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HARMFUL AQUATIC ORGANISMS IN BALLAST WATER

Commentary on entries in the ballast water record book

Submitted by INTERTANKO

SUMMARY

Executive summary: This document is submitted in order to provide stakeholder input to the data gathering and analysis plan (DGAP) (BWM.2/Circ.67/Rev.1) as envisaged in the experience-building phase (resolution 290(71)) and provides the Committee with a copy of INTERTANKO's Commentary on entries in the ballast water record book (BWRB)

*Strategic direction,
if applicable:* 1

Output: 1.24 and 1.25

Action to be taken: Paragraph 9

Related documents: BWM/CONF/36; resolution MEPC.290(71) and BWM.2/Circ.67/Rev.1

Introduction

1 Following the entry into force of the *International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004* on 8 September 2017, all ocean-going ships have been required to record ballast operations in a ballast water record book (BWRB), a requirement under regulation B-2 of the Convention. Appendix II of the Convention (Form of Ballast Water Record Book) specifies the ballast operations that should be recorded, as a minimum, in the BWRB.

2 The correct and accurate completion of the BWRB by ships' crews is a critical step in the compliance process. The criticality of ensuring that entries in the BWRB are correct is equally relevant for those on board as well as those inspecting and auditing the ship for regulatory compliance purposes.

Stakeholder input into the experience-building phase

3 The Marine Environment Protection Committee (MEPC), at its seventy-first session, adopted the experience-building phase (EBP) to monitor and improve the *International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004* (BWM Convention) (resolution MEPC.290(71)). MEPC 72 subsequently approved the data gathering and analysis plan (DGAP) for the EBP with a revision approved at MEPC 74 (BWM.2/Circ.67/Rev.1). Member Governments and stakeholders are encouraged to use the DGAP to gather, prepare and submit data to the EBP.

4 More specifically, resolution 290(71) notes that "challenges may arise during the implementation of any new convention that were not foreseen at the time of its adoption...", and that the intention of the EBP is, in part, to "identify aspects of the implementation that are working well and to shed light on issues that require further attention". Resolution 290(71) also adds that, while "the analysis will be based primarily on the data gathered through the EBP, it should also take into account any relevant information otherwise provided to the Organization pursuant to the Convention and its guidelines".

5 The standard templates for reporting, as envisaged in the DGAP, do not necessarily lend themselves to the qualitative analysis of subjective views, i.e. opinions regarding the correct record book entry. However, while there is no standard template provided in the DGAP for the submission of data by observer organizations, it is nevertheless envisaged that this document and the information and analysis offered in the annex are considered relevant for inclusion in the Ballast Water Review Group's assessment and analysis.

6 More specifically, there is direct relevance to the information provided in this document that reflects the type of data envisaged as being submitted by port State control authorities in Appendix B of the DGAP. Appendix B seeks information on the outcome of port State control inspections and deficiencies in record book entries (reference, Part 1: PSC Inspection outcomes, Appendix B: Basic PSC Report Template, BWM.2/Circ.67/Rev.1) as well as deficiencies concerning other aspects of the Convention (Appendix B, Part 2 Basic PSC Report Template: Actions arising from unsatisfactory inspections).

Commentary on entries in the BWRB

7 INTERTANKO's Commentary on entries in the BWRB as provided in the annex, provides a commentary on entries in the ballast water record book (BWRB) for commonly used ballast water operations on tankers. It is based on questions and feedback from INTERTANKO members as well as feedback from several flag Administrations and port State Authorities consulted by INTERTANKO and its members in relation to BWRB entries.

8 The document notes that INTERTANKO's members have encountered differing interpretations by Administrations, port State Authorities, class societies and third-party auditors and inspectors when examining ballast water activities that are recorded in the BWRB. The Commentary therefore discusses the following areas: the ambiguity that exists within Appendix II of the Convention; a consideration of the variations of interpretation of the record-keeping entries specified in Appendix II, and; possible options for making entries in the BWRB under various ballast operation scenarios.

