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Subject:	COMMISSION STAFF WORKING DOCUMENT Union submission to the 76 <sup>th</sup> session of the Marine Environment Protection Committee of the International Maritime Organization on aspects and proposals to consider for the draft scope of work developed by the Sub-Committee on Pollution Prevention and Response as regards the evaluation and harmonisation of regulations and guidance on the discharges and residues from Exhaust Gas Cleaning Systems into the aquatic environment, including conditions and areas

Delegations will find attached document SWD(2021) 40 final.

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Brussels, 19.2.2021  
SWD(2021) 40 final

## **COMMISSION STAFF WORKING DOCUMENT**

**Union submission to the 76<sup>th</sup> session of the Marine Environment Protection Committee of the International Maritime Organization on aspects and proposals to consider for the draft scope of work developed by the Sub-Committee on Pollution Prevention and Response as regards the evaluation and harmonisation of regulations and guidance on the discharges and residues from Exhaust Gas Cleaning Systems into the aquatic environment, including conditions and areas**

**Union submission to the 76<sup>th</sup> session of the Marine Environment Protection Committee of the International Maritime Organization on aspects and proposals to consider for the draft scope of work developed by the Sub-Committee on Pollution Prevention and Response as regards the evaluation and harmonisation of regulations and guidance on the discharges and residues from Exhaust Gas Cleaning Systems into the aquatic environment, including conditions and areas**

**PURPOSE**

This Staff Working Document contains a draft Union submission to the 76<sup>th</sup> session of the Marine Environment Protection Committee (MEPC 76) of the International Maritime Organization (IMO).

It concerns upcoming work on the draft output on evaluation and harmonisation of rules and guidance on discharge water from Exhaust Gas Cleaning Systems (EGCS) into the aquatic environment, including conditions and areas. The 74<sup>th</sup> session of the Marine Environment Protection Committee (MEPC 74) included this output in the 2020-2021 agenda of the Pollution Prevention and Response Sub-Committee (PPR). MEPC 74 based their decision on discussions of EU document MEPC 74/14/1. Due to the COVID-19 pandemic, MEPC 75 postponed to MEPC 76 the approval of the draft scope developed at PPR7, with the view to further developing the scope at PPR 9 in 2022.

Several studies and more data on the impact of EGCS operations on the environment, in particular of discharge waters from open-loop mode operation, are now available, which build on the previous EU document PPR 7/11. As a consequence, areas where further clarification and scientific support is required in order to develop globally harmonised rules have been identified. The present document relates to Union concerns as regards the impacts of EGCS on human health and the marine environment. It addresses the urgent need to conclude the work on the required risk and impact assessment framework and on the possible development of regulations restricting the discharges from EGCS.

The document envisages to propose an amendment to the draft scope. Ahead of its approval by MEPC 76 and, on the assumption that the scope will be approved, it also already elaborates, in its annexes, on various elements, aiming to achieve early consensus on the scope. In particular, in the appendix to the Union's document, it proposes draft guidelines and regulations for consideration by the MEPC.

The draft guidelines and regulations in question were initially planned for submission to PPR 8 (cfr Council Working Paper WK 13923 and 14080/2020). It should be noted that they have already been discussed, revised and approved in principle during meetings of the Council's Working Party on Shipping on 2 and 16 December 2020. The current revised document ensuing from these discussions should thus be used as a sensible way forward for a submission to MEPC76.

**EU COMPETENCE**

Article 8 and Annex II of Directive 2016/802/EU relating to a reduction in the sulphur content of certain liquid fuels lay down conditions for the use of EGCS by cross-referencing the 2009 IMO Guidelines on Exhaust Gas Cleaning Systems (adopted as IMO Resolution MEPC.184(59)).

According to these IMO Guidelines, wash-water resulting from EGCS shall not be discharged into the sea, including enclosed ports, harbours and estuaries, unless it is demonstrated by the ship operator that such wash-water discharge has no significant negative impacts on, and does not pose risks to, human health and the environment. Moreover, considering that the EGCS discharge water contains hazardous and polluting substances, the use of such systems calls into question Article 195 of UNCLOS, under which States shall act so as not to transfer, directly or indirectly, damage or hazards from one type of pollution to another.

