

INTERSESSIONAL MEETING ON  
CONSISTENT IMPLEMENTATION OF  
REGULATION 14.1.3 OF MARPOL ANNEX VI  
Agenda item 5

ISWG-AP 1/5  
25 May 2018  
ENGLISH ONLY

**AMENDMENTS TO REGULATION 14 OF MARPOL ANNEX VI TO REQUIRE A  
DEDICATED SAMPLING POINT FOR FUEL OIL**

**Proposals for amendments to regulations of MARPOL Annex VI  
to require sampling points for fuel oil**

**Submitted by Norway, Panama, ICS, BIMCO, IACS,  
INTERTANKO, INTERCARGO and WSC**

**SUMMARY**

*Executive summary:* This document proposes amendments to regulation 14 of MARPOL Annex VI regarding sampling points for the purpose of taking representative samples of the fuel oil being used on board ships; and consequential draft amendments to regulation 18 of MARPOL Annex VI, the supplement to the IAPP Certificate, regulation 2 of MARPOL Annex VI and MEPC.1/Circ.864

*Strategic direction, 2  
if applicable:*

*Output:* 2.14

*Action to be taken:* Paragraph 15

*Related documents:* MEPC 70/15/3; MEPC 70/18; PPR 5/12 and PPR 5/24

**Background**

1 Having considered document MEPC 70/15/3 (Norway), MEPC 70 approved the new output on "Amendments to regulation 14 of MARPOL Annex VI to require a dedicated sampling point for fuel oil" for inclusion in the Committee's biennial agenda for 2018-2019 biennium, assigning the PPR Sub-Committee as the coordinator (MEPC 70/18, paragraphs 15.8 to 15.10).

2 At its fifth session, the Sub-Committee considered document PPR 5/12 (Norway), proposing draft text for new paragraphs 11 and 12 of regulation 14 of MARPOL Annex VI, which would require that each ship of 400 gross tonnage and above shall be fitted with one or more dedicated sampling points for the purpose of taking representative samples of the fuel oil presently used on board the ship.

3 The Sub-Committee did not conclude on the proposal in document PPR 5/12. However, in the terms of reference for the Intersessional Meeting on Consistent implementation of regulation 14.1.3 of MARPOL Annex VI (ISWG-AP 1), the Sub-Committee included items on the development of draft amendments to regulation 14 of MARPOL Annex VI, using document PPR 5/12 as a basis, and consideration of the need to develop new guidelines or revise the guidelines for onboard sampling for the verification of the sulphur content of the fuel oil used on board ships (MEPC.1/Circ.864) (PPR 5/24, paragraph 13.21.4).

4 In this regard, the Sub-Committee invited interested Member Governments and international organizations to provide further comments on the draft amendment to MARPOL Annex VI and their views on whether the guidance contained in MEPC.1/Circ.864 was adequate, to ISWG-AP 1 (PPR 5/24, paragraph 12.5).

### **Discussion**

5 Document PPR 5/12 proposed adding new paragraphs in regulation 14 of MARPOL Annex VI to require that each ship of 400 gross tonnage and above be fitted with one or more dedicated sampling points for fuel oil. These new paragraphs, as proposed in document PPR 5/12, were:

#### **"Sampling point for fuel oil**

11 Each ship of 400 gross tonnage and above shall be fitted with one or more dedicated sampling points for the purpose of taking representative samples of the fuel oil being used [for propulsion purposes] on board the ship. The sampling point(s) shall be fitted taking into account guidelines developed by the Organization.

12 For existing ships, the sampling points referred to in paragraph 11 shall be fitted not later than the first renewal survey that occurs after [entry into force of these regulations]."

6 During the discussion at PPR 5, IACS offered the following comments, which it opined should be considered before concluding on the proposed amendments:

- .1 given that the purpose of the proposal was presumably to verify that fuel complies with the requirements regarding the sulphur content of the fuel oil, it was necessary to consider whether these amendments are sufficient, or if consideration also needs to be given to regulation 18 of MARPOL Annex VI. If the amendments to regulation 14 were agreed, IACS offered the view that amendments to regulation 18 would also be needed for the competent authority to take representative samples utilizing the sampling ports (in addition to the inspection of the bunker delivery notes), since the purpose of the dedicated sampling point(s) is to enable effective control and enforcement of MARPOL Annex VI;
- .2 due consideration should be given to ascertaining whether it is relevant to require this sampling point for all combinations of ships and fuel types; and
- .3 whether it was necessary to have "a dedicated sampling point", which would mean that, in almost all instances, a new sampling point will need to be fitted. IACS considered that "dedicated sampling points", as specified in the proposed new paragraph 11 of regulation 14 of MARPOL Annex VI, was an over-prescriptive requirement. Many ships and engine systems already have the ability to take the samples, for example, through air bleed valves or a

drain valve on the fuel strainer. On fuel systems, there would normally already exist a designated point from where fuel samples can be taken which fulfil the conditions specified in paragraph 2.2 of MEPC.1/Circ.864. In this regard, IACS suggested that rather than using the word "dedicated", the term "designated" should be employed. This view was supported by a number of delegations at PPR 5.

7 The co-sponsors consider that exemptions from fitting or designating sampling points should only be provided for combustion machinery utilizing low flashpoint fuels as defined in the IGF Code. In this regard, it is noted that low flashpoint fuels are currently undefined in MARPOL Annex VI.

8 The co-sponsors also consider that designated sampling points should be clearly marked on board; and described in the Oil Record Book and relevant piping diagrams.

9 Additionally, regarding the understanding on the term "agreed" in the existing paragraph 2.1 of MEPC.1/Circ.864, it is considered that the role of Administrations and/or recognized organizations is to confirm the sampling point at site as per paragraph 2.2.6 of the annex to the circular, rather than to "approve" it.