Action requested of the Committee

9 The Committee is invited to note the information provided in the annex to this document.

ANNEX

COMMENTARY ON ENTRIES IN THE BALLAST WATER RECORD BOOK



INTERTANKO

**Commentary on Entries in the
Ballast Water Record Book
(BWRB)**

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Introduction

The following provides a commentary on entries in the ballast water record book (BWRB) for commonly used ballast water operations on tankers. The commentary is based on questions and feedback from INTERTANKO Members as well as feedback from several Administrations consulted by INTERTANKO and its Members in relation to the BWRB.

As background and context to the commentary, this document also provides a brief summary of the requirements of the International Convention for the Control and Management of Ships' Ballast Water and Sediments, 2004 (BWM Convention) as it relates to the requirements for a BWRB under Regulation B-2. A sample BWRB format is also included as an Annex to this document.

About this document

In the absence of both a harmonised coding system for BWRB entries and clear guidance from the International Maritime Organization (IMO) on how to interpret Appendix II of the BWM Convention, it has not been possible to produce a definitive guide providing specific and precise details of how to make entries in the BWRB. The ambiguity of Appendix II of the BWM Convention and subsequent range of interpretations has therefore necessitated the development of a commentary rather than a guidance document.

Background

Following the entry into force of the BWM Convention on 8 September 2017, all ocean-going vessels have been required to record ballast operations in a BWRB. Appendix II of the BWM Convention (Form of Ballast Water Record Book) specifies the ballast operations that should be recorded, as a minimum, in the BWRB. However, based on the experience of INTERTANKO's Members, it is evident that Appendix II of the BWM Convention is open to a variety of interpretation and ambiguity by Flag Administrations, Class Societies, Port State Control authorities and third-party auditors.

This commentary therefore: i. discusses some of the ambiguity that exists within Appendix II of the BWM Convention; ii. considers variations of interpretation of the record-keeping entries specified in Appendix II, and; iii. offers possible options for making entries in the BWRB under various ballast operation scenarios.

Disclaimer

Ship owners and managers should always consult their Flag Administration for their guidance and consent in relation to the mandatory record-keeping requirements of the BWM Convention. This is particularly important for any uncertainty in relation to the BWRB to ensure that the format and entries meet the requirements established by the Administration.

INTERTANKO would like to thank the representatives from the various Administrations that were consulted for taking time and effort to provide their interpretation of the scenarios and examples that were presented by INTERTANKO Members.

INTERTANKO welcomes views and comments on this document as well as additional scenarios and examples that are not taken into account, which will assist us in improving the document for future revisions.

Requirements of the BWM Convention pertaining to the BWRB

Requirements of the BWM Convention pertaining to the BWRB

Regulation B-2 specifies the requirements of the BWRB for each ship. Key requirements that must be observed are:

1. Each ship shall have on board a BWRB. It could be an electronic record system or it could be integrated into another record book or system, and which shall at least contain the information specified in Appendix II of the BWM Convention.
2. Each operation concerning Ballast Water shall be fully recorded without delay in the BWRB. Each entry shall be signed by the Officer in Charge of the operation concerned and each completed page shall be signed by the Master.
3. In the event of the discharge of Ballast Water pursuant to regulations A-3, A-4 or B-3.6, or in the event of other accidental or exceptional discharge of Ballast Water not otherwise exempted by the BWM Convention, an entry shall be made in the BWRB describing the circumstances of, and the reason for, the discharge.
4. The BWRB shall be kept readily available for inspection at all reasonable times. It shall be maintained on board the ship for a minimum period of two (2) years after the last entry has been made and, thereafter, in the Company's control for a minimum period of three (3) years.
5. Port State Control Officers may inspect the BWRB on board any ship to which the BWM Convention 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 BWRB and the taking of a certified copy shall be performed as expeditiously as possible without causing the ship to be unduly delayed.

Additional Guidance issued by the IMO relevant to the BWRB

The IMO has issued 14 guidelines to assist in the implementation and enforcement of the BWM Convention. Record keeping of ballast water operations is mentioned in several of these guides.

In relation to appropriate training for ships' Masters and crews, this should include instructions on the ships' Ballast Water Management plan including the completion of required records (2017 Guidelines for Ballast Water Exchange (G6)).