Furthermore, in relation to water quality, Member States have to meet the obligations stemming from existing EU rules. These are laid down in the Water Framework Directive<sup>1</sup>, Marine Strategy Framework Directive<sup>2</sup> and Directive 2008/105/EC on environmental quality standards in the field of water policy, especially Article 3<sup>3</sup>.

In addition, on-board EGCS are listed in the Commission Implementing Regulation (EU) 2020/1170, which lays down the design, construction, performance requirements and testing standards for equipment falling within the scope of application of Directive 2014/90/EU<sup>4</sup> on marine equipment.

This Implementing Regulation also refers to the IMO Resolution MEPC.259(68) on page 44. Therefore, any amendments to that IMO Resolution will affect the relevant binding requirements contained in Directive 2014/90/EU<sup>5</sup>.

In light of all of the above, the present draft Union submission falls under EU exclusive competence.<sup>6</sup> It is in line with the Union's ambitions as outlined in the European Green Deal<sup>7</sup>, notably on Sustainable and Smart Mobility<sup>8</sup> and Zero Pollution. This Staff Working Document is presented to establish an EU position on the matter and to transmit the document to the IMO prior to the required deadline of 10 March 2021.<sup>9</sup>

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<sup>1</sup> OJ L 327, 22.12.2000, p. 1–73; 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

<sup>2</sup> OJ L 164, 25.6.2008, p. 19–40; Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy

<sup>3</sup> OJ L 348, 24.12.2008, p. 84–97; as amended by Directive 2013/39/EU. Several substances, such as heavy metals and polyaromatic hydrocarbons, listed in Annex I of the Directive are contained in EGCS discharge waters.

<sup>4</sup> OJ L 264, 12.8.2020, p. 1–269

<sup>5</sup> OJ L 257, 28.8.2014, p. 146.

<sup>6</sup> An EU position under Article 218(9) TFEU is to be established in due time should the IMO Maritime Safety Committee eventually be called upon to adopt an act having legal effects as regards the subject matter of the said draft Union submission. The concept of '*acts having legal effects*' includes acts that have legal effects by virtue of the rules of international law governing the body in question. It also includes instruments that do not have a binding effect under international law, but that are '*capable of decisively influencing the content of the legislation adopted by the EU legislature*' (Case C-399/12 Germany v Council (OIV), ECLI:EU:C:2014:2258, paragraphs 61-64).

<sup>7</sup> COM(2019)640

<sup>8</sup> COM(2020) 789 final, SWD(2020) 331 final

<sup>9</sup> 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.

MARINE ENVIRONMENT PROTECTION  
COMMITTEE  
76th session  
Agenda item 9

MEPC 76/XX/YY  
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## **POLLUTION PREVENTION AND RESPONSE**

**Proposals and aspects to consider for the draft scope of work for the evaluation and harmonisation of rules and guidance on the discharges and residues from EGCS into the aquatic environment, including conditions and areas**

**Submitted by the European Commission on behalf of the European Union**

### **SUMMARY**

*Executive summary:* MEPC 76 has still to approve the draft scope of work concerning the evaluation and harmonisation of rules and guidance on the discharges and residues from EGCS into the aquatic environment, including conditions and areas. The need to address this matter is, however, urgent. This document also proposes to amend the draft scope and, while respecting IMO working procedures and arrangements, to already develop elements for the consideration of the Committee. The aim of this approach is to achieve early consensus on the scope and its way forward. In particular, the annex to this document presents guiding principles and early proposals for relevant draft guidelines and regulations to address key aspects and develop the elements outlined in Parts 1-4 of the draft scope as set out in Annex 11 to document PPR 7/22/Add.1. The documents is presented for the Committee's consideration, pending its approval of the draft scope, in view of completion at PPR9 as appropriate.

