

SAMPLE Storm Water Pollution Prevention Plan

Magerr's Marina

September 15, 2000

The best management practices included in this sample SWPPP are just examples. Your plan may need to include other requirements.

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1.0 INTRODUCTION

1.1 Background

In 1972, Congress passed the Federal Water Pollution Control Act (FWPCA), also known as the Clean Water Act (CWA), to restore and maintain the quality of the nation's waterways. The ultimate goal was to make sure that rivers and streams were fishable, swimmable, and drinkable. In 1987, the Water Quality Act (WQA) added provisions to the CWA that allowed the EPA to govern storm water discharges from industrial activities. EPA published the final notice for Phase I of the Multi-Sector General Storm Water Permit program (Federal Register Volume 60 No. 189, September 20, 1995, page 50804) in 1995 which included provisions for the development of a Storm Water Pollution Prevention Plan (SWPPP) by each industrial facility discharging storm water, including marinas.

Development, implementation, and maintenance of the SWPPP will provide Magerr's Marina with the tools to reduce pollutants contained in storm water discharges and comply with the requirements of the General Storm Water Permit issued by the State of Maryland (Permit No. MD-S1234567-8). The primary goals of the 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.

1.2 **SWPPP Content**

This SWPPP includes all of the following:

Identification of the SWPPP coordinator with a description of this person's duties;

- Identification of the SWPPP implementation team members;

Description of the facility including information regarding the facility's location and activities as well as a site description, three maps, and a summary of the storm water drainage system;

Identification of potential storm water contaminants;

Description of storm water management controls and various Best Management Practices (BMPs) necessary to reduce pollutants in storm water discharge;

Description of the facility monitoring plan; and a

Description of the implementation schedule and provisions for amendment of the plan.

2.0 SWPPP COORDINATOR AND DUTIES

The SWPPP coordinator for the facility is Mrs. Mary Smith (phone number: (301) 555-6434). Mrs. Smith's duties include the following:

- Create a SWPPP team to aid in the implementation of the SWPPP plan;
- Implement the SWPPP plan;
- Oversee maintenance practices identified as BMPs in the SWPPP;
- Implement and oversee employee training;
- Conduct or provide for inspection or monitoring activities;
- Identify other potential pollutant sources and make sure they are added to the plan;
- Identify any deficiencies in the SWPPP and make sure they are corrected;
- Prepare and submit reports; and
- Ensure that any changes in facility operation are addressed in the SWPPP.

To aid in the implementation of the SWPPP plan, the members of the SWPPP team are Tom Johnson and Mike Carter. Tom Johnson will ensure that all housekeeping and monitoring procedures are implemented, while Mike Carter will ensure the integrity of the structural BMPs.

