



MERCHANT SHIPPING NOTICE

Issued by the Merchant Shipping Division, Sri Lanka

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NOTICE TO MASTERS, OFFICERS, TRAINING INSTITUTES, SHIP OWNERS, MANAGERS, OPERATORS, SHIPPING AGENTS AND RECOGNISED ORGANISATIONS

Amendments to MARPOL Annex VI

The following amendments to MARPOL Annex VI regulations 2,6,12,13,14,15 and 16 will be effective as from 1 July 2010.

Regulation 6: Issue or Endorsement of a Certificate

New type of IAPP certificate to be issued for vessels constructed (keel laying date) after 1 July 2010.

For vessel with keel laying date before 1 July 2010, no later than first scheduled dry dock after 1 July 2010 but in no case later than three years after that date.

Regulation 2: Definitions

“SOx Emission Control Areas” (SECAs) to be renamed “Emission Control Areas” (ECAs).
ECAs are areas with controlled SOx and NOx emission.

Regulation 12: Ozone Depleting Substances

Each vessel of 400GT and above should have ODS record book and list of equipment containing ODS.

Regulation 13: Nitrogen Oxides (NOx)

From 1 July 2010 there will be three emission limits for engines, Tier I, II, III.

Engines with power output more than 130 kW will have to be equipped with respective EIAPP certificate and approved NOx technical file.

Tier I: is the current NOx emission limit

It applies to engines with a power output of more than 130 kW installed on a ship constructed (keel laying date) on or after 2000-01-01 and before 2011-01-01, and to major engine conversions performed between these dates, even if the keel laying date of the ship was earlier. From 2010-07-01, Tier I will also be applicable to engines with a power output of more than 5,000 kW and a per cylinder displacement of more than 90 litres, installed on ships constructed on or after 1990-01-01 and before 2000-01-01, provided that an approved method (NOx reduction method) for that engine has been certified by a Party to Annex VI, has notified IMO, and is commercially available. In this case, carriage of an “approved method file” instead of an EIAPP certificate and technical file is obligatory.

Tier II: Applies to engines installed on ships on or after 1 January 2011

Applies to engines installed on ships constructed on or after 1/1/2011 or to non identical engine replacement on or after this date.

Tier III: Applies to engines installed on ships on or after 1 January 2016 operating in ECAs.

Applies to engines installed on ships constructed on or after 1/1/2016 or to non identical engine replacement on or after this date. This is applicable only if vessels are operating in ECAs.

Outside ECAs, Tier II is applicable.

Regulation 14: Sulphur Oxides (SOx) & particulate matter (PM)

Sulphur content shall not exceed:

-4.5% prior to 1/1/2012

-3.5% on or after 1/1/2012

-0.5% on or after 1/1/2020

In ECAs the sulphur content should not exceed:

-1.5% prior to 1/7/2010

-1.0% on or after 1/7/2010

-0.1% on or after 1/1/2015

Mandatory documented fuel oil change over procedures should be available on board after 1 July 2010 as described in page 3.

Regulation 15: Volatile Organic Compounds (VOC)

Tankers carrying crude oil should have an approved VOC management plan. The plan has to be ship specific and must have written procedures for minimizing VOC emissions.

Regulation 16: Ship board Incinerator

In addition to existing substances prohibited by MARPOL Annex VI, the following are not permitted to be incinerated;

- Sewage sludge
- Sludge oil that is not generated on board
- Exhaust gas cleaning system residues

Mandatory Fuel Oil Change Over Procedures Regulation 14

According to MARPOL Annex VI Regulation 14, vessels should have documented fuel oil change over procedures when using different grades of fuel oils before entering or after leaving Emission Control Areas.

Description of the Requirement

Until now documented fuel oil change over procedures were not mandatory. These written procedures should be available on board before the next periodical MARPOL Annex VI survey after 1 July 2010. It is recommended that procedures be available on board after 1 July 2010 in order to avoid having Port State Control deficiencies in the event of an inspection.

The following should be recorded in Engine Log book:

- Volume of low sulfur fuel oils in each tank
- Date, time and position of vessel when change over took place. (Before entering Emission Control Areas)
- Date, time and position of vessel when change over took place. (After leaving Emission Control Areas)

While operating within an Emission Control Area, the sulphur content of fuel oil used on board ships shall not exceed the following limits:

- 1.50% m/m prior to 1 July 2010;
- 1.00% m/m on and after 1 July 2010; and
- 0.10% m/m on and after 1 January 2015.

Factor Affecting Fuel oil change over procedures

Fuel sulphur content - During change-over, high-sulphur fuel is mixed with low-sulphur fuel. The time needed for the change-over is calculated on the basis of a complete linear blend.

Fuel consumption- Higher fuel consumption means a shorter change-over period. Fuel consumption is a function of ship speed, loading level and auxiliary power requirements.

Fuel tank arrangement - The configuration of fuel tanks also affects the duration of the change-over. A fuel tank arrangement which consists of one settling tank and one service tank will take longer to flush than one which consists of two settling and two service tanks. For ships with separate low and high-sulphur fuel tanks, the change-over period will be very short.

Possible Switching scenario between HFO and LSHFO with one service and one settling tank

If the ship has only one HFO service and one HFO settling tank, and assuming that it is possible to completely drain them with a transfer pump, and the operator deems it feasible to do so even at sea, the switchover procedure may include the following phases:

- Switching from HFO to LFO operation
- stopping the separator
- perhaps draining the bottom sludge to the sludge tank
- draining the HFO service and HFO settling tanks completely with the transfer pump to a storage tank with the same fuel quality
- filling the settling tank with the new quality
- possibly changing the gravity disc of the separator
- restarting the separator
- filling up the service tank via the separator (at least partly to a safe level), and
- switching over to this new fuel

Depending on the ship this procedure may perhaps take 15 hours in case the service tank is filled to 50 % capacity before taken into use.

MEPC.176 (58) circular is attached herewith for full compliance.

Request all relevant officials to take note of this notice.

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