

SUBCOMMITTEE ON IMPLEMENTATION OF  
IMO INSTRUMENTS  
7th session  
Agenda item 5

III 7/5/8  
7 May 2021  
Original: ENGLISH  
Pre-session public release:

**MEASURES TO HARMONIZE PORT STATE CONTROL (PSC) ACTIVITIES AND  
PROCEDURES WORLDWIDE**

**Early implementation of MARPOL Annex VI amendments  
to achieve consistent implementation of the 0.50% sulphur limit**

**Submitted by Jamaica and the International Bunker Industry Association (IBIA)**

**SUMMARY**

*Executive summary:* This document highlights discrepancies in enforcement of the 0.50% sulphur limit in force since 1 January 2020 and urges PSC regimes to harmonize procedures in line with resolution MEPC.321(74), circular MEPC.1/Circ.882 and resolution MEPC.324(75) which call for the application of amendments to Appendix VI of MARPOL Annex VI related to the verification procedure for a MARPOL Annex VI fuel oil sample in advance of their entry into force

*Strategic direction, if applicable:* 1

*Output:* 1.11

*Action to be taken:* Paragraph 18

*Related documents:* Resolutions MEPC.320(74), MEPC.321(74) and MEPC.324(75) and MEPC.1/Circ.882

**Background**

1 In 2017, MEPC 71 agreed to consider regulatory amendments and guidelines to ensure consistent implementation of the 0.50% sulphur limit under regulation 14.1.3 of MARPOL Annex VI, prior to its entry into force on 1 January 2020. Subsequently, MEPC adopted guidelines and amendments to MARPOL Annex VI for this purpose, with several aspects aimed specifically at harmonizing enforcement measures by relevant authorities.

2 In 2019, MEPC 74 adopted resolution MEPC.320(74) on *2019 Guidelines for consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI*, containing advice for various stakeholders, including port State control officers (PSCOs), and resolution MEPC.321(74) on the *2019 Guidelines for port State control under MARPOL Annex VI*

*Chapter 3* (hereafter referred to as the *2019 PSC Guidelines*), inviting governments, when exercising PSC under MARPOL Annex VI, to apply the *2019 PSC Guidelines* from 1 January 2020.

3 MEPC 74 also issued MEPC.1/Circ.882, requesting the Parties to apply approved amendments to Appendix VI of MARPOL Annex VI regarding the verification procedures for a MARPOL Annex VI fuel oil sample (regulations 14.8 or 18.8.2 of MARPOL Annex VI) to ensure consistent implementation of the 0.50% sulphur limit. At MEPC 75, these amendments were adopted by resolution MEPC.324(75), which also recalled the request to the Parties to apply the amendments to Appendix VI of MARPOL Annex VI in advance of their entry into force.

### **Verification procedures to determine compliance with MARPOL Annex VI sulphur limits**

4 Both the *2019 Guidelines for consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI* (resolution MEPC.320(74)) and the *2019 PSC Guidelines* contain detailed procedures for relevant authorities to establish compliance with applicable sulphur limits. Both sets of guidelines refer to sulphur verification procedures for a fuel oil sample in line with the approved, and subsequently adopted, amendments to Appendix VI of MARPOL Annex VI.

5 The amendments to Appendix VI of MARPOL Annex VI provide two distinctly different verification procedures: Part 1 for the MARPOL delivered sample, and Part 2 for in-use and on board samples. The key difference is that Part 1 for the MARPOL delivered sample does not recognize the inherent limitations of the sulphur test method with regards to accuracy, known as 95% confidence, whereas Part 2 for in-use and on board samples does take this into account. In brief, if a relevant authority decides to obtain an in-use or on board sample from a ship to check for compliance with the 0.50% sulphur limit, a test result up to and including 0.53% sulphur from an appropriately accredited laboratory shall be considered as having met the requirement. For the MARPOL delivered sample, a test result greater than the applicable limit required by regulation 14 of MARPOL Annex VI shall be considered to have not met the requirement. For both Part 1 and Part 2, the final results obtained from the verification procedure shall be evaluated by the competent authority.

6 The *2019 Guidelines for consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI* (resolution MEPC.320(74)), and the revision of Appendix VI of MARPOL Annex VI, make it absolutely clear that the 95% confidence principle for test precision should be applied to in-use and on board samples. This principle was sufficiently important to prompt MEPC to issue MEPC.1/Circ.882, inviting Member Governments to apply approved amendments to MARPOL Annex VI related to the verification procedure for a MARPOL Annex VI fuel oil sample in advance of their entry into force, in order to "ensure a consistent approach to verifying the sulphur limit of the fuel oil delivered to, in-use or carried for use on board a ship until the entry into force of the approved amendments." This consistent approach does not appear to be happening, as described below.

