

(3) Provide for ease of cleaning, ease of maintenance and ease of replenishment of deodorizing and/or disinfecting agent, when used.

(4) Venting shall be to the free atmosphere, exterior to the boat's structure and of such a design as to preclude clogging.

(5) Be of such design and construction that the danger of ignition of flammable vapor within or external to the unit will be prevented.

(6) Use electrical components and connections complying with applicable standards of the American Boat and Yacht Council.

(7) Be of such design and construction that, when properly installed, malfunctioning of its components will not endanger the boat in which it is installed by permitting water to enter the hull interior.

(8) Provide no means for discharge of waste directly or indirectly to the water either deliberately or accidentally.

(9) Be of such design and construction that shifting contents of the container will not endanger either the container or the boat.

(10) Have adequate capacity for expected use.

(11) The manufacturer shall specify the maximum angle of heel at which no spillage will occur from his device.

b. It is recommended that a deck type fitting be used with the word "WASTE" conspicuously marked on the flange. The deck type fitting should have male threads not less than 1½ inches in diameter with 11½ threads per inch. The cap shall effect a seal.

6. Installation

a. Installation of the device and its piping should allow ease of servicing and replenishment of any required deodorizing and/or disinfecting agent.

b. The device shall be adequately secured independently of any connecting piping.

c. All piping shall be sufficiently strong and durable to withstand any pressure that might be imposed on it by normal operation of the device.

d. The interior of the piping or hose shall be as smooth as practicable so as to permit the free flow of sewage.

e. Materials and piping shall meet the requirements of section 4.

f. Subject to the foregoing, it is recommended that:

(1) Boat designers and manufacturers, in planning toilet installations, provide space adequate for the installation of an approved device.

(2) The piping or hose connecting toilet to intake of device should be as short and direct as possible.

(3) The retention device should be placed as low as practicable.

(4) Means should be provided for determining the degree of fullness of the tank without opening the tank.

PART B-II

RECOMMENDED PRACTICES AND STANDARDS FOR RECIRCULATING DEVICES

(Subcommittee: Gordon Crowell, Henry A. Albing, Jr., Fred Stone.)

PART B-III

RECOMMENDED PRACTICES AND STANDARDS FOR CHEMICAL MACERATION DEVICES

1. Scope

Wherein recommended practices and standards are applied to devices such as macerator-chemical treatment devices designed to treat human wastes discharged through marine toilets as may be required by appropriate regulatory agencies for pollution abatement.

2. Definitions

a. *Most Probable Number* (MPN)—A statistical measure of the number of coliform organisms present and indicative of the degree of pollution from human sources.

b. *Septic Action*—The biological decomposition of organic matter in the absence of dissolved oxygen, and accompanied by the production of offensive odors.

3. Effluent requirements

a. A sewage treatment device for marine toilets shall discharge an effluent meeting the following minimum standards: