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State of Oregon

**Department of Environmental Quality  
and  
State Marine Board**

**Guidelines for Sewage Collection and Disposal for  
Recreational Boats, Commercial Vessels and Floating Structures**

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**I. DEFINITIONS** For the purpose of these guidelines the following definitions will apply:

“Black Water” means water-carried human body wastes, including feces, urine and other extraneous substances of body origin including toilet paper.

“Board” means the Oregon State Marine Board (OSMB).

“Boathouse” a covered floating structure primarily used for the wet or dry storage of a boat. Generally boathouses are moored in one location for extended periods of time. If any plumbing fixtures are present, except hose bibs, a boathouse is classified as a “Combo.”

“Boat Toilet Fixture” includes any type of permanently installed toilet fixture or marine head on a boat or vessel. Does not include portable toilets.

“Boat Waste Collection Device” includes all types of stationary, portable or mobile equipment that collect and transfer black water from boats. Includes boat pumpout and dump stations.

“Combo” a boathouse-floating home combination structure with plumbing fixtures. Combos are generally moored in one location for extended periods of time.

“Commercial Vessel” every description of ship or boat used for any type of commercial purpose including but not limited to commerce, tour, charter, or otherwise engaged in the transportation of passengers for hire.

“Department” means the Oregon Department of Environmental Quality (DEQ).

“Dump Station” a device that receives sewage from a portable toilet.

“Dwelling” a structure, boat or vessel that has sleeping, cooking and plumbing fixtures used for human occupancy or is used for residential purposes.

“Floating Home” a floating structure designed or used as a dwelling, with no means of self propulsion, usually moored in one location for extended periods of time.

“Gray Water” means any water carried waste other than black water, such as bath, kitchen or laundry wastes.

“Holding Tank” includes all types of fixed receptacles used on boats or vessels to collect sewage from boat toilet fixtures.

“Home Port” the principal location a boat is moored, housed or stored.

“Houseboat” a self propelled boat designed for use as a temporary dwelling. Any houseboat moored in one location and used as a dwelling for more than 10 of any 30 day period are classified as a “liveaboard.”

“Liveaboard” a boat moored in one location, usually home port and used as a dwelling for more than 10 of any 30 day period.

“Marine Sanitation Device or MSD” means a U.S. Coast Guard approved Type I, II or III device used to treat or retain in a holding tank, all boat toilet fixture waste generated from a boat or vessel.

“Moored” means secured or tied-up to a dock, pile, float, buoy or at anchor.

“Navigable Waters” means the list of federal navigable waters in Oregon as determined by the Thirteenth District of the U.S. Coast Guard based on Title 33 of the Code of Federal Regulations.

“Operating” means underway, not moored.

“Owner” includes but not limited to individuals, corporations, entities, operators, renters or any other responsible person in control or having control of real or personal property.

“Plumbing Fixture” includes but not limited to toilets, showers, lavatories or laundry fixtures.

“Portable Toilet” includes all types of portable toilets, hand carried potty’s, used to collect black water into a small receptacle.

“Pumpout” means a stationary or portable pumping or suction device that removes waste from a boat holding tank and transfers it to an approved municipal, septic, on-site treatment system or landside holding tank for disposal.

“Recreational Boat” means every description of recreational watercraft used or capable of being used as a means of transportation on the water, self propelled, to include but not limited to transient boats, houseboats, liveaboard boats and other types of boats. Does not include commercial boats or vessels, boathouses, combos or floating homes.

“Sewage” means black water and/or gray water waste.

“Sole State Waters” means those waters entirely within the confines of the state which have not been listed as Navigable Waters by the U.S. Coast Guard applicable to boat MSD requirements.

“Structure” includes but not limited to boathouse, combos, and floating homes used as a dwelling.

“Transient Boat” a boat in transit, not home port. Any transient boat, moored in one location and used as a dwelling for more than 10 of any 30 day period is classified as “liveaboard.”

“U.S. Coast Guard” means the United States Coast Guard (USCG).

“Waters of the State” includes but not limited to Sole State Waters and Federal Navigable Waters.

