14.1 Ballasting Procedure

Unless absolutely necessary for the safety of the vessel during extreme sea condition the loading of ballast water into Cargo Oil Tank (COT) designated as Heavy Ballast Tank(s) of a tanker vessel must be avoided.

When necessary to taking Heavy Ballast for the safety of the ship at sea whilst enroute, the Master shall notify the Management of his intention and the reason to load ballast into **Cargo Oil Tank No.3 C,** designated as **Heavy Ballast Tank** in the ship's approved "Cargo Loading Manual". Although the Master has over-riding responsibility for the safety of the ship and crews, he may request confirmation from the management before commencing the ballasting operation.

Proper planning is required for safe ballasting operation onboard any vessel. Care should be taken that during the operation, vessel's stress and structural condition is maintained acceptable to the approved Cargo Loading Manual.

The following procedure shall be observed when ballasting the cargo tank:

- Enter into the ship's Cargo Loading Computer with all necessary data to secure calculation of ship's stresses, such as Shearing Force (SF), Bending Moment (BM), KG, GM, etc. Take the Print-Out and present to the Master for comment.

- Ballast water shall be loaded into the COT No. 3 C (designated Heavy Ballast Tank) passing through the valves at the Cargo Sea Chest connected to the suction crossover and to the appropriate cargo pump.

- Check to ensure that valves to other cargo tanks are shut (secured) except to the intended COT No. 3 C (designated heavy ballast tank)

- Ensure that I.G. branch line for COT No. 3 C is **opened.**

- To prevent accidental escape of oil to sea during operation, start the Cargo Pump to use until positive revolution is reach and then slowly open the cargo sea chest valve.

- After completion of loading ballast close and secure Sea Chest Valve, COT No. 3 C and other related valves according to standard practice.

The following procedure shall be observed when Deballasting the cargo tank:

Discharge to shore reception facility.

Heavy ballast water loaded into the ship's Cargo Oil Tank (COT) shall be considered oil contaminated water and as much as possible, shall be discharge to shore reception facility if available at the next port. The Master shall notify the Port Agent, Terminal and Management of the quantity of dirty water ballast to be discharge ashore.

Discharging Heavy Ballast Water to sea.

- The vessel is NOT within any special areas. (MARPOL 34, 1.1)
- Irrespective where the heavy ballast water was loaded, it should be discharge in open ocean at a distance of more than 50 nautical miles from the nearest land (MARPOL, Reg. 34, 1.2).

If ships route allows, the discharge shall be carried out at distance of lat least **200** nautical miles from the nearest land and at depth of at least **200** meters. (Refer to Section 12.2 (d) of BWMP)

- Using the cargo pump, the water should be discharge through the high overboard discharge line, passing through the oil discharge and monitoring equipment. Ensure that this equipment is operating at its controlled setting as approved by Class.
- Closely monitor the tank sounding until the water level approaches to about 3 meters, and then reduce the pumping rate to a minimum. Permanently assign a crew to monitor the color of discharge water over the ship's side. Deballasting shall be stop immediately when sign of oil or oil sheen is observe coming out with discharge water. Close and secure all valves related to deballasting operation according to standard practice.
- Transfer the remaining ballast water from COT No. 3 C (stripped) to available slop tank. Allow the water in the Slop Tank to settle down for a certain period in order that lighter oily water will rise and float on top inside the Slop Tank.
- Depending on the quantity of water in the Slop Tank and the sludge oil on top, decant the bottom water passing through the ODME until the contents of Slop Tank is reduced to acceptable quantity. Secure pumps and related valves according to standard practice onboard.
- The remaining dirty water in the Slop Tank can either be discharge to shore facility or to sludge ship/barge or to Load on Top Operation according to charterers' instruction.
- Accomplish proper documentation of the entire operation, including all required forms (Refer to Appendix VI) must be accomplished. Retain record onboard for at least 2 years.