

TEMPLATE

Storm Water Pollution Prevention Plan (SWPPP) for Marinas



The following example template can be used as a guide for operators of marinas when developing and implementing a Storm Water Pollution Prevention Plan (SWPPP) to satisfy requirements of Ohio EPA's NPDES General Permit for Storm Water Discharges Associated with Industrial Activity from Marinas (OHRM00001).

This example template has been organized to provide you with a simple, step-by-step approach to develop a site specific SWPPP in accordance with OHRM00001. Please take the time to go through the example template and instructions step-by-step, and complete the information specific to your facility. If you have any questions please contact Jason Fyffe, Central Office Storm Water Section by e-mail to jason.fyffe@epa.state.oh.us or by calling (614) 728-1793.

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Storm Water Pollution Prevention Plan

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APPENDIX A: OHIO EPA NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL FROM MARINAS (OHRM00001)

Download at:

http://www.epa.state.oh.us/dsw/permits/GP_Marinas.html

APPENDIX B: VISUAL AND ANALYTICAL MONITORING GUIDANCE DOCUMENT

Download at:

http://www.epa.state.oh.us/dsw/permits/GP_Marinas.html

INTRODUCTION

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act (CWA)) was enacted, it provides that the discharge of pollutants to waters of the United States from any point source is unlawful, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added section 402(p) which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES program. On November 16, 1990 and on December 8, 1999, EPA published final regulations that establish requirements as to which storm water dischargers are required to obtain NPDES permits. Federal storm water regulations identify marinas as an industrial category subject to such permitting.

Ohio EPA issued a NPDES general permit for storm water discharges associated with industrial activity from marinas (OHRM00001). OHRM00001 covers the entire State of Ohio. Marinas (standard industrial classification (SIC) code 4493) involved in boat maintenance activities (including boat rehabilitation, mechanical repairs, painting, fueling and lubrication) or equipment cleaning operations are defined in the federal storm water regulations (40 CFR 122.26(b)(14)) as engaged in industrial activity and subject to OHRM00001.

Development, implementation and maintenance of this Storm Water Pollution Prevention Plan (SWPPP) will provide the tools to reduce pollutants contained in storm water discharges and comply with the requirements of OHRM00001. The primary goals of this SWPPP will be to:

- Identify potential sources of pollutants that affect storm water discharges from the site;
- Describe the practices that will be implemented to prevent or control the release of pollutants in storm water discharges; and
- Create an implementation schedule to ensure that the practices described in this SWPPP are in fact implemented and to evaluate the plan's effectiveness in reducing the pollutant levels in storm water discharges.

Additional guidance to develop a SWPPP can be found at the following:

USEPA SWPPP Guidance and Other Useful Information

- <http://cfpub1.epa.gov/npdes/stormwater/swppp-msgp.cfm>

Example SWPPPs

- <http://www.epa.gov/reg3wapd/stormwater/pdfs/marina.pdf>
- <http://www.dep.state.fl.us/law/Documents/Grants/CMP/pdf/StormwaterPlan-Final.pdf>

Ohio Clean Marinas Program – Best Management Practices Guidebook

- <http://ohioseagrant.osu.edu/documents/cmarina/gbook.pdf>

Ohio EPA Fact Sheet – Pollution Prevention for Marinas

- <http://www.epa.state.oh.us/opp/fact30.pdf>

SWPPP REVISIONS

Directions: The SWPPP shall be amended under the following conditions: (1) whenever there is a change in design, construction, operation or maintenance that has a significant effect on the potential for the discharge of pollutants to surface waters of the state, (2) whenever an inspection by a local, State or Federal official determines that modifications to the SWPPP are necessary, (3) whenever a spill, leak or other release occurs at the facility, or any time there is an unauthorized discharge from the facility, (4) if the plan proves to be ineffective in eliminating or significantly minimizing pollutants. Document any necessary SWPPP revisions using this worksheet.

If the plan must be modified because of one of the above conditions, the modification must be done within 14 calendar days after discovery. New or modified BMPs must be implemented before the next storm event, if possible, but no later than 60 days after discovery. Document the amount of time taken to modify a BMP or implement additional BMPs using this worksheet.

If the plan modification is based on a release or unauthorized discharge, include a description and date of the release; the circumstances leading to the release and actions taken in response to the release; and measures to prevent the recurrence of such releases.

DATE	DESCRIPTION OF REVISION	TIMEFRAME TO MODIFY OR IMPLEMENT ADDITIONAL BMP(s)	AUTHORIZED SIGNATURE

FACILITY INFORMATION

Directions: Please provide the following facility information as indicated below.

