

ANNEX 5

DRAFT BWM.2 CIRCULAR

DRAFT GUIDANCE ON BALLAST WATER RECORD-KEEPING AND REPORTING

1 The Marine Environment Protection Committee, at its eightieth session (3 to 7 July 2023) approved the *Guidance on ballast water record-keeping and reporting* to assist in bringing clarity to the record keeping and reporting process under the BWM Convention, including guidance on completing the Ballast Water Record Book, an updated example ballast water reporting form and an example form for voluntary tank-by-tank logging of ballast water operations, as set out in the annex.

2 Member Governments are invited to bring this Guidance to the attention of all parties concerned.

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1 Purpose

1.1 The first part of this document (section 2, Ballast Water Record Book), which is intended for ship crews, explains how ballast water operations should be recorded by making mandatory entries in the Ballast Water Record Book (BWRB). These records are required by the Convention. These records may also assist the ship in properly implementing its Ballast Water Management Plan and in operating and maintaining any ballast water management system (BWMS) that is being used.

1.2 The second part (section 3, Ballast water reporting form), intended for ship crews and port States, contains an example ballast water reporting form (BWRF) together with instructions for completing it. A BWRF may be submitted prior to entry into a port State that requires specific information regarding the management of ballast water on ships bound for its ports, offshore terminals or anchorage areas.

1.3 The third part (section 4, Voluntary tank-by-tank log), intended for ship crews, explains how to maintain voluntary tank-by-tank records of ballast water operations that may facilitate completion of a BWRF by allowing the crew to efficiently track the contents of each tank and hold that carries ballast water. Maintaining these voluntary records may also assist the ship in documenting and demonstrating that the requirements of the Convention have been met.

2 Ballast Water Record Book

2.1 Introduction

2.1.1 Regulation B-2 of the BWM Convention establishes mandatory requirements for maintaining a BWRB on board the ship, and appendix II of the annex to the Convention specifies the information that must be included.

2.1.2 The BWRB may be inspected in the port or offshore terminal of a Party by officers duly authorized to inspect the ship for the purpose of determining compliance with the Convention.

2.1.3 The following sections explain when to record operations in the BWRB, how to record these operations (including standardized formats that should be used for smooth record-keeping and inspections) and how the records should be stored. Example entries are provided in appendix 1 to demonstrate how various ballast water operations and circumstances should be recorded in the BWRB.

2.2 When to record operations in the Ballast Water Record Book

2.2.1 Each operation concerning ballast water shall be fully recorded chronologically as per completion without delay in the Ballast Water Record Book (regulation B-2.5).

2.2.2 In the event of the discharge of ballast water pursuant to regulations A-3 (exceptions), A-4 (exemptions), B-3.6 (ballast water discharged to a reception facility) or B-3.7 (other methods of ballast water management that are approved in principle by the Committee) or in the event of other accidental discharge/ingress or other exceptional uptake or discharge of ballast water not otherwise exempted by this Convention, an entry shall be made in the Ballast Water Record Book describing the circumstances of, and the reason for, the discharge.

2.2.3 If ballast water exchange is not undertaken for the reasons in regulation B-4 this shall be recorded, in accordance with regulation B-4.5.

2.2.4 Record all failures or inoperabilities of the ballast water management system in the Ballast Water Record Book under item Code F. If the failure or inoperability is not immediately resolved, a second Code F entry should later be recorded when the BWMS is rectified and made operational.

2.2.5 Exemptions granted under regulation A-4 and any additional measures under regulation C-1 shall be recorded in the Ballast Water Record Book under item Code H. (regulation A-4.4).

2.2.6 For tankers, ballast taken into heavy weather Cargo Oil Tanks is considered as exceptional ballast as described in regulation 18.3 of MARPOL Annex I and would be recorded in both the Oil Record Book part II and in the Ballast Water Record Book.

2.2.7 Ships should take the following guidance into account in selecting code letters to reflect ballasting operations:

- .1 During a typical uptake or discharge operation, any ballast water treatment should be noted under Code A or Code B as appropriate. It is not necessary to enter Codes C1 or C2 to reflect this treatment.

- .2 A ballast water exchange operation should be entered using Code C1 (noting any ballast water treatment applied). It is not necessary to enter Codes A and B in conjunction with ballast water exchange.
- .3 Code C2 should be used when treatment occurs independently from an uptake or discharge (e.g. in-tank treatment, or treatment during circulation between tanks).
- .4 Ballast water internal transfer operations for the purpose of list/trim/stability of the ship involving similarly managed water should be recorded under Code H in the Ballast Water Record Book as the quantity in the tanks have changed.

2.3 How to record operations in the Ballast Water Record Book

2.3.1 When making entries, write the date in dd-MMM-yyyy format (e.g. 01-JUN-2022). If the operations cross over the dates, then the entry should be made after completion of the operation and start date can be mentioned as: - Start 1900 hrs (UTC) (hhmm SMT) on 01-JAN-2023 and Completion at 0100 hrs (UTC) (hhmm SMT) on 02-JAN-2023.

2.3.2 Enter the appropriate code and item number in the respective columns.

2.3.3 Enter all times using the Coordinated Universal Time (UTC) and Ship's Mean Time (SMT).

2.3.4 Record the ballast tank nomenclature as per the diagram corresponding to the Ballast Water Management Plan that forms a part of the Ballast Water Record Book.

2.3.5 Enter the port names using the proper standardized UN/LOCODE. If the UN/LOCODE is not available, or an offshore terminal or anchorage area is entered, write out Port Name and Country in full. No abbreviation should be used.

2.3.6 Enter the location position in the degrees, minutes and seconds format (example. Lat: 00 00.00 N/S, Long: 000 00.00 E/W).

2.3.7 Under the item "Ballast water treatment method" enter any treatment applied to the water during the specific operation being recorded. No prior treatment or intended future treatment should be recorded. If more than one method applies (e.g. partial treatment) then multiple entries should be made, each pertaining to the relevant volume. The following notations should be used:

- .1 "Approved BWMS";
- .2 "Prototype BWMS"; and
- .3 "Regulation B-3.7," in the case of other methods of ballast water management approved in principle by the Committee in accordance with that regulation.

