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COMMISSION STAFF WORKING DOCUMENT

For the Council Shipping Working party

IMO – EU Information paper to be submitted to the 71st session of the Marine Environment Protection Committee of the IMO, London from 3 - 7 July 2017 (MEPC 71) concerning information on the need for improved Washwater Data Collection

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IMO – EU Information paper to be submitted to the 71st session of the Marine Environment Protection Committee of the IMO, London from 3 – 7 July 2017 (MEPC 71) concerning information on the need for improved Washwater Data Collection

PURPOSE

The document in Annex contains a draft Union submission to the 71st session of the Committee on Marine Environment Protection (MEPC 71) of the IMO concerning the need for improved Washwater Data Collection. It is hereby submitted to the appropriate technical body of the Council with a view to achieving agreement on transmission of the document to the IMO prior to the required deadline of 28 April 2017[1].

MARPOL Annex VI requirements, with regard to limitation of SOx emissions, are implemented in EU law in Directive 2016/802/EU relating to a reduction in the sulphur content of certain liquid fuels. The 2009 IMO Guidelines for Exhaust Gas Cleaning Systems (EGCS) are referred to in Annex II of Directive 2016/802/EU in relation to conditions for the use of Exhaust Gas Cleaning Systems under that Directive. The Guidelines were revised in 2015 by way of Resolution MEPC.259(68), and the 2015 Guidelines for Exhaust Gas Cleaning Systems stipulate discharge criteria for washwater from EGCS.

Improved knowledge about the contents of washwater discharge may influence the flexibility Member States have in their choices to achieve the mandatory quality objectives laid down in existing EU rules regulating surface water quality (Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (the 'Water Framework Directive') and Directive 2008/56/EC of the European Parliament and of the Council establishing a framework for community action in the field of marine environmental policy (the 'Marine Strategy Framework Directive')) as well as the emissions of priority substances and other pollutants including excess nutrients to water (Water Framework Directive and Directive 2008/105/EC[2] of the European Parliament and of the Council on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council).

In addition, on-board exhaust gas cleaning systems are listed in Commission Implementing Regulation (EU) 2017/306 indicating design, construction and performance requirements and testing standards for marine equipment, which refers to IMO Resolution MEPC.259(68), and

[1] The submission of proposals or information papers to the IMO, on issues falling under external exclusive EU competence, are acts of external representation. Such submissions are to be made by an EU actor who can represent the Union externally under the Treaty, which for non-CFSP (Common Foreign and Security Policy) issues is the Commission or the EU Delegation in accordance with Article 17(1) TEU and Article 221 TFEU. IMO internal rules make such an arrangement absolutely possible as regards existing agenda and work programme items. This way of proceeding is in line with the General Arrangements for EU statements in multilateral organisations endorsed by COREPER on 24 October 2011.

[2] As amended by Directive 2013/39/EU

therefore have to comply with the requirements of Directive 2014/90/EU on marine equipment and repealing Council Directive 96/98/EC.

The said draft Union submission therefore falls under EU exclusive competence.

MARINE ENVIRONMENT PROTECTION COMMITTEE
71st session
Agenda item X

MEPC 71/INF X
XX April 2017
Original: ENGLISH

REVIEW OF THE 2015 GUIDELINES FOR EXHAUST GAS CLEANING SYSTEMS (RESOLUTION MEPC. 259(68))

The need for improved Washwater Data Collection

Submitted by the European Commission on behalf of the European Union

SUMMARY

Executive summary:	The 2015 Guidelines for Exhaust Gas Cleaning Systems (EGCS) stipulate discharge criteria for washwater from EGCS. An important aspect of the EGCS Guidelines is however that the existing criteria should be open to revision on the basis of improved information from washwater sampling and analysis. This document brings to the attention of the Committee an example of an existing standard procedure, developed by industry, in the context of the European Sustainable Shipping Forum (ESSF), for the sampling and analysis of EGCS washwater. As more wash water sampling campaigns are ongoing or planned, this submission identifies the need for harmonisation of procedures to ensure an adequate confidence level and comparability in different washwater sampling and analysis campaigns.
Strategic direction:	2, 7.1, 7.2, 7.3, 8, 10
High-level action:	2.0.1, 7.2.2, 7.3.1
Output:	Revision of the 2015 Guidelines for Exhaust Gas Cleaning Systems (resolution MEPC.259(68))
Action to be taken:	Paragraph 10, 11
Related documents:	Resolution MEPC.259(68), 2015 Guidelines for Exhaust Gas Cleaning Systems, MEPC 69/19, MEPC 69/21

