



MARINA ACTIVITIES – BMP FACTSHEET 1.9



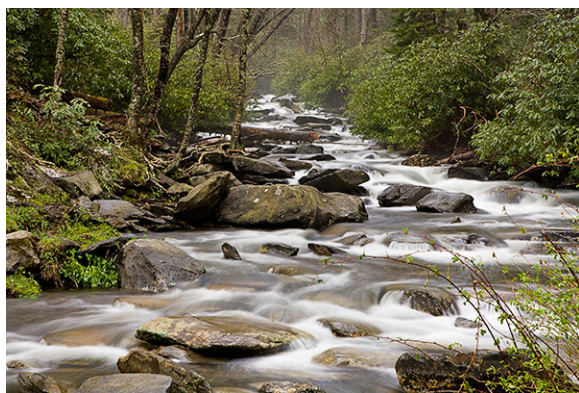
U.S. ARMY GARRISON FORT BELVOIR, VIRGINIA

Definition and Purpose:

To prevent or reduce the discharge of pollutants to stormwater. To provide guidance on the correct procedures, operations, and pollution prevention practices when performing a multitude of marina activities. The guidelines presented in this factsheet focus on the proper procedures that must be taken when performing boat maintenance, boat cleaning, boat fueling, waste disposal and grey water disposal.

The goal of regulating these procedures is to prevent unnecessary and unlawful discharges of harmful pollutants into our waterways. Facility owners will be required to comply with various safeguard requirements as per the new VAR0092771 Industrial Stormwater Permit.

It is very important to follow the proper procedures and guidelines that will be discussed in this factsheet so that byproducts of marina activities **do not** come into contact with stormwater. If proper procedures are not followed harmful pollutants can migrate by means of stormwater run-off into our natural waterways.



Approach:

The new permit authorizes certain new and existing discharges of stormwater to receiving waters in accordance with your facilities effluent limitations and includes the development and implementation of BMPs (Best Management Practices). In order to insure BMPs are being implemented, visual inspections and sampling of outfalls will be performed periodically and during the course of the SWPPP annual inspections and permit driven inspections.



Existing and New Facilities: When complaint investigations or routine stormwater audits for current facilities indicate impacts to water resources due to poor management practices, ENRD can evaluate and provide guidance when taking action to address any problems identified. Infrastructure and equipment, in addition to BMP implementation, are evaluated during inspections. To minimize the potential for compliance issues and to reduce liability, it is highly recommended that the recommendations in this document be followed.

Pollution prevention

Many of the problems associated with contamination of local waterways stem from the improper storage, handling, and application of many products used in marina activities. The discharge of harmful pollutants into stormwater run-off can be reduced if proper procedures are followed. Pollution prevention starts with **good housekeeping** which includes:

- Keep materials organized. Have designated areas for each type of material. Do not store hazardous or flammable materials on the dock, in the lockers, or elsewhere in marina. Hazardous material storage lockers with the proper containment should be used for specific hazardous materials.
- Always store usable chemicals and fuels securely on-board to prevent accidental overboard discharges.
- Keeping waste storage areas clean at all times by sweeping and cleaning up any spills immediately.
- Develop a material tracking system to keep track of material usage and locations of materials.
- Maintain adequate supplies of spill response equipment and materials in locations accessible to and near areas where spills may occur.
- Always follow the marina rules or policies governing the use of their facilities. It is important that boat owners use designated areas to perform cleaning, fueling, and maintenance activities, employing proper measures.

Boat Cleaning, Maintenance and Repair

Well maintained boats can help conserve water quality. However, maintenance and cleaning activities may contribute to water quality impairment if the proper precautions aren't taken. Many marinas have designated areas for cleaning and maintenance. It is very important that boat owners use these designated areas and follow marina rules or policies governing use of these facilities. The following guidelines must be followed:



Boat Cleaning- When boat cleaning is conducted while the boat is both in and out of the water, precautions should be used to protect water quality. Here are the basic guidelines and procedures that must be followed when performing cleaning activities:

- Always take boat to designated maintenance and cleaning areas. These areas have specialized equipment and BMPs to keep pollutants out of the water.
- When boat cleaning is conducted while the boat is in water, boaters should select non-toxic, low nutrient cleaning products that do not harm humans or aquatic life. Simple alternative cleaning products such as baking soda, vinegar, lemon juice, and vegetable oils are less harmful, however, these products should be used sparingly and discharge

into water avoided because they may also adversely impact aquatic life.

- Scrub and rinse your boat often. A quick rinse after each outing reduces the need to scrub the top-side with harsh cleaners.
- Do not discharge oily bilge water to marina waters, storm drains, swales, ditches, or on the ground. Use preventive engine maintenance, oil absorbents, and bilge pump-out services to reduce the chances of oily bilge water discharges.
- Pollution prevention can be accomplished by maintaining a containment system around the work area to control direct discharge, surface runoff, or wind dispersal of harmful chemicals into water. This may include: using drop clothes, plugging any openings that drain to the water and vacuuming or sweeping any loose debris such as paint chips.



