Chapter Comm 86

BOAT AND ON–SHORE SEWAGE FACILITIES

Note: Chapter H 80 as it existed on September 30, 1980 was repealed and a new chapter H 80 was created effective October 1, 1980; renumbered to be chapter ILHR 84 effective June 1, 1983; renumbered to be chapter ILHR 86 effective March 1, 1985. **Chapter ILHR 86 was renumbered Chapter Comm 86 under s. 13.93 (2m) (b) 1., Stats., and corrections made under s. 13.93 (2m) (b) 6. and 7., Stats., Regiser, February, 1997, No. 494.**

Comm 86.01 Applicability. This chapter as authorized by s. 30.71, Stats., for the abatement of water pollution through control of the discharge of sewage from boats maintained or operated at any time upon the inland or outlying waters of the state, defined in s. 29.01 (9) and (11), Stats., shall be applicable to any boat which is equipped with a toilet.

Note: Section 29.01 (9) and (11), 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, September, 1980, No. 297, eff. 10–1–80; renum. from H 80.01, Register, May, 1983, No. 329, eff. 6–1–83; correction made under s. 13.93 (2m) (b) 7., Stats., Register, February, 1994, No. 458.

Comm 86.02 Definitions. The following definitions shall apply in the interpretation and enforcement of this chapter.

(1) "Department" means the department of commerce.

(2) "Approved" means written approval from the department.

(3) "Boat" means every description of watercraft, other than a seaplane, on the water, used or capable of being used as a means of transportation on water, s. 30.50 (1), Stats.

(4) "Deodorant" means a substance or process which masks or destroys offensive odor.

(5) "Holding tank" means a permanently installed container which receives the discharge from one toilet or more and retains the sewage for shore disposal.

(6) "Maintain and operate" means to moor and occupy or to navigate, steer, sail, row or otherwise to exercise physical control over the use or movement of a boat.

(7) "Owner" means the person who has lawful possession of a boat by virtue of legal title or equitable interest therein which entitles that person to such possession.

(8) "Portable toilet" means a self–contained unit with a flushing device which retains sewage in a holding tank for disposal to a sewage system acceptable to the department.

(9) "Recirculating system" means a holding tank with all necessary appurtenances to provide for the recirculation of flushing liquid and for the receiving, venting and shore removal of sewage.

(10) "Sealed" means making a toilet incapable of discharging sewage into the waters upon which a boat is operated or moored.

(11) "Sewage" means human body wastes.

(12) "Toilet" means any device, facility or installation designed or constructed for use as a place for receiving sewage directly from the human body.

History: Cr. Register, September, 1980, No. 297, eff. 10–1–80; renum. from H 80.02 and am. (1) Register, May, 1983, No. 329, eff. 6–1–83.

Comm 86.03 Petition for variance. (1) PROCEDURE. The department shall consider and may grant a variance to an administrative rule upon receipt of a fee and a completed petition for variance form from the owner, provided an equivalent degree of safety is established in the petition for variance which meets the intent of the rule being petitioned. The department may impose specific conditions in a petition for variance to promote the protection of the health, safety and welfare of the employes or the public. Violation of those conditions under which the petition is granted constitutes a violation of these rules.

(2) PETITION PROCESSING TIME. Except for priority petitions, the department shall review and make a determination on a petition for variance within 30 business days of receipt of all calculations, documents and fees required to complete the review. The department shall process priority petitions within 10 business days.

Note: Copies of the petition for variance (form SBD–8) are available from the Division of Safety and Buildings, P.O. Box 7969, Madison, Wisconsin 53707.

History: Cr. Register, September, 1980, No. 297, eff. 10–1–80; renum. from H 80.03, Register, May, 1983, No. 329, eff. 6–1–83; r. and recr. Register, October, 1984, No. 346, eff. 11–1–84; cr. (2), Register, February, 1985, No. 350, eff. 3–1–85.

Comm 86.04 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, recirculating system, provisions of a portable toilet or shore disposal facility or appurtenances thereto.

History: Cr. Register, September, 1980, No. 297, eff. 10–1–80; renum. from H 80.04, Register, May, 1983, No. 329, eff. 6–1–83.

Comm 86.05 Approval required. (1) GENERAL. Any prefabricated tank, portable toilet or toilet proposed for installation in boats used upon the inland or outlying waters of the state shall receive the approval of the department. The manufacturer of any prefabricated tank, portable toilet or toilet shall submit, in duplicate, plans and specifications showing construction details for such facility. The owner of a custom built tank or toilet shall similarly submit such details in duplicate for approval prior to installation. The department may require the submission of other information or the unit itself, in the case of a portable toilet, to complete its review.

