

MARINA INDUSTRY ENHANCEMENT (MIE)

To help marinas address rising operating costs, decreasing fish populations, a decline in participation in boating and fishing and a weak economy, the New Jersey Department of Transportation's I BOAT NJ Program and the National Fish and Wildlife Foundation provided funds to the New Jersey Sea Grant Consortium (NJS GC) to conduct activities to enhance the marina industry and expand the New Jersey Clean Marina Program.



The Marina Industry Enhancement (MIE) component of the award includes funding for activities such as providing technical assistance to help marinas implement measures to comply with stormwater regulations regarding wastewater and other regulations, funding for best management practices (BMPs), media events and other items.

Vessel-Generated Wash Wastewater

Marinas in New Jersey are required to eliminate the discharge of vessel wash water into surface and ground water effective March 1, 2010. Marinas have the option of capturing the wastewater and recycling it, hauling it away for proper disposal, request permission to connect to the sanitary sewer where applicable, or ceasing the practice of washing vessels.

Wash Wastewater Characterization and Data

Wastewater generated from washing vessel bottoms may contain various levels of both solid and dissolved metals (copper, zinc, lead, iron and other metals), organic materials (barnacles, tube worms and algae) and salts. **The amount of lead in the wastewater can be greatly reduced by removing the sacrificial anodes prior to pressure washing and by using hull cleaners sparingly.** Studies indicate the metals commonly found in vessel wash wastewater bind preferentially to fine particles. These fine particles and bound metals can be difficult to remove from the wastewater through filtration. In addition, when the wastewater is recycled and particles remain, this residue can lead to the early breakdown of the pressure washer.

The I BOAT NJ grant program funded wash wastewater studies at the following marinas in New Jersey: All Seasons Marina, Dillon's Creek Marina and Viking Marina. Information on the type of systems tested and data on the wash wastewater will be posted as it becomes available.

Data from the following states' analysis of wash wastewater is available on the MIE website:

- Connecticut
- Maine
- New Jersey
- Washington

Best Management Practices (BMP) Grant Program

The grant program is a competitive funding initiative that provides Clean Marinas and marinas working toward the Clean Marina designation with funds to implement BMPs outlined in the NJCMP guidebook. Grant applications will be accepted on a quarterly basis, with most awards averaging \$4,000. A minimum of 10% matching funds will be required. More information can be found at <http://njmsc.org/MIE/BMP.html>

The information referenced below and other pertinent information is available on the MIE website at njseagrant.org/MIE.html.

New Jersey Stormwater Regulations

Marinas conducting vessel maintenance activities such as mechanical repairs, refurbishing, painting, fueling and cleaning operations are required to have a Basic Industrial Stormwater General Permit . By March 1, 2010 marinas must eliminate the discharge of vessel wash water into surface and ground water. NJ Department of Environmental Protection developed the Basic Industrial Stormwater General Permit and Guidance for Marinas, Stormwater Pollution Prevention Plan Forms and a Boat Rinsing Policy.

Permit-by-Rule Information

A permit-by-rule for the construction and/or installation of boat wash wastewater systems and associated infrastructure was developed to provide regulatory assistance for marinas implementing measures to cease the discharge of vessel wash wastewater.

Vessel Wash Wastewater Systems

Washington State developed a guidebook to help boatyard operators select wastewater discharge options and wastewater treatment systems, is available on our website.

Case studies of marinas with vessel wash wastewater systems were prepared to provide guidance and technical advice to marina operators.

BMPs for Vessel Wash Wastewater Systems

Based on our experience in NJ recommended BMPs for efficient and safe operation of vessel wash wastewater systems have been identified.

Reducing Waste Management Costs Using Solar Evaporators

Evaporation has been identified as a possible method to dispose of wastewater and information on how to construct a solar evaporator has been provided.

Wash Wastewater Treatment System Manufacturers

A list of Vessel Wash Wastewater Treatment Systems is available.

Collection Pads

A list of collection pad manufacturers is available.

Resources

Additional information on the NJ Clean Marina Program, recycling shrink wrap, presentations from workshops, emergency response and inspection templates, and other relevant topics

If you have questions or need more information please Michael Danko at 732-872-1300 ext. 29 or mdanko@njseagrant.org.

