

MARPOL Annex VI – Fuel Oil Sampling Points.



11 January 2022

Applicability: shipowners, ship operators, ship managers, ship masters, designers and shipbuilders.

Further to [Class News No. 21/2017](#), the IMO has published amendments to MARPOL Annex VI, given in Resolution [MEPC.324\(75\)](#)*. These introduce new requirements for the sampling and verification of the sulphur content of fuel oil, including fuel oil sampling points. The amendments enter into force on 1 April 2022.

What should shipowners and managers do now?

Operators should arrange for in-use fuel oil sampling points to be installed, or designated (in accordance with section 2 of the Annex to [MEPC.1/Circ. 864/Rev.1](#)) and ensure the arrangement is described in either a piping diagram or other relevant documents and made available for survey. Early compliance is recommended.

Background

Key amendments in MEPC.324(75) include the following requirements:

- Three types of fuel oil samples now defined in MARPOL – ‘In-use sample’, ‘Onboard sample’ and ‘MARPOL delivered sample’ – used to check for compliance with sulphur limits
- Ships to have designated sampling points for taking representative samples of fuel oil in use, i.e. ‘In-use samples’ (regs. 14.10 to .13)
- New procedures for in-use and onboard fuel oil sampling (reg. 14.8 and .9)
- Procedures for verification/analysis of in-use samples and onboard samples (Appendix VI, Part 2)
- Amended procedures for verification/analysis of MARPOL delivered samples (Appendix VI, Part 1)

Fuel oil samples

The new amendments define three types of fuel oil samples:

- **In-use sample:** a sample of fuel oil in use on a ship (i.e. typically taken downstream of the in-use fuel oil service tank and close to the fuel oil combustion machinery)

- **Onboard sample:** a sample of fuel oil intended to be used or carried for use onboard that ship (i.e. a sample of the fuel oil in the fuel oil tank)
- **MARPOL delivered sample:** the sample of fuel oil delivered during the bunker operation (this is the existing bunker sample requirement) (in accordance with regulation 18.8.1 and Appendix VI, Part 1)

In-Use Fuel Oil Sampling Points

In order to take in-use samples, sampling points are required to be fitted, or designated, to ships of 400gt and above (and fixed and floating drilling rigs or other platforms), as follows:

- **New ships** (keel laid on or after 1 April 2022): on delivery.
- **Existing ships** (keel laid before 1 April 2022): no later than at the first IAPP renewal survey undertaken on or after 1 April 2023.

These requirements apply to any fuel oil to which MARPOL Annex VI, regulation 14 applies, including fuel oil used by main engines, auxiliary engines, incinerators, inert gas generators, boilers, emergency generators, power packs, etc. The requirements do not apply to a fuel oil service system for a low-flashpoint fuel ** for combustion purposes for propulsion or operation onboard the ship.

The in-use fuel oil sampling points are required to be fitted, or designated, in accordance with '2019 Guidelines for on board sampling for the verification of the sulphur content of the fuel oil used on board ships' ([MEPC.1/Circ.864/Rev.1](#)). The sampling points are to be clearly marked for easy identification and described in either the piping diagram or other relevant documents. Existing sampling points may be 'designated' by the operator as in-use fuel oil sampling points, if they meet these requirements.

The number and location of designated fuel oil sampling points should take into consideration possible fuel oil cross-contamination and service tank arrangements.

Modifications to fuel oil piping are to be done under survey, and meet the relevant [Lloyd's Register \(LR\) Rules](#) on fuel piping systems (e.g. LR Rules for Ships, Part 5, Chapter 14, Section 2).

After confirmation, the Supplement to the ship's IAPP Certificate is required to be updated to indicate compliance with this new requirement. This may be done at any survey on or after entry into force in 1 April 2022, if operators wish to implement earlier than the first renewal survey date.

Onboard fuel oil sampling points

Whilst the fitting or designating of sampling points for taking 'In-use samples' is now mandated, the fitting or designating of sampling points for taking fuel oil 'onboard samples' is not mandatory.

In-use and onboard fuel oil sampling procedures

Where in-use or onboard fuel oil samples are needed by competent authorities, e.g. Port State Control inspectors, the samples are required to be taken and verified, by the competent authorities, in accordance with MARPOL Annex VI, regulation 14.

In-use fuel oil samples shall be drawn taking into account '2019 Guidelines for on board sampling for the verification of the sulphur content of the fuel oil used on board ships' ([MEPC.1/Circ.864/Rev.1](#)).

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Onboard fuel oil samples shall be drawn taking into account the '2020 Guidelines for on board sampling of fuel oil intended to be used or carried for use on board a ship' ([MEPC.1/Circ.889](#)).

* The MARPOL amendments also appear in the completely revised Annex VI, which enters into force in November 2022 and is published as IMO Resolution [MEPC.328\(76\)](#).

** **Low-flashpoint fuel** means gaseous or liquid fuel oil having a flashpoint lower than otherwise permitted under paragraph 2.1.1 of regulation 4 of chapter II-2 of (SOLAS).

For further information

For more details, please get in touch with statutorysupport@lr.org

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