

SUB-COMMITTEE ON POLLUTION  
PREVENTION AND RESPONSE  
9th session  
Agenda item 14

PPR 9/14/3  
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**REVISION OF MARPOL ANNEX IV AND ASSOCIATED GUIDELINES TO INTRODUCE  
PROVISIONS FOR RECORD-KEEPING AND MEASURES TO CONFIRM THE  
LIFETIME PERFORMANCE OF SEWAGE TREATMENT PLANTS**

**Comments on document PPR 9/14**

**Submitted by IACS**

**SUMMARY**

*Executive summary:* This document comments on document PPR 9/14 (Norway) containing the report of the Correspondence Group on Amendments to MARPOL Annex IV and Associated Guidelines, and proposes further revision of the draft amendments to MARPOL Annex IV and associated guidelines

*Strategic direction, 1  
if applicable:*

*Output:* 1.23

*Action to be taken:* Paragraph 13

*Related documents:* PPR 8/7, PPR 8/7/6, PPR 8/7/8, PPR 8/7/9, PPR 8/7/10, PPR 8/13; PPR 9/14 and PPR 9/14/2

**Introduction**

1 This document is submitted in accordance with the provisions of paragraph 6.12.5 of the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5/Rev.2) and provides comments on document PPR 9/14 (Norway).

**Background**

2 At PPR 8 the Sub-Committee re-established the Correspondence Group on Amendments to MARPOL Annex IV and Associated Guidelines, under the coordination of Norway, to progress further the work on revision of MARPOL Annex IV and associated guidelines with the approved terms of reference.

3 IACS appreciates the hard work of the coordinator and all participants of the Correspondence Group, which allowed for substantial progress in the revision of MARPOL Annex IV and associated guidelines. IACS notes that there are still issues that need further

consideration, which include sewage treatment plant (STP) commissioning test, draft amendments to the *2012 Guidelines on implementation of effluent standards and performance tests for sewage treatment plants* (MEPC.227(68), as amended by resolution MEPC.284(70)) (the 2012 Guidelines) and the development of the STP performance guidelines.

4 In order to facilitate the discussion during PPR 9 and to further the development of the draft amendments to MARPOL Annex IV and the 2012 Guidelines, IACS is pleased to provide the below additional considerations to the ones presented in document PPR 9/14/2 (IACS).

## **Discussion and proposals**

### ***Draft amendments to MARPOL Annex IV***

5 IACS notes that the requirement of a commissioning test of the STP was introduced in regulation 4.1.1 of the draft amendments of MARPOL Annex IV for an initial survey before the ship is put in service or before the ISPP Certificate is issued for the first time. For the purpose of addressing the cases where the existing STP is to be replaced by a new STP, or an additional STP is to be installed on board an existing ship in service, IACS is of the view that a commissioning test should also be conducted for the newly installed STP. In this regard, it is proposed to revise the text in regulation 4.1.3 of the draft amendments to MARPOL Annex IV as follows.\*

"4.1.3 An additional survey, either general or partial, according to the circumstances, shall be made after a repair resulting from investigations prescribed in paragraph 9 of this regulation, or whenever any important repairs or renewals are made. The survey shall be such as to ensure that the necessary repairs or renewals have been effectively made, that the material and workmanship of such repairs or renewals are in all respects satisfactory and that the ship complies in all respects with the requirements of this Annex. When an additional survey is undertaken for the new installation of any sewage treatment plant, this survey shall confirm that a commissioning test has been conducted in accordance with paragraph 1.1 of this regulation."

### ***Draft amendments to the 2012 Guidelines***

6 Section 4.5 of the draft amendments to the 2012 Guidelines stipulates that the STP should be equipped with an effluent monitoring unit measuring (EMU), consisting of an effluent flow meter and an effluent turbidity sensor or other sensor measuring an indicative parameter. The EMU's sensor can/should be designed as part of the STP to monitor and control the treatment process. Paragraph 4.7 of the draft amendments to the 2012 Guidelines stipulates that the STP should be provided with the necessary connections to ensure that any bypass of the sewage treatment system will activate an alarm, and that the bypass event is recorded by the control and monitoring equipment.

