

**Smith Reynolds Airport
Winston Salem, North Carolina**



**Stormwater Pollution Prevention Plan
and
Spill Prevention, Control and Countermeasure Plan**

**Prepared in Accordance with
Airport General Permit No. NCG150000
and
40 CFR 112**

February 2017

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1.0 STORMWATER POLLUTION PREVENTION PLAN

1.1 INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared to comply with the United States Environmental Protection Agency (USEPA) National Pollutant Discharge Elimination System (NPDES) program under the amended 1987 Federal Water Pollution Control Act. This Plan (1) consists of steps and activities designed to identify potential sources of stormwater pollution or contamination, and (2) establishes best management practices (BMPs) that will prevent or reduce pollutants in stormwater runoff.

A separate Federal regulation, 40 Code of Federal Regulations (CFR) 112, requires some facilities, including North Carolina Airports, that have certain oil (and oil by-products) capacities to develop Spill Prevention Control and Countermeasure (SPCC) Plans to address the oil storage on-site. Not all Airports are regulated by SPCC regulations. However, if the Airport's aboveground oil storage capacity totals 1,320 gallons or greater, the Airport is required to add Appendix H of this Plan, which is devoted to SPCC compliance. Note that "the Plan" refers to either the SWPPP or the SWPPP/SPCC Plan, depending on the Airport requirements.

The North Carolina Department of Environmental Quality (NCDEQ), formerly known as the North Carolina Department of Environment and Natural Resources (NCDENR), has adopted final stormwater permitting rules for industrial discharges in North Carolina. North Carolina is a delegated NPDES state with general and individual permitting authority. USEPA regulations 40 CFR 122 require certain industries to apply for an NPDES Permit for stormwater discharges. This SWPPP has been prepared to comply with Airport General Permit (No. NCG150000) for Stormwater Discharges from Airports in North Carolina. Smith Reynolds Airport Certificate of Coverage number is NCG150033. The permit is effective as of September 1, 2014 and expires on August 31, 2019.

The Airport is required to perform certain compliance activities and will be required to adhere to both the Airport General Permit and SPCC requirements. The Airport must characterize and monitor oil-containing tanks, stormwater drainage areas, and stormwater quality. The Airport must then implement necessary BMPs that can include programmatic, operational, and structural practices that eliminate or reduce stormwater pollution.

In general, the Airport and their personnel are required to:

- Establish spill containment procedures, drainage control, and security measures;
- Learn and implement stormwater pollution prevention, and spill prevention and control procedures and requirements;
- Follow written standard operating procedures for hazardous material handling and storage;
- Perform routine inspections; and

Maintain records to document successful completion of Plan requirements.

In developing a list of appropriate BMPs for the Airport, technical and economic feasibility issues are a baseline consideration in choosing BMPs that will be performed to achieve permit compliance. Expensive or unproven technologies are generally dismissed early in the selection process. This results in a list of practical BMPs that the Airport will complete. Additional BMPs, including structural controls, will be evaluated during each Annual Comprehensive Site Compliance Evaluation.

The following appendices are included as part of this Plan. Appendix A contains SWPPP requirements. Appendix B contains the BMP manual. Appendix C lists Plan-related acronyms and definitions. Appendix D provides a copy of the Airport General Permit. Appendix E provides blank inspection checklists and forms. Appendix F is used to insert completed inspection checklists and forms and other SWPPP-required documentation. Appendix G contains the Site Figures for the Airport. Appendix H contains SPCC Plan requirements.

1.2 RESPONSIBLE PARTIES

The permit requires each Airport to develop a Stormwater Pollution Prevention Team (SWPPT) that consists of Airport and commercial tenant personnel. For purposes of this Plan, the term “commercial tenants” refers to all Airport tenants that conduct industrial activities as described in this Plan. Please note that some commercial tenants may have already developed their own site-specific SWPPP. There is specific language included in the Airport General Permit [Part II, Section A.5] that indicates that if any commercial tenant facility obtains separate authorization under the Airport General Permit and creates their own SWPPP, that the commercial tenant SWPPP must be coordinated and integrated with this SWPPP for the entire Airport.

The SWPPT typically consists of Airport and commercial tenant supervisors and other personnel involved with industrial activities at the Airport and that the Airport Director or SWPPT Leader chooses to appoint. The SWPPT will report to the Airport Director for funding and managerial support.

The Airport Director, or designee, will serve as the SWPPT Leader. The SWPPT will meet at least once annually to evaluate the effectiveness of the BMPs and determine whether BMPs need to be added, modified, or deleted at the Airport. The SWPPT will be responsible for ensuring that SPCC Plan requirements are fulfilled, if applicable. A series of forms are provided in this Plan to assist the team in the evaluation of their assigned areas. Applicable forms must be completed for each building/area at the Airport. The SWPPT is required to make revisions to the Plan where changes to the Airport significantly affect potential risks to stormwater quality. These revisions will be documented using SWPPP Form 11 and will be fully incorporated into the appropriate portion of the Plan at least once annually (during the Annual Comprehensive Site Compliance Evaluation).

The responsibility of the Airport Director or appointee is to:

- Review and ensure that the SPCC Plan, if the Airport is required to have an SPCC Plan, is sealed by a Professional Engineer (PE) [Airports storing less than 10,000 gallons of oil may not require PE certification];
- Ensure the Plan is implemented;
- Be accountable for discharge prevention;
- Appoint SWPPT Leader;
- Review and approve selected BMPs;
- Receive spill reports and non-compliance reports;
- Review and approve Plan revisions and new BMPs identified by SWPPT.

The responsibility of the SWPPT Leader is to:

- Maintain Plan requirements;
- Select and train SWPPT members;
- Schedule and conduct SWPPT meetings;
- Ensure that the SWPPT carries out duties listed subsequently; and
- Document the Plan Implementation Schedule (SWPPP Form 1)

The responsibility of each SWPPT member is to:

- Attend SWPPT meetings;
- Schedule the actions to be performed for the Plan;
- Conduct required site inspections;
- Implement best management practices;
- Conduct visual observations at all industrial stormwater discharge outfalls as specified in the Permit;
- Perform record keeping and documentation as required by the Plan;
- Perform the annual updating and certifications as required by the Plan; and
- Evaluate the adequacy of the Plan and modify as necessary.

The organizational arrangement of the Airport SWPPT is presented below. Most of the information provided in this Plan requires effort by the Airport SWPPT and other on-site employees. The SWPPT members will assist the SWPPT Leader in regards to those areas under their specific management control.

Stormwater Pollution Prevention Team (SWPPT)	
TEAM LEADER	
Airport Primary Contact	Shoaib Quader
TEAM MEMBERS	
Commercial Tenants	
Signature Flight Support	Kevin Brookshire
Piedmont Flight Training	Sandy Symmes
Piedmont Propulsion	Mike McPhaul
Forsyth County Fire Department	Chris Davis
Willard Cab Company	Robin Willard
North State Aviation	Phil Rolison
Epes Transport System, Inc.	Jeff Gerlock
BB&T	Jim Murray
Avis Budget Rental Car	Josh Gray
Hertz Rental Car	Debbie Ijames
Signature Technic Air	Sam Harmon

*The SWPPT will also be responsible for SPCC requirements if the Airport is required to have Appendix H, which is devoted to SPCC Compliance.

1.3 POTENTIAL POLLUTANT SOURCES AND BMP ACTION PLAN

The goal of the SWPPP is to ensure to the maximum extent practicable that only the highest quality of stormwater runoff is discharged from the Airport. The following sub-sections identify potential pollutant sources at the Airport and BMPs to reduce pollutant loading. The Airport maintains compliance via site inspections, annual compliance evaluations, and visual monitoring of stormwater discharge outfalls.

1.3.1 Airport Location

This section describes the location of the Airport and provides information on properties surrounding the Airport. A Site Location Map of the Airport is included in Appendix G.

Airport Name:	Smith Reynolds Airport		
Street Address:	3801 North Liberty Street		
City	Winston-Salem	County:	Forsyth
Airport Size (acres):	~705.00	Latitude:	N 36° 08' 01"
SIC Code:	4512	Longitude:	W 80° 13' 19"
Adjacent Land Use (North):	North Liberty St., then commercial, then Norfolk Southern Railroad, then mixed residential, commercial and Industrial.		
Adjacent Land Use (South):	Bowen Blvd. & New Walkertown Rd., then residential.		
Adjacent Land Use (East):	Residential.		
Adjacent Land Use (West):	Commercial, then mixed residential, commercial and industrial.		
Additional Location Information:	The Airport began operation in 1927 and serves the Western Piedmont of North Carolina. The airport is located at an elevation of 970 feet in Forsyth County adjacent to North Liberty St. It is approximately 3 miles east of the City of Winston-Salem.		

1.3.2 Airport Description

The Airport currently engages in the following categories of industrial activity.

Aircraft/ Equipment Maintenance

Stormwater discharges covered in this category include runoff from areas where the following maintenance activities may occur: aircraft cleaning and janitorial services; fluid changes; mechanical repairs; parts cleaning; washing; storage of aircraft and equipment waiting for repair or maintenance; and storage of the related materials and waste materials such as oil, fuel, solvents, batteries, tires, and filters.

Aircraft Refueling

Stormwater discharges covered in this category include runoff from areas where aircraft refueling operations may occur. These activities include fuel delivery to the Airport, fuel storage both in separate containers and in aircraft, refuelers, and equipment internal tanks, and fuel dispensing.

Aircraft Deicing

Stormwater discharges covered in this category include runoff from areas associated with aircraft deicing operations. Areas where these activities occur (typically during winter months) include the aircraft parking apron.

Hazardous Materials Storage

Stormwater discharges covered in this category include runoff from storage areas for new and waste materials, which typically include paint, solvents, herbicides, pesticides, oil, lubricants, batteries, and filters when the storage areas are either directly exposed to rainfall or when spills or leaks from these areas have the potential to enter the storm drainage system.

Raw Material Stockpiles

Stormwater discharges covered in this category include runoff from stockpiles, bins, scrap piles, and storage areas. Material stockpiles are often exposed to precipitation and cause stormwater pollution due to sediment or chemical constituents in runoff.

Vehicle and Equipment Maintenance

Stormwater discharges covered in this category include runoff from areas where vehicle and equipment fluid changes; mechanical repairs; parts cleaning; painting; washing; storage of vehicles and equipment waiting for repair or maintenance; and storage of related materials and waste materials, which typically include: oil, fuel, solvents, antifreeze, hydraulic fluid, grease lubes, batteries, tires, and filters.

Vehicle and Equipment Refueling

Stormwater discharges covered in this category include runoff from areas associated with vehicle and equipment refueling operations. These activities include fuel delivery to the facilities; fuel storage both in separate storage containers and in vehicle and equipment internal tanks; and fuel dispensing.

The location and layout of the Airport are shown in the Site Location Map and Airport Site Map figures included in Appendix G. The Airport Site Map identifies Airport facilities, potential pollution sources, stormwater drainage systems, stormwater discharge outfalls, and drainage boundaries.

Activities performed at the Airport including by commercial tenants are described below:

Airport or Commercial Tenant Name	Airport	
Activities	<input type="checkbox"/> Aircraft / Equipment Maintenance <input type="checkbox"/> Refueling <input type="checkbox"/> Aircraft Deicing <input checked="" type="checkbox"/> Hazardous Material Storage <input checked="" type="checkbox"/> Raw Material Storage	<input checked="" type="checkbox"/> Vehicle/ Equipment Maintenance <input checked="" type="checkbox"/> Vehicle/ Equipment Refueling <input checked="" type="checkbox"/> Other
Summary Description	Smith Reynolds Airport operates a Main Terminal Building, vehicle parking, Aircraft Parking Aprons, Vehicle Fuel Tanks, Maintenance Facility, T-Hangars and Conventional Hangars, Runways and Taxiways, and other Airport facilities and grounds. The Airport sanitary sewer system collects domestic sewage from on-site sanitary facilities and discharges to the local wastewater treatment plant.	
	Building/ Area	Activities/ Potential Pollutants
	Main Terminal Building	Hazmat storage
	Aircraft Parking Aprons (Air Carrier Apron and General Aviation Apron)	Aircraft storage and Parking, servicing, minor maintenance, Hazmat storage
	T-Hangars	Aircraft storage, maintenance, Hazmat storage
	Conventional Hangars	Aircraft storage, maintenance, washing, Hazmat storage
	Public Parking	Vehicle parking
	Maintenance Facility	Refueling of mowers, trucks for airfield operations. Fuel Tanks, New and Waste Oil Storage

Commercial Tenant Name	Signature Flight Support	
Activities	<ul style="list-style-type: none"> ■ Aircraft/ Equipment Maintenance ■ Aircraft Refueling ■ Aircraft Deicing ■ Hazardous Material Storage ■ Raw Material Storage 	<ul style="list-style-type: none"> ■ Vehicle/ Equipment Maintenance ■ Vehicle Equipment Refueling ■ Other _____ washing_____
Summary Description	Signature Flight Support provides aircraft refueling, equipment refueling, aircraft storage, aircraft and vehicle washing, aircraft deicing, international trash disposal, and minor paint touch-ups.	
	Building/ Area	Activities/ Potential Pollutants
	Hangar	Aircraft storage. Waste oil storage. Minor paint touch-ups
	Aircraft Parking Apron	Aircraft refueling, deicing, washing, aircraft deicing fluid (ADF) storage.
	Bulk Tanks	Aircraft Refueling.

Commercial Tenant Name	Forsyth County Fire Dept.	
Activities	<ul style="list-style-type: none"> ■ Aircraft/ Equipment Maintenance □ Aircraft Refueling □ Aircraft Deicing □ Hazardous Material Storage ■ Raw Material Storage 	<ul style="list-style-type: none"> □ Vehicle/ Equipment Maintenance ■ Vehicle Equipment Refueling □ Other _____ vehicle washing_____
Summary Description	The Forsyth County Fire Department provides firefighting duties at the airport. It provides emergency care for sick and injured persons and fire prevention activities.	
	Building/ Area	Activities/ Potential Pollutants
	Aircraft Rescue & Fire Fighting Building	Vehicle washing. Vehicle maintenance. Hazmat storage. Spill response

Commercial Tenant Name	North State Aviation	
Activities	<input type="checkbox"/> Aircraft/ Equipment Maintenance <input type="checkbox"/> Aircraft Refueling <input checked="" type="checkbox"/> Aircraft Deicing <input type="checkbox"/> Hazardous Material Storage <input type="checkbox"/> Raw Material Storage	<input type="checkbox"/> Vehicle/ Equipment Maintenance <input type="checkbox"/> Vehicle Equipment Refueling <input type="checkbox"/> Other _____
Summary Description	North State Aviation provides aircraft/equipment maintenance at the airport.	
	Building/ Area	Activities/ Potential Pollutants
	Hangar	Aircraft storage, Performs aircraft maintenance, Waste oil storage, Janitorial cleaning supplies.
	Aircraft Parking Apron	Aircraft refueling, minor maintenance.

Commercial Tenant Name	Epes Transport System	
Activities	<input type="checkbox"/> Aircraft/ Equipment Maintenance <input type="checkbox"/> Aircraft Refueling <input type="checkbox"/> Aircraft Deicing <input type="checkbox"/> Hazardous Material Storage <input type="checkbox"/> Raw Material Storage	<input type="checkbox"/> Vehicle/ Equipment Maintenance <input checked="" type="checkbox"/> Vehicle Equipment Refueling <input checked="" type="checkbox"/> Other _____ truck washing _____
Summary Description	Epes Transport Systems leases space from the Airport. It provides transportation services to the public.	
	Building/ Area	Activities/ Potential Pollutants
	Building	Performs truck repair and maintenance. Waste oil storage. Truck Fueling and washing

Commercial Tenant Name	BB&T	
Activities	<input checked="" type="checkbox"/> Aircraft/ Equipment Maintenance <input type="checkbox"/> Aircraft Refueling <input type="checkbox"/> Aircraft Deicing <input type="checkbox"/> Hazardous Material Storage <input type="checkbox"/> Raw Material Storage	<input type="checkbox"/> Vehicle/ Equipment Maintenance <input type="checkbox"/> Vehicle Equipment Refueling <input type="checkbox"/> Other <hr/>
Summary Description	BB&T leases hangar space at the airport. It performs general maintenance on its planes.	
	Building/ Area	Activities/ Potential Pollutants
	Hangar	Aircraft storage. Performs aircraft maintenance. Waste oil storage. Janitorial cleaning supplies.
	Aircraft Parking Apron	Minor maintenance.

Commercial Tenant Name	Avis Budget Rental Car	
Activities	<input type="checkbox"/> Aircraft/ Equipment Maintenance <input type="checkbox"/> Aircraft Refueling <input type="checkbox"/> Aircraft Deicing <input type="checkbox"/> Hazardous Material Storage <input type="checkbox"/> Raw Material Storage	<input type="checkbox"/> Vehicle/ Equipment Maintenance <input type="checkbox"/> Vehicle Equipment Refueling <input checked="" type="checkbox"/> Other <u>Vehicle storage and washing</u>
Summary Description	Avis Budget only provides the washing and storage of rental cars at the airport.	
	Building/ Area	Activities/ Potential Pollutants
	Rental Car Facility	Vehicle storage. Washing

Commercial Tenant Name	Hertz Rental Car	
Activities	<input type="checkbox"/> Aircraft/ Equipment Maintenance <input type="checkbox"/> Aircraft Refueling <input type="checkbox"/> Aircraft Deicing <input type="checkbox"/> Hazardous Material Storage <input type="checkbox"/> Raw Material Storage	<input type="checkbox"/> Vehicle/ Equipment Maintenance <input type="checkbox"/> Vehicle Equipment Refueling <input checked="" type="checkbox"/> Other <u>Vehicle storage and washing</u>
Summary Description	Hertz only provides the washing and storage of rental cars at the airport.	
	Building/ Area	Activities/ Potential Pollutants
	Rental Car Facility	Vehicle storage. Washing,

Commercial Tenant Name	Willard Cab	
Activities	<input type="checkbox"/> Aircraft/ Equipment Maintenance <input type="checkbox"/> Aircraft Refueling <input type="checkbox"/> Aircraft Deicing <input type="checkbox"/> Hazardous Material Storage <input type="checkbox"/> Raw Material Storage	<input type="checkbox"/> Vehicle/ Equipment Maintenance <input type="checkbox"/> Vehicle Equipment Refueling <input checked="" type="checkbox"/> Other <u>Vehicle storage and washing</u>
Summary Description	Willard Cab only washes and stores vehicles at the airport.	
	Building/ Area	Activities/ Potential Pollutants
	Parking area	Vehicle storage and parking.

Commercial Tenant Name	Piedmont Propulsion Systems	
Activities	<input checked="" type="checkbox"/> Aircraft/ Equipment Maintenance <input type="checkbox"/> Aircraft Refueling <input type="checkbox"/> Aircraft Deicing <input checked="" type="checkbox"/> Hazardous Material Storage <input type="checkbox"/> Raw Material Storage	<input type="checkbox"/> Vehicle/ Equipment Maintenance <input type="checkbox"/> Vehicle Equipment Refueling <input type="checkbox"/> Other <hr/>
Summary Description	Piedmont Propulsion performs aircraft propeller maintenance	
	Building/ Area	Activities/ Potential Pollutants
	Landside building	Aircraft parts maintenance

Commercial Tenant Name	Signature Technic Air	
Activities	<input checked="" type="checkbox"/> Aircraft/ Equipment Maintenance <input type="checkbox"/> Aircraft Refueling <input type="checkbox"/> Aircraft Deicing <input type="checkbox"/> Hazardous Material Storage <input type="checkbox"/> Raw Material Storage	<input type="checkbox"/> Vehicle/ Equipment Maintenance <input type="checkbox"/> Vehicle Equipment Refueling <input type="checkbox"/> Other <hr/>
Summary Description	Technic Air provides aircraft maintenance, repair and overhaul services	
	Building/ Area	Activities/ Potential Pollutants
	MRO Hangar	Aircraft maintenance. Waste oil storage

Commercial Tenant Name	Piedmont Flight Training	
Activities	<ul style="list-style-type: none"> ■ Aircraft/ Equipment Maintenance □ Aircraft Refueling □ Aircraft Deicing □ Hazardous Material Storage □ Raw Material Storage 	<ul style="list-style-type: none"> □ Vehicle/ Equipment Maintenance □ Vehicle Equipment Refueling □ Other <hr/>
Summary Description	Piedmont Flight Training is a flight school that engages in minor aircraft maintenance.	
	Building/ Area	Activities/ Potential Pollutants
	Aircraft Parking Apron	Aircraft maintenance.