3.0 FACILITY DESCRIPTION

3.1 Facility Location

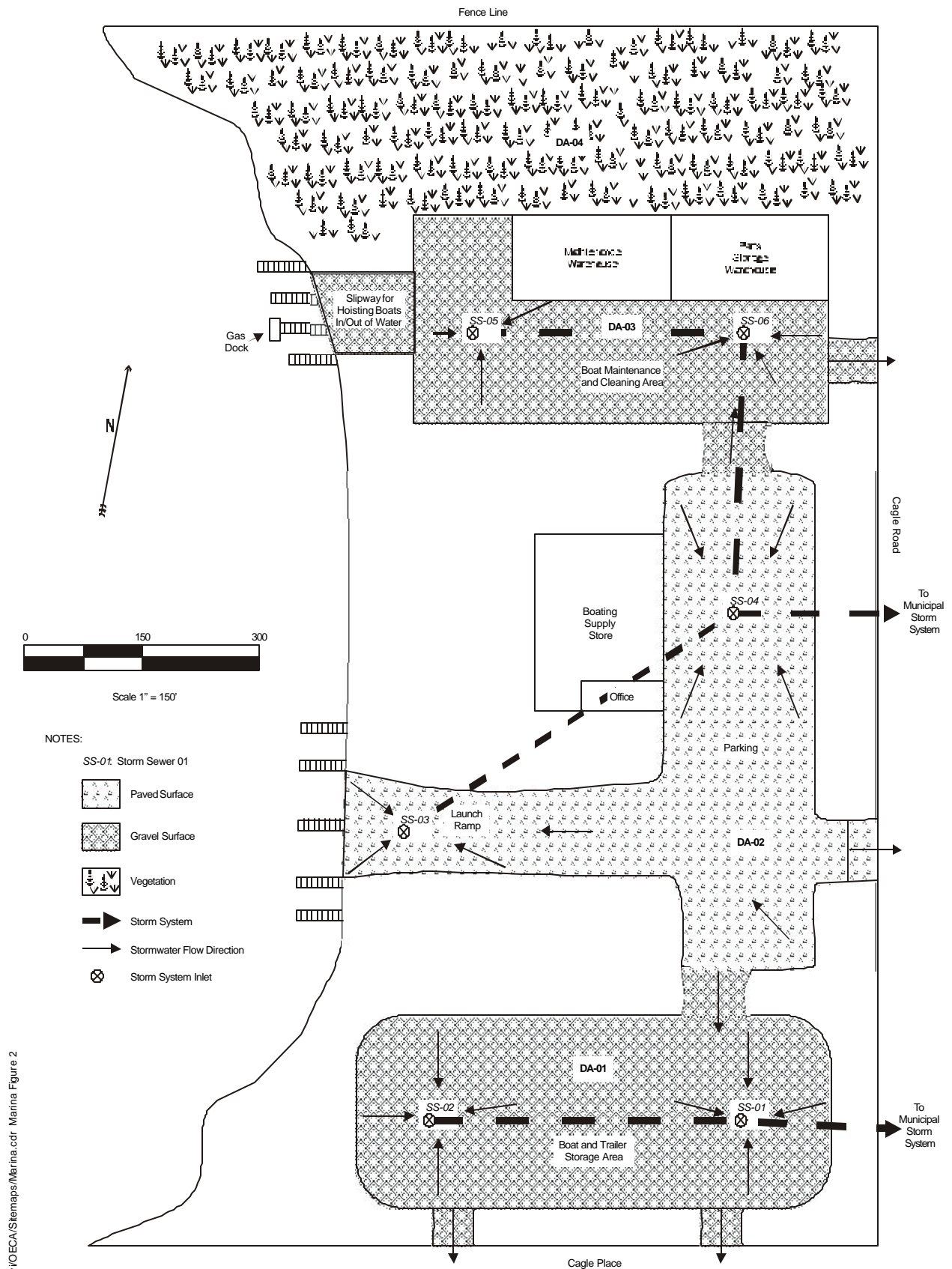
Magerr's Marina is located at 8200 Cagle Road in Oxon Hill, Maryland. Figure 1 presents a map showing the location of the site. The facility is a 25.6-acre parcel located in Section 30, Township 7N, Range 21 East. The facility is bound to the east by Cagle Road, to the south by Cagle Place, to the north by residential property, and to the west by the Potomac River.

3.2 Site Activities

Magerr's Marina consists of a boat and trailer storage area, a boat maintenance and cleaning area, a maintenance warehouse, a parts storage warehouse, a boat launch ramp, a gas station, a boating supply store, and an office building. Based on site activities, Magerr's Marina falls under the Standard Industrial Classification code of 4493. Typically, the facility operates 16 hours per day, 7 days per week, and maintains a staff of approximately 18 people.

3.3 Site Description

The total area of the site is approximately 25.6 acres and approximately 4.7 acres, or 19 percent, is impervious (i.e., pavement, buildings). The remainder of the site consists of a 3.1-acre compacted gravel boat and trailer storage area, a 2.6-acre compacted gravel boat maintenance and cleaning area, a 4.0-acre undeveloped wooded area, plus approximately 11.2 acres of miscellaneous unpaved roadways and undeveloped areas. Six storm drains are located throughout the property. Figure 2 is a facility layout map showing the major site features and the locations of the storm drains.



I:\w\OECA\Stemaps\Marina.cdr Marina Figure 2

Figure 2. Site Map with Drainage Areas and Storm Water Flow (Prior to BMP Implementation)

3.4 Storm Water Drainage System

The site can be divided into four major drainage areas. Table 1 describes the significant characteristics of each drainage area. Figure 2 shows the locations of the drainage areas and the apparent storm water drainage patterns. Drainage area DA-04 located along the north one-third of the property is undeveloped wooded area and generally covered by vegetation. Because of the high permeability of the soils and the absence of site activities in this area, this drainage area is not significant and will not be addressed further in this SWPPP. Paved parking areas are affected by industrial activities and are therefore included in this SWPPP. Drainage areas DA-01 (boat and trailer storage area), DA-02 (launch ramp and parking lot including roof drains from the office building and boating supply store), and DA-03 (boat maintenance and cleaning area, gas dock, and roof drains from the maintenance warehouse and parts storage warehouse) ultimately discharge to Cabin Branch Creek through a municipal storm system. Cabin Branch Creek empties into the Potomac River approximately 0.5 miles downstream. The Potomac River is a major tributary to Chesapeake Bay.

