

Appendix XII: Storm Water Pollution Prevention Plan

THIS TEMPLATE IS AVAILABLE ELECTRONICALLY AT <http://www.dnr.state.md.us/boating/cleanmarina/>

This template may help you prepare a Storm Water Pollution Prevention Plan as required by **General Discharge Permit No. 10-MA** (Effective March 1, 2011 through February 28, 2016) http://www.mde.maryland.gov/programs/permits/watermanagementpermits/waterdischargepermitapplications/pages/permits/watermanagementpermits/water_applications/marinas.aspx

As explained in the General Discharge Permit for Marinas 10-MA:

1. The permittee (marina) shall implement and maintain a Storm Water Pollution Prevention Plan (SWPPP) for the facility covered by this permit. The SWPPP shall be prepared in accordance with sound engineering practices and identify potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges associated with eligible activities on the facility property.
2. The SWPPP shall prescribe practices to reduce and/or eliminate pollutants in storm water discharges associated with activities at the facility. The Maryland Department of the Environment provides guidance and hyperlinks to sources that will aid in the creation/revision of an SWPPP (http://www.mde.maryland.gov/programs/permits/watermanagementpermits/waterdischargepermitapplications/pages/permits/watermanagementpermits/water_applications/marinas.aspx . The SWPPP must include a year-round contact.
3. The Discharge Permit also requires quarterly facility inspections by qualified marina staff, to review the effectiveness of the SWPPP. The inspection must be documented and held in a log book on site. Attachment #1 to this template includes a sample log the marina may duplicate and use.
4. The General Discharge Permit for Marinas requires quarterly visual monitoring of storm water discharge, to determine the effectiveness of the control measures outlined in the SWPPP. Once each quarter, the permittee shall collect a storm water sample from each outfall and assess the sample visually. A “visual monitoring form” is included as part of the Discharge Permit and is *not* included as part of this template.

This template is provided by the Maryland Department of Natural Resources as a guidance tool. Use of this template does not relieve users of their responsibilities to comply with requirements of the General Permit for Marinas in its entirety or the Clean Water Act. I acknowledge that the Maryland Department of Natural Resources and its staff are not responsible and/or liable for any of my actions or for compliance with the above-mentioned permit. In addition, I agree to release and hold harmless the Maryland Department of Natural Resources from any liability in the event of fines, penalties, or prosecution by the Environmental Protection Agency or Maryland Department of the Environment.

Acknowledged by: _____

Date: _____

Element #1 Developing a Site Plan

Completed by:

Title:

Date:

Instructions: Draw a map of your site including a footprint of all buildings, structures, paved areas, and parking lots.

The General Discharge Permit for Marinas requires that you identify the following features on your site map:

- All outfalls and storm water discharge points
- Name of receiving waters (or if through a Municipal Separate Storm Sewer System)
- Hazardous materials storage locations
- Main equipment locations
- Main building locations
- Direction of storm water flow (use arrows)
- Direction of permitted waste water discharges (e.g., pressure wash water)
- Locations of any of the following exposed to precipitation:
 - Fuel storage tanks and pumps
 - Sewage collection areas (e.g., pumpout, holding tank)

MARINA INFORMATION

Marina name:

Address:

Phone number:

Email:

Element #2 POLLUTION PREVENTION TEAM MEMBER ROSTER

Completed by:

Title:

Date:

Year Round Contact/Team Leader:

Title:

Office phone:

Responsibilities:

Members:

1)

Title:

Office phone:

Responsibilities:

2)

Title:

Office phone:

Responsibilities:

3)

Title:

Office phone:

Responsibilities:

Company Authorized Signature: _____

Printed Name: _____

Date: _____

Element #3 Employee Training

Completed by:

Title:

Date:

Instructions: Employees must be trained twice per calendar year on the following topics (as applicable to the facility). Training should be documented using this worksheet (**make copies of the original as needed for future use**). *Also inform independent contractors and customers about pollution prevention measures (e.g., through contracts or signs).*

Training Topic	Brief Description of Training Materials (i.e., film, fact sheet, discussion)	Dates of Training (required twice per year)	Staff Names or Initials
Used oil management			
Used solvent and paint management			
Disposal of used abrasives			
Disposal of vessel wastewater			
Spill prevention and control			
Fueling procedures			
General good housekeeping			
Painting and blasting procedures			
Used battery management			
Disposal of sacrificial anodes (i.e., zincs)			

Elements #4 Description of Potential Pollutant Sources

Completed by:

Title:

Date:

Instructions: Describe *activities* that may reasonably be expected to add significant amounts of pollutants to storm water discharges (e.g., pressure washing, fuel handling, bottom paint removal areas). Include activities that may also result in the discharge of pollutants during dry weather, to waters of the state (e.g. fuel dock operations).

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10)

Element #7 Best Management Practices, Measures and Controls

Completed by:

Title:

Date:

a. Good Housekeeping and Routine Yard Maintenance Schedule

The General Discharge Permit states: "Permittees must keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals. The Plan must include a schedule for routine yard maintenance and cleanup. Scrap metal, wood, plastic, miscellaneous trash...must be routinely removed from the general yard area."

