INTERNATIONAL MARITIME ORGANIZATION

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MARINE ENVIRONMENT PROTECTION COMMITTEE
76th session
Agenda item 9

MEPC 76/9/8
21 April 2021
Original: ENGLISH
Pre-session public release: ☒

POLLUTION PREVENTION AND RESPONSE

Comments on documents MEPC 76/9/1 and MEPC 76/9/2

Submitted by FOEI, Greenpeace International, WWF, Pacific Environment and CSC[1]

SUMMARY

Executive summary:	This document provides comments on documents MEPC 76/9/1 (ICES) and MEPC 76/9/2 (Austria et al.) and, based on the information contained in these and other documents, proposes an amendment to the title and scope of the proposed output on the evaluation and harmonization of rules and guidance on the discharge of discharge waters from EGCS into the marine environment
Strategic direction, if applicable:	1
Output:	1.23
Action to be taken:	Paragraph 12
Related documents:	PPR 7/INF.22, PPR 7/12/4, PPR 7/22, PPR 7/22/Add.1; MEPC 75/10; MEPC 76/9/1, MEPC 76/9/2, MEPC 76/INF.5, and MEPC 76/INF.11

Introduction

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.2). It provides comments on document MEPC 76/9/1, submitted by ICES on the risks to the marine environment posed by scrubber water discharge and recommendations to reduce impacts, and document MEPC 76/9/2, submitted by Austria et al. on the draft scope of work for output 1.23.

[1] Supported by the Antarctic and Southern Ocean Coalition and STAND.earth.

2 In document MEPC 76/9/1, ICES references its publication ICES Viewpoint, "Scrubber discharge water from ships – risks to the marine environment and recommendations to reduce impacts", published in September 2020 (MEPC 76/INF.5, annex 1). This publication recommends a rapid transition to compliant fuels which can meet sulphur air emission limits without the use of scrubbers. In the interim period, ICES' publication recommends that scrubber water discharge be prohibited in specific areas (for example Particularly Sensitive Sea Areas (PSSA) and Special Areas, as defined by IMO), that stringent limits be applied and enforced for contaminants in discharge water, and that appropriate standards and protocols are developed to this end. The co-sponsors support the call by ICES for a rapid transition to compliant fuels which meet the sulphur air emission limits without the use of exhaust gas cleaning systems.

3 In the absence of sufficient supplies of compliant fuel which would be required by an immediate ban on exhaust gas cleaning systems (EGCS, also referred to herein as scrubbers), the co-sponsors acknowledge that a prohibition on discharge waters in sensitive and/or significant areas including PSSAs and Special Areas could offer a transitional option. However, there are many other sea areas that should be considered sensitive in terms of scrubber discharge effluents including coastal and polar waters.

4 In document MEPC 76/9/2 (Austria et al.), the co-sponsors refer to the approval by MEPC 74 of 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" and reiterate the pressing need for uniform and unambiguous regulatory measures to better control pollution from scrubbers. In paragraph 5.4 of annex 1 of the appendix to document MEPC 76/9/2, the co-sponsors propose draft framework guidelines for risk and impact assessment, which emphasize the importance of prohibiting scrubber water discharge where doing so would conflict with environmental objectives or conventions and regulations formulated to protect the marine environment (e.g. UNCLOS Article 195, etc.), as well as in areas where scrubber discharge water would risk additional deterioration of the environment. The co-sponsors support this proposal as the basis for future work. However, the co-sponsors of the present document do not view area-specific impact assessments as a replacement for a phasing out and prohibiting the discharge of scrubber discharge water into the marine environment. Rather, this impact and risk assessment framework should be viewed as a means of identifying zero-discharge areas during the phase-out period and until a prohibition of scrubber water discharge into the marine environment is complete.

5 Several cases have been reported on malfunctioning of EGCS equipment; among others in the North Sea, Iceland and Alaska, there have been notable incidents of EGCS failures that led to hour-long violations of burning heavy fuel oil without an EGCS inside Emission Control Areas. These violations resulted from software failures, equipment malfunctions, human errors, failures to act on alarms for extended periods of time, and multiple failures in voyage planning – arguably also falling within the category of human error. The cumulative air pollution impacts of many ships suffering similar issues could likely have enormous human health and environmental costs.

