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STATE BOARD OF HEALTH

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Chapter H 80

BOAT AND ON-SHORE SEWAGE FACILITIES

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H 80.01 Applicability. This regulation for the abatement of water pollution through control of the discharge of sewage from boats maintained or operated at any time upon the inland waters of the state, defined in section 29.01(4), Wis. Stats., shall be applicable to any boat which is equipped with a toilet that is not sealed.

Note: 29.01(4), Wis. Stats., provides: "All waters within the jurisdiction of the state are classified as follows: Lakes Superior and Michigan, Green Bay, Sturgeon Bay, Sawyer's harbor, and the Fox river from its mouth up to the dam at De Pere are 'outlying waters.' All other waters, including the bays, bayous and sloughs of the Mississippi river bottoms, are 'inland waters.'"

History: Cr. Register, February, 1966, No. 122, eff. 3-1-66.

H 80.02 Definitions. The following definitions shall apply in the interpretation and enforcement of this chapter.

- (1) **APPROVED.** Written approval from the board.
- (2) **BOARD.** The state board of health.
- (3) **BOAT.** Every description of watercraft, other than a seaplane, on the water, used or capable of being used as a means of transportation on water.
- (4) **HEAD.** Any toilet facility installed on a boat, including incineration and chemical type toilets.
- (5) **HOLDING TANK.** A permanently installed container which receives the discharge from one head or more and retains the sewage for shore disposal.
- (6) **MAINTAIN AND OPERATE.** To moor and occupy and to navigate, steer, sail, row or otherwise to exercise physical control over the use or movement of a boat.
- (7) **OWNER.** The person who has lawful possession of a boat by virtue of legal title or equitable interest therein which entitles him to such possession.
- (8) **SEALED.** Making a head incapable of discharging sewage into the waters upon which a boat is operated or moored.
- (9) **TOILET.** A toilet is any device, facility or installation designed or constructed for use as a place for human defecation or urination.

History: Cr. Register, February, 1966, No. 122, eff. 3-1-66; cr. (9) Register, April, 1968, No. 148, eff. 5-1-68.

H 80.03 Approved comparable construction. When compliance with this regulation, without modification, appears impracticable, the board shall be so informed in writing, giving reason therefor and any suggested modifications that would reasonably comply with the intent of

the law and this regulation, and be requested to approve suggested modifications or to give advice as to acceptable alternate installations or devices.

History: Cr. Register, February, 1966, No. 122, eff. 3-1-66

H 80.04 Contract applicability. Applicable provisions of this regulation shall be construed to be a part of any order or agreement, written or verbal, for the installation of a holding tank or shore disposal facility or appurtenances thereto.

History: Cr. Register, February, 1966, No. 122, eff. 3-1-66.

H 80.05 Reduction in solid size. The sewage discharged from a head shall pass through an integral or separate macerating, grinding or homogenizing device prior to discharge to a holding tank. The device shall be automatically operated each time a head is flushed and shall be capable of reducing the particle size of solids so that the greatest dimension is less than the size of the head trap.

History: Cr. Register, February, 1966, No. 122, eff. 3-1-66.

H 80.06 Holding tank and appurtenances. (1) **TANK MATERIAL AND STRENGTH.** Each holding tank shall be constructed of a plastic which is resistant to acid, alkali and water; stainless steel with comparable resistance, or other approved material. A holding tank, with all openings sealed, shall show no signs of deformation, cracking or leakage when subjected to a combined suction and external pressure head equivalent to a 50-foot head of water. It shall be designed and installed so as not to become permanently distorted with a static top load of 200 pounds.

(2) **MOUNTING.** The holding tank shall be mounted sufficiently below the head so that the tank inlet is below the fixture trap, excepting that on boats equipped with pump type marine heads the holding tank may be located above such head. The minimum support for a tank shall be that recommended by the manufacturer which shall be sufficient to rigidly secure the tank in place.

