

SUB-COMMITTEE ON POLLUTION PREVENTION AND RESPONSE 5th session Agenda item 13 PPR 5/13/4 30 November 2017 Original: ENGLISH

CONSISTENT IMPLEMENTATION OF REGULATION 14.1.3 OF MARPOL ANNEX VI

Proposal for a prohibition on the carriage of non-compliant fuel oil for combustion purposes with a sulphur content exceeding 0.50% m/m and suggestions for guidelines to promote effective and consistent implementation of regulation 14.1.3 of MARPOL Annex VI

Submitted by ICS, BIMCO, INTERTANKO, CLIA, IPTA and WSC

SUMMARY

Executive summary: This document proposes prohibition on the carriage of non-compliant

fuel oil, as defined in regulation 2.9 of MARPOL Annex VI, with a sulphur content exceeding 0.50% m/m on board ships, along with suggestions on the content of guidelines to promote effective and consistent implementation of regulation 14.1.3 of MARPOL Annex VI. This proposal does not affect the existing provisions for equivalent means of compliance under regulation 4 or exemptions

under regulation 3 of MARPOL Annex VI.

Strategic direction: Number to be assigned after A 30

High-level action: Number to be assigned after A 30

Output: Number to be assigned after A 30

Action to be taken: Paragraph 12

Related documents: PPR 4/20/3, PPR 4/20/4, PPR 4/20/6, PPR 4/20/7, PPR 4/21;

MEPC 71/5/3 and MEPC 71/17

Introduction

- 1 At MEPC 70, the Committee agreed that the effective date of the 0.50% m/m limit as set out in regulation 14.1.3 of MARPOL Annex VI shall be 1 January 2020. Following the work at PPR 4 and the outcome of MEPC 71, the Committee:
 - .1 approved a new output on "Consistent implementation of regulation 14.1.3 of MARPOL Annex VI", for inclusion in the PPR Sub-Committee's biennial agenda for 2018-2019 and the provisional agenda for PPR 5, with a target completion year of 2019;



- .2 approved the scope of the work as prepared by PPR 4 (PPR 4/21, annex 13, paragraph 13), including the additional item on safety implications relating to the option of blending fuels in order to meet the 0.50% m/m sulphur limit requested by MSC 98;
- instructed the PPR Sub-Committee to identify and report to MSC any safety issues identified with regard to low-sulphur fuel oil;
- .4 forwarded document MEPC 71/9/5 to PPR 5 for consideration, under the new output; and
- .5 requested ISO to consider the framework of ISO 8217 with a view to ensuring consistency between the relevant ISO standards on marine fuel oils and the implementation of regulation 14.1.3 of MARPOL Annex VI.
- Since the effective date of the 0.50% m/m global sulphur limit is 1 January 2020, the time to discuss, agree and implement additional measures to promote consistent implementation is limited. For this reason, the co-sponsors of document PPR 4/20/3 suggested that the scope for a new output should be organized into four primary subject areas which could serve as a framework for the new output and facilitate further detailed discussions. The four subject areas are:
 - .1 initial transitional issues that arise with a sudden shift from the 3.50% m/m sulphur limit that applies on 31 December 2019 to the new 0.50% m/m limit that begins on 1 January 2020;
 - .2 impact on machinery systems that can be expected to arise with use of fuel oils with a 0.50% m/m sulphur limit, especially potential safety concerns that may arise from the use of new fuel sources and blends;
 - .3 verification issues and mechanisms necessary to ensure a level commercial landscape, including efforts to ensure that compliant fuel is delivered for use on ships; and
 - .4 any regulatory amendments or guidelines necessary to address issues raised in items 1 to 3 above or otherwise considered necessary to promote consistent implementation of the 0.50% m/m sulphur limit.

The co-sponsors would in this submission like to expand on the above-mentioned areas and offer the following for consideration.

General remarks

- The co-sponsors welcomed the decision on implementation of the 0.50% m/m global sulphur limit and recognize that this will significantly reduce sulphur emissions to the atmosphere from the world fleet. The co-sponsors, however, also note that this new regulatory standard will introduce significant technical and operational challenges for shipowners and operators. The co-sponsors have on several occasions and in multiple submissions expressed their concern with various transitional issues that may arise with the shift from 3.50% m/m sulphur limit to the new 0.50% m/m limit. These concerns include, but are not limited to:
 - .1 regional or local non-availability of compliant fuel oil;

- .2 impact on fuel and machinery systems resulting from the use of low sulphur fuel oils;
- .3 verification issues; and
- .4 control mechanisms, and actions that are necessary to ensure compliance and consistent implementation.

These issues need to be addressed to facilitate consistent and effective implementation. The implementation of the 0.50% m/m sulphur limit in trades away from the major shipping lanes is also a major concern, especially if there is a tightening of the supply of compliant fuel oils and a significant fuel oil price spike in 2020.

