Planning for Ballast Water Exchange/Checklists for Ballast Water Operations

The International Safety Management (ISM) code requires the vessels operator to develop ship specific guidelines and checklists for identified shipboard procedures, which are carried out on a regular basis. The purpose is to help the master and the vessels operator to develop ship specific checklists under the Safety Management System (SMS) procedure. Various methods and procedures for the practice of Ballast water management on board vessel and ashore may have safety and environmental implications

These are only generic guidelines concerning the ballast water exchange procedures and in no way exhaustive.

Pre Planning Checklist

Has plan been prepared as per sequence in the ship's BWM Plan?	Y/N	Remarks
Have exact quantities of fuel, diesel and lubricating oils been obtained?		
Have exact quantities of freshwater and stores been obtained?		
Has the passage plan been prepared to take BW exchange into account?		
Is draft adequate at all stages?		
Is trim adequate at all stages?		
Are stability, FSE and GM adequate at all stages?		
Are stresses within the maximum permissible limits for seagoing condition?		
Are exact quantities of ballast water in each tank known and recorded?		
Have specific instructions of port state and terminal been taken into account?		
Are there any known defects which may impair the BWM operations?		
Have all relevant departments and officers/crew been briefed about the plan?		

Pre operations Checklist

Are the weather conditions and sea state within acceptable limits?	Y/N	Remarks
Confirm with the bridge that the ship is more than 200 nm from nearest land		
Confirm with the bridge that the ship is in more than 200 m depth of water		
Are crew and officers rested as per hours of work regulations?		
Has notice been served for pumps?		
Is the pumproom ventilation running, where applicable?		
Check and confirm power available for all controls, including lubricants and oil levels: • Hydraulic		
• Pneumatic		
• Electric		
• Steam		
Have all concerned been advised of the time of commencement?		
Has tank atmosphere been evaluated for 0_2 and gas, where applicable?		
Have the tank level gauges been checked for accuracy?		
Are manual means of sounding/gauging available and operational?		
Is the deck watch in attendance and properly equipped/attired?		
Have deck operations been ceased (if water to overflow on deck)?		
Have the air pipes been set appropriately and are they clear?		
Have the *PV* valves been set appropriately, where applicable?		
Is the IG/nitrogen plant ready for use and on-line, where applicable?		
Have the relevant deck openings been opened, where applicable?		
Have tank overflow line valves been opened, where applicable?		
Has the line been set for the appropriate pump and the set of tanks?		
Has the company been informed of the time of planned commencement?		

During Operations Checklist

Monitor weather conditions - cease operations if these are beyond limits	Y/N	Remarks
Bridge to inform if distance from nearest land or depth is less than required		
Check on pumps and power plant		
Check on all plant oil levels		
Confirm tank levels on regular basis, in line with the exchange plan stages		
Record tank soundings/levels		
Check on tank ventilation arrangements to prevent over or under pressurization		
Check tank atmosphere for O_2 and gas, where applicable		
Complete a stage as per plan prior to moving on to the next stage		
Check crew and officers are well rested prior to proceeding to the next stage		
Keep a check and log on pump seals, suction and discharge pressures, pump casing temperatures, salinity of water		
Keep a check and log IG/N_2 quality, temperature and pressure, where used		
Keep a check on pump room atmosphere, where applicable		
Keep a check on pump room bilge level, where applicable		
Are there any deviations from the plan?		
Maintain running records of all operations		

On completion Checklist

Have all the stages of the plan been completed?	Y/N	Remarks
Are all the final tank levels as per plan?		
Have all pumps been stopped?		
Are all the valves shut and secured?		
Are all deck openings closed and secured?		
Are all overflow tank valves shut and secured?		
Are air pipes and PV valves set to the voyage conditions?		
Are all sounding/level pipes closed?		
Are tank pressure and atmosphere set to voyage conditions, if applicable?		
Ensure all relevant plants are stopped		
Check and empty pump room bilge, where applicable		
Are all records, logs and reports completed as per BWM Plan and SMS?		
Inform the company of completion of exchange operations		