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To: Shipowners, Shipping Companies, All Branches, Headquarters Departments concerned,  
Surveyors & Auditors

## Technical Notice for special requirements of flag states carrying out biological commissioning tests on samplings for ships with BWMS on board

The 74th session of the Marine Environment Protection Committee (MEPC) of International Maritime Organization (IMO) approved the proposed amendments to regulation E-1.1 and E-1.5 (MEPC74/18/Add.1 Annex 10) of the Ballast Water Management Convention (BWM Convention). The amendments require an installed ballast water management system (BWMS) to undergo a commissioning test during the initial or additional survey, and to confirm that the BWMS is properly installed by verifying that the treated ballast water meets D-2 standard. The amendments also makes it clear that the commissioning test should not apply to ships that had already a BWMS installed and hold with an International Ballast Water Management Certificate (IBWMC) or Statement of Compliance of International Ballast Water Management Certificate (SOC). The proposed amendments are expected to be adopted during the 75th session of MEPC which was originally scheduled in April 2020 but has been postponed due to the outbreak of COVID- 2019. The exact date of the meeting is yet to be determined.

In addition, the Resolution MEPC.300 (72) "Code For Approval of Ballast Water management Systems (BWMS Code/8.3.6) and Resolution A.1140(31) "Survey Guidelines Under the Harmonized System of survey and Certification (HSSC), 2019 (Annex 4(BI)1.1.3.20 , require that the commissioning tests be carried out for BWMS that are installed on board at the time of the initial survey, whether new or existing ships. All BWMS installed on ships on or after 28 October 2020 shall be approved and certified in accordance with BWMS Code.

As of today, flag states such as Singapore, Australia, Cyprus, Tuvalu, Panama and Bahamas have issued circulars on the mandatory installation of BWMS on board and

the proposed commissioning test of ballast water before the above amendments take effect. The main requirements of these circulars are summarized as follows:

## **A. Flag States where ballast water commissioning tests are mandatory for ships with BWMS on board**

### **1. Singapore**

1.1 Circular No: SHIPPING CIRCULAR NO. 09 OF 2019

1.2 Implementation Date: The commissioning test shall be carried out for BWMS that is installed on board applicable Singapore registered ships (SRS) of 400 GT and above after 8 September 2019. Applicable SRS of less than 400GT may undergo the commission test voluntarily.

1.3 Main content

1.3.1 The commissioning test shall be carried out to the satisfaction of the attending RO surveyor after a complete installation of BWM, and after all ballasting equipment (e.g. Pumps and piping) has been fully tested as appropriate.

1.3.2 The representative ballast water samples collected for the commissioning test should be analyzed using at least an appropriate indicative analysis method (List of indicative analysis methods are listed in table 3 of BWM.2/Circ.42/Rev.1, as may be amended). The commissioning test is considered to be successful if the analysis indicates that the sample does not exceed the D2 standard and the self-monitoring equipment of the BWMS indicates correct operation of all sensors and related equipment.

1.3.3 A written report including methods and detailed results of the commissioning testing should be provided to the attending RO surveyor for verification before and IBWMC can be issued.

1.3.4 The arrangement for conducting the test and any commercial dealings pertaining to the commissioning test shall be between the shipowners / manager /shipyard / contractor and the manufacturer. The Administration of Singapore MPA does not carry out approval of any specific testing facility. The testing facility engaged to conduct the commissioning test shall be independent of the manufacturer of the BWMS and accepted by the RO which issues the IBWMC.

1.3.5 If the commissioning test cannot be successfully carried out due to the equipment's system design limitation, a short term IBWMC may be issued for a period of not more than three (3) months. This is to allow time for the commissioning test to be carried out to the satisfaction of the attending RO surveyor. No authorization from MPA is required for such cases provided that the attending RO surveyor ensures the following:

- (1) Reasons for the commissioning test not being completed successfully are recorded in the ballast water record book;
- (2) The attending RO surveyor is provided with arrangements for the commission test (e.g. date, time, location);
- (3) The ship's ballast water management plan (BWMP) has incorporated appropriate contingency measures in line with the "Amendments to the Guidelines

for ballast water management and development of ballast water management plans (G4)” (Resolution MEPC.306(73));

(4) The ship’s Master and the designated ballast water management officer are aware of the “Guidance on contingency measures under the BWM Convention”, BWM.2/Circ.62, as may be amended, in particular on the communication between the ship and the port State; and

(5) The ship’s Master and the designated ballast water management officer are aware of the reporting requirements to the competent port Authority as per regulation E1.7 of the BWM Convention when the vessel is calling a foreign port and shall comply with any additional requirements that the port State may impose.

1.3.6 If the commissioning test is not completed within the three (3) months of the short term IBWMC, MPA’s approval for an extension is to be sought.

## **2. Australia**

2.1 Circular No: SHIPPING CIRCULAR NO. 01 OF 2019

2.2 Implementation Date: The commissioning test shall be carried out for BWMS that are installed on board applicable Australian Flagged Ships of 400GT and above after 8 September 2019. Applicable ships of less than 400GT may undergo the commissioning test voluntarily.

