SAMPLE
Storm Water Pollution Prevention Plan

Magerr's Airport

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 airports.

Development, implementation, and maintenance of the SWPPP will provide Magerr's Airport 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 Airport is located at 1200 Addison Road in Capital Heights, Maryland. Figure 1 presents a map showing the location of the site. The facility is a 64.7-acre parcel located in Section 30, Township 7N, Range 21 East. The facility is bound to the north by Airport Road, to the east by Addison Road, to the south by residential property, and to the west by commercial property.

3.2 Site Activities

Magerr's Airport consists of a parking lot, a terminal, an aircraft storage area, an aircraft maintenance area, a cargo facility, a hanger, a parts storage warehouse, a fueling station, a taxiway/runway area, and two runways. Typically, the facility operates 18 hours per day, 7 days per week, and maintains a staff of approximately 30 people.

3.3 Site Description

The total area of the site is approximately 64.7 acres, and approximately 30 acres, or 47 percent, is impervious (i.e., pavement, buildings). The remainder of the site consists a 4.0-acre compacted gravel aircraft storage area, an 8.1-acre undeveloped wooded area, plus approximately 22.6 acres of miscellaneous unpaved roadways and undeveloped areas. Nine 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.

3.4 Storm Water Drainage System

The site can be divided into 5 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-05 located along the southeast corner of the property is undeveloped wooded area and is generally covered by vegetation. Because of

