

SUB-COMMITTEE ON POLLUTION  
PREVENTION AND RESPONSE  
6th session  
Agenda item 11

PPR 6/11/5  
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**REVIEW OF THE 2015 GUIDELINES FOR EXHAUST GAS CLEANING SYSTEMS  
(RESOLUTION MEPC.259(68))**

**Comments on the report of the Correspondence Group on  
Exhaust Gas Cleaning Systems**

**Submitted by IACS**

**SUMMARY**

*Executive summary:* This document provides comments on the report of the Correspondence Group on Exhaust Gas Cleaning Systems (PPR 6/11)

*Strategic direction, if applicable:* 1

*Output:* 1.12

*Action to be taken:* Paragraph 12

*Related document:* PPR 6/11

**Background**

1 This document is submitted in accordance with the provisions of paragraph 6.12.5 of the document on *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.1) and comments on the report of the Correspondence Group on Exhaust Gas Cleaning Systems (PPR 6/11).

2 IACS participated in the work of the Correspondence Group and would like to thank the Coordinator and the other participants for the constructive discussions within the Group. However, IACS does have some concerns with the proposed draft amendments to the 2015 Guidelines for exhaust gas cleaning systems (hereinafter referred to as "draft amendments"), as discussed below.

## Discussion

3 IACS understands that when approving exhaust gas monitoring systems and discharge water monitoring systems, in general, confirmation of compliance with the EGCS Guidelines should be carried out. However, in order to ensure the reliability of the monitoring system in a realistic condition expected on board a ship, IACS considers it necessary to conduct environmental testing as part of the approval of the systems, as stated in the *2016 Guidelines for approval of ballast water management systems (G8)* (resolution MEPC.279(70)) and the *Revised Guidelines and Specifications for Pollution Prevention Equipment for Machinery Space Bilges of Ships* (resolution MEPC.107(49)). Therefore, IACS believes it necessary to refer to the provisions for environmental testing in the EGCS Guidelines. This can be achieved by making reference to IACS UR E10, that is also referred to in resolution MEPC.279(70). Consequently, it is proposed that in the draft amendments a new paragraph 5.2.2 is added and paragraph 10.2**bis**.2 is modified as follows (additions/deletions):

"5.2.2 Monitoring system should pass the environmental testing in accordance with IACS UR E10 as amended, Test Specification for Type Approval."

"10.2**bis**.2 The discharge water monitoring system should be approved by the Administration. The monitoring and recording equipment should pass the environmental testing in accordance with IACS UR E10 as amended, Test Specification for Type Approval."

4 Regarding paragraph 4.1.1 of the draft amendments, IACS is of the view that the environmental testing provisions may be applied to an EGCS that is approved by Scheme A because some systems approved by Scheme A also have a monitoring device depending on the manufacturer's design. In this regard IACS believe it is necessary to modify paragraph 4.1.1.3 of the draft amendments as follows (additions/deletions):

".3 production range approval. If a continuous exhaust gas monitoring system is fitted, the monitoring equipment should pass the environmental testing taking into account the test standards acceptable to the Administration or the test standards laid down and maintained by the recognized organization.\*

\* Refer to IACS Unified Requirement E10 as amended, Test Specification for Type Approval."

5 During the discussion in the Correspondence Group on paragraph 4.4.8 of the draft amendments, IACS advised that it is not clear as to whether the provisions for the exhaust gas monitoring system specified in section 6 (for Emission Testing) are to be applied to the exhaust gas monitoring system regarding daily spot checks. As it is very important to make clear what provisions are to be applied to the monitoring system for daily spot checks, IACS suggests a sentence is added at the end of paragraph 4.4.8 to the draft amendments as follows (additions/deletions).