1.3.3 Airport Bulk Oil and Hazardous Substance Storage

The Airport Site Map indicates the location of aboveground storage tanks, underground tanks, mobile and portable containers, equipment, and other potential pollutant sources. Section 1.3.2 describes the containers per Airport shop, building, or area. Contents and capacities of both SPCC-regulated oil containers and Non-SPCC-regulated containers (other bulk hazardous substance containers) are presented in Table 1-1. Tanks are compatible with the material stored.

Table 1-1 Bulk Oil and Hazardous Substance Storage

Container ID/ Storage Device	Quantity	Location	Product	Capacity (gallons)	Container Material	Secondary Containment	Equipment Failure Rate of Flow/ Comments ¹
AST	1	FBO Corporate Hangar	AVGAS	12,000	Steel	Concrete Dike, Single Walled	1gpm to instantaneous
AST	1	FBO Corporate Hangar	Waste Fuel	300	Steel	Concrete Dike, Single Walled	1gpm to instantaneous
AST	1	Self-Serve Tank near Forsyth County Fire Dept.	AVGAS	6,000	Steel	Concrete Dike, Single Walled	1gpm to instantaneous
AST	1	Self-Serve Tank near Forsyth County Fire Dept.	Waste Fuel	300	Steel	Concrete Dike, Single Walled	1gpm to instantaneous
AST	1	4001 N. Liberty	Waste Fuel	300	Steel	Concrete Dike, Single Walled	1gpm to instantaneous
AST	1	FBO Apron	Jet A Fuel	300	Steel	Steel Tug for test cell,	1gpm to instantaneous
UST	1	FBO Apron	Jet A Fuel	20,000	Steel	Asphalt Bermed Area	1gpm to instantaneous
UST	1	FBO Apron	Gasoline	4,000	Steel		1gpm to instantaneous
AST	1	FBO Apron	Diesel Fuel	270	Steel	Asphalt Bermed Area	1gpm to instantaneous
AST	1	FBO Apron	Waste Jet Fuel	300	Steel	Steel tub	1gpm to instantaneous
Refueler Truck	1	FBO Apron	Jet A Fuel	5,000	Steel	Asphalt Bermed Area	1gpm to instantaneous
Refueler Truck	1	FBO Apron	Jet A Fuel	3,000	Steel	Asphalt Bermed Area	1gpm to instantaneous

Container ID/ Storage Device	Quantity	Location	Product	Capacity (gallons)	Container Material	Secondary Containment	Equipment Failure Rate of Flow/ Comments ¹
Refueler Truck	1	FBO Apron	Jet A Fuel	3,000	Steel	Asphalt Bermed Area	1gpm to instantaneous
Refueler Truck	1	FBO Apron	AVGAS 100LL	1,000	Steel	Asphalt Bermed Area	1gpm to instantaneous
Refueler Truck	1	FBO Apron	Jet A Fuel	7,000	Steel	Asphalt Bermed Area	1gpm to instantaneous
AST	1	4001 N. Liberty	Jet A Fuel	15,000	Steel	Concrete Dike	1gpm to instantaneous
AST	1	4001 N. Liberty	Jet A Fuel	15,000	Steel	Concrete Dike	1gpm to instantaneous
AST	1	Maintenance Building	Diesel Fuel	500	Steel	DW	1gpm to instantaneous
Drums	1	Maintenance Building	Waste Oil	55	Steel		1drum on-site
AST	1	Epes Maintenance Bld.	Motor Oil	900	Steel		1gpm to instantaneous
Drums	10	Epes Maintenance Bld.	Oil & Fluids	M @ 55	Steel		10 drums on-site
Drums	4	Epes Maintenance Bld.	Waste Oil	M @ 55	Steel		4 drums on-site
AST	1	Epes Maintenance Bld.	Waste Oil	260	Steel		1gpm to instantaneous
AST	1	Epes Maintenance Bld.	Waste Oil	500	Steel		1gpm to instantaneous
AST	1	Epes Maintenance Bld.	Waste Oil	340	Steel		1gpm to instantaneous
AST	1	Epes Maintenance Bld.	Diesel Fuel	12,000	Steel	Steel containment dike	1gpm to instantaneous
AST	2	MRO Hangar	Waste Oil	150	Fiberglass	Single Walled	1gpm to instantaneous
AST	2	MRO Hangar	Jet A Fuel	250	Fiberglass	Single Walled	1gpm to instantaneous
Drum	1	MRO Hangar	Methyl Ethyl Ketone	55	Steel	Berm	1 drum on site
Drum	1	MRO Hangar	Toluene	55	Steel	Berm	1 drum on site
Drum	1	MRO Hangar	Mineral Spirits	55	Steel	Berm	1 drum on site
Drum	2	MRO Hangar	Paint Waste Material	33	Steel	Berm	2 drums on site
Can	2	MRO Hangar	Hydraulic Fluid	1			2 cans on site

Container ID/ Storage Device	Quantity	Location	Product	Capacity (gallons)	Container Material	Secondary Containment	Equipment Failure Rate of Flow/ Comments ¹
Drum	1	MRO Hangar	TKS Blend de-icing fluid	55	Steel		1 drum on site
Drum	1	MRO Hangar	Isopropyl Alcohol	55	Steel		1 drum on site
Can	1	MRO Hangar	Alodine	1			1 can on site
Can	2	MRO Hangar	Antifreeze/Coolant	1			1 can on site
Can	1	MRO Hangar	Acetone	1			1 can on site
AST	1	Piedmont Propulsion	Used Oil	200	Steel	Spill Pallet	Storage container
Drum	1	Piedmont Propulsion	Methyl Ethyl Ketone	55	Steel	Spill Pallet	1 drum on site
Drum	1	Piedmont Propulsion	Alodine	55	Steel	Spill Pallet	1 drum on site
Drum	1	Piedmont Propulsion	Alodine Waste Water	55	Steel	Spill Pallet	1 drum on site
Drum	1	Piedmont Propulsion	Waste Paint	55	Steel	Spill Pallet	1 drum on site
UST	1	Piedmont Propulsion	Sodium Hydroxide / Deionized Water	150	Steel		Built into floor
Drum	1	Piedmont Propulsion	Sodium Hydroxide / Deionized Water	55	Steel	Spill Pallet	1 drum on site
UST	1	Piedmont Propulsion	Nitric Acid / Deionized Water	150	Steel		Built into floor
Drum	1	Piedmont Propulsion	Nitric Acid / Deionized Water	55	Steel	Spill Pallet	1 drum on site
Drum	1	Piedmont Propulsion	Hydrochloric Acid / Ferric Chloride Solution	55	Steel	Spill Pallet	1 drum on site
Drum	1	Piedmont Propulsion	Alkaline Cleaner	55	Steel	Spill Pallet	1 drum on site

DW = Double-walled M = Multiple gpm = gallons per minute

¹ For prediction of the direction, rate of flow, and total quantity of oil/hazardous substance discharge from a container leak or failure: See Airport Site Map and Section 1.3.5 Airport Drainage for direction of potential discharge.

1.3.4 Airport Security

Establishing appropriate security systems may prevent an accidental or intentional release of oil or hazardous substances to the stormwater drainage system as a result of vandalism, theft, sabotage, or other improper uses of Airport property. The Airport has the following security systems in place:

Airport	Existing security policies and enforcement procedures
	Perimeter security fencing around Airport
	Access gates to fenced areas are locked during non-working hours
	Fuel Station pumps are secured
	Overhead lighting is provided throughout the Airport
Commercial Tenants	
Signature Flight Support	Fuel farm is fenced and locked, Hangars are locked and fuel truck keys are secured. Facilities are secured.
MRO Hangar	Aircraft and facilities are secured.
Forsyth County Fire Dept.	Vehicles and facilities are secured.
North State Aviation	Aircraft and facilities are secured.
Piedmont Flight Training	Aircraft and facilities are secured.
Piedmont Propulsion	Facilities are secured.
Epes Trucking	Facilities are fenced and secured
BB&T	Aircraft and facilities are secured.
AvisBudget Rental Car	Facilities are secured.
Hertz Rental Car	Facilities are secured.
Willard Cab	Facilities are secured.

1.3.5 Airport Drainage

The topography of the terrain within the Airport is generally flat. The Airport is located within the Yadkin-Pee Dee River Basin. Stormwater runoff at the Airport drains into four

main drainage basins: Brushy Fork Creek and Tributaries 1, 2, and 3 (as labeled on the Airport Site Map). The segments of Tributary 3 and Brushy Fork stream are considered Perennial streams that support aquatic life.

Stormwater runoff from the southern portion of the Airport; which includes portions of Taxiway A, and portions of Runway 33 and associated taxiways; flows southeast into Tributary 3 and ultimately into Brushy Fork Stream, which flows southwest under Bowen Blvd.

Stormwater runoff from the north portion of the Airport; which includes the main terminal, aircraft parking apron, vehicle parking areas, fuel farm, refueling areas, rental car maintenance area, general aviation hangars, and portions of Runway 4-22 and its associated taxiways; flows southwest into Tributary 1 (outfall no.5). It also flows northerly and outfalls onto a grassy area of the airport (outfall no. 3)

Stormwater runoff from the northeast portion of the Airport; which includes portions of Runway 22 and associated taxiways, aircraft parking apron, fuel farms, refueling areas, general aviation hangars, and flows into Brushy Fork Creek which traverses along the east side of Runway 15-33.

Stormwater runoff from the northwest portion of the Airport; which includes portions of Runway 4 and associated taxiways flows into Tributary 1.

Stormwater runoff from the east portion of the Airport, which includes portions of Runway 15-33, flows southeasterly into Brushy Fork Creek.

Stormwater runoff from the west portion of the Airport, which includes portions of Runway 15-33 and its associated taxiways, aircraft parking aprons, general aviation hangars flows southwesterly into Tributary 2.

The Airport's spill response capabilities and proper personnel training as described in this Plan will protect against potential discharges to storm drainage systems from any undiked area.

The characteristics of the industrial drainage outfalls and their associated drainage basins are identified in Table 1-2. Table 1-2 identifies the outfalls, outfall type, outfall coordinates, drainage areas, and percent impervious surface. Visual observations of stormwater discharges will be performed for outfalls listed in Table 1-2 at designated points, as shown on the Airport Site Map. Visual observations will be conducted as described in Section A.1.5 and documented using SWPPP Form 6. A drainage basin identification number is assigned to each outfall and shown on the Airport Site Map. If future Facility development results in the construction of additional outfalls, the outfall shall be added to Table 1-2 and the Airport Site Map.

Table 1-2 Outfall and Drainage Basin Characteristics

OUTFALL I.D.	OUTFALL TYPE	LATITUDE*	LONGITUDE*	DRAINAGE BASIN	DRAINAGE AREA (acres)	IMPERVIOUS AREA (acres)	PERCENT IMPERVIOUS	OFF-SITE RUN-ON
1	60" CMP	N 34° 59' 19"	W 78° 53' 26"	44	58.0	26.0	44.8	None
2	24" RCP	N 34° 59' 41"	W 78° 53' 9"	22	38.0	26.0	68.4	None
3	24" RCP	N 34° 59' 42"	W 78° 53' 7"	21	1.8	1.0	55.6	None
4	30" RCP	N 34° 59' 41"	W 78° 53' 2"	17	3.7	2.5	67.6	None
5	36" RCP	N 34° 59' 41"	W 78° 52' 58"	8	83.0	31.0	37.3	None
6	Ditch	N 35° 0' 14"	W 78° 52' 28"	1	53.0	9.0	17.0	None
7	Ditch	N 36° 07' 45"	W 80° 13' 21"	59	38.0	10.1	26.7	None
8	Ditch	N 36° 07' 41"	W 80° 13' 21"	59	39.2	10.2	26.0	None
9	Ditch	N 36° 07' 34"	W 80° 13' 21"	85	91.7	29.6	32.3	None
10	Pond Outfall	N 36° 07' 35"	W 80° 13' 18"	89	25.0	6.8	27.1	None
11	18" RCP	N 34° 59' 31"	W 78° 52' 38"	112	67.0	9.0	13.4	None
12	Brushy Fork Stream	N 36° 07' 17"	W 80° 12' 42"	104	51.5	9.05	17.6	None
13	Road Culvert	N 36° 07' 07"	W 80° 12' 41"	105	356.0	66.0	19.0	None
14	24" RCP	N 34° 59' 27"	W 78° 52' 27"	110	25.0	1.0	4.0	None
15	8" CPP	N 34° 59' 59"	W 78° 52' 42"	115	25.0	1.0	4.0	None

* Obtained from available maps

1.3.6 Airport Spill History

The ongoing documentation of spills is a required provision of this Plan. There have been no significant spills of oil or hazardous substances reported at the Airport other than those provided below. The spill reported below was due to a stray bullet fired from a gun off-property that ricocheted and pierced a hole in the fuel tank of an aircraft parked in the North T-Hangar.

The cause of repetitive spills will be investigated, identified, and eliminated.

Airport Spills	2011	No significant spills
Commercial Tenant Spills		No significant spills
Airport Spills	2012	No significant spills
Commercial Tenant Spills		No significant spills
Airport Spills	2013	No significant spills
Commercial Tenant Spills		No significant spills
Airport Spills	2014	No significant spills
Commercial Tenant Spills		No significant spills
Airport Spills	2015	No significant spills
Commercial Tenant Spills		No significant spills
Airport Spills	2016	No significant spills
Commercial Tenant Spills		June: Aprox. 13 gal of AvGas @ North T-Hangar

1.3.7 Risk Assessment

Airport operations that have a risk of contributing to a spill that may contaminate the stormwater drainage system and adjacent waters of the State are described below.

Airport operations that have a high risk potential of contributing to a large spill are the delivery or transfer of fuels from storage tanks or refuelers, or the failure of a storage tank. Outdoor refueling, material handling, vehicle and equipment cleaning are other potential high risk sources of stormwater pollution. Proper refueling and materials handling procedures as detailed in Chapter 3 - Best Management Practices will reduce the potential for water quality impacts.

Non-permitted discharges associated with washing activities or illicit connections to the storm system have the potential to discharge oil, sediment, and other pollutants into the Airport storm drainage system. There is a high risk of pollutants entering the storm system from non-permitted discharges. Non-stormwater discharges identified at the

Airport will be documented (refer to completed SWPPP Form 5 in Appendix F). A plan to eliminate non-permitted discharges at the Airport must be developed and carried out.

A moderate risk of spillage is incurred during delivery and off-loading of fuel and other hazardous substances. There is also a moderate risk of small spills in vehicle and equipment parking areas and hazardous substance storage areas. Such spills include fuel, aircraft deicing fluid (ADF), lubricating oils, paint, cleaning compounds, and brake or other hydraulic fluids. The use of portable totes, bowsers, and dollies without adequate secondary containment and spill response materials represents a moderate risk of spills and leaks.

A list of materials exposed to stormwater runoff at the Airport was compiled (refer to completed SWPPP Form 4). There is a moderate risk of pollutants entering the stormwater drainage system from exposed materials. Where practical, the Airport will provide cover for or will relocate exposed materials indoors. Aircraft/ vehicles/ equipment awaiting repair and scrap parts can introduce pollutants if these items are not completely emptied of fuels and lubricants, or are coated with oily residues. Where practical, the Airport can conduct refueling, material handling operations, and aircraft/ vehicle/ equipment cleaning operations indoors or under cover. In areas where the elimination of exposure is not practical, the Airport will attempt to minimize exposure by diverting stormwater runoff away from the areas of potential contamination.

Some identified materials subject to long term exposure to precipitation represent a low-level risk of stormwater pollution. Lead, zinc, and other heavy metals can precipitate from exposed items (e.g., galvanized sign posts, scrap metal) in contact with acidic rainfall. It is impractical to cover all aircraft and vehicle parking and equipment storage areas. Since these items by themselves represent a negligible potential for stormwater pollution, a constructed roof covering is not required. Scrap materials and other items no longer in use will be removed from the site promptly.

Except for bulk storage of liquids, operations that occur inside buildings present low risks of stormwater pollution. The positioning of drums and containers of hazardous materials near exterior doors increases the potential for a spill to flow from the building and into the stormwater drainage system. Such containers will be located away from exterior doors where practical.

1.3.8 Potential Spill Scenarios

Equipment failures may result in discharges of oil or hazardous substances in varying amounts over varying periods of time. Structural, mechanical, or instrument failures may include tank rupture, or piping and fitting failures associated with the use of various petroleum and non-petroleum products. These failures can occur as the result of structural deficiencies, material defects, unchecked corrosion, and extreme stresses resulting from unusual internal or external pressures, or from external loads.

The potential spill sources, quantity of the potential spill, probable direction of flow, and the method of containment are discussed in this sub-section. Specific flow rates for each scenario are dependent on the size of the failure or rupture; however, the spill scenario is assumed to be a catastrophic release, where the entire container quantity is released within two (2) minutes – see Section 1 and Appendix H.1 for container quantities, contents and method of containment. Refer to the Airport Site Map for direction of flow in the event of a spill, or to determine direction of flow for emergency response planning in the event of a catastrophic release. Spill prediction scenarios are reviewed by personnel during annual training as specified in Section A.1.4. Airport experience does not indicate a reasonable potential for equipment failure.

1.3.9 BMP Implementation Schedule

A BMP action plan is a key component of the SWPPP. Proper selection and implementation of both structural and non-structural BMPs is necessary to reduce pollutant loading to stormwater. SWPPP BMPs are grouped into the following categories:

- * Baseline BMPs
- * Site-specific BMPs

Baseline and site-specific BMPs are identified for the Airport to improve stormwater quality and ensure the Airport is in compliance with the Permit. New BMPs will be added during site inspections as needed.

Baseline BMPs are generally required for all Airport and commercial tenant operated industrial buildings/ areas located throughout the entire Airport property. The baseline BMPs are specifically required by the Airport General Permit and must be performed by all Airports that operate under the Permit. The baseline BMPs are described in detail in Appendix B of this Plan.

Site-specific BMPs are specific to a particular zone or building on the Airport and are tracked by using the BMP Implementation Form included in Appendix E. Completed copies of this form are found in Appendix F. The Airport and each commercial tenant must track BMP implementation for their operations. The BMP Implementation Form contains a reference column “Ref” which will provide more detailed BMP information contained in Appendix B of this Plan. Certain BMPs must be implemented on an annual basis (e.g., inspect outdoor storage areas), whereas other BMPs may only need to be completed once (e.g., repair damaged containment area).

BMPs are to be implemented to the maximum extent practicable. Due to changing practices, activities and technology, this is an elusive goal. The SWPPT will continue to review activities at the Airport to determine if BMPs should be added, modified, or deleted. BMP modification can result from changes in activities performed at the Airport. Additional BMPs will be added when determined necessary, such as during the annual comprehensive site compliance evaluations. A brief description written for new BMPs is sufficient for Permit compliance. Deletions or modifications will also be documented.

APPENDIX A
SWPPP REQUIREMENTS

A.0 SWPPP REQUIREMENTS

As part of Plan requirements, the SWPPT will complete required tasks in each year of the permit term. Completion of the tasks will be documented on the Plan Implementation Schedule for the SWPPT Leader, which is provided on SWPPP Form 1. The Form provides the SWPPT Leader with a schedule to implement and document the required tasks for each year.

The Forms in Appendix E are provided for the SWPPT to implement and document completion of each task. The SWPPT Leader will insert completed Forms and records into Appendix F each year.

SWPPP Form 1 identifies the tasks to be performed and the method of documentation to be used for each task. Target dates indicated in the plan implementation schedule are the dates that task implementation should begin, not necessarily the date that a task is completed. When tasks are completed, the SWPPT Leader will enter the completion date on the appropriate plan implementation schedule for each year.

SWPPP Form 2 is the SWPPP Certification Form that must be signed by Airport Management. SWPPP Form 3 will be used each year to document SWPPP-related training at the Airport. SWPPP Forms 4 and 5 will be completed each year during the annual Comprehensive Site Compliance Evaluation (second semiannual site inspection). SWPPP Form 5 will be completed and certified each year to document compliance with non-stormwater discharge requirements of the permit. SWPPP Form 6, which is the Outfall Visual Inspection Record, will also be completed twice each year during representative rain storm events at each Airport stormwater discharge point that contains runoff from industrial activities. SWPPP Form 7 will be completed twice each year during each semiannual site inspection. SWPPP Form 8 will be used by the SWPPT Leader to track BMP implementation at the Airport. SWPPP Form 9 will be used for monthly tracking of deicing/ anti-icing chemical usage at the Airport during winter seasons. SWPPP Form 10 will be used to document and certify the Annual Comprehensive Site Compliance Evaluation.