Table 1
Characteristics of Storm Water Drainage

Drainage Area⁽¹⁾	Storm water Flow Description	Total Size (sq. feet)	Impervious Surface Area (sq. feet)	Runoff Coefficient⁽²⁾	Drainage Discharge Point
DA-01	Boat and Trailer Storage Area: Overland flow across the compacted gravel area to storm inlets SS-01 and SS-02.	135,000	0	Medium	Cabin Branch Creek
DA-02	Parking and Launch Ramp Area: Sheet flow across the paved area to storm inlets SS-03 and SS-04. All roof drains from the office building and boating supply store discharge to storm inlet SS-04.	172,000	172,000	High	Cabin Branch Creek
DA-03	Boat Maintenance and Cleaning Area: Sheet flow across the compacted gravel area to storm inlets SS-05 and SS-06. Sheet flow across the paved gas station to storm inlet SS-05. All roof drains from the maintenance warehouse and parts storage warehouse discharge to storm inlet SS-06.	114,000	0	Medium	Cabin Branch Creek
DA-04	Vegetated Area: All vegetated areas located north of the boat maintenance and cleaning area. Flow from this area does not leave the site as storm water run off.	173,000	0	Low	None

(1) See Figure 2 for drainage areas.

(2) Runoff Coefficient:

High: 70-100% impervious (example: asphalt, buildings, paved surfaces)

Medium: 40-70% impervious (example: packed soils)

Low: 0-40% impervious (example: grassy areas)

4.0 IDENTIFICATION OF POTENTIAL STORM WATER CONTAMINANTS

This section identifies significant materials located at the facility that may potentially contaminate storm water. Additionally, the section presents a record of past spills and leaks, identifies potential areas for storm water contamination, and summarizes available storm water sampling data.

4.1 Significant Material Inventory

Materials used by the facility that have the potential to be present in storm water runoff are listed in Table 2. This table includes information regarding material type, chemical and physical description, and the specific regulated storm water pollutants associated with each material.

4.2 Historic Spill and Leak Record

According to the facility records, there have not been any spills in uncovered areas of the facility in the past three years.

4.3 Potential Areas for Storm Water Contamination

The following potential source areas of storm water contamination were identified and evaluated:

Boat and Trailer Storage Area: All boats and trailers not currently in use or awaiting maintenance are stored in the boat and trailer storage area. Storm water from this area can be potentially contaminated by fluids leaking on to the gravel surface from boats and trailers and by soil erosion. These contaminants may contain oil & grease, lead, cadmium, benzene, ethyl benzene, toluene, xylene, MTBE, chlorinated hydrocarbons, organophosphates, carbamates, arsenic, and nitrogen.

Parking and Launch Ramp Area: Employees and boaters park their vehicles in the parking lot area and boaters launch their boats in the launch ramp area. Storm water from this area can be potentially contaminated by leaking fluids from vehicles parked in the parking lot, leaking fluids from boats as they are

entering or exiting the river, by soil erosion, and by fish waste and trash accumulated by boaters. These contaminants may contain chlorinated hydrocarbons, organophosphates, carbamates, arsenic, nitrogen, stoddard solvent, petroleum distillates, ethylene glycol, propylene glycol, copper, lead, zinc, oil & grease, cadmium, benzene, ethyl benzene, toluene, xylene, and MTBE.

Boat Maintenance and Cleaning Area: Maintenance, cleaning, and fueling activities take place in the boat maintenance and cleaning area. Storm water from this area can be potentially contaminated by fluids leaking from the boats during maintenance activities, wastewater from boat cleaning operations, and spills and leaks during fueling activities. These contaminants may contain benzene, toluene, MTBE, stoddard solvent, petroleum distillates, metal oxides, calcium carbonate, methylene chloride, tetrachloroethane, and perchloroethylene.

Table 3 presents site specific information regarding storm water pollution potential from each of these areas.

4.4 A Summary of Available Storm Water Sampling Data

Magerr's Marina has no available sampling data because sampling has not been conducted at the site to date.

Table 2**Significant Materials Used at Magerr's Marina**

Trade Name Material	Chemical/Physical Description⁽¹⁾	Storm Water Pollutants⁽¹⁾
Paint thinner	Light colored liquid	Xylenes, ethyl benzene, stoddard solvent, petroleum distillates
Paint	Various colored liquid	Metal oxides, stoddard solvent, talc, calcium carbonate, arsenic
Paint removers	Colorless liquid	Methylene chloride, tetrachloroethane, trichloroethene, trichloroethylene
Pesticides (insecticides, fungicides, herbicides, rodenticides)	Various colored to colorless liquid, powder, pellets, or grains	Chlorinated hydrocarbons, organophosphates, carbamates, arsenic
Fertilizer	Liquid or solid grains	Nitrogen, phosphorous
Degreasing Solvents	Colorless or white liquid	Trichloroethylene, trichloroethane, perchloroethylene, methylene chloride, tetrachloroethane
Chemical strippers	Clear, colorless liquid	Methylene chloride
Cleaning solutions	Clear, various colored liquid	Chlorine, ammonia, phosphates, petroleum distillates
Wood preservatives	Clear amber or dark brown liquid	Stoddard solvent, petroleum distillates, arsenic, copper, chromium
Antifreeze	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)
Hydraulic oil/fluids	Brown oily petroleum hydrocarbon	Mineral oil
Gasoline	Colorless, pale brown or pink petroleum hydrocarbon	Benzene, ethyl benzene, toluene, xylene, MTBE
Diesel Fuel	Clear, blue-green to yellow liquid	Petroleum distillate, oil & grease, naphthalene, xylenes
Lubricants	Amber liquid or brown paste	Kerosene, mineral oil, petroleum distillates
Wastewater from hydroblasting	Water	Oil and grease, solids, heavy metals
Batteries	Clear, slightly yellow liquid	Sulfuric acid, heavy metals
Switches	Viscous silver metallic liquid	Mercury