(2) APPROVED UNIT LISTING. The department shall keep a current list of approved prefabricated tanks, portable toilets and toilets for installation on boats and shall provide a copy of such current list to the bureau of law enforcement, department of natural resources.

History: Cr. Register, September, 1980, No. 297, eff. 10–1–80; renum. from H 80.05, Register, May, 1983, No. 329, eff. 6–1–83.

Comm 86.06 Holding tank, toilet and appurtenances. (1) MATERIAL. Each holding tank and toilet shall be constructed of a plastic which is resistant to acid, alkali and water; stainless steel with comparable resistance or other approved material. Metal combinations shall be galvanically compatible.

(2) HOLDING TANK STRENGTH. 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 of 5 pounds per square inch. It shall be designed and installed

so as not to become permanently distorted with a static top load of 200 pounds.

(3) TEMPERATURE RESISTANCE. All materials used shall be capable of withstanding a temperature range of from –22° F. (winter storage) to the maximum operating temperature obtainable when operating in an ambient temperature of 140° F.

(4) MOUNTING. The tank and toilet shall be rigidly and permanently secured in place in such manner that the tank, toilet and piping will not fall.

(5) CAPACITY. The capacity shall be sufficient to receive the waste from the maximum number of persons that may be on board during an 8–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.

(a) *Holding tank.* The capacity shall be determined on the basis of contribution of 4½ gallons per person per 8–hour day for a toilet of the hand pump type. If standard waterflush toilets are installed, the minimum capacity shall be at 13½ gallons per person per 8–hour day.

(b) *Recirculating toilet.* The capacity of the tank of a recirculating type unit shall be determined on the basis of a contribution of one–quarter gallon per person per 8–hour day.

(6) CONTROLS. Each holding tank shall contain a sewage level device which actuates a warning light or other visible gauge when the tank becomes three–fourths full. The light or other device shall be located so that it can be readily observed. The sewage level device shall be in operable condition at any time the boat is used. Such water level indicator shall be installed so as to be removable and be of such design and of such size as to make a watertight seal with a tank opening that is sufficiently large to accommodate the sewage level device.

(7) MAINTENANCE. (a) A separate manhole shall be provided in the top of the tank for maintenance purposes. A plate or cap capable of making a watertight seal shall be provided on the opening which shall be of sufficient size to readily permit cleaning and maintenance.

(b) *Deodorant.* Any deodorant used in a holding tank, approved portable toilet or recirculating toilet shall be easily obtainable and constitute a minimum hazard when handled, stored and used according to the manufacturer's recommendations and form no dangerous concentration of gases nor react dangerously with other chemicals used for the same purpose.

(8) 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. Plastic opening fittings shall be of the rigid serrated type. Inlet openings should preferably be such that they could accommodate fittings that would be connected to piping of a minimum nominal inside diameter (I.D.) of 1½ inches. Outlet openings shall be such as to accommodate at least 1½ inch I.D. piping. Vent pipe openings shall be able to accommodate fittings for at least a one–half 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 2 inches in diameter at the base and 2 inches or more in height.

(9) PIPING AND FITTINGS. (a) *Size.* The piping from a toilet to the holding tank shall be at least as large as the trap of the toilet fixture. The piping from the holding tank or toilet to the pumpout connection shall have a nominal inside diameter of at least one and one–half inches.

(b) *Material.* All waste and venting piping shall be made of galvanized steel, wrought iron or yoloy 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, insertible 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.

(c) *Location.* No piping, other than that for venting, associated with the boat sewage system shall pass through the hull. The vent pipe shall terminate with an inverted U–bend, the opening of which shall be above the maximum water level in the toilet or holding tank. At least one vent terminal shall be constantly open to the atmosphere. The terminal of the outlet pipe shall be of the female connection type and be located above the holding tank in a manner that makes gravity discharge of the contents impractical. It shall have an airtight capping device marked "WASTE" and the cap and flange shall be embossed with the word "WASTE".

(10) ELECTRICAL SYSTEM. The electrical system associated with the boat holding tank or toilet system shall conform to accepted practice and create no hazards.

(11) PORTABLE TOILET. Each portable toilet shall meet the material requirements and temperature resistance requirements of subs. (1) and (3). Exposed surfaces shall be of reasonably smooth and cleanable material. Capacity of the flush tank and holding tank shall be adequate for the intended use. Portable toilets shall be designed to prevent spillage of contents of the holding tank when the toilet is tipped or portable toilets shall be secured on board.

History: Cr. Register, September, 1980, No. 297, eff. 10–1–80; renum. from H 80.06, Register, May, 1983, No. 329, eff. 6–1–83.