*Strategic direction, if applicable:* 1

*Output:* 1.23

*Action to be taken:* Paragraph 7

*Related documents:* PPR 7/12, PPR 7/12/1, PPR 7/12/2, PPR 7/12/3 and Corr.1, PPR 7/12/4, PPR 7/12/5, PPR 7/12/6, PPR 7/12/7, PPR 7/22, PPR 7/22/Add.1, MEPC 74/14/1, MEPC 74/14/7, MEPC 74/14/8, MEPC 74/14/9, PPR 7/INF.9, PPR 7/INF.18, PPR 7/INF.22, PPR 7/INF.23, MEPC 74/INF.10, MEPC 74/INF.24, MEPC 74/INF.27,

## Background

1 MEPC 74 approved a new output on "Evaluation and harmonization of rules and guidance on the discharge of liquid effluents from EGCS into waters, including conditions and areas" in the 2020-2021 biennial agenda of the PPR Sub-Committee with a target completion year of 2021. The GESAMP EGCS Task Team for assessing the available information on environmental effects of EGCS discharge water also submitted a comprehensive report, including valuable recommendations.

2 After a significant debate at PPR 7, the Sub-Committee agreed to the revision of the title and the draft scope of work for output as set out in Annex 11 to document PPR 7/22/Add.1, with a view to approval by MEPC 75. However, this approval was postponed to MEPC 76 and consequently its related work to 2022, when the following session of the PPR Sub-Committee would take place (PPR9). The EU is seriously concerned about the unintended consequences that this postponement may cause and would like to recall document MEPC 74/14/1 recommending including as a matter of urgency the proposed output in the 2020-2021 biennial agenda of the Committee to be completed in no more than two sessions.

3 The EU would like to reiterate the urgent need for uniform and unambiguous regulatory measures to better control the potential pollution and reduce the economic impacts both for the industry and Administrations. There is scientific evidence on the potential toxicity of EGCS water discharges based on knowledge Member States have from sampling and analyses of EGCS discharge water<sup>10</sup>. In the EU alone, the discharge into the aquatic environment of discharge waters from EGCS systems in 2019 represented in volume the main discharge (78%) from ships if ballast water is excluded. This figure is set to increase as the number of these systems increases, requiring urgent consideration to avoid irreversible pollution of the marine environment.

4 This urgency is even more relevant as in the absence of progress, some concerned States may ban the use of open-loop EGCS systems in their waters, including on the basis of the precautionary principle as appropriate. The European Commission has moreover issued its European Green Deal<sup>11</sup> initiative, under which the EU plans to accelerate the shift to sustainable and smart mobility<sup>12</sup>, and to take action in particular on maritime transport to make it fully decarbonised by 2050 and drastically less polluting to active a toxic-free environment. Furthermore, it is important to recall Article 195 of UNCLOS whereby States, in taking measures to prevent, reduce and control pollution of the marine environment, shall act so as not to transfer, directly or indirectly, damage or hazards from one area to another or transform one type of pollution into another.

5 Based on the concerns expressed and taking into account investment were already made by industry to comply with Regulation 14 in the most cost-effective manner, the document proposes an amendment to the draft scope set out in 'Part 3: Regulatory matter' of Annex 11 to document PPR 7/22/Add.1. The intent of the editorial proposal would be to reinforce the need to develop regulatory measures and instruments.

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<sup>10</sup> PPR 6/INF.20 – Results from a German project on washwater from Exhaust Gas Cleaning Systems

<sup>11</sup> COM(2019)640

<sup>12</sup> COM(2020) 789 final, SWD(2020) 331 final

6 Furthermore, PPR 7 also invited interested Member Governments and international organizations to submit proposals and comments to PPR 8 in accordance with the scope of work, provided that the scope of work was approved at MEPC 75. Acknowledging that MEPC 76 still has to approve point 2.21 of the report of PPR 7 as set out in MEPC 75/10, but in view of the urgency, the document makes proposals, on the assumption that the scope will be approved and while respecting IMO working procedures and arrangements, to address the various elements of the scope of work with the aim to achieve early consensus. In view of this, the Appendix to this paper includes specific criteria and recommendations, proposes draft guidelines and regulations for consideration by the Committee, in relation to the draft scope of work.

### **Action requested of the Committee**

7 The Committee is invited to consider:

- the following editorial proposal as introduced in paragraph 5 to amend the draft scope of work set out Annex 11 to document PPR 7/22/Add.1:

#### **Part 3: Regulatory matter**

- Assess the state of technology for EGCS discharge water treatment and control.
  - Identify, and develop ~~as appropriate, possible~~ regulatory measures and instruments.
- the appendix to this document and its annexes, proposing draft guidelines and regulations, as reference documents for further elaboration within the working group of PPR 9 in order to complete this work at that session.