(3) **CAPACITY.** The tank capacity for a boat shall be sufficient to receive the waste from the maximum number of persons that may be on board during a 16-hour period. The passenger rating shall be that indicated on the boat's capacity plate, or that of a boat of similar size should the plate be illegible or missing. Minimum tank capacity in gallons for boats having a marine type head shall be 2.5 times the rating or 20 gallons, whichever is the greater. An owner of a commercial boat carrying more than 8 persons per 16-hour period, or of any boat equipped with standard type water flush toilets, shall request information from the board as to required tank capacity, submitting information as to type of boat usage and passenger rating with such request.

(4) **CONTROLS AND MAINTENANCE.** Each holding tank shall have installed therein a sewage level device which actuates a warning light when the tank becomes three-fourths full. The light shall be located so that it can be readily observed. The level indicator and light device shall be in operable condition at any time the boat is used. Such water level indicator shall be installed on a removable plate or cap of such design and of such size as to make a watertight seal with a tank opening that is sufficiently large to accommodate the light actuating device and to permit any necessary cleaning of the tank or rodding

of the piping should no other provisions be made for such latter purposes in the tank design. The plate or cap shall be readily removable for maintenance purposes.

(5) **OPENINGS FOR PIPING.** Openings shall be provided in each holding tank for inlet, outlet and vent piping. The openings and pipe fittings shall be so designed as to provide watertight joints between the tank and the piping. Inlet openings should preferably be such that they could accommodate fittings that would be connected to piping ranging from 1½ inches to 2½ inches in nominal inside diameter (I.D.). Outlet openings shall be such as to accommodate 1½-inch I.D. piping. Vent pipe openings shall be able to accommodate fittings for one-inch I.D. pipe, and should preferably be located at the top of a conical frustum or cylindrical vertical extension of the tank which is at least two inches in diameter at the base and two inches or more in height.

(6) **ELECTRICAL SYSTEM.** The electrical system associated with a boat holding tank system shall conform to accepted practice.

History: Cr. Register, February, 1966, No. 122, eff. 3-1-66.

H 80.07 Piping and fittings. (1) **SIZE.** The piping from the head to the holding tank shall be at least as large as the trap of the head fixture. The piping from the tank to the pump-out connection shall have a nominal inside diameter of at least 1½ inches.

(2) **MATERIAL.** All waste and vent piping shall be made of galvanized steel, wrought iron or yaloy pipe; lead; brass; type M copper; or flexible or rigid plastic pipe. Assembly shall be made with threaded fittings in the case of ferrous or brass pipe; lead or solder type fittings in the case of lead and copper pipe; and with threaded fittings, invertible clamp type fittings or weldable fittings in the case of plastic pipe. Clamps, usable only with plastic pipe, shall be made of stainless steel. All piping materials and fittings shall be capable of withstanding a pressure of at least 75 pounds per square inch and a combined maximum suction and external pressure head equivalent to 50 feet of water.

(3) **LOCATION.** No piping, other than that for venting, associated with the boat sewage system shall pass through the hull. The vent pipe may pass through the upper part of the boat transom and shall terminate with an inverted U-bend the opening of which shall be above the maximum water level in the head or sewage holding tank. When any storage tank receives discharge from a pump type head the tank vent pipe shall be provided with a combined air and vacuum float valve of a design to prevent discharge of liquid waste. The terminal of the outlet pipe shall be located above the holding tank in a manner that makes impractical gravity discharge of the contents. It shall have an airtight capping device marked "WASTE" or such word shall be provided on the boat surface immediately adjoining the outlet pipe.

History: Cr. Register, February, 1966, No. 122, eff. 3-1-66.

H 80.08 Alternate waste discharges. No boat equipped with a means of discharging sewage directly from the head or holding tank into the water upon which the boat is moored or is moved shall enter inland waters of the state until such means of discharge are inactivated through removal of pumping devices when so equipped or through

plugging of the outlet when discharge by gravity is possible. An owner or operator of a boat equipped with an alternate disposal system shall contact the area game warden or a local police department with respect to inactivation before entering inland waters. The owner or operator shall give information as to the inland waters he plans to navigate and as to the time of stay on such waters.