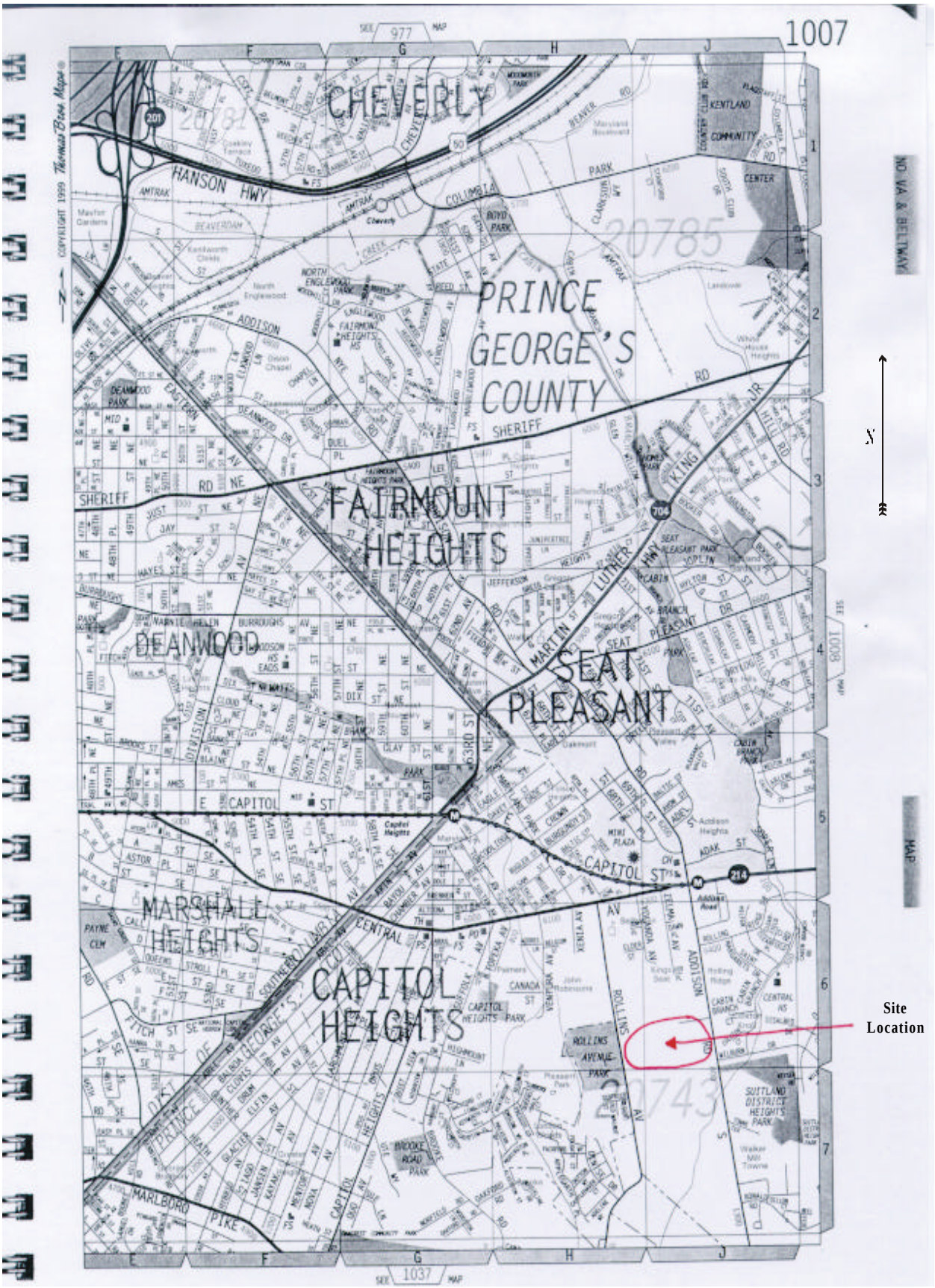
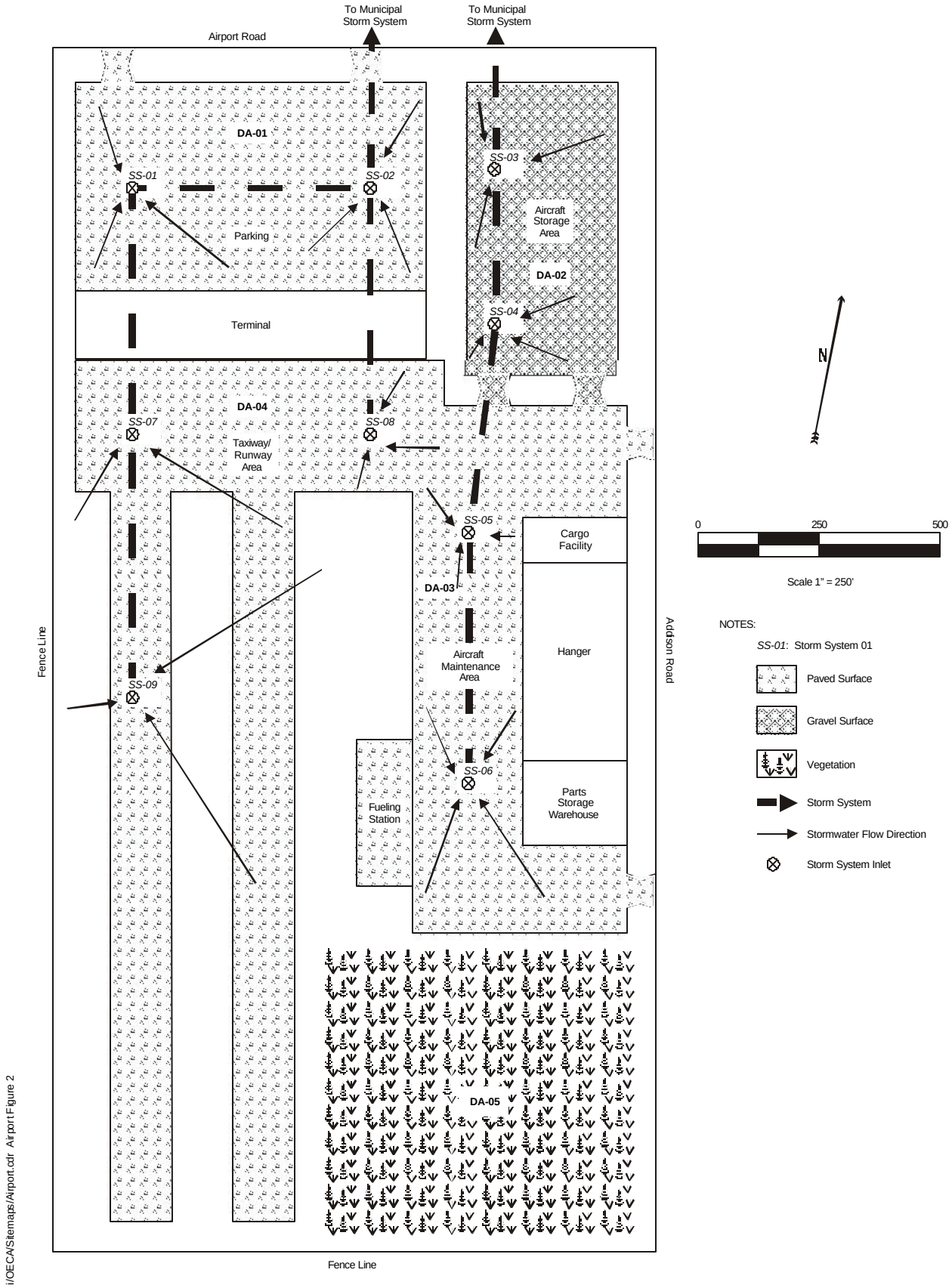