"4.4.8 Under Scheme A, if a continuous exhaust gas monitoring system is not fitted, a daily spot check of the Emission Ratio for a duration of not less than 5 minutes at a minimum recording frequency of 0.1 Hz at normal working condition for each outlet to the atmosphere should be undertaken to verify compliance in conjunction with the continuous monitoring of the parameters stipulated in 4.4.7. The exhaust gas readings should be allowed to stabilize before commencing recording. Readings from the calibration procedure should be automatically recorded or noted in a calibration protocol. Emission values, which are used to determine the Emission Ratio, obtained after stabilization should be recorded. If a continuous exhaust gas monitoring system

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is fitted, only daily spot checks of the parameters listed in paragraph 4.4.7 would be needed to verify proper operation of the EGC unit. The exhaust gas monitoring system for the daily spot check should meet the requirements of chapter 6."

6 In cases where exhaust gases leak from the damper of a bypass line, the exhaust gases leaking to the bypass lines are released to the atmosphere without monitoring by the exhaust gas monitoring system. Therefore, IACS would propose to add a new paragraph 3.2 to the draft amendments as follows (additions/deletions):

"3.2 In cases where bypass lines are arranged on board, appropriate measures, such as an air seal, should be taken to prevent leakage of exhaust gases from the damper to bypass lines."

7 IACS considers that currently it is not clear what kind of function should be provided to the data recording and processing device. Therefore, IACS proposes the following changes to paragraph 7.2 of the draft amendments in order to provide the necessary clarity (additions/deletions):

"7.2 The recording and processing device should whenever the EGCS is in operation, the data described in 4.4.7, 5.4.2 and 10.3, as applicable, including overboard discharges from any associated tanks within the system, against UTC and ship's position as given by a Global Navigational Satellite System (GNSS) and whether the ship was inside or outside an Emission Control Area as given by regulation 14.3 at that time. The device should also be capable of:

- .1 (Scheme B only) being automatically set, or pre-set, with the Emission Ratio limit value as appropriate to the sea area, in relation to regulation 14.3, where the ship is operating, and recording this value;
- .2 being automatically set, or pre-set, with the applicable overboard pH limit value, and recording this value;
- .3 being automatically set with the applicable PAH limit value, and recording this value
- .4 (Omitted)
- .5 being pre-set with the applicable turbidity limit value, and recording this value; and
- .6 (Omitted)."

8 IACS considers that clarification should be provided on making non-compliant reports clearly identifiable so that compliance can be easily verified. Therefore, IACS would propose to add the following sentence at the end of paragraph 7.5 of the draft amendments (additions/deletions):

"7.5 The device should be capable of downloading a copy of the recorded data and reports in a readily useable format. Such copy of the data and reports should be available to the Administration or port State control as requested. These reports should make non-compliant events clearly identifiable so that compliance can be easily verified."

9 Regarding the washwater drain (leakage from washwater line tanks and equipment), IACS considers that the washwater drain should also be addressed by the provisions regarding discharge water. Therefore, IACS would propose the following new paragraph 10.1.8 of the draft amendments (additions/deletions):

**"10.1.8 Discharge of washwater drain**

10.1.8.1 Drainage leaked from EGC unit and washwater tanks which is to be discharged overboard should comply with the criteria in 10.1.7."

10 IACS considers that the type of EGCS called "open-loop scrubbers" without treatment equipment, is not sufficiently considered in paragraph 10.1.4.1 of the draft amendments. In this regard, the following modification is proposed (additions/deletions):

"10.1.4.1 The discharge water treatment system should be designed to minimize suspended particulate matter, including heavy metals and ash. The turbidity of the discharge water, following treatment equipment, including any reactant dosing, but before any other dilution unit, if used, should meet the criteria below. The limit should be recorded in the ETM-A or ETM-B."

11 There is a possibility that the turbidity correction formula for PAH may be different depending on the experiment method for developing the correction formula. Therefore, IACS considers that it is necessary to unify the experiment method including the applicable test reagent for development of the correction formula.

**Action requested of the Sub-Committee**

12 The Sub-Committee is invited to consider the foregoing comments and proposals and take action as appropriate.

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