(1) Data obtained from MSDSs when available.

Table 3

Locations of Potential Sources of Storm Water Contamination

Drainage Area⁽¹⁾	Potential Storm Water Contamination Point	Potential Pollutant	Potential Problem
DA-01	Boat and Trailer Storage Area	Pesticides, fertilizer, antifreeze, crankcase oil, hydraulic oil/fluids, gasoline, diesel fuel	Leaking fluids from boats and trailers as they await maintenance or use. Soil erosion.
DA-02	Parking Lot and Launch Ramp	Pesticides, fertilizer, antifreeze, crankcase oil, hydraulic oil/fluids, gasoline, diesel fuel	Leaking fluids from parked vehicles in the parking lot. Leaking fluids from boats as they enter and exit the river. Soil erosion. Litter and fish waste accumulated by boaters.
DA-03	Boat Maintenance and Cleaning Area	All materials in Table 2	Fluid spills during maintenance activities, fuel leaks during fueling, and wastewater from cleaning operations.

(1) See Figure 2 for drainage areas.

5.0 STORM WATER MANAGEMENT CONTROLS

This section discusses the storm water management controls required by the permit and describes the management practices selected to address the areas of concern identified in Section 4 of this SWPPP.

5.1 Compliance with Other Programs

Storage of waste petroleum products and spent cleaning solvents complies with the requirements of the Resource Conservation and Recovery Act (RCRA). Under RCRA, Magerr's Marina conducts weekly inspections of the area storing the fluids to verify placarding, storage times, and the integrity of storage containers. During the RCRA inspection, leaks or spills which may impact storm water are noted and cleaned immediately. Additionally, underground storage tanks (USTs) associated with the gas station comply with all UST regulations. The BMPs included in this SWPPP are also intended to prevent soil and ground water contamination which could also lead to a CERCLA enforcement action. Magerr's Marina has also developed a Spill Prevention Control and Countermeasure (SPCC) Plan which includes BMPs for oil storage. The BMPs in the SPCC Plan prevent storm water contamination. Since these BMPs are included in the SPCC Plan, they are not included in this SWPPP.

5.2 Storm Water Management Practices

Upon reviewing the potential sources of storm water contamination at the facility and the facility operations, Magerr's Marina prepared a list of planned Best Management Practices (BMPs). When implemented, these BMPs will control the potential discharge of pollutants in storm water runoff for each area of concern. Passive treatment BMPs were developed with a goal to remove 80% of all storm water pollutants. The list of BMPs was reviewed by the operations manager for applicability and feasibility. Figure 3 shows the structural BMPs that will be implemented to prevent storm water contamination.