## **APPENDIX**

This Appendix, in the main document and its Annexes, provides a series of principles, criteria and guidance for Parts 3 and 4 of the scope of work being proposed by the IMO. In particular, the Annexes present draft framework guidelines for risk and impact assessment (Part 1-A and Part 1-B of the scope of work) as well as for delivery of EGCS residues to port reception facilities (Part 2 of the scope of work).

### **General principles**

1 In order to progress this work, some guiding principles should be established and followed. In all aspects of the development of possible new regulatory measures and guidance for the discharge water from EGCS, the precautionary principle should be applied as appropriate also taking into account the sensitivity of the specific marine area and of assessment of impacts related to that marine area.

2 Due to the need for a harmonised approach in the implementation of the regulatory measures, to be adopted as appropriate, on the EGCS discharge waters including conditions and areas, a harmonised guidance for a common risk and impact assessment may be used. The principles adopted for this guidance should then be applied at the different levels in question (regional, national, local, port, etc.) to assess the impact of discharge water discharges. Impacts of the discharge should be identified and evaluated with respect to the environment, the crew and human populations at large.

3 As set out in Paragraph 10.4.1 of the “2015 Guidelines for EGCS“, if EGCS residues are collected in any form, then these should be considered waste types and disposed of into Port Reception Facilities exempt as provided otherwise (see Annex 2, Paragraph 3.1). Such residues should not be discharged to the sea and also should not be mixed with other waste streams.

4 Port and Coastal States are invited to undertake risk assessments and impact assessments to appropriately regulate the discharge of discharge water in ports, harbours, estuaries, coastal and other territorial waters. This should be done at the appropriate level and be conducted or coordinated with neighbouring States. Alternatively, port and coastal States can take into consideration risk assessments and impacts assessments undertaken by another Party.

5 When restricting EGCS discharges, consideration could be given to investments made by industry to comply with Regulation 14, taking however into account that the choice of EGCS as an alternative compliance option under Regulation 4 is also based on favourable economic competitiveness considerations. In any case, the cost of not restricting EGCS discharges should also be factored in, and the sooner such measures are taken, the lower the consequent economic impact will be on industry as well as on port and coastal states.

### **Part 3 and 4 of the scope of work**

6 In order to control the environmental impacts of discharge water from EGCS, appropriate regulations should be developed. To that extent, in Annex 3 a new draft regulation in MARPOL Annex VI is proposed to possibly assist Parties to regulate the EGCS



discharge of discharge water in ports, harbours, estuaries or other enclosed sea areas, and other sea areas under their jurisdiction. In order to clarify definitions as regards discharges resulting from operating EGCS and ensure coherence of terminology across relevant regulations and guidelines it is proposed to include in Annex 2 and 3 the definition of 'discharge water' as in draft MEPC Resolution on the 2020 Guidelines for EGCS following adoption by the Committee. It should be noted however that while the 'discharge water' definition does not fall under the definition of operational waste according to Regulation 1.12 of MARPOL Annex V it can however be considered as already covered by the definition of 'emissions' to atmosphere or water set out in Regulation 2.7.

7 Administrations should notify the Organization of local/regional restrictions/conditions on the discharge water from EGCS as outlined in Annex 3.

8 The physical, chemical, ecotoxicological and toxicological data for a number of chemicals in discharge water are available in the literature. In addition, there is science-based indication of cumulative and synergistic effects of the chemical composition present in the discharge water, and not all substances therein have been identified yet. It is proposed for further consideration to develop a list of substances found in discharge water, with information on their concentration and sampling and analysis methodologies, toxicity, chemical fate or behaviour and other pertinent aspects, taking into account the Annex to document PPR 7/12. Such a database could follow the example of the online "GESAMP-BWWG Database of chemicals most commonly associated with treated ballast water". Any newly identified substance could then be added and the risk and impact assessments could be revised if necessary. It is also recommended to place this database in IMO GISIS under a separate new item titled "Chemicals in EGCS Discharge Water" and to incorporate current knowledge<sup>13,14,15</sup> of crucial substances with detrimental impacts on the marine environment and biota most commonly associated with EGCS discharge water as identified by the GESAMP EGCS Task Team and agreed by the Sub-Committee.