Note: Discharge of wastes from boats in any form would be contrary to section 29.29(3), Wis. Stats.

History: Cr. Register, February, 1966, No. 122, eff. 3-1-66.

H 80.09 On-shore disposal facilities. (1) PUMP. A self-priming pump shall be provided for the on-shore removal of sewage from boat holding tanks. The pump shall be powered by an explosion-proof electric motor. Head characteristics and capacity shall be based on installation needs for the site. The pump may be either fixed in position or portably mounted.

(2) **SUCTION HOSE.** The suction hose shall be of fire suction hose quality. A quick-connect dripproof sewer coupling of bronze or brass shall be fitted to the end of the hose that is to be attached to the boat piping outlet.

(3) **DISCHARGE HOSE.** Flexible hose used as a pump discharge shall be of fire hose quality. All fixed piping or sewers shall conform with requirements of the state plumbing regulations, Wis. Adm. Code, Ch. H 62.

(4) **SEWAGE DISPOSAL REQUIREMENTS. (a) Public facilities.** When public sanitary sewers are available within a reasonable distance from the marina or pump-out dock, the disposal piping shall be designed to discharge thereto. See Wis. Adm. Code section H 62.04.

(b) **Private facilities.** When the marina or dock is remote from a public sewer, a private sewage disposal system installed in compliance with applicable state plumbing regulations shall be provided unless adequate private treatment and disposal facilities are already available. See sections H 62.04 and H 62.20.

(5) **PLAN APPROVAL.** Every owner, personally or through his representative, shall obtain written approval from the board prior to award of any new or modified construction of shore disposal facilities set forth in this section. Three sets of plans and specifications of such new or modified shore disposal facilities to be constructed for the purpose of pumping out boat holding tanks and disposing of the sewage shall be submitted to the board for review as to acceptability. Plans and specifications shall cover in detail the materials to be used, the capacity of the pump, and when applicable, the size and construction of septic tank, results of soil percolation tests and layout of the soil absorption system. Location of all wells within 150 feet of the absorption system and the general topography of the area shall be shown on a location plan.

History: Cr. Register, February, 1966, No. 122, eff. 3-1-66.

H 80.10 Alternate facilities. (1) CHEMICAL TYPE TOILETS. Chemical toilets of adequate capacity and of proper design may be used in lieu of a head flushed by water provided the container is not portable and use of on-shore pump and disposal facilities is provided for in the design of the unit. The design of the toilet and on-shore disposal adaptation shall be approved.

(2) **INCINERATION TYPE TOILETS.** An approved incinerator type toilet may also be used in lieu of a head flushed by water provided it is of adequate capacity to handle the passenger load. Equipment for removal of resulting ash shall be kept on board.

Note: If U. S. Coast Guard inspection certificate of the boat is needed, the owner should make inquiry of said agency as to the acceptability of such fixture.

History: Cr. Register, February, 1966, No. 122, eff. 3-1-66.

H 80.11 Operation and maintenance. All facilities controlled by this chapter shall be maintained in good operating condition at all times. All necessary tools for repair and maintenance shall be kept on board or on dock, as the case may be, and shall be properly stored when not in use. Extra fuses for electrical equipment and extra indicator lights shall be on hand. Pump-out suction hoses should be adequately drained through the pump before disconnection and then be properly stored or sealed. Pumping equipment shall be shut off before the hose is disengaged from the boat outlet pipe. Ashes removed from incineration type toilets shall be retained for shore disposal.

History: Cr. Register, February, 1966, No. 122, eff. 3-1-66.

H 80.12 Prohibited facilities. No person shall use or permit to be used as a holding facility for human defecation or urination, a pail, plastic bag or any other type of portable, semiportable or disposable receptacle aboard boats not specifically permitted by the provisions of this chapter.

History: Cr. Register, April, 1968, No. 148, eff. 5-1-68.