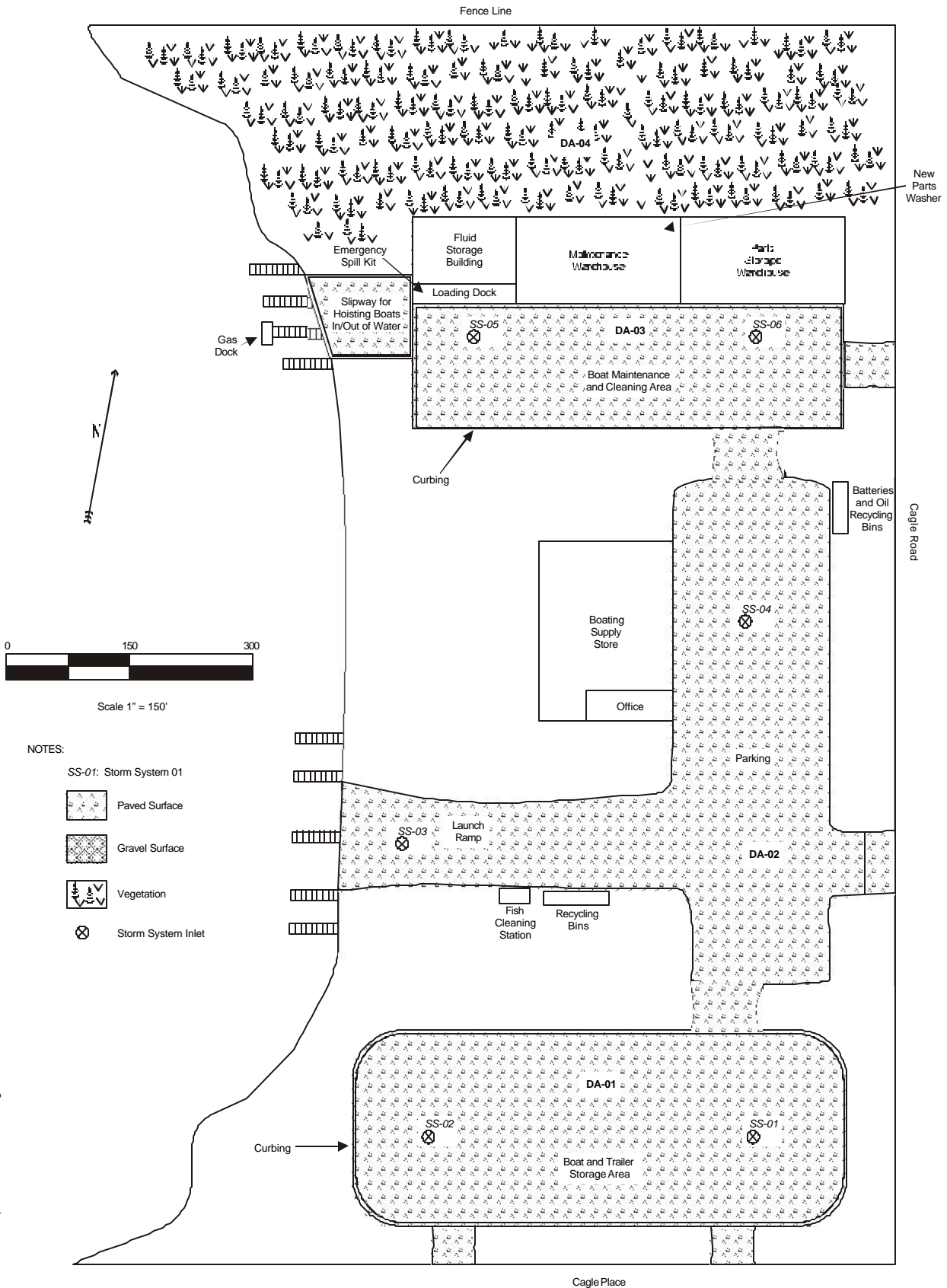


Figure 3. Site Map with Structural BMPs

DA-01

To prevent storm water impacts in the boat and trailer storage area (DA-01), the following BMPs will be implemented:

- As of the date of this plan, Magerr's Marina will inspect all entering boats and trailers for leaks. For those with leaking fluids, drip pans will be placed under the detected leaks in order to collect fluid that would previously have dripped on to the gravel and ultimately discharge into the Potomac River.
- As of the date of this plan, boats and trailers specifically stored in this area to await maintenance will not be stored for more than two weeks.
- Within 30 days of the date of this plan, absorbent oil socks will be placed on storm system inlets SS-01 and SS-02 as a secondary preventative measure should the drip pans fail to contain all the leaking fluids.
- Within in one year of the date of this plan, the boat and trailer storage area will be paved and curbing will be placed along the perimeter to provide for better containment and cleanup of leaking fluids.

DA-02

To prevent storm water contamination in the parking lot and launch ramp area (DA-02), the following BMPs will be implemented:

- Within 30 days of the date of this plan, Magerr's Marina will place absorbent oil socks on storm system inlets SS-03 and SS-04. This will prevent fluids that leak from parked cars and boats on the launch ramp from entering the storm drains.
- Recycling bins will be constructed by the launch ramp within three months of the date of this plan to minimize solid wastes produced by boaters. These bins will be used to collect plastics, glass, aluminum,

and paper and will prevent rain from transporting the waste into waterways.

- Within three months of the date of this plan, a fish cleaning facility will be constructed for the boaters' use that will provide for the proper disposal of fish waste.
- Within 3 months of the date of this plan, oil and battery recycling bins will be constructed in the northeast corner of the parking lot.

Within one year of the date of this plan, a sump will be constructed on the launch ramp to collect runoff down the ramp. Periodically, settled material collected in the sump will be transferred to 55-gallon drums for off-site disposal.

- To promote the use of these pollution prevention facilities, a monthly newsletter will be established to educate boaters on proper waste minimization.

DA-03

The boat maintenance and cleaning area (DA-03) currently has the greatest potential to impact storm water at the site due to boat fueling, cleaning, and maintenance activities. To prevent storm water pollution from this area, the following BMPs will be implemented:

- As of the date of this plan, cleaning operations will never take place dock-side or in the water. Instead, all operations will take place in the boat cleaning and maintenance area.

