Ballast Water Management convention - guidance and FAQS

The International Convention for the Control and Management of Ships' Ballast Water and Sediments, commonly referred to as the Ballast Water Management (BWM) Convention ["the Convention"], was adopted in 2004 and entered into force on 8 September 2017. Its purpose is to prevent the spread of harmful aquatic organisms and pathogens through the control and management of ships' ballast water and sediments, thereby protecting marine ecosystems, human health, and coastal economies.

Which vessels does the BWM Convention apply to?

The Convention applies to ships[1] flying the flag of a State that is Party to the Convention or to ships not entitled to fly the flag of a Party, but which operate under the authority of a Party. However, the Convention, does not apply to the following:

- Ships not designed or constructed to carry ballast water.
- Ships trading domestically (unless the coastal State within whose jurisdiction the ship trades requires compliance with the Convention).
- Any warships, naval auxiliary or other ships owned or operated by a State, provided they are used only on government non-commercial service.
- Ships with permanent ballast water in sealed tanks and therefore not subject to discharge at any time.

[1] Ship means a vessel of any type whatsoever operating in the aquatic environment and includes submersibles, floating crafts, floating platforms, Floating Storage Units (FSUs) and Floating Production Storage and Offloading vessels (FPSOs).

What documents are required for compliance with the BWM Convention for vessels under 400 GT?

The Convention's survey and certification requirements, including the issuance of an

International Ballast Water Management Certificate (IBWMC), do not apply to ships under 400 GT. Instead, the Convention requires Administrations [flag States] to establish appropriate measures for such ships to ensure that the applicable provisions of the Convention are complied with.

Where the Convention applies, for ships under 400 GT, they are required to:

- Have on board and implement a Ballast Water Management Plan (BWMP) approved by the Administration.
- Have on board and maintain a Ballast Water Record Book (BWRB).

Members should contact the appropriate Administration to confirm their particular requirements in relation to the Convention for ships under 400 GT, as these may vary between flag States.

What documents are required for compliance with the BWM Convention for vessels 400 GT and above?

In addition to the two aforementioned documents, ships of 400 GT and above to which the Convention applies, excluding floating platforms, Floating Storage Units (FSUs) and Floating Production Storage and Offloading vessels (FPSOs), must also carry:

- IBWMC, as required under Section E of the Convention, “Survey and Certification requirements for Ballast Water Management”.

What are the BWMP, BWRB and IBWMC?

BWMP (Ballast Water Management Plan)

All ships to which the Convention applies require a BWMP as per Regulation B-1.

The BWMP must be tailored to each vessel and outline the ship’s safety procedures and BWM actions, including sediment management and any coordination required with coastal or port States. It should designate the responsible officer, set out reporting requirements, and be written in the ship’s working language. Where the working language is not English, French, or Spanish, a translation into one of those languages should be included.

A model BWMP can be found in the Appendix of IMO Resolution MEPC.127(53) along with guidelines, as amended by MEPC.306(73) and MEPC.370(80).

BWRB (Ballast Water Record Book)

All vessels to which the Convention applies require a BWRB as per Regulation B-2. This may be an electronic record system or may be integrated into another record book or system. For guidance on the use of electronic record books, see IMO Resolution MEPC.372(80).

Each of the following occurrences require entries in the BWRB:

- When ballast water is taken on board from, or discharged into, the aquatic environment or to a port-based reception facility.
- Whenever ballast water is exchanged, circulated, or treated for management purposes.
- In the event of an accidental or other exceptional uptake or discharge of ballast water, or failures, malfunctions, or inoperability of the ballast water management system (BWMS).

BWRB entries must be maintained on board the ship for a minimum period of two years after the last entry has been made and thereafter under the Company's control for a minimum period of three years.

Guidance on ballast water record-keeping and reporting is provided in BWM.2/Circ.80/Rev.1. A model BWRB can be found in the Annex of IMO Resolution MEPC.369(80).

IBWMC (International Ballast Water Management Certificate)

An IBWMC is issued by the vessel's flag State (or a Recognised Organisation (RO) acting on its behalf) after a satisfactory survey confirming that the ship complies with the applicable requirements of the Convention. This includes verification of the ship's ballast water management arrangements, relevant equipment, and systems, and required documentation.

The certificate remains valid for a period of up to five years and is subject to the applicable survey regime, which includes initial, annual, intermediate, and renewal surveys to verify ongoing compliance with the Convention.

Any exemptions granted in accordance with regulation A-4 or IMO Resolution MEPC.289(71) will be noted on the certificate, along with their scope and conditions.

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What else is required for compliance with the BWM Convention?

Ships constructed on or after 8 September 2017 are required to meet the ballast water performance standard (regulation D-2) from delivery. Ships constructed prior to this date were required to comply with regulation D-2 in accordance with the Convention's implementation schedule, linked to the relevant International Oil Pollution Prevention (IOPP) certificate renewal survey, and in any event no later than 8 September 2024. As this implementation period has now passed, vessels to which the Convention applies should generally be expected to comply with regulation D-2. If Members have any uncertainty, they should confirm the vessel's position with the flag State or RO.

Ballast Water Exchange (BWE) under regulation D-1 is no longer the accepted method of compliance for ships that are required to meet regulation D-2. It may, however, remain relevant as a contingency measure, under temporary arrangements or other limited cases permitted by the Convention or Administration.

After the ship undergoes the necessary survey by the flag State or RO (vessels under 400 GT may not be required to undergo an inspection), no changes shall be made to related equipment or systems without express approval from the flag State. Systems and equipment shall be duly maintained and equipment replaced with like-for-like parts or materials.