2.3 Main content

2.3.1 The commissioning test shall be carried out to the satisfaction of the attending RO surveyor after a complete installation of BWM, and after all ballasting equipment (e.g. Pumps and piping) has been fully tested as appropriate.

2.3.2 The ballast water samples collected for the commissioning test should be a representative sample, analyzed using at least an appropriate indicative analysis method. (List of indicative analysis methods are listed in table 3 of BWM.2/Circ.42/Rev.1, as may be amended) The commissioning test is considered to be successful if the analysis indicates that the sample does not exceed the D-2 standard and the self-monitoring equipment of the BWMS indicates correct operation of all sensors and related equipment.

2.3.3 A written report including methods and detailed results of the commissioning testing should be provided to the attending RO surveyor for verification before an IBWMC can be issued. The report should be provided to the Australian Department of Agriculture (Agriculture) for information.

2.3.4 The arrangement for conducting the test and any commercial dealings pertaining to the commissioning test shall be between the shipowners/manager/shipyard/contractor and the manufacturer. Agriculture does not carry out approval of any specific testing facility. The testing facility engaged to conduct the commissioning test shall be independent of the manufacturer of the BWMS and accepted by the RO which issues the IBWMC.

2.3.5 If the commissioning test cannot be successfully carried out due to the equipment’s system design limitation, a short term IBWMC may be issued for a period of not more than three (3) months. This is to allow time for the commissioning test to be carried out to the satisfaction of the attending RO surveyor.

No authorization from Agriculture is required for such cases provided that the attending RO surveyor ensures the following:

(1) Reasons for the commissioning test not being completed successfully are recorded in the ballast water record book;

(2) The attending RO surveyor is provided with arrangements for the commission test (e.g. date, time, location);

(3) The ship's ballast water management plan (BWMP) has incorporated appropriate contingency measures in line with the "Amendments to the Guidelines for ballast water management and development of ballast water management plans (G4)" (Resolution MEPC.306(73));

(4) The ship's Master and the designated ballast water management officer are aware of the "Guidance on contingency measures under the BWM Convention", BWM.2/Circ.62, as may be amended, in particular on the communication between the ship and the port State; and

(5) The ship's Master and the designated ballast water management officer are aware of the reporting requirements to the competent port Authority as per regulation E-1.7 of the BWM Convention when the vessel is calling a foreign port and shall comply with any additional requirements that the port State may impose.

(6) The RO surveyor must collect the following information and provide it to the Marine Biosecurity Unit at [pestsmarine@agriculture.gov.au](mailto:pestsmarine@agriculture.gov.au) as soon as reasonably practical:

.1 vessel details, including name and IMO number

.2 circumstances which led to incomplete testing, and

.3 date for proposed next test.

2.3.6 If the commissioning test is not completed within the three (3) months of the short term IBWMC, Agriculture's approval for an extension is to be sought.

### **3. Cyprus**

3.1 Circular No: Circular No 20/2019

3.2 Implementation Date: The Shipping Deputy Ministry to the President( "SDM" ) requests that the BWMS which are planned for installation on a Cyprus flagged ship from 1/1/2020 are inspected in the scope of commissioning the BWMS in accordance with the guidance provided by BWM2./Circ.70.

3.3 Main content

3.3.1 The commissioning tests will be performed as a part of the installation process, simultaneously with the installation of the system by surveyors of Recognized Organizations ("ROs") empowered by the SDM to perform inspections on board Cyprus flagged ships. No further authorization is needed. Exemptions for postponing of the test may be granted on a case by case basis by the SDM e.g. in cases of non-availability of a laboratory, and the request must originate from the RO.

3.3.2 An International Ballast Water Management Certificate indicating compliance to Regulation D-2 of the Annex to the BWMC will not be issued or endorsed until the completion of the commissioning test with satisfactory results.

3.3.3 The commissioning test is not aiming to verify the Type Approval Certificate of

a BWMS. However, in case that, the attending surveyor identifies discrepancies on the components of the system or its performance related to the items inspected in the scope of the issuance of a Type Approval Certificate, the attending surveyor must consult the SDM for guidance.

3.3.4 The sampling water collecting and analyzing process will be taken from an ambient environment within the system design limitations (SDL). The analysis standard accepted is an indicative analysis with direct measurement as listed in BWM.2/Circ. 42/Rev. 1. The laboratory used should be accredited with ISO standard as applicable.

3.3.5 The commissioning of the system will be considered as successful if the operational test is successful and the indicative analysis report is evidencing the performance of the system to be in conformity with the values listed in Standard D-2 of the Annex of the BWM Convention. A copy of the report should be kept on board. No reporting is needed to be submitted to this office unless requested.