Figure 1. Facility Location



I:/fwi/OECA/Sitemaps/Airport.cdr Airport Figure 2

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

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	**Parking Area:** Sheet flow across the paved area to storm inlets SS-01and SS-02. Roof drains from the terminal discharge to both storm inlets.	258,000	258,000	High	Cabin Branch Creek
DA-02	**Aircraft Storage Area:** Overland flow across the compacted gravel area to storm inlets SS-03 and SS-04.	176,000	0	Medium	Cabin Branch Creek
DA-03	**Aircraft Maintenance Area:** Sheet flow across the paved area to storm inlets SS-05 and SS-06. Roof drains from the cargo facility discharge to storm inlet SS-05. Roof drains from the hanger and parts storage warehouse discharge to storm inlet SS-06.	398,000	398,000	High	Cabin Branch Creek
DA-04	**Taxiway/Runway Area:** Sheet flow across the paved area to storm inlets SS-07, SS-08, and SS-09. Roof drains from the terminal discharge to storm inlets SS-07 and SS-08.	547,000	547,000	High	None
DA-05	**Grass-covered Area:** All grass-covered areas located south of the aircraft maintenance area. Flow from this area does not leave the site as storm water run off.	352,000	352,000	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 soil)

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

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 (parking lot and roof drains from the terminal), DA-02 (aircraft storage area), DA-03 (aircraft maintenance area and roof drains from the cargo facility, hanger, and parts storage warehouse), and DA-04 (taxiway/runway area and roof drains from the terminal) ultimately discharge to Cabin Branch Creek through a municipal storm system. Cabin Branch Creek discharges into Beaver Dam Creek approximately two miles downstream, which in turn empties into the Anacostia River approximately 8 miles downstream. The Anacostia River is a major tributary to Chesapeake Bay.

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:

- Parking lot: Employees and passengers park their vehicles in the parking lot area. Storm water from this area can be potentially contaminated by leaking fluids from the parked vehicles. These contaminants may include benzene, ethyl benzene, toluene, xylene, MTBE, mineral oil ethylene glycol, propylene glycol, copper, lead, and zinc.

  Aircraft storage area: Aircraft awaiting maintenance or use are stored in the aircraft storage area. Storm water from this area can be potentially contaminated by leaking fluids from airplanes. These contaminants may include naphtha, naphthalene, kerosene, urea, ethylene glycol, and propylene glycol.

- Aircraft maintenance area: Maintenance, fueling, deicing, and cleaning

operations are performed in the aircraft maintenance area. Storm water from this area can be potentially contaminated by deicing/anti-icing chemicals, fluids leaking from aircraft during maintenance activities, wastewater from aircraft cleaning operations, and spills and leaks from fueling operations. These contaminants may include ethylene glycol, propylene glycol, copper, lead, zinc, oil & grease, trichloroethylene, trichloroethane, perchloroethylene, urea, stoddard solvent, naphtha, bisphenol, and arsenic.

- Taxiway/runway area: Passengers load aircraft and aircraft depart and arrive at the airport in the taxiway/runway area. Storm water from this area can be potentially contaminated by leaking fluids from planes as passengers are boarding and as they are awaiting take off, by leaking fluids from tow vehicles and baggage vehicles, and by deicing/anti-icing materials that may drip off the aircraft during take-off. These contaminants may include benzene, ethyl benzene, toluene, xylene, MTBE, naphtha, naphthalene, kerosene, urea, ethylene glycol, propylene, and glycol.

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 Airport has no available sampling data because sampling has not been conducted at the site to date.

