Marine Environment Protection Agency
56th session
Agenda item 6:
REVISIONS TO MARPOL ANNEX VI

MEPC 56/6
24 April, 2007
Original: ENGLISH

Proposed amendments to Resolution MEPC.130(53)

Submitted by Euromot

SUMMARY	
Executive summary:	This document provides comments and proposals for consideration for possible amendments to Resolution MEPC.130(53).
Action to be taken:	Paragraph 5
Related documents:	MARPOL Annex VI, Resolution MEPC.130(53) BLG-WGAP 1/2/12 Proposed amendments to resolution MEPC.130(53) by Finland and Norway.

Introduction

1 BLG 10 instructed the Intersessional Meeting of the BLG Working Group on Air Pollution to continue the work of BLG 10 on the revision of MARPOL Annex VI, the NO_x Technical Code and related guidelines.

2 Finland and Norway considered Resolution MEPC.130(53) in light of its implementation and proposed in BLG-WGAP 1/2/12 several issues to be revisited. Due to time constraints, the Intersessional Working Group on Air Pollution in November 2006 transferred the document to BLG 11. Again due to time constraints, BLG 11 transferred the document to MEPC 56.

3 Euromot agrees with BLG-WGAP 1/2/12, and justification for each item is not repeated here.

4 Euromot wishes to take the issue one step further by proposing some wording, by offering some further justification, and by adding one more item (related to sampling frequency). To enhance reading of this document the same structure as in BLG-WGAP 1/2/12 is applied, and the reader is advised to read both documents simultaneously. The proposed amendments can be found in Appendix 1.

Action requested by MEPC 56

5 MEPC 56 is invited to consider the proposed amendments to Resolution MEPC.130(53) and decide as appropriate.

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Appendix 1. The proposed amendments to Resolution MEPC 130(53).

#	Section	Proposed amendment
1a	2.2.1	**Proposed wording:** after "6.0 g SOx/kWh", insert: *or lower*
1b	2.2.7	**Proposed wording:** after "6.0 g SOx/kWh", insert: *or lower*
1c	2.3.1(b)(vii)	**Proposed wording:** after "6.0 g SOx/kWh", insert: *or lower*
1d	2.3.1(c)	**Proposed wording:** after "6.0 g SOx/kWh", insert: *or lower*
1e	2.3.1(d)	**Proposed wording:** after "6.0 g SOx/kWh", insert: *or lower*
1f	2.3.5	**Proposed wording:** after "6.0 g SOx/kWh", insert: *or lower*
1g	3.1	**Proposed wording:** after "6.0 g SOx/kWh", insert: *or lower*
2	3.5	**Proposed wording:** At the end of the paragraph, add sentence: *In case the actual load range (turn-down ratio) of a boiler is smaller, this requirement is adjusted accordingly.*
3	4.1.2	**Justification:** For practical reasons, demonstration of compliance will have to be made onboard for existing ships but also for newbuildings, as engine test beds do not allow for such testing. In many cases it is impossible to use fuel with sulphur content stipulated in the original text for the following reasons: • Exhaust gas cleaning systems will typically be installed in SECAs. In such areas the availability of fuel with sulphur content above 2 % has clearly decreased upon entry into force of the SECA. If a fuel with a sulphur content of e.g. 2.5 % is available in the region, such fuel can well be used for testing. The problem will then be to find the second fuel with 2.5 + 1 = 3.5 % sulphur. • In Finland fuel with more than 1.5 % sulphur is presently difficult to find. This introduces an introduction dilemma for exhaust gas cleaning systems. An exhaust gas cleaning system on a newbuilding should be tested and certified on the sea trial. The solution is to start with a fuel which is available in the region of the newbuilding yard, and certify the equipment for a somewhat higher sulphur content than the test fuel as already permitted in the existing guideline. Once the ship is delivered and repositioned to its normal area of operation, fuel with higher sulphur content is expected to be available, and the system can be re-certified for higher sulphur level. • Under Marpol, SECA rules permit the use of fuel with no more than 1.5 % sulphur content unless an approved exhaust gas cleaning system is installed. No derogation for testing is provided. **Proposed wording**: At the end of the paragraph, add sentence: *Alternatively demonstration of compliance can be based on testing with fuel with lower sulphur content, where a sufficient SO_x-reduction performance for higher sulphur contents can be theoretically verified to the satisfaction of the Administration. Certification for lower maximum fuel sulphur content than 4.5 % may be considered in such cases.*
4	4.3.5	**Proposed wording**: At the end of the paragraph, delete: *"in accordance with 4.1.6"*.
5	5.2	**Proposed wording**: At the end of the first sentence, add *"(O_2 only if required under 3.7)"*.
6	5.2	**Proposed wording**: Replace the second sentence with: *"CO_2 and O_2 as % with a total measurement error of the analyser not to exceed +/- 5 % of the reading or +/- 3,5 % of full scale, whichever is smaller, according to Appendix 3, section 1.5 in the NO_x Technical Code"*.
7	5.5	**Proposed wording:** Replace "cross-duct" with "*in-situ*".
8	6.7 16.3	**Proposed wording**: At the end of section 6.7, add: *"Alternatively, running hour counters on a relevant EGCS-SOx pump or other ancillary and on the combustion unit in question is also deemed to serve this purpose. In case of a unit consuming chemicals at a known rate as documented in ETM, records of such consumption in the EGCS-SOx Record Book also serves this purpose"*.
9a	6.8	**Proposed wording**: Delete the first sentence.
9b	15.3	**Proposed wording**: Delete the last sentence.