## **II. SCOPE**

The purpose of these guidelines is to establish minimum standards for proper collection and disposal of sewage generated by a wide variety of on-water structures, boats and vessels. The goal is to ensure protection of water quality through reasonable and achievable means of water pollution prevention measures.

These guidelines are intended to provide the public with clear and concise requirements by principal state agencies including applicable laws, rules and policies. Some overlap of state and federal jurisdiction may occur. Any reference to federal authority or laws is for information purposes only.

The guidelines recognize that any person, structure, boat or vessel that generates sewage while on or in sole State Waters or federal Navigable Waters are subject to regulation. All sewage generated shall be effectively collected, treated, contained and/or disposed of in an approved manner as described in these guidelines. Under no circumstances shall discharge of any untreated black water be permitted or allowed on Waters of the State.

Also, these guidelines recognize the unique needs of on-water structures, boats and vessels with respect to sewage collection, treatment and disposal. Hence, criteria ordinarily found for land side structures may not directly apply to on-water structures, boats and vessels. However, it is the responsibility of every person who generates or receives sewage to take appropriate measures to properly dispose of this waste according to state or federal law.

These guidelines shall apply to both sole State Waters and federal Navigable Waters which together include all waters of the state. These guidelines are not intended to conflict with any other state or federal law, rule, regulation or policy.

As the scope of these guidelines is quite broad, the principal agency (state or federal authority) may in some instances, require more stringent methods or requirements to ensure protection of water quality. Any public inquiry should be directed to the lead agency listed at the end of these guidelines.

### **III. AUTHORITY**

With respect to these guidelines only:

The Department (DEQ) shall take lead responsibility to regulate sewage generated from on-water structures and commercial vessels moored or operating on sole State Waters and federal Navigable Waters.

The Board (OSMB) shall take lead responsibility to regulate black water generated from recreational boats moored or operating on sole State Waters and federal Navigable Waters.

The U.S. Coast Guard (USCG) has authority to regulate black water generated from recreational boats and vessels operating on federal Navigable Waters. No federal rules are in effect at this time (9/96) regulating collection and/or treatment of gray water generated from boats.

Recreational boat and vessel owners are strongly encouraged to collect and properly dispose of gray water and to refrain from discharging it overboard.

**A.     STRUCTURES**

DEQ ORS 468B.080 Prohibitions relating to garbage or sewage dumping into waters of state.

(1) No garbage or sewage shall be discharged into or in any other manner be allowed to enter the waters of the state from any building or structure unless such garbage or sewage has been treated or otherwise disposed of in a manner approved by the Department.

All plumbing fixtures in buildings or structures, including prior existing plumbing fixtures from which waste water or sewage is or may be discharged, shall be connected to and all waste water or sewage from such fixtures in buildings or structures shall be discharged into a sewerage system, septic tank system or other disposal system approved by the Department.

**B.     RECREATIONAL BOATS**

OSMB       ORS 830.110 Powers and Duties of the Board:

(14) Make rules regarding marine toilets and their use consistent with the prevention and control of pollution of the waters of this state and not in conflict with the rules of the Health Division or the Environmental Quality Commission.

**C.     COMMERCIAL VESSELS AND RECREATIONAL BOATS**

USCG33 CFR 159 Marine Sanitation Devices:

159.7 (b) After January 30, 1980, no person may operate any existing vessel with installed toilet facilities unless it is equipped with ... Type I, II, III device.

**IV.    **SEWAGE DISPOSAL REQUIREMENTS****

**A.     STRUCTURE OWNER**

Any plumbing fixtures present on structures to include floating homes, boathouses, or combos shall be continuously connected to a Department approved sewerage system as per ORS 468B.080 (includes gray and black water) except structures with only hose bibs. This includes both sole State Waters and federal Navigable Waters.

Discharge of any untreated sewage from any structure on or in sole State Waters or federal Navigable Waters without a DEQ discharge permit is illegal.

## **B. RECREATIONAL BOAT OWNER**

### **1. Recreational Boat Toilet Fixtures - MSD Requirements**

All recreational boats with toilet fixtures shall have an effective means to collect, treat or dispose of black water in an approved manner as follows:

Operating or moored on federal Navigable Waters:

A U.S. Coast Guard approved Type I, II or III device to treat or retain in a holding tank, all boat toilet fixture waste. Type I and II allow treated overboard discharge, Type III normally is a holding tank. No overboard discharge of untreated black water is permitted.