Instructions: Describe your regular yard maintenance schedule and explain how you dispose of waste such as scrap metal, wood, and trash.

Example: We routinely do a spring clean up in April each year. All scrap metal is recycled and other debris is put in the dumpster or hauled to the dump, depending on size. Any recyclable materials (plastic) are recycled by our regular waste hauler.

b. Maintenance of Storm water Controls This is addressed in the table below. However please note the General Discharge Permit states that non-structural controls (e.g., spill response supplies, staff training) must also be maintained.

Instructions: Describe your maintenance of non-structural controls below.

Example: Each April staff inspects our spill response materials. We re-stock this kit as needed. Emergency phone numbers are checked each February and the response plans are updated if needed.

ELEMENT #7 Continued

c. Vessel Maintenance Activities–Best Management Practices

The General Discharge Permit states: [“Work areas must be secured each evening to prevent exposure of pollutants to storm water. The facility must contain maintenance activities to prevent abrasives, paint chips and overspray from reaching receiving waters or the storm sewer system.”]

Instructions: Describe the storm water management practices or devices that you have selected to control pollutants from the activities noted below.

Activity/Source	Brief Description of Storm Water Management Practice	Plan for Proper Maintenance of Storm Water Practice (e.g., clean sediment traps, change filters) <i>“Permittees must regularly inspect, test, maintain, and repair all industrial equipment and systems to avoid situations that may result in releases (spills, leaks) of pollutants in storm water discharging to receiving waters.”</i>
<p>Bottom Washing Area</p> <p><i>Note: When not in use, prevent any storm water from entering the treatment system for boat bottom washing if you have one.</i></p>	<p><i>Example: sweep up wash down pad nightly when boats have been washed.</i></p>	

ELEMENT #7 CONTINUED

<p>Activity/Source</p>	<p>Description of Storm Water Management Practice (e.g., filter cloth, tenting, cover with tarps) <i>“Permittees must keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals.”</i></p>	<p>Plan for Proper Maintenance of Storm Water Practice (e.g., replace ground covers when dirty, change filters) <i>“Permittees must regularly inspect, test, maintain, and repair all industrial equipment and systems to avoid situations that may result in releases (spills, leaks) of pollutants in storm water discharging to receiving waters.”</i></p>
<p>BOAT MAINTENANCE ACTIVITIES Items i-vi</p> <p>i. Surface Preparation (e.g. sanding, stripping or blasting) and ii. TBT</p> <p>The General Discharge Permit states:</p> <p>“Stripping, burning, or scraping must be conducted over a suitable ground cover.”</p> <p>“Paint containing TBT shall be removed only in protected areas. Coatings suspected to contain TBT are not to be burned off.”</p> <p>“Soda/Sand Blasting, Sanding or Grinding...[permanent structures or temporary protective measures (i.e. drop cloths and shrouds) shall be secured around the activity to capture airborne debris. A suitable ground cover must be placed under the activity to collect debris.]”</p>		

Activity/Source	Brief Description of Storm Water Management Practice (e.g., ground cover, tenting) <i>“Permittees must keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals.”</i>	Plan for Proper Maintenance of Storm Water Practice (e.g., maintain supply of filter cloth, replace between jobs)
<p>iii. Painting</p> <p>The General Discharge Permit states: “All paint mixing, solvent transfer, and equipment clean up must be contained and shall not enter storm drains or the environment. Painting bottoms, including touch ups, must be...controlled...and have no exposure to storm water.”</p> <p>[Spray painting shall only be performed in an enclosed building or spray booth with a floor covering such as concrete or tarps.] (paraphrased from Permit).</p>		
<p>iv. Waste Disposal</p> <p>The General Discharge Permit States: “Any solid waste generated from boat maintenance activities...shall be collected for disposal at an appropriate facility, in accordance with RCRA, MDE...regulations and any local environmental ordinances/authorities.” Containment of the solid waste shall be adequate to prevent any potential discharge from entering surface waters.”</p>	<p><i>Example: Dumpsters are provided for general household waste. Hazardous waste stored in labeled drum and emptied by licensed hauler monthly. Includes x, y, z...</i></p>	<p><i>Example: Dumpsters kept closed at all times and checked for leaks. Leaking dumpsters are replaced.</i></p>

