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HARMFUL AQUATIC ORGANISMS IN BALLAST WATER

Proposal on guidance for the temporary storage of treated sewage and grey water in ballast water tanks

Submitted by India, Japan, United Arab Emirates, ICS, BIMCO and BEMA

SUMMARY

Executive summary: This document provides a draft of guidance for the temporary

storage of treated sewage and grey water in ballast water tanks. In light of the actual needs for storage of such water in ballast water tanks at specific ports and areas, the draft guidance in the annex is proposed in order to establish a uniform procedure that minimizes the impact on the environment while ensuring practicability for existing ships. The co-sponsors hope that this draft guidance would facilitate the discussion and contribute to the development of a circular at MEPC 79 to bring the guidance to the attention of all

parties concerned.

Strategic direction,

if applicable:

1

Output: 1.22

Action to be taken: Paragraph 8

Related documents: MEPC 78/4, MEPC 78/4/13, MEPC 78/17 and MEPC 78/WP.8

Introduction

At MEPC 78, the Committee invited interested Member States and international organizations to submit concrete proposals on additional aspects for guidance on the temporary storage of treated sewage (TS) and grey water (GW) in ballast tanks under the BWM Convention, taking into account the principles set out in paragraphs 11 and 12 of document MEPC 78/4 (IACS) and the points set out in paragraph 27 of the Ballast Water Review Group's report (MEPC 78/WP.8). Also, the Committee deferred paragraph 14 of document MEPC 78/4 to MEPC 79 for this session to decide on the sought confirmation in conjunction with its consideration of any further submissions (see paragraphs 4.41 and 4.42 of document MEPC 78/17).



Discussion

- With regard to the decision-making on the sought confirmation, the co-sponsors are of the view that temporary storage of TS and GW in ballast water tanks (BW tanks) under the BWM Convention should be permitted. If the temporary storage of such water in BW tanks is not permitted, this could cause serious problems for ships, which do not have a dedicated tank for temporary storage of such water or where retrofitting such tank is impractical, thereby their voyage to specific ports and areas would be restricted.
- Turning to the principles set out in document MEPC 78/4 (IACS), some points have been identified which would result in difficulties for existing ships in the implementation, such as physical separation or isolation of the pumps and pipelines from those of the ballast system. In addition, tank cleaning on board or in dry dock is also difficult to implement during normal ship operations. In light of the actual needs for temporary storage of TS/GW in BW tanks at specific ports and areas, the co-sponsors are of the view that practical ways in addressing this issue should be pursued.
- In this connection, the co-sponsors are of the view that the following approaches are appropriate in addressing the points provided in paragraphs 11 and 12 of document MEPC 78/4 (hereinafter referred to as paragraphs 11 and 12, respectively).
 - .1 Regarding the point of paragraph 11.1, it would cause difficulty for existing ships since it requires retrofitting of isolated pumps and pipelines. In order to avoid mixing of ballast water and TS/GW, the pumps and pipelines should be flushed with water, which meets the standard described in regulation D-2 of the BWM Convention, prior to or after using a BW tank for the temporary storage of TS/GW.
 - .2 Regarding the point of paragraph 11.2.1, the change-over procedure of piping associated with BW tanks, which is intended to prevent mixing of ballast water and TS/GW, should be included in the Ballast Water Management Plan (BWMP) of the ship and be subsequently approved by the Administration.
 - Regarding the point of paragraph 11.2.2, the means of flushing of BW tanks, which may contain sediments, should be followed by the procedure of flushing tank bottoms and other surfaces for sediment management as described in the BWMP of the ship, which was approved by the administration taking into account the Guidelines (G4) (resolution MEPC.127(53)).
 - Regarding the point of paragraph 11.3, the procedure for ballast water exchange should be in accordance with the 2017 Guidelines (G6) (resolution MEPC.288(71)) in order to ensure the hull strength and stability if a ship needs to conduct ballast water exchange plus ballast water treatment (BWE+BWT) for the flushing of BW tanks.
 - .5 Regarding the point of paragraph 11.4, the procedure for the temporary storage of TS/GW in BW tanks should be included in the BWMP of the ship and be approved by the Administration.
 - Regarding the point of paragraph 11.5, BW tanks should be emptied and flushed prior to the temporary storage of TS/GW.