Ballast Water Management Systems (BWMS)

Vessels required to meet the D-2 standard for ballast water performance will normally do so by using an approved BWMS, or another method accepted by the Administration.

BWMS technologies vary, but most operate either:

- Through mechanical separation and disinfection using an active substance (such as electrochlorination or chemical dosing); or
- Through physical treatment without active substances, most commonly filtration combined with ultraviolet (UV) irradiation.

The choice of system depends on the vessel's design, trading pattern, operational profile, and any operational limitations noted in the type-approval certificate.

Some systems may experience reduced effectiveness in Challenging Water Quality (CWQ) conditions, such as waters with high turbidity, low UV transmittance, or extreme temperatures. Operators should recognise these limitations and ensure their BWMP includes procedures for identifying and managing CWQ, in accordance with the relevant IMO guidance.

Ballast Water Exchange (BWE)

Where a ship is required or permitted to conduct BWE, including as a contingency measure, the exchange should be carried out in accordance with regulation B-4 and should meet the ballast water exchange standard in regulation D-1.

- BWE should be conducted at least 200 nautical miles from the nearest land and in waters with a minimum depth of 200 metres.
- If this is not possible, it should be carried out as far from the nearest land as practicable, and in all cases at least 50 nautical miles from the nearest land and in waters with a minimum depth of 200 metres.
- The exchange must achieve at least 95% volumetric efficiency, typically by pumping through three times the tank volume or by using an equivalent method approved by the Administration.
- All operations should follow the ship's approved BWMP, considering safety, stability, and prevailing weather conditions.

BWE may still be relevant when applied as part of an agreed contingency measure under BWM.2/Circ.62, particularly in situations where a BWMS is temporarily inoperable or unsuitable for the prevailing water conditions. Guidance on BWE is provided in IMO Resolution MEPC.288(71), amended by MEPC.371(80).

Sediment Management

The Convention also requires ships to manage sediments arising from ballast water operations. Sediments should be removed and disposed of in accordance with the ship's approved BWMP, and in line with any applicable port, coastal State, flag State, or reception facility requirements.

The BWMP should include procedures for the disposal of sediments at sea and to shore and identify the officer responsible for ensuring that sediment management procedures are followed. Where sediments are removed from ballast tanks, they should be disposed of safely and in a manner that prevents harm to the marine environment, human health, property, and resources.

Members should also be aware that ports and terminals may impose their own requirements for the reception, handling, or disposal of sediments. Any sediment management activity should be appropriately recorded where required by the BWMP, the BWRB, or applicable local requirements.

Contingency Measures

Whilst contingency measures are not mandatory under the Convention unless required by the vessel's flag State, Members are recommended to ensure that appropriate contingency measures are included in their BWMP. The measures should address situations where the ship is unable to manage ballast water in accordance with the approved BWMP or meet the applicable standard. IMO guidance on contingency measures is provided in BWM.2/Circ.62.

Contingency measures should be assessed on a case-by-case basis in consultation with the vessel's flag State and the port State of destination, with the aim of protecting the marine environment, ensuring ship safety, and minimising disruption to operations. These may include various operational, logistical, or treatment-based actions, as outlined in the IMO guidance.

Any malfunction of the BWMS should be rectified at the earliest opportunity, with a repair plan submitted to the relevant authorities. All actions taken should be appropriately recorded in the BWRB.

Challenging Water Quality (CWQ) Conditions

Where a ship encounters operational limitations with its BWMS due to CWQ that impairs proper functioning or prevents the system from meeting operational demands, bypassing the BWMS may be considered as a last resort after all practicable alternative measures have been exhausted. Any such action should follow the principles set out in IMO Resolution MEPC.387(81) and, where applicable, the contingency measures framework in BWM.2/Circ.62. Operators should recognise that bypassing the BWMS may risk contaminating ballast tanks and sediments, and that subsequent discharge operations must be managed to ensure compliance with the Convention.

Planning for CWQ is strongly recommended. A ship's BWMP should set out procedures for early identification and response to CWQ, including triggers for implementation, communication

steps with the flag and port State, and ensuring the crew are familiar with these procedures. Members are also encouraged to check INTERTANKO's Ports with Challenging Water Quality (PCWQ) database prior to arrival.

All actions taken in response to CWQ should be appropriately recorded in the BWRB.

What action should be taken in the event of accidental discharge or defective equipment?

In the event of accidental discharge of ballast water or defective equipment which affects the ability to comply with the Convention, the flag State and port State should be informed. The incident and all subsequent actions taken should be recorded in the BWRB.

Can exemptions from complying with the convention be obtained?

Exemptions may be granted in accordance with regulation A-4 of the Convention. Applications must be supported by a risk assessment conducted in accordance with the Guidelines for risk assessment under regulation A-4, IMO Resolution MEPC.289(71). Exemptions are granted by the relevant State or States, are limited to the specified ports, locations, voyages, or circumstances for which they are issued, and are subject to any conditions imposed by the granting authority. Members should contact the relevant State Authority for further information.

What are the consequences if a vessel does not comply with the Convention where required?

During or following a Port State Control (PSC) inspection, where a vessel is found non-compliant with the Convention, the PSC authority may prohibit the discharge of ballast water until any deficiencies are rectified or grant permission for a vessel to discharge ballast water to another vessel, a reception facility or at sea upon departing the port. The PSC Officer (PSCO) may also issue a warning, detain, or exclude the vessel from the jurisdiction, depending on the circumstances and applicable law. States may also choose to issue financial penalties. Deliberate false declarations, falsification of records, or deception of authorities may result in criminal liability in some jurisdictions.

Finally, failure to comply with applicable statutory rules and regulations may also result in breach of the Club Rules and could therefore prejudice cover.

For further information please contact the Loss Prevention team.