2.3.8 "None. (regulation A-4)," in the case of exemptions granted in accordance with that regulation.

2.3.9 "None, as per BWMS design," in the case no treatment is necessary during uptake or discharge because of the design of the BWMS (e.g. a BWMS that does not treat during discharge, or a BWMS where the treatment takes place in the tank).

2.3.10 "None. (regulation B-3)" if the ship is not yet required to meet the standard in regulation D-2.

2.3.11 "None" and specify the reason, in other cases where no treatment is performed (e.g. BWMS bypass).

2.3.12 There should not be blank lines between successive entries.

2.3.13 In the case of a ship subject to equivalent compliance under regulation A-5 that is required by its Administration to keep records of each ballast water operation, the information specified in this guidance should be taken into account.

2.3.14 The entries in the Ballast Water Record Book shall be in a working language of the ship. If that language is not English, French or Spanish, the entries shall contain a translation into one of those languages. When entries in an official national language of the State whose flag the ship is entitled to fly are also used, these shall prevail in case of a dispute or discrepancy. (regulation B-2.5)

2.3.15 Each entry shall be signed by the officer in charge of the operation concerned and each completed page shall be signed by the master. (regulation B-2.5)

2.3.16 Incorrect entries should be struck through with a single line in such a way that the wrong entry is still legible. The incorrect entry should be signed and dated and followed by the correct entry.

2.3.17 Entries pertaining to an earlier missed operation should be completed as per example 25.

2.4 Storage of information

2.4.1 The Ballast Water Record Book shall be maintained on board the ship for a minimum period of two years after the last entry has been made and thereafter in the Company's control for a minimum period of three years. (regulation B-2.2).

2.4.2 The Ballast Water Record Book shall be kept readily available for inspection at all reasonable times and, in the case of an unmanned ship under tow, may be kept on the towing ship. (regulation B-2.4)

2.4.3 In addition to the Ballast Water Record Book, further tank-wise entries can be made in the Ballast Water Log voluntarily to complement it accordingly. Keeping tank-by-tank records of ballast water operations may assist the ship crews in completing of any Ballast Water Reporting Form that may be required by a port State, demonstrating that entries in the Ballast Water Record Book reflect the actual ballast water situation during any inspection, and implementing the Ballast Water Management Plan more efficiently through more specific knowledge of current tank contents.

2.4.4 Officers duly authorized by a Party may inspect the Ballast Water Record Book on board any ship to which this regulation applies while the ship is in its port or offshore terminal, and may make a copy of any entry, and require the master to certify that the copy is a true copy. Any copy so certified shall be admissible in any judicial proceeding as evidence of the facts stated in the entry. The inspection of a Ballast Water Record Book and the taking of a certified copy shall be performed as expeditiously as possible without causing the ship to be unduly delayed. (regulation B-2.6).

3 Ballast water reporting form

3.1 Introduction

3.1.1 As noted above, a BWRF may be submitted prior to entry into a port State that requires specific information regarding the management of ballast water on ships bound for its ports, offshore terminals, or anchorage areas.

3.1.2 Although individual port State forms may vary owing to national requirements and circumstances, port States are invited to align their forms with the example BWRF set out in appendix 2 as much as possible. Doing so will reduce the administrative burden on ships. Port States are also invited to use fillable PDF forms or online reporting systems to facilitate the submission of BWRF.

3.1.3 The example form allows for the collection and transmission of relevant information that will assist the port State and the ship in efficiently and effectively communicating the situation on board, as well as the ship's intentions. A completed form will:

- .1 positively identify the ship, the owner, the ISM Company, the agent and the officer onboard completing the report, to facilitate communications with port State authorities;
- .2 convey relevant voyage information, including the ship's intended arrival port and date, as well as the last port and future ports, if known;
- .3 summarize the current ballast water situation on board the ship relative to its ballast water capacity, including ballast tanks and any holds that may be in use for ballasting purposes;
- .4 summarize the ship's ballast water management approach, including management actions taken on water to be discharged, any available contingency methods (should they be needed), and key information on the ship's status with respect to survey and certification to assist the port State in assessing the status of the ship; and
- .5 include an appendix identifying the origin, management and discharge intentions for each tank to allow the port State to assess the risk posed by the water.

3.1.4 Ships that regularly submit BWRFs to port States may find it practical and efficient to maintain records of ballast water operations on a tank-by-tank basis. A form to facilitate this record-keeping is provided in section 4 of this guidance.

3.2 Completing the example ballast water reporting form

3.2.1 Write dates in the dd-MMM-yyyy format (e.g. 01-JUN-2022).

3.2.2 Enter times using Coordinated Universal Time (UTC).

3.2.3 Section 1. Ship information:

- .1 Ship name: Enter the name of the ship. In case of tug and barge operation (pull, push, sideway or an articulated tug and barge), enter both ship names, separated by a hyphen (-). Do not add prefixes or suffixes such as "M/V" (Motor Vessel), "M/S" (Motor Ship) or "T/S" (Tanker Ship/Tall Ship);
- .2 Flag: Enter the full name of the State or Territory whose flag the ship is flying at the time of the BWRP submission. Do not use abbreviation;
- .3 MMSI Number: Enter the ship's Maritime Mobile Service Identify (MMSI number);
- .4 Distinctive Numbers/Letters or Call Sign: Enter the ship's Official Number or Call Sign. If no Official Number exists for the ship, enter other identification number;
- .5 Owner: Enter the name of the registered owner(s) of the ship. If under charter, enter the name of the operator;
- .6 ISM Company name and number: Enter the name of the Company as defined under the *International Convention for the Safety of Life at Sea*, chapter IX-1, and *International Safety Management Code* and its Identification Number, conforming to the IMO Unique Company and Registered Owner Identification Number Scheme;
- .7 Gross tonnage: Enter the gross tonnage of the ship as established under the *International Convention on Tonnage Measurement of Ships, 1969* or any successor Convention. In case of tug and barge combinations, enter the gross tonnage of each ship, separated by a hyphen (-); and
- .8 Date of construction: Enter the date of construction as defined in regulation A-1.

