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HARMONIZED IMPLEMENTATION OF THE REVISED GUIDELINES AND SPECIFICATIONS FOR POLLUTION PREVENTION EQUIPMENT FOR MACHINERY SPACE BILGES OF SHIPS DURING THE TYPE-APPROVAL PROCESS

1 MEPC 49 adopted, on 18 July 2003, resolution MEPC.107(49) on Revised Guidelines and Specifications for Pollution Prevention Equipment for Machinery Space Bilges of Ships. These Revised Guidelines apply to equipment installed on board on or after 1 January 2005.

2 Experience gained in the implementation of the Revised Guidelines during the type approval process according to the standards described in the Revised Guidelines has shown that, on some issues, the described procedure is vague and different interpretations of the Guidelines are possible.

3 This observation was made particularly with regard to the interpretations of paragraphs 4.1.5, 1.2.9.6 (Part 1), 3.2.2.3 (Part 3) and test result diagrams (Appendix) of the Revised Guidelines.

4 In order to ensure that approval of the equipment in the context of these requirements will be based on a uniform high level application, there is a need for clarification of particular issues.

5 The Marine Environment Protection Committee, at its fifty-eighth session (6 to 10 October 2008), recognizing the necessity to provide appropriate guidance for the harmonized implementation of the Revised Guidelines and specifications for pollution prevention equipment for machinery space bilges of ships adopted by resolution MEPC.107(49), approved the Guidance notes (MEPC 58/23, paragraph 10.46), set out in the annex, which are intended to be used during the type approval process.

6 Member Governments are invited to use the annexed Guidance notes when implementing the requirements of resolution MEPC.107(49) and testing pollution prevention equipment for type-approval, and to bring the Guidance to the attention of all parties concerned.

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ANNEX

GUIDANCE NOTES FOR THE HARMONIZED IMPLEMENTATION OF THE REVISED GUIDELINES AND SPECIFICATIONS FOR POLLUTION PREVENTION EQUIPMENT FOR MACHINERY SPACE BILGES OF SHIPS (RESOLUTION MEPC.107(49)) DURING THE TYPE APPROVAL PROCESS

The requirements set out in paragraphs 4.1.5, 1.2.9.6 (Part 1), 3.2.2.3 (Part 3) and test result diagrams (Appendix to Appendix 1) of the Revised Guidelines are open to different interpretations. In order to ensure the uniform application of these requirements, the following Guidance notes for harmonized implementation, set out in italics, should be followed:

PARAGRAPH 4.1.5

Paragraph 4.1.5 of the revised Guidelines states that the system should require the minimum of attention to bring it into operation. In the case of equipment used for engine-room bilges, there should be no need for any adjustment to valves and other equipment to bring the system into operation. The equipment should be capable of operating for at least 24 h of normal duty without attention.

Present situation during type approval

The timetable for the complete type approval with the test fluids A, B, and C is approximately 9 h. Although the system should be capable to operate 24 h of normal duty without attention, it is not required to verify this operation in detail.

Possible problem

There is no definition of the term normal duty. Furthermore the equipment manufacturer may carry out individual tests with each test fluid or may use test results from previous type approvals.

Guidance note

Paragraph 4.1.5 of resolution MEPC.107(49) should be interpreted as follows:

> *It should be understood that the complete type approval with the test fluids A, B and C should be performed in series, without interruption to attend, clean or maintain the bilge water separator. This test would be regarded as a simulation of the 24 hours of unattended operation not requiring any crew attention*.

PARAGRAPH 1.2.9.6 OF PART 1

According to paragraph 1.2.9.6 of Part 1 of the Annex to the revised Guidelines a test lasting a minimum of 2 h should be carried out to check that the 15 ppm bilge separator will operate continuously and automatically.

Present situation during type approval

Some separation processes may require one or more interruptions, e.g., for back flushing, filter cleaning or batch operation within the 2 hour test run with test fluid A and also for the test with the remaining test fluids B and C.

Possible problem

If the required time for the continuous operation incorporates also the previous mentioned interruptions, the total throughput of the separator may be reduced significantly compared to a separator with a continuous separation process. In that case the performance standards are not comparable.

Guidance note

Paragraph 1.2.9.6 (Part 1 of the Annex) of resolution MEPC.107(49) should be interpreted as follows:

> *It should be understood that the 15 ppm bilge separator should operate continuously and automatically without any interruptions.*
>
> *It should be assured that back flushing if performed during the certification test does not cause:*
>
> - *Dilution of the test fluids A, B, or C, or*
> - *Dilution of the test sample sent to the laboratory for analysis.*
>
> *If input flow of the test fluid is interrupted during the performance of the test it should be assured that the total quantities of the test fluids A, B, and C processed automatically are not less than the nominal flow of the separator multiplied by the specified test duration for each fluid.*
>
> *While all the time, the bilge separator operates continuously and automatically without human intervention*.

PARAGRAPH 3.2.2.3 OF PART 3

According to paragraph 3.2.2.3 of Part 3 of the Annex to the revised Guidelines (humidity test), the equipment should be left switched off for a period of 2 h at a temperature of 55ºC in an atmosphere with a relative humidity of 90%. At the end of this period the equipment should be switched on and should operate satisfactorily for 1 h.

Present situation during type approval

The electronic part of the equipment may only be tested under ambient workshop conditions (15 to 25°C and 54 to 66% relative humidity).

Possible problem

The equipment is not tested sufficiently and malfunctions may happen later on board, e.g., under tropical conditions.

Guidance note

Paragraph 3.2.2.3 (Part 3 of the Annex) of resolution MEPC.107(49) should be interpreted as follows:

> *First the temperature test of the electronic part should be operated under the test condition mentioned under 3.2.2.2 (part 3 of Annex) of the guidelines, followed by the humidity test*.

APPENDIX TO APPENDIX 1

The test result diagrams of the Appendix to Appendix 1 (Certificate of Type Approval) in the revised Guidelines show a continuous operation of the 15 ppm separator during the performance test with test fluid A, B and C.

Present situation during type approval

Some separation processes may require one or more interruptions, e.g., for back flushing, filter cleaning or batch operation.

Possible problem

If the required time for the continuous operation incorporates also the previous mentioned interruptions the total throughput of the separator may be reduced significantly compared to a separator with a continuous separation process.

Guidance note

The test result diagrams (Appendix to Appendix 1) should be interpreted as follows:

> *The continuous and automatic operation should apply to the performance tests with the test fluids A, B and C according to the test result diagrams in the Appendix to Appendix 1. However if due to the separation process any interruption in feeding the test fluid with nominal flow rate, e.g., for back flushing, is deemed necessary, the time for these interruptions should be added to the required time of the test step which was interrupted during the performance test. While all the time, the bilge separator operates continuously and automatically without human intervention.*