SWPPP Form 11 will be used each year to document the completion of intermediate and annual reviews by the SWPPT Leader and SWPPT members. SWPPP Form 11 will also be used each year to document amendments to the Plan. SWPPP Form 12 will be completed each time that accumulated rainwater is released from exposed secondary containment structures. SWPPP Form 13 will be completed for each significant spill incident that may occur.

SPCC Forms 1 through 5 are provided if the Airport is required to have an SPCC Plan. SPCC Form 1 is the Management Certification and Professional Engineer Certification that must be both signed by Airport Management, and sealed by a PE. SPCC Form 2 is the Certification of the Applicability of the Substantial Harm Criteria, which must be signed by Airport Management. SPCC Form 3 is the monthly inspection form for oil containers located at the Airport. SPCC Form 4 is the Spill Response and Notification Contacts form that will be completed and updated as needed. SPCC Form 5 is the Discharge Report to the EPA Regional Administrator that will be completed if the Airport

has an oil spill of more than 1,000 gallons in a single discharge or more than 42 gallons of oil in each of two discharges, occurring within any consecutive 12-month period.

According to Part III, Section A, Paragraph 1 of the Permit, the SWPPP shall be developed and implemented within 12 months of the effective date of the initial certificate of coverage and updated thereafter on an annual basis. Secondary containment shall also be accomplished within 12 months of the effective date of initial certificate of coverage.

A.1 PLAN GUIDANCE

A.1.1 Record Keeping

This Plan will be maintained by the SWPPT Leader. The Plan will be reviewed annually and updated by the SWPPT as needed. If there are any technical amendments to the SPCC Plan, then a Professional Engineer must recertify the Plan, *if* the Plan initially required a PE's seal. Technical amendments include changes to the Plan that require engineering practice such as including physical modifications or changes in Airport procedures. A blank Record of Plan Reviews (SWPPP Form 11) is provided. The SWPPT Leader will maintain a record that summarizes the results of inspections and a certification that the Airport is in compliance with the Plan (indicating accomplishment of BMPs) or identify any incident(s) of non-compliance. Implementation of the Airport Plan includes documentation of all monitoring, measurements, inspections, maintenance activities, and training provided to employees. All Plan documentation will be kept on-site for a period of five (5) years and made available to DWR or the USEPA Regional Administrator immediately upon request.

The SWPPT Leader shall amend the SWPPP 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. A blank Plan Amendment Records Form (SWPPP Form 11) is provided. Amendments should include a brief description of the change, date of change, any new required BMPs, target dates and completion dates. An amendment made to the Plan must be prepared within six months of the change in Airport operation, and must be implemented as soon as possible, but not later than six months following preparation of the amendment. Reports and changes to the Plan will be retained on-site within the Plan document for a period of five (5) years.

The SWPPT will evaluate the spill prevention program once each year. Spill prevention items that are addressed within this Plan and that may need annual review and revision include:

- Review and update materials inventory list (emphasis on hazardous substances);
- Identify potential spill sources;
- Establish incident reporting procedures;
- Develop inspection procedures;
- Review previous incidents;

-
- Establish a training program; and
 - Review new construction and proposed operational changes.

The Airport will retain records of all stormwater monitoring information required by the Permit for a period of five (5) years from the date of the sample, measurement, report, or application. Records will be kept on-site within the Plan document. Copies of any analytical monitoring results will also be maintained on-site within the Plan document.

For inspections of secondary containment discharges, records must document the individual making the observation, the description of the accumulated rainwater, and the date and time of the release (SWPPP Form 12). Records will be kept on-site within the Plan document for a period of five (5) years.

Training performed in conjunction with the Plan will be documented with training records maintained on-site within the Plan document (SWPPP Form 3). Training outside the scope of the Plan will also be documented and maintained at a central location on-site. Records will be kept for a period of five (5) years.

The Airport is not required to submit the Plan for review unless requested to do so by DWR or USEPA. If the DWR or USEPA reviews the Plan, the Airport may be required to amend the Plan. In the event that DWR or USEPA notifies the Airport that the Plan does not meet one or more of the minimum requirements of the Permit or the regulations, the Airport will be required to amend the Plan. Within 30 days of such notice from DWR or USEPA, the Airport will submit a proposal and time schedule to the DWR or USEPA for modifying the Plan to meet minimum requirements. The Airport will also provide certification in writing, in accordance with the Permit, to the DWR that the changes have been made.

A.1.2 Inspections

Stormwater System Inspections

The Airport performs inspections of the Airport facilities and stormwater systems on a semi-annual basis. Records of these inspections are documented on SWPPP Form 7. These inspections are required by Part II, Section A.2.r. of the NPDES Permit.

Annual Comprehensive Site Compliance Evaluation

Airport personnel familiar with the Airport General Permit requirements and this SWPPP shall perform an annual comprehensive site compliance evaluation (also known as an Annual Facility Inspection or SWPPP Evaluation) at a minimum of once per year to evaluate the effectiveness of the SWPPP in preventing and controlling stormwater pollution. The SWPPT Leader will maintain a record which summarizes the results of the inspections and a certification that the Airport is in compliance with the SWPPP (indicating implementation of BMPs) or identify any incident(s) of non-compliance. The results of the SWPPP Evaluation are to be documented on the Annual Comprehensive Site Compliance Evaluation (SWPPP Form 10). Typically, SWPPP Form 4 (Exposed Significant Materials Inventory) and SWPPP Form 5 (Non-Stormwater Discharge

Assessment) are completed during or as part of the annual SWPPP Evaluation. These forms are included in Appendix E of this Plan.

A.1.3 Spill Response and Reporting

Spill Response

All spills must be reported immediately to the SWPPT Leader or their designated representative. The SWPPT Leader or their representative directs the response, cleanup, notification, and disposal efforts. Table A-1 contains the telephone numbers for agencies that the SWPPT Leader may need to contact in the event of a spill.

Trained Airport personnel provide initial response to spills. In the case of large-volume spills, the Airport will request aid from the local Fire Department, and other appropriate emergency response agencies may be contacted for assistance with large-volume spills (see Table A-1). Warning signs placed at fuel stations, bulk storage tanks, or other refueling areas should contain emergency telephone numbers to aid in quick response. Fuel Stations that operate 24-hours a day should post warning signs with 24-hour emergency telephone numbers.

Table A-1. State and Federal Spill Response Telephone Numbers

Spill Response Entity	Telephone Number
NCDEQ 24 Hour Emergency Response Spill Reporting	(800) 858-0368
National Response Center	(800) 424-8802
EPA Region 4	(404) 562-9655

Minor spills can be absorbed with dry granular absorbents, pads, booms, or socks. Many liquid hazardous substances stored at the Airport are used inside hangars or other buildings and are otherwise not normally exposed to the storm drainage system. Small spills can be controlled by sweeping or mopping the spilled material into approved containers for proper disposal. Proper disposal includes removing used absorbent compounds from the floor on a timely basis.

ONLY PERSONNEL TRAINED IN SPILL RESPONSE SHOULD BE ALLOWED TO CLEAN UP OR RESPOND TO SPILLS.

In the event a spill reaches the storm drainage system or waters of the State, Airport personnel shall respond to the spill to expedite containment, and the SWPPT Leader will notify the appropriate spill response personnel (see Table A-1 for Federal and State Response numbers) for spill containment and/or cleanup. If a fire or security problem

associated with a discharge arises, the Fire Department and Police shall be immediately contacted at 911 for emergency assistance.

Spills that occur outside on vehicle parking lots or equipment storage lots where there is no secondary containment will be immediately addressed with appropriate spill response equipment and procedures. Necessary measures will be taken to prevent soil contamination and to prevent any spills from reaching the stormwater drainage system.

In general, four basic steps should be taken to control pollution that can result from a spill:

1. Stop the spill at the source.
2. Contain the spill.
3. Collect the spilled material.
4. Dispose of the spilled material and subsequent contaminated material properly and legally.

Steps 3 and 4 should be undertaken only by personnel who are properly trained in spill response and cleanup. Table A-2 summarizes spill response, reporting, and cleanup for oil. Note that oil is defined as oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

Table A-2. Oil Spill Response, Reporting, and Cleanup

Spill Volume	Response	Reporting	Cleanup
Any amount on-site	Airport Personnel	SWPPT Leader	Sorbent Material, Pads
25 gallons, or sheen, or ≤ 100 feet from water	Airport Personnel	SWPPT Leader, NCDEQ	Sorbent Material, Pads
Greater than 1,000 gallons	Airport Personnel, Fire Dept/Contractor	SWPPT Leader, NCDEQ	Qualified Hazmat Contractor
Any amount that reaches a navigable Water	Airport Personnel, Fire Dept/Contractor	SWPPT Leader, EPA, NRC, NCDEQ	Qualified Hazmat Contractor

Spill Reporting

All releases of oil to waters of the United States (i.e., receiving stream) that cause a film, sheen, or deposition, or violate applicable water quality standards will be immediately reported to the National Response Center (NRC).

The Airport must report to DWR any non-compliance that endangers human health or the environment. Information will be provided orally within 24 hours (or as soon as practical) from the time the Airport becomes aware of the circumstances. A written

submission to DWR shall also be provided within five (5) days of the time the Airport becomes aware of the circumstances.

The written submission will contain a description of the non-compliance, and its causes; the period of non-compliance, including exact dates and times, and if the non-compliance has not been corrected, the anticipated time compliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance.

A.1.4 Personnel Training

Personnel training is essential to the effectiveness of this Plan. Personnel at all levels of responsibility will be trained in the components and goals of the NPDES program (and the SPCC program where applicable), the regulations, and this Plan.

It is the SWPPT Leader's responsibility to train personnel to:

- Identify and manage potential spills that can occur from equipment and containers of petroleum and hazardous substances and review spill prediction scenarios;
- Recognize toxic and hazardous substances located on-site; and
- Prevent, or minimize to the extent practical, stormwater pollution at the Airport.

The SWPPT Leader must ensure personnel are trained in:

- Requirements of the Plan and applicable rules and regulations;
- Proper and safe spilled material cleanup;
- General Airport operations and procedures;
- Operation and maintenance of equipment to prevent discharges;
- Instruction on securing drums and containers;
- Frequent checking for leaks and spills;
- Proper handling and storage of hazardous substances;
- Identification of toxic and hazardous substances and wastes stored, handled, used, and produced on-site;
- Preventative maintenance of equipment and stormwater controls;
- Preventing exposure of oil, hazardous substances, and waste materials to stormwater;
- Good housekeeping procedures;
- Spill prevention and response;
- Safe fuel handling procedures; and

- Past discharges or failures, malfunctioning components, recently developed precautionary measures, and lessons learned.

Provide training for new personnel promptly upon assignment and provide personnel refresher training on an annual basis. Ensure that all personnel training for Airport and commercial tenant personnel is documented. A blank Training Documentation Sheet (SWPPP Form 3) is provided in Appendix E. Keep completed copies of the form on-site with the Plan document for at least five (5) years. The SWPPT Leader will develop a schedule and coordinate training for all SWPPT members in the elements of the Plan. The SWPPT members will coordinate training on the proper completion of BMPs for personnel under their direction. Training may include reviewing the Plan or other training materials or attending regular training meetings.

A.1.5 Qualitative Monitoring Guidance

Stormwater discharge qualitative monitoring (visual observations) will be performed at each designated outfall point as shown in the Airport Site Map. The Permit requires that all industrial stormwater discharge outfalls be observed twice per year. Stormwater discharge outfall visual observations should be performed during a storm event that has been preceded by at least 72 hours of dry weather. Visual observations must be made on samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one (1) hour of when the runoff or snowmelt begins discharging from the outfall. The visual observation should be made during daylight hours. If no storm event resulted in runoff during daylight hours from the Airport during a monitoring period, the Airport must document that no runoff occurred during the period.

The table below shows the parameters for which discharges from industrial outfalls will be observed. No analytical monitoring is required.

Table A-3. Qualitative Monitoring Requirements

Discharge Characteristics	Frequency	Location *
Color	Semi-Annual	SDO
Odor	Semi-Annual	SDO
Clarity	Semi-Annual	SDO
Floating Solids	Semi-Annual	SDO
Suspended Solids	Semi-Annual	SDO
Foam	Semi-Annual	SDO
Oil Sheen	Semi-Annual	SDO
Erosion or deposition at the outfall	Semi-Annual	SDO
Other obvious indicators of stormwater pollution	Semi-Annual	SDO

* Monitoring Location: Visual observation shall be performed at each industrial stormwater discharge outfall or at the next accessible point upstream.

Visual monitoring is conducted for the purpose of evaluating the effectiveness of the SWPPP and assessing new sources of stormwater pollution. A blank Outfall Visual

Observation Record (SWPPP Form 6) is provided in Appendix E. Completed originals of the forms will be kept on-site with the SWPPP document for at least five (5) years.

Adverse weather conditions that may prohibit visual monitoring of stormwater discharge outfalls include weather conditions that create dangerous conditions for personnel (e.g., local flooding, high winds, hurricanes, tornadoes, electrical storms). When conducting visual monitoring of outfalls, SWPPT personnel are required to follow standard Airport safety practices (e.g., wearing safety vests, steel-toed boots, wet weather gear).

If the storm event monitored and reported in accordance with the Permit coincides with a non-stormwater discharge (or other atypical condition), the Airport shall separately monitor and report all parameters as required under the non-stormwater discharge permit requirements and provide information with the Outfall Visual Inspection Record, which must remain on-site for a period of five years and made available to DWR upon request.

When conducting wet weather visual monitoring at outfalls that receive off-site runoff, the effects of this off-site runoff can be minimized by conducting the wet weather visual observation within the first ten minutes of discharge from the on-site outfall.

If stormwater discharges are determined to be polluted, the source of the pollutants will be located and minimized to the extent practical. Refer to Appendix B, Best Management Practices, for descriptions of applicable measures that can be implemented to reduce pollutants.

A.1.6 Non-stormwater Discharges

The term “stormwater conveyance system” includes catch basins, drop inlets and similar structures, pipes, ditches, channels, swales, and canals that discharge to “waters of the State.” As stated in the Permit, the only non-stormwater discharges that shall be allowed in the stormwater conveyance system are as follows:

- (a) Other discharges that are authorized by, and in compliance with, another NPDES discharge permit including discharges of process and non-process wastewater, and stormwater associated with industrial activity; or
- (b) Determined to be incidental non-stormwater flows that do not significantly impact water quality and may included:
 - Potable water, including water line flushing;
 - Fire hydrant flushing;
 - Landscape irrigation (provided all pesticides, herbicides, and fertilizer have been applied in accordance with manufacturer’s instructions);
 - Diverted stream flows;
 - Rising groundwaters;
 - Uncontaminated groundwater infiltration;
 - Uncontaminated pumped groundwater;
 - Discharges from potable water sources;

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- Foundation or footing drains where flows are not contaminated with process materials;
 - Uncontaminated air-conditioning or compressor condensate;
 - Irrigation waters (does not include reclaimed water as described in 15A NCAC 2H.0200);
 - Uncontaminated groundwater or spring water;
 - Water from crawl space pumps;
 - Lawn watering;
 - Flows from riparian habitats and wetlands;
 - Street washwater where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
 - Routine external building washdown that does not use detergents;
 - Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your Airport, but NOT intentional discharges from the cooling tower (e.g., piped cooling tower blowdown or drains); and
 - Flows from emergency fire-fighting and discharges resulting from fire fighting training and testing or demonstration of fire fighting equipment.

Vehicle, aircraft, and equipment washwater is NOT included in the definition of allowable non-stormwater discharges in the Permit, and is therefore not allowed to discharge into the stormwater drainage system or adjacent waters of the State. See Appendix B.3.3 for accepted washing procedures.

Note also that discharges of washwater from steam cleaning, parts washers, and other equipment cleaning operations are not allowed to enter the stormwater drainage system.

The holders of NPDES permits for discharges of stormwater associated with industrial activity are required to perform an investigation to show that outfalls discharge only stormwater or one of the allowable discharges defined previously. An investigation to identify potential non-stormwater discharges will be performed each year during the second semiannual site inspection (SWPPP Form 5). The Airport will certify that the investigation is performed for areas where industrial activity occurs. The investigation will determine that the discharges from each outfall are composed only of stormwater or a permitted discharge.

The following methods are typically employed in these types of investigations to determine whether non-stormwater discharges are present:

- Visual observation of the outfalls and storm drainage system;
- Interview with Airport personnel;
- Review of as-built infrastructure drawings and building plumbing plans;
- Testing of floor drains and drainage system using water, smoke, dye, or video; and

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- Analytical monitoring.

When non-permitted non-stormwater discharges or unauthorized sewer (e.g., sinks, floor drains) connections are discovered, a plan to eliminate the discharge shall be developed and carried out. Non-structural corrective actions should be performed immediately and will require an amendment to the SWPPP to reflect the completion of the BMP. Structural modifications should be made as soon as possible.

A.1.7 Releases from Secondary Containment Structures

Drainage from secondary containment for bulk storage of liquid materials will be controlled by manually activated valves or other similar devices. The drain valves for containment structures will be closed at all times except when making a controlled release. The drain valves will be secured with a locking mechanism. Any stormwater that accumulates in the containment area will be visually observed for color, foam, outfall staining, visible sheen, and dry weather flow prior to release of the accumulated stormwater. After each significant precipitation event, Airport operators will inspect the rainfall or snowfall that has accumulated in the containment areas. If there is no evidence of oil or chemical contamination, the valves can then be opened to release the clean stormwater to the drainage system. If oil or chemicals appear to be present, the contaminants will be removed and disposed of in accordance with local, state, and federal regulations. It may be necessary to remove and dispose of all the accumulated rainwater as a contaminated waste.

The drain valve openings and releases are required to be documented. A blank Rainwater Release from Containment Structure (SWPPP Form 12) is provided to document the releases. Completed copies of the form will be inserted into the document and kept on-site for at least five (5) years. After releasing accumulated rainwater, the drain valve will be closed and locked.

An accidental release from a secondary containment structure, including diked or bermed areas, should be treated like an accidental release or spill from any aboveground storage tank (AST). Appropriate spill response and reporting procedures will be followed to document the release.

Accumulated sludge in non-exposed secondary containment structures will be characterized, either by analytical methods or generator knowledge, and disposed of accordingly.

A.1.8 Deicing/ Anti-icing Operations

Airports that conduct aircraft and/or airfield deicing/ anti-icing operations must evaluate their deicing/ anti-icing procedures to consider alternative practices to reduce the amount of deicing/ anti-icing chemicals used and to minimize the quantity of deicing/ anti-icing fluid runoff discharging to the storm system. As part of this SWPPP and as appropriate based on deicing/ anti-icing chemical usage, the Airport SWPPT will include site-specific BMPs to minimize deicing/ anti-icing fluid in runoff into this SWPPP. Example BMPs for deicing/ anti-icing are described in Appendix B.3.8 of this SWPPP.

The permit requires the Airport to track and submit annual usage rates of deicing/ anti-icing chemicals to the State. Based on these usage rates DWR may require Airports with excessive deicing/ anti-icing chemical usage to apply for an individual permit. The Airport will use SWPPP Form 9 in Appendix E for monthly tracking of deicing/ anti-icing chemical usage at the Airport during each winter seasons. The total amount of chemical usage at the Airport is defined in the permit as the cumulative amount (of pre-dilution volume) used by the Airport authority and each commercial tenant at the Airport.

A.1.9 Existing Environmental Plans

Existing stormwater management practices required by other existing environmental management plans have been evaluated and applicable portions have been incorporated into this Plan. Future stormwater management practices required by other regulations will be evaluated by the SWPPT and incorporated into the Plan during the annual update. The Airport will maintain a current copy of each of these plans.

APPENDIX B
BEST MANAGEMENT PRACTICES

B.0 BEST MANAGEMENT PRACTICES

B.1 BMP ASSESSMENT PROCESS

The Airport must consider and implement practical BMPs to control stormwater pollution potential. This section describes the process used to select BMPs and describes the purpose and intent of each BMP. BMPs are generally divided into two categories:

- **Baseline BMPs**, which are general in nature (e.g., good housekeeping) and apply to most industrial facilities; and,
- **Site-Specific BMPs**, which pertain to a specific facility (e.g., construction of a concrete containment around an individual fuel tank).

NCDEQ DWR and USEPA emphasize the establishment of pollution prevention measures and BMPs that reduce the potential for pollutant discharges at the source.

