

Ballast Water Management Plan
Section 9 – Sediment Control and Disposal

9.1 General

- Where practicable, routine cleaning of the ballast tank to remove sediments shall be carried out in mid-ocean or under controlled arrangements in port or dry dock.
- When sediment have accumulated, consideration should be given to flushing tank bottoms and other surfaces when in suitable areas, i.e. outside 200 nautical miles from land and in water depths of over 200 meters.
- The volume of sediment in a ballast tank shall be monitored on a regular basis.
- Sediment in ballast tanks shall be removed in a timely basis and as found necessary, always taking into account safety and operational considerations addressed in this manual. The frequency and timing of removal will also depend on factors such as sediment build up, ship's trading pattern, availability of reception facilities, workload of the ship's personnel and safety considerations.
- Removal of sediment from ballast tank should preferably be undertaken under controlled conditions in port, at a repair facility or in dry dock. The removed sediment should preferably be disposed off in a sediment reception facility if available, reasonable and practicable.
- Flushing by using water movement within a tank to bring sediment into suspension, will only remove a part of the mud, depending on the configuration of an individual tank and its piping arrangement. Removal may be more appropriate on a routine basis during scheduled dry dockings. This is often needed for other reasons anyway.
- However, flushing at sea may be a useful tool on some occasions such as when a ship changes its trading area.
- When sediment is removed from the ship's ballast tanks and is to be disposed of by that ship at sea such disposal should only take place in areas outside 200 nautical miles from land and in water depths of over 200 meters.
- If it is necessary to take on and discharge ballast water in the same port to facilitate safe cargo operations, care should be taken to avoid unnecessary discharge of ballast water that has been taken up in another port.
- Minimise departure and arrival ballast quantities but always within the constraints of safe navigation.
- Take additional good house keeping measures to minimise the risk, such as rinse anchors and anchor chain when retrieving to remove organisms and sediment at their place of origin, remove fouling organisms from hull, piping and tanks on a regular basis.
- It is noted that these conditions are guidelines only. It is the responsibility of the ship's Master to ensure the safety of his crew is not jeopardised.
- Additionally, operational limits defined for specific ballast exchange conditions must be adhered to during operation.
- Ballast exchange operations are complex procedures and may last from several hours to days. All personnel engaged in ballast exchange should be well trained to respond to routine and emergency procedures.
- It should always be considered that while performing a ballast exchange at sea, failure of power system or any part of ballast pumping and piping system can take place. Such incidents should be brought immediately to the attention of the Company's Safety department and emergency procedures should be activated to bring the ship back to her ballast seagoing condition as soon as possible. Such emergency procedures could be ballasting by gravity and even utilisation of the general service pump.

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- Where a Port State Authority requires that specific ballast water procedures and/or treatment option(s) be undertaken, and due to weather, sea conditions or operational impracticability such action cannot be taken, the ship's Master should report this fact to the Port State Authority as soon as possible and, where appropriate, prior to entering seas under its jurisdiction.

The uptake of ballast water should be minimized or, where practicable, avoided in areas and situations such as:

- Areas with outbreaks, infestations or known populations of harmful organisms and pathogens;
- Areas with current phytoplankton blooms (algal blooms, such as red tides);
- Nearby sewage outfalls;
- Nearby dredging operations;
- When a tidal stream is known to be the more turbid; and areas where tidal flushing is known to be poor;
- In darkness when bottom-dwelling organisms may rise up in the water column;
- In very shallow water; or
- Where propellers may stir up sediment.

IMO stipulates that Port State should not require any action of the Master which may imperil the lives of those on board or the safety of the ship.
