



Aquatic Invasive Species Mobile Boat Wash Wastewater Guidance Document
Prepared by the Michigan Department of Environmental Quality, Water Resources Division

Purpose Statement

This guidance document is intended to provide regulatory requirements and recommendations for the handling of wastewater generated during mobile boat washing operations for aquatic invasive species (AIS) decontamination. This document does not pertain to permanent boat washing stations or those found at marinas for non-AIS washing purposes.

Background

Recreational boating can be a significant pathway for the spread of AIS, and as such, decontamination of boats, trailers, and related equipment is becoming more common in Michigan. One method for decontaminating boats and trailers is to use a pressure washer to spray and remove AIS and other foreign material before or after launching. This washing is most effective when using heated, pressurized water. Pressurized water removes potential AIS hitchhikers while the heated water (~120 to 140 degrees F) can kill invertebrates, plants, and diseases. Generally, soaps or other chemicals are not used during the operation of boat washing stations used specifically for AIS decontamination.

Boat wash stations for AIS decontamination generally consist of a freshwater source and a pressure washer system (motorized pump sprayer), but also often include a heating mechanism (burner) and sometimes include a holding tank(s) for water, a containment pad for wastewater, a vacuum or sump pump mechanism for water recovery, and in some instances a multistage filtration system for recovered water. Boat wash stations for AIS can either be permanent installations or contained on a utility trailer so they remain fully mobile and self-contained (see Figure 1). This document only pertains to boat washes for AIS decontamination that are mobile and uses pressurized water to remove AIS from boats, trailers, and equipment at or near boating access sites.

Wastewater Issue

Wastewater from a boat wash station is produced after a boat and trailer are sprayed with pressurized water (see Figure 2). Wastewater is the water that runs off of the boat and trailer after washing either onto the ground or a containment pad, if present. Contaminants such as dissolved metals, paint chips, oil, grease, and biological material (plant material, invertebrates, etc.) can potentially be transferred from a boat/trailer to the wastewater during the washing process. Furthermore, Michigan Department of Environmental Quality (MDEQ) testing has confirmed that these contaminant levels can exceed water quality-based effluent limits for surface waters during the operation of boat wash stations for AIS decontamination; therefore, all discharges of wastewater from boat washing operations to surface waters or surface features with a connection to the surface waters of the state are prohibited, unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit.

Discharge Options

The following is a summary of available options for the safe and proper disposal of wastewater from AIS boat washing operations that do NOT require a permit from the MDEQ:

Option 1

Operation of a mobile boat wash that occurs at different sites so that the discharge of wastewater is not at the same location for more than 1-2 days. Boat washing operations at a single location for a longer duration should consult the MDEQ. Additionally, discharge of wastewater to the ground at an upland site or to the ground sufficiently far enough (a minimum of 200 feet is recommended) from surface waters does not require a permit provided that:

- There is no overland flow to surface water (i.e., no runoff over the ground to a water body, no flow from a sloping parking lot/ramp, no storm water drains present, etc.).
- No soap, chemicals, or other additives are used during washing.
- Written permissions/permits are obtained from the landowner or property manager.

- Discharge to the ground/groundwater occurs over grass/soil and not on a boating access site's paved or gravel areas or other areas conducive to runoff.
- There are no nuisances or hazardous conditions created such as ponding or flooding.

If choosing Option 1, the Part 22, Groundwater Quality, Rules promulgated pursuant to Part 31, Water Resources Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), still apply:

- (a) The discharge shall not be, or not be likely to become, injurious.
- (b) The discharge shall not cause runoff to, ponding on, or flooding of adjacent property, shall not cause erosion, and shall not cause nuisance conditions.
- (c) The point of discharge shall be located not less than 100 feet inside the boundary of the property where the discharge occurs.

If discharging at various locations, it is recommended that a log be kept of discharges for a period of three years from the date of the discharge. The log should include the date and location for each discharge and the items washed. The log shall be readily available for inspection and copying at any reasonable time by a law enforcement official or, upon presentation of credentials, an authorized representative of the department, city, county, or district health department that has jurisdiction.

Option 2

Containment and collection of all wastewater during boat wash operations for later disposal at a wastewater treatment plant (WWTP) or in a sanitary sewer system (NOT a storm water drain), provided that the sewer is connected to a WWTP and the WWTP does not use a lagoon system and has approved the discharge.

For all other methods of wastewater discharge, operators of a boat washing station for AIS decontamination should contact the MDEQ (see *Contacts* section below).

All discharges of wastewater from boat washing operations to surface waters or surface features with a connection to the surface waters of the state are prohibited, unless authorized by an NPDES permit. Surface waters of the state are defined as the Great Lakes and their connecting waters, all inland lakes, rivers, streams, impoundments, open drains, wetlands, and other surface bodies of water within the confines of the state (Part 4, Water Quality Standards, Rules promulgated pursuant to Part 31, Water Resources Protection, of the NREPA; R 323.1044). Persons and/or organizations wishing to operate a boat wash station using a discharge method not given in the above *Discharge Options* section may need to obtain an NPDES permit from the MDEQ, depending on site-specific conditions. Authorization via an NPDES permit from the MDEQ may include effluent limitations, monitoring requirements, and associated fees.

Contacts

- For permit-related questions and concerns, contact:
Matt Mulford, Permits Section, Water Resources Division, MDEQ
Phone: 517-284-5598
Email: MulfordM1@michigan.gov
- For general AIS boat washing questions, contact:
Kevin Walters, AIS Program, Water Resources Division, MDEQ
Phone: 616-250-8637
Email: waltersk3@michigan.gov
- For all other wastewater related questions or information about discharge from permanent boat washes and marinas, contact your local MDEQ district office by visiting www.michigan.gov/deg and clicking "[Locations](#)" in the upper right.

Figure 1: MDEQ's mobile boat wash



Figure 2: MDEQ's mobile boat wash in operation showing waste water containment



For information or assistance on this publication, please contact the Water Resources Division, through the DEQ Environmental Assistance Center at 800-662-9278. This publication is available in alternative formats upon request.

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