



Indian Ocean MOU on port State control

GUIDANCE TO THE PORT STATE CONTROL OFFICERS

IOMOU Circular No. 01 of 2017

**GUIDANCE TO PORT STATE CONTROL OFFICERS FOR VERIFYING
COMPLIANCE WITH
THE INTERNATIONAL CONVENTION FOR THE CONTROL AND MANAGEMENT
OF SHIPS' BALLAST WATER AND SEDIMENTS, 2004**

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1. PURPOSE

This document is intended to provide basic guidance for the conduct of a Port State Control Inspection, to verify compliance with the requirements of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 (BWM).

2. APPLICATION

The BWM Convention enters into force on 8th September 2017.

These guidelines apply to ships as stipulated in Article 3 of the BWM Convention.

The Convention recognizes two standards of ballast water management for existing ships, namely Ballast Water Exchange (BWE) - standard D-1 which is acceptable until the first renewal survey of IOPP under MARPOL Annex I after 8th September 2017 and the second standard is the Ballast water Performance Standard (BWP) - standard D-2. New ships with keel laid after 8th September 2017 and existing ships after the first renewal survey of IOPP following 8th September 2017 shall conduct standard D-2. The implementation dates for the D-2 standard are according to IMO Assembly Resolution 1088(28), and replaces those in Regulation B-3 of the BWM Convention.

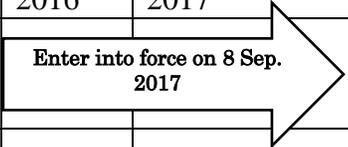
Keel laid	2016	2017	2018	2019	2020	2021	2022	
Existing ship			D-1 or D-2 until first renewal survey of IOPP					
			After the renewal survey D-2					
New ship			D-2					

Table 1 : BWM Implementation schedule (IMO Assembly Resolution 1088(28))

With respect to ships of non-Parties to the BWM Convention, port State control officers (PSCOs) of Parties should apply the same requirements to ensure that no more favorable treatment is given to such ships.

3. INSPECTION OF SHIPS REQUIRED TO CARRY THE BALLAST WATER MANAGEMENT (BWM) CERTIFICATE

3.1 Four-Step Process

The PSC procedure can be described as a four-stage inspection:

- 3.1.1 The first step, an "initial inspection", should focus on documentation and ensuring that an officer has been nominated for ballast water management on board the ship and to be responsible for the Ballast Water Management System (BWMS), and that the officer is familiar with the BWMS;
- 3.1.2 The second step – the "more detailed inspection" where the operation of the BWMS is checked and the PSCO clarifies whether the BWMS has been operated adequately according to the Ballast Water Management Plan (BWMP) and the self-monitored

operational indicators verified during type approval procedures. Undertaking a more detailed inspection is dependent on the conditions of article 9.2 of the BWM Convention;

- 3.1.3 The third step – sampling is envisaged to occur during this stage of PSC which relies on indicative analysis, to identify whether the ship is meeting the ballast water management performance standard described in Regulation D-2, or whether detailed analysis is necessary to ascertain compliance; and
- 3.1.4 The fourth step, if necessary, incorporates detailed analysis to verify compliance with the D-2 standard.

3.2 Initial inspection

An initial inspection will as a minimum and to the extent applicable be to examine the following:

- 3.2.1 Check that a valid International BWM Certificate (IBWMC) is on board, in accordance with Article 9.1(a). A IBWMC shall be issued after an IOPP initial or renewal survey on ships of 400 gross tonnage and above, excluding floating platforms, FSUs and FPSOs;
- 3.2.2 Check that the Ballast Water Management Plan is onboard and is approved by the Administration, as per Regulation B-1. The BWMP is to be written in the working language of the crew, if the text is not in English, French or Spanish; the plan is to include a translation into one of these languages. (Section B, Regulation B-1(7));
- 3.2.3 Check that Ballast Water Record Book (BWRB) is on board and meets requirements of the BWM Convention, based on Regulation B-2;
- 3.2.4 Check that the details of any ballast water operations carried out are recorded in the BWRB together with any exemptions granted, based on Regulation B-2 and appendix II of the BWM Convention, as well as notations of any accidental and exceptional discharges (Regulation B-2.3) and instances where ballast water was not exchanged in accordance with the BWM Convention (Regulation B-4.5). The BWRB shall be kept on board the ship for a minimum of two years after the last entry. The officer in charge of the operation shall sign each entry in the record book and the master shall sign each completed page;
- 3.2.5 Check the Type Approval Certificate or its copy for the BWMS, to determine whether the BWMS is used in accordance with any limited conditions. While carriage and presentation of the Type Approval Certificate is not mandatory, the PSCO may also check the BWMP to obtain ship-specific information on the BWMS and its usage.
- 3.2.6 Check that an officer has been designated to be responsible for the implementation of the BWMP (Regulation B-1.5);
- 3.2.7 PSCO should conduct a visual check of the overall condition of the ship and the equipment and arrangements detailed in the IBWMC and the BWMP, including the BWMS if the use of one is required;
- 3.2.8 In the case of a ship subject to the ballast water exchange standard, check that the BWRB indicates that the required exchange was undertaken (Regulations D-1 and B-4);