Source reduction measures include preventative maintenance, chemical substitution, spill prevention, good housekeeping, pollution prevention training, and proper materials management. Where such practices are not appropriate to a particular source or do not effectively reduce pollutants in stormwater discharges, DWR and USEPA support the use of source control measures and BMPs such as material segregation or covering, debris control, vegetative filter strips, infiltration and stormwater detention or retention, runoff diversion, and dust control. Like source reduction measures, source control BMPs are intended to keep pollutants out of stormwater. The remaining classes of BMPs, which involve recycling or treatment of stormwater, allow the reuse of stormwater or attempt to lower pollutant concentrations prior to discharge.

B.2 BASELINE BMPS

Baseline BMPs are practices that are generic and can be applied at most industrial facilities. The Permit requires each Airport to address several baseline BMPs such as developing preventative maintenance and good housekeeping programs.

B.2.1 Stormwater Pollution Prevention Training

The Permit requires that Airport personnel, including commercial tenants, receive training on SWPPP compliance, pollution prevention, and spill response. The Permit does not specify exact course content or format. The Airport can develop the training program in-house, or it may contract with vendors to provide the training.

B.2.2 Good Housekeeping Program

Good housekeeping is the preservation of a clean and orderly work environment that contributes to overall pollution control efforts. The implementation of this program may also include some materials management practices as they relate to storage of drums and bench stock in the shop areas. Adherence to the following practices will minimize the potential for stormwater pollution:

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- Maintain dry and clean floors. Interior floors will be swept weekly, with residue placed in designated waste disposal containers. Spills/drips/leaks will be cleaned promptly.
 - Contaminated dry granular absorbents (e.g., "speedi-dri") will be swept daily and disposed of properly.
 - Brooms, dust pans, and mops will be hung on racks for easy access and use.
 - Trash will be picked up on a regular basis and disposed of properly.
 - Catch basins and other inlets to the stormwater drainage system will be checked regularly. Litter and trash will be removed and disposed of properly.
 - Separate holding cans will be provided for oily rags as a fire prevention aid.
 - The exterior grounds will be policed biweekly. Litter and other trash will be disposed of properly. Scrap parts and empty drums will be removed from the Airport promptly. Solid waste dumpsters and recycle bins will be covered to prevent rainfall from contacting the container contents.
 - Equipment will be visually inspected for leaks and other conditions that could lead to a discharge of a pollutant.
 - Hazardous substances will be stored in approved containers. The containers will be stored in an area not exposed to stormwater. The containers will be located away from direct vehicular traffic.
 - Containers of liquids can be placed on spill containment pallets or racks to prevent corrosion and contain leaks. The containers will be stored in an area not exposed to precipitation where practical.
 - Containers of chemicals and other compounds or mixtures will be labeled with name of substance, stock number, expiration date, health hazards, safe handling requirements, and first aid information. For each chemical substance used, a Material Safety Data Sheet (MSDS) will be provided in areas accessible to personnel.
 - Drums and tanks containing used oil must be labeled "USED OIL."
 - Good housekeeping procedures will be included in the employee training program. Regularly scheduled meetings will be held to discuss good housekeeping and pollution prevention concepts.
 - The good housekeeping checklist will be completed during each Airport site inspection.
 - Secondary containment areas shall be free from debris and not used for storage of any materials capable of contaminating contained rainwater.

B.2.3 Preventative Maintenance Program

The Airport will regularly inspect and test Airport equipment and operational systems whose failure has a potential to release pollutants into the stormwater drainage system. Inspections will uncover conditions such as cracks or slow leaks that could cause breakdowns or failures resulting in discharges of chemicals or particulate matter (solids) to the stormwater drainage system. The program will reduce breakdowns and failures by making proper adjustments, repair, or replacement of equipment or parts.

Standard operating procedures include two specific preventative maintenance periods:

- Run-time preventative maintenance occurs daily during working hours as normal operation of the equipment and machinery.
- Preventative maintenance at regularly scheduled intervals involves inspections, cleaning, and minor repairs.

The following items, if present at the Airport, are subject to periodic inspections as they have a direct risk to stormwater. The Permit requires written documentation of scheduled inspections.

- Fuel pumps: Items such as hoses, nozzles, electrical components, and gauges will be checked for wear. Routine maintenance will adjust and replace items as needed. Fuel pumps will be inspected regularly.
- Oil pumps: Drip containment devices will be inspected for proper operation. Seals, couplings, and valves will be inspected and replaced as needed. Oil pumps will be inspected regularly.
- Other pumps: These devices are subject to frequent inspection and maintenance that includes lubrication, balancing, repacking bearings, and tightening of support bolts and pipe connections. The pump manufacturers' recommendations will be followed. Other pumps that handle hazardous substances with a reasonable potential to pollute stormwater will be inspected regularly.
- Mobile equipment: These machines will be inspected for leaking hydraulic fluids, fuel lines, and lubricating oils. Mobile equipment will be inspected regularly.
- Secondary containment structures: These structures will be equipped with a locking valve to control discharge. The valves will be locked in the closed position. Discharges will be made in accordance with the Permit and other applicable regulations. The inspector will observe the structural integrity, valve and lock operation, and look for signs that the primary tank may be leaking. Exposed secondary containment structures will be inspected regularly. For those secondary containment structures without drain valves, rainwater disperses through evaporation. The Permit does not require the installation of a drain valve where none exists. However, accumulated residue must be removed and disposed of properly.

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- Pipes and supply lines: Pressurized pipes that supply petroleum, oil, and lubricants or other hazardous substances will be inspected regularly. Special attention will be made to supports, connectors, couplers, and valves.
 - Other: Equipment used for recycling various compounds will be inspected and maintained as directed by the original manufacturer. Other equipment that presents a reasonable risk for stormwater pollution will be inspected regularly.

Preventative maintenance also pertains to stormwater controls such as infiltration devices, diversion structures, detention facilities, and other stormwater treatment systems. Stormwater controls will be kept in proper operating condition.

B.2.4 Spill Prevention

Spill prevention and response information and procedures will be kept at the SWPPT Leader's office and at each shop location, as required. The potential spill sources with high risk for contaminating stormwater include the storage and handling of oil or hazardous substances and aircraft/ vehicle/ equipment maintenance activities. Accidents and careless handling during these activities can cause spilled liquids to enter the stormwater drainage system. See Section A.1.3 for spill response and reporting procedures.

Spill Prevention

Vehicles entering the Airport will be warned either verbally or with signage of aboveground piping or other oil transfer operations. During transfer of fuel or delivery of hazardous substances, the driver and handlers will be responsible for preventing spills. Loading or unloading will occur in approved locations only.

The driver will ensure that all hoses are secure and that proper absorbent materials (e.g., pads, booms and socks) are available before unloading. Communications will be established between the pumping and receiving stations, if applicable, and the remaining volume of the receiving container will be verified prior to product transfer. Drivers will use chock blocks and/or a vehicle break interlock system to prevent premature disconnect of their truck.

During fuel delivery operations, the driver will remain with the vehicle at all times. Sufficient volume (approximately 10% of the total capacity) will be maintained in the container for thermal expansion. During all loading and unloading operations, personnel will monitor tank levels using dipsticks, visual observation or other approved method. Absorbent pads and booms are to be located near the fuel delivery/ connection points. Drivers will visually inspect all valves and outlets for leakage when transfer is complete.

B.2.5 On-site Contractor Responsibilities

While the Airport is ultimately responsible for pollutants that leave its property, it should be made clear to vendors that they will be responsible for the cost and effort to clean up and remediate spills and other incidents caused by the vendor.

Fuel vendors have a high risk of creating a spill that could introduce fuel into the stormwater drainage system. Vendors must observe all fuel and liquid deliveries, and be able to respond immediately to a spill incident.

B.2.6 Industrial Activity Exposure

While the SWPPP does not require that inert materials and equipment be placed under cover, the Airport will take reasonable measures to minimize the exposure of industrial activities to precipitation and stormwater. Measures include:

- Conducting industrial activities indoors or under cover;
- Storing materials and parts indoors or under cover;
- Diverting stormwater away from the industrial activity area with berms, ditches, curbing, and buffer strips; and
- Diverting stormwater from industrial activity areas with appropriate runoff management methods.

B.2.7 Daily Observations

General walk-throughs of work areas should be conducted by Airport personnel during normal daily duties. A written record is not required for these daily observations; however, Section A.1.2 describes the inspections that do require written documentation. Particular attention should be paid to leaks, spills, and properly operating equipment. Problems will be reported and corrected as soon as practical. The following list will serve as a guide to critical items:

- Tanks and drums: observe for leaks, corrosion.
- Check secondary containment structures. Drains should be closed and locked.
- Refueling trucks, portable fuel bowsers, landscape chemical distributors, paint trucks, and other refueling points: observe for leaks, malfunctioning control valves.
- Look for unusual stains on walls, floors, and grounds.
- Look for deterioration of equipment foundations and anchorages.
- Check for and remove debris from stormwater drainage system inlets/ outlets.
- Check for windblown materials or materials tracked by aircraft or vehicles that can enter the stormwater drainage system.
- Note any unusual odors.
- Ensure that equipment is operating properly? Check for excessive noise, vibration, or exhaust.
- Check that work areas are clean and orderly. Practice good housekeeping.

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- Inspect valves and pipelines. Look for deteriorating gaskets, supports, and loose valve stems.
 - Make sure all valves are in proper position.
 - Look for leaking containers. Replace as necessary.
 - Check for torn bags of dry materials or bags exposed to rainwater.
 - Check that dry granular absorbents used to contain apron spills or maintenance floor spills are properly cleaned up.
 - Check condition of spill response kits and quantity of absorbent materials.
 - Clear access to all safety equipment such as eyewashes, fire extinguishers, and spill kits.
 - Clear access to emergency exit doors. Emergency exit doors must be kept unlocked during all work hours.

Refer to Section A.1.2 for semiannual inspection requirements.

B.2.8 Scrap Material Storage and Salvage

The Airport will minimize the quantity of scrap metals, scrap parts, and unused aircraft and equipment stored on the Airport property.

Scrap materials will be promptly removed from the Airport. Divert run-on away from scrap material storage areas. Divert runoff from scrap storage areas through a buffer strip, onto a level grassy area, or into a grass berm. Minimize direct runoff into the stormwater drainage system with the use of buffer strips or other runoff management devices.

Some items present a pollutant risk while they are stored on-site. For example, old tanks may still contain residue. Rusting tanks introduce leached metals into the stormwater runoff. Abandoned tanks will be emptied and cleaned, and removed from the Airport. Ensure scrap materials are free from lubricants and loose paint to the extent practical. Ensure that salvaged aircraft and equipment fuel tanks and fluid reservoirs are completely empty and drips are contained.

Small scrap items such as automotive batteries will be stored indoors or under cover until they are removed from the Airport.

B.2.9 Vegetation Practices

Preserving existing vegetation or revegetating disturbed soil as soon as possible after construction is the most effective way to control erosion.

Vegetation reduces erosion in multiple ways:

- Shields the soil surface from direct erosive impact of rain;

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- Improves the soil's porosity and water storage capacity so more water can infiltrate into the ground;
 - Slows the runoff and allows sediment deposits; and
 - Physically holds the soil in place with plant roots.

Vegetative buffers (e.g., grass filter strips, forested buffers) improve stormwater runoff quality by reducing the rate of flow, trapping sediment and other pollutants, uptake of nutrients, and increasing infiltration into the ground. The Airport should maintain vegetative buffers around the Airport perimeter to the extent practical.

Vegetation cover can be grass, trees, shrubs, bark, mulch, or straw. Grasses are the most common types of cover used for revegetation because they grow quickly and provide erosion protection within days. Straw or mulch may be used during non-growing seasons to prevent erosion. Existing shrubs and trees with established root systems should be protected to help prevent erosion.

Vegetation and other site-stabilization practices can be either temporary or permanent controls. Temporary controls provide cover for exposed or disturbed areas for short periods of time or until permanent erosion controls are put in place. Permanent vegetative practices are used when disturbance activities are completed or when erosion is occurring on a site that is otherwise stabilized.

B.2.10 Sediment and Erosion Control

Soils exposed to water, wind, or ice can have erosion and sedimentation problems.

Sedimentation occurs when soil particles are suspended in surface runoff or wind and are deposited in streams or other water bodies. Construction and other ground surface disturbing activities can accelerate erosion by removing vegetation, compacting or disturbing the soil, changing natural drainage patterns, and covering the ground with impermeable surfaces (pavement, concrete, buildings). When the land surface is impermeable, stormwater can no longer infiltrate, resulting in greater amounts of water that can move more quickly across a site and can carry larger amounts of sediment and other pollutants to streams and rivers.

Areas that are erosion-prone or where construction activity is occurring at the Airport will be inspected regularly. Sedimentation and erosion control devices will be installed and maintained.

Areas that need immediate erosion repair include areas with such heavy activity that plants cannot grow, soil stockpiles, stream banks, steep slopes, construction areas, demolition areas, and any area where the soil is disturbed, denuded (stripped of plants), and subject to wind and water erosion.

There are several ways to limit and control sediment and erosion pollution:

- Leave as much natural vegetation and plants on-site as possible;
- Minimize the time that soil is exposed;

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- Prevent runoff from flowing across disturbed areas - divert the flow to vegetated areas;
 - Stabilize the disturbed soils as soon as possible;
 - Slow down the runoff flowing across the site - use level spreaders or terraces;
 - Provide check dams in drainage ways to decrease flow rates;
 - Use grassy swales rather than concrete-lined channels; and
 - Remove sediment from stormwater runoff before it leaves the site by allowing it to sheet flow across vegetative buffers.

BMPs that are economically reasonable and appropriate with current industry practice will be used as necessary to eliminate or reduce pollutants in stormwater discharges. Structural controls will be implemented to ensure that no solid materials, including floatable debris, are discharged to waters of the United States, except as authorized by a permit issued under section 404 of the Clean Water Act. The generation of dust or other particulate matter, along with vehicle tracking of raw, final, or waste materials, or sediment, will be minimized. The introduction of raw, final, or waste materials to exposed areas will be minimized. Flow velocity dissipation devices will be placed at discharge locations and along the length of stormwater discharge outfall channels if the flow would otherwise create erosive conditions.

Using these measures to control erosion and sedimentation is an important part of stormwater management. Selecting the best set of sediment and erosion prevention measures depends upon the nature of the on-site activities and other local conditions. Refer to the North Carolina Sediment Control Planning and Design Manual for additional details and information.

B.2.11 Management of Runoff

Management of runoff is the consideration of appropriate traditional stormwater management practices (practices other than those which control the source of pollutants) used to divert, infiltrate, reuse, or otherwise manage stormwater runoff in a manner that reduces pollutants in stormwater discharges from the site. Procedures determined to be reasonable and appropriate must be implemented and maintained. The potential of various sources at the Airport to contribute pollutants to stormwater discharges from industrial activity must be considered when determining reasonable and appropriate measures. Appropriate measures may include:

- Vegetated buffer zones (vegetated areas along Airport perimeter)
- Vegetated swales (vegetated depressions used to transport, filter, and remove sediment);
- Stormwater diversion devices (grass berms, curbing);
- Stormwater collection and reuse (such as for a process or as an irrigation source);
- Inlet controls (such as passive sediment interceptors);
- Snow management activities;

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- Infiltration devices; and
 - Wet detention/retention basins.

Many BMPs are measures to reduce pollutants at the source before they have an opportunity to contaminate stormwater runoff. Traditional stormwater management practices can be used to direct stormwater away from areas of exposed materials or potential pollutants. Traditional stormwater management practices can be used to direct stormwater that contains pollutants to natural or other types of treatment locations. For example, using grass berms to divert runoff away from parking aprons minimizes the pollutants leaving the site. The Permit does not specify any one stormwater management practice since these practices must be selected on a case-by-case basis, depending on the activities and flow characteristics at the Airport.

B.3 SITE-SPECIFIC BMPS

B.3.1 Refueling Operations

The Permit has requirements for the Airport to implement BMPs for refueling operations. The following BMPs can be implemented to prevent or minimize contamination of stormwater runoff from refueling activities.

- a) Instruct personnel to avoid “topping off” the fuel tanks.
- b) Instruct drivers to remain with refueling equipment during the entire fuel delivery process.
- c) Provide drip pans at remote refueling locations and with refueler trucks to collect small leaks.
- d) Provide spill kits at refueling stations and with each refueler and/or at refueler parking areas.
- e) Minimize outdoor refueling operations during times of heavy rainfall.
- f) Provide secondary containment for refueler truck parking areas.

Pipelines not in service will be capped or blank-flanged, and marked as to their origin. Pipe supports are properly designed to minimize abrasion and corrosion, and to allow for expansion and contraction. New buried metallic piping will have either a protective coating or cathodic protection. New or repaired buried piping must undergo integrity and leak testing per industry standards. In the event that piping is exposed during an excavation, the pipe will be inspected for corrosion.

B.3.2 Spill Kits

Complete and adequate spill kits should be positioned in easily accessible locations near the oil and hazardous substance storage area(s) at the Airport. Airport and commercial tenant personnel should know the location of and have access to their spill kits. Spill kits will be utilized by Airport and commercial tenant personnel for both minor and major spill incidents. Specialized spill kits should be provided for the particular oil or hazardous substance stored on-site. The spill kits should have sufficient absorbents to contain a spill from the largest container within the hazardous substance storage area.

Absorbent should be located in aircraft maintenance hangars, equipment shops, oil changing and lube bays, and any building where 55-gallon drums of oil or hazardous substances are stored. Standard oil response spill kits typically consist of spill response equipment sufficient to control and contain a 55-gallon oil spill. Small spill kits consist of spill response equipment sufficient to control and contain smaller oil spills.

Following a spill cleanup, the items used from the spill kit must be replenished as soon as possible.

B.3.3 Aircraft/ Vehicle/ Equipment Cleaning Operations

The point source discharge of airport, vehicle, and equipment washwater, including tank cleaning operations, **is not** authorized by the Airport General Permit and must be covered under a separate NPDES general or individual permit or discharged to a sanitary sewer in accordance with applicable local industrial pretreatment requirements. The SWPPT Leader must ensure that all washwater discharges are in accordance with the Airport General Permit.

The following methods are recommended to prevent or minimize contamination of the stormwater runoff from areas used for aircraft, vehicle, and/or equipment cleaning operations:

- Do not discharge washwater directly into the stormwater drainage system.
- Collect washwater runoff from cleaning areas and provide treatment or recycling.
- Ideally, washwater from cleaning activities should be discharged into a sanitary sewer system. Both indoor and outdoor wash stations should be connected to the sanitary sewer system where it is available.
- Detergents, if used, will be biodegradable and the pH adjusted to be in the range of 6 to 9 standard units.

B.3.4 Oil/Water Separators

Oil/water separators (OWSs) require frequent and intense maintenance to operate properly. OWSs are designed to trap oil and other pollutants that float on the surface of water. The introduction of detergents, acids, heavy pollutants, and soluble materials will render the OWS ineffective. OWSs are typically not designed to treat stormwater as large flows through an OWS will cause the oil to bypass the separation chamber.

OWSs should not discharge to the same septic tank to which domestic waste discharges. Oil that bypasses the OWSs can cause a septic tank to malfunction.

OWSs that discharge to the stormwater drainage system are illicit. The Airport has three options for correcting these illicit connections:

1. Obtain an individual NPDES Permit for the discharge from oil/water separators. This involves submitting a separate permit application to DWR and then complying with the Permit's effluent limitations, maintenance, and monitoring requirements.

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2. Reroute the OWS discharge to a nearby sanitary sewer system. Local municipalities require notification and operational limits for connected OWSs. The Airport can contact the local municipal pretreatment coordinator for additional information.
 3. Permanently plug and abandon the OWS. This option may not be feasible if the OWS is needed to remove oil from industrial discharges.

OWSs that remain in service require regular maintenance and removal of accumulated oily sludge and grit. The SWPPT should refer to the vendor's literature for maintenance requirements. OWSs should be included regularly inspected to ensure they are cleaned when needed.

B.3.5 Secondary Containment

The Permit requires that secondary containment be provided for bulk storage of liquid materials, storage of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) water priority chemicals, or storage of hazardous substances to prevent leaks and spills from contaminating stormwater runoff. Secondary containment can take many forms, depending on the types and quantity of containers, exposure to precipitation, and operation criteria.