Table 2

Significant Materials Used at Magerr's Airport

Trade Name Material	Chemical/Physical Description[1]	Storm Water Pollutants[1]
Hydraulic oil/fluids	Brown oily petroleum hydrocarbon	Mineral oil
Brake fluid	Ethylene glycol based syrupy liquid	Ethylene glycol
Antifreeze/coolant	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)
Oil recovered from steam cleaning	Brown oily water	Oil & grease, solids
Wastewater recovered from steam cleaning	Water	Oil & grease, solids
Gasoline	Colorless, pale brown or pink petroleum hydrocarbon	Benzene, ethyl benzene, toluene, xylene, MTBE
Jet fuel (aviation or turbine fuel)	Clear white to yellow liquid	Naphtha, naphthalene, kerosene
Degreasing Solvents	Colorless or white liquid	Trichloroethylene, trichloroethane, perchloroethylene
Paint	Various colored liquids	Stoddard solvent, naphtha, bisphenol, arsenic
Deicing/anti-icing materials	White crystals/powder or colored oily liquid	Urea, ethylene glycol, propylene glycol
Lubrication	Amber liquid or brown paste	Kerosene, mineral oil, petroleum distillates
Fertilizer	Liquid or solid grains	Nitrogen, phosphorous
Herbicides, pesticides	Various colored to colorless liquid, powder, pellets, or grains	Chlorinated hydrocarbons, organophosphates, carbamates, arsenic

(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	Parking lot	Hydraulic oil/fluids, brake fluid, antifreeze/coolant, gasoline	Leaking fluids from passenger and employee vehicles in the parking area.
DA-02	Aircraft storage area	Hydraulic oil/fluids, brake fluid, jet fuel (aviation or turbine fuel), deicing/anti-icing materials, fertilizer, herbicides, pesticides	Leaking fluids from the aircraft as they await maintenance or use. Soil erosion in the gravel storage area.
DA-03	Aircraft maintenance area	All materials in Table 2	Fluid spills during maintenance activities, fuel leaks or spills during fueling, wastewater from cleaning operations, and spills during deicing/anti-icing operations.
DA-04	Taxiway/runway area	All materials in Table 2	Leaking fluids from aircraft during passenger loading and from aircraft awaiting take-off. Leaking fluids from baggage and tow vehicles. Deicing/anti-icing chemicals dripping off aircraft during take-off.

(1) See Figure 2 for drainage areas

5.0 STORM WATER MANAGEMENT CONTROLS

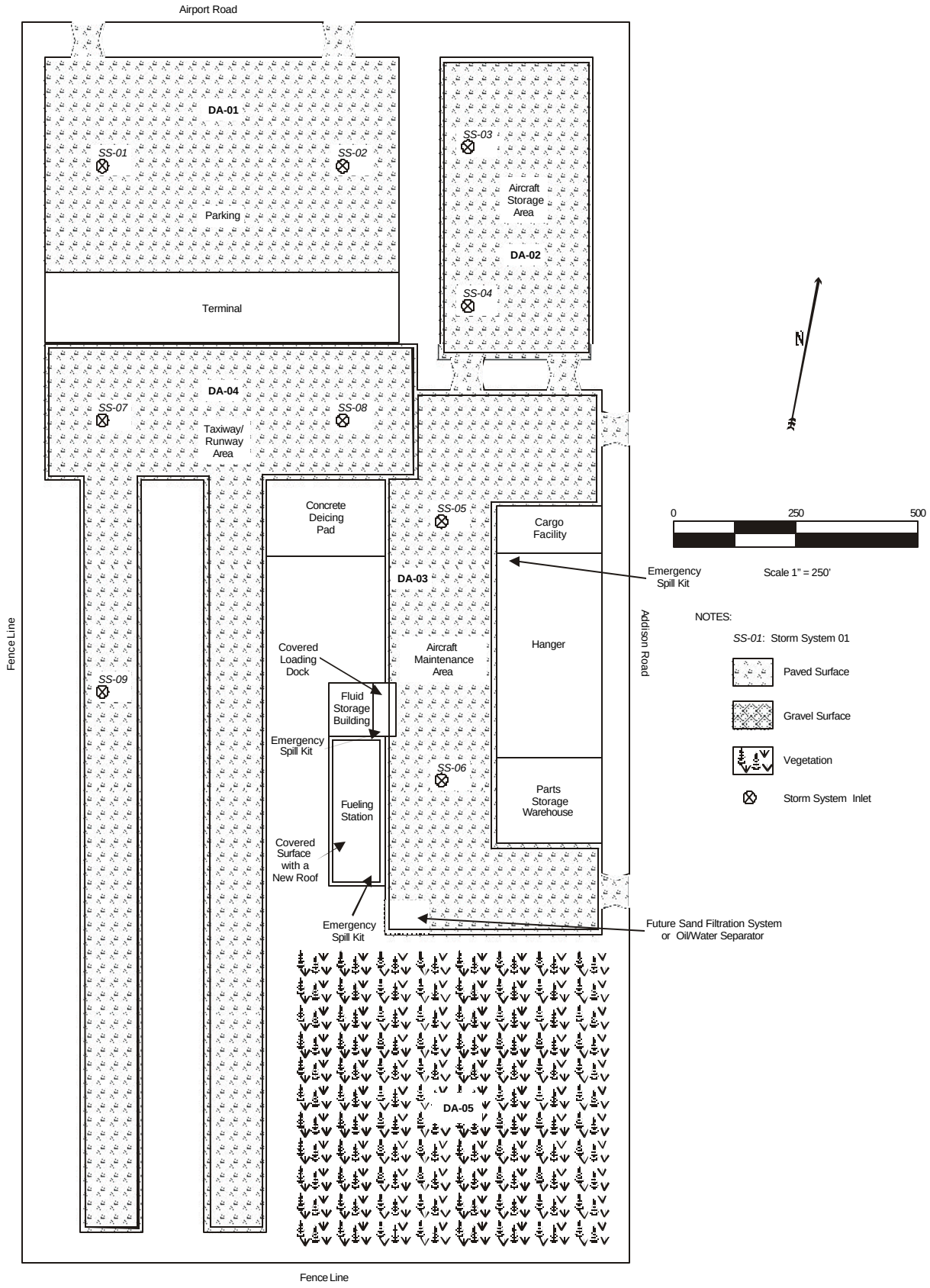
This section discusses the storm water management controls required by the permit and describes the management practices selected to address the areas of concern identified in Section 4 of this SWPPP.