Within 30 days of the date of this plan, a fuel spill prevention plan will be prepared as a resource to prevent spills, or in the event of a spill, to aid in the clean-up process. The plan will address proper procedures and maintenance of the gas dock equipment and identify supplies and equipment for quick spill response.

- Within 30 days of the date of this plan, absorbent oil socks will be placed on storm system SS-05 and SS-06.
- Within 30 days of the date of this plan, solvent cleaning will be performed in two self-contained parts washers. Magerr's has

contracted with a local vendor (Safe Solutions of Oxon Hill Maryland) to supply the parts washers and solvent. The vendor will remove accumulated oily sludge and solvent from the parts washer and transport the material off-site within ninety days to comply with the RCRA standards for a Large Quantity Generator (LQG). All parts washers will be stationed inside the maintenance warehouse.

- Within 30 days of the date of this plan, drip pans will be used at all times when painting.
- Within 30 days of the date of this plan, instead of using chemical strippers for hull maintenance and paint removal operations, mechanical sanders and scraping equipped with vacuums will be used to prevent the migration of debris and residue.
- Within 30 days of the date of this plan, during the handling of drums, storm system SS-05 will be covered to contain possible spills during clean up.
- Within 3 months of the date of this plan, fuel pump nozzles at the gas dock will be equipped with automatic back pressure shut-off to prevent overfilling of fuel tanks.

Within 3 months of the date of this plan, the underground storage tank (UST) storing fuel will be equipped with an overfill protection valve which restricts flow when the tank capacity reaches ninety percent.

Within 3 months of the date of this plan, the UST fill port will be equipped with a containment bucket with a minimum capacity of five gallons.

- Within 6 months of the date of this plan, a sump will be constructed on the slipway for hoisting boats into and out of the water. The sump will collect all runoff from pressure washing activities and material collected in the sump will be periodically transferred into 55-gallon drums for off-site disposal.
- Within 6 months of the date of this plan, the area will be sloped, paved, and curbed to contain all spilled fluids and wastewater.
- Within one year of the date of this plan, Magerr's Marina will construct a new fluid storage building and covered loading dock next to the maintenance warehouse to prevent storm water contamination from fluid handling and storage. These facilities will be constructed within

one year of the date of the plan. All fluids involved in maintenance activities and all 55-gallon drums of wastewater collected from cleaning operations will be stored in this building.

- Immediately after the construction of the loading dock, to prevent storm water contamination from the loading dock for the fluid storage building, no 55-gallon drum handling will take place during rain events. This will prevent any spills from combining with storm water and discharging from the site.
- Within 30 days of the construction of the fluid storage building, all containers in the fluid storage building will be placed on pallets with secondary containment (a plastic grate on top of a tub approximately 9 inches deep to contain any leaks or spills).
- Within 30 days of the construction of the fluid storage building, weekly inspections of the fluid storage building will be conducted to look for leaks or deterioration of fluid storage containers. Any leaks identified during the inspection will be immediately cleaned using a dry absorbent.
- Within 30 days of the construction of the fluid storage building, an emergency spill kit and telephone will be placed inside the fluid storage building.
- Within 30 days of the construction of the loading dock, Magerr's Marina will place an emergency spill kit on the loading dock.
- For spills which can not be managed by the emergency spill kit, the local fire department will be immediately telephoned.
- All spills which reach the storm system will be reported to the National Response Center at 1-800-424-8802.

5.3 Storm Water Treatment

No storm water treatment measures are currently in place at the facility. As discussed above, Magerr's Marina will install sumps in the slipway and launch ramp to collect potential runoff.

6.0 FACILITY MONITORING PLAN

Visual inspections of all storm system inlets will be made quarterly during dry weather conditions for evidence of non-storm water discharges. The visual inspection will be completed by an employee under the SWPPP Coordinators' direction. The dry weather inspections will verify the site is not discharging sanitary or process water to storm system. Information recorded on the annual inspection log shall include: date of inspection, storm system inlet location, inspection results, and potential significant sources of non-storm water discovered through testing. Blank dry-weather inspections forms can be found in Appendix A of this SWPPP.

Magerr's Marina will perform quarterly visual inspections of all storm system inlets during rain events to look for evidence of storm water contamination. Inspections will be conducted within the first thirty minutes of discharge or soon thereafter, but not exceeding 60 minutes. The visual inspection shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen, or other obvious indicators of storm water pollution. Information recorded during the quarterly inspection shall include: date of inspection, storm system inlet location, inspection results, and potential significant sources of storm water contaminants if discovered. Blank quarterly inspections forms can be found in Appendix A of this SWPPP.

