

Ballast Water Sampling Analysis During BWMS Commissioning Testing

Amended Rules and Guidance

Rules for Ballast Water Management Installations
Guidance for Ballast Water Management Installations

Reason for Amendment

At the 75th session of the IMO's Marine Environment and Protection Committee (MEPC 75) held in November 2020, an amendment to the *International Convention for the Control and Management of Ships' Ballast Water and Sediments* was adopted as Resolution MEPC.325(75). This amendment specifies that ballast water sampling and analysis is required to be carried out during the commissioning testing of ballast water treatment equipment from 1 June 2022.

In relation to said amendment, an amendment to the IMO circular "2020 Guidance for the Commissioning Testing of Ballast Water Management Systems" was adopted as BWM.2/Circ.70/Rev.1 as well.

Furthermore, a draft interpretation to clarify the actual application schedule of said amendment is planned to be approved at the 77th session of the IMO's Marine Environment and Protection Committee (MEPC 77) in November 2021.

Accordingly, relevant requirements are amended based upon said amendment, the revised circular BWM.2/Circ.70/Rev.1 and the draft interpretation expected to be approved by the IMO.

Outline of Amendment

- (1) Adds requirement for the sampling and analysis of ballast water during the commissioning testing of ballast water treatment equipment as specified in the Resolution MEPC.325(75).
- (2) Clarifies that the sampling and analysis of ballast water is mandatory for the ships for which the date of completion of the surveys required in accordance with paragraphs 1.1 and 1.5 of Regulation E-1, Section E of the *International Convention for the Control and Management of Ships' Ballast Water and Sediments* is on or after 1 June 2022.
- (3) Adds guidance for the commissioning testing of ballast water treatment equipment as a reference.

“Rules for ballast water management installations” has been partly amended as follows:

Part 2 SURVEYS

Chapter 2 REGISTRATION SURVEYS

2.1 Registration Surveys during Construction

2.1.3 Inspections of Equipment

Sub-paragraph -2 has been amended as follows.

2 For ships conducting the ballast water management specified in **Chapter 3, Part 3 of the Rules**, the following inspections are to be carried out:

- (1) Confirmation that installations for ballast water treatment (ballast water management system, ballast pump and ballast piping, etc.) are located in their proper positions based upon approved drawings;
- (2) Confirmation that the *BWMS* is in good working order (in principle, includes operation tests associated with ballasting and de-ballasting at rated capacity);
- (3) Confirmation that any consumables such as active substances and preparations necessary for conducting ballast water treatment are provided on board under appropriate controls;
- (4) Confirmation that the *BWMS* is the same as that listed on the certificate for type approval specified in **2.1.2-2(1)**;
- (5) For *BWMS* which make use of active substances or preparations, confirmation that the type of said *BWMS* complies with **3.3-1(2), Part 3 of the Rules**;
- (6) Confirmation that the recording devices for control and monitoring equipment are operable and that sufficient supply of any consumables necessary for the recording devices is provided on board;
- (7) For *BWMS* generating by-products such as sediments, dedicated installations to store such by-products are provided on board; and
- (8) The workmanship of the installation is satisfactory and, in particular, that any bulkhead penetrations or penetrations of the ballast system piping are to the relevant approved standards; and
- (9) The installation commissioning procedures have been completed.
- (10) For ships that complete their registration surveys on or after 1 June 2022, the sampling and analysis of ballast water of the ballast water management system (*BWMS*) has been completed.
- ~~(10)~~ Other inspections deemed necessary by the Society.

2.2 Registration Surveys Not Built under Survey

Paragraph 2.2.3 has been amended as follows.

2.2.3 Inspections of Equipment

1 At Registration Surveys not Built under Survey, relevant inspections are to be carried out mutatis mutandis according to the requirements specified in **2.1.3**. However, for ships in possession

of an International Ballast Water Management Certificate or an equivalent thereto, inspections corresponding to those specified in **3.3** are to be carried out.

2 For ships carrying out Registration Surveys described in **2.1.3** according to **-1** above for which the completion date is on or after 1 June 2022, the confirmation inspection required by **2.1.3-2(10)** is to be included therein.

Chapter 4 OCCASIONAL SURVEYS

Section 4.1 has been amended as follows.

4.1 General*

1 At Occasional Surveys, inspections are to be carried out on the relevant items of the requirements specified in **3.1.2** and **3.1.3**. In addition, Registration Surveys for such installations are to be carried out mutatis mutandis according to the degree of repairs or modifications made to the ballast water management installation and its relevant equipment. To implement the survey, in lieu of the traditional ordinary surveys where a surveyor is in attendance, the Society may approve survey methods which it considers to be appropriate.

2 For ships undergoing any installation, change, and replacement of their *BWMS*, the Occasional Surveys described in **2.1.3** are to be carried out.

3 For ships carrying out the Occasional Surveys described in **2.1.3** according to **-2** above for which the completion date is on or after 1 June 2022, the confirmation inspection required by **2.1.3-2(10)** is to be included therein.

“Guidance for ballast water management installations” has been partly amended as follows:

Part 2 SURVEYS

Chapter 2 REGISTRATION SURVEYS

2.1 Registration Surveys during Construction

Paragraph 2.1.3 has been added as follows.

2.1.3 Inspections of Equipment

1 For the purpose of **2.1.3, Part 2 of the Rules**, inspections are to be carried out after all equipment (including associated piping, etc.) has been fully installed on board in consideration of *BWM.2/Circ.70/Rev.1 2020 Guidance for the Commissioning Testing of Ballast Water Management Systems*.

2 During the inspections specified in **-1** above, in addition to *BWM.2/Circ.70/Rev.1 2020 Guidance for the Commissioning Testing of Ballast Water Management Systems*, the following are to be undertaken for the sampling and analysis of the ballast water of the *BWMS* referred to in **2.1.3-1(10), Part 2 of the Rules**.

(1) Collection of representative samples

(a) Representative samples are to be collected from the sampling facilities specified in **1.5, Part 3 of the Rules** during the corresponding ballast water discharge after the full treatment has been applied.

(b) The total sample volume is to be at least 1 m^3 ; a smaller volume, however, may be used in cases where it is validated to ensure representative sampling of organisms.

(c) The applicable self-monitoring parameters (e.g. flow rate, pressure, TRO concentration, UV transmittance/intensity) of the *BWMS* are to also be assessed, taking into account the system design limitations of the *BWMS*; in addition, the correct operation of all sensors and related equipment is to be confirmed.

(2) Analysis of representative samples

(a) Representative samples are to be analysed for its compliance with the requirements specified in **(1) and (2) of 3.2, Part 3 of the Rules**, using the indicative analysis methods listed in *BWM.2/Circ.42/Rev.2*, as may be amended.