SPCC-regulated aboveground oil containers greater than 55-gallons in size, which includes tanks, drums, generators, and oil-filled electrical equipment such as transformers, will be located as depicted on the Airport Site Plan. Empty drums are stored in various areas while awaiting removal. Secondary containment should be provided for the following oil and hazardous substance storage areas:

- At ASTs, including used oil, heating oil, and ADF;
- Mobile/ portable totes and bowsers,
- Where non-empty 55-gallon drums are stored;
- Where drums or other containers are used as dispensing units within workshops;
- Where paint, solvents, and thinners are stored;
- Where oil is stored;
- Where liquid pesticides and herbicides are stored; and
- Where other liquid hazardous substances are stored.

For ASTs exposed to precipitation, the secondary containment should be constructed of impervious materials such as poured-in-place concrete. The volume of secondary containment should equal the volume of the largest AST within the containment plus freeboard for the 25-year, 24-hour storm event (approximately 8 inches for most of North Carolina). If a drain valve is provided, the valve must have a lock and remain closed except when making a controlled release of uncontaminated rainwater. A roof over the containment will minimize accumulated rainwater. Other options for ASTs include:

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- Provide prefabricated tanks with integral secondary containment and rain shed.
 - Provide double-walled tanks.

Containers in sizes up to 55 gallons have several options:

- Store containers inside a prefabricated metal hazardous material storage building with integral secondary containment.
- Use the existing building and provide a built-up curb or berm at the doorway threshold. Install a ramp to provide access for drums and to prevent trips.
- Use the existing building and place a spill blocker across the doorway threshold.
- Use the existing building and provide spill containment pallets for the containers.
- Build a depressed concrete slab with curbing and a shed roof.
- Store small containers within a self-contained flammables cabinet.

Secondary containment that is not exposed to precipitation should have a volume equal to 110% of the largest container within the secondary containment device.

Refer to Appendix A.1.7, Releases from Secondary Containment Structures, for guidance on how to manage controlled releases.

B.3.6 Hazardous Substance Storage and Management

For purposes of this document, the term “hazardous substance” includes hazardous substances defined by USEPA, hazardous materials defined by federal Department of Transportation rules, regulated hazardous wastes, non-regulated wastes, and any other material or substance that is a reasonable potential stormwater pollutant. Work areas that generate hazardous waste will designate a satellite accumulation point, which will meet the requirements specified in 40 CFR 262.34. The storage of hazardous materials and hazardous waste should be segregated.

The Airport has the following options for hazardous substance storage:

- a) Store hazardous substance indoors within secondary containment.
- b) Store hazardous substance outdoors under cover and within secondary containment.
- c) Store hazardous substance in prefabricated HAZMAT storage building with integral secondary containment.
- d) Store small hazardous substance containers in a flammables cabinet with integral secondary containment.

Provide a spill kit near or at locations where hazardous substances are stored. A spill kit will consist of absorbent pads, booms, or dry granular absorbents in sufficient quantity to contain a spill from the largest container at that storage location. Non-sparking shovels should be provided to aid in cleaning up the spill. Containers will be available for disposing any used absorbents. See Appendix B.3.2 for additional information on spill kits.

Ensure that hazardous material containers are labeled properly. Labels are required to help employees handle and use the material safely and respond to spills efficiently. Active tanks should be labeled with the contents, capacity, hazard, and an emergency phone number.

B.3.7 Salt Storage

One of the most effective controls to minimize the amount of salt lost to runoff is proper storage. Providing cover for salt (including sand/salt mixture) storage areas reduces salt loss from stormwater runoff. The Airport has the following options for minimizing stormwater pollution from salt storage areas:

- a) Provide cover for salt storage areas (e.g., salt dome, salt shed, or covered bin). A structure with a permanent constructed roof is preferable to tarpaulins or temporary roof structures.
- b) Divert run-on away from the salt storage and mixing areas.
- c) Minimize direct runoff from the salt storage area into the storm drainage system with the use of straw bales, bump diverters, curbed containment, or other runoff management devices.
- d) Practice good housekeeping to eliminate spillage of salt in non-covered areas and sweep salt residue into covered storage areas.

B.3.8 Aircraft Deicing/ Anti-icing Operations

The following BMP recommendations are developed based on the Airport's current stormwater permit requirements, the relative risk associated with deicing, costs and ease of implementation.

The Airport's permit does not require analytical monitoring for aircraft/ airfield deicing/ anti-icing operations. However, the permit stipulates that excessive deicing/ anti-icing chemical usage may lead to DWR requiring an individual permit, which would include analytical monitoring and more stringent deicing/ anti-icing BMP implementation requirements.

USEPA guidance stipulates that Airports that use urea and glycol-based aircraft deicing/ anti-icing fluids (ADFs) in excess of 100,000 gallons of glycol-based deicing/ anti-icing chemicals and/or 100 tons or more of urea on an average annual basis should be required to perform analytical monitoring of stormwater discharges. Typically, only those outfalls that collect runoff from areas where deicing/ anti-icing activities occur are required to be monitored.

Regardless of whether the Airport uses urea or glycol-based ADF products in excess of the monitoring threshold, the following BMPs are recommended:

Training

- *Deicing/Anti-icing* – The Airport should provide additional and ongoing training for facility personnel involved in deicing activities. Training sessions should include discussions on best management practices, chemical minimization techniques, and potential ADF runoff collection or reduction methods.
- *Coordinated Training* – The Airport should provide training and coordination between the Airport personnel who operate and maintain the storm drainage infrastructure and personnel who operate deicing/ anti-icing equipment, chemicals, collection and disposal.

Source Reduction

- *Chemical Alternatives* – The Airport should consider alternatives to the use of urea and glycol-based ADFs to reduce the aggregate amount of deicing/ anti-icing chemicals used and/or lessen the environmental impact. Chemical options to replace glycol-based and urea-based products include: potassium acetate; magnesium acetate; calcium acetate and anhydrous sodium acetate.
- *Exposure Minimization* – The Airport should investigate the feasibility of wing covers for aircraft as a means of minimizing ADF use and minimizing safety concerns related to facility personnel sweeping aircraft wings.
- *Analysis of Application Rates* – The Airport should evaluate application rates to ensure against excessive over application, and adjust rates as necessary consistent flight safety considerations. Also, the Airport should consider the metered application of chemicals, pre-wetting dry chemical constituents prior to application, installation of runway ice detection systems and implement anti-icing operations as a preventive measure against ice buildup.

ADF Collection and Disposal

- *Collection and Disposal* – The Airport should obtain grate covers and/or spill blocker booms to protect storm drain inlets from ADF-laden runoff during heavy deicing events. This would require the use of a wet vacuum sweeper truck to collect the ADF runoff as it ponds behind the spill blocker.
- *Disposal* – The Airport should have a contractor collect the recovered ADF for distillation and recycling.

Structural Control/Capital Improvement

- *Collection of Waste ADF* – The Airport should consider the purchase of a wet vacuum sweeper truck to collect waste ADF.
- *Storage of Waste ADF* – The Airport should consider providing an ADF recovery tank (with cover) and secondary containment and include inspection of the tank on the regularly scheduled stormwater evaluations.

Record Keeping and Reporting

- *Record Keeping and Reporting* – ADF storage and usage records will be maintained by the Airport. The daily information collected should be rolled up and reported on form included in Appendix E. Quantities (ordered and inventoried) of potassium acetate, sand and salt usage should also be recorded.
- *Sampling* – The Airport should consider collecting periodic grab samples from storm drains or outfall locations associated with deicing/ anti-icing operations during rainfall events that occur after deicing/ anti-icing events are over in order to determine if residual ADF on the ramp is draining to the facility storm drainage system after the fact.

ADF Storage

The Airport has the following options for minimizing stormwater pollution from bulk liquid deicing/ anti-icing chemical storage tanks and mixing areas:

- a) Provide secondary containment for bulk liquid deicing/ anti-icing chemical storage tanks (e.g., propylene glycol, calcium chloride, liquid brine). See Appendix B.3.5 for additional information related to secondary containment.
- a) Divert run-on away from the storage and mixing areas.
- b) Install sump pump in the mixing area to contain any spilled chemical.
- c) Use chemical alternatives (e.g., chemicals with lower concentrations of chloride).
- d) Practice good housekeeping to eliminate spillage of chemicals on the ground surface.

B.3.9 Illicit Connections and Improper Discharges Elimination

Illicit connections include direct pipe or other conveyance tie -ins to the stormwater drainage system. Improper discharges include the dumping of non-permitted non-stormwater materials into the stormwater drainage system.

Floor drains that connect to the stormwater drainage system are illicit connections that provide an avenue for an improper discharge. Floor drains connected to the stormwater drainage system must be permanently plugged or rerouted to the sanitary sewer system. Personnel must be instructed not to pour any substances into catch basins, drop inlets, ditches, and other portions of the stormwater drainage system.

Floor drains that are connected to an oil/water separator or other stormwater treatment device may be allowed if pollutants do not bypass the treatment device. Refer to Appendix B.3.4 for the proper operation of OWSs.

Floor drains that are connected to the sanitary sewer system should be identified and marked. Personnel will be trained to pour, dump, or place nothing in these floor drains that could cause an upset to the sanitary sewer system. The entry of oil, paint, solvent, and landscape chemicals into the sanitary sewer system may upset the system. Follow

the manufacturer's instructions for the dilution of janitorial cleaning compounds before discharging into the sanitary sewer system.

Hand sinks that discharge to the ground or stormwater drainage system are illicit connections. These hand sinks must be rerouted to the sanitary sewer system. Label hand sinks with instructions prohibiting the entry of hazardous substances.

B.3.10 Contaminated Soil Removal

Contaminated soil can cause stormwater runoff pollution problems. Where spills of oil or other hazardous substances are excessive and are causing pollutants to enter the stormwater drainage system, remediation may be necessary. A description of soil remediation methods is beyond the scope of this document. Beware that a hazard characterization of removed soil may be required before disposal.

For recent spills and areas near traffic, barricades may be erected to minimize tracking of the contaminated soil from the site.

B.3.11 Underground Storage Tank Evaluation

Underground storage tanks (USTs) used to store oil or other hazardous substances have the potential to contribute to stormwater runoff pollution during refueling operations or through tank leaks into the subsurface soil or groundwater system. USTs located at Airports may be active, inactive, or abandoned. The status of USTs should be evaluated to ensure the tanks are meeting current UST regulations and local requirements. Most USTs will not be covered by this Plan because they are regulated by 40 CFR 280 or 281. There are specific USTs that are exempt from 280 and 281, including USTs storing fuel for comfort heat and USTs that are 110-gallons or less.

These USTs *are* covered by the SPCC regulations and must be managed accordingly.

USTs that are regulated by the SPCC rule must comply with the requirements in Appendix H and USTs covered by 40 CFR 280 or 281 are described in the narrative in Section 1.

For active USTs: Make sure that the tanks meet current standards for construction and leak detection. Ensure that proper filling procedures are followed to minimize the potential for spills to the ground surface.

For inactive (or unneeded) USTs: USTs that are unneeded at the Airport can be closed or removed from the Airport property.

For abandoned USTs: Abandoned tanks should be empty and either properly closed or removed from the Airport property.

APPENDIX C
ACRONYMS AND DEFINITIONS

ACRONYMS

The following is a list of acronyms and abbreviations used in this document.

AST	Aboveground Storage Tank
BMP	Best Management Practice
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
DEQ	Department of Environment Quality
DWR	Division of Water Resources
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FRP	Facility Response Plan
HAZMAT	Hazardous Materials
MSDS	Material Safety Data Sheet
NCDEQ	North Carolina Department of Environment Quality
NCDWR	North Carolina Division of Water Resources
NPDES	National Pollutant Discharge Elimination System
NRC	National Response Center
OWS	Oil/Water Separator
Plan	Stormwater Pollution Prevention Plan (and SPCC Plan if required)
POTW	Publicly Owned Treatment Works
SAP	Satellite Accumulation Point (for hazardous waste)
SARA	Superfund Amendments and Reauthorization Act
SDO	Stormwater Discharge Outfall
SPCC	Spill Prevention, Control and Countermeasure (Plan)
SWPPP	Stormwater Pollution Prevention Plan
SWPPT	Stormwater Pollution Prevention Team
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank

DEFINITIONS

Best Management Practices (BMPs) means measures or practices used to reduce the amount of pollution entering surface waters. BMPs can be structural or non-structural and may take the form of a process, activity, physical structure, or planning.

Bulk Storage Container means any container used to store oil. These containers are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce. Oil-filled electrical, operating, or manufacturing equipment is not a bulk storage container.

Director is the Director of the Division of Water Resources, the permit issuing authority.

Discharge is a release or flow of stormwater or other substance from a conveyance or storage container.

General Permit is a permit issued under the NPDES program to cover a certain class or category of stormwater discharges. These permits allow for a reduction in the administrative burden associated with permitting stormwater discharges associated with industrial activities.

Grab Sample means an individual sample of collected instantaneously. Grab samples that will be directly analyzed or qualitatively monitored must be taken within the first 30 minutes of discharge.

Hazardous Substances are: (1) any substances designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act, and (2) any substances that pose a threat to human health and/or the environment. Hazardous substances can be toxic, corrosive, ignitable, explosive or chemically reactive.

Hazardous Waste is by-products of human activities that can pose a substantial or potential hazard to human health or the environment when improperly managed. It possesses at least one of four characteristics (ignitability, corrosivity, reactivity, or toxicity), or appears on special USEPA lists.

Illegal Dumping is the deposition or placement of solids or fluids of any kind into the stormwater drainage system that will create a litter or nuisance, or that will pollute or cause an unsanitary condition on the system.

Illicit Connection is any pipeline, ditch, or other direct physical connection to the stormwater drainage system or waters of the State that is not composed entirely of stormwater except discharges authorized by a separate NPDES permit or allowed by this Permit.

Minor spills are those spills that have a volume less than any reportable quantity, can be controlled and cleaned up with on-site resources, do not contaminate the environment, and do not cause injury to personnel.

National Pollutant Discharge Elimination System (NPDES) means the Federal Environmental Protection Agency's (USEPA) national program for issuing, modifying, revoking and reissuing, terminating, monitoring, and enforcing water quality permits.

NPDES Permit is an authorization, license, or equivalent control document issued by USEPA or an approved state agency to implement the requirements of the NPDES program.

Oil means oil of any kind or in any form, including, but not limited to: fats, oils, or greases of animal, fish, or marine mammal origin; vegetable oils, including oils from seeds, nuts, fruits, or kernels; and, other oils and greases, including petroleum, fuel oil, sludge, synthetic oils, mineral oils, oil refuse, or oil mixed with wastes other than dredged spoil.

Oil Sheen is a thin, glistening layer of oil on water.

Oil/Water Separator is a device installed, usually at the entrance to a drain, which separates and collects oil and grease from water flows entering the drain.

Outfall is the point of wastewater or stormwater discharge from a discrete conveyance system (see also point source discharge of stormwater).

Permit Issuing Authority (or Permitting Authority) is the State of North Carolina Department of Environment Quality, Division of Water Resources.

Permittee is the owner or operator issued the Airport General Permit.

Point Source Discharge of Stormwater is any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, or discrete fissure from which stormwater is or may be discharged to waters of the State.

Precipitation is any form of rain or snow.

Preventative Maintenance Program is a schedule of inspections and testing at regular intervals intended to prevent equipment failures and deterioration.

Representative Storm Event is a storm event that measures greater than 0.1 inches of rainfall and that is preceded by at least 72 hours in which no storm event measuring greater than 0.1 inches has occurred. A single storm event may contain up to 10 consecutive hours of no precipitation. For example, if it rains for 2 hours without producing any collectable discharge, and then stops, a sample may be collected if a rain producing a discharge begins again within the next 10 hours.

Run-on is stormwater surface flow or other surface flow which enters property other than that where it originated.

Runoff is that part of precipitation, snow melt, or irrigation water that runs off the land into streams or other surface water. It can carry pollutants from the air and land into the receiving waters.

Secondary Containment are structures, usually dikes or berms, surrounding tanks or other storage containers and designed to catch spilled material from the storage containers. Secondary containment must provide spill containment for the contents of the single largest tank within the containment structure plus sufficient freeboard to allow for the 25-year, 24-hour storm event.

Section 313 Water Priority Chemical is a chemical or chemical category which:

- (a) Is listed in 40 CFR 372.65 pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, also titled the Emergency Planning and Community Right-to-Know Act of 1986;
- (b) Is present at or above threshold levels at a facility subject to SARA Title III, Section 313 reporting requirements; and
- (c) That meet at least one of the following criteria:
 - (i) Is listed in Appendix D of 40 CFR Part 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table IV (certain toxic pollutants and hazardous substances);
 - (ii) Is listed as a hazardous substance pursuant to Section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or
 - (iii) Is a pollutant for which EPA has published acute or chronic water quality criteria.

Sheetflow is runoff which flows over the ground surface as a thin, even layer, not concentrated in a channel.

Significant materials includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any chemical the facility is required to report pursuant to Section 313 of Title III of the SARA; fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have a potential to be released with stormwater discharges.

Significant spills includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (Ref: 40 CFR 110.10 and CFR 117.21) or Section 102 of CERCLA (Ref: 40 CFR 302.4) [or spills that cannot be controlled with on-site resources, or cause a contamination to the environment, or cause injury to personnel.]

Spill Prevention Control and Countermeasures (SPCC) Plan is a plan required for certain facilities by federal regulation 40 CFR 112 consisting of structures, such as curbing, and action plans to prevent and respond to spills of oil as defined in the Clean Water Act. The Plan details the equipment, workforce, procedures, and steps to prevent, control, and provide adequate countermeasures to an oil discharge.

Stormwater runoff is the flow of water, which results from precipitation and which occurs immediately following rainfall or as a result of snowmelt.

Stormwater Discharge Associated with Industrial Activity is the discharge from any point source which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing or raw material storage areas at an industrial site. Facilities considered to be engaged in "industrial activities" include those activities defined in 40 CFR 122.26(b)(14). The term does not include discharges from facilities or activities excluded from the NPDES program.

Stormwater Pollution Prevention Plan (SWPPP) is the comprehensive site-specific plan which details measures and practices used to prevent or minimize stormwater pollution and improve the quality of stormwater discharging from the site. The SWPPP is based on an evaluation of the pollution potential of the facility.

Total Flow is the flow corresponding to the time period over which the entire storm event occurs. Total flow shall be either: (a) measured continuously, (b) calculated based on the amount of area draining the outfall, the amount of built-upon (impervious) area, and the total amount of rainfall, or (c) estimated by the measurement of flow at 20 minute intervals during the rainfall event.

Toxic Pollutant is any pollutant listed as toxic under Section 307(a)(1) of the Clean Water Act.

Vehicle Maintenance Activity means vehicle rehabilitation, mechanical repairs, painting, fueling, lubrication, and vehicle cleaning operations.

Waters of the United States

- (d) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (e) All interstate waters, including interstate "wetlands";
- (f) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, "wetlands," sloughs, prairie potholes, wet meadows, play lakes, or natural ponds, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce.
- (g) All impoundments of waters otherwise defined as waters of the United States under this definition;
- (h) Tributaries of waters identified in paragraphs (a) through (d) of this definition;
- (i) The territorial sea; and
- (j) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition.

APPENDIX D
AIRPORT GENERAL PERMIT NO. NCG150000

STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES
GENERAL PERMIT NO. NCG150000

TO DISCHARGE STORMWATER UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

For establishments primarily engaged in:

Furnishing Transportation by Air, or Operating Airports

In compliance with the provision of North Carolina General Statute 143-215.1, other lawful standards and regulations promulgated and adopted by the North Carolina Environmental Management Commission and the Federal Water Pollution Control Act, as amended, this permit is hereby issued to all owners or operators, hereafter permittees, which are covered by this permit as evidenced by receipt of a Certificate of Coverage by the Environmental Management Commission to allow the **discharge of stormwater to the surface waters of North Carolina** or separate storm sewer systems conveying stormwater to surface waters in accordance with the terms and conditions set forth herein.

Coverage under this General Permit is applicable to:

- All owners or operators of stormwater point source discharges associated with industrial activity from Air Transportation facilities identified by the SIC Codes in Major Group 45; including air transportation, scheduled, and air courier (SIC 4512 and 4513); air transportation, non-scheduled (SIC 4522); airports, flying fields, except those maintained by aviation clubs, and airport terminal services including: air traffic control, except government; aircraft storage at airports; aircraft upholstery repair; airfreight handling at airports; airport hangar rental; airport leasing, if operating airport; airport terminal services; and hangar operations; and airport and aircraft service and maintenance including: aircraft cleaning and janitorial service; aircraft servicing/repairing, except on a factory basis; vehicle maintenance shops (including vehicle and equipment rehabilitation, cleaning, mechanical repairs, painting, fueling, lubrication); and material handling facilities.
- Stormwater point source discharges from like industrial activities deemed by The Division of Energy, Mineral, and Land Resources (DEMLR) to be similar operations in the process, or the discharges, or the exposure of raw materials, intermediate products, by-products, final products, or waste products.

