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ANY OTHER BUSINESS

Evolved oil filtering equipment technology and ability to comply with a discharge limit of 5 ppm for MARPOL Annex I

Submitted by CESA

SUMMARY

Executive summary:	This submission presents information on the evolved oil filtering equipment technology and the current ability to comply with a discharge limit of 5 ppm. The purpose is to facilitate discussion on a proposal for a new output to amend regulation 15 of MARPOL Annex I.
Strategic direction, if applicable:	2
Output:	Not applicable
Action to be taken:	Paragraph 13
Related documents:	Resolutions MEPC.107(49) and MEPC.117(52)

Background

1 MARPOL Annex I regulation 15 requires that the oil content of effluent without dilution does not exceed 15 parts per million (ppm).

2 The revised MARPOL Annex I was adopted by resolution MEPC.117(52) on 15 October 2004 and entered into force on 1 January 2007. Since then, technology has been improved and testing capabilities have been advanced.

3 In view of these developments, CESA proposes to consider updating the current oil content limit for oily water discharges from 15 ppm to 5 ppm. This would bring the standard in line with best available technologies, potentially reducing the environmental impact.

Discussion

4 In line with the IMO mission and strategic direction to oily discharges, CESA considers it appropriate to review the standards in light of the current state of technology and advancement in testing capabilities.

5 With the revised MARPOL Annex I adopted more than 20 years ago, to include oil filtering equipment, it was based on what was considered practically possible at the time. When the resolution entered into force in 2007, it was not without its challenges for equipment manufacturers, crew and administrations, and malpractices known as "magic pipe" incidents became media headlines.

6 The technological developments have taken leaps since then; the operational issues have been resolved and the cleaning standard performance has been raised.

7 Moreover, a number of classification societies have for a decade offered class notations, certifying equipment which is outperforming the IMO standard, indicating extensive industry experience with improved oil filtering equipment.

8 Several manufacturers have type approved commercially available 5 ppm filtering equipment readily available. Moreover, it is understood that many orders for newbuild ships include a request for 5 ppm bilge water oil filtering equipment.

9 CESA notes that decreasing the discharge standard from 15 ppm to 5 ppm would imply also updating the oil filtering equipment type approval guidelines (resolution MEPC.107(49)). The technology for testing equipment also has undergone development since the adoption of these guidelines in 2003. In addition, CESA would argue that the update should also address proof of long-term operation beyond programmed equipment cleaning operation, proof of operation due to ship roll and pitch, establishment of equipment limitations regarding ambient conditions such as low temperatures, and (liquid) medium limitations considering the use of future alternative fuels.

10 Oil filtering equipment certified to achieve 5 ppm is generally more expensive than those achieving 15 ppm. This is due to applying more advanced technology and due to increased type approval cost. It should be noted that 5 ppm systems on the market today already undergo type approval in accordance with the class notations.

11 For illustrative purposes, if bilge water discharges would contain oil at the 15 ppm limit and ships would operate 365 days a year, requiring oil discharges to meet the 5 ppm limit may reduce oil discharges significantly as exemplified in table 1.

Table 1: Illustration of effect of reducing ppm limit from 15 ppm to 5 ppm for bilge water discharges

			at 15 ppm	**at 5 ppm**
	Assumed daily bilge water discharge (kg)	**Assumed number of ships above 400 GT (approx.)**	**Oil discharges (ton/year)**	**Oil discharges (ton/year)**
Cargo ship	400	48000	105,12	35,04
Passenger ship	4600	4000	100,74	33,58

12 Considering MSC-MEPC.1/Circ.5/Rev.5, annex 1, on information required in submissions of proposals for inclusion of an output, data regarding the societal costs of oily bilge water discharges is not readily available, and hence it is not yet possible to establish whether the societal cost exceeds the investment cost for applying the best available technology.

Action requested of the Committee

13 The Committee is invited to take note of the information contained in this document.