### **Lack of uniform implementation and enforcement practices**

7 Since the 0.50% sulphur limit took effect on 1 January 2020, there have been cases of ships that have received a test result from their own fuel oil testing programme on their own bunker manifold inlet sample indicating a sulphur content above 0.50%. Ships may have documented such test results as indicative of a potential non-compliance through a notification to their flag Administration. Copies of such notifications may also be sent to authorities at the next port of call, the Administration under jurisdiction of which the bunker supplier is located, and to the bunker supplier, in line with paragraph 2.1.6 of the *2019 PSC Guidelines*.

8 Reports from the market indicate that there have been several cases where ships have been advised, or even required, by authorities, to debunker fuels which have not been proven as non-compliant by the appropriate verification procedures stipulated under MARPOL Annex VI. It has happened on the basis of a test result from the ship's own bunker inlet sample from its own fuel oil testing programme indicating potential non-compliance, e.g. 0.51% to 0.53% sulphur. No MARPOL delivered samples were obtained and tested by relevant authorities for compliance with the relevant sulphur limits. This has created a lot of problems and uncertainty for the shipping and fuel oil supply industries.

9 Debunkering is not a trivial matter. Apart from causing delays and substantial financial costs, it also carries an environmental cost through extra CO<sub>2</sub> emissions, and represents safety and environmental risks. Demands to debunker on the basis of a ship's own sample testing programme, which is merely indicative of a potential non-compliant fuel, seems to go against the spirit of the regulation and has caused a lot of confusion and conflict in the market about what happens when a ship has a test result from its own sample and fuel testing programme that exceeds the limit, but is within 95% confidence – e.g. up to 0.53% against a fuel ordered to meet the 0.50% sulphur limit.

### **Need for clarity and fairness in enforcement practices**

10 The *2019 Guidelines for consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI* (resolution MEPC.320(74)) and the *2019 PSC Guidelines* both make a clear distinction between initial inspections and what constitutes "clear grounds" to conduct more detailed inspections, which may include conducting fuel oil sample analysis to verify compliance. "Clear grounds" may include results from remote sensing and portable devices used during initial inspections, but the Guidelines specify that these are of indicative nature and should not be regarded as evidence of non-compliance.

11 The procedures for verifying sulphur compliance call for PSCOs to obtain either an in-use sample, an on board sample, or the ship's MARPOL delivered sample for testing by an accredited laboratory in accordance with Appendix VI of MARPOL Annex VI, as amended.

12 Testing the sulphur content is not mandatory, and the only documentation required of the actual sulphur content is what is stated in the bunker delivery note (BDN). If the ship master has independent test results of the fuel oil sample taken by the ship during the bunkering which indicates non-compliance, the co-sponsors believe this is merely an indication of potential non-compliance and needs to be proven by relevant authorities, using the appropriate samples and verification procedures, before taking any enforcement action.

13 The two different sulphur verification procedures (Part 1 and Part 2 in Appendix VI of MARPOL Annex VI, as amended) can cause confusion in how the regulation is understood and applied. In IBIA's view, the principle enshrined in the amended Appendix VI is that any test results up to 0.53% against the 0.50% sulphur limit should be considered as having met the requirement for a ship to use or carry for use and should be determined by testing an in-use or on board sample. If the in-use or on board sample tests above 0.53% sulphur (or 0.11% for an Emission Control Area (ECA) fuel), further investigation should be considered to determine the sulphur content of the corresponding MARPOL delivered sample(s).

14 If a MARPOL delivered sample tests above 0.50% sulphur (or 0.10% sulphur for an ECA fuel), the fuel oil has not met the requirement as delivered and these findings should be reported to the authority under whose jurisdiction the fuel oil supplier operates.

15 If for any reason only the MARPOL delivered sample is sent for analysis by a competent authority, a result above 0.50% has not met the requirement as delivered and this should be reported as per paragraph 14 of this document. However, unless the test result

is above 0.53% sulphur, it should still be considered as having met the requirement for a ship to use or carry for use in line with what would be the case if this test result came from an in-use or on board sample, as per Part 2 of the sulphur verification procedure in Appendix VI. This way, the ship would not be penalised for a test result within the 95% confidence margins, but the supplier would still be found to have failed to meet the requirement for the fuel oil as delivered.

16 The co-sponsors urge Member States and PSC regimes to apply the adopted amendments to MARPOL Annex VI related to the verification procedure for a MARPOL Annex VI fuel oil sample and follow the *2019 Guidelines for consistent implementation of the 0.50% sulphur limit under MARPOL Annex VI* (resolution MEPC.320(74)) to improve clarity and uniformity in enforcement among relevant authorities. This would greatly reduce uncertainty, frustration and conflict between stakeholders including ship owners/operators, charterers, and fuel oil suppliers.

17 It would be beneficial also to develop harmonized PSC procedures worldwide recognizing the principles highlighted in paragraphs 10 through to 15 of this document to ensure ships are not unduly penalised on the basis of analysis carried out on their own sample, or a MARPOL delivered sample as opposed to an in-use or on board samples.

#### **Action requested of the Sub-Committee**

18 The Sub-Committee is invited to consider the information contained in this document, in particular the requests in paragraphs 16 and 17, and to take action as appropriate.

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