after the year in which the data is collected.