



Fleet Safety Manual

7.E.3 - HANDLING AND DISCHARGE OF BLACK AND GREY WATER

1 PURPOSE

- a) To ensure that Canadian Coast Guard (CCG) vessels dispose of their black water (sewage) and grey water (waste) in accordance with applicable regulations and in an environmentally sound manner paying particular attention to local restrictions.

2 RESPONSIBILITIES

2.1 COMMANDING OFFICER

- a) The Commanding Officer shall be aware, in their area of operation, where sewage and waste water discharge is restricted or prohibited. At any time that the vessel is operating in one of these areas they shall ensure that the Engine Room is notified and that the automatic discharge is disabled or that discharges are controlled.

2.2 CHIEF ENGINEER

- a) The Chief Engineer shall ensure that fitted treatment equipment meets discharge requirements and is properly maintained.

2.3 COMMANDING OFFICER, CHIEF ENGINEER AND THE SUPERINTENDENT MARINE ENGINEERING

- a) The Commanding Officer, Chief Engineer and the Superintendent Marine Engineering shall ensure that, where appropriate, the vessel is fitted with sewage equipment to control discharge. Where vessels are assigned to areas where discharge is prohibited, fittings shall be installed to allow for discharge to designated facilities ashore.

3 INSTRUCTION

3.1 OVERSEE / OPERATE SYSTEM

- a) Maintenance of the Black and Grey Water systems is to be integrated into the vessel's operational maintenance routine. Where manufactures specific instructions are lacking, Site Specific Work Instructions shall be developed for the operation and maintenance of the system.

- b) Vessel familiarization or the use of placards or signage at fixtures shall be utilized to ensure that personnel do not introduce oily waste or other pollutants into the grey or black water system. This may include warnings about the use of excessive soap which limits the operation of the treatment portion of the plant.

3.2 TREATING BLACK AND GREY WATER

- a) Where approved marine sewage treatment plants are installed, ensure that certified environmentally friendly products are used both for treatment and cleaning (according to manufacturer's instructions). Where installed, run the system on automatic and ensure that the machinery is operating properly through regular checks and in accordance with the maintenance plan prescribed by the manufacturer. When performing maintenance ensure that there are no local regulations prohibiting cleaning / de-sludging operations.

3.3 HOLDING TANKS

- a) Where holding tanks are used in place of treatment plants or when discharges are restricted from vessels with approved treatment plants due to geographical areas, the tank level shall be monitored as required.
- b) On vessels not equipped with an approved marine sewage treatment plant or a lack of a treatment plant altogether, holding tanks shall be fitted with valves which may prevent overboard discharge.

3.4 DISPOSAL OF BLACK AND GREY WATER

- a) Dispose of black and grey water shall be in accordance with municipal, national and international standards, equipment manufacturers' instructions and site specific work instructions.
- b) At no time shall sewage be discharged into waters where sewage discharge prohibitions are in effect.
- c) When chlorine is used as a disinfectant in the treatment process of sewage the discharge of a residual of the chlorine shall not be greater than 0.5 mg/L
- d) For vessels operating in the Great Lakes, unless a vessel is equipped with approved equipment that complies with the regulations, sewage shall not be discharged into the Great Lakes or St. Lawrence River;
- until past the downstream gates to Montreal's St-Lambert Lock
 - within 4 miles of shore
 - between 4 and 12 miles off shore unless the sewage has been macerated and disinfected.

4 DOCUMENTATION

- Site-specific work instructions – as appropriate
- Manufacturer's operating and maintenance instructions
- Placards or signage at sinks and drains and lavatories