9 As regards the responsibility of ship operators to populate databases, IMO Resolution MEPC.184(59) should be taken into account, whereby wash-water resulting from EGCS shall not be discharged into the sea, including enclosed ports, harbours and estuaries, unless it is demonstrated by the ship operator that such wash-water discharge has no significant negative impacts on and does not pose risks to human health and the environment. Requirements for data population should, however, avoid causing an unintended excessive administrative burden through the need to conduct complex risk and impact assessments before the EGCS guidelines are made considerably more stringent.

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<sup>13</sup> German Environment Agency, 'Environmental Protection in Maritime Traffic –Scrubber Wash Water Survey', Final Report, September 2020

<https://www.umweltbundesamt.de/publikationen/environmental-protection-in-maritime-traffic>

<sup>14</sup> Royal Belgian Institute of Natural Sciences (RBINS). 'Potential impact of wash water effluents from scrubbers on water acidification in the southern North Sea' Final project report, 2020. [http://biblio.naturalsciences.be/library-1/rbins-staff-publications-2020/Scrubber\\_report.2020](http://biblio.naturalsciences.be/library-1/rbins-staff-publications-2020/Scrubber_report.2020)

<sup>15</sup> Chalmers University, "Current knowledge on impact on the marine environment of large-scale use of Exhaust Gas Cleaning Systems (scrubbers) in Swedish waters" to be published (tbc)

## ANNEX 1

### DRAFT FRAMEWORK GUIDELINES FOR RISK AND IMPACT ASSESSMENT OF DISCHARGE WATER FROM EXHAUST GAS CLEANING SYSTEM

#### 1 INTRODUCTION

1.1 These guidelines are intended to assist port and coastal States that may undertake, or decide to undertake, risk assessments and impact assessments to assess the potential impact of discharge water from Exhaust Gas Cleaning Systems (EGCS) before developing and implementing controls on this discharge from ships including the proper management and disposal of EGCS waste types into port reception facilities.

1.2 In all aspects of risk and impact assessment the precautionary approach should take precedence in any analysis and follow-up action.

#### 2 DEFINITIONS

*Discharge water:* Any water from an EGCS to be discharged overboard.

*Washwater:* Cleaning medium brought into contact with the exhaust gas stream for the reduction of SO<sub>x</sub> and particulate matter.

*Bleed-off water:* Aqueous solution removed from the washwaters of an EGCS operating in closed-loop mode to keep its required operating properties and efficiency.

*EGCS residue:* Material removed from the washwater or the bleed-off water by a treatment system or discharge water that does not meet the discharge criterion, or other residue material removed from the EGCS.

*Emissions:* any release of substances, subject to control by this Annex, from ships into the atmosphere or sea according to MARPOL, Annex VI, Regulation 2.7.

#### 3 APPLICATION

3.1 These guidelines can be used by the port and coastal state when undertaking risk and impact assessments to ascertain whether discharge water can be discharged in their ports, harbours, estuaries, or coastal and other territorial waters. This can be done at local, national or regional level and be conducted at least in cooperation with neighbouring states.

#### 4 CRITERIA TO BE CONSIDERED WHEN UNDERTAKING A RISK ASSESSMENT

A risk assessment can involve the following non-exhaustive list of steps:

4.1 Collection and collation of the following existing data and information, including where applicable provision of data from ship operators:

- The number of EGCS installations on ships trading in the area, their operating conditions, their frequency of use including where discharges occur, and the volumes discharged;

- Available data on actual composition and pollutants found in EGCS discharge water, including any neutraliser used this should include at least the following 'priority hazardous substances', i.e. including but not limited to: cadmium, lead, mercury, nickel, anthracene, benzene, benzo(a)pyrene, benzo(b)fluoroanthene, benzo(k)fluoroanthene, benzo(g,h,i)perylene, fluoranthene, indeno(1,2,3cd)pyrene and naphthalene, as well several other contaminants commonly found in discharge waters (e.g. vanadium, chromium, copper, zinc, fluorene, chrysene and pyrene).
- Hazard assessments of the substances present in EGCS discharge water, including their persistence, tendency to bioaccumulate, carcinogenicity, mutagenicity and reproductive toxicity (CMR), neurotoxicity, endocrine disruptive potential or other toxicity for human health, the environment or marine life;
- Existing threshold concentrations (PNEC, Predicted No Effect Concentration or EQS, Environmental Quality Standards) for each substance (in water, sediment and/or biota) indicating the level in the environment below which there should be no harm (lethal or sub-lethal) to the aquatic ecosystem or human health, taking account of the likely bioavailability of the substances where relevant;
- Information on how chemical, biological and physical characteristics of the receiving environments, including their pH and salinity, could affect the level of risk.