If ballast water exchange is not undertaken for the reasons in Regulation B-4.4, i.e. if the Master reasonably decides that such exchange would threaten the safety or stability of the ship, its crew, or its passengers because of adverse weather, ship design or stress, equipment failure, or any other extraordinary condition, then details of the reasons ballast water exchange was not undertaken are to be recorded in the BWRB. Reference is made to BWM.2/Circ.63, 'Application of the Convention to ships operating in sea areas where ballast water exchange in accordance with regulations B-4.1 and D-1 is not possible'.

Information to be included in the BWRB

In making entries to the BWRB, the Officer in Charge of the operations should ensure that, as a minimum, the information specified in Appendix II of the BWM Convention is provided. While the BWRB does not strictly follow a coding system as per the Oil Record Book for MARPOL Annex I, for ease of reference the numbering in paragraph 3 of Appendix II of the Annex to the BWM Convention is used through the commentary.

Information to be included in the BWRB

Information specified in Appendix II of the BWM Convention with the correct paragraph references:

Period of Operation

Name of Ship

IMO Number

Gross Tonnage

Flag

Total Ballast Water Capacity (in cubic metres)

Whether the ship is provided with BWMP

Diagram of ship indicating ballast tanks

Entries in BWRB shall be made on each of the following occasions;

- 3.1 *When ballast water is taken on board*
 - .1 *Date, time and location port or facility of uptake (port or lat/long), depth if outside port*
 - .2 *Estimated volume of uptake in cubic metres*
 - .3 *Signature of Officer in Charge of operation*

- 3.2 *Whenever ballast water is circulated or treated for BWM purposes*
 - .1 *Date and time of operation*
 - .2 *Estimated volume circulated or treated (in cubic metres)*
 - .3 *Whether conducted in accordance with BWMP*
 - .4 *Signature of Officer in Charge of operation*

- 3.3 *When ballast water is discharged into the sea*
 - .1 *Date, time and location port or facility of uptake (port or lat/long)*
 - .2 *Estimated volume of discharged in cubic metres plus remaining volume in cubic metres*
 - .3 *Whether approved BWMP had been implemented prior to discharge*
 - .4 *Signature of Officer in Charge of operation*

- 3.4 *When ballast water is discharged to a reception facility*
 - .1 *Date, time and location of uptake*
 - .2 *Date, time and location of discharge*
 - .3 *Port of facility*
 - .4 *Estimated volume discharged or taken up, in cubic metres*
 - .5 *Whether approved BWMP had been implemented prior to discharge*
 - .6 *Signature of Officer in Charge of operation*

- 3.5 *Accidental or other exceptional uptake or discharges of ballast water*
 - .1 *Date and time of occurrence*
 - .2 *Port or position of the ship at time of occurrence*
 - .3 *Estimated volume of ballast water discharged*
 - .4 *Circumstances of uptake, discharge, escape or loss, the reason therefore and general remarks*
 - .5 *Whether approved BWMP had been implemented prior to discharge*
 - .6 *Signature of Officer in Charge of operation*

- 3.6 *Additional operational procedure and general remarks*

Format of the BWRB

Format of the BWRB

A sample format for the BWRB has been provided in Annex 1 as an example only. This sample provides an overview of the information that should be included in the BWRB, as well as how the BWRB may be completed when reflecting the relevant codes/paragraph numbers for the relevant ballast water operations as they are reflected in Appendix II of the BWMP Convention.

Importantly, the sample format includes the three main headings as provided in the Sample BWRB Page in Appendix II. Namely: Date; Item (number), and; Record of operations/signature of Officers in Charge. Optional sub-columns have been inserted under Record of operations/signature of Officers in Charge may assist users in breaking down the process of ballast water management and their record keeping. This is discussed further in the commentary.

The format in the sample may also assist in the completion and submission of Ballast Water Reporting Forms (BWRF) in ports where these are required. Although the BWRF is not a mandatory document, many port State authorities request the submission of the report prior to the ship's arrival. A model format of the BWRF is also provided by the IMO in the 2017 Guidelines for Ballast Water Exchange (G6).

Ballast Water Record Book Commentary and FAQs

The commentary reflects the views of several IMO Member States acting as Flag Administrations and port State authorities. Together with this are the views of Members of INTERTANKO's Environment Committee. The views and commentary offered are not intended to provide a definitive conclusion on the relevant entry but offer a considered perspective as to why some entries may be appropriate during certain ballast operations.