NAME OF FACILITY	
FACILITY OPERATOR	
FACILITY OWNER	
FACILITY ADDRESS	
FACILITY PHONE NUMBER	
PRIMARY STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE	
RECEIVING WATER(S)	
NUMBER OF BOAT SLIPS (TOTAL BOAT CAPACITY INCLUDING WET AND DRY) <small>If \geq 200 then Part 12B is applicable for your facility</small>	

SITE ACTIVITIES

Directions: Provide a brief description of the facility's activities and operations.

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PART 1

POLLUTION PREVENTION TEAM

MEMBER ROSTER

Directions: Identify the person(s) responsible for developing the SWPPP and in the implementation, maintenance and revision of the plan. Identify the responsibilities of each member.

Leader:
Title:
Office Phone:
Responsibilities:

Member:
Title:
Office Phone:
Responsibilities:

Member:
Title:
Office Phone:
Responsibilities:

PART 2

SITE DESCRIPTION

Directions: Provide the size of the property (in acres) and estimate the percent imperviousness of the site. To determine the percent impervious of the site use the following equation:

$$\frac{(\text{Area of Roofs} + \text{Area of Paved and Other Impervious Surfaces}) \times 100}{\text{Total Area of Facility}}$$

Precipitation Information. Estimate of average annual precipitation for the area and note which months are usually the wettest. You can get this information from almanacs or from the closest airport, etc.

Size of Property (in acres):

Estimate of the Percent Impervious of Site:

Precipitation Information:

PART 3

SITE MAP

Directions: Draw a map of your site including footprint of all buildings, structures, paved areas and parking lots. In addition, the general permit requires the following elements below to be included on the map.

- Outline of drainage area for each storm water outfall
- Structural measures to reduce pollutants in storm water runoff, e.g., filter cloth barrier, vegetated buffer
- Location and name(s) of all surface waters of the state that receive discharges from the site
- Locations of all storm water conveyances including ditches, pipes and swales
- Locations and name(s) of owner/operator of MS4s (if you discharge to them)
- Locations of all non-storm water discharges
- Locations where major spills or leaks have occurred (if applicable)
- Locations of the following activities that are exposed to precipitation: fueling, engine maintenance and repair, vessel maintenance and repair, boat washing, painting, sanding, blasting, welding, metal fabrication, loading/unloading areas, storage of wastes, liquid storage areas (paint, solvents) and material storage areas (blasting media)
- Storage piles containing salt

PART 4

SPILL PREVENTION AND RESPONSE PROCEDURES

Directions: Identify where potential spills and leaks could occur. Identify if any significant spills and leaks of toxic or hazardous pollutants have occurred at the facility in the three years prior to obtaining permit coverage. Definition: Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of reportable quantities. See the following websites for additional information:

http://www.epa.state.oh.us/dapc/serc/Release_Reporting.pdf

http://www.epa.state.oh.us/dapc/serc/LEPC_List.pdf

Note: If you have a certified Spill Prevention, Control and Countermeasure Plan (SPCC) include it by reference here.

POTENTIAL POLLUTION SOURCE/PREVIOUS SIGNIFICANT SPILLS	BEST MANAGEMENT PRACTICES

IF A SPILL OCCURS

Directions: Describe procedures and equipment available for cleaning up spills.

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IMPORTANT PHONE NUMBERS

Directions: Provide contact information for individual and agencies that must be notified in the event of a spill.

PART 5

ELIMINATION OF UNAUTHORIZED DISCHARGES

Directions: Using this worksheet certify that all discharges (i.e., outfalls) have been tested or evaluated for the presence of non-storm water and that all unauthorized discharges have been eliminated.

Non-Stormwater Discharge Assessment and Certification	Completed By:			
	Title:			
	Date:			

Dates of Test or Evaluation	Outfall Directly Observed During the Test	Method Used to Test or Evaluate Discharge	Describe Results from Test for the Presence of Non-Stormwater Discharge, i.e., origin and composition of any unauthorized discharge	Action(s) taken to eliminate any unauthorized discharge, i.e., a floor drain was sealed

Certification

I, _____ (responsible corporate official), certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (type or print):	B. Area Code and Telephone Number:
C. Signature:	D. Date Signed:

PART 6

SUMMARY OF POTENTIAL POLLUTANT SOURCES, LIST OF ASSOCIATED POLLUTANTS & BMPs

Potential Pollutant Source	Associated Pollutants	BMPs
<p>Directions: Identify materials or activities that are exposed to storm water. At a minimum, look at the following areas of your facility.</p>	<p>Directions: Identify the associated pollutants of concern (e.g. oil, paint, fuel, cleaning solvents).</p>	<p>Directions: Describe BMPs that are or will be implemented to address. Provide a date or timeframe which BMP will be implemented.</p>
<p align="center"><u>Boat Washing Area(s)</u></p>		<p>*Identify where activity occurs and identify where the discharge will be released (i.e., receiving waterbody, storm sewer system, sanitary sewer system). Wash water shall not be discharged to surface waters of the state or a storm sewer system if detergents or other chemical cleaning agents are used. The discharge of wash water from the cleaning of engines or other oily parts is also prohibited.</p>
<p align="center"><u>Blasting, Sanding and Painting Area(s)</u></p>		<p>*Consider containing all blasting and painting activities or use other measures to prevent the discharge of the contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). When necessary, regularly clean storm water conveyances of deposits of abrasive blasting debris and paint chips. Detail any standard operating practices relating to blasting and painting (prohibiting uncontained blasting and painting over open water or prohibiting blasting and painting during windy conditions, which can render containment ineffective).</p>