#### 4.2 The following analyses:

- Use of the whole-effluent toxicity approach to assess the overall risk from the discharge water;
- Generic modelling for fate and dispersion of chemicals and specifically heavy metals in discharge water of EGCS (e.g. based on the MAMPEC-BW model) in order to assess the Predicted Environmental Concentrations (PEC) of chemicals in receiving water bodies;
- The risk posed by the substances in the discharge water to the organisms in the receiving environments, or to human health, based on the hazard and threshold information defined above and on the following:
  - the natural background concentrations of substances present in the discharge water;
  - whether the chemicals in the discharge water could result in increased/reduced risks, taking account of the combined toxic effects of mixtures of chemicals and of potential cumulative and long-term (chronic) effects;
  - specific reactions that could occur between the components of discharge water and the chemical/physical elements (e.g. temperature, salinity, pH) of the natural environment and other substances already present in the receiving water and that could increase the risk posed by the discharged chemicals to a certain environment or to a specific trophic level, food-web structure, organism or ecosystem; and
  - effects of the discharge water on the pH of the receiving environment taking into account potential climate-change related ongoing effects on this parameter.
- Modelling the volume of discharge water discharges from the ships in various operating modes at full steam, when entering a port and when at berth (including multiple simultaneous discharges);

- Scenarios on the potential variations in the use of this technology in the future, including the dependency on fuel type.

## 5 IMPACT ASSESSMENT

The risk assessment approach identified above may be applied to the specific receiving environment that is being assessed, at the relevant geographical levels, taking account of the type of water body i.e. marine (open water), coastal and other territorial waters (within 12 nm from the coastline), estuarine, large harbour and small enclosed harbour environments and areas in the vicinity of dense shipping routes. In addition, saltwater, brackish water and freshwater situations and the effect of tides or their absence may be considered, as appropriate.

5.1 Application of risk assessment approach to the specific receiving environment by identifying and defining:

- The existing status (ecological, chemical, environmental) of the receiving water bodies;
- The likely effect on status of the discharge water discharges, in particular whether the discharge could result in failure to meet the objectives of the applicable environmental legislation;
- The specific environmental stressors that may be affected by discharge water discharges; and,
- The adverse effects arising from these stressors.

5.2 Incorporation the following steps for the specific receiving environment:

- A systematic review of the positive and negative consequences of impacts of the discharge waters impacts.
- Specific modelling for physical distribution and fate of the components in discharge water and comparing the PNEC and PEC.
- Identification of the overall vulnerability of and potential damage to the environment, habitats or organisms that may be impacted, and the potential cost of restoration.
- The identification of any direct or indirect socio-economic and human health impacts of the discharge water discharge.
- Whether there are any seasonal or temporal impacts that need to be considered.
- Identification of any practical mitigation measures that could minimise the potential impacts identified at this stage.

The adoption of a ban on discharge water from EGCSs and should be implemented in areas where any of the following criteria are met:

1. Environmental objectives in the areas are not met, e.g. good chemical status, good ecological status or good environmental status are not achieved.
2. The discharge of EGCS effluents implies a risk of deteriorating the environment.
3. The EGCS discharge water conflicts with the conventions and regulations formulated to protect the marine environment (see UNCLOS Article 195 etc.).

5.3 Uncertainty analysis can be undertaken by identifying whether the potential adverse effects from discharge water discharges are well understood. This may include the effects on

the immediate and downstream environment taking into account both spatial and temporal factors.

5.4 When restricting EGCS discharges, consideration could be given to investments already made by industry to comply with Regulation 14, also taking however into account that the choice of EGCS as an alternative compliance option under Regulation 4 was primarily based on considerations of favourable economic competitiveness. In any case, the cost of not restricting EGCS discharges should also be factored in, and the sooner such measures are taken, the lower the consequent economic impact will be on industry as well as on port and coastal states.