During the drafting and review of the commentary by the Environment Committee, it was observed that the most concise and accurate interpretation of the BWRB (Appendix II) did not always provide the reassurance that an inspecting authority may concur with the entry. Therefore, it was often observed that extra entries were made in order to take into account any possible variation of interpretation by the inspecting authorities. This is regardless of the additional administration that may create onboard.

A. Ballast Water Exchange; which entry and which method?

To fully understand the different interpretations it is necessary to reflect on the three methods of ballast water exchange considered acceptable by the IMO; sequential, flow-through and dilution. In practice this can be reduced to two methods as the flow-through and dilution methods are considered as "pump through" methods when referencing Regulation B-4.2.2 of the BWMP Convention. When any one of the three methods is used and to improve clarity, a note in the 'Remarks' section of the BWRB may be inserted that advises which method was used.

For the sequential method, entries should be made in 3.1 and 3.3 during uptake and discharge respectively. A record taken on a tank-by-tank basis may assist in managing the exchange operation and to demonstrate that 95% volumetric exchange has been achieved, as per the BWMP Convention requirements. See also the commentary in 'F' on whether operations should be recorded on a tank-by-tank basis or total ballast volume.

For the flow through and dilution methods the same codes apply for ballast uptake, 3.1, and ballast discharge, 3.3. deballasting. To indicate that the necessary volume has been exchanged it may be necessary to accurately record the start and stop time of the ballast water operation and the total volume. This can be entered in 3.2, again with a note in the 'Remarks' section advising of the method of exchange used. A reference to the BWMP may also be necessary (e.g. 'According to the BWMP: Y/N'). The BWMP will provide the necessary details for calculating the time required to pump three times the capacity of each tank with the percentage calculated by dividing the number of units of water exchanged by the original volume of ballast water in the tank. The pump rate capacity will also be referenced in the BWMP.

C. Should 3.4 be used when taking ballast from a reception facility?

Note that during consideration of how to record ballast water exchange in the BWRB it was frequently the case that there was no distinction made between which method of exchange was being used by the ship. As such, advice that only 3.2 should be used for ballast water exchange purposes may be too general and therefore confusing when a ship uses the sequential method.

Some further complexity may arise if ballast water uptake is conducted in two phases for the purpose of ballast water exchange. For example, a vessel takes up 5000m³ of ballast water on 2 April which is recorded in 3.1.2. A second uptake of 7000m³ of ballast water is then undertaken on 3 April and also recorded in 3.1.2. In these situations, Members have been advised by port State inspectors to add an additional note in 3.1.2 referencing the total volume that has been taken onboard. So in this example, an additional note (e.g. Total onboard; 12,000m³) following the 7000m³ uptake on 3 April would be added to clearly indicate the total volume now taken up.

B. Should 3.1 be used for treated ballast water?

Although currently limited, options are available in some ports to take ballast water that has already been treated. This may be in the form of treated, potable or municipal water from a shore reception facility or water already treated on a ballast water boat or barge.

Many Administrations take the view that so long as the ballast water is used to control trim, list, draught, stability or stresses then all ballast water taken on board should be recorded, regardless of whether it is treated or untreated. 3.1 should therefore be used whenever ballast water is taken on board. So as an example, if ballast water is treated while being taken on board, an entry should be made in 3.1 as well as 3.2.

Please note 'C' below that discusses the discharge of ballast water to a reception facility (3.4) and the use of 3.4.4 in reference to the volume of water taken up.

C. Should 3.4 be used when taking ballast from a reception facility?

An entry should be made in 3.4 when ballast water is discharged to a reception facility for treatment. This would be in lieu of an entry in 3.3 which is intended for ballast discharged into the sea.

However, some ambiguity arises due to the text 'or taken up' used in 3.4.4. Because of this text in 3.4.4 then some Administrations have suggested an entry could be made in 3.4 when taking ballast water from a reception facility. Presumably, this would be treated ballast water. Regardless of whether the company and the Administration require an entry in 3.4 and reference to the discussion in 'B' above, then any ballast taken on board should be accompanied by an insertion in 3.1.