The General Permit shall become effective on September 1, 2017.

The General Permit shall expire at midnight on August 31, 2022.

Signed this 21ST day of August, 2017.

Original signed by Tracy E. Davis

Tracy E. Davis, P.E., CPM, Director
Division of Energy, Mineral, and Land Resources
By the Authority of the Environmental Management Commission

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PART I INTRODUCTION

SECTION A: GENERAL PERMIT COVERAGE

All airports desiring to be covered by this General Permit must register with the Division of Water Quality by the filing of a Notice of Intent (NOI) and applicable fees. The NOI shall be submitted and a certificate of coverage issued prior to any discharge of stormwater associated with industrial activity that has a point source discharge to the surface waters of the state.

Any owner or operator not wishing to be covered or limited by this General Permit may make application for an individual NPDES permit in accordance with NPDES procedures in 15A NCAC 2H .0100, stating the reasons supporting the request. Any application for an individual permit should be made at least 180 days prior to commencement of discharge.

This General Permit does not cover activities or discharges covered by an individual NPDES permit until the individual permit has expired or has been revoked. Any person conducting an activity covered by an individual permit but which could be covered by this General Permit may request that the individual permit be revoked and coverage under this General Permit be provided.

Any facility may apply for new or continued coverage under this permit until a Total Maximum Daily Load (TMDL) for pollutants for stormwater discharges is established. A TMDL sets a pollutant loading limit that affects a watershed, or portion of a watershed, draining to an impaired water. For stormwater discharges to watersheds affected by a TMDL, coverage under this permit may depend on the facility demonstrating it does not have reasonable potential to violate applicable water quality standards for those pollutants as a result of discharges. If the Division determines that discharges have reasonable potential to cause water quality standard violations, the facility shall apply for an individual permit 180 days prior to the expiration date of this general permit, and once that permit is effective, will no longer have coverage under this general permit. The facility must identify impaired waters (scheduled for TMDL development) and waters already subject to a TMDL in the Site Plan, as outlined in the Stormwater Pollution Prevention Plan (SPPP), Part II, Section A.2 (h)(ii).

During the period beginning on the effective date of the permit and lasting until expiration, the Permittee is authorized to discharge stormwater associated with the industrial activity. Such discharges shall be controlled, limited, and monitored as specified in this permit.

SECTION B: PERMITTED ACTIVITIES

Until this permit expires or is modified or revoked, the permittee is authorized to discharge stormwater to the surface waters of North Carolina or separate storm sewer system which has been adequately treated and managed in accordance with the terms and conditions of this General Permit. All discharges shall be in accordance with the conditions of this permit.

Any other point source discharge to surface waters of the state is prohibited unless it is an allowable non-stormwater discharge or is covered by another permit, authorization, or approval. The stormwater discharges allowed by this General Permit shall not cause or contribute to violations of Water Quality Standards.

This General Permit does not allow discharges determined by the Division of Water Quality to be wastewaters. Wash water and rinse water must be directed to a sanitary sewer system or permitted by a separate wastewater permit issued by the Division.

This permit does not relieve the permittee from responsibility for compliance with any other applicable federal, state, or local law, rule, standard, ordinance, order, judgment, or decree.

PART II MONITORING, CONTROLS, AND LIMITATIONS FOR PERMITTED DISCHARGES

SECTION A: STORMWATER POLLUTION PREVENTION PLAN

1. The Permittee shall develop and implement a Stormwater Pollution Prevention Plan (SWPPP), herein after referred to as the Plan. The Plan must include Best Management Practices (BMPs), economically reasonable and appropriate in light of current industry practices, that are selected, designed, installed, implemented and maintained in accordance with good engineering practices to eliminate or reduce pollutants in the permittee's discharge. The Plan must identify all potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges; describe and ensure implementation of practices used to eliminate or reduce pollutants in stormwater discharges; and ensure compliance with the terms and conditions of this permit.
2. The Plan shall include, at a minimum, the following items:
 - a. The Plan shall include a list identifying each area where industrial materials or activities are exposed to stormwater. Industrial materials or activities include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; intermediate products, by-products, final products and waste products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of raw material, intermediate products, final products and waste products.
 - b. The Plan shall include a list of the name(s) of all surface waters that receive discharges from the permittee's site. The permittee must provide the size and description of wetlands or other special aquatic sites that may receive discharges from the airport. If there are discharges through any publicly owned or operated storm sewer system, the Plan must identify the publicly owned or operated storm sewer system.
 - c. The Plan shall include the identity of any receiving water into which the permittee discharges.
 - d. The Plan shall include a list and locations where reportable spills or leaks of pollutants that have occurred at the facility during the three previous years.
 - e. The Plan shall include the location(s) and/or descriptions where potential spills and leaks could occur that could contribute pollutants to stormwater discharges, and the corresponding outfall(s).
 - f. For each area where industrial materials or activities are exposed to stormwater, the Plan shall include a narrative description of storage practices, loading and unloading activities, outdoor process areas, dust or particulate generating or control processes, and waste disposal practices. The Plan shall include a narrative description of the potential pollutants which could be expected to be present in the stormwater discharge from each outfall.

- g. The Plan shall describe and assess the potential for the following activities and facility areas to contribute pollutants to stormwater discharges: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing operations (including apron and centralized aircraft deicing stations, runways, taxiways and ramps). If deicing chemicals are used, the permittee must maintain a record of the types (including the Material Safety Data Sheets [MSDS]) used and the monthly quantities, either as measured or estimated. This includes all deicing chemicals, not just glycols and urea (e.g., potassium acetate), because large quantities of these other chemicals can still have an adverse impact on receiving waters. Commercial tenants or other fixed-based operations that conduct deicing operations must provide the above information to the airport authority for inclusion in the airport authority's Plan. The pollutant list must include all significant materials, including any hazardous substances or oil handled, treated, stored, or disposed of that have been exposed to stormwater in the 3 years prior to the date the Plan was prepared or amended.
- h. Site Plan. The site plan shall provide a description of the physical facility and the potential pollutant sources which may be expected to contribute to contamination of stormwater discharges. The site plan shall contain the following:
- (i) The size of the property in acres.
 - (ii) A general location map (USGS quadrangle map or appropriately drafted equivalent map), showing the facility's location in relation to transportation routes and surface waters within 1 mile of the site, the name of the receiving water(s) to which the stormwater outfall(s) discharges, or if the discharge is to a municipal separate storm sewer system, the name of the municipality and the ultimate receiving waters, and accurate latitude and longitude of the point(s) of discharge.
 - (iii) A site map drawn to scale (including a distance legend) showing: the site property boundary, on-site and adjacent surface waters and known wetlands, industrial activity areas (including storage of materials, disposal areas, process areas, loading and unloading areas, storage tanks, fueling stations, vehicle and equipment maintenance and/or cleaning areas, machinery, access roads and tracks, transfer areas for substances in bulk, locations used for the treatment, storage or disposal of wastes), locations of all stormwater conveyances including ditches, pipes and swales; stormwater inlets and outfalls, building locations, locations of all existing structural and source control BMPs, the location and extent of significant structures and impervious surfaces, and the percentage of each drainage area that is impervious), and the drainage areas for each outfall.
 - (iv) Locations of any storage piles containing salt used for deicing or other commercial or industrial purposes. Storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes, must be enclosed or covered to prevent exposure to precipitation. The permittee must implement appropriate measures (e.g., good housekeeping, diversions, and/or containment) to minimize exposure resulting from adding to or removing materials from the pile. Piles do not need to be

enclosed or covered only if stormwater from the pile is not discharged directly or indirectly to waters of the United States or discharges from the piles are authorized and controlled under another NPDES permit.

- (v) Locations of aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance.
- i. The Plan shall contain a narrative description of the best management practices employed which control or minimize the exposure of significant materials to stormwater, including structural and nonstructural measures. The Plan shall describe the type, location and implementation of all BMPs for each area where industrial materials or activities are exposed to stormwater.
- j. Feasibility Study. The Plan shall include a review of the technical and economic feasibility of changing the methods of operations and/or storage practices to eliminate or reduce exposure of materials and processes to stormwater. Wherever practical, the permittee shall prevent exposure of all storage areas, material handling operations, and manufacturing or fueling operations. In areas where elimination of exposure is not practical, the Plan shall document the feasibility of diverting stormwater runoff away from areas of potential contamination.
- k. Secondary Containment Requirements and Records. Secondary containment is required for: bulk storage of liquid materials; storage of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) water priority chemicals; and storage of hazardous substances, in order to prevent leaks and spills from contaminating stormwater runoff. A table or summary of all such tanks and stored materials and their associated secondary containment areas shall be maintained. If the secondary containment devices are connected directly to stormwater conveyance systems, the connection shall be controlled by manually activated valves or other similar devices (which shall be secured closed with a locking mechanism), and any stormwater that accumulates in the containment area shall be at a minimum visually observed for color, foam, outfall staining, visible sheens and dry weather flow, prior to release of the accumulated stormwater. Accumulated stormwater shall be released if found to be uncontaminated by the material stored within the containment area. Records documenting the individual making the observation, the description of the accumulated stormwater, and the date and time of the release shall be kept for a period of five years.
- l. BMP Summary. The BMP Summary shall include a written record of the specific rationale for installation and implementation of the selected site BMPs. The BMP Summary shall be reviewed and updated annually.
- m. Non-stormwater discharges to waters of the United States that are not authorized by an NPDES permit are unlawful and must be eliminated. The Plan must include a certification that all discharges (i.e., outfalls) have been tested or evaluated for the presence of non-stormwater, and that all unauthorized discharges have been eliminated. The permittee shall re-certify annually that the

stormwater outfalls have been evaluated for the presence of non-stormwater discharges. The certification statement will be signed in accordance with the requirements found in Part III, General Conditions, Section B, Paragraph 5 and must include:

- i The date of any testing and/or evaluation,
 - ii A description of the evaluation criteria or testing method used,
 - iii A list of the outfalls or onsite drainage points that were directly observed during the test,
 - iv A description of the results of any test and/or evaluation for the presence of non-stormwater discharges, i.e., identification of unauthorized discharge(s) origin and composition,
 - v The action(s) taken to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was rerouted to sanitary, or an NPDES permit application was submitted for a cooling water discharge.
- n. Spill Prevention and Response Plan. The Spill Prevention and Response Plan (SPRP) shall incorporate an assessment of potential pollutant sources based on a materials inventory of the facility. Facility personnel (or the team) responsible for implementing the SPRP shall be identified in a written list incorporated into the SPRP. A responsible person shall be on-site at all times during facility operations that have the potential to contaminate stormwater runoff through spills or exposure of materials associated with the facility operations. The SPRP must be site stormwater specific. Therefore, an oil Spill Prevention Control and Countermeasure plan (SPCC) may be a component of the SPRP, but may not be sufficient to completely address the stormwater aspects of the SPRP. The common elements of the SPCC with the SPRP may be incorporated by reference into the SPRP. Response procedures must include notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing and cleaning up spills. Employees who may cause, detect or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. Include contact information for individuals and agencies that must be notified in the event of a spill in the Plan and in other locations where it will be readily available.
- o. Preventative Maintenance and Good Housekeeping Program. A preventative maintenance and good housekeeping program shall be developed and implemented. The program shall list all stormwater control systems, stormwater discharge outfalls, all on-site and adjacent surface waters and wetlands, industrial activity areas (including material storage areas, material handling areas, disposal areas, process areas, loading and unloading areas, and haul roads), all drainage features and structures, and existing structural BMPs. The program shall establish schedules of inspections, maintenance, and housekeeping activities of stormwater control systems, as well as facility equipment, facility areas, and facility systems that present a potential for stormwater exposure or stormwater pollution. Inspection of material handling areas and regular cleaning schedules of these areas shall be incorporated into the program. Timely compliance with the established schedules for inspections, maintenance, and housekeeping shall be recorded in writing and maintained.

- p. Employee Training. The Plan shall include a stormwater employee and commercial tenant training program. The permittee must include a schedule for all types of necessary training. All employees and commercial tenants who work in areas where industrial materials or activities are exposed to stormwater, or are responsible for implementing activities identified in the Plan (e.g., inspectors, maintenance personnel), must participate in annual training. Training must cover the components and goals of the Plan, and include spill response, good housekeeping, material management practices, and BMP operation and maintenance.
 - q. Responsible Party. The Plan shall identify staff members (by name or title) responsible for developing, implementing, maintaining, revising and ensuring compliance with the Plan. Specific responsibilities of each staff individual must be identified and listed in the Plan.
 - r. Facility Inspections. The Plan shall specify the frequency of inspections. The Director may require increased inspections and Plan reevaluations as necessary. The inspection and any subsequent maintenance activities performed shall be documented, recording date and time of inspection, individual(s) making the inspection, and a description of the facility's stormwater control systems, equipment, and systems.
3. Implementation. The permittee shall implement the Plan. Implementation of the Plan shall include documentation of all monitoring, measurements, inspections, maintenance activities, and training provided to employees, including the log of the sampling data and a record of actions taken to implement BMPs associated with the industrial activities. Such documentation shall be kept on-site for a period of five years and made available to the Director or the Director's authorized representative immediately upon request. The permittee must maintain all BMPs in effective operating condition at all times. Failure to do so is a violation of this permit. The Plan must describe procedures and a regular schedule for preventive maintenance of all BMPs, including the amount of time required for maintenance and repair, and what back-up practices are in place should a run-off event occur while a BMP is off-line. Nonstructural BMPs must also be diligently maintained (e.g., spill response supplies available, personnel trained). BMPs that are not operating properly must be repaired before the next anticipated storm event. If maintenance prior to the next storm event is not possible, maintenance must be completed as soon as possible, and the permittee must document the justification for the extended repair schedule. In the interim, the permittee must have back-up measures in place to ensure that the quality of the stormwater discharge is not diminished. The permittee must document all BMP maintenance and repairs. Dates of regular maintenance should be documented. For repairs, the date of deficiency discovery and the date on which the BMP was restored to full-function should also be documented.

4. Plan Review and Amendment.
 - a. The permittee shall review and amend the Plan whenever there is a change in design, construction, operation, or maintenance which has a significant impact on the discharge, or potential for discharge, of pollutants to surface waters; routine inspection or compliance evaluation determines deficiencies in BMPs; an inspection by a local, State, or Federal official determines that modifications to the Plan are necessary; or there is a spill, leak or other release; or any time there is an unauthorized discharge.
 - b. All aspects of the Plan shall be reviewed and updated on an annual basis. The annual update shall include an updated list of significant spills or leaks of pollutants for the previous three years, or the notation that no spills have occurred. The annual update shall include re-certification that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges. Each annual update shall include a re-evaluation of the effectiveness of the BMPs listed in the BMP Summary of the Stormwater Management Plan.
 - c. Plan modifications must be made within 30 calendar days after discovery, observation or event requiring a modification. Implementation of new or modified BMPs must be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by the Division. The amount of time taken to modify a BMP or implement additional BMPs must be documented.
 - d. If the Plan modification is the result of a release or unauthorized discharge, the permittee must document a description of the release, the 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. Such documentation shall be kept on-site for a period of five years and made available to the Director or his authorized representative immediately upon request.
 - e. The Director may notify the permittee when the Plan does not meet one or more of the minimum requirements of the permit. The notification will identify specific provisions of this permit that are not being met, and may include required modifications to the permittee's Plan, stipulated deadlines, additional monitoring requirements and special reporting requirements. The permittee shall provide certification in writing (in accordance with Part III, General Conditions, Section B, Paragraph 5) to the Director that the changes have been made.
 - f. A signature and date is required for any revisions to the Plan.
5. If a commercial tenant obtains authorization under this permit and develops a Plan for discharges from the commercial tenant's own areas of the airport, that Plan must be coordinated and integrated with the Plan for the entire airport.
6. The permittee must retain a copy of the current Plan required by this permit at the facility, and it must be immediately available at the time of an on-site inspection.

SECTION B: MONITORING REQUIREMENTS

1. Qualitative monitoring requires a visual inspection of each stormwater discharge outfall (SDO) associated with industrial activity regardless of representative outfall status and shall be performed as specified below in Table 1.

Table 1. Qualitative Monitoring Requirements

Discharge Characteristics	Frequency	Monitoring Location
Color	Semi-Annual	SDO
Odor	Semi-Annual	SDO
Clarity	Semi-Annual	SDO
Floating Solids	Semi-Annual	SDO
Suspended Solids	Semi-Annual	SDO
Foam	Semi-Annual	SDO
Oil Sheen	Semi-Annual	SDO
Erosion or deposition at the outfall	Semi-Annual	SDO
Other obvious indicators of stormwater pollution	Semi-Annual	SDO

2. Qualitative monitoring of stormwater outfalls must be performed during a representative storm event. Visual examinations must be made on samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 1 hour) of when the runoff or snowmelt begins discharging from the outfall.
 - a. The visual examination must be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring period, the permittee is excused from the visual monitoring requirement for that period, provided the permittee documents that no runoff occurred.
 - b. In the event an atypical condition is noted at a stormwater discharge outfall, the permittee shall document the suspected cause of the condition and any actions taken in response to the discovery. This documentation will be maintained on-site for a period of five years and made available to the Director or his/her authorized representative immediately upon request.
 - c. Visual examination reports must be maintained onsite. The report must include the examination date and time, inspection personnel, nature of the discharge (i.e., runoff or snow melt), visual quality of the stormwater discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, erosion or deposition at the outfall, and other obvious indicators of stormwater pollution), and probable sources of any observed stormwater contamination.

SECTION C: DEICING OPERATIONS

Facilities which conduct aircraft and/or runway (including taxiways and ramps) deicing/anti-icing operations shall:

1. Evaluate present operating procedures to consider alternative practices that would reduce the overall amount of deicing/ anti-icing chemical used and/or lessen the environmental impact of the pollutant source.
2. Evaluate whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety.
3. Produce and implement a plan for the minimization of the release of materials used for deicing into the stormwater system. This plan shall address, as a minimum:
 - a. The current use and practices employed at the airport for the control and minimization of entry of the deicing materials into the stormwater system;
 - b. The means that may be practicable for modifying current use and practices to collect the runoff that occurs during and following the application of the deicing materials; and
 - c. Feasible alternatives to the use of urea and glycol-based deicing chemicals to reduce the aggregate amount of deicing chemicals used and/or lessen the environmental impact, consistent with considerations of flight safety.
4. Airport authorities must determine annually the usage rate of deicing/anti-icing chemicals at their facility. The total amount of deicing/anti-icing chemicals used at an airport facility is the cumulative amount used by the airport authority and each commercial tenant of the airport facility. In determining the fluid amounts of deicing/anti-icing chemicals used at a facility, operators should use the pre-dilution volume.
5. Annual usage rate of deicing/anti-icing chemicals shall be reported annually to the state. The Division may require facilities that conduct aircraft and/or runway (including taxiways and ramps) deicing/anti-icing operations to apply for an individual permit.

PART III STANDARD CONDITIONS FOR NPDES STORMWATER GENERAL PERMITS

SECTION A: COMPLIANCE AND LIABILITY

1. Compliance Schedule

The permittee shall comply with Limitations and Controls specified for stormwater discharges in accordance with the following schedule:

Existing facilities already operating, but applying for coverage under this General Permit for the first time: The Stormwater Pollution Prevention Plan shall be developed and implemented within 12 months of the effective date of the initial Certificate of Coverage issued pursuant to this General Permit and updated thereafter on an annual basis.

Secondary containment, as specified in Part II, Section A, Paragraph 2(b) of this permit, shall be accomplished within 12 months of the effective date of the initial Certificate of Coverage.

New facilities applying for permit coverage for the first time and existing facilities previously permitted and applying for renewal under this General Permit: All requirements, conditions, limitations, and controls contained in this permit become effective immediately upon issuance of the Certificate of Coverage. The Stormwater Pollution Prevention Plan shall be developed and implemented prior to the beginning of discharges from the operation of the industrial activity and be updated thereafter on an annual basis. Secondary containment, as specified in Part II, Section A, Paragraph 2(b) of this permit shall be accomplished prior to the beginning of discharges from the operation of the industrial activity.

2. Duty to Comply

The permittee must comply with all conditions of this General Permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for certificate of coverage termination, revocation and reissuance, or modification; or denial of a certificate of coverage upon renewal application.