An annual storm water compliance inspection will be conducted approximately one year following implementation of this SWPPP and annually thereafter. The inspection will determine if the BMPs have been implemented and will assess their effectiveness. The inspection will also determine if site operations have changed since development of this SWPPP. If operational changes have been made, the SWPPP Coordinator will determine if those changes will impact storm water quality and develop new BMPs to address the change. All operational changes and new BMPs will be recorded in this SWPPP. Additionally, the inspection date, the inspection personnel, the scope of the inspection, major observations, and any needed revisions will be recorded. Revisions to the plan will occur within fourteen days after the annual inspection. Blank annual compliance inspections forms can be found in Appendix A of this SWPPP.

7.0 COMPLIANCE AND REPORTING REQUIREMENTS

7.1 SWPPP and SWPPP Summary

As per the requirements of Magerr's Marina's general permit number MD-S1234567-8, Magerr's Marina is required to prepare a SWPPP by the effective date of September 15, 2000. The SWPPP will be kept at the facility and will be made available to the state or federal compliance inspection officer upon request.

7.2 Employee Training

An employee training program will be developed and implemented to educate employees about the requirements of the SWPPP. This education program will include background on the components and goals of the SWPPP and hands-on training in spill prevention and response, good housekeeping, proper material handling, disposal and control of waste, container filling and transfer, and proper storage, washing, and inspection procedures. All new employees will be trained within one week of their start date. Additionally, all employees will be required to participate in an annual refresher training course. An employee sign-in sheet for the refresher course can be found in Appendix A of this document. The training program will be reviewed annually by the SWPPP coordinator to determine its effectiveness and to make any necessary changes to the program.

7.3 Implementation Schedule

In accordance with the State of Maryland, the SWPPP implementation schedule is presented in Table 4. Table 5 presents the implementation schedule for the individual BMPs. This schedule corresponds to the September 15, 2000 effective date of the SWPPP.

Table 4

Implementation Schedule

Storm Water Pollution Prevention Action Items	Implementation Date
Implement employee training	Immediate
Biannual visual inspections of outfalls	March 15, 2001; September 15, 2001; and biannually thereafter
Quarterly visual monitoring during rain events	December 15, 2000; March 15, 2001; June 15, 2001; September 15, 2001; and quarterly thereafter
Implementation of BMPs	See Table 5
Annual facility site compliance inspection	September 15, 2001 and annually thereafter

Table 5

BMP Implementation Schedule

Drainage Area⁽¹⁾	Best Management Practices	Implementation Date
DA-01	All boats and trailers entering the boat and trailer storage area will be inspected for leaks.	Immediately
	Boats and trailers stored in this area specifically for maintenance purposes will not be stored for more than 14 days.	Immediately
	Drip pans will be placed under any detected leaks.	Within 30 days
	Oil catches (e.g., absorbent socks) will be placed on storm system inlets SS-01 and SS-02.	Within 30 days
	The boat and trailer storage area will be paved and curbing placed along the perimeter to prevent uncontrolled runoff.	Within 1 year
DA-02	Oil catches (e.g., absorbent socks) will be placed on storm system inlets SS-03 and SS-04.	Within 30 days
	Recycling bins will be constructed next to the launch ramp to collect plastics, glass, aluminum, and paper.	Within 3 months
	A fish cleaning facility will be constructed next to the launch ramp to aid in proper disposal of fish waste.	Within 3 months
	Recycling bins will be constructed in the northeast corner of the parking lot to collect oil and batteries. The launch ramp will be equipped with a sump to collect runoff down the ramp.	Within 3 months
	Material collected in the sump will be periodically placed in 55-gallon drums for off-site disposal.	Within 1 year
DA-03	No boat cleaning activities will take place in the water or dock-side.	Immediately
	Drip pans will be used at all times when painting.	Immediately
	Oil catches (e.g., absorbent socks) will be placed on the storm system inlets SS-05 and SS-06.	Within 30 days
	A spill prevention plan will be prepared.	Within 30 days
	An emergency fuel spill kit will be placed at the gas dock.	Within 30 days

Table 5 (Continued)