ELEMENT #7 CONTINUED

<p>Activity/Source</p>	<p>Brief Description of Storm Water Management Practice (e.g., oil-sorb materials kept nearby) <i>“Permittees must keep clean all exposed areas that are potential sources of pollutants.”</i></p>	<p>Plan for Proper Maintenance of Storm Water Practice <i>“Permittees must regularly inspect, test, maintain, and repair all industrial equipment and systems to avoid situations that may result in releases (spills, leaks) of pollutants in storm water discharging to receiving waters.”</i></p>
<p>v. Oil Transfer (recycling tanks, fueling areas) The General Discharge Permit states: “Any co-mingling of storm water with petroleum products is considered an industrial process wastewater...” And “Discharges that contain a visible oil sheen are prohibited.” And If bilge water is collected...to prevent the discharge from entering waters of the State, it must be treated prior to discharge into ground or surface waters...The Discharge shall be sampled at the discharge point and be reported...” See Part IV of the Permit for more information.</p>		
<p>vi. Sacrificial Anodes and Mechanical Repair The General Discharge Permit states: “All anodes shall be properly disposed or recycled. All metal removed while vessels is in water shall be taken ashore.”</p>		
<p>d. Material storage area The General Discharge Permit states: “Identify materials stored indoors. Ensure containment or enclosure for those stored outdoors. [All chemicals] and waste products including used batteries and lead and copper waste shall be stored under cover on an impervious surface. Cracked batteries must be stored in a covered [water tight] secondary containment.”</p>		

Activity/Source	Brief Description of Storm Water Management Practice (e.g., oil-sorb materials kept nearby)	Plan for Proper Maintenance of Storm Water Practice
<p>e. Material handling area (e.g., fueling, paint mixing) The General Discharge Permit states: “Describe measures that prevent or minimize contamination of storm water runoff from material handling areas.”</p>		
<p>f. Engine Maintenance and repair areas The General Discharge Permit states: “Ensure there is no contamination of precipitation or surface runoff from all areas used for engine maintenance and repair.” See page 21 of the Permit for more detail if applicable.</p>		
<p>g. Dry Dock The General Discharge Permit states: “Routinely maintain and clean the dry dock to minimize pollutants in storm water runoff.” See more on page 22 of the Permit if applicable.</p>		
<p>h. Marine Railway The General Discharge Permit states: “All solids and debris must be removed prior to being submerged to prevent materials from being washed into waters.”</p>		

ELEMENT #7 CONTINUED

i. Erosion and Sediment Controls

The General Discharge Permit requires you to stabilize exposed areas and contain runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation, and the resulting discharge of pollutants. Describe these measures in the table below. If this is not applicable, indicate "N/A."

Identify areas which have high potential for significant soil erosion	Describe measures in place (e.g., structural, vegetative) to reduce pollutants from storm water discharges.
<i>Example: Area on the left of the main driveway where the grade is steep.</i>	<i>We installed stones (3-6" diameter) and planted grasses to stabilize this area and prevent wash out.</i>
1.	
2.	
3.	
4.	
5.	

ELEMENT #7 CONTINUED

j. Spill Prevention and Response Procedures

Instructions: Identify containers *exposed to storm water* that are susceptible to spills or leaks (e.g., drums holding materials for recycling). Identify plans for effective response to such spills. (e.g., maintaining oil-sorbent materials nearby, having a spill response company identified if needed)

If you have a formal Spill Prevention Control and Countermeasure Plan (SPCC) (required for facilities that can store more than 1,320 gallons of petroleum above ground) you may reference it below.

In the event of a spill on the water, you must notify both the U.S. Coast Guard spill response center at 800-424-8802 and MD Department of the Environment at 866-633-4686.

List containers exposed to storm water and their contents	Spill Response Plan

ATTACHMENT #1
Quarterly Visual Inspection LOG Sheet

Refer to the table in Element #7 when completing your quarterly site inspections.

	1Q 2011	2Q 2011	3Q 2011	4Q 2011
Is site compliant with the Storm water Pollution Prevention Plan and the General Discharge Permit for Marinas 10-MA? Y/N	N/A			
Describe any deficiencies found.	N/A			
Describe any necessary follow up action.	N/A			

Quarterly Visual Inspection LOG Sheet

Refer to the table in Element #7 when completing your quarterly site inspections.

	1Q 2012	2Q 2012	3Q 2012	4Q 2012
Is site compliant with the Storm water Pollution Prevention Plan and the General Discharge Permit for Marinas 10-MA? Y/N				
Describe any deficiencies found.				
Describe any necessary follow up action.				

Quarterly Visual Inspection LOG Sheet

Refer to the table in Element #7 when completing your quarterly site inspections.

	1Q 2013	2Q 2013	3Q 2013	4Q 2013
Is site compliant with the Storm water Pollution Prevention Plan and the General Discharge Permit for Marinas 10-MA? Y/N				
Describe any deficiencies found.				
Describe any necessary follow up action.				

Quarterly Visual Inspection LOG Sheet

Refer to the table in Element #7 when completing your quarterly site inspections.

	1Q 2014	2Q 2014	3Q 2014	4Q 2014
Is site compliant with the Storm water Pollution Prevention Plan and the General Discharge Permit for Marinas 10-MA? Y/N				
Describe any deficiencies found.				
Describe any necessary follow up action.				

Quarterly Visual Inspection LOG Sheet

Refer to the table in Element #7 when completing your quarterly site inspections.

	1Q 2015	2Q 2015	3Q 2015	4Q 2015
Is site compliant with the Storm water Pollution Prevention Plan and the General Discharge Permit for Marinas 10-MA? Y/N				
Describe any deficiencies found.				
Describe any necessary follow up action.				