Operating or moored on sole State Waters:

A U.S. Coast Guard approved Type III device (normally a holding tank) for all boat toilet fixture waste. A Type I or II MSD cannot be discharged while operating or moored on sole state waters. No overboard discharge of treated or untreated black water is permitted.

### **2. Marine Sanitation Devices (MSD)**

Pursuant to U.S. Coast Guard Regulations 33 CFR 159, as of January 30, 1980, if a vessel (including boats) has a permanently installed toilet, it shall be equipped with an operable MSD. Vessels 65 feet in length and under may install a Type I, II or III MSD. Vessels over 65 feet in length shall install a Type II or III MSD.

Type I MSD - This device treats the sewage with disinfectant chemicals or other means and macerates the solids before discharging it into the water. The treated discharge must meet a standard for bacteria count (less than 1000 fecal coliform per 100 ml) and must not produce visible floating solids (basically reduce solids to less than 1/16th of an inch in diameter).

Type II MSD - This is also a flow through treatment device but meets a higher standard of effluent purity. The standard for bacteria is not to exceed 200 fecal coliform bacteria per 100 ml and solids must be reduced to less than 150 mg/1 or parts per million of suspended solids. The effluent from a Type II device would have the same clarity as slightly cloudy water. To achieve this standard, solids are separated from the waste stream and held for incineration or another type of suitable disposal or, are recycled into the incoming waste stream.

Type III MSD - Type III MSD's are certified to a "no-discharge" standard. Type III devices include recirculating and incinerating toilets and holding tanks. Holding tanks are the most common type of MSD found on boats. Sewage is stored in a holding tank until it can be pumped to a dockside facility or overboard at sea beyond the territorial waters (three mile limit) of the U.S..

### **3. WYE Valves and Overboard Discharge**

Discharge of untreated black water from a boat or vessel moored or operating on sole State Waters or federal Navigable Waters (within the three mile limit) is illegal. A Wye valve may be installed on any MSD to provide for the direct discharge of raw sewage when the boat or vessel is outside sole State Waters or federal Navigable Waters more than three miles from shore.

The (Wye) valve must be secured in the closed position while moored or operating on sole State Waters or federal Navigable Waters (within the three mile limit). Use of a padlock, non-releasable wire-tie, or the removal of the valve handle would be considered adequate securing of the device. The method chosen must be one that presents a physical barrier to the use of the valve.

### **4. Boat Portable Toilet Requirements**

All portable toilet black water collected on boats operating on sole State Waters or federal Navigable Waters shall be properly disposed of in an approved manner when the holding tank is full as set forth in Section B. 7 Boat Waste Collection Facilities.

Discharge of untreated black water from any portable toilet on or in State Waters or Federal Navigable Waters (within the three mile limit) is illegal.

### **5. Transient Boat Requirements**

Any recreational boat moored in one location used as temporary dwelling for any period less than any 10 of any 30 day period that have/use marine toilets or portable toilets shall dispose of or cause to have disposed, in a proper manner, all black water waste generated when the holding tank is full as set forth in Section B. 7 Boat Waste Collection Facilities.

Any transient boat moored in one location and used as temporary dwelling unit for more than 10 of any 30 day period is classified as a "liveaboard" and shall comply with Section B.6 Liveaboard Boat Requirements.

Discharge of untreated black water from a boat or vessel moored or operating on sole State Waters or federal Navigable Waters (within the three mile limit) is illegal.

### **6. Liveaboard Boat Requirements**

Any recreational boat, houseboat or transient boat moored in one location and used as a dwelling for more than 10 days of any 30 is classified as a liveaboard.

Any liveaboard that have/use marine toilets or portable toilets on boats shall dispose of or cause to have disposed, in a proper manner, all black water waste generated when the holding tank is full as set forth in Section B. 7 Boat Waste Collection Facilities.

Discharge of untreated black water from a boat or vessel moored or operating on sole State Waters or federal Navigable Waters (within the three mile limit) is illegal.