5.1 Compliance with Other Programs

Storage of various aircraft fluids complies with the requirements of the Resource Conservation and Recovery Act (RCRA). Under RCRA, Magerr's Airport 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, the underground storage tanks (USTs) associated with the fueling station comply with all UST regulations. The BMPs included in this SWPPP are also intended to prevent soil and ground water contamination which could lead to a CERCLA enforcement action. Magerr's Airport 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 pollutants at the facility and the facility operations, Magerr's Airport prepared a list of planned Best Management Practices (BMPs). When implemented, these BMPs will control the discharge of potential 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.



I:/fw/OECA/Sitemaps/Airport.cdr Airport Figure 3

Figure 3. Site Map with Structural BMPs

DA-01

To prevent leaking fluids from contaminating storm water in the parking lot (DA-01), the following BMP will be implemented:

- Within 30 days of the date of this plan, absorbent oil socks will be placed on storm system inlets SS-01 and SS-02.

DA-02

To prevent storm water impacts in the aircraft storage area (DA-02), the following BMPs will be implemented:

- As of the date of this plan, Magerr's Airport will inspect all aircraft entering the aircraft storage area for leaks.
- As of the date of this plan, aircraft 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-03 and SS-04.
- Within 30 days of the date of this plan, drip pans will be placed under any detected leaks in order to collect fluid that would previously have dripped on to the gravel and ultimately discharge into Cabin Branch Creek.
- Within two years of the date of this plan, the aircraft storage area will be paved and curbing will be placed along the perimeter to provide for better containment and cleanup of leaking fluids.

DA-03

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

- As of the date of this plan, all hoses used in the fueling operation will be inspected for leaks prior to use.

- To prevent pollution from painting and maintenance activities, these operations will take place in the hanger whenever possible, as of the date of this plan.

- As of the date of this plan, preventive anti-icing will be performed to minimize the amount of deicing/anti-icing agents applied to the aircraft. Prior to the start of icing conditions, anti-icing materials will be applied to the aircraft preventing large quantities of ice from accumulating.

- Eventually, urea and glycol based deicing/anti-icing chemicals will be phased out and replaced with less toxic potassium acetate-based chemicals, but until then, deicing fuilds containing urea will be channeled to grassy areas.

- Within 30 days of the date of this plan, the underground storage tanks (USTs) storing the jet fuel will be equipped with an overfill prevention valve which restricts flow when the tank capacity reaches ninety percent.