- 3.2.9 Check that the ship has taken steps to meet the ballast water performance standard described in Regulation D-2 once required to do so by IMO Assembly Resolution A.1088(28);
- 3.2.10 In the case where a ship operates under Regulation D-4 “Prototype Ballast Water Treatment Technologies”, check the IBWMC, ‘statement of compliance’ from the Administration and BWMP. D-2 standards do not apply to these vessels for the first 5 years from date of prototype BWMS installation;
- 3.2.11 Check that designated officers and crew are familiar with essential BWM procedures, including the operation of BWMS;
- 3.2.12 In the case of a ship claiming an exception under Regulation A-3.1 (safety of the ship or saving life), Regulation A-3.2 (accidental discharge or ingress resulting from damage), Regulation A-3.3 (avoiding or minimizing pollution) or Regulation B-4.4 (unsafe conditions for exchange), the master should provide proof of the need for the relevant exception;
- 3.2.13 If the IBWMC is valid, BWMP approved, entries in BWRB are appropriate and the PSCO’s general impressions and visual observations on board confirm a good standard of maintenance with regard to the Convention, the PSCO should generally confine the initial inspection to the above;
- 3.2.14 PSCO or any authorized authority of an Administration could take samples anytime during the inspection to verify compliance under Article 9.1 (C) of the Convention. The quantity of the sampling water to be taken and location chosen shall be in accordance with IMO guidelines for Ballast Water Sampling (G-2) and associated guidance documents developed by the International Maritime Organization (IMO). Every effort should be made to avoid any undue delays to the ship;
- 3.2.15 For safety reasons or force majeure, when a ship has deviated from an approved method of ballast water management, the master has to provide proof that non-compliance was in order not to impair the safety or stability of the ship, its crew or its passengers. This can be due to adverse weather, ship stress, equipment failure or any other extraordinary conditions.

3.3 Clear Grounds

- 3.3.1 After the establishment of clear grounds that the ship is not complying with the Convention, a more detailed inspection shall be carried out, (Article 9 (2)).
- 3.3.2 Clear grounds found during the initial inspection, which may warrant a more detailed inspection, could be but are not limited to, any of the following:
- IBWMC is missing, not valid, or it has expired (Article 9.1 (a));
 - The absence of a BWMP approved by the flag State (Regulation B-1);
 - The BWRB is absent or does not meet the requirements of the convention (Article 9.1 (b));
 - Entries in the BWRB do not reflect the actual ballast water situation on board (Article 9.1 (b));
 - The condition of the ship or its equipment does not correspond substantially with the particulars of the IBWMC (Article 9.2 (a));

- Where applicable, ballast water exchange conducted in accordance with Regulation B-4 of the convention;
- Where applicable, prototype ballast water treatment technologies have not been operated consistently and as designed;
- Evidence or observation that the master or the crew are not familiar with their duties or essential shipboard operations in the implementation of ballast water management, or that such operations have not been carried out (Article 9.2(b));
- Information from third parties such as a report or complaint concerning violation of the convention (Article 10(4));
- No Designated Officer has been nominated with the responsibility for ballast water management (Regulation B-1 (5));
- Evidence, or observation that the BWMS has not been used in accordance with its operational instructions;
- Evidence or observation of unreported accidents or defects that affect the ability of the ship to manage ballast water (regulation E-1.7);
- Evidence or observation that ballast water has been discharged other than in accordance with the regulations of the Convention (Regulation A-2);
- The master has not provided the proof referenced in paragraph 3.2.12.

3.3.3 Where a more detailed inspection is to be carried out, the port State will take such steps to ensure the ship will not discharge ballast water until it can do so in accordance with Article 9.3 of the BWM Convention (see notification requirements in paragraph. 8.1 and 8.2).