## **7. Boat Waste Collection Devices**

Approved boat waste collection devices for Type III MSD holding tanks shall be any one of the following:

- a. Dockside sewage connection to a DEQ approved municipal, septic, on-site treatment system or upland holding tank for disposal.
- b. Mobile boat pumpout service approved by DEQ.
- c. Pumpout station that transfers waste from a boat holding tank to an approved municipal, septic, on-site treatment system or holding tank for disposal.

Approved waste collection devices for portable toilets shall be any one of the following:

- a. Portable toilet dump station that transfers waste to a DEQ approved municipal, septic, on-site treatment system or upland holding tank for disposal.
- b. RV dump station which complies with DEQ requirements.
- c. Dwelling or municipal sewer system which complies with DEQ requirements.

## **C. COMMERCIAL VESSEL OWNER**

All commercial vessels with toilet fixtures shall have an effective means to collect, treat and/or dispose of black and gray water in an approved manner as follows. An available and accessible means to dispose of all black and gray water collected, in a DEQ approved municipal or on-site treatment system, shall be provided.

### **1. Operating or Moored on Federal Navigable Waters:**

A U.S. Coast Guard approved Type I, II or III device to treat or retain in a holding tank, all boat toilet fixture waste. Type I and II allow treated overboard discharge, Type III normally is a holding tank. No overboard discharge of untreated black water is permitted.

DEQ may prescribe other requirements for significant volume of treated or gray water discharge based concentrations and waterbody location. Contact DEQ for specific requirements.

### **2. Operating or Moored on Sole State Waters:**

Discharge of untreated black water from a boat or vessel moored or operating on sole State Waters or federal Navigable Waters (within the three mile limit) is illegal.

## **7. Boat Waste Collection Devices**

Approved boat waste collection devices for Type III MSD holding tanks shall be any one of the following:

- a. Dockside sewage connection to a DEQ approved municipal, septic, on-site treatment system or upland holding tank for disposal.
- b. Mobile boat pumpout service approved by DEQ.
- c. Pumpout station that transfers waste from a boat holding tank to an approved municipal, septic, on-site treatment system or holding tank for disposal.

Approved waste collection devices for portable toilets shall be any one of the following:

- a. Portable toilet dump station that transfers waste to a DEQ approved municipal, septic, on-site treatment system or upland holding tank for disposal.
- b. RV dump station which complies with DEQ requirements.
- c. Dwelling or municipal sewer system which complies with DEQ requirements.

## **C. COMMERCIAL VESSEL OWNER**

All commercial vessels with toilet fixtures shall have an effective means to collect, treat and/or dispose of black and gray water in an approved manner as follows. An available and accessible means to dispose of all black and gray water collected, in a DEQ approved municipal or on-site treatment system, shall be provided.

### **1. Operating or Moored on Federal Navigable Waters:**

A U.S. Coast Guard approved Type I, II or III device to treat or retain in a holding tank, all boat toilet fixture waste. Type I and II allow treated overboard discharge, Type III normally is a holding tank. No overboard discharge of untreated black water is permitted.

DEQ may prescribe other requirements for significant volume of treated or gray water discharge based concentrations and waterbody location. Contact DEQ for specific requirements.

### **2. Operating or Moored on Sole State Waters:**

A U.S. Coast Guard approved Type III device (normally a holding tank) for all boat toilet fixture waste. A Type I or II MSD cannot be discharged while operating or moored on sole state waters. No overboard discharge of treated or untreated black water is permitted.

DEQ may prescribe other requirements for significant volume of treated or gray water discharge based

For all commercial vessels that use marine heads with holding tanks - each shall have an available and accessible means to dispose of or cause to have disposed, in a proper manner, all black water waste generated when the holding tank is full as provided in Section B. 7 Boat Waste Collection Facilities.

**5. New Marinas (Constructed after January 1, 1997)**

In addition to all other requirements for proper boat waste collection and disposal, all new marinas (constructed after January 1, 1997) shall provide the following:

- a. A dockside sewer connection for each slip proposed for liveaboard boats.
- b. Required number of boat waste collection device(s) in accordance with Appendix A.