- .7 Regarding the point of paragraph 11.6, BW tanks used for storage of TS/GW should be emptied and flushed to remove any residuals before being used for storage of ballast water.
- .8 Regarding the point of paragraph 11.7, BW tanks should be managed by appropriately recording in the Ballast Water Record Book (BWRB) of the ship for clarifying the type of water therein when the BW tank is used for temporary storage of TS/GW.
- .9 Regarding the point of paragraph 11.8, untreated sewage, including comminuted and disinfected sewage using a sewage comminuting and disinfecting system in accordance with regulation 9.1.2 of MARPOL Annex IV, should be outside the scope of the guidance to be considered.
- .10 Regarding the point of paragraph 12, discharge of the ballast water should be in compliance with the BWM Convention, and discharge of TS should be in compliance with MARPOL Annex IV. In order to avoid complicated operations, mixing of ballast water with TS/GW should be avoided.
- The co-sponsors are of the view that the following approaches are appropriate with respect to the points provided in paragraph 27 of document MEPC 78/WP.8 (hereinafter referred to as paragraph 27).
 - .1 Regarding the points of paragraphs 27.1, 27.3 and 27.4, it is important to operate with identifying the type of stored water in BW tanks, i.e. ballast water or TS/GW. In addition, it is essential to record a change in the type of stored water in a BWRB as part of management of stored water.
 - .2 Regarding the point of paragraph 27.2, it should be addressed by the procedure of tank flushing, etc. taking into account the practicability for existing ships. In addition, the procedure of tank flushing, etc. should be included in the BWMP of the ship and subsequently be approved by the Administration.

Proposals

- The co-sponsors prepared draft guidance on this issue, as set out in the annex to this document, reflecting the co-sponsors' views as mentioned in paragraphs 3 to 5. The Committee is invited to consider developing guidance for this issue using this draft guidance as a basis.
- In light of the actual needs for storage of TS/GW in BW tanks at specific ports and areas, the draft guidance in the annex is proposed in order to establish a uniform procedure that minimizes the impact on the environment while ensuring practicability for existing ships. The co-sponsors hope that this draft guidance would facilitate the discussion and contribute to the development of a circular at MEPC 79 to bring the guidance to the attention of all parties concerned.

Action requested of the Committee

8 The Committee is invited to consider the proposal in paragraphs 6 and 7 of this document and take action, as appropriate.

ANNEX

DRAFT GUIDANCE FOR THE TEMPORARY STORAGE OF TREATED SEWAGE AND GREY WATER IN BALLAST WATER TANKS

Introduction

- 1 The purpose of this guidance is to provide a procedure for the temporary storage of treated sewage and/or grey water in ballast water tanks.
- This guidance is developed for establishing a uniform procedure that minimizes the impact on the environment while ensuring practicability on existing ships, in light of the actual needs for storage of treated sewage and/or grey water in ballast water tanks at specific ports and areas.

Definitions

- 3 "Ballast water" means water with its suspended matter taken on board a ship to control trim, list, draught, stability or stresses of the ship (refer to article 1(2) of the BWM Convention).
- 4 "Treated ballast water" means the water that is treated by the BWMS in order to comply with regulation D-2 of the BWM Convention.
- Treated sewage (TS)" means the sewage that is treated by a sewage treatment plant in accordance with regulation 9.1.1 of MARPOL Annex IV. TS does not include the comminuted and disinfected sewage by a sewage comminuting and disinfecting system in accordance with regulation 9.1.2 of MARPOL Annex IV.
- "Grey water (GW)" means drainage from dishwater, galley sink, shower, laundry, bath and washbasin drains, and does not include drainage from toilets, urinals, hospitals, and animal spaces, as defined in regulation 1.3 of MARPOL Annex IV, and does not include drainage from cargo spaces (refer to paragraph 2.7 of resolution MEPC.227(64)).
- 7 "Ballast water tank (BW tank)" means any tanks, hold, or space used for the carriage of ballast water (refer to paragraph 2.2 of the Guidelines (G4) (resolution MEPC.127(53) as amended by resolution MEPC.306(73)).

