

SEWAGE FACILITIES

Applicability

This section applies to new, expanding, or existing marinas.

Background

As mentioned earlier in this guidebook, pollutants tend to concentrate within marina basins due to their sheltered environment. Of particular concern is the illegal discharge of untreated sewage from boats. The nutrients found in sewage can result in excessive plant and algal blooms within the marina basin. In severe cases, the decomposition of raw sewage within the marina basin may result in fish kills. As the



Wahala Beach in Lake County

sewage is broken down by bacteria, the bacteria consume oxygen that is dissolved in the water column. This is the same oxygen that fish require. Additionally, raw sewage contains disease-causing bacteria and viruses which are a threat to swimmers and others coming into direct contact with the water. Every year there are a number of beach closures along Indiana's Lake Michigan beachfront due to elevated *E. coli* levels (an indicator of sewage contamination).

While the potential volume of sewage that could be released from boats is relatively small as compared with sewer overflows, the concentration of the sewage is much higher. There is no dilution of the sewage with water from bathing, dishwashing, or clothes washing. Marine heads use little or no water.

Existing Federal and State Laws

A marina located on the state's navigable waters and its public freshwater lakes that can accommodate boats equipped with a marine sanitation device must provide pumpouts that are in good working order and accessible to patrons of the marina. The marina must obtain either:

1. A permit from IDEM under 327 IAC 3-2 for the construction and operation of a wastewater treatment facility or a sanitary sewer;
2. A permit from the Indiana State Department of Health under 410 IAC 6-10 for the construction of a commercial on-site wastewater disposal facility; or
3. An alternative written approval for wastewater disposal from an authorized governmental agency (312 IAC 6-4-3).

SEWAGE FACILITIES



A boater uses a pumpout station at the Washington Park Marina.

If your marina is not expected to serve watercraft equipped with a marine sanitation device, or if you enter into a binding agreement with another marina or similar facility along the waterway to provide pumpout services to your patrons, you may apply to the Indiana Department of Natural Resources for an exemption from this section.

The Clean Vessel Act, which is administered by the U.S. Fish and Wildlife Service, makes grant dollars available to private and public marinas for the installation and restoration of

boat sewage pumpout stations and portable toilet dump stations. IDEM has been awarded a grant from the U.S. Fish and Wildlife Service to implement the Clean Vessel Act Pumpout Program. Pumpout stations are used to dispose of highly concentrated human waste collected aboard boats. Under this program, marinas are reimbursed up to 75 percent of pumpout construction costs.

Best Management Practices

U.S. EPA recommends the following best management practices for sewage facility management and maintenance.

- Install pumpout facilities and dump stations that meet the marina's needs. There are three types of onshore sewage collection systems—fixed point, portable/mobile and dedicated slipside systems.
 1. Fixed point systems are stationary systems. The boat that needs service can move to the pumpout station. A hose is connected to the sanitation device fitting and a pump or vacuum system moves the waste material into an onshore holding device or into the sewer system. A fixed point system should be centrally located and have free and easy access for boats to maneuver.



SEWAGE FACILITIES

2. Portable systems are good for smaller, more difficult-to-maneuver marinas. They may or may not have a holding tank attached to them. Since these systems are portable, they can be pushed to the boat needing service instead of having the boat come to the dedicated pumpout station. Some boaters find this more convenient. The mobile systems are able to move about the marina. An empty mobile station is easier to maneuver than a full one. You must consider returning the mobile system to an area where it can be pumped out and whether it is feasible to move when full. These systems also require more hands-on cleaning activities.
3. Dedicated slip side systems provide continuous wastewater collection at select slips within the marina. These are good systems if enough slips can be dedicated to their use. These systems have a direct connection to the boat and a below-dock gravity drained sewer system. It utilizes a vacuum-type pumpout system.

- Along with these three sewage collection systems, a dump station should be available for boaters who have portable toilets. Dump stations can be considered a satisfactory disposal facility and may be fundable with funds from the Clean Vessel Act.



Portable toilet dump station

- Provide pumpout service at convenient times and at reasonable costs. Having the pumpout station open at the same times as the fueling station allows for patrons to fuel and dump during the same trip. Have extra staff available before and after weekends to meet your patrons' needs. Consider discounts to patrons who fuel at your dock, or incorporate it into the slip fees.
- Keep pumpout stations clean and easily accessible. While offering free or inexpensive pumpouts are likely to attract customers, having pumpouts that look dirty, are full of clutter and are difficult to use are a sure deterrent. Keep the equipment clean and free of debris. Post instructions near the station and offer training on its operation.

SEWAGE FACILITIES

- Consider having marina staff do pumpouts. This service is appreciated by patrons and, if added to free pumpouts, would attract many customers to your slips.
- Provide portable dump stations near small slips and launch ramps. Most smaller boats (less than 26 feet in length) do not have marine sanitation devices on board. Many marinas allow transient boaters to launch from their ramps.



Washington Park Marina in Michigan City provides dockside pumpout services.

Many of these transient boats do not have marine sanitation devices. These boaters utilize portable units that can be carried on shore for dumping into toilets. To further encourage boaters to properly dispose of their waste, dump stations should be kept clean and located in an area that is convenient to the ramp area. Public launch ramps should offer a dump station where feasible.

- Consider declaring marina waters to be a “no discharge” area. Federal law prohibits the discharge of untreated waters into all territorial waters and inland waters of the nation. Type I and II marine sanitation devices may lawfully be used on Lake Michigan and its navigable tributaries in the Lake Michigan Coastal Area. For additional information regarding waterways on which Type I and II marine sanitation devices may lawfully be used, see www.IN.gov/legislative/register/20070214-IR-312070082NRA.xml.pdf. The marina can have itself designated as a no discharge area if it decides that it wishes to be stricter than the federal regulations. However, certain conditions must be met. The marina will need to provide adequate restroom facilities for patrons, offer convenient and low/no cost pumpout services, offer boater education, post signage that the marina is a no discharge area, place contract language in the rental agreement and enforce the no discharge zone.

SEWAGE FACILITIES

- Provide convenient and clean public restrooms. Most boaters would prefer to use clean, well-lit restrooms than the portable unit located on the boat. If the restrooms are easy to access by boat and boaters, the potential for overboard discharge of untreated sewage is lessened.
- Establish practices to control pet waste problems. Provide a special area away from the shoreline for pets to be taken for walks. Install fenced dog parks to allow patrons to exercise their dogs or put in park benches to encourage the owner to use the space. The area should be grassy and away from storm drains. Offer a supply of cleanup bags and a refuse container with a lid on it. Educate your patrons on the issues with pet waste and ask them to clean up after their pet.



This bath house and public restroom is located at Washington Park Marina.



This dog walk area has educational signage, pet waste collection bags, a garbage can and even a fire hydrant!

SEWAGE FACILITIES



Resident waterfowl droppings can contribute to high levels of bacteria and viruses in the receiving waterbody.

- Avoid feeding wild birds, including ducks, geese and/or seagulls, in the marina. This encourages birds to flock to the marina and become long-term residents. The birds' waste can contaminate water and create a mess on boats and walkways.