



## VESSELS OPERATING ON BIOFUELS, SYNTHETIC FUELS AND BLENDS THEREOF

### *Technical Notice MARPOL.12 Rev.1*

*Notice to Ship-owners, Ship Operators, Managers, Masters,  
Owners' Representatives and Recognized Organizations*

The Directorate wishes to draw the attention of all concerned to [MEPC.1/Circ.795/Rev.7](#), extending the scope of the unified interpretation (UI) of regulation 18.3 of MARPOL Annex VI concerning the use of biofuels to include synthetic fuels.

The UI clarifies that:

- a biofuel is a fuel oil which is derived from biomass and hence includes, but is not limited to, processed used cooking oils, fatty-acid-methyl-esters (FAME) or fatty-acid-ethyl-esters (FAEE), straight vegetable oils (SVO), hydrotreated vegetable oils (HVO), glycerol or other biomass to liquid (BTL) type products;
- a synthetic fuel is a fuel oil from synthetic or renewable sources similar in composition to petroleum distillate fuels.

The Product Name, as entered onto the bunker delivery note, should be of sufficient detail to identify whether, and to what extent, a biofuel or a synthetic fuel is blended into the product as supplied. A fuel oil which is a blend of not more than 30% by volume of biofuel or synthetic fuel should meet the requirements of regulations 18.3.1 of MARPOL Annex VI. On the other hand, a fuel oil which is a blend of more than 30% by volume of biofuel or synthetic fuel should meet the requirements of regulation 18.3.2 of MARPOL Annex VI.

The UI also clarifies that a marine diesel engine certified in accordance with the requirements of regulation 13 of MARPOL Annex VI, which can operate on a biofuel or a synthetic fuel or blends containing these fuels without changes to its NO<sub>x</sub> critical components or settings/operating values outside those as given by that engine's approved Technical File, should be permitted to use such a fuel oil without having to undertake the assessment as given by regulation 18.3.2.2 of MARPOL Annex VI. Parent engine emissions tests undertaken on DM or RM grade fuels to the ISO 8217:2005 standard, as required by paragraph 5.3.2 of the NO<sub>x</sub> Technical Code, should be valid for all DM or RM grade fuels used in operation, or that the engine may be designed for, or capable of operation on, including those meeting the ISO 8217 standards superseding ISO 8217:2005.

For instances not covered by the preceding paragraph, where fuel oils are derived from methods other than petroleum refining, or fuel oil which is a blend of more than 30% by volume of biofuel or synthetic fuel, or other fuels required to undertake the assessment as given by regulation 18.3.2.2 of MARPOL Annex VI and for which have not been specifically certified in accordance



with the regulation 13 limits at test bed for that specific fuel and Engine Group/Family, the UI interprets the following as an acceptable route to demonstrate compliance with regulation 18.3.2.2:

- the ship's IAPP Certificate may continue to be issued where the overall NO<sub>x</sub> emissions performance has been verified to not cause the specified engine to exceed the applicable NO<sub>x</sub> emissions limit when burning said fuels using the onboard simplified measurement method in accordance with 6.3 of the NO<sub>x</sub> Technical Code 2008, or the direct measurement and monitoring method in accordance with 6.4 of the NO<sub>x</sub> Technical Code 2008, or by reference to relevant test-bed testing. For the purposes of this interpretation and demonstration of compliance with regulation 18.3.2.2 of MARPOL Annex VI, and as applicable to possible deviations when undertaking measurements on board, an allowance of 10% of the applicable limit may be accepted.

MEPC.1/Circ.795/Rev.7 also provides interpretations with regards to:

- the reporting of boil-off gas (BOG) consumed on board ships in the IMO Data Collection System (IMO DCS);
- EEDI reporting requirements in regulation 22.3 of MARPOL Annex VI; and
- issues related to the development and verification of the SEEMP and the issuance of the Statement of Compliance for CII reporting.

Merchant Shipping Directorate

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