- The co-sponsors consider that it will be challenging for Parties to monitor and ensure full compliance on the high seas. A prohibition on the carriage of fuel oils exceeding 0.50% m/m sulphur, as bunkers to ships without an exception or exemption pursuant to regulation 3 of MARPOL Annex VI or an approved equivalent pursuant to regulation 4, would facilitate implementation on the high seas as it would only be necessary to identify the carriage of such fuels, not their use.
- 5 This should however not preclude Parties to MARPOL Annex VI and all coastal States to also consider a strict control on the supply of fuel oils to ships within waters under their jurisdiction. Such a control on supply would reinforce compliance.
- It remains very important to preserve the viability of the compliance mechanisms contained in regulations 3 and 4 of MARPOL Annex VI in order not to foreclose innovation. This includes allowance by Member State of the use of emission abatement methods by ships of all flags in their ports, territorial seas and exclusive economic zones to achieve emissions reductions that are at least equivalent to the reductions required by regulation 14.1.3.
- The co-sponsors call for consistent and pragmatic enforcement of the sulphur regulations that recognizes variations in analysis results originating from the testing method itself as well as the potential influence of tank wall residual contamination. The priority of compliance inspections in ports should be on wilful non-compliance with the regulations. Where ships experience technical or operational issues that may lead to accidental and unintended non-compliance, this should be considered differently than wilful non-compliance, and such ships should not face severe measures or penalties.

Proposal

8 The co-sponsors propose a specific prohibition on the carriage of fuel oil intended for use as bunker on board exceeding 0.50% m/m sulphur. The co-sponsors draw attention to the definition of fuel oil provided in regulation 2.9 of MARPOL Annex VI:

Fuel oil means <u>any fuel delivered to and intended for combustion purposes for propulsion or operation on board a ship, including gas, distillate and residual fuels.</u>

Any references to fuel oil used in MARPOL Annex VI refer only to fuel intended to be used for combustion purposes on board, as such the co-sponsors believe it is important to recognize and make explicit that the proposed prohibition on the carriage of non-compliant fuel oil will not affect the carriage of high sulphur oil as cargoes. It is also important to note that this proposal is not intended to override the existing provisions in regulation 3 (Exceptions and exemptions) and regulation 4 (Equivalents), of MARPOL Annex VI. The co-sponsors respectfully

recommend that Member States consider proposing an amendment to regulation 14.1 of MARPOL Annex VI as follows (new text in bold):

"The sulphur content of any fuel oil **carried for use** on board ships shall not exceed the following limits:"

- 9 The proposed changes to regulation 14 or MARPOL Annex VI should be complemented by a set of guidelines addressing the following important topics:
 - .1 non-availability and the need for a global fuel oil non-availability report (FONAR) system accepted and managed by port States;
 - .2 fuel quality issues, particularly regarding new types of fuels and blends, including development of standards in cooperation with ISO;
 - .3 verification issues, control mechanisms, and actions that are necessary to ensure consistent implementation and compliance;
 - .4 guidance for establishing that the sulphur content of fuel oil as delivered meets the sulphur content stated on the bunker delivery note; and
 - .5 guidance for establishing the sulphur content of fuel oil in use, including sampling and testing methods.
- With respect to the development of the above guidelines, the co-sponsors believe that the following issues need to be addressed to provide clarity for both governments and shipowners:
 - .1 to address situations where compliant fuel is not available, the Committee should agree on a recommended common format for a FONAR. Use of a common format and reporting procedure will greatly simplify communications in those situations where fuel oil meeting the requirements of regulation 14.1 may not be available. The Committee is encouraged to consider if there is a need for consequential amendments to regulation 18 of MARPOL Annex VI, to ensure that there is no conflict between the proposed prohibition on the carriage of fuel oil with a sulphur content exceeding 0.50% m/m and cases where a ship cannot comply because compliant fuel oils are not available;
 - .2 the test results from analysis of sulphur content for fuel oil can vary across a defined range of values and most fuel oils are blended by suppliers with sulphur levels just below the specified limit. Based on experience the test results from analysis of compliant fuels may slightly exceed the 0.50% sulphur limit. This is in recognition of limitations in repeatability and reproducibility of the specified test method for sulphur contained in appendix V of MARPOL Annex VI and is aligned with recognized fuel testing standards and guidelines as well as with practices in land based regulation. In simple terms it is impossible to assure 100% accuracy in any test or measurement process. A defined confidence factor would recognize practical limitations in methodology and testing techniques whilst not altering the fuel sulphur content limits defined in regulation 14.1 of MARPOL Annex VI. The co-sponsors therefore propose that a 95% confidence factor should also be applied in IMO guidance when considering whether a tested fuel is compliant. This would minimize the risk of a compliant fuel being found to be above the applicable limit because of limitations in the testing procedure and not because the sulphur content is too high; and

- .3 guidelines which provide for reasonable and measured enforcement during an initial transitional period. There is a range of reasons why fuel oil may be found to be marginally non-compliant in the initial transition phase. These reasons could include the presence of residues of non-compliant fuel in piping systems which cannot practically be removed by system cleaning and loading of non-compliant fuel negating previous tank cleaning and flushing as a result of local non-availability of compliant fuel. The co-sponsors believe that such marginal non-compliances will steadily decrease during the transitional period and that they should be recognized as being different from wilful non-compliance.
- 11 Enforcement actions should always be based on a robust set of enforcement guidelines addressing topics outlined in paragraphs 8 through 10 above.

Action requested of the Sub-Committee

The Sub-Committee is invited to consider the views contained in this document and take action as appropriate.