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Mouawad Consulting

## 10 considerations for ship owners to comply with the Ballast Water Management Convention

Shipping moves over 80% of the world's commodities and transfers approximately three to five billion tonnes of ballast water internationally every year. Ballast water is essential to the safe and efficient operation of shipping, but it also poses a serious ecological, economic and health threat through the transfer of invasive aquatic species inadvertently carried in it.

The transfer of invasive marine species into new environments via ballast water has been identified as one of the major threats to the world's oceans. In response, the International Maritime Organization (IMO) adopted the Ballast Water Management Convention (BWM Convention) in 2004, which later entered into force 8 September 2017.

The BWM Convention includes 2-tiered steps to comply with its requirements, which apply to all vessels irrespective of age, size, type or trade, unless trading in domestic waters or for ships that do not discharge ballast water.

Ship owners should take into consideration many issues to comply with the provisions of the BWM Convention. Those requirements are applicable for ships sailing the flag of a Party to the BWM Convention (Party) or discharging ballast water in waters of a Party.

In this article, we list the 10 most important ones:

1. **Ballast Water Management Plan:** Regardless of the method of compliance (D-1: exchange or D-2: treatment), all ships must have an approved BWM Plan. The plan must be ship specific and include information on how Ballast Water is managed onboard the ship.
2. **Ballast Water Record Book:** Regardless of the method of compliance, all ships must have a Ballast Water Record Book onboard, and start using it to record movement of ballast water as of 8 September 2017.
3. **Survey and Certification:** When the above is available onboard, regardless of the method of compliance, all ships must order a survey onboard, the conclusion of which must be the issuance of an International Ballast Water Management Certificate. In case the flag of the ship is not a Party, a Certificate of Compliance can be issued.
4. **Prepare for the D-2 standard:** Eventually, all ships will phase out their exchange period and start complying with the D-2 standard (which is a discharge standard where the concentration of organisms must be below a certain threshold). Ship owners should ensure the following:
  - a. Check when the ship will be required by the BWM Convention to comply with the D-2 standard (mainly by the first IOPP Renewal after 8 September 2019 but for some ships earlier)

- b. Ship owners are advised to perform a market analysis and feasibility study to identify the most suitable BWMS for their ships. The due diligence can just as well conclude that the ship should be scrapped instead of investing in a new BWMS; or that use of a reception facility is applicable to that particular ship or trade.
  - c. Perform detailed engineering study for the retrofit, to avoid delayed dry-docks or BWMS that are wrongly installed.
  - d. Use the free of charge BWMS Finder on [www.bwm.no](http://www.bwm.no) to get an idea of suitable systems for a specific ship, or BWMS Cube for an overview of existing BWMS in the market. Using the Ship Compliance Calculator will assist you determining the dates the ship must comply with the IMO D-2 standard and USCG Regulations.
5. **Install a BWMS:** Installing a BWMS earlier than scheduled has many advantages. The most obvious one, in addition to the crew familiarization with the equipment, is having a leeway in trying and failing during the operations of the ships, and adjusting the procedures and the installations underway. Ensuring proper commissioning and training of the crew is key to a successful retrofit.
6. **Use your BWMS:** Ship owners should make sure that the BWMS installed onboard their ships is used at all times. In case the BWMS has been sitting idle for more than a year, ship owners should schedule a re-commissioning of the BWMS.
7. **Maintain your BWMS:** BWMS, like any other equipment, require constant maintenance following recommendations of the maker, which must be included in the Operations, Maintenance, and Safety Manual (OMSM). Ensuring adequate spare parts are available and routine maintenance is performed will get the ship a long way in complying with the requirements of the BWMS Convention.
8. **Identify issues with ship's operating areas:** In addition to issues related to the equipment, the crew should identify areas/ports where the water is challenging for the BWMS they have onboard. For example, water in ports with UV Transmittance lower than what the BWMS is approved for, or water in ports with salinity or temperature lower than what the electrolysis-based BWMS is approved for, etc. Identified issues with contingency measures must be included in the BWM Plan.
9. **Stay up-to-date with the Regulations:** The IMO is constantly working on new proposals and updates to the regulations. Keep informed about those by following Mouawad Consulting LinkedIn page or Newsletter that are published on [www.bwm.no](http://www.bwm.no).
10. **US Regulations:** For ships trading in the US, different sets of requirements are applicable when discharging Ballast Water in the US:
  - a. **Federal Regulations under the USCG:** Regulations falling under the USCG, which require exchange or treatment (by a USCG Type Approved BWMS, not only IMO Type Approved). The compliance dates for treatment are the first scheduled dry-dock after 1 January 2016 or 1 January 2014 (depending on the ballast capacity of the ships), with

extensions to those dates issued by the USCG in case the ship cannot find suitable USCG Type Approved BWMS.

- b. Federal Regulations under the EPA:** Regulations falling under the Vessel General Permit (VGP), following in general the same standards as the USCG Regulations, but requiring annual testing of the Ballast Water and reporting back to the EPA.
- c. State Regulations:** State-wise regulations falling under the VGP, but where each State in the US can include additional requirements to the discharge of Ballast Water. The State of California is the most active state, requiring additional measures on top of the USCG and the EPA.

Mouawad Consulting has a cumulative experience of over 10 years assisting ship owners comply with all of the considerations listed above. Our offices in Hamar (Norway), Shanghai (China) and Beirut (Lebanon) can be reached at: [info@bwm.no](mailto:info@bwm.no) or by phone (Norway: +47 48050902; China: +86 13967232721; Lebanon: +961 70952002).