

FACTS ABOUT BOAT SEWAGE

Kitsap County's waterways offer boaters a variety of on-the-water experiences, from exploring the secluded shorelines of Blake Island, to sailing the Puget Sound. But the pollution of our waterways can spoil boating and other aquatic recreation. Sewage and graywater discharges from boats can create public and environmental health problems, especially if vessels dump wastes overboard in confined areas -- like harbors, marinas, or coves.

ARE BOAT SEWAGE DISCHARGES REALLY A PROBLEM?

The 1992 Clean Vessel Act identifies vessel sewage discharges as "a substantial contributor to localized degradation of water quality in the United States." Individual boats and marinas may release only small amounts of pollutants, yet there are about 12,000 registered vessels in Kitsap County, so the illegal discharge of boater generated sewage, including graywater, can make a big difference in water quality.

SEWAGE-POLLUTED WATER CAN BE HAZARDOUS TO PUBLIC HEALTH

Human wastes can contain disease-causing organisms such as bacteria, viruses and parasites. People who contact water contaminated with human wastes can become ill. More serious water-borne diseases include infectious hepatitis, typhoid and cholera.

UNTREATED VESSEL DISCHARGES CAN CONTAMINATE SHELLFISH BEDS

When boaters discharge wastewater overboard in shellfish bed areas, these contaminated shellfish cause disease outbreaks in humans. In some cases, such as *Vibrio* bacteria or Norwalk virus, hundreds of people can be affected.

SEWAGE AND GRAYWATER CAN DECREASE OXYGEN IN THE WATER

The amount of dissolved oxygen in the water required to decompose organic matter or sewage is measured in terms of "Biological Oxygen Demand" or "BOD". Increased BODs are often found in marinas and areas where boaters congregate. The result can be very low oxygen levels in water, causing fish kills in severe cases.

MARINE SANITATION DEVICES

A Marine Sanitation Device (MSD) is designed to keep untreated sewage out of the water. Every boat with an installed marine toilet must have it connected to an operable Coast Guard-approved MSD. Most boats have one of three basic types of MSDs:

- A Type I MSD must macerate the sewage to no visible solids, and then reduce the fecal coliform bacteria count to less than 1,000 per 100 milliliters.
- A Type II MSD macerates the sewage even finer so that the discharge contains no suspended particles and the fecal coliform bacteria count must be below 200 per 100 milliliters.

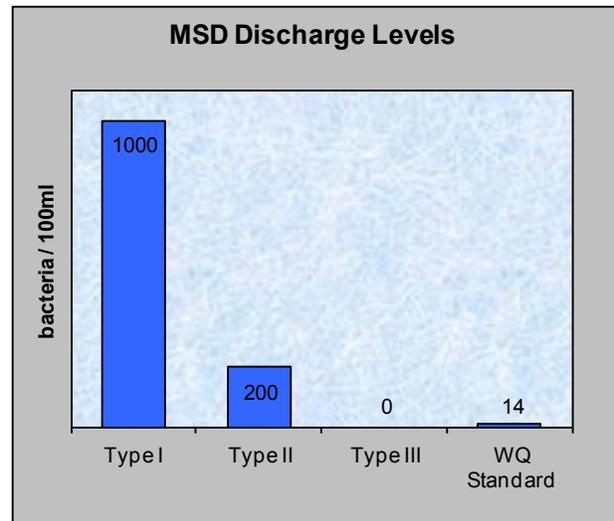


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- A Type II MSD macerates the sewage even finer so that the discharge contains no suspended particles and the fecal coliform bacteria count must be below 200 per 100 milliliters.
- Type III MSDs are holding tanks. This is the most common type of MSD found on boats. These systems are designed to retain or treat the waste until it can be disposed of at the proper shore-side facilities. Portable toilets are the simplest type of MSDs



In Washington State, the marine water quality standard for fecal coliform bacteria is 14 per 100 milliliters, as set forth in Chapter 173-201A of the Washington Administrative Code (WAC). From the perspective of public and environmental health impacts, a Type III MSD -- when used correctly -- may be best, because it conveys boat waste into a local sewage treatment system and reduces the need for on-board use of potentially toxic tank treatment chemicals.

WHAT ABOUT OTHER WASTEWATER GENERATED FROM MY VESSEL?

A common misconception is that the discharge of “graywater”, produced from sinks, showers, or washing machines, does not cause water quality problems. However, graywater often contains soaps, cleaning chemicals and fecal coliform bacteria. On the other hand, very few vessels are plumbed in such a way as to collect or treat graywater in an MSD. All marina users, including liveaboards, are required to use the marina facilities for washing clothes and/or bathing to minimize the discharge of graywater. Graywater discharges are a violation of public health regulations, enforceable by the Health District.

WHAT'S THE LAW?

It's illegal to discharge untreated sewage, including graywater, under Federal, State, and Local law. Violations of either Kitsap County Board of Health Ordinance 1999-13 Marina Sewage Regulations or 2008-1 Onsite Sewage System and General Sewage Sanitation Regulations may result in civil infraction tickets and fines of \$524 per day, per violation. Under most land use leases held by marinas, zero discharge from vessels is required, meaning Type I and Type II MSDs cannot be used inside marinas. The Marina Sewage Regulations require that "Y" valves used as part of MSD systems must be secured in the closed position. If you have a thru-the-hull seacock, it must also be secured.

For more information contact the Health District’s Water Quality Program at (360) 337-5235 or visit our webpage at www.kitsappublichealth.org.