7 IACS can see the logic between the "EMU" and the "alarm" requirements in order to fulfil the requirements of performance control and monitoring as stipulated in regulation 11B of the draft amendments to MARPOL Annex IV. As shown in figure 1.2 of the draft amendments to the 2012 Guidelines, the EMU is included in the scope of type approval of a STP, so it is assumed that the EMU will be integral to the STP.

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\* Here and elsewhere, tracked changes are indicated using "strikeout" for deleted text and "grey shading" to highlight all modifications and new insertions, including deleted text.

8 In addition, IACS wonders if the term "control and monitoring equipment" in paragraph 4.7 of the draft amendments to the 2012 Guidelines corresponds to the EMU in section 4.5 of the draft amendments to the 2012 Guidelines. If so, it is suggested to move paragraph 4.7 into section 4.5. IACS is of the view that the EMU recording device will need to be linked to the alarm system, which would be provided by the manufacturer of the STP. According to paragraph 4.7 of the draft amendments to the 2012 Guidelines, any bypass of the sewage treatment system will activate an alarm. In this regard, it seems more appropriate that both the arrangement of bypass of the STP and the connection to the alarm are provided by the manufacturer of the STP.

9 The footnote to the international test specifications for type approval in paragraph 5.4.6.3.2 of the draft amendments to the 2012 Guidelines refers to "IEC 60068 – Methods for Environmental Testing". IACS has developed its unified requirements UR E10 "Test specification for type approval" for all equipment on board a ship and has kept it up to date. In order to be consistent with other documents of type approval of environmental protection equipment under the IMO conventions, IACS recommends that the footnote be revised to refer to IACS UR E10, Rev.8, February 2021 instead of IEC 60068, as follows:

"2 Equipment is to be tested in accordance with international test specifications for type approval<sup>1</sup>. ...

<sup>1</sup> ~~IEC 60068 – Methods for Environmental Testing~~ IACS UR E10, Rev.8, February 2021. "

#### ***Draft Guidelines on implementation of MARPOL Annex IV for sewage treatment plants***

10 Based on the discussion and proposed revision of regulation 4.1.3 of the draft amendments to MARPOL Annex IV in paragraph 5 above, IACS proposes the corresponding revision of relevant paragraphs 2.5.1, 6.1.2 and 6.2.1 of the draft Guidelines on implementation of MARPOL Annex IV for sewage treatment plants, as follows:

"2.5.1 Commissioning test – testing of an STP carried out as a part of initial survey or additional survey; or";

"6.1.2 The ship with an installed STP that is in accordance with regulation 9.1.1 or 9.2.1 of MARPOL Annex IV should be subject to additional onboard tests in accordance with regulations 4.1.1, 4.1.2 and 4.1.23 of MARPOL Annex IV."; and

"6.2.1 Commissioning test as a part of the initial survey or additional survey should confirm that the STP is installed correctly and validate that it produces an effluent that meets standards defined in Appendix II of MARPOL Annex IV when supplied with influent generated on a specific ship in normal operating conditions."

#### ***Other***

11 IACS provided proposals on the revision of the draft amendments to MARPOL Annex IV regarding the definition of "passenger ship" in document PPR 9/14/2. If those proposals are agreed by the Sub-Committee, then consequential amendments to the relevant paragraphs regarding passenger ships in the associated guidelines should be introduced.

12 IACS recommends that further consideration should be given to the correlation between the requirements of performance control and monitoring, as stipulated in regulation 11B of the draft amendments to MARPOL Annex IV, and the requirements of the EMU and the alarm in the draft amendments to the 2012 Guidelines.

**Action requested of the Sub-Committee**

13 The Sub-Committee is invited to consider the foregoing, specifically the proposals in paragraphs 5, 8, 9, 10, 11 and 12, and take action as appropriate.

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