When a reception facility is used then a reference should be included in 3.4.5 to the relevant section of the BWMP that covers the use of reception facilities as a means of compliance with the BWMP Convention. Note that some Administrations have commented on the need to also make an insertion in 3.2 when a reception facility is used. The reason for this additional entry may be based on the use of 3.2 to demonstrate in every situation the means of compliance (treatment of management of the ballast water) with the BWMP Convention. This would be regardless of whether the ballast water is exchanged, treated with a BWMS or managed using treated water taken from or discharged to a reception facility.

D. The meaning of 'circulated' in 3.2 and 3.2.2

3.2.2 states that an entry in the ballast water record book shall be made:

'3.2 Whenever Ballast Water is circulated or treated for Ballast Water Management purposes:...

.2 Estimated volume circulated or treated (in cubic metres)...'

The terms, 'circulated or treated', used together suggest a catch-all for any ballast water transfers undertaken between tanks. This may include but is not limited to ballast water transfers for:

- i. ballast water exchange purposes;
- ii. general ballast water management for vessel trim, list, draught, stability or stresses, or;
- iii. ballast transfers to maximise the mixing of chemicals (also referred to as active substances) with the ballast water for treatment and/or neutralisation purposes.

E. How to record treatment using a BWMS during ballasting and/or de-ballasting

As an overarching principle, record keeping for the purposes of meeting the Regulation D-2 discharge standard through a BWMS will depend on the type of BWMS being used. As such, reference to the BWMP should be made in the BWRB.

More specifically, two schools of thought exist when recording the treatment of ballast water using a BWMS:

- i. Using only 3.1 and 3.3

If the BWMS treats the ballast on uptake, for example using filtration and UV, then an entry should be made in 3.1 and again in 3.3. It is in 3.3 that a clear reference should be made to the discharge being undertaken in accordance with the BWMP and therefore in compliance with the BWM Convention, Regulation D-2. This would appropriately be made in 3.3.3.

This logic can be applied to a BWMS that treats on discharge where the entry in 3.3.3 would draw attention to the treatment method used as per the BWMP.

In many cases however, a BWMS will undertake treatment on uptake as well as an additional treatment upon discharge, e.g. an additional UV irradiation in order to overcome re-growth. Again, 3.1 and 3.3 (with a clear reference to the BWMP in 3.3.3) could be used.

- ii. Using 3.2 as well as 3.1 and 3.3

Again, dependant on the type of BWMS used, there may be a need to make an entry in 3.2. An example would be the dosing of the ballast water with an active substance and/or the mixing of the ballast water with an active substance or neutralising agent. In this case a reference to the treatment can be made in 3.2. This would be in addition to the entries made for uptake, 3.1 and discharge, 3.3. The latter would again include an entry in 3.3.3 to reference the BWMP and the BWMS used.

Some Administrations have recommended the use of 3.2 every time a BWMS is used. The justification for an additional entry here relates to the interpretation of the text in Annex II of the BWM Convention and an entry being made, 'whenever the ballast is treated for ballast water management purposes'. 3.2 requires a signed entry to be made for the date, time and volume of ballast water treated as well as a reference to the BWMP. As such, and if the total volume of ballast treated is inserted, as opposed to a tank-by-tank entry, then the administrative burden of such an entry can be minimised.

Specific questions have been raised regarding the neutralisation of active substances. This may be during the voyage, in tank or during discharge. As neutralisation is considered part of the overall treatment process associated with the BWMS then it may not be appropriate to make a separate entry just for this process. If a record has been included relating to the neutralisation process of the BWMS then this should accompany the necessary reference to the BWMP which should in turn provide the necessary details and explanation of the neutralisation process as a step in the overall treatment of the ballast water.

It has been observed that some vetting inspectors have requested that neutralisation be recorded in 3.3.3.

F. Should entries be made tank-by-tank?

Appendix II of the BWM Convention does not explicitly require that the volume be recorded on a tank-by-tank basis. For this reason and for simplicity, the total volume of ballast water the vessel has on board can be used.