## ANNEX 2

### DRAFT GUIDANCE REGARDING THE DELIVERY OF EGCS RESIDUES TO PORT RECEPTION FACILITIES

#### 1 INTRODUCTION

These best practices are intended to assist both ship operators and port States in assuring the proper management and disposal of EGCS waste types into port reception facilities.

#### 2 DEFINITIONS

*Discharge water:* Any water from an EGCS to be discharged overboard.

*Washwater:* Cleaning medium brought into contact with the exhaust gas stream for the reduction of SOx and particulate matter.

*Bleed-off water:* Aqueous solution removed from the washwater of an EGCS operating in closed-loop mode to keep its required operating properties and efficiency.

*EGCS residue:* Material removed from the washwater or the bleed-off water by a treatment system or discharge water that does not meet the discharge criterion, or other residue material removed from the EGCS.

*Emissions:* according to MARPOL, Annex VI, Regulation 2.7, means any release of substances, subject to control by this Annex, from ships into the atmosphere or sea.

#### 3 BEST PRACTICE

##### **Discharge water from open and closed-loop EGCSs**

3.1 In sea areas *including* ports, harbours and estuaries where the discharge of EGCS discharge water is prohibited, ships using an EGCS should keep their discharge water on board in dedicated holding tank(s) for delivery to port reception facilities, either in the port of call or in the next port of call able to accept the discharge water accordingly. However, outside these areas, the stored discharge water could be discharged into the sea in

accordance with the discharge criteria given in paragraph 10.1.7 of the 2020 Guidelines for Exhaust Gas Cleaning Systems.

3.2 Port States should provide adequate reception facilities for this discharge. However, depending on the number of ships that will need this service and the frequency and amount of EGCS residues to be delivered, the port in conjunction with the port State may decide if the appropriate reception facilities at their berths should be permanent or provided on an individual basis.

3.3 In cases where discharge water is to be disposed of in non-permanent facilities, ports should have arrangements with a hazardous waste contractor(s), who can supply a suitable portable/mobile facility depending on the amount of discharge water to be collected. For EGCS discharge water collected in either permanent or mobile facilities, the water should be disposed of according to the appropriate and environmentally sound waste disposal methods.

## **EGCS Residues**

3.4 Residues generated by the EGCS unit should be appropriately managed on board and delivered ashore to adequate reception facilities according to MEPC.199(62) – 2011 Guidelines for Reception Facilities under MARPOL Annex VI. Such residues should not be discharged to the sea. Additionally, they should not be mixed with different waste streams or burnt in the ship's incinerators.

3.5 As EGCS residues are not to be discharged into the sea, the ships that produce these types of waste should have on board:

- where applicable, evidence of a contract to prove that arrangements are in place to deliver the waste in the region where the ship is operating;
- waste receipts from use of that contract to prove previous deliveries of such waste which should be kept on board for a period of 12 months after the delivery has been made; and
- an estimation of the amount of EGCS residues the produced on a daily basis, with records of the volume of solids and sludge produced.

3.6 This information will allow the master of the ship to prove that there are appropriate mechanisms in place to dispose of this waste in an environmentally sound manner.

## **ANNEX 3**

### **DRAFT AMENDMENTS TO MARPOL ANNEX VI**

#### **Regulation 2**

##### *Definitions*

1 New paragraphs 7 and 8 are inserted after definition in paragraph 6, as follows:

"7 Discharge water: Any water from an EGCS to be discharged overboard."

## **Draft Regulation XX**

### ***Discharge of discharge water from Exhaust Gas Cleaning Systems***

1 A Party may regulate discharges of discharge water from Exhaust Gas Cleaning Systems (EGCS) from a ship in a port or ports, harbours, estuaries or other enclosed sea areas, and or other sea areas under its jurisdiction, taking into account the guidelines to be developed by the Organization.

2 The Organization shall circulate a minimum list of the sea areas, including ports, harbours and estuaries, to be controlled for discharge of discharge water from EGCSs. Parties shall notify the Organization of local regulations on the discharges of discharge water from EGCS. The Organization shall make publicly available the list of such local regulations.