6 It has been previously shown (PPR 7/INF.22) that EGCS discharge water is emitted near shore and within critical habitats for threatened and endangered resident killer whale species that live off the coast of British Columbia, Canada. More recently, the International Council on Clean Transportation (ICCT) study "Air emissions and water pollution discharges from ships with scrubbers"[2] found that all scrubbers (open-loop, closed-loop and hybrid) discharge water that is more acidic and turbid than the surrounding water. Additionally, scrubbers emit nitrates, PAHs and heavy metals, all of which can negatively affect water quality

[2] https://theicct.org/publications/air-water-pollution-scrubbers-2020

and marine life. In particular, the discharge of metals and PAHs are of concern. PAHs are carcinogenic and heavy metals are toxic, and both can accumulate in the water, sediments and marine life. These toxics bioaccumulate up the food chain and have been linked to cancer and immune system suppression in marine mammals including in killer whales and belugas.

7 Furthermore, the report of the GESAMP Task Team on EGCS (PPR 7/INF.23) showed that as contaminants are washed out of the exhaust gas they are successively introduced into the marine environment, potentially resulting in unintended consequences for aquatic ecosystems and toxicological effects on humans. It notes that, "… in this respect, it could even be argued that EGCS are potentially in conflict with article 195 of UNCLOS "Duty not to transfer damage or hazards or transform one type of pollution into another". The Task Team further concluded that for every tonne of SO_X input from EGCS, the ocean would not absorb a half tonne of carbon, and that the use of EGCS does not show any meaningful reductions in atmospheric GHG reductions. As such, the use of these systems may not only violate UNCLOS, but also further exacerbate the climate footprint of international shipping.

8 In document MEPC 76/INF.11, Belgium has provided the results of an analysis on the potential impact of washwater effluents from EGCS on water acidification in the southern North Sea. The annex to document MEPC 76/INF.11 notes: "The marine environment is already under a lot of anthropogenic pressures and the results of the present study show that the effect of the open-loop and hybrid scrubbers wash water effluent on the sea water pH is important." The document also notes that a precautionary approach is recommended.

9 The weight of evidence is increasing and given the information outlined above it is clear that regulating scrubbers is urgently needed in order to protect the marine environment. This is of particular importance in delicate ecosystems such as the Arctic, as well as in areas with a high level of ship traffic.

Proposal to amend the output

10 In paragraph 2.21 of document MEPC 75/10 (Secretariat), which was deferred to MEPC 76, the Committee is invited to approve the revised title and scope of work for output 1.23. FOEI, WWF and Pacific Environment have previously suggested that the output title be amended (refer to document PPR 7/12/4) but despite support for the proposed revised title in plenary (PPR 7/22, para 12.7), due to time constraints, only a cursory discussion of the title was possible in the Working Group on Prevention of Air Pollution from Ships and only minor changes to the title were made. In light of the information submitted in documents MEPC 76/9/1 and MEPC 76/9/2 and other recent documents, it is clear that the element of 'where' is of particular importance in sensitive areas such as the Arctic, especially in Arctic coastal zones with low alkalinity[3] and buffering capacity (acidification potential), and key for Indigenous subsistence. As a result, the co-sponsors propose that MEPC consider a further minor revision to the title of output 1.23 as follows:

> "Evaluation and harmonization of rules and guidance on the discharge of discharge water from EGCS into the aquatic environment, including <u>if, when, or where discharges should be allowed</u>."

11 Furthermore, in line with the recommendation in the report ICES Viewpoint, "Scrubber discharge water from ships – risks to the marine environment and recommendations to reduce impacts" referred to in document MEPC 76/9/1, the impact and risk assessment framework should be viewed as a means of identifying zero-discharge areas, such as coastal and polar

[3] https://svs.gsfc.nasa.gov/30697

waters and areas of cultural and ecological sensitivity and significance including PSSAs and Special Areas, during a phase-out period and until a rapid transition to compliant fuels which can meet sulphur air emission limits without the use of scrubbers is complete.

Action requested of the Committee

12 The co-sponsors invite the Committee to:

.1 note the support of the co-sponsors for the call by ICES for a rapid transition to compliant fuels which meet the sulphur air emission limits without the use of exhaust gas cleaning systems; and

.2 consider the proposed revised title of the output 1.23 and the proposal to identify zero-discharge areas until a transition to compliant fuels is complete, as set out in paragraphs 10 and 11, and take action as appropriate.