Drainage Area⁽¹⁾	Best Management Practices	Implementation Date
DA-03 (Continued)	Solvent cleaning will be preformed in two self-contained parts washers. A monthly solvent recovery service that provides parts cleaning equipment, replaces solvent, and collects waste solvent for recovery will be used.	Within 30 days
	Mechanical sanders and scrapers equipped with vacuums will be used for hull maintenance and paint removal operations.	Within 30 days
	Fuel pump nozzles will be equipped with automatic back pressure shut-off.	Within 3 months
	The underground storage tank (UST) storing fuel will be equipped with an overflow protection valve.	Within 3 months
	The UST fill port will be equipped with a five-gallon containment bucket.	Within 6 months
	The boat maintenance and cleaning area will be paved and sloped to contain all spilled fluids. Curbing will be placed along the perimeter of the newly paved area.	Within 6 months
	The slipway where boats are lifted in and out of the water will be equipped with a sump to collect runoff from pressure washing activities. Material collected in the sump will be periodically placed in 55-gallon drums for off-site disposal.	Within 6 months
	A fluid storage building, with a covered loading dock, will be constructed next to the maintenance warehouse.	Within 1 year
	All fluid storage containers in the fluid storage building will be placed on pallets with secondary containment to collect spills and leaks. The fluid storage building will be inspected weekly for leaks and spills. All spills will be treated immediately with absorbent and drummed. Defective storage containers will be repaired or properly disposed. An emergency spill kit and telephone will be placed inside the fluid storage building.	Within 30 days of fluid storage building construction
	No drum handling will occur on the fluid storage building loading dock during rain events. In addition, when drums at the fluid storage loading dock are handled (loading on to shipping trucks), storm system inlet SS-05 will be covered to contain the release during clean up.	Within 30 days of loading dock construction
	An emergency spill kit will be placed on the loading dock. Employee training regarding the use of the spill kit will be provided.	Within 30 days of loading dock construction

Table 5 (Continued)

7.4 Record Retention Requirements

Records described in the SWPPP must be retained on site for 5 years beyond the date of the cover letter (September 15, 2000) notifying the facility of coverage under a storm water permit, and shall be made available to the state or federal compliance inspection officer upon request. Additionally, employee training records and waste and recycling receipts or vouchers shall also be maintained.

7.5 Principal Executive Officer Signature

In accordance with the state of Maryland, this plan has been approved and signed by Mr. Mike Jones, the authorized representative responsible for the operation of the facility.

7.6 Provisions for Amendment of the Plan

If the facility expands, experiences any significant production increases or process modifications, or changes any significant material handling or storage practices which could impact storm water, the SWPPP will be amended appropriately. The amended SWPPP will have a description of the new activities that contribute to the increased pollutant loading and planned source control activities.

The SWPPP will also be amended if the state or federal compliance inspection officer determines that it is ineffective in controlling storm water pollutants discharged to waters.

7.7**Corporate Certification**

I 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 manages the system, or those persons 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

Date

Appendix A

Inspection Logs

Refresher Course
Employee Sign-In Sheet

Date	Employee Name	Employee Signature

Quarterly Non-Storm Water Discharge Assessment Log

Date	Outfall Number or Description	Flow ⁽¹⁾ (Y/N)	If Flow is Yes, Complete This Section		
			Possible Source	Observations ⁽²⁾	Corrective Action
	DA-01 – SS-01, SS-02		Leaking fluids from boats and trailers as they await maintenance or use. Soil erosion		
	DA-02 – SS-03, SS-04		Leaking fluids from parked vehicles in the parking lot. Leaking fluids from boats as they enter and exit the river. Soil erosion. Litter and fish		
	DA-03 – SS-05, SS-06		Fluid spills during maintenance activities, fuel leaks during fueling, and wastewater from cleaning operations.		

(1) Evaluation shall take place during dry periods

(2) Observations include flow, stains, sludge, color, odor, or other indications of a non-storm water discharge

Inspector's Name _____

Quarterly Visual Monitoring Inspection Log

Date	Time⁽¹⁾	Outfall Number or Description	Weather Conditions	Observations⁽²⁾	Probable Source of Any Observed Contamination
		DA-01 – SS-01, SS-02			Leaking fluids from boats and trailers as they await maintenance or use. Soil erosion
		DA-02 – SS-03, SS-04			Leaking fluids from parked vehicles in the parking lot. Leaking fluids from boats as they enter and exit the river. Soil erosion. Litter and fish waste
		DA-03 – SS-05, SS-06			Fluid spills during maintenance activities, fuel leaks during fueling, and wastewater from cleaning operations.

(1) Inspections shall be conducted within the first thirty minutes of discharge or as soon thereafter as practical, but not exceeding sixty minutes

(2) Observations include color, odor, turbidity, floating solids, foam, oil sheer, etc.

Inspector's Name _____

Annual Facility Site Compliance Inspection Log⁽¹⁾

A-4

Date	Drainage Area	Potential Pollutants and Source	Changes in Drainage Conditions or Operations Since Last Inspection ⁽²⁾	BMP Effective (Y/N)	Current and Proposed BMPs	Implementation Schedule for proposed BMPs
	DA-01	Leaking fluids from boats and trailers as they await maintenance or use. Soil erosion.				

	DA-02	Leaking fluids from parked vehicles in the parking lot. Leaking fluids from boats as they enter and exit the river.				
	DA-03	Fluid spills during maintenance activities, fuel leaks during fueling, and wastewater from cleaning operations.				

(1) Scope of this inspection is to verify that BMPs are properly operated and are adjusted if operational or site changes require new BMPs to prevent storm water contamination

(2) Changes in drainage conditions or operations require revisions to the SWPPP

Inspector's Name _____