Boat Maintenance/Repair -When boat maintenance is conducted while the boat is both in and out of the water, precautions should be used to protect water quality. Here are the basic guidelines and procedures that must be followed when performing maintenance activities:

- Always take boat to designated maintenance areas. These areas have specialized equipment and BMPs to keep pollutants out of the water.
- All paint mixing must be done on the shore, not the dock or the deck of the vessel. Spray painting is not allowed while boats are in the water.
- Do not leave unattended open containers of paint and other maintenance supplies on the docks. Limit the use of paint, thinners and varnishes (on board or on the dock) to containers that are less than a gallon.
- Open cans should be placed inside some type of secondary containment that will catch spills. A five gallon bucket or plastic tote works well for this purpose.
- Immediately inform marina operators of pollution or debris that may have entered the water so that the discharge can be stopped, contained and cleaned up.



Fueling

Drips and small spills that occur during boat fueling can accumulate over time into larger more detrimental problems. The complex hydrocarbons found in oil and gasoline not only

pose a risk to aquatic life but can be damaging to boats and create fire hazards. When fueling boats it is important to follow these guideline to prevent unnecessary and unlawful discharges into surface water:

- Stop all engines auxiliaries, Shut off all electricity, open flames, and heat sources (including smoking materials).
- Check all bilges for fuel vapors and close access fittings and openings that could allow fuel vapors to enter enclosed spaces of the vessel.
- Maintain nozzle contact with fill pipe and avoid overfilling, fuel filling nozzle must be attended at all times.
- Attach a container to the external vent fitting to collect overflow, as a precautionary measure. Several products easily attach to the boat with suction cups.
- Remember heat (direct sunlight) can cause expansion and a fuel vent spill even after fueling is completed. Leave at least 5% of space in a fuel tank to allow for that expansion.
- Wipe up spills immediately with absorbent cloth. **DO NOT HOSE DOWN.** Store spill containment materials in a clearly marked and easily accessible location (where fueling activities occur and where fuel is stored).
- After fueling Inspect bilges for leakage and fuel odors, ventilate until odors are removed.
- Put portable fuel tanks inside secondary containment (drip pans) and if possible, fill portable fuel tanks ashore.

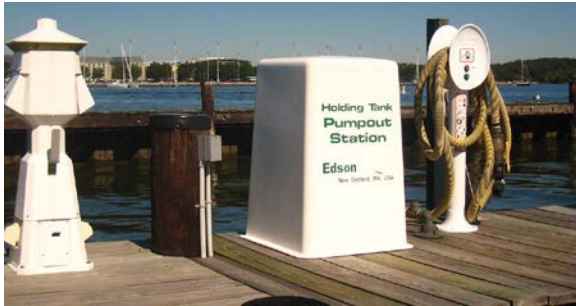


Waste Disposal

Maintenance and cleaning activities can produce waste materials such as used batteries, antifreeze, used oil, used oil filters and used containers (e.g. paint cans). These items are never to be disposed of in the dumpsters or trash cans. Marinas should provide areas where you can either properly dispose of your waste or recycle your waste. If Marina does not provide the proper waste disposal services contact the county to locate an off-site disposal facility or contact the Hazwaste facility on Fort Belvoir for disposal at 703-806-4537. When using any appropriate off-shore waste facility it is important to follow these guidelines:

- Marinas should provide on-site collection facilities for collection of trash, recyclable materials and hazardous materials. If disposal facilities are not provided, the marina should post visible signs directing boaters to local disposal facilities or services.
- Try to only purchase what you need to avoid unnecessary waste materials.
- Do not dispose of any liquid paint, solvents or other hazardous wastes in the marina trash receptacles or any solid waste container. Let paint can dry completely before depositing them in a solid waste receptacle.

- Do not mix any other fluid with waste oil when pouring into recycling tanks. Waste oil contaminated with other materials cannot be readily recycled and disposal costs increase dramatically.



Black Water (Sewage) and Gray Water

Grey water is the water collecting from your sink and shower, while black water is the sewage/water collecting from a toilet. Both these types of water require special handling and disposal.

- Do not discharge grey water directly overboard. Discharge within three (3) miles of land is illegal and subject to hefty fines.
- Store sewage in holding tanks and dispose of properly at a pump-out station or use a pump-out service. Y-valves must be safety wired to ensure sewage flows into holding tank only.
- Even treated sewage is a threat to the shallow water environments. Do not discharge treated sewage while in the marina.
- Minimize detergent usage and oily food waste in on-board sinks and showers. Dispose of food waste in the trash. Use shore side facilities whenever possible.



For questions and additional information contact DPW / ENRD at 703- 805-0048 or 703-806-3847