3.4 More Detailed Inspections

3.4.1 A more detailed inspection should, but not be limited to, verifying that:

There is a ballast water management procedure on board the vessel.

The BWMP provides adequate information regarding:

- Details of specific operational or safety restrictions which effect the ship and or the crew including procedures for safe tank entry;
- Details of specific safety aspects of ballast water management system;
- Details of method(s) used on board for the management of ballast and for sediment control including step-by-step operational procedures;
- Procedures for the disposal of sediments at sea and to shore;
- List and/or diagram indicating the locations of sampling and access points in pipelines and ballast water tanks;
- Outline the duties of the designated officer as set forth in BWMP; and
- Details of the record-keeping requirements of the Convention in accordance with BWMP

3.4.2 Since the time of the survey of the ship under Regulation E-1.1, has an unsanctioned change been made to the structure, equipment, fittings, arrangements or material associated with the BWMP, except the direct replacement of such equipment or fittings (Regulation E-1.10)? To verify that the plan reflects the actual conditions onboard and to verify that the BWMP have been reapproved if changes have been made.

3.4.3 If the BWMP requires use of a BWMS:

- Is the BWMS and associated equipment in good working order and is the primary treatment process fully working (this could include filters, pumps, all the UV lights and back flushing equipment)?
- Is the crew following safety procedures associated with operation of the BWMS?
- Is the treatment process fully operational (this could include reference to the self-monitoring system of a BWMS)?
- Does the BWRB align with the onboard control equipment, including the self-monitoring device of the BWMS?
- Is the BWMS being operated in accordance with the operational instructions?
- Can the designated officer demonstrate the necessary knowledge of the BWMS and how it operates?
- Has the BWMS been bypassed?
- Where required, are any needed Active Substances present in adequate supply on board the ships, and where present, are they being introduced into the BWMS?

3.4.4 The PSCO may examine any element of the ballast water system in order to check that it is working properly.

3.4.5 Any BWM related deficiency found should be recorded as an individual deficiency in the inspection report. PSCO should assess deficiencies and observations throughout detailed inspection. If he/she still doubts about the BWM Convention implementation onboard when their assessment indicate possibility of non-compliance treated ballast water by BWMS, it may result in sampling.

4. SAMPLING

4.1.1 Sampling for compliance of D-2 is a very complex issue and will be the responsibility of the appropriate authority in the port State to implement the guidelines on Ballast Water Sampling (G2) and associated guidance as developed by IMO.

4.1.2 Port States should refrain from applying criminal sanctions or detaining the ship, based on sampling during the experience building phase that was agreed at IMO. This does not prevent the port State from taking preventive measures to protect its environment, human health, property or resources.

4.1.3 Any indicative or detailed analysis should not unduly delay the operations, movement or departure of the ship. PSCO should not request ballast water discharge operations only for sampling purposes, recognizing that discharge could pose a threat to the safety, environment, human health, property or resources.

4.2 Indicative analysis
PSCO should carry out an indicative analysis first.

4.3 The quantity of the sampling water to be taken and location in the ship chosen should be in accordance with the annex, part 1 and/or part 2 of the Guidelines for ballast water sampling (G2).

4.3.1 Indicative analysis (using operational or performance indicators) can be undertaken at any time throughout the discharge. In cases where indicative analysis identifies that a system exceeds the D-2 standard by a threshold specific to the validated indicative analysis method being used, it may be sufficient to establish non-compliance, however, the practicalities, application and limitations of the methodology being used for indicative analysis need to be understood fully. The examples of the method listed in the ballast

water sampling and analysis guideline (BWM.2/Circ.42) as practicable procedure of PSC inspection, but it is not limited.

4.3.2 If the indicative analysis indicates that the ship poses a threat to the environment, human health, property or resources (Article 10 (3)), or is inconclusive meaning that detailed analysis may be required, the PSCO shall implement one or more of the following:

- Retention of all ballast water on board;
- Require the vessel to undertake any repairs required to the BWMS;
- Permit the vessel to proceed to exchange ballast water in a location acceptable to the Administration;
- Allow the vessel to discharge ballast to an appropriate shore reception facility; or
- Allow the vessel to treat the ballast water or a portion of it on board in accordance with a method approved by the port Administration.

4.4 Detailed analysis

PSCO can require a detailed analysis when as the non-conclusive result found by indicative analysis.

4.4.1 The quantity of the sampling water to be taken and location in the ship chosen should be in accordance with the Guidelines for ballast water sampling (G2). The analyzing the sample should be taking into account the annex part 2 as shipboard test, part 4 as sample analysis method that are in the Guidelines for approval of ballast water management systems (G8) and associated guidance documents developed by IMO. Every effort should be made to avoid any undue delays to the ship.

