

**Application:** All shipowner/operators, masters and officers of merchant ships and authorised classification societies

## Introduction

The IMO global sulphur cap requirements entered into force on 1st January 2020. Refer to [Barbados Maritime Ship Registry Bulletin 316, "Fuel Oil Sulphur Cap"](#), which describes the applicable regulatory requirements. PSC inspections are carried out in accordance with the 2019 guidelines for PSC under MARPOL Annex VI (MEPC 74/18/Add.1, Annex 15) to establish whether a ship complies, PSC inspectors are likely to focus their attention on documents and procedures maintained on board. In certain jurisdictions however, PSC inspectors may carry portable sulphur testing kits and if the results of these tests are inconclusive or indicate potential non-compliance, additional sampling will take place for verification ashore. Questions have arisen in conjunction with these sampling tests and the purpose of this bulletin is to provide additional guidance.

## Bunker Delivery Notes (BDNs) and MARPOL Samples

Details of fuel delivered on board for combustion purposes shall be recorded by means of a suppliers Bunker Delivery Note (BDN). The BDN shall be accompanied by a representative sample of the fuel delivered (the MARPOL Sample). Refer to Part 1 in MEPC.1/Circ.882, "MARPOL Delivered Fuel Oil Sample". Acceptance criteria for the MARPOL sample are given in Appendix VI, Table 1 "Summary of Part 1, MARPOL Delivered Fuel Oil Sample Procedure". On completion of bunker delivery, the MARPOL sample is to be sealed and signed by the supplier's representative and the Master or senior officer in charge of the bunker operation and kept onboard until the fuel has been substantially consumed, but for a period of not less than twelve months from the date of delivery. BDNs and associated samples should be easily identifiable, filed properly and retained on board for at least three years after the fuel has been received.

## Additional Sampling of Fuel Oil

In addition to the official MARPOL sample, commercial samples may also be taken. New sample categories of "in-use" and "onboard" samples have been introduced to allow competent authorities of parties to MARPOL to determine whether the fuel oil used onboard meets the sulphur content limits specified in Regulation 14.1 or 14.4.

## PSC Fuel Sampling

The PSCO will normally investigate whether a ship carries compliant fuel oils, based on the documents listed in paragraph 2.1.2 of the 2019 PSC Guidelines. Additionally, records required to demonstrate compliance may also be viewed. However, results from remote sensing could be used to trigger inspections and portable devices could be used during the initial inspections. Remote sensing and portable devices are however, of indicative nature and should not be regarded as the evidence of non-compliance but may be considered clear grounds for expanding the inspection.

When the PSCO identifies clear grounds of suspected non-compliance based on initial inspections, they may require samples of fuel oils to be analysed. The samples to be analysed may be either the representative samples provided with the BDN in accordance with regulation 18.8.2, (MARPOL delivered samples), or samples from designated sampling points in accordance with the 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 - in-use fuel

oil samples, or other samples obtained by the port State). There are two locations where fuel sampling might be required by the PSCO:

1. downstream of the fuel oil service tank
2. the storage tanks, "in use" and "on-board" respectively.

In detecting suspected non-compliance, the sample analysis should be conducted in a uniform and reliable manner. The verification procedure for MARPOL delivered samples should be in accordance with appendix VI of MARPOL Annex VI. For the "in-use" and "onboard" samples, the sample should be deemed to meet the requirements, provided the test result from the laboratory does not exceed the specification limit  $+0.59R$  (where R is the reproducibility of the test method) and no further testing is necessary. Refer to MEPC.1/Circ.882, Annex, table 2, summary of in-use or onboard FO sample procedures.

In accordance with ISO 4259-2: 2017, and allowing for a 95% confidence limit, the maximum amount of sulphur allowed in these samples is 0.11% m/m for ECA fuel and 0.53% m/m for global fuel. In situations where the commercial samples taken during bunkering, indicate a higher sulphur content than noted on the BDN, then the flag administration and PSC at destination need to be notified in writing without delay. (Note that the ship will have likely sailed by the time these test results are known). In the event of any further investigation by PSC, the Representative Sample (MARPOL sample) will be used by PSC for further verification procedures and the ship may be ordered to de-bunker the fuel at the next port.

If a non-compliance is established, consistent with regulation 18.2.3, the port State may prevent the ship from sailing until the ship takes any suitable measures to achieve compliance which may include de-bunkering all non-compliant fuel oil. In addition, the port State should report the information of the ship using or carrying for use non-compliant fuel oil to the Administration of the ship and inform the Party or non-Party under whose jurisdiction a bunker delivery note was issued of cases of delivery of non-compliant fuel oil, giving all relevant information.

### **Additional documentation and procedural requirements during PSC Inspections**

The following documents and information should also be available during PSC inspections.

- International Air Pollution Prevention Certificate (IAPPC)
- Written procedures for fuel change-over
- Shipboard Implementation Plan
- Tank plans and piping diagrams
- Fuel Oil Non-Availability Report FONAR
- Voyage records: ECDIS and navigation charts
- Oil Record Book Part I - all entries for internal fuel transfers, bunkering, retention, disposal should be entered appropriately and signed
- Engine logbooks
- Tank sounding records.
- Equivalent arrangements or alternate fuel.
- IAPPC and Supplement

## References

1. MEPC.1/Circ.882 Early Application of the Verification Procedures for a MARPOL Annex VI Fuel Oil Sample (Regulation 18.8.2 or Regulation 14.8).
2. Resolution MEPC.320(74), 2019 Guidelines for Consistent Implementation of the 0.5% Sulphur Limit Under MARPOL Annex VI.
3. MEPC 74/18/Add.1, Annex 15, Resolution MEPC.321(74) 2019 Guidelines for Port State Control Under MARPOL Annex VI, Cha

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