The permittee shall comply with standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

The Clean Water Act provides that any person who violates a permit condition is subject to a civil penalty not to exceed \$25,000 per day for each violation. Any person who negligently violates any permit condition is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment for not more than 1 year, or both. Any person who knowingly violates permit conditions is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. Also, any person who violates a permit condition may be assessed an administrative penalty not to exceed \$10,000 per violation with the maximum amount not to exceed \$125,000. [Ref: Section 309 of the Federal Act 33 USC 1319 and 40 CFR 122.41(a).]

Under state law, a daily civil penalty of not more than ten thousand dollars (\$10,000) per violation may be assessed against any person who violates or fails to act in accordance with the terms, conditions, or requirements of a permit. [Ref: North Carolina General Statutes 143-215.6A]

Any person may be assessed an administrative penalty by the Director for violating section 301, 302, 306, 307, 308, 318, or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.

3. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this General Permit which has a reasonable likelihood of adversely affecting human health or the environment.

4. Civil and Criminal Liability

Except as provided in Section D of this permit regarding bypassing of stormwater control facilities, nothing in this General Permit shall be construed to relieve the permittee from any responsibilities, liabilities, or penalties for noncompliance pursuant to NCGS 143-215.3, 143-215.6A, 143-215.6B, 143-215.6C or Section 309 of the Federal Act, 33 USC 1319. Furthermore, the permittee is responsible for consequential damages, such as fish kills, even though the responsibility for effective compliance may be temporarily suspended.

5. Oil and Hazardous Substance Liability

Nothing in this General Permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under NCGS 143-215.75 et seq. or Section 311 of the Federal Act, 33 USC 1321.

6. Property Rights

The issuance of this General Permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

7. Severability

The provisions of this General Permit are severable, and if any provision of this General Permit, or the application of any provision of this General Permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this General Permit, shall not be affected thereby.

8. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the certificate of coverage issued pursuant to this General Permit or to determine compliance with this General Permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this General Permit.

9. Penalties for Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this General Permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

10. Penalties for Falsification of Reports

The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this General Permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both.

SECTION B: GENERAL CONDITIONS

1. General Permit Expiration

The permittee is not authorized to discharge after the expiration date. In order to receive automatic authorization to discharge beyond the expiration date, the permittee shall submit forms and fees as are required by the agency authorized to issue permits no later than 180 days prior to the expiration date. The Division will send renewal forms to the owner approximately 240 days prior to the expiration date. Any permittee that has not requested renewal at least 180 days prior to expiration, or any permittee that does not have a permit after the expiration and has not requested renewal at least 180 days prior to expiration, will be subjected to enforcement procedures as provided in NCGS §143-2153.6 and 33 USC 1251 et. seq.

2. Transfers

The certificate of coverage issued pursuant to this General Permit is not transferable to any person except after notice to and approval by the Director. The Director may require modification or revocation and reissuance of the certificate of coverage to change the name and incorporate such other requirements as may be necessary under the Clean Water Act. Permittee is required to notify the Division in writing in the event the permit is sold or closed. Permittee is required to notify the Division within 90 days in the event the permitted facility is sold or closed.

3. When an Individual Permit May be Required

The Director may require any owner/operator authorized to discharge under a certificate of coverage issued pursuant to this General Permit to apply for and obtain an individual permit or an alternative General Permit. Any interested person may petition the Director to take action under this paragraph. Cases where an individual permit may be required include, but are not limited to, the following:

- a. The discharger is a significant contributor of pollutants;
- b. Conditions at the permitted site change, altering the constituents and/or characteristics of the discharge such that the discharge no longer qualifies for a General Permit;
- c. The discharge violates the terms or conditions of this General Permit;
- d. A change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
- e. Effluent limitations are promulgated for the point sources covered by this General Permit;
- f. A water quality management plan containing requirements applicable to such point sources is approved after the issuance of this General Permit.
- g. The Director determines at his own discretion that an individual permit is required.

4. When an Individual Permit May be Requested

Any permittee operating under this General Permit may request to be excluded from the coverage of this General Permit by applying for an individual permit. When an individual permit is issued to an owner/operator the applicability of this General Permit is automatically terminated on the effective date of the individual permit.

5. Signatory Requirements

All applications, reports, or information submitted to the Director shall be signed and certified.

- a. All notices of intent to be covered under this General Permit shall be signed as follows:
 - (1) For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (a) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or (b) the manager of one or more manufacturing production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding 25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
 - (3) For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.
- b. All reports required by the General Permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - (1) The authorization is made in writing by a person described above;
 - (2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, a position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
 - (3) The written authorization is submitted to the Director.
- c. Any person signing a document under paragraphs a. or b. of this section shall make the following 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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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 fines and imprisonment for knowing violations."

6. General Permit Modification, Revocation and Reissuance, or Termination

The issuance of this General Permit does not prohibit the Director from reopening and modifying the General Permit, revoking and reissuing the General Permit, or terminating the General Permit as allowed by the laws, rules, and regulations contained in Title 40, Code of Federal Regulations, Parts 122 and 123; Title 15A of the North Carolina Administrative Code, Subchapter 2H .0100; and North Carolina General Statute 143-215.1 et. al.

After public notice and opportunity for a hearing, the General Permit may be terminated for cause. The filing of a request for a General Permit modification, revocation and reissuance, or termination does not stay any General Permit condition. The certificate of coverage shall expire when the General Permit is terminated.

7. Certificate of Coverage Actions

The certificate of coverage issued in accordance with this General Permit may be modified, revoked and reissued, or terminated for cause. The notification of planned changes or anticipated noncompliance does not stay any General Permit condition.

SECTION C: OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this General Permit.

2. Need to Halt or Reduce not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the condition of this General Permit.

3. Bypassing of Stormwater Control Facilities

Bypass is prohibited and the Director may take enforcement action against a permittee for bypass unless:

- a. Bypass was unavoidable to prevent loss of life, personal injury or severe property damage; and
- b. There were no feasible alternatives to the bypass, such as the use of auxiliary control facilities, retention of stormwater or maintenance during normal periods of equipment downtime or dry weather. This condition is not satisfied if adequate

backup controls should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

- c. The permittee submitted notices as required under Section E of this Part.

If the Director determines that it will meet the three conditions listed above, the Director may approve an anticipated bypass after considering its adverse effects.

SECTION D: MONITORING AND RECORDS

1. Representative Sampling

Samples collected and measurements taken, as required herein, shall be characteristic of the volume and nature of the permitted discharge. Samples shall be taken on a day and time that is characteristic of the discharge. All samples shall be taken before the discharge joins or is diluted by any other waste stream, body of water, or substance. Monitoring points as specified in this permit shall not be changed without notification to and approval of the Director.

2. Recording Results

For each measurement, sample, inspection or maintenance activity performed or collected pursuant to the requirements of this General Permit, the permittee shall record the following information:

- a. The date, place and/or description of the location or activity, and time;
- b. The individual(s) who performed the sampling, measurements, inspection or maintenance activity;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

3. Flow Measurements

Where required, appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges.

4. Test Procedures

Test procedures for the analysis of pollutants shall conform to the EMC regulations published pursuant to NCGS 143-215.63 et. seq, the Water and Air Quality Reporting Acts, and to regulations published pursuant to Section 304(g), 33 USC 1314, of the Federal Water Pollution Control Act, as Amended, and Regulation 40 CFR 136.

To meet the intent of the monitoring required by this General Permit, all test procedures must produce minimum detection and reporting levels and all data generated must be reported down to the minimum detection or lower reporting level of the procedure.

5. Representative Outfall

If a facility has multiple discharge locations with substantially identical stormwater discharges that are required to be sampled, the permittee may petition the Director for representative outfall status. If it is established that the stormwater discharges are substantially identical and the permittee is granted representative outfall status, then sampling requirements may be performed at a reduced number of outfalls.

6. Records Retention

Visual monitoring shall be documented and records maintained at the facility along with the Stormwater Pollution Prevention Plan. Copies of analytical monitoring results shall also be maintained on-site. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this General Permit for a period of at least 5 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

7. Inspection and Entry

The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Director), or in the case of a facility which discharges through a municipal separate storm sewer system, an authorized representative of a municipal operator or the separate storm sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to; enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this General Permit; have access to and copy, at reasonable times, any records that must be kept under the conditions of this General Permit; inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this General Permit; and sample or monitor at reasonable times, for the purposes of assuring General Permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

SECTION E: REPORTING REQUIREMENTS1. Availability of Reports

Except for data determined to be confidential under NCGS 143-215.3(a) (2) or Section 308 of the Federal Act, 33 USC 1318, all reports prepared in accordance with the terms and conditions of this permit shall be available for public inspection at the offices of the Division of Water Quality. As required by the Act, analytical data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NCGS 143-215.6B or in Section 309 of the Federal Act.

2. Non-Stormwater Discharges

If the storm event monitored in accordance with this General Permit coincides with a non-stormwater discharge, the permittee shall separately monitor all parameters as required under the non-stormwater discharge permit and provide this information with the stormwater discharge monitoring report.

3. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned changes at the permitted facility which could significantly alter the nature or quantity of pollutants discharged. This notification requirement includes pollutants which are not specifically listed in the General Permit or subject to notification requirements under 40 CFR Part 122.42 (a).

4. Anticipated Noncompliance

The permittee shall give notice to the Director as soon as possible of any planned changes at the permitted facility which may result in noncompliance with the General Permit requirements.

5. Bypass

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass; including an evaluation of the anticipated quality and affect of the bypass.
- b. Unanticipated bypass. The permittee shall submit notice within 24 hours of becoming aware of an unanticipated bypass.

6. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under 24 hour reporting at the time monitoring reports are submitted.

7. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a Notice of Intent to be covered under this General Permit or in any report to the Director, it shall promptly submit such facts or information.

8. Spills

The permittee shall report to the local DWQ Regional Office, within 24 hours, all significant spills as defined in Part VI of this permit. Additionally, the permittee shall report spills including: any spill of 25 gallons or more, any spill regardless of amount that causes a sheen on surface waters, any spill regardless of amount occurring within 100 feet of surface waters, and any oil spill less than 25 gallons that cannot be cleaned up within 24 hours.

9. Twenty-four Hour Reporting

The permittee shall report to the central office or the appropriate regional office any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee became aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances.

The written submission shall contain a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time compliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Director may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

PART IV LIMITATIONS REOPENER

1. This permit shall be modified or alternatively, revoked and reissued, to comply with any applicable effluent guideline or water quality standard issued or approved under Sections 302(b) (2) (c), and (d), 304(b) (2) and 307(a) of the Clean Water Act, if the effluent guideline or water quality standard so issued or approved:
 - (a). Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
 - (b). Controls any pollutant not limited in the permit.
2. The Division may require facilities that conduct aircraft and/or runway (including taxiways and ramps) deicing/anti-icing operations to apply for an individual permit.
3. The permit as modified or reissued under this paragraph shall also contain any other requirements in the Act then applicable.

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**PART V ADMINISTERING AND COMPLIANCE MONITORING FEE
REQUIREMENTS**

The permittee must pay the administering and compliance monitoring fee within 30 (thirty) days after being billed by the Division. Failure to pay the fee in timely manner in accordance with 15A NCAC 2H .0105(b)(4) may cause this Division to initiate action to revoke the Certificate of Coverage.

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PART VI DEFINITIONS

1. Act

See Clean Water Act.

2. Allowable Non-Stormwater Discharges

This permit regulates stormwater discharges. Non-stormwater discharges which shall be allowed in the stormwater conveyance system are:

- (a) All other discharges that are authorized by a non-stormwater NPDES permit.
- (b) Uncontaminated groundwater, foundation drains, air-conditioner condensate without added chemicals, springs, discharges of uncontaminated potable water, waterline and fire hydrant flushings, water from footing drains, flows from riparian habitats and wetlands.
- (c) Flows from emergency fire fighting and discharges resulting fire-fighting training and testing or demonstrations of fire fighting equipment.

3. Best Management Practices (BMPs)

Measures or practices used to reduce the amount of pollution entering surface waters. BMPs may take the form of a process, activity, or physical structure.

4. Bulk Storage of Liquid Products

Liquid raw materials, manufactured products, waste materials or by-products with a single above ground storage container having a capacity of greater than 660 gallons or with multiple above ground storage containers located in close proximity to each other having a total combined storage capacity of greater than 1,320 gallons.

5. Bypass

A bypass is the known diversion of stormwater from any portion of a stormwater control facility including the collection system, which is not a designed or established operating mode for the facility.

6. Certificate of Coverage

The Certificate of Coverage (COC) is the cover sheet which accompanies the General Permit upon issuance and lists the facility name, location, receiving stream, river basin, effective date of coverage under the permit and is signed by the Director.

7. Clean Water Act

The Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), as amended, 33 USC 1251, et. seq.

8. Department

Department means the North Carolina Department of Environment and Natural Resources

9. Director

The Director of the Division of Water Quality, the permit issuing authority.

10. Division or DWQ

The Division of Water Quality, Department of Environment and Natural Resources.

11. EMC

The North Carolina Environmental Management Commission.

12. Grab Sample

An individual sample collected instantaneously. Grab samples that will be directly analyzed or qualitatively monitored must be taken within the first 30 minutes of discharge.

13. Hazardous Substance

Any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act.

14. Industrial Activity

For the purposes of this permit, industrial activities shall mean all industrial activities as defined in 40 CFR 122.26.

15. Municipal Separate Storm Sewer System

A stormwater collection system within an incorporated area of local self-government such as a city or town.

16. Notice of Intent

The state application form which, when submitted to the Division, officially indicates the facility's notice of intent to seek coverage under a General Permit.

17. Outfall

The point of wastewater or stormwater discharge from a discrete conveyance system. See also point source discharge of stormwater.

18. Permittee

The owner or operator issued a certificate of coverage pursuant to this General Permit.

19. Point Source Discharge of Stormwater

Any discernible, confined and discrete conveyance including, but not specifically limited to, any pipe, ditch, channel, tunnel, conduit, well, or discrete fissure from which stormwater is or may be discharged to waters of the state.

20. Representative Outfall Status

When it is established that the discharge of stormwater runoff from a single outfall is representative of the discharges at multiple outfalls, the DWQ may grant representative outfall status. Representative outfall status allows the permittee to perform analytical monitoring at a reduced number of outfalls.

21. Representative Storm Event

A storm event that measures greater than 0.1 inches of rainfall and that is preceded by at least 72 hours in which no storm event measuring greater than 0.1 inches has occurred. A single storm event may contain up to 10 consecutive hours of no precipitation. For example, if it rains for 2 hours without producing any collectable discharge, and then stops, a sample may be collected if a rain producing a discharge begins again within the next 10 hours.

22. Secondary Containment

Spill containment for the contents of the single largest tank within the containment structure plus sufficient freeboard to allow for the 25-year, 24-hour storm event.

23. Section 313 Water Priority Chemical

A chemical or chemical category which:

- a. Is listed in 40 CFR 372.65 pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, also titled the Emergency Planning and Community Right-to-Know Act of 1986;
- b. Is present at or above threshold levels at a facility subject to SARA title III, Section 313 reporting requirements; and
- c. Meets at least one of the following criteria:
 - (1) Is listed in appendix D of 40 CFR part 122 on Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table IV (certain toxic pollutants and hazardous substances);
 - (2) Is listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or
 - (3) Is a pollutant for which EPA has published acute or chronic water quality criteria.

24. Significant Materials

Includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

25. Significant Spills

Includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.10 and CFR 117.21) or Section 102 of CERCLA (Ref: 40 CFR 302.4).

26. Stormwater Associated with Industrial Activity

The discharge from any point source which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing or raw material storage areas at an industrial site. Facilities considered to be engaged in "industrial activities" include those activities defined in 40 CFR 122.26(b)(14). The term does not include discharges from facilities or activities excluded from the NPDES program.

27. Stormwater Discharge Outfall (SDO)

The point of departure of stormwater from a discernible, confined, or discrete conveyance, including but not limited to, storm sewer pipes, drainage ditches, channels, spillways, or channelized collection areas, from which stormwater flows directly or indirectly into waters of the State of North Carolina.

28. Stormwater Runoff

The flow of water which results from precipitation and which occurs immediately following rainfall or as a result of snowmelt.

29. Stormwater Pollution Prevention Plan

A comprehensive site-specific plan which details measures and practices to reduce stormwater pollution and is based on an evaluation of the pollution potential of the site.

30. Storm Sewer System

A conveyance or system of conveyances including roads with drainage systems, streets, catch basins, pipes, conduits, curbs, gutters, ditches, manmade channels, or storm drains for the primary purpose of transporting stormwater runoff.

31. Total Flow

The flow corresponding to the time period over which the entire storm event occurs. Total flow shall be either; (a) measured continuously, (b) calculated based on the amount of area draining to the outfall, the amount of built-upon (impervious) area, and the total amount of rainfall, or (c) estimated by the measurement of flow at 20 minute intervals during the rainfall event.

32. Total Maximum Daily Load (TMDL)

TMDLs are written plans for attaining and maintaining water quality standards, in all seasons, for a specific water body and pollutant.

33. Toxic Pollutant

Any pollutant listed as toxic under Section 307(a)(1) of the Clean Water Act.

34. Upset

Means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment or control facilities, inadequate treatment or control facilities, lack of preventive maintenance, or careless or improper operation.

35. Vehicle Maintenance Activity

Vehicle or rehabilitation, mechanical repairs, painting, fueling, lubrication, and cleaning operations.

36. 25-year, 24 hour storm event

The maximum 24-hour precipitation event expected to be equaled or exceeded, on the average, once in 25 years.

APPENDIX E
BLANK INSPECTION CHECKLISTS/ FORMS

LIST OF FORMS

SWPPP FORMS

PLAN IMPLEMENTATION SCHEDULE.....	SWPPP FORM 1
SWPPP CERTIFICATION.....	SWPPP FORM 2
TRAINING DOCUMENTATION SHEET	SWPPP FORM 3
EXPOSED SIGNIFICANT MATERIALS ASSESSMENT.....	SWPPP FORM 4
NON-STORMWATER DISCHARGE ASSESSMENT.....	SWPPP FORM 5
OUTFALL VISUAL INSPECTION RECORD.....	SWPPP FORM 6
SEMI-ANNUAL SITE INSPECTION CHECKLIST	SWPPP FORM 7
BMP IMPLEMENTATION.....	SWPPP FORM 8
DEICING/ ANTI-ICING CHEMICAL USAGE LOG	SWPPP FORM 9
ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION	SWPPP FORM 10
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SPCC FORMS

SPCC MANAGEMENT CERTIFICATION/ PE CERTIFICATION	SPCC FORM 1
CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA.....	SPCC FORM 2
SPCC MONTHLY SITE INSPECTION CHECKLIST	SPCC FORM 3
SPILL RESPONSE AND NOTIFICATION CONTACTS	SPCC FORM 4
DISCHARGE REPORT TO EPA REGIONAL ADMINISTRATOR	SPCC FORM 5

PLAN IMPLEMENTATION SCHEDULE

Airport Name: _____

Permit Year: _____

The following schedule is provided for the SWPPT Leader to implement and document the required Plan tasks for each year. Blank forms identified below are provided in Appendix E. Enter the completion date on this form when tasks are completed. Insert completed forms and records into Appendix F.

Task	Tasks to be Performed	Required Documentation	Frequency	Completion Date
1	Certify SWPPP	SWPPP Form 2	Once/ 5 years	___/___/___
2	Appoint SWPPT members	Section 1.2	Annual	___/___/___
3	Train Airport/ Commercial Tenant personnel	SWPPP Form 3	Annual	___/___/___
4	Perform wet weather outfall visual observations ¹	SWPPP Form 6	Semi-annual	___/___/___ ___/___/___
5	Conduct site inspection	SWPPP Form 7	Semi-annual	___/___/___ ___/___/___
6	Implement BMPs	SWPPP Form 8	Annual	___/___/___
7	Complete Deicing/ Anti-icing Usage Log (In Winter)	SWPPP Form 9	Monthly	On-going
8	Conduct/ Certify Comprehensive Site Compliance Inspection ²	SWPPP Forms 4, 10	Annual	___/___/___
9	Complete/ Certify Non-stormwater Discharge Assessment	SWPPP Form 5	Annual	___/___/___
10	Review the Plan/ Make any Revisions	SWPPP Form 11	Annual	___/___/___
11	SPCC Management Certification and PE Certification	SPCC Form 1	Once/ 5 years (& as needed)	___/___/___
12	Ensure Certification of Applicability of Substantial Harm Criteria is completed	SPCC Form 2	Once/ 5 years	___/___/___
13	Complete Spill Response/ Notification Form	SPCC Form 4	Annual	___/___/___
14	Complete SPCC Monthly Site Inspections	SPCC Form 3	Monthly	On-going
	Release rainwater from secondary containment	SWPPP Form 12	@	N/A
	Significant Spill Report	SWPPP Form 13	@	N/A
	Discharge Report to EPA Regional Administrator	SPCC Form 5	@	N/A

@ Report required at each incident.