## Proposals

10 Considering paragraphs 6 to 9 above, the following amendments to regulation 14 of MARPOL Annex VI are offered (shown as additions/deletions):

### **"Fuel oil sampling point**

11 For each ship subject to regulations 5 and 6 of this Annex, one or more sampling points shall be fitted or designated for the purpose of taking representative samples of the fuel oil being used on board the ship taking into account the different fuel oil grades being used. The sampling point(s) shall be designated taking into account guidelines developed by the Organization.\*

\* Refer to MEPC.1/Circ. 864 – Guidelines for onboard sampling for the verification of the sulphur content of the fuel oil used on board ships

12 For ships constructed before [entry into force of these requirements], the sampling points referred to in paragraph 11 shall be fitted or designated not later than the first renewal survey that occurs after [entry into force of these regulations].

13 Fuel oil service systems carrying low-flashpoint fuels for combustion purposes for propulsion or operation on board the ship are exempted from the requirements of paragraph 11 and 12 above."

11 Based on the discussions in paragraph 7, the co-sponsors propose the addition of the following definition for low-flashpoint fuels as a new paragraph 51 of regulation 2 of MARPOL Annex VI:

"2.51 *Low-flashpoint fuel* means gaseous or liquid fuel having a flashpoint lower than otherwise permitted under paragraph 2.1.1 of SOLAS regulation II-2/4."

12 The following consequential amendments to the Supplement to the IAPP Certificate are proposed, as new sections 2.3.4 and 2.3.5:

"2.3.4 the ship is fitted with designated sampling point(s) in accordance with regulation 14.11 or 14.12.....□

2.3.5 the requirement for fitting or designating sampling point(s) in accordance with regulation 14.11 or 14.12 is exempted for fuel oil service systems carrying low-flashpoint fuels for combustion purposes for propulsion or operation on board the ship.....□"

13 Considering the discussion in paragraph 6.1 above, the following amendments to regulation 18 of MARPOL Annex VI are proposed (shown as additions/deletions):

"18.7.1bis The competent authority of a Party may utilize the sampling point(s) which is fitted or designated for the purpose of taking representative samples of the fuel oil being used on board in order to verify the fuel oil complies with regulation 14 of this Annex.

18.7.2 The inspection of the bunker delivery notes, ~~and~~ the taking of certified copies and the taking fuel oil samples by the competent authority ~~under paragraph 7.1~~ shall be performed as expeditiously as possible without causing the ship to be unduly delayed."

14 On the basis of the understanding provided in paragraph 9, draft amendments to the text in the annex of MEPC.1/Circ.864 are proposed in the annex to this document.

**Action requested by the Intersessional Meeting**

15 The Intersessional Meeting is invited to consider the comments and proposals provided in this document and take action as appropriate.

\*\*\*

## ANNEX

### GUIDELINES FOR ONBOARD SAMPLING FOR THE VERIFICATION OF THE SULPHUR CONTENT OF THE FUEL OIL USED ON BOARD SHIPS (shown as additions/deletions)

#### 1 Preface

The objective of these Guidelines is to establish an agreed method for sampling to enable effective control and enforcement of liquid fuel oil being used on board ships under the provisions of MARPOL Annex VI.

#### 2 Sampling location

2.1 The on-board representative sample or samples should be obtained from a designated sampling point or points, ~~as agreed by the Administration taking into account the criteria given in paragraphs 2.2.1 to 2.2.5 of these Guidelines.~~ The number and location of designated fuel oil sampling points should be confirmed by the Administration following consideration of possible fuel cross-contamination and service tank arrangements.

~~2.2 In the absence of the sampling point or points referred to in paragraph 2.1, the fuel sampling point to be used should fulfil all of the following conditions:~~ the fuel sampling points to be used should fulfil all of the following conditions:

- .1 be easily and safely accessible;
- .2 take into account different fuel oil grades being used for the fuel oil combustion machinery item;
- .3 be downstream of the in-use fuel oil service tank;
- .4 be as close to the fuel oil combustion machinery as safely feasible taking into account the type of fuel oil, flow-rate, temperature, and pressure behind the selected sampling point;
- .5 be clearly marked for easy identification and described in the Oil Record Book and all other relevant documents;
- ~~.6 be proposed by the ship's representative and accepted by the inspector; and~~
- .56 The each sampling point should be located in a position shielded from any heated surface or electrical equipment and the shielding device or construction should be sturdy enough to endure leaks, splashes or spray under design pressure of the fuel oil supply line so as to preclude impingement of fuel oil onto such surface or equipment; and
- ~~.6 be proposed by the ship's representative and accepted by the inspector; and~~
- .7 the sampling arrangement should be provided with suitable drainage to the drain tank or other safe location.

~~2.3 Fuel oil samples may be taken at more than one location in the fuel oil service system to determine whether there is a possible fuel cross-contamination in the absence of fully segregated fuel service systems, or in case of multiple service tank arrangements.~~

### **3 Sample handling**

The fuel oil sample should be taken when a steady flow is established in the fuel oil circulating system. The sampling connection\* should be thoroughly flushed through with the fuel oil in use prior to drawing the sample. The sample or samples should be collected in a sampling container or containers and should be representative of the fuel oil being used. The sample bottles should be sealed by the inspector with a unique means of identification installed in the presence of the ship's representative. The ship should be given the option of retaining a sample. The label should include the following information:

- .1 sampling point location where the sample was drawn;
- .2 date and port of sampling;
- .3 name and IMO number of the ship;
- .4 details of seal identification; and
- .5 signatures and names of the inspector and the ship's representative.

---

---

\* The sampling connection is the valve and associated pipework designated for sample collection which is connected to the fuel oil service system.