However, it is commonly the case that BWRBs are formatted in such a way as to allow entries to be made on a tank-by-tank basis. There are several reasons that this option may be used:

- i. The BWRB has been created electronically to facilitate a tank-by-tank entry. It is recognised that tank-by-tank entries in a paper BWRB could create excessive record keeping administration on board.
- ii. Breaking the ballast volumes down tank-by-tank may assist with the overall management of ballast water on board. This may be particularly relevant for ballast water exchange or BWMS that utilise in-tank dosing.
- iii. When undertaking ballast water exchange, reference should be made to the IMO's Guidelines for Ballast Water Exchange 2017 (G6) which refers specifically to ballast water tank.
- iv. Many BWRBs and ballast logs require tank-by-tank records to be made. As such, some BWRBs are formatted so entries are made only once but can then be used for several purposes, namely; the BWRB, ballast water reporting or ballast water log.
- v. Tank-by-tank entries are useful for keeping track of ballast management on chemical/product parcel tankers when partial loading/discharging is common. Similarly, it may be more straightforward to record internal transfers of ballast between tanks if a tank-by-tank record keeping format is used.
- vi. In the event a ballast water exchange cannot be completed in full, and only some tanks have been exchanged, then a tank-by-tank record may facilitate the ballast discharge from a compliance perspective.

Regardless of whether total volume or tank-by-tank entries are made in the BWRB, the BWMP should reflect how records should be maintained in partial treatment, part ballast loading and other circumstances where ambiguity may occur in the overall management of the ship's ballast water.

G. Flushing of ballast tanks for cleaning

Flushing is considered in the BWM Convention in reference to sediment management. However, it is also common to undertake saltwater flushing for compliance with some regional and national ballast water regulations such as the Great Lakes. Flushing is broadly the addition of mid-ocean water to ballast water tanks followed by the subsequent mixing with the ballast water and sediments before discharging to sea.

As ballast water is taken in and then discharged, many Administrations advise on entries in 3.1 and 3.3 respectively. The key entry however would be in 3.6 'Additional operational procedure and general remarks' which would detail the actual operation undertaken.

When making the entry in 3.3 and specifically 3.3.3 in relation to the BWMP, then the full flushing procedure should be included in the BWMP.

Medical Waste Disposal

H. Ballast Water Management System malfunction or requires repair

The IMO's Guidelines for ballast water management and the development of a ballast water management plan 2005 (G4) advises that "All failures and malfunctions of the system are to be recorded in the BWRB". An entry should therefore be made in 3.6 with a reference to the BWMP. It is further recommended that the BWMP for ships using a BWMS includes contingency measures. Guidance on contingency measures is provided in INTERTANKO's Ballast Water Contingency Measures for Tankers 2018.

In addition, the malfunction of a ballast water pump while the vessel is conducting ballast water exchange should also be recorded in the BWRB, 3.6.

I. Should sampling and testing of ballast water be recorded in the BWRB?

There is no requirement to record sampling and testing of ballast water in the BWRB. None of the IMO's regulatory or guidance documents refer to the recording of sampling and testing. And while the US Environment Protection Agency (EPA) requires sampling and testing to be recorded as part of a ship's Vessel General Permit (VGP) Annual Report, there is no requirement for an entry in the BWRB.

However, some Administrations are recommending results of any sampling be kept with the record book together with a reference date, the materials and methods of the testing, the results and the company/person that conducted the sampling. This could be recorded in 3.6.

Some manufacturers are also recommending sample and testing results to be recorded, although this may be achieved outside of a formal entry in the BWRB, e.g. by using the manufacturer's manual or equipment log book.

Some BWMPs now include procedures for the management and record keeping of sampling and testing as a means of satisfying any unilateral, statutory (e.g. by Port State Control) requirements as well as possible voluntary (ship or equipment specific) initiatives.

J. Information on removal of sediments from certain tanks

Details relating to the management of sediments (removal and disposal) should be included in the BWMP with any documents that verify the sediment removal, such as receipts confirming disposal, kept with the records for verification. An entry reflecting any sediment management and/or removal should be recorded in 3.6 with a reference made to the BWMP, 3.6.

K. What if the ship does not undertake BWE for safety purposes?

This provision exists in the BWM Convention, Regulation. If the Master reasonably decides that undertaking Ballast Water Exchange to meet Regulation D-1 would threaten the safety or stability of the ship, its crew or its passengers because of adverse weather, ship design or stress, equipment failure, or any extraordinary condition, details of the reasons should be recorded in the BWRB, 3.6.

L. Discharge of ballast water carried in cargo tanks of tankers

Exceptional ballast is a term used in MARPOL Annex I, Regulation 18.3.1 and does not form part of the total ballast capacity of the ship. In considering the discharge of exceptional ballast, the IMO's Marine Environment Protection Committee (MEPC), through the Ballast Water Review Group, assessed that any oil that may be mixed into the ballast could have a deleterious effect on the functioning of BWMS. It was also noted that oil has a biocidal effect on a number of organism groups. The Review Group agreed that discharges of ballast water carried in cargo tanks of oil tankers are better dealt with under MARPOL Annex I (regulations 18.3.2 and 34). In addition to the oil record book, if such discharges take place due to exceptional circumstances, they may also be recorded in the ballast water record book as an exceptional discharge in 3.5.

For chemical tankers it is logical to follow the same principle as above. So for chemical tankers requiring the ballasting/deballasting of cargo tanks for traditional stability or safety reasons, such operations are governed by MARPOL Annex II regulations, specifically Annex II – Regulation 13.2, 13.6.1, and 13.7.2. Some companies also advocate that both the ballasting and deballasting operation be conducted at a distance of not less than 12 nautical miles from the nearest land.

Sample Ballast

Name of Ship:		This record book format allows for the recording of all relevant items in accordance with port States as per the Ballast Water Reporting Form. A model for this form is provided and operators are strongly advised to consult with their flag Administration in regards to								
IMO Number:										
Gross Tonnage										
Flag										
Total Ballast Water capacity (in cubic metres)										
Is the ship provided with a Ballast Water Management plan?										
Is the diagram of ship indicating ballast tanks attached?										
Date	Item Number	Location/Position	Time Started	Time Completed	Depth in metres (if outside port)	Tank Number	Content		Estimated uptake (from sea, where applicable)	Est. intake facility (where applicable)
							Initial	Final		

Notes

Item Number

- 3.1 When Ballast Water is taken onboard
- 3.2 Whenever Ballast Water is circulated or treated for Ballast Water Management purposes
- 3.3 When Ballast Water is discharged into the sea
- 3.4 When Ballast Water is discharged to a reception facility
- 3.5 Accidental or other exceptional uptake or discharges of Ballast Water
- 3.6 Additional operational procedure and general remarks

Location/Position

Geographic location of ship (Port or Lat and Long)

Time Completed

Alternatively and depending on diagram of ship, Ballast Tank Identity or Name may be more suitable than number.

Ballast Water Record

in accordance with the IMO Ballast Water Convention, Appendix II (form of the Ballast Water Record Book) while also completing information widely requested by the IMO in the 2017 Guidelines for Ballast Water Exchange (G6), Appendix. The Model below is provided as an example only. All owners and operators should use the Model in an acceptable format for the Ballast Water Record Book.

Record of Operations									Signature of Officer in Charge	
Volume (m3)	Estimated uptake from reception facility (where applicable)	Estimate circulated or treated (where applicable)	Estimate discharged into sea, (where applicable)	Estimate discharged to port reception facility (where applicable)	Method Employed (Pump/ Gravity)	Based on BWMP? (if applicable)	Salinity	Remarks		Is this an accidental or exceptional uptake or discharge? If yes, please fill up Appendix 1

Tank Number

An alternative to two columns for Time Started / Time Completed, a single column with Time / Duration may also be considered.

Salinity

Salinity is not part of the record of Operations but frequently requested in ballast water reporting forms.

Accidental or Exceptional Uptake or Discharge

Please see Appendix 1 sample provided on page 11.

Above is an example of a sample Ballast Water Record Book – we recommend you zoom in to view it.
Clicking through the following link:
<https://bit.ly/2YhcmK3>
... will take you to an identical Microsoft Excel spreadsheet where you can access various notes and spreadsheet data (you will need a login to view).

Please contact the Secretariat should you have any problems.

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