10a	7	**Proposal:** Update this section based on findings from the Correspondence Group on EGCS-SOx Wash Water. Alternatively, if wording cannot be agreed upon in MEPC 56, replace the original text with: *"As per separate Guidelines for Wash Water to be developed by the Organization."*
10b	11	**Proposed wording:** Replace the text with: *"As section 7"*. Alternatively, restructure the document by moving wash water requirements to a separate chapter, as requirements are independent of Scheme A and B.
11	9	**Proposed wording**: Replace "5.2 and 5.16" with *"5.2 to 5.16"*.
12a	15.8	**Proposed wording**: After "at any time", insert: *"in steady state conditions"*
12b	15.9	**Proposed wording**: After "At no time during", insert: *"steady state"*. At the end of the paragraph, add sentence: *"Short excursions from the overall requirement are permitted, provided that the average SOx-emission from the ship is not increased."*
13	17	**Proposal:** Update this section based on findings from the Correspondence Group on EGCS-SOx Wash Water. Alternatively, if wording cannot be agreed upon in MEPC 56, replace the original text with: *"As per separate Guidelines for Wash Water to be developed by the Organization."*
14	18.1	**-**
15	General	**Proposal**: Improve document structure.
16	10.1	**Justification:** The sampling frequency requirement 0.005 Hz is proposed to be amended to 0.002 Hz based on the following considerations: 1. To allow acceptably long sampling times also for "one analyser – multiple source" installations to ensure trustworthy and accurate sampling for at least four (4) stacks/sources per analyser. 2. To take into account also operating situations where there are significant differences in measured concentrations in the different stacks, for example different loads, possibly different fuels, etc. 3. Practical experience with existing similar systems on land based power plants have shown that the most trustworthy results have been achieved with even as long as 7 minutes as a default for one measurement sequence. The first 1 minute is used to replace the prevailing gas with the new sample gas totally, the next 3 minutes are used for the stabilization, and then the last 3 minutes are used for the actual measurements and an average of this 3 minute period is calculated and stored as a very short-term (momentary) value. 4. To allow sufficient analyzer response time to ensure trustworthy and accurate sampling. It is probably better to allow also some "averaging time" for the analyser after the stabilisation time than to take just a single momentary reading, see above practical experience from power plants. 5. To take into account also sample line lengths, and sample volumes in the sample conditioning systems which have to be flushed between different sources. 6. Air pulses or similar to the analyzer during transition periods can probably normally be avoided but artificial peaks or disturbances can take place due to pressure peaks when changing sample channel, depending on how sensitive the analyser type is for this type of disturbances. **7.** To allow also regular calibration procedures through probes within a limited amount of time available within maximum cycle time and required availability times for the analyser. **Proposed wording**: Replace "0.005 Hz." with *"0.002 Hz. In ships with several EGCS units a correspondingly slower sampling rate of each unit is acceptable."*