PART 6

SUMMARY OF POTENTIAL POLLUTANT SOURCES, LIST OF ASSOCIATED POLLUTANTS & BMPs

Potential Pollutant Source	Associated Pollutants	BMPs
<p>Directions: Identify materials or activities that are exposed to storm water. At a minimum, look at the following areas of your facility.</p>	<p>Directions: Identify the associated pollutants of concern (e.g. oil, paint, fuel, cleaning solvents).</p>	<p>Directions: Describe BMPs that are or will be implemented to address. Provide a date or timeframe which BMP will be implemented.</p>
<p><u>Material Handling and Storage Area(s)</u></p>		<p>*Consider covering fueling areas, using spill and overflow protection, mixing paints and solvents in a designated area (preferably indoors or under a shed), and minimizing runoff of storm water to material handling areas. Specify which materials are stored indoors, and consider containment or enclosure for those stored outdoors. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Consider implementing an inventory control plan to limit the presence of potentially hazardous materials onsite. If applicable, salt storage piles shall be covered and include measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding or removing materials from pile.</p>
<p><u>Engine Maintenance and Repair Area(s)</u></p>		<p>*Consider performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluid prior to disposal, prohibit hosing down the shop floor, using dry cleanup methods.</p>

PART 6

SUMMARY OF POTENTIAL POLLUTANT SOURCES, LIST OF ASSOCIATED POLLUTANTS & BMPs

Potential Pollutant Source	Associated Pollutants	BMPs
<p>Directions: Identify materials or activities that are exposed to storm water. At a minimum, look at the following areas of your facility.</p>	<p>Directions: Identify the associated pollutants of concern (e.g. oil, paint, fuel, cleaning solvents).</p>	<p>Directions: Describe BMPs that are or will be implemented to address. Provide a date or timeframe which BMP will be implemented.</p>
<p align="center"><u>Drydock Area(s)</u></p>		<p>*Address the cleaning of accessible areas of the drydock prior to flooding, and final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, and fuel spills occurring on the drydock. Consider sweeping rather than hosing off debris and making absorbent materials and oil containment booms available for spills.</p>
<p align="center"><u>General Yard Area(s) – Waste Dumpsters and Trash Cans</u></p>		<p>*Regularly remove from general yard area scrap metal, wood, plastic, trash, paper, glass, welding rods, packaging, etc. Include a schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers.</p>

PART 7

Boat Maintenance Activities Performed by a Boat Owner or Other Third Party

Directions: Describe how you will ensure that the practices and procedures of this SWPPP are adhered to if boat maintenance activities are performed by a boat owner or other third party at your facility. Measures could include boat work order, fact sheets, brochures, signage, etc.

PART 8

Erosion, Sedimentation Controls and Management of Runoff

Directions: (1) Identify any areas of the facility that have a potential for soil erosion and describe BMPs to prevent or control on-site erosion and sedimentation. Only necessary if there is on-going sedimentation due to activities such as construction or landscaping or the presence of unpaved roads or lots. (2) Describe any existing structural post-construction storm water management controls at the facility and consider installing any reasonable and appropriate structural post-construction storm water controls to reduce pollutants in the facility's storm water discharges and (3) Identify any storm water discharge locations that create erosive conditions and describe BMPs to prevent erosive conditions.

Identify Areas Which Have High Potential for Soil Erosion and Describe BMPs to Prevent or Control Erosion

Describe Any Structural Post-Construction Storm Water Management Controls

Storm Water Discharge Locations That Create Erosive Conditions

PART 9

PREVENTIVE MAINTENANCE SCHEDULE

Directions: Describe a preventive maintenance program to involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil and water separators and sediment traps) as well as inspecting and maintaining facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters. The schedule should either be periodic or based upon more appropriate intervals such as hours of use, mileage, age, etc. Non-structural BMPs need to also be maintained (e.g., spill response supplies available). The plan shall include all documented maintenance and repairs. Dates of regular maintenance should be documented. For repairs, the date of deficiency discovery and the date on which the equipment or BMP was restored to full function should also be documented in the plan.