Comm 86.07 Overboard discharge inactivation. No boat equipped with a means of discharging sewage directly from a toilet or holding tank into the water upon which the boat is moored or is moved shall enter inland or outlying waters of the state until such means of discharge is inactivated. An owner or operator of a boat equipped with such means of discharge shall contact a representative of the department of natural resources or a local law enforcement official with respect to inactivation before entering state waters. Overboard discharge inactivation shall include as a minimum either disconnection of the toilet piping, removal of the pumping device, securely plugging the discharge outlet, sealing of the toilet bowl with wax or other method approved by the official contacted. The inspecting official shall provide the boat owner or operator with a signed written statement as to the method of inactivation accepted. The owner or operator shall give information as to the inland or outlying waters he or she 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 s. 29.29 (3), Stats.

History: Cr. Register, September, 1980, No. 297, eff. 10–1–80; renum. from H 80.07, Register, May, 1983, No. 329, eff. 6–1–83; correction made under s. 13.93 (2m) (b) 5., Stats., Register, February, 1994, No. 458.

Comm 86.08 On–shore disposal facilities. (1) PUMP. A self–priming pump, suitable for pumping sewage, shall be provided for the on–shore removal of sewage from boat holding tanks and toilets; the installation of which shall be in accord with the appropriate state and local regulations. 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 non–collapsible quality, preferably made with reinforcement. A quick–connect dripproof connector shall be fitted to the end of the hose that is attached to the boat piping outlet.

(3) DISCHARGE HOSE. Quality flexible hose, compatible with the pump characteristics, may be used. All permanent piping shall conform to the state plumbing regulations. [chs. Comm 82 and 84]

(4) SEWAGE DISPOSAL REQUIREMENTS. (a) *Public facilities.* When connection to a public sanitary sewer is economically feasible, the disposal piping shall be designed to discharge thereto. [ch. Comm 84]

(b) *Private facilities.* When a public sewer is not available, 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. [chs. Comm 82 and 83]

(5) WATER SUPPLY REQUIREMENTS. The on–shore disposal facility shall be served by a water supply piping system to permit flushing of the facilities serviced. If a potable water supply is the source for flushing, the distribution piping shall be protected from backsiphonage and backpressure.

(6) PLAN APPROVAL. Every owner, personally or through an authorized representative, shall obtain written approval from the department prior to award of any new or modified construction of shore disposal facilities set forth in this section. Three sets of plans and specification of such new or modified shore disposal facilities to be constructed for the purpose of pumping out boat holding tanks and toilets, receiving sewage from portable toilets, and disposing of the sewage shall be submitted to the department for review as to acceptability. Plans and specifications shall cover in detail the materials to be used, the pump characteristics, the water supply system, and when applicable, the size and construction of the septic or holding tank, results of soil percolation and boring tests and layout of the soil absorption system. Location of all wells within 50 feet of the absorption system, the surface water high water level and the general topography of the area shall be shown on the plans.

(7) DISPOSAL OF PORTABLE TOILET WASTES. Sewage from portable toilets shall be discharged into an approved fixture or other approved device designed to receive sewage.

History: Cr. Register, September, 1980, No. 297, eff. 10–1–80; renum. from H 80.08, Register, May, 1983, No. 329, eff. 6–1–83.

Comm 86.09 Alternate facilities. (1) CHEMICAL TYPE TOILETS. Nonrecirculating chemical toilets may be used in lieu of a toilet flushed by water provided the container is not portable and the use of on–shore pumping facilities is provided for in the design of the unit. The design of the toilet and on–shore disposal adaptation shall be approved.

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

(3) PORTABLE TOILETS. An approved portable toilet may be used in lieu of a permanently installed toilet provided it is of adequate capacity to handle the passenger load. Sewage in the holding tank shall be properly disposed of on shore. Units shall be temporarily secured on board, if necessary, to prevent spillage of contents.

History: Register, September, 1980, No. 297, eff. 10–1–80; renum. from H 80.09, Register, May 1983, No. 329, eff. 6–1–83.

Comm 86.10 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 properly stored or capped. Pumping equipment shall be shut off before the hose is disengaged from the boat outlet pipe. Any equipment on board shall not be used or operated to allow discharge of sewage to surface waters.

History: Cr. Register, September, 1980, No. 297, eff. 10–1–80; renum. from H 80.10, Register, May, 1983, No. 329, eff. 6–1–83.

Comm 86.11 Prohibited facilities. No person shall use or permit to be used as a holding facility for sewage a pail, plastic bag or any other type of portable, semiportable or disposal receptacle aboard boats not specifically permitted by the provisions of this chapter.

History: Cr. Register, September, 1980, No. 297, eff. 10–1–80; renum. from H 80.11, Register, May, 1983, No. 329, eff. 6–1–83.