General matters for application

- 8 Temporary storage of TS/GW in BW tanks should only be used as an option under specific ports and areas which restrict the discharge of TS/GW.
- 9 This guidance applies to a ship, which conducts ballast water management that at least meets the standard described in regulation D-2 of the BWM Convention.
- 10 It should be avoided to mix ballast water and TS/GW in BW tanks without carrying out the procedures of paragraph 14 of this guidance.
- 11 Temporary storage of untreated sewage in BW tanks is not covered by this guidance.

- 12 If the use of a particular BW tank is changed for temporary storage of TS/GW in accordance with this guidance, such BW tank should be solely used for storing it. If the use of the BW tank needs be reverted for storage of ballast water, the ship should follow this guidance again.
- A ship, which needs to apply this guidance, should include the procedure for the temporary storage of TS/GW in BW tanks in the Ballast Water Management Plan (BWMP) of the ship with approval by the Administration.

Guidance

- Before changing the use of a BW tank, follow the procedures below.
 - .1 In case a ship changes the use of BW tank storage from ballast water to TS/GW, the ship should follow one of the following procedures:
 - the ship should discharge the ballast water in the BW tank in accordance with the criteria of regulation D-2 of the BWM Convention and flush the BW tank in accordance with the sediment removal procedure described in its BWMP. The procedure of the flushing of a BW tank for sediment removal should be followed by the procedure described in the latter part of paragraph 1.3.2 of part A of the Guidelines (G4) (resolution MEPC.127(53) as amended by resolution MEPC.306(73)), namely, flushing tank bottoms and other surfaces when in suitable areas, i.e. areas complying with the minimum depth and distance described by regulations B-4.1.1 and B-4.1.2;
 - the ship should discharge the ballast water in the BW tank in accordance with the criteria of regulation D-2 of the BWM Convention and flush the BW tank in accordance with the procedure of ballast water exchange plus ballast water treatment (BWE+BWT). In this case, BWE is required to follow regulation D-1 of the BWM Convention and the 2017 Guidelines (G6) (resolution MEPC.288(71)). Regulation B-4 of the BWM Convention is not applied during operation of BWE+BWT; or
 - .3 the ship should clean the BW tank in port, at a repair facility, in dry dock, etc.
 - .2 In case a ship changes the use of a BW tank from TS/GW storage back to ballast water storage, the ship should follow one of the following procedures:
 - .1 the ship should discharge the contents of the BW tank in accordance with the provisions of the relevant annex to the MARPOL Convention and flush the BW tank using water, which meets the standard described in regulation D-2 of the BWM Convention, such as treated ballast water or fresh water; or
 - .2 the ship should clean the BW tank in port, at a repair facility, in dry dock, etc.

- .3 Along with the procedures above, the pumps and pipelines associated with a BW tank for storage of TS/GW should be flushed using the water, which meets the standard described in regulation D-2 of the BWM Convention, such as treated ballast water or fresh water.
- .4 The pumps, valves and pipelines should be switched appropriately to avoid mixing of ballast water and TS/GW, when a ship stores TS/GW in a BW tank.
- A ship should record the following items in its Ballast Water Record Book as item number 3.6 (additional operational procedure and general remarks):
 - .1 date, time and location of change of the use of a BW tank;
 - .2 type of water to be stored after the change of use (e.g. TS, GW or ballast water); and
 - .3 implemented procedure for the change of the use of a BW tank (e.g. after the discharge of treated ballast water, BW tank was flushed in accordance with the procedure described in the BWMP).