Type Device	Preventive Maintenance Schedule	Condition & Repairs (if any)	For Repairs	
			Date of Discovery	Date Restored

PART 10

ROUTINE FACILITY INSPECTIONS – INSPECTION YEAR _____

Directions: After inspection, record the findings and any corrections to the area. Inspector, please initial.

Month/Day	Boat Washing Area	Blasting, Sanding and Painting Area	Material Handling and Storage Area	Engine Maintenance and Repair Area	Drydock Area	General Yard Area
January ____						
February ____						
March ____						
April ____						
May ____						
June ____						
July ____						
August ____						
September ____						
October ____						
November ____						
December ____						

PART 11

EMPLOYEE TRAINING

Directions: Describe a schedule to inform employees of the components and goals of this SWPPP on the following topics as applicable. Provide a brief description of the training program/materials. Document trainings using this worksheet.

Training Topic	Brief Description of Training Program/Materials, e.g., film, fact sheet, discussion	Schedule for Training (list dates)	Attendees
Used Oil Management			
Spent Solvent Management			
Disposal of Spent Abrasives			
Disposal of vessel wastewater			
Spill Prevention and Control			
Fueling Procedures			
General Good Housekeeping Practices			
Painting and Blasting Procedures			
Used Battery Management			

PART 12

MONITORING REQUIREMENTS

Directions: If any data is available, include a summary of existing storm water discharge sampling data previously taken at the facility.

Summary of data:

PART 12A

QUARTERLY VISUAL MONITORING – YEAR _____

Directions: Visually examine each outfall associated with industrial activity on a quarterly basis. The examination shall be made of grab samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff begins discharging. All samples shall be from an event greater than 0.1 inch in magnitude and occur at least 72-hours from the previously measurable (greater than 0.1 inch rainfall) storm event. See Appendix B for quarterly visual monitoring guidance.

Outfall # _____	Color	Odor	Clarity	Floating Solids	Settled Solids	Suspended Solids	Foam	Oil Sheen	Other Obvious Indicators Pollutants	Possible Sources of Pollutants
Quarter 1 (January, February and March)										
Date										
Time										
Person										
Quarter 2 (April, May and June)										
Quarter 3 (July, August and September)										
Quarter 4 (October, November and December)										

PART 12B

ANALYTICAL MONITORING – YEAR _____

Directions: Facilities with **200** or more boat slips (total boat capacity including wet and dry) are required to monitor for the five parameters below. Take grab sample from all outfalls associated with industrial activity. Take the grab sample during the first 30 minutes of the discharge. All samples shall be from an event greater than 0.1 inch in magnitude and occur at least 72-hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Document sampling results in mg/l for each parameter using this worksheet. See Appendix B for annual analytical monitoring guidance.

Outfall # _____	Date of Sample	Total Recoverable Aluminum (mg/l)	Total Recoverable Iron (mg/l)	Total Recoverable Lead (mg/l)	Total Recoverable Zinc (mg/l)	Total Suspended Solids (TSS) (mg/l)

PART 13

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION YEAR _____

Directions: Use this worksheet to perform your annual comprehensive site compliance evaluation.

Inspected by:				Title:	Inspection Date:
Inspection Items	YES	NO	Major Observations/Comments	Modifications to Measures and Controls	
Are the members on the Pollution Prevention Team still current?					
Is the Site Plan drawing still accurate?					
Is your inventory of exposed materials still accurate?					
Were there any spills or leaks during the past year?					
Is there evidence of pollutants entering the drainage system?					
Are the existing measures and controls to reduce pollutant loadings effective?					
If applicable, are structural BMPs (retention ponds, swales, berms, etc.) maintained and operating effectively?					
Are spill prevention and response procedures being followed?					
Does your facility maintain good housekeeping?					
Has scheduled training(s) been completed and documented this year?					
Did facility personnel conduct/document monthly routine inspections?					
Did facility personnel conduct/document quarterly visual monitoring?					
If applicable, did facility personnel conduct/document annual analytical monitoring?					
Does your facility keep adequate records of inspections, spills and maintenance activities?					

Certification

I, _____ (responsible corporate official), certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title:

B. Area Code and Telephone Number:

C. Signature:

D. Date Signed:

PART 14

RECORD-KEEPING AND INTERNAL REPORTING PROCEDURES

This SWPPP will be retained for the life of the permit. Copies of all reports and worksheets generated and records of all data used to complete the Notice of Intent (NOI) to be covered by the permit will be retained for at least 6 years from the date of the measurement, report or application. Maintain records with this SWPPP.

PART 15

SWPPP SIGNATURE

I certify the completion of the Storm Water Pollution Prevention Plan (SWPPP) for industrial activity at _____.

I, _____ (responsible corporate official), certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those person(s) directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME: _____ TITLE: _____

SIGNATURE: _____ DATE: _____