Introduction and background

1 Following the adoption, by resolution MEPC.184(59), of the 2009 Guidelines for Exhaust Gas Cleaning Systems (EGCS), and later of their amendment through resolution MEPC.259(68), resulting in the 2015 EGCS Guidelines, substantial experience in certification and verification of EGCS systems has been gained. Further to this, industry has seen an increasing number of EGCS installed on ships, with the large majority of these being of the

wet scrubber type, implying either continuous washwater discharge or, in closed-loop operation, interrupted bleed-off water. The EGCS Guidelines contain special criteria for EGCS washwater, on pH, PAH, turbidity and nitrates, for the certification of EGCS used by different Parties, Flags, Classification Societies, Industry and other organizations. EGCS are recognized as equivalent compliance methods in the context of MARPOL Annex VI, Regulation 4, a conclusion of particular relevance in the context of the 0.10% sulphur limit for fuel oil that entered into force in Emission Control Areas (ECA) from 1 January 2015, and the 0.5% global sulphur limit that will enter into force on 1 January 2020.

2 The present submission follows a previous proposal at the MEPC 69 meeting (see MEPC 69/19) for a new output on the review of the 2015 Guidelines for Exhaust Gas Cleaning Systems (resolution MEPC.259(68)). The Committee agreed to include a new output on "Review of the 2015 Guidelines for Exhaust Gas Cleaning Systems (resolution MEPC.259(68))" in its post-biennial agenda, with three sessions needed to complete the work. Proposed amendments to the 2015 EGCS Guidelines will result from this exercise and the present submission aims to assist in the particular aspect of washwater data collection (Appendix 3 of resolution MEPC.,259(68)).

3 As mentioned above, the 2015 EGCS Guidelines, superseding the earlier version of the 2009 document, include important provisions to guide in different aspects of the certification of EGCS. The focus of the present submission is however strictly on Appendix 3, entitled “Washwater Data Collection”. It follows the initial experience with washwater sampling and analysis, where a growing number of organizations and ships have gradually become more involved and where, in consequence, a remarkable need for guidance on the issue has been reported.

4 The relevance of washwater data collection is made clear in the preamble to the 2015 EGCS Guidelines, where Administrations are invited *to provide for collection of data as described in Appendix 3* of the Guidelines. On top of this clear direct invitation, Appendix 3 elaborates even further on why washwater collection data is needed for further substantiated revision of washwater discharge criteria. Only improved and reliable information on types and quantities of pollutants in the washwater will allow for the development of adequate discharge criteria and associated control measures. Recognizing that the washwater discharge criteria in section 10 of the 2015 EGCS Guidelines are intended to act as initial guidance for implementing EGCS designs, Appendix 3 becomes, in this sense, a fundamental instrument in allowing, and indeed promoting, future initiatives to bring more data on washwater discharge contents and its effects. The present submission reiterates and underlines the relevance of Appendix 3 as one main mechanism to allow future development of the 2015 EGCS Guidelines, while recognising the need for its improvement. Experimental and scientific-based evidence is fundamental for development, improvement, creation or consolidation of the relevant criteria in the Guidelines.

Analysis of the issue

5 The European Sustainable Shipping Forum (ESSF) was created, bringing together 28 EU Member States, the European Commission and 32 maritime organisations, to enable a structured dialogue, inter alia:

.1 on the monitoring of compliance with the sulphur regulations;

.2 on creating the framework conditions for the use of scrubber technology in shipping by addressing its technical, economic and operational aspects;

.3 on the use of marine liquefied natural gas (LNG) as ship fuel;

.4 on the increasing use of EGCS technology in shipping, in particular its technical, economic, environmental and operational aspects;

.5 on coordinating research and development activities and encouraging innovation;

.6 on exploring all available financing opportunities;

.7 on considering compatibility with the EU's broader environmental protection objectives (e.g. the effects of the use of EGCSs); and

.8 on identifying potential improvements in sustainability and competitiveness.

The need to propose amendments to the 2015 EGCS Guidelines and, as highlighted in the present submission, also to bring the important topic of washwater sampling and analysis to the attention of the Committee, has emerged in the discussions at the ESSF Sub-Group on EGCSs.