4.5 If the ship is allowed to leave the port before the results of the detailed analysis are made available and/or the result is indicating that the ship poses a threat to environment, human health, property or resources, the competent Authority will request the flag State or the recognized organization to take appropriate measures, and also may inform the results to the port State in whose waters the ship is operating. (See notification requirements in paragraph 8.2).

4.6 The informed port State can prohibit such ship from discharging ballast water in accordance with Article 10 until the result are made available or threat is removed. The port State may also allow a ship to enter while the flag State or RO are taking appropriate action until they prove that such threat has been removed. However, during the experienced-building phase, the port State should not be penalized (sanctioned, warned, detained or excluded) solely due to an excess of the D-2 standard.

5. VIOLATIONS AND CONTROL OF SHIPS

Stopping the discharge due to sampling as a control action

5.1 If the sampling described above leads to a result, or supports information received from another port or offshore terminal, indicating that the ship poses a threat to the environment, human health, property or resources, the Party in whose waters the ship is operating shall prohibit such ship from discharging ballast water until the threat is removed (see notification requirements in paragraph 8.2). However to prohibit discharging or to proceed to exchange ballast water outside of port are same as penalization for ship, PSCO should recognize it.

6. DETAINABLE DEFICIENCIES

- 6.1 In exercising his/her functions, the PSCO should use professional judgment to determine whether to detain the ship until any noted deficiencies are corrected or to permit a vessel to sail with deficiencies, which do not pose an unreasonable threat of harm to the marine environment.
- 6.2 In order to assist the PSCO in the use of these guidelines, the following non-exhaustive list of deficiencies should be considered to be of such nature that may warrant the detention of a ship:
- Absence of a IBWMC;
 - Absence of a BWMP;
 - Absence of a BWRB;
 - Indication that the vessel or its equipments does not correspond substantially with the particulars of the IBWMC and/or BWMP;
 - The designated personnel are not familiar with essential shipboard procedures relating to ballast water management;
 - No ballast water management procedures have been implemented on board;
 - No Designated Officer has been nominated;
 - The ship has not complied with the BWMP for management and treatment of ballast water (standards D-1, D-2 or D-4);
 - Absence, serious deterioration or failure of proper operation of equipment required under the BWMP;
 - Result of non-compliance by sampling; or
 - Ballast water has been discharged other than in accordance with the regulations of the Convention (Regulation A-2).
- 6.3 If detainable deficiencies are established during a More Detailed Inspection the port State shall prohibit any further discharge of the ballast water as it may not be in compliance with the Convention.

7. EXEMPTIONS

PSCO should verify whether a Party or Parties under their jurisdiction have granted an exemption to a ship under Regulations A-4, B-3 or C-1 of the convention. Any exemptions granted are to be recorded in the Ballast Water Record Book.

8. NOTIFICATIONS

- 8.1 In the event that an action is taken in accordance with paragraphs 3.3.3 or 5.1 of these guidelines, the port State should inform, in writing, the flag State of the ship concerned, or if this is not possible, the consul or diplomatic representative of the ship concerned, of all the circumstances in which the action was deemed necessary. In addition, the recognized organization responsible for the issue of certificates should be notified (Article 11.2); and
- 8.2 In the event that the PSCO is unable to take the intended action, or if the ship has been allowed to proceed to the next port of call, the authorities of the port State should communicate all the facts to the flag State, to the recognized organization, and to the authorities of the country of the next appropriate port of call (Article 11.3; Resolution A.1052(27), paragraph 4.1.4).

8.3 In the event of a violation of the BWM Convention, the notifications in paragraph 8.2 should be made. In addition, the ship should be notified of the violation and the report forwarded to the flag State should include any associated evidence (Article 11.1).

9. DEFICIENCIES CODES

01136 - International Ballast Water Management Certificate

14801 - BWMP - Missing/not approved/incorrect/not updated/incorrect language

14802 - BWRB – Missing/not properly filled/incorrect language

14804 - Ballast Water Exchange – not carried out as required

14805 - Sediment removal – not carried out/not as required

14806 - Crew training and familiarization – lack of familiarity

14809 - Conditions for exemptions – Invalid/expired/incorrect/missing

14810 - Ballast Water Discharge violation in port – not as required

14811 - BWMS – malfunction/not properly maintained

14899 – Other

FLOWCHART