- Within 30 days 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 30 days of the date of this plan, the aircraft and the fueling vehicles used to transfer fuel from the UST to the aircraft will be equipped with overfill protection equipment.

- Within 30 days of the date of this plan, temporary secondary containment will be placed around all areas where leaks could take place during fueling operations.

- Within 30 days of the date of this plan, a 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 fueling station equipment and identify supplies and equipment for quick spill response. A copy of the plan will be stored at the fueling station and on the fueling vehicle.

- Within 30 days of the date of this plan, the supplies necessary to clean a fuel spill (a broom, a shovel, kitty litter, saw dust, a 55-gallon drum) will be stored in a convenient location at the fueling station and on the fueling vehicle so they will be immediately available in the event of a spill.

- Within 30 days of the date of this plan, water from steam cleaning operations will drain into a 55-gallon drum for off-site disposal. Any wastewater not collected in the drum during steam cleaning will be vacuumed and placed into the drum.

- Within 30 days of the date of this plan, absorbent oil socks will be placed on storm system inlets SS-05 and SS-06 and curbing will be placed along the perimeter of the aircraft maintenance area.

- Within 30 days of the date of this plan, solvent cleaning will now be performed in two self-contained parts washers in the hanger. Magerr's Airport has contracted with a local vendor (Safe Solutions of Capital Heights 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).

- Within 30 days of the date of this plan, Magerr's Airport will place drip pans under leaking aircraft during maintenance activities and under portions of the plane that are being painted during painting activities.

- Within 30 days of the date of this plan, an emergency spill kit and telephone will also be placed inside the hanger to aid in the event of a spill.

- Within 30 days of the date of this plan, a graded, concrete deicing pad will be constructed near the beginning of the runway to minimize the number of locations where deicing fluids must be applied to the aircraft before take off.

- Within 30 days of the date of this plan, extra deicing/anti-icing material will drain into a tank and then be transferred into 55-gallon drums for off-site shipment to a glycol recovery system.

- Within 30 days of the date of this plan, storm system inlets SS-05 and SS-06 will be covered during fluid handling to contain possible spills during clean-up.

- Within six months of the date of this plan, Magerr's Airport will cover the fueling station with a new roof and place curbing along the perimeter of the area.

- Within six months of the date of this plan, Magerr's Airport will install a sand filtration system or an in-ground oil-water separator to collect settleable solids and floating oil from the wastewater of the cleaning activities. To determine which system to implement, Magerr's Airport will request pollutant removal efficiency data from vendors of both systems.

- Within one year of the date of this plan, a fluid storage building with a covered loading dock will be constructed by the fueling station. These facilities will be constructed within one year of the date of this plan.

- Immediately after 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 leaks or spills).

- Immediately after the construction of the fluid storage building, weekly inspections 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.

- Immediately after construction of the fluid storage building, an emergency spill kit and telephone will be placed inside the fluid storage building.

- Immediately after the constuction of the loading dock, to prevent contamination at the loading dock, no fluid 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 contruction of the loading dock, Magerr's Airport 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.

DA-04

To prevent possible storm water contamination in the taxiway/runway area (DA-04), the following BMPs will be implemented:

- As of the date of this plan, when applying solid deicing/anti-icing chemicals to the runways, the chemicals will be wetted prior to application. This will prevent the chemicals from being blown off the runway during takeoffs and departures.

- As of the date of this plan, preventive anti-icing will also be used in the area to minimize the quantity of deicing/anti-icing chemicals applied.

- Within 30 days of the date of this plan, oil absorbent socks will be placed on storm system SS-07, SS-08, and SS-09.

5.3 Storm Water Treatment

No storm water treatment measures are currently in place at the facility. As discussed above, Magerr's

Airport will install a sand filtration system or an in-ground oil-water separator to collect settleable solids and floating oil from steam cleaning.