3.3.6 All actions related to the commissioning test should be recorded in the Ballast Water Management Book.

3.3.7 Any clarifications or further guidance in relation to this Circular should be addressed to the Marine Environment Unit of the Flag State Directorate of the Shipping Deputy Ministry of Cyprus using the e-mail address: [environment@dms.gov.cy](mailto:environment@dms.gov.cy)

#### **4. Tuvalu**

4.1 Circular No: MARINE CIRCULAR MC-3/2016/1

4.2 Implementation Date: February, 2020

4.3 Main Content

4.3.1 Commissioning Testing of BWMS shall be carried out in accordance with BWM.2/Circ.70.

4.3.2 In the event where commissioning testing cannot be completed immediately following the BWMS installation, or where test results are considered erratic or out of expected range, the RO shall work in consultation with the manufacturer of the BWMS and the ship owner to provide recommendations to ensure compliance as far as practicable, and to implement alternative measures during the interim period to mitigate the effect of non-compliance of the BWMS.

#### **B. Flag States where ballast water commissioning tests are recommended for ships with BWMS on board**

##### **1. Panama**

1.1 Circular No: MERCHANT MARINE CIRCULAR MMC-345-Mar-2020

1.2 Proposed implementation Date: The commissioning test shall be carried out for BWMS that are installed on board applicable Australian Flagged Ships after March 2020.

1.3 Main Content

Following the outcome from the MEPC 74 where Administrations were strongly

recommended to provide instruction to its Recognized Organizations to verify that the indicative analysis testing is conducted at the time of the Commissioning Test (operational test carried out based on the installation commissioning procedures) to the Ballast Water Management System, and considering the delays and inconveniences reported to this Administration due to the lack of clarity with regard to the indicative analysis testing, the following points should be observed:

1.3.1 The indicative analysis test it is recommended with the intention to demonstrate compliance of the treated discharge ballast water during the above mentioned test with regulation D-2 through a sampling analysis using as reference the guidance for commissioning testing 'BWM.2/Circ.70' (as the recommended guideline)

1.3.2 In case that the indicative analysis testing will result as non-complying, then a detailed analysis should be conducted, using as reference the Guideline content in BWM.2-Circ.42-Rev.1).

1.3.3 Laboratories used for detailed analysis (if required) should be accepted or approved by the ROs considering the requirements in the Code for the Recognized Organizations with regards to subcontracting and service suppliers.

1.3.4 Commissioning test should not apply to ships that had already a BWMS installed and certified for D-2 standard.

1.3.5 In cases were the voluntary sampling analysis for indicative analysis test is not possible to conduct during the ship's commissioning test (e.g. salinity of ambient water is outside the System Design Limitations of the BWMS, lack of equipment for indicative analysis required), please inform to this Administration for registry purpose.

1.3.6 The indicative analysis test is not mandatory (voluntary) until the entry into force of amendments to Regulation E-1 will take place.

## **2. Bahamas**

2.1 Circular No: INFORMATION BULLETIN No.165 Rev.6 (04 November 2019)

2.2 Proposed implementation date: The commissioning test shall be carried out for BWMS that are installed on board applicable Bahamian Ships after November 4, 2019.

2.3 Main content

2.3.1 All BWMS installed on board Bahamian ships should be adequately tested and verified operational by the Recognized Organization that classes the ship.

2.3.2 Section (BI) 1.1.2.19 of A.1120(30) on initial survey requires verification of the commissioning testing, confirming that the discharged ballast water complies with Regulation D-2 of the Convention

2.3.3 The BMA recommends BWMS post installation verification as follows:

a) A test confirming that the installed BWMS meets the required performance standard should be conducted to the satisfaction of the attending surveyor, to the extent prescribed in paragraph 3 of the Annex to IMO Circular BWM.2/Circ.70.

b) An effluent test confirming the BWMS discharge meets Regulation D-2 standards should be completed in accordance with the maker's recommendations or where

appropriate laboratory facilities are available locally. A method of verifying indicative compliance of the effluent test results may be taken on the basis of section 4.2 of the Annex to BWM.2/Circ.42/Rev.1/Corr.1.

2.3.4 Where commissioning and/or effluent testing cannot be completed immediately following BWMS installation, or where test results are considered erratic or out of expected range, the Recognized Organization conducting the IBWMC Initial Survey should contact the BMA to agree on follow up actions.

This technical notice is made public on CCS website ([www.ccs.org.cn](http://www.ccs.org.cn)), and is transmitted to the relevant shipowners and shipping companies by the branches within their responsible area. Please contact Classed Ship in Services Department of the Headquarters for any inquiries in the implementation by e-mail to: [cdwork@ccs.org.cn](mailto:cdwork@ccs.org.cn).

Annex 1: MPA Shipping Circular No.09 of 2019

Annex 2: Shipping Circular No. 01 of 2019 of Department of Agriculture of Australia

Annex 3: Circular No.20/2019 of Cyprus Shipping Deputy Ministry to the President

Annex 4: Marine Circular MC-3/2016/1 of Tuvalu Ship Registry

Annex 5: PMA Merchant Marine Circular MMC-345

Annex 6: BMA Information Bulletin No. 165, Rev. 06