6 Following the context above, having had no evidence of any other submission to this Organization, or any information to date that can be contextualized in the washwater data collection in Appendix 3 of the 2015 EGCS Guidelines, the present submission reiterates the relevance of such data. The importance of information on washwater discharge contents is objectively and successfully outlined in the 2015 EGCS Guidelines. Significant sampling & analysis experience has already been gained by industry, ship owners and authorities but the need for a harmonised procedure is increasingly evident.

7 Whilst Appendix 3 of the 2015 EGCS Guidelines is clear about the relevance and objectives of washwater data collection, indicating important elements for consideration in the planning and preparation of sampling & analysis exercises, it is considered not entirely sufficient to ensure harmonisation across different possible initiatives and sources of data. Comparability of results, regression statistics and comparison of a growing amount of differently sourced data will only be possible on the basis of comparable preparation, standards, procedures, laboratory accreditation, amongst other aspects. The relevance of such considerations is particularly high in the context of a growing number of EGCS installations, also in anticipation of the entry-into-force of the 2020 global sulphur cap, and, concomitantly, in the context of the growing number of initiatives to sample and analyse the washwater discharges from ships. The understanding of the risk and impact from EGCS washwater discharges (from one or multiple ships equipped with EGCS) to and on the environment, and thus any thorough impact assessment or evaluation of their acceptability, are highly dependent on the quality, reliability and scientific certainty of washwater data collection exercises. Guidelines for washwater sampling are, for these reasons, very important and should be considered as a priority development.

8 The need for guidelines for sampling and analysis of EGCS washwater is a fundamental conclusion from the existing, yet early, experience in this field, undertaken by both the industry and authorities from the EU Member States. Equipment manufacturers are interested in allowing the demonstration of the full environmental potential of EGCS, ship

owners in the demonstration of compliance of their installed systems, and authorities in receiving assurance that the risk of negative environmental impact is sufficiently mitigated. The principle of transparency should therefore be promoted in order to satisfy all parties in a balanced manner and, furthermore, to ensure that the EGCS Guidelines and relevant washwater discharge criteria can be revised on the basis of improved evidence-based analysis.

9 Guidance should be provided on all the stages of washwater sampling and analysis, as for example shown in the table below. The advice should also refer to the sampling of inlet water.

Table 1

Washwater Data Collection – Sample life-cycle approach

Stage	**Objective**	**Description**
1. Preparation	Preparation of the sampling points and confirmation of the working parameters for the combustion unit.	– The life-cycle of the washwater sample starts before its collection. – List of all information related to working parameters, e.g. engine power rating, and washwater flow rates.
2. Collection	To extract a representative sample from the washwater discharge	– Information on sampling kit, including on appropriate containers (appropriate materials, sealability etc). – Advice on procedure for collection of sample. – Information to be recorded, e.g. timing of sampling (in addition to the working parameters above)
3. Handling & Holding	Handling of the collected sample to ensure no corruption of the sample. Holding (storing) of collected samples on board until dispatch for analysis.	– Advice on preservation of sampled volumes – Parameters for refrigerated storage of collected samples, as required by parameter requirements.
4. Transport	Transport of the stored samples to laboratory.	– Transport of samples as a time-critical task. – Advice on adequate transportation conditions.
5. Sample	Sample preparation and	– Sample preparation and analysis

preparation and Analysis	analysis to take place in accredited laboratory.	of selected parameters to take place according to agreed adequate standard methodologies.
6. Disposal	Disposal of collected samples.	– Disposal process to take into account any special consideration of additives or reactants present in the samples.

Action requested of the Committee

10 The Committee is invited to recall the agreement at its 69th session, on a new unplanned output on review of the 2015 EGCS Guidelines (resolution MEPC.259(68), and to note further the information provided and listed below:

.1 Current washwater data-collection initiatives are being undertaken in line with Appendix 3 of the 2015 EGCS Guidelines, but following different procedures.

.2 An example for a protocol for washwater sampling and analysis (SHIP GUIDE SCRUBBER WASH WATER SAMPLE ANALYSIS PROGRAMME – developed by the Exhaust Gas Cleaning Systems Association (EGCSA) and the Association of Port Reception Facility Providers (EUROSHORE) within the framework of the European Sustainable Shipping Forum) is available online at www.egcsa.com/xxxx [Final link will be available mid-April]

11 The Committee is invited to take note of the need for a revision of Appendix 3 of the 2015 EGCS Guidelines to further harmonise washwater data collection. A detailed proposal is planned to be submitted for consideration by the next PPR Sub-Committee, in the context of the revision of the 2015 EGCS Guidelines.