**V. COMPLIANCE**

State of Oregon. The penalty for deliberate discharge of raw (untreated) sewage into federal Navigable Waters or sole State Waters from any kind of structure, recreational boat, or commercial vessel while operating or moored is a Class B felony, ORS 468.946 Water Pollution in the First Degree.

U.S. Coast Guard. The penalty for deliberate discharge of raw (untreated) sewage into federal Navigable Waters from any kind of recreational boat or commercial vessel is a minimum \$1,000 civil penalty.

Report violations - federal Navigable Waters:

Structures	DEQ
Recreational Boats	USCG, County Sheriff Marine Patrol
Commercial Vessels	USCG

Report violations - sole State Waters:

Structures	DEQ
Recreational Boats	County Sheriff Marine Patrol
Commercial Vessels	DEQ

**VI. INQUIRIES**

Inquiries regarding Structures, Floating Homes, Combos and Commercial Vessels on state or federal waters; Sewer Systems contact the Department of Environmental Quality, 2020 S.W. Fourth Ave, Suite 400, Portland, OR 97201. Phone 503-229-5263.

Inquiries regarding Recreational Boats, Houseboats, Liveaboards and Transient Boats on state or federal waters; Grants for Boat Waste Collection Devices contact the Oregon State Marine Board, Boating Facilities Program, 435 Commercial St N.E., Salem, Oregon 97310. Phone 503-378-8587.

Inquiries regarding Commercial Vessels and Recreational Boats operating on federal Navigable Waters; MSD Requirements contact the U.S. Coast Guard, Marine Safety Office Group Portland, 6767 N. Basin Ave, Portland, OR 97217. Phone 503-240-9301.

OSMB/DO Revised 9/3/96

## APPENDIX “A”

### Guidelines for Determining Number of Boat Waste Collection Devices Required at Marinas and Moorages

Use Step 1 to determine the estimated number of recreational boats with Type III holding tanks.

Use Step 2 to determine number of boat pumpout or portable toilet dump stations required.

**Step 1** Determine estimated number of recreational boats with Type III MSD holding tanks or portable toilets. If number of boats with Type III MSD holding tanks and portable toilets is known skip to Step 2.

- A. Determine total number boats by overall length of boat if occupied or length of slip if unoccupied.. Include all slips: annual/seasonal boats, weekly and transient (guest) boats and boathouse units. Use length categories below. Count separately all liveaboard boats.

Boat Length Categories:

Less than 16 ft  
16 to 26 ft  
26 to 40 ft  
Over 40 ft

- B. To determine the estimated number of boats with Type III holding tanks and portable toilets use the average percentage by category as follows:

	Portable Toilets	Type III Holding Tanks
Less than 16 ft	0%	0%
16 to 26 ft	25%	0%
26 to 40 ft	0%	75%
Over 40 ft	0%	100%

Note: Adjustments may be made to certain boat categories to account for predominant small boat, large boat, or sailboat marinas or moorages that have boats with marine toilets or portable toilets.

**Step 2** Determine number of boat waste collection devices required to include boat pumpout (stationary or portable) and portable toilet dump stations.

A. Annual/Seasonal and Transient Boats

Note: Adjustments may be made to number of pumpouts required to account for any dockside sewage connections, mobile pumpout service etc.

Number of Boats With Holding Tanks	Number of Boat Pumpouts Required
less than 25	None*
25 - 300	1
300 - 600	2
Over 600	3 plus 1 for each 300 boats

Estimated Number of Boats With Portable Toilets	Number of Boat Dump Stations Required
less than 25	None*
25 - 300	1
300 - 600	2
over 600	3 plus 1 for each 300 boats

\* None only applicable to marinas with small numbers of boats with Type III MSD's that jointly "share" (within 2 mile radius) a pumpout or dump station open for public use.

B. Liveaboard Boats

Note: Adjustments may be made to number of pumpouts required to account for any dockside sewage connections, mobile pumpout service, restrooms etc.

Number of Boats With Holding Tanks	Number of Boat Pumpouts Required
1 - 25	1
25 - 50	2
Over 50	3 plus 1 for each 25 boats

Estimated Number of Boats With Portable Toilets	Number of Boat Dump Stations Required
1 - 25	1
25 - 50	2
Over 50	3 plus 1 for each 25 boats