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BWM.2/Circ.70
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INTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT OF SHIPS' BALLAST WATER AND SEDIMENTS, 2004

Guidance for the commissioning testing of ballast water management systems

1 The Marine Environment Protection Committee (MEPC), at its seventy-third session (22 to 26 October 2018), approved *Guidance for the commissioning testing of ballast water management systems*, as set out in the annex.

2 Member Governments and international organizations are invited to bring the annexed Guidance to the attention of all parties concerned.

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ANNEX

GUIDANCE FOR THE COMMISSIONING TESTING OF BALLAST WATER MANAGEMENT SYSTEMS

Context

1 The purpose of commissioning testing is to validate the installation of a ballast water management system (BWMS) by demonstrating that its mechanical, physical, chemical and biological processes are working properly. Commissioning testing is not intended to validate the design of type-approved BWMS that are approved by the Administration.

2 The following Guidance for the commissioning testing of BWMS has been developed for use by persons fitting and verifying the installation of BWMS in accordance with:

.1 regulation E-1.1.1 of the Convention, which requires, inter alia, that an initial survey verify that any structure, equipment, systems, fitting, arrangements, material or processes comply fully with the requirements of the Convention;

.2 regulation E-1.1.5 of the Convention which requires, inter alia, that an additional survey be made after a change, replacement, or significant repair of the structure, equipment, systems, fittings, arrangements and material necessary to achieve full compliance with the Convention;

.3 paragraph 8.2.5 of the BWMS Code, which requires that the Administration issuing the International Ballast Water Management Certificate verify that installation commissioning procedures are on board the ship in a suitable format;

.4 paragraph 8.3.6 of the BWMS Code, which requires that the installation commissioning procedures have been completed;

.5 paragraph 1.18 of resolution MEPC.174(58), which provides that, when a type-approved ballast water management system is installed on board, an installation survey according to section 8 should be carried out; and

.6 paragraph 1.1.2.19 of annex 4 of the HSSC Guidelines (resolution A.1120(30)), which includes, "verifying that an operational test of the ballast water management system was carried out based on the installation commissioning procedures and that documented evidence is provided which shows compliance of the treated discharge ballast water during the above mentioned test with regulation D-2 through sampling and analysis based on applicable guidelines developed by the Organization."

3 For the purposes of this Guidance, commissioning testing refers to an operational test of the ballast water management system carried out based on the installation commissioning procedures referred to in paragraph 2.6.

Validating compliance

4 The following steps should be undertaken following installation of the BWMS on board the ship, and after all ballasting equipment (e.g. pumps and piping) has been fully installed and tested as appropriate:

.1 a sample should be collected during a ballast water uptake to characterize the ambient water, by any means practical (e.g. in-line sample port or direct harbour sample). The ambient water should be accepted for testing regardless of the level of challenge it poses to the BWMS;

.2 a sample should be collected during the corresponding ballast water discharge after the full treatment has been applied. Samples should be taken in accordance with the *Guidelines on ballast water sampling* (G2);

.3 the representative samples should be analysed for all size classes included in the D-2 standard using indicative analysis methods listed in table 3 of BWM.2/Circ.42/Rev.1; and

.4 the applicable self-monitoring parameters (e.g. flow rate, pressure, TRO, UV intensity, etc.) of the BWMS should also be assessed, taking into account the System Design Limitations of the BWMS, and the correct operation of all sensors and related equipment should be confirmed.

5 The validation is successful if the analysis indicates that the discharge sample does not exceed the D-2 standard and the self-monitoring equipment indicates correct operation.

6 In the case that the ambient water is not appropriate for the operational testing during the commissioning of the BWMS (e.g. salinity of ambient water is outside the SDL of the BWMS), testing should be evaluated to the satisfaction of the Administration.

Documentation

7 A written report including methods and detailed results of the commissioning testing should be provided to the Administration.