3.2.4 Section 2. Voyage Information:

- .1 Enter ports using the proper UN/LOCODE for standardization and to avoid errors (<https://unece.org/trade/cefact/unlocode-code-list-country-and-territory>). If UN/LOCODE is not available, write out port, State/province, and country in full. No abbreviation should be used.

3.2.5 Section 3. Ballast water usage and capacity:

- .1 Enter the total volume of ballast water on board and the number of ballast tanks and cargo holds with ballast water upon arrival at the "Arrival port" indicated in section 2; and
- .2 Enter the total ballast water capacity as per the ship's Ballast Water Management Plan including the maximum volume of ballast water which can be carried, and the number of tanks and cargo holds designed to carry ballast water.

3.2.6 Section 4. Ballast water management:

- .1 Indicate the principal ballast water management method(s) employed on the ship. "In accordance with regulation D-1" refers to the exchange of ballast water to meet the ballast water exchange standard. "In accordance with regulation D-2" refers to the treatment of ballast water using an IMO-approved ballast water management system to meet the ballast water performance standard. "Subjected to regulation D-4" refers to the use of a prototype ballast water treatment technology approved by the Administration under regulation D-4. If an "other method" of ballast water management approved in principle by the Committee is used in accordance with regulation B-3.7, describe the method. Multiple items may be checked off, if applicable;
- .2 Enter the number of tanks and holds with ballast water that will be discharged for the current planned trip by ballast water management method. If other ballast water management method has been used, describe the method and state the reason;
- .3 If the ship is equipped with a ballast water management system, provide the name of the manufacturer and the model of the system. Indicate whether the ballast water management system was fully operational during the management of all treated ballast tanks/holds. Indicate when the ballast water management system was last partially or fully bypassed by entering the last bypass date, if any;
- .4 If ballast water has not been exchanged or treated in accordance with regulation B-3, state the reason. For countries that use an electronic form, a drop-down list with the following options may be used:
 - .1 regulation A-4 exemption;
 - .2 equipment failure;
 - .3 regulatory exemption;
 - .4 ship design limit;
 - .5 adverse weather; and
 - .6 other (describe);
- .5 Provide information on the Ballast Water Management Plan, including any contingency measures(s) in the appropriate fields. Provide descriptions if a contingency measure other than ballast water exchange in accordance with regulation D-1 is planned. Multiple items may be checked off, if applicable;
- .6 Indicate if an interface is available on the ship for coupling to a ballast water reception facility as a contingency measure;
- .7 Provide information on the Ballast Water Record Book and the International Ballast Water Management Certificate or equivalent document in the appropriate fields;

- .8 Provide the name of the authority (e.g. flag State authority or recognized organization) that issued the International Ballast Water Management Certificate or equivalent document;
- .9 Provide the date of the last intermediate, annual, or any other additional endorsement as per the Convention;
- .10 Provide the name of the authority (e.g. flag State authority or recognized organization) that performed the last survey.

3.2.7 Section 5 and appendix. Ballast water history:

- .1 Enter the name and the identifier of the ship as well as the arrival date in case the page gets separated from the previous page of the form in a printed copy;
- .2 Record information for each ballast water tank/hold across the page listing the original source(s) of the ballast water under "BW source" prior to any ballast water management, all management events under "BW management practices", and all planned discharge events under "Proposed BW discharge";
- .3 Tanks/holds: List all ballast tanks and holds separately (e.g. port and starboard tanks should be on separate rows). Use tank codes as indicated on the form. List multiple ballast water sources for the same tank on separate lines. Include empty tanks/holds and those containing only residual ballast water and sediments*;
- .4 Current volume: Enter the volume of ballast water in tank on arrival at the "Arrival port" indicated in section 2;
- .5 Under "BW management practices", complete columns with an asterisk (*) only if exchange or saltwater flushing has been conducted as per regulation B-4 and paragraph 1.3.2 of part A of the Guidelines (G4), respectively;
- .6 % Exchange: If exchange or saltwater flushing has been conducted, calculate the percentage of tanks volumetric capacity used to exchange. % Exchange can be calculated by dividing the total volume of water moved by "Sequential" or "Flow-through" or used in "Saltwater flushing" by the capacity of ballast tank or hold, then multiply by 100;
- .7 Min. depth (m): If exchange or saltwater flushing has been conducted, enter the minimum depth in metres during the ballast water exchange or flushing;
- .8 Indicate the ballast water management method(s) used. For countries that use an electronic form, a drop-down list with the following options may be used:
 - .1 DE = Dilution exchange;
 - .2 SE = Sequential exchange;

* Residual ballast water and sediments refers to any ballast water and sediments that cannot be removed from a ballast tank using the equipment installed on the ship for that purpose.

- .3 FE = Flow-through exchange;
- .4 SWF = Saltwater flushing;
- .5 OT = Onboard treatment;
- .6 PBU = Uptake from port-based facility;
- .7 PRF = Discharge to port reception facility; and
- .8 NM = No management;
- .9 If no discharges are planned for the current trip, fields under "Proposed BW discharge" are to remain blank;

3.2.8 Section 6. Responsible officer

- .1 Provide information on the responsible officer, including name, title, and contact information.

4 Voluntary tank-by-tank log

4.1 Introduction

4.1.1 Tank-by-tank logs are not required by the Convention. However, keeping tank-by-tank logs is recommended as a best practice to assist in:

- .1 completing any BWRFB that may be required by a port State;
- .2 demonstrating that entries in the BWRFB reflect the actual ballast water situation on board during any inspection; and
- .3 implementing the Ballast Water Management Plan more efficiently through more specific knowledge of current tank contents.

