



BERMUDA MERCHANT SHIPPING INFORMATION NOTICE

The 2020 global Sulphur limit

This Notice is intended for: Ship Owners, Managers, Masters, Operators, Officers

References:

MARPOL Annex VI

Resolution MEPC.305(73) - Amendments to MARPOL Annex VI (Prohibition on the carriage on non-compliant fuel oil for combustion purposes for propulsion or operation on board a ship).

Resolution MEPC.320(74) - 2019 Guidelines for consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI.

MEPC.1/Circ.878 - Guidance on the development of a ship implementation plan for the consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI

MEPC.1/Circ.883 - Guidance on indication of ongoing compliance in the case of the failure of a single monitoring instrument and recommended actions to take if the exhaust gas cleaning system (EGCS) fails to meet the provisions of the 2015 EGCS guidelines (resolution MEPC.259(68))

Summary:

For ships operating outside designated Emission Control Areas, IMO has set an upper limit for sulphur in fuel oil used on board ships of 0.50% m/m (mass by mass) from 1 January 2020.

IMO have produced guidance to assist the maritime industry in complying with these requirements. This information notice provides a summary of these.

This Notice was issued on 02 October 2019

1. Introduction

- (1) Until 31 December 2019 the limit for sulphur content of ships' fuel oil is 3.50% m/m (mass by mass) for ships operating outside Emission Control Areas (ECA's). On and after 1 January 2020 the limit for sulphur content of ship's fuel oil will be reduced to 0.50% m/m.
- (2) This new sulphur limit will apply to "fuel oil used on board". The interpretation of "fuel oil used on board" includes use in main and auxiliary engines as well as boilers.

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- (3) For ships operating inside the four ECAs the limit for sulphur content of ship's fuel oil is 0.1%. The four ECA's are as follows:
 - (a) The Baltic Sea area,
 - (b) The North Sea area,
 - (c) The North American area (covering designated coastal areas off the United States and Canada),
 - (d) The United States Caribbean Sea area (around Puerto Rico and the United States Virgin Islands)
- (4) Most ships are expected to utilize new blends of fuel oil which will be produced to meet the 0.50% limit on sulphur in fuel oil.
- (5) An increasing number of ships are also using natural gas as a fuel, which when ignited leads to negligible sulphur oxide (SO_x) emissions. This has been recognised by IMO in the development of the International Code for Ships using Gases and other Low Flashpoint Fuels (the IGF Code), which was adopted in 2015.
- (6) Another alternative fuel is methanol which is being used on some short sea services.
- (7) Ships may also meet the SO_x emission requirements by using approved equivalent methods, such as Exhaust Gas Cleaning Systems (EGCS) or "scrubbers", which "clean" the emissions before they are released into the atmosphere. If this approach is used the equivalent arrangement must be approved by Bermuda.

2. Exemptions

- (1) Exemptions are provided for situations involving the safety of the ship or saving life at sea, or if a ship or its equipment is damaged.
- (2) Further exemptions are permitted to allow a ship to conduct trials for the development of ship emission reduction and control technologies and engine design programmes. Such an exemption would require special consideration by the Bermuda Shipping and Maritime Authority.

3. Following Implementation – After 1 January 2020

- (1) Ships taking on fuel oil for use on board must obtain a bunker delivery note, which states the sulphur content of the fuel oil supplied. Samples may be taken for verification.
- (2) Bermuda ships must be issued with an International Air Pollution Prevention (IAPP) Certificate by their Class Society on behalf of Bermuda. This certificate includes a section stating that the ship uses fuel oil with a sulphur content that does not exceed the applicable limit value as documented by bunker delivery notes or uses an approved equivalent arrangement.
- (3) Port and Coastal States can use Port State Control to verify that the ship is compliant. They could also use surveillance, for example air surveillance to assess smoke plumes and other techniques to identify potential violations.

4. Industry Guidance

(1) A number of IMO documents have been produced to guide the maritime industry in implementing these new requirements. This notice will briefly summarise each in turn:

(2) Resolution MEPC.320(74)

Contains guidance to ensure the consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI. Specifically:

- (a) Ship implementation planning for 2020;
- (b) Impact on fuel and machinery systems;
- (c) Verification issues and control mechanism and actions;
- (d) Fuel oil non-availability and report form FONAR;
- (e) Possible safety implications relating to fuel oils meeting the 0.50% m/m sulphur limit;

(3) MEPC.1/Circ.878

To assist ship operators and owners to plan ahead for the 0.50% sulphur 2020 limit, the IMO MEPC approved guidance on ship implementation planning. The guidance is part of a set of guidelines being developed by IMO for consistent implementation of the MARPOL regulation coming into effect from 1 January 2020. This includes sections on:

- (a) Risk assessment and mitigation plan (impact of new fuels);
- (b) Fuel oil system modifications and tank cleaning (if needed);
- (c) Fuel oil capacity and segregation capability;
- (d) Procurement of compliant fuel;
- (e) Fuel oil changeover plan (conventional residual fuel oils to 0.50% sulphur compliant fuel oil);
- (f) Documentation and reporting.

(4) MEPC.1/Circ.883

For ships with Exhaust Gas Cleaning Systems (EGCS or 'Scrubbers') the IMO has produced guidance on actions to be taken in the event that the EGCS malfunctions. Specifically:

- (a) System Malfunction;
- (b) Short-term exceedances;
- (c) Interim indication of ongoing compliance in the case of sensor failure;
- (d) Notification to relevant Authorities;

(5) Resolution MEPC.305(73)

A complementary MARPOL amendment will prohibit the carriage of non-compliant fuel oil for combustion purposes for propulsion or operation on board a ship - unless the ship has an Exhaust Gas Cleaning System ("scrubber") fitted.

(a) Installing an EGCS or scrubber is accepted by Bermuda as an alternative means to meet the sulphur limit requirement.

(b) The complementary amendment is expected to enter into force on 1 March 2020.

(6) Further information is also available from;

(a) The International Chamber of Shipping

“Guidance to Shipping Companies and Crews on Preparing for Compliance with the 2020 ‘Global Sulphur Cap’ for Ships’ Fuel Oil in Accordance with MARPOL VI”

<https://www.ics-shipping.org/docs/default-source/resources/guidance-for-compliance-with-the-2020-global-sulphur-cap-july-2019.pdf?sfvrsn=24>

(b) Classification Societies

<https://www.dnvgl.com/maritime/global-sulphur-cap/index.html>

<https://marine-offshore.bureauveritas.com/newsroom/imo-2020-global-sulphur-cap-limit>

https://ww2.eagle.org/en/Products-and-Services/abs-advisory-services/environmental-performance/imo-2020-global-sulphur-cap.html?gclid=EA1aIQobChMIgtyuY3n5AIVS_IRCh2pnAvTEAMYAiAAEgI BCPD_BwE

<https://www.lr.org/en/sulphur-2020/>

(c) Oil Companies and Bunker suppliers.

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