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 Airport 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 Airport's general permit number MD-S1234567-8, Magerr's Airport 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	Oil catches (e.g., absorbent socks) will be placed on storm system inlets SS-01 and SS-02	Within 30 days
DA-02	Aircraft will be inspected for leaks prior to entering the aircraft storage area.	Immediately
	Aircraft specifically stored for maintenance purposes will not be stored for more than 14 days.	Immediately
	Oil catches (e.g., absorbent socks) will be placed on storm system inlets SS-03 and SS-04.	Within 30 days
	Drip pans will be placed under any detected leaks.	Within 30 days
	The aircraft storage area will be paved and curbing will be placed along the perimeter.	Within 2 years
DA-03	Painting and maintenance activities will take place inside the hanger. Drip pans will be used during both activities.	Immediately
	Preventive anti-icing will be used and urea and glycol based deicing/anti-icing materials will be phased out.	Immediately
	All fueling hoses will be inspected for leaks prior to use.	Immediately
	Oil catches (e.g., absorbent socks) will be placed on the storm system inlets SS-05 and SS-06.	Within 30 days
	The underground storage tanks (USTs) storing the jet fuel will be equipped with an overfill prevention valve.	Within 30 days
	The UST fill port will be equipped with a containment bucket with a minimum capacity of five gallons.	Within 30 days
	Fueling vehicles and aircraft will be equipped with overfill protection equipment.	Within 30 days
	A spill prevention plan will be prepared.	Within 30 days
	An emergency fuel spill kit will be placed at the fueling station and on the fueling vehicle.	Within 30 days
	Solvent cleaning will be performed in two self-contained pars washers in the hanger. A monthly solvent recovery service that provides parts cleaning equipment, replaces solvent, and collects waste solvent for recovery will be used.	Within 30 days

Table 5 (Continued)

Drainage Area[1]	Best Management Practices	Implementation Date
	All wastewater from aircraft cleaning operations will be collected in 55-gallon drums and stored for shipment off-site. Within six months of the date of this plan, a drain leading to a sand filtration system or an in-ground oil water separator will be constructed. Sand filtration and oil/water separator equipment vendors will be contacted immediately to investigate removal efficiencies and implementability.	Within 30 days
DA-03 (Continued)	An emergency spill kit and telephone will be placed inside the hanger.	Within 30 days
	Deicing material will drain into a tank and then be transferred to 55-gallon drums for shipment off-site.	Within 30 days
	A cover will be constructed over the fueling station and curbing will be placed along the perimeter of the paved area.	Within 6 months
	Curbing will be placed along the perimeter of the aircraft maintenance area to contain leaks and spills.	Within 1 year
	A graded, concrete deicing pad will be constructed.	Within 1 year
	A fluid storage building with a covered loading dock will be constructed.	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.	Immediately after the construction of the fluid storage building
	No fluid handling will take place on the loading dock during rain events and storm system SS-05 and SS-06 will be covered during fluid handling.	Immediately after the constuction of the loading dock
	An emergency spill kit will be placed on the loading dock.	Within 30 days of the construction of the loading dock
DA-04	Solid deicing/anti-icing agents will be wetted prior to application.	Immediately
	Preventive anti-icing measures will be taken.	Immediately
	Oil catches (e.g., absorbent socks) will be placed on the storm system inlets SS-07, SS-08, and SS-09.	Within 30 days

(1) See Figure 2 for drainage areas
Note: BMPs are in chronological order according to drainage area

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

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 passenger and employee vehicles in the parking area.		
	DA-02 - SS-03, SS-04		Leaking fluids from the aircraft as they await maintenance or use. Soil erosion in the gravel storage area.		
	DA-03 - SS-05, SS-06		Spills during maintenance activities, fuel leaks during fueling, wastewater from cleaning, and spills during deicing/anti-icing.		
	DA-04 - SS-07, SS-08, SS-09		Leaking fluids from aircraft. Leaking fluids from baggage and tow vehicles. Deicing/anti-icing chemicals		

(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 passenger and employee vehicles in the parking area.
		DA-02 - SS-03, SS-04			Leaking fluids from the aircraft as they await maintenance or use. Soil erosion in the gravel storage area.
		DA-03 - SS-05, SS-06			Spills during maintenance activities, fuel leaks during fueling, wastewater from cleaning, and spills during deicing/anti-icing.
		DA-04 - SS-07, SS-08, SS-09			Leaking fluids from aircraft. Leaking fluids from baggage and tow vehicles. Deicing/anti-icing chemicals.

(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]

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 passenger and employee vehicles in the parking area.				
	DA-02	Leaking fluids from the aircraft as they await maintenance or use. Soil erosion in the gravel storage area.				
	DA-03	Spills during maintenance activities, fuel leaks during fueling, wastewater from cleaning, and spills during deicing/anti-icing.				
	DA-04	Leaking fluids from aircraft. Leaking fluids from baggage and tow vehicles. Deicing/anti-icing chemicals.				

(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 _____