4.1.2 The tank-by-tank log format in appendix 3 has been developed to efficiently capture the essential information needed to complete the example BWRFB set out in this guidance.

4.2 Completing the tank-by-tank log

4.2.1 Complete a ballast water log for each tank.

4.2.2 Enter ports using the proper UN/LOCODE for standardization and to avoid errors (<https://unece.org/trade/cefact/unlocode-code-list-country-and-territory>). If UN/LOCODE is not available, write out port, State/province, and country in full. No abbreviation should be used.

4.2.3 Write dates in the dd-MMM-yyyy format (e.g. 01-JUN-2022).

4.2.4 Enter times using Coordinated Universal Time (UTC).

4.2.5 Enter ship name, ship identifier, tank identifier and tank capacity in the appropriate fields.

- 4.2.6 Record information for each ballast water operation across the page listing the date, location or position, start time, minimum depth (if operations took place outside of port), all applicable volumes under "Volume" in cubic metres, end time, the salinity of the ballast water after ballast operation was completed in PSU, ballast water management method(s) used, and any remarks.
- 4.2.7 Record one operation per row in chronological order. Record all applicable volumes associated with one operation in a single row. For example, if approximately 1,000 cubic metres of ballast water are loaded into an empty tank and treated in a single operation then enter a single row with 0 for the initial content, 1,000 for the estimated uptake from the sea, 1,000 for the estimated volume treated and 1,000 for the final content.

APPENDIX 1

GUIDANCE FOR COMPLETING THE BALLAST WATER RECORD BOOK

SAMPLE ENTRIES IN THE BALLAST WATER RECORD BOOK

Code A - When ballast water is taken on board (ballasting operation)

(A) When ballast water is taken on board from the aquatic environment (ballasting operation)

- .1 Start time and location (port of uptake or latitude/longitude)
- .2 Completion time and location (port of uptake or latitude/longitude and minimum depth of water during uptake)
- .3 The identity of the tanks affected
- .4 Estimated volume of uptake and final total quantity retained in cubic metres
- .5 Whether conducted in accordance with the approved Ballast Water Management Plan
- .6 Ballast water treatment method

Example 1: When ballast water is taken on board (ballasting operation) – at port

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
02-JAN-2023	A	1	Start- 0900 hrs (UTC) (hhmm SMT) on 01-JAN-2023 at BE ANR (<i>UN/LOCODE</i> or port name)
		2	Completion- 0600 hrs (UTC) (hhmm SMT) on 02-JAN-2023 at BE ANR
		3	3P, 3S, 4P and 4S BW tanks
		4	Uptake 6800 m3. Final quantity retained: 7200 m3
		5	Yes. Ballasting as per BWMP for D-2 compliance
		6	Approved BWMS
			Signed----- Name -----Rank-----

Example 2: When ballast water is taken on board (ballasting operation) – at sea

Date	Code (letter)	Item (number)	Record of operations / signature of officer in charge
01-JAN-2023	A	1	Start- 0900 hrs (UTC) (hhmm SMT) at <u>Lat xx xx.xx N / Long yyy yy.yy E</u>
		2	Completion-1800 hrs (UTC) (hhmm SMT) at <u>Lat xx xx.xx N / Long yyy yy.yy E</u> at 350 m minimum depth
		3	3P, 3S, 4P and 4S
		4	Uptake 6800 m3. Final quantity retained: 7200 m3
		5	Yes. Ballasting as per BWMP for D-2 compliance
		6	Approved BWMS
			Signed----- Name -----Rank-----

Notes for examples 1 and 2:

1. A ship required to meet the D-1 standard that loads ballast water without treatment in accordance with the BWMP should record "Yes. Ballasting done as per the BWMP for D-1 compliance" in item 5 and "None" in item 6. When the ship later carries out a ballast water exchange, this should be recorded under code C.
2. The examples 1 and 2 consider the new intake water of 6,800 m3 taken in tanks having existing treated water of 400 m3. Mixing of treated water with untreated water will result in the full load being considered as unmanaged.
3. In case the ship has to take in unmanaged ballast water, item 5 should state "No," item 6 should state "None" and the reason should be given.

Example 3: When ballast water is taken on board (ballasting operation) – at port (or sea) onboard ships employing in-tank or in-voyage treatment in accordance with the approved Ballast Water Management Plan

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
02-JAN-2023	A	1	Start- 0900 hrs (UTC) (hhmm SMT) on 01-JAN-2023 at <u>UN/LOCODE or port name or Lat/Long</u>
		2	Completion- 0600 hrs (UTC) (hhmm SMT) on 02-JAN-2023 at <u>UN/LOCODE or port name or Lat / Long</u>
		3	3P, 3S, 4P and 4S
		4	Uptake 6800 m3. Final quantity retained: 7200 m3
		5	Yes. Ballasting as per BWMP for D-2 compliance
		6	None. As per BWMS design
			Signed----- Name -----Rank-----

Notes for example 3:

- .1 BWMS employing "in-tank" treatment load in ballast directly into the tank without any treatment. At the point of uptake, entry to be made as per example 3. Item 6 must state "None. As per BWMS design".
- .2 Subsequently the ship must make entry as per example 10 when carrying out the in-tank or circulation using code C 2

Code B

(B) When ballast water is discharged into the aquatic environment (deballasting operation)

- .1 Start time and location (port of discharge or latitude/longitude)
- .2 Completion time and location (port of discharge or latitude/longitude and minimum depth of water during discharge)
- .3 The identity of the tanks affected
- .4 Estimated volume of discharge and final total quantity retained in cubic metres
- .5 Whether conducted in accordance with the approved Ballast Water Management Plan
- .6 Ballast water treatment method

Example 4: When ballast water is discharged into the port (aquatic environment)

Date	Code (letter)	Item (number)	Record of operations / signature of officer in charge
01-JAN-2023	B	1	Start- 09:00 hrs (UTC) (hhmm SMT) at UN/LOCODE or port name
		2	Completion- 1800 hrs (UTC) (hhmm SMT) at UN/LOCODE or port name
		3	3P, 3S, 4P and 4S
		4	Discharged 6800 m3. Final quantity retained: 400 m3
		5	Yes. Deballasting as per BWMP for D-2 compliance
		6	Approved BWMS
			Signed----- Name -----Rank-----

Example 5: When ballast water managed as per BWMP is discharged into the sea (aquatic environment)

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	B	1	Start- 09:00 hrs (UTC) (hhmm SMT) at <i>Lat /Long</i>
		2	Completion- 1800 hrs (UTC) (hhmm SMT) <i>Lat /Long</i> <i>at minimum depth of 400 metres</i>
		3	3P, 3S, 4P and 4S
		4	Discharged 6800 m3. Final quantity retained: 400 m3
		5	Yes. Deballasting as per BWMP for D-2 compliance
		6	Approved BWMS
			Signed----- Name -----Rank-----

Notes for examples 4 and 5

- .1 For a D-1 certified ship, item 5 to be entered as "Yes. D-1 compliant" and item 6 to be entered as "No".
- .2 Ships employing single pass treatment system (only on uptake) with no treatment during deballasting are to record "None, as per BWMS design" in item 6.
- .3 Ships deballasting water managed under the contingency plan of the approved BWMP to record as per example 7.

Example 6: When ballast water not managed as per BWMP is discharged into the sea (aquatic environment)

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	B	1	Start- 09:00 hrs (UTC) (hhmm SMT) at <u><i>Lat /Long</i></u>
		2	Completion- 1800 hrs (UTC) (hhmm SMT) at <u><i>Lat /Long</i></u> <i>at minimum depth of 400 metres.</i>
		3	3P, 3S, 4P and 4S
		4	Discharged 6800 m3. Final quantity retained: 400 m3
		5	No.
		6	None. <i>State the reasons</i>
			Signed----- Name -----Rank-----

Notes for example 6:

- .1 For a D-1 certified ship, in case the ship has not carried out the exchange, item 5 to be recorded as "No." and item 6 as "None. [regulation B-3]".
- .2 For a D-2 certified ship, in the event of discharge of semi / untreated water where the approved BWMP process is not followed, the deballasting event must be recorded with item 5 entered "No." and item 6 entered as "None" and "state the reasons".
- .3 Further, entry using code (F) or code (H) is required to be made (as applicable) preceding the above example 6 entry, stating the conditions leading to non-compliant discharge.

Example 7: When ballast water is discharged into the aquatic environment (e.g. at a port) which has been managed as per the contingency plan in the approved BWMP

Date	Code (letter)	Item (number)	Record of operations / signature of officer in charge
01-JAN-2023	B	1	Start- 0900 hrs (UTC) (hhmm SMT) at <u>Lat /Long</u>
		2	Completion- 1800 hrs (UTC) (hhmm SMT) at <u>Lat /Long</u> <i>at minimum depth of 400 metres.</i>
		3	3P, 3S, 4P and 4S
		4	Discharged 6800 m3. Final quantity retained: 400 m3
		5	Yes. As per approved contingency plan
		6	Approved BWMS
			Signed----- Name -----Rank-----

Note for example 7:

- .1 For a D-2 certified ship, only in case the ship has implemented contingency plan as per approved BWMP, item 5 to be recorded as "Yes. As per approved contingency plan" and item 6 as "Approved BWMS" (if applicable to the contingency plan procedure adopted).

Code C

(C) Whenever ballast water is exchanged, or treated in-tank or treated through internal circulation

1 Ballast water exchange

- .1 Start time and location (latitude/longitude)
- .2 Completion time and location (latitude/longitude)
- .3 Minimum distance from the nearest land and minimum depth of water during the exchange or, if applicable, identify the designated exchange area in accordance with regulation B-4.2

- .4 Whether conducted in accordance with the Ballast Water Management Plan and state the ballast water exchange method (sequential or flow-through or dilution) used.
- .5 The identity of the tanks affected
- .6 Total quantity exchanged and final total quantity on board in cubic metres
- .7 Treatment method for the incoming ballast water

Example 8: Whenever ballast water is exchanged (without any treatment)

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	C	1.1	Start- 0900 hrs (UTC) (hhmm SMT) at <u>Lat/Long</u>
		1.2	Completion- 1800 hrs (UTC) (hhmm SMT) at <u>Lat/Long</u>
		1.3	Minimum distance 840 nm and minimum depth 6500 metres
		1.4	Yes. Sequential method as approved in the BWMP
		1.5	2P, 2S, 3P, 3S, 4P and 4S
		1.6	Exchanged 7200 m3. Final quantity retained 7200 m3
		1.7	None
			Signed----- Name -----Rank-----

Example 9: Whenever ballast water is exchanged along with treatment using approved BWMS

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	C	1.1	Start- 0900 hrs (UTC) (hhmm SMT) at <u>Lat/Long</u>
		1.2	Completion- 1800 hrs (UTC) (hhmm SMT) at <u>Lat/Long</u>
		1.3	Minimum distance 840 nm and minimum depth 6500 metres
		1.4	Yes. Sequential method (as approved in the BWMP)
		1.5	2P, 2S, 3P, 3S, 4P and 4S
		1.6	Exchanged 7200 m3. Final quantity retained 7200 m3
		1.7	Approved BWMS
			Signed----- Name -----Rank-----

Notes for examples 8 and 9:

- .1 The stated exchange method (dilution/sequential/flow-through) must be as per the approved Ballast Water Management Plan.
- .2 The exchange along with treatment (BWE+BWT), if carried out as per the approved BWMP contingency plan, must be recorded using example 9 and if applicable reported to the concerned authorities prior discharge of this water.
- .3 In case of carrying out exchange at a designated area, state the "area name or Lat / Long" under item 1.3 and enter "designated area in accordance with regulation B-4.2" under item 1.4.
- .4 In the event the ship is unable to carry out exchange owing to safety or operational issues, entry has to be made as per example 26.
- .5 In case of a flow-through or dilution ballast water exchange as per approved Ballast Water Management Plan item 1.4 should state "yes flow through or dilution (as appropriate) method (as approved in Ballast Water Management Plan)" and under 1.6 enter the total quantity exchanged and final quantity retained (example: "exchanged 22000 m³ retained 7200m³")

(C) 2 Ballast water internal circulation for treatment or in-tank treatment

- .1 Start time
- .2 Completion time
- .3 The identity of the tanks affected (identifying source and destination tanks if applicable)
- .4 Total quantity treated (through circulation or in tank) in cubic metres
- .5 Ballast water treatment method

Example 10: Ballast water internal circulation for treatment using approved BWMS

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
02-JAN-2023	C	2.1	Start- 0900 hrs (UTC) (hhmm SMT) on 01-JAN-2023
		2.2	Completion- 1800 hrs (UTC) (hhmm SMT) on 02-JAN-2023
		2.3	3P, 3S, 4P and 4S
		2.4	6800 m3 treated through circulation
		2.5	Approved BWMS
			Signed----- Name -----Rank-----

Notes for example 10:

- .1 The above entry is applicable to the ships which circulate the water in the ballast tanks through the BWMS to achieve treatment. In such case there is no fresh intake or release of ballast water.

- .2 Ships taking in water directly (bypassing BWMS) and subsequently carrying out treatment in tank or in voyage as per BWMP, are required to make entry as per example 3 after uptake and as per example 10 when the treatment of this water is carried out.
- .3 Anti-heeling tank automatic operations of transfers of water for the purpose of list correction are not to be recorded under code C.
- .4 The internal transfers between a set of ballast tanks having same quality of water (either managed or unmanaged) for which entries have already been made under code A or managed under code C are not to be recorded.
- .5 In case of water being transferred into a tank not accounted under A 3 , C 1.5 or C 2.3, entry is required to be made under code C 2 with C 2.3 capturing the required details.

Code D

(D) Uptake or discharge of ballast water from/to a port-based or reception facility

- .1 Start time and location of uptake/discharge (state facility name)
- .2 Completion time
- .3 Operation carried out (whether uptake or discharge)
- .4 The identity of the tanks affected
- .5 Total quantity in cubic metres and final quantity retained on board
- .6 Whether conducted in accordance with the approved Ballast Water Management Plan
- .7 Onboard ballast water treatment method

Example 11: Uptake of ballast water from a port-based or reception facility

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	D	1	Start- 0900 hrs (UTC) (hhmm SMT) from "facility / terminal name"
			at the <i>Port of (insert UN/LOCODE)</i>
		2	Completion- 1800 hrs (UTC) (hhmm SMT)
		3	Uptake
		4	1DB(P), 1DB(S), 2TST (P), 2TST (S) and Aft Peak Tank
		5	6800 m3. Final quantity retained 6800 m3
		6	Yes. Treated ballast water intake as per BWMP
		7	None.
			Signed----- Name -----Rank-----

Example 12: Discharge of ballast water to a port-based or reception facility

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	D	1	Start- 0900 hrs (UTC) (hhmm SMT) from "port-based/reception facility" at the <i>Port of (insert UN/LOCODE)</i>
		2	Stop- 1800 hrs SMT (UTC) (hhmm SMT)
		3	Discharge
		4	1DB(P), 1DB(S), 2TST (P), 2TST (S) and Aft Peak Tank
		5	6800 m3. Total retained 0 m3
		6	Yes. Discharged to port reception facility.
		7	None.
			Signed----- Name -----Rank-----

Notes for examples 11 and 12:

- .1 The ship taking in ballast water from the port facility which is treated by the onboard BWMS prior to filling the ballast tanks is to enter item 7 as "Yes, approved BWMS" in example 11.
- .2 The documents concerning the uptake / discharge of ballast water provided by the port-based or reception facility must be attached to the BWRB and must be readily available for inspection.

Code E

(E) Accidental discharge/ingress or other exceptional uptake or discharge of ballast water

- .1 Start time and location of ingress/uptake/discharge (port name or latitude/longitude)
- .2 Completion time
- .3 Operation carried out (whether ingress, uptake or discharge)
- .4 The identity of the tanks affected
- .5 Total quantity of ballast water in cubic metres
- .6 State the circumstances of ingress, uptake, discharge or loss, the reason thereof, any treatment method used and general remarks

Example 13: Accidental ingress of ballast water

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	E	1	Start- 0900 hrs (UTC) (hhmm SMT) at (insert port name / location)
		2	Completion- 1800 hrs (UTC) (hhmm SMT)
		3	Ingress of water into ballast tank
		4	Fore Peak Tank (FPT)
		5	450 m3
		6	Accidental ingress of water in forepeak ballast tank due to hull breach as a result of collision.
			Signed----- Name -----Rank-----

Example 14: Accidental discharge of ballast water

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	E	1	Start- 0900 hrs (UTC) (hhmm SMT) at ____ (insert port name/location)
		2	Completion- 1000 hrs (UTC) (hhmm SMT)
		3	Discharge of water from ballast tank
		4	Fore Peak Tank (FPT)
		5	450 m3
		6	Accidental discharge of water in forepeak ballast tank due to hull breach as a result of collision.
			Signed----- Name -----Rank-----

Example 15: Exceptional uptake of ballast water

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	E	1	Start- 0900 hrs (UTC) (hhmm SMT) at _(insert port name/ location)
		2	Completion- 1200 hrs (UTC) (hhmm SMT)
		3	Uptake of water into ballast tank
		4	Aft Peak tank
		5	400 m3
		6	Water taken into aft peak ballast tank to adjust trim, following an oil spill on deck
			Signed----- Name -----Rank-----

Notes for examples 13, 14 and 15:

- .1 Accidental ingress or discharges are occurrences without human initiation. Water ingress or discharge (escape) due to collision, grounding, structural failures, valve or machinery failures are to be recorded under code E.
- .2 Exceptional uptake or discharge are human initiated procedures undertaken in exceptional circumstances for the safety of the ship and prevention of pollution.
- .3 Intake of shore supplied untreated water into ballast tanks at a dry dock facility for the purpose of undocking of a ship should be considered as exceptional circumstance and entry recorded under code E.

Code F

(F) Failures and inoperabilities of the ballast water management system

- .1 Time and location (port name or latitude/longitude) of failure of the ballast water management system
- .2 Operation carried out (state whether uptake or discharge)
- .3 Description of the issue (e.g. kind of alarm or other description of circumstances)
- .4 Time and location (port name or latitude/longitude) when the ballast water management system has been made operational

Example 16: Failures of the ballast water management system that are repaired immediately

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	F	1	1100 hrs (UTC) (hhmm SMT) at the port of _____
		2	Uptake
		3	Xxxxxx sensor failure and BWMS plant shut down
		4	1500 hrs (UTC) (hhmm SMT) at the port of _____ the BWMS
			made operational
			Signed----- Name -----Rank-----

Example 17: Inoperabilities of the ballast water management system

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	F	1	1100 hrs (UTC) (hhmm SMT) at the <i>Port of (UNLOCODE)</i>
		2	Uptake
		3	Filter choked and high differential pressure trip due to muddy water
		4	No repair required
			Signed----- Name -----Rank-----

Notes for examples 16 and 17:

- .1 Failures and inoperabilities include malfunctions, shutdowns or critical alarms indicating a failure of the ballast water management system which may indicate non-compliance with the D-2 standard (except routine information and warnings).
- .2 In case the BWMS failure is not rectified immediately, the entry using code F/ item 4 is to be made on the date when the BWMS is made operational.
- .3 In the event of failure of the BWMS during ballasting or deballasting, the entry under code A or code B must be followed up by code F entry as per example 17.
- .4 Inoperability of the BWMS due to challenging water conditions is required to be recorded under code F items 1, 2 and 3 with remark in item 3 clearly stating the alarms which are triggered owing to challenging water conditions.

Code G

(G) Ballast tank cleaning/flushing, removal and disposal of sediments

- .1 Time and ship's location on commencement of ballast tank cleaning/flushing, removal or disposal of sediments (port name or latitude/longitude)
- .2 Time and ship's location on completion of ballast tank cleaning/flushing, removal or disposal of sediments (port name or latitude/longitude)
- .3 Tank(s) identification (name of the ballast tanks as per the Ballast Water Management Plan)
- .4 Discharge or disposal to a reception facility (state quantity in cubic metres and name of the facility)
- .5 Disposal or discharge to the aquatic environment as per Ballast Water Management Plan (state quantity in cubic metres, minimum distance from the nearest land in nm and minimum depth of water in metres)

Example 18: Ballast tank cleaning and discharge of sediments to reception facility / dry dock

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	G	1	1100 hrs (UTC) (hhmm SMT) at <u>Port of (UN/LOCODE)</u>
		2	1500 hrs (UTC) (hhmm SMT) at <u>Port of (UN/LOCODE)</u>
		3	1P, 1S, 2P, 2S, 3P and 3S
		4	10 m3 sediments disposed to " <u>insert name</u> " reception facility
			Signed----- Name -----Rank-----

Example 19: Ballast tank cleaning/flushing and disposal of sediments to aquatic environment (at sea)

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	G	1	1100 hrs (UTC) (hhmm SMT) at Lat xx xx.xx N / Long yyy yy.yy E
		2	1500 hrs (UTC) (hhmm SMT) at Lat xx xx.xx N / Long yyy yy.yy E
		3	3P and 3S
		5	100 m3 of tank flushing including sediments discharged to sea at minimum distance of 350 nm and minimum depth of 2800 m
			Signed----- Name -----Rank-----

Notes for examples 18 and 19:

- .1 Sediment disposal receipt provided by shore/port reception facility or dry dock facility must be attached to the BWRB and must be available for inspections.
- .2 In case of flushing of a tank with treated water, operation to be recorded under code G items 1, 2, 3 and 5 with comments in 5 stating that treated water was used to flush the tank.

Code H

(H) Additional operational procedures and general remarks

Example 20: Internal tank-to-tank ballast water transfers

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	H		200 m3 of ballast water transferred from 1P and 1S to 2P and 2S
			Signed----- Name -----Rank-----

Example 21: Sampling of ballast water during discharging

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	H		Ballast water sample taken during discharge operation at the port of "UN/LOCODE" by PSC.
			Signed----- Name -----Rank-----

**Example 22: Use of ballast water tank for non-ballast water purpose:
taking out of operation**

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	H		Aft peak ballast tank emptied and isolated from the ballast
			water pipe system for use of non-ballast purpose in
			accordance with BWMP. Valve # 123 sealed.
			Signed----- Name -----Rank-----

**Example 23: Use of ballast water tank for non ballast water purpose:
taking into operation**

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	H		Aft Peak ballast tank cleaned / flushed and reconnected to
			ballast water system pipeline in accordance with
			BWMP. Valve # 123 unsealed
			Signed----- Name -----Rank-----

Example 24: Reporting to flag or port State of a failure of the BWMS

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	H		BWMS failure at hhmm (UTC) (hhmm SMT) on dd-MMM-
			yyyy informed flag
			State
			Signed----- Name -----Rank-----

Note for example 24:

- .1 BWMS failures are recorded under code F. In case of reporting to flag or port State, above entry to be recorded and, if operations subsequently carried out as per contingency plan or as per advice from port state/flag State, same to be recorded under applicable code/item.

Example 25: Entry pertaining to an earlier missed operational entry

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
xx-MON-yyyy (Date 1)	H		Entry pertaining to an earlier missed operational entry
			Signed----- Name -----Rank-----
xx-MON-yyyy (Date 2)			<i>(record the correct entry here)</i>
			Signed----- Name -----Rank-----

Note for example 25:

- .1 This entry is to be followed by the entry pertaining to the missed operation. The date 1 to be entered corresponding to the original date of operation and subsequent entry date 2 to be the current date.

Example 26: Ship unable to perform ballast water exchange owing to safety reasons, e.g. bad weather

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	H		Ship unable carry out BWE owing to (state reason)
			Port of call (Name port / county) informed
			Signed----- Name -----Rank-----

Note for example 26:

- .1 This entry is to be made for safety (bad weather) or operational related issues (e.g. ship's route does not pass through areas where distance from nearest land is always more than 50 nm and / or 200 m depth or a designated BWE area).

Example 27 : Scenarios for making sequential entries in the ballast water record book

Scenario 1: Uptake and discharge of ballast water for a ship subject to regulation D-2

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	A	1	Start- 0900 hrs (UTC)(hhmm SMT) at BE ANR
		2	Completion – 1800 hrs (UTC) (hhmm SMT) at BE ANR
		3	3P, 3S, 4P and 4S
		4	Uptake 6800 m3. Final quantity retained: 7200 m3
		5	Yes. Ballasting as per BWMP for D-2 compliance
		6	Approved BWMS
			Signed----- Name -----Rank-----

07-JAN-2023	B	1	Start- 09:00 hrs (UTC) (hhmm SMT) at FR LEH
		2	Completion – 1800 hrs (UTC) (hhmm SMT) at FR LEH
		3	3P, 3S, 4P and 4S
		4	Discharged 6800 m3. Final quantity retained: 400 m3
		5	Yes. Deballasting as per BWMP for D-2 compliance
		6	Approved BWMS
			Signed----- Name -----Rank-----

**Scenario 2: Uptake, exchange and discharge of ballast water for a ship
subject to regulation D-1**

Date	Code (letter)	Item (number)	Record of operations/signature of officer in charge
01-JAN-2023	A	1	Start- 0900 hrs (UTC) (hhmm SMT) at BE ANR
		2	Completion – 1800 hrs (UTC) (hhmm SMT) at BE ANR
		3	3P, 3S, 4P and 4S
		4	Uptake 6800 m3. Final quantity retained: 7200 m3
		5	Yes. Ballasting as per BWMP for D-1 compliance
		6	None
			Signed----- Name -----Rank-----

03-JAN-2023	C	1.1	Start – 0900 hrs (UTC) (hhmm SMT) at <u>Lat / Long</u>
		1.2	Completion –1800 hr (UTC) (hhmm SMT) at <u>Lat / Long</u>
		1.3	Minimum distance 840 nm and minimum depth 6500 metres
		1.4	Yes. Sequential method as approved in the BWMP
		1.5	3P, 3S, 4P and 4S
		1.6	Exchanged 7200 m3. Final quantity retained 7200 m3.
		1.7	None
			Signed----- Name -----Rank-----

07-JAN-2023	B	1	Start – 09:00 hrs (UTC) (hhmm SMT) at FR LEH
		2	Completion – 1800 hrs (UTC) (hhmm SMT) at FR LEH
		3	3P, 3S, 4P and 4S
		4	Discharged 6800 m3. Final quantity retained: 400 m3
		5	Yes. Deballasting as per BWMP for D-1 compliance
		6	None
			Signed----- Name -----Rank-----

APPENDIX 2: EXAMPLE BALLAST WATER REPORTING FORM

Date of submission (dd/MMM/yyyy): _____

Time of submission (24:00 UTC): _____

Report type: New Amended

1. SHIP INFORMATION		2. VOYAGE INFORMATION		3. BALLAST WATER USAGE AND CAPACITY			
Ship name:	Flag:	Arrival port UN/LOCODE (or port, State/province and country):					
IMO Number:	MMSI Number:	Arrival date (dd/MMM/yyyy):		Total ballast water on board:			
Distinctive Numbers/Letters or Call Sign:		Agent:		Volume	Units	No. of tanks in ballast	No. of holds in ballast
Owner:		Last port UN/LOCODE (or port, State/province and country):			m ³		
ISM Company name and number:		Next port UN/LOCODE (or port, State/province and country):		Total ballast water capacity:			
Type:	GT:	Next port (2) UN/LOCODE (or port, State/province and country):		Volume	Units	Total no. of ballast tanks	Total no. of holds
Date of construction (dd/MMM/yyyy):		Next port (3) UN/LOCODE (or port, State/province and country):			m ³		

4. BALLAST WATER MANAGEMENT

The principal ballast water management method(s) employed on this ship is/are: <input type="checkbox"/> in accordance with regulation D-1 <input type="checkbox"/> in accordance with regulation D-2 (describe): _____ <input type="checkbox"/> subject to regulation D-4 <input type="checkbox"/> other approach in accordance with regulation (describe): _____			
Total no. of ballast water tanks/holds to be discharged: _____			
Of tanks/holds to be discharged, how many were managed according to: Regulation D-1 _____ Regulation D-2 _____ Both regulations D-1 and D-2 _____ other method _____ (describe and state reason) _____ not managed _____			
If any tanks/holds not managed, state reason(s) why not: _____			
BWMS used, if any: Manufacturer: _____ Model: _____ Fully operational? <input type="checkbox"/> Yes <input type="checkbox"/> No Last bypass date (dd/MMM/yyyy): _____			
Approved Ballast Water Management Plan on board? <input type="checkbox"/> Yes <input type="checkbox"/> No Ballast Water Management Plan implemented? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Contingency measure(s) included in the Ballast Water Management Plan? <input type="checkbox"/> None <input type="checkbox"/> D-1 <input type="checkbox"/> Other (describe): _____			
Contingency measure(s) deployed? <input type="checkbox"/> Yes <input type="checkbox"/> No Interface available on ship for coupling to ballast water reception facility? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Ballast Water Record Book on board? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Does ship carry an International Ballast Water Management Certificate: <input type="checkbox"/> Yes <input type="checkbox"/> No Authority that issued Certificate: _____			
Date of issue (dd/MMM/yyyy): _____ Expiry date (dd/MMM/yyyy): _____ Place of issue: _____			
Last survey/endorsement date (dd/MMM/yyyy): _____ Surveying authority: _____			