¹ Perform visual observations at each industrial outfall.

² The Comprehensive Airport Compliance Inspection occurs concurrently with the second semi-annual site inspection.

SWPPP 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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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 fines and imprisonment for knowing violations” [as specified in Part III, Section B, Paragraph 5. of the Permit].

Authorized Signatory¹	Title	Phone No.	Date
<i>Print name</i>	<i>Print title</i>	<i>Print phone</i>	<i>Print date</i>
<i>Sign here</i>			
<i>Airport Name</i>			

TRAINING PROGRAM OUTLINE

Annual training in stormwater pollution prevention should be conducted for employees whose job duties involve working with materials or equipment in stormwater discharge areas. Training topics to be addressed should include, at a minimum, good housekeeping, spill prevention and response, proper material handling and storage, and inspections. Training should address specific BMPs for relevant drainage areas.

Source Reduction

- ‰ Explain source reduction practices

Recycling

- ‰ Explain recycling practices

Good Housekeeping

- ‰ Review basic cleanup procedures
- ‰ Review proper disposal locations
- ‰ Remind staff of good housekeeping procedures
- ‰ Be sure employees know where routine cleanup equipment is located
- ‰ Review areas where outdoor storage of materials is and is not allowed

Spill Prevention and Response

- ‰ Identify potential spill areas and drainage routes
- ‰ Familiarize employees with past spill events - why they happened and the environmental impact
- ‰ Review emergency contacts and telephone numbers
- ‰ Review the locations of spill cleanup equipment
- ‰ Provide incidental spill response training (or Emergency Response Training if applicable)

Proper Material Storage, Handling, and Disposal

- ‰ Identify potential pollutant sources (e.g., exposed materials)
- ‰ Be sure employees are aware of which materials are hazardous and where materials are stored
- ‰ Point out and explain container labels
- ‰ Tell employees to use the oldest materials first
- ‰ Demonstrate how valves are “tightly closed” and how drums should be sealed

Inspections

- ‰ Review inspection and monitoring procedures

Structural BMPs

- ‰ Explain structural controls including devices to control and treat stormwater, secondary containment, and erosion and sediment controls

Brief description of training program materials (e.g., film, newsletter course)

A copy of this form must be placed in each attendee’s personnel file upon completion of training.

EXPOSED SIGNIFICANT MATERIALS ASSESSMENT

EXPOSED SIGNIFICANT MATERIALS ASSESSMENT	Facility: _____ Inspector: _____ Date: _____
---	---

Instructions: Describe the significant materials that were exposed to stormwater during the past year and/or are currently exposed. Significant materials include, but are not limited to raw materials, fuels, solvents, detergents, metals, hazardous substances, fertilizers, pesticides and waste products that have a reasonable potential to release pollutants into stormwater discharges.

Description of Exposed Significant Material	Period of Exposure	Quantity Exposed (units)	Location (as indicated on the site map)	Method of Storage or Disposal (e.g., pile, drum, tank)	Description of Proper Material Management Practices (e.g., pile covered, drum sealed)

NON-STORMWATER DISCHARGE ASSESSMENT

NON-STORMWATER DISCHARGE ASSESSMENT			Facility: _____ Inspector: _____ Date: _____		
Date of Test or Evaluation	Outfall Directly Observed During the Test (identify as indicated on the site map)	Method Used to Test or Evaluate Discharge	Describe Results from Test for the Presence of Non-Stormwater Discharge	Identify Potential Significant Sources	Actions Taken to Eliminate Discharge

CERTIFICATION

I certify, under penalty of law, that **all stormwater outfalls covered by this Permit have been tested or evaluated for the presence of non-stormwater discharges and that [this Form]** was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information **[on this Form]** is, to the best of my knowledge and belief, 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 No.
C. Signature	D. Date Signed

OUTFALL VISUAL INSPECTION RECORD

Outfall # _____	Observations
Color	
Odor	
Clarity	
Floating Solids	
Suspended Solids	
Foam	
Oil Sheen	
Erosion at Outfall	
Other	

Outfall # _____	Observations
Color	
Odor	
Clarity	
Floating Solids	
Suspended Solids	
Foam	
Oil Sheen	
Erosion at Outfall	
Other	

Outfall # _____	Observations
Color	
Odor	
Clarity	
Floating Solids	
Suspended Solids	
Foam	
Oil Sheen	
Erosion at Outfall	
Other	

Outfall # _____	Observations
Color	
Odor	
Clarity	
Floating Solids	
Suspended Solids	
Foam	
Oil Sheen	
Erosion at Outfall	
Other	

Date _____ Time: _____ Inspected by: _____

SEMI-ANNUAL SITE INSPECTION CHECKLIST

Date _____ Time: _____ Inspected by: _____

The following areas were inspected:

- Loading docks, equipment parking, outdoor storage, and waste collection areas
- Chemical and material storage areas and cabinets
- Equipment and systems designed to prevent contamination of surface waters
- Stormwater conveyances and outfalls
- Aircraft, vehicles, and equipment for leaks and general condition
- Structural controls

General

- Identify potential pollutant sources (e.g., exposed materials)
- Inspect for general compliance of the drainage area with the SWPPP
- Inspect the condition of drainage system (inlets, pipe ends, ditches)
- Inspect for any evidence of pollutants entering the stormwater system
- Inspect the buildings (e.g., air conditioning units)
- Are equipment and materials that are not directly associated with loading/unloading activities stored indoors
- Are the outdoor uncovered material storage areas used for the storage of miscellaneous industrial equipment reduced to the greatest extent practicable

Housekeeping

- Inspect for posted signs reminding staff of good housekeeping procedures
- Inspect for presence of adequate cleanup equipment
- Inspect areas where outdoor storage of materials is and is not allowed

Spill Prevention and Response

- Inspect potential spill areas and drainage routes
- Are spill control materials readily available and suitable for materials stored on-site
- Are warning signs posted in potential spill areas (with emergency contacts and telephone numbers)
- Are signs posted indicating the locations of spill cleanup equipment

Materials Handling and Storage

- Are employees aware of which materials are hazardous and where they are stored
- Are employees instructed to use the oldest materials first
- Are employees instructed on recycling practices
- Are all valves "tightly closed" and drums sealed

Industrial materials or activities exposed to stormwater, potential sources of polluted runoff, stormwater controls, and conveyance systems.

- f
- %o No leaks or spills from industrial equipment, drums, tanks and other containers
- %o No off-site tracking of industrial or waste materials, or sediment where vehicles or equipment enter or exit the Airport
- %o No tracking or blowing of raw, final or waste materials from areas of no exposure to exposed areas
- %o No evidence of, or the potential for, pollutants entering the drainage system
- %o No evidence of pollutants discharging to surface waters at Airport outfall(s), and the condition of and around the outfall, including flow dissipation measures to prevent scouring.
- %o No evidence of pollutants discharging to storm system from exposed material storage areas, loading and unloading areas, outdoor process areas, dust or particulate generating or control processes, and waste disposal practices.
- %o No oily or contaminated equipment, debris, or pallets exposed to rain
- %o No corroded or open drums
- %o No corroded or damaged tanks, tank supports, or drain valves
- %o No torn bags of chemicals or bags exposed to rain
- %o No corroded or leaking pipes
- %o No leaking or improperly closed valves or fittings
- %o No leaking pumps or hose connections
- %o No broken or cracked dikes, walls, or other secondary containment systems
- %o No windblown dry chemicals

Notes:

Recommended modifications to SWPPP: _____

DEICING/ ANTI-ICING CHEMICAL USAGE LOG

MONTH OF _____, 20____

DAY	Chemical	USE ONLY	
	Quantity	Temp	Precip Type
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
Sub			

DAY	Chemical	USE ONLY	
	Quantity	Temp	Precip Type
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			
31			
Sub			
Total			

This form is to be returned to the Airport SWPPT Leader each month following each deicing or anti-icing chemical application month.

Quantity is pre-dilution volume (gallons) of deicing/ anti-icing chemicals applied to aircraft or pavements.
 Temp is Temperature during deicing/ anti-icing operations.
 Precip Type is rain, frozen rain, or snow.

“The information contained on this form is to the best of my knowledge and belief, true, accurate, and complete.”

Authorized Signatory	Title	Phone No.	Date
<i>Print name</i>	<i>Print title</i>	<i>Print phone</i>	<i>Print date</i>
<i>Sign here</i>			
<i>Airport/ Commercial Tenant Name</i>			

ANNUAL COMPREHENSIVE SITE COMPLIANCE EVALUATION

Effectiveness of Stormwater Drainage System and Structural Controls

- Potential Pollutant Sources (e.g., exposed materials) are effectively controlled
- Stormwater drainage areas were evaluated for effectiveness
- Potential pollutant sources were evaluated for non-compliance
- Storm drainage system and structural controls are effective
- No evidence of pollutants entering the storm drainage system
- Stormwater pollution prevention BMPs are effective
- New or additional BMPs were evaluated

Required Action: _____

Overall Evaluation Effectiveness of SWPPP

Required Action: _____

“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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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 fines and imprisonment for knowing violations” [as specified in Part III, Section B, Paragraph 5 of the Permit].

Authorized Signatory ¹	Title	Phone No.	Date
<i>Print name</i>	<i>Print title</i>	<i>Print phone</i>	<i>Print date</i>
<i>Sign here</i>			
<i>Airport Name</i>			

RECORD OF PLAN REVIEWS

This Plan will be reviewed each year. The Permit requires a review and evaluation of this Plan at least once a year, which supersedes the SPCC regulatory plan review requirement of every five years. Blank lines are provided on this form for each SWPPT member's review. The SWPPT Leader is assigned the responsibility of ensuring that this Plan will be reviewed and amended in accordance with the stormwater discharge permit. The SWPPT Leader may amend this Plan to include more effective pollution prevention technology and BMPs, if such technology is field proven and if implementation will significantly reduce the likelihood of the contamination of stormwater.

REVIEW DATE	REVIEW COMMENTS	SIGNATURE

PLAN AMENDMENT RECORDS

The Plan will be amended whenever there is a change in the design, construction, process, operation, or maintenance that has a **significant** effect on the potential for stormwater contamination at the Airport. Amendments to this Plan should be fully implemented as soon as possible, but no later than six (6) months after changes occur or after the review period. All technical amendments to the SPCC Plan must be certified by a registered Professional Engineer in accordance with 40 CFR §112.3(d), and satisfactorily implemented. PE seals are only required if an SPCC amendment is technical (i.e. requires engineering practice such as a physical modification).

This record sheet is provided to summarize amendments to the Plan. The SWPPT Leader will be responsible for ensuring that the Plan is amended in strict accordance with the Plan requirements.

AMEND DATE	AMENDMENT COMMENTS (include Plan Section/Appendix)	SIGNATURE/SEAL

RAINWATER RELEASE FROM CONTAINMENT STRUCTURE

Complete this form each time that accumulated rainwater is to be released from exposed secondary containment structures.

Building/Area: _____

Date: _____

Inspected By: _____

Time: _____

Description of Secondary Containment Structure: _____

Visual Observation of Accumulated Rainwater

Check yes or no, and provide details under comments.

ITEM	YES	NO	COMMENTS
COLOR			
ODOR			
CLOUDY			
FOAM			
OIL SHEEN			
OUTFALL STAINING			
DRY WEATHER FLOW			
OTHER INDICATORS			

If accumulated rainwater appears contaminated, list actions taken to remove contaminants:

Release of Accumulated Rainwater:

After the release of the accumulated rainwater, was the secondary containment drain valve properly closed and locked? † YES † NO

Comments:

SPILL REPORT

Complete this form for each significant spill¹ incident. Keep original form with the Plan.

Date: _____ Time: _____

Facility Name: _____

Address & Location: _____

Person Reporting: _____ Phone: _____

Spill Location: _____

Type of Material: _____

Quantity: _____

Source (if known): _____

Cause of Spill (if known): _____

Amount of Material Recovered: _____

	YES	NO
Spill contained on premises?	†	†
Did the spill enter the stormwater drainage system?	†	†
Did the spill enter a body of water?	†	†
Nearest body of water or body of water spill entered? _____		Distance _____

Amount of spill control supplies used/ to be restocked: _____

Measures taken to prevent recurring incidents: _____

Personal Injuries: _____

Additional pertinent information: _____

AGENCIES NOTIFIED OF SPILL:

NRC Contact: _____ Date/Time: _____

NCDEQ Contact: _____ Date/Time: _____

OTHER Contact: _____ Date/Time: _____

IT IS NOT NECESSARY TO WAIT FOR ALL INFORMATION BEFORE CALLING THE NATIONAL RESPONSE CENTER.

¹ Significant spill includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.10 and CFR 117.21) or Section 102 of CERCLA (Ref: 40 CFR 302.4) [or spills that cannot be controlled with on-site resources, or cause a contamination to the environment, or cause injury to personnel].

SPCC MANAGEMENT CERTIFICATION

This Spill Prevention, Control, and Countermeasure Plan for this Airport has my full endorsement and I am at a level of authority to commit the necessary resources to implement this Plan as herein described.

Authorized Signatory ¹	Title	Phone No.	Date
<i>Print name</i>	<i>Print title</i>	<i>Print phone</i>	<i>Print date</i>
<i>Sign here</i>			
<i>Facility Name</i>			

¹ Certification of this SPCC Plan is made once every five-years and is not updated annually.

PROFESSIONAL ENGINEER CERTIFICATION

I, _____, attest by means of this certification:

- That I am familiar with the requirements of 40 CFR 112.1 - 112.8;
- That I or my agent have visited and examined the Facility;
- That this Spill Prevention, Control, and Countermeasure Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of this part;
- That procedures for required inspections and testing have been established; and
- That this Plan is adequate for the Facility.

Professional Engineer
State: _____
PE Certificate Number: _____

Date

**CERTIFICATION OF THE APPLICABILITY OF
THE SUBSTANTIAL HARM CRITERIA**

Facility Name: _____

Facility Address: _____

1. Does the Facility transfer oil over water to or from containers and does the Facility have a total oil storage capacity greater than or equal to 42,000 gallons?

Yes _____ No _____

2. Does the Facility have a total oil storage capacity greater than or equal to 1 million gallons and does the Facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any above-ground oil storage tank area?

Yes _____ No _____

3. Does the Facility have a total oil storage capacity greater than or equal to 1 million gallons and is the Facility located at a distance (as calculated using the appropriate formula in Attachment C-III of 40 CFR Part 112 Appendix C or a comparable formula¹) such that a discharge from the Facility could cause injury to fish and wildlife and sensitive environments?

Yes _____ No _____

4. Does the Facility have a total oil storage capacity greater than or equal to 1 million gallons and is the Facility located at a distance (as calculated using the appropriate formula in Attachment C-III of 40 CFR Part 112 Appendix C or a comparable formula¹) such that a discharge from the Facility would shut down a public drinking water intake?²

Yes _____ No _____

5. Does the Facility have a total oil storage capacity greater than or equal to 1 million gallons and has the Facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?

Yes _____ No _____

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Signature _____

Title _____

Name _____

Date _____

- 1) If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.
- 2) For the purposes of 40 CFR Part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR Section 143.2(c).

SPCC MONTHLY SITE INSPECTION CHECKLIST

Date _____ Inspected by: _____

Container Area: _____

(NOTE: USE A SEPARATE FORM FOR EACH REGULATED OIL CONTAINER AREA (>= 55 GALLONS))

- % Primary tank, containment area, interstice, and spill protection container are free of water.
- % If present, water in containment area is free of any visible product/ sheen.
- % Containment area is free of equipment, debris, vegetation, and fire hazards.
- % Containment area is free of cracks, holes, and any other breaches.
- % Containment area drain valve(s) operable and in closed positions.
- % Containment egress pathways are clear and gates/ doors operable.
- % No leaks are visible near container, concrete pad, containment, surrounding area.
- % Container exterior is visibly in good condition, and free of visible signs of leakage.
- % Container liquid level gauge is readable and in good condition.
- % All container openings are properly sealed.
- % All oil-related labels and signs are legible and complete.
- % Pipes, valves, pumps, hoses, are intact with no visible signs of leakage.
- % Pumps, control systems, and high-level alarms are operating properly.
- % Pipes and valves are labeled as required.
- % Expansion joints, valves, clamps, and supports are intact with no signs of leakage.
- % Container fitting joints and seals are free of corrosion.
- % There are no other conditions that should be address for continued safe operation or that may affect the SPCC Plan

Notes:

Recommended modifications to SWPPP: _____

SPILL RESPONSE AND NOTIFICATION CONTACTS

Post completed form at appropriate locations (near telephones) at the Airport.
See Appendix H for specific spill reporting timeline/ requirements.

Airport Name			
	Name	Work Phone	24-Hour Phone
Airport Primary			
Airport Alternate			
Commercial Tenants	Name	Work Phone	24-Hour Phone
Primary			
Alternate			
Primary			
Alternate			
Primary			
Alternate			
Primary			
Alternate			
Primary			
Alternate			
Primary			
Alternate			
SPILL NOTIFICATION			
NCDEQ 24-hour Emergency Response Spill Reporting		800-858-0368	
National Response Center		800-424-8802	
EPA Region 4		404-562-9655	
SPILL RESPONSE			
Local Fire Department			
Local Emergency Planning Commission (LEPC):			
Other Local Response Agencies:			
Local Contractor(s):			

This report Form must be submitted to the US EPA Region IV office only if the Facility has discharged to water: 1) More than 1,000 gallons of oil in a single discharge, or 2) More than 42 gallons of oil in each of two discharges, occurring within any consecutive twelve-month period.

Discharge Report to EPA Regional Administrator	
Facility name and location:	
Name(s) of the owner or operator of facility:	
Name of person submitting the report:	
Date and year of initial facility operation:	
Maximum storage or handling capacity of the facility and normal daily throughput:	
Cause(s) of spill, including a failure analysis of system or subsystem in which the failure occurred:	
Corrective actions and/or countermeasures taken, including an adequate description of equipment repairs and/or replacements:	
Additional preventive measures taken or contemplated to minimize the possibility of recurrence:	
Note: Use additional pages if sufficient space is not provided on the form.	
Provide the following:	
Task Completed	Comments
Description of facility, including maps, flow diagrams, and topographical maps.	
The names of individuals and/or organizations also contacted and the date and time contacted.	

This information must be submitted to the following USEPA address:

The Regional Administrator
 U.S. Environmental Protection Agency, Region
 1V 61 Forsyth Street SW
 Atlanta, GA 30303-3104

APPENDIX F
**COMPLETED INSPECTION CHECKLISTS/
FORMS**

Insert completed forms here

APPENDIX G
PLAN FIGURES

Insert Plan Figures here

APPENDIX H
SPCC PLAN REQUIREMENTS

40 CFR 112 CROSS REFERENCE TABLE

Final SPCC Rule	Description of Section	SWPPP/ SPCCP Section
§ 112.3(d)	Management/PE certification	SPCC Form 1
§ 112.3(e)	Facility maintains copy of plan	H.1
§ 112.4(a)	Submittal requirements to the regional administrator	H.2.2
§ 112.5(a)	Updating requirements	H.2.1
§ 112.5(b)	Plan reviewed at least once every five years	H.2.1
§ 112.5(c)	PE certifies technical amendments	H.2.1
§ 112.7	Cross reference table to the parts of the regulation	40 CFR 112 Cross Reference Table
§ 112.7	Facility management signature	SPCC Form 1
§ 112.7(a)(1,2)	Conformance with the regulations, details on equivalent environmental protection	H.2.3
§ 112.7(a)(3)	Plot plan showing the location and contents of each container, exempted USTs, and direction of stormwater flow: <ul style="list-style-type: none"> i. - oil storage inventory ii. - discharge prevention measures iii. - discharge or drainage controls iv. - countermeasures for discharge recovery v. - methods of disposal for recovered materials vi. - emergency contact list and phone numbers 	Site Map Table 1-1 H.3.8 B.3.5, H.3.6 H.2.4 B.3.10 A.1.3, Table 1-1 and SPCC Form 4
§ 112.7(a)(4)	Discharge reporting responsibilities	H.2.4, SPCC Form 5
§ 112.7(a)(5)	Discharge emergency response procedures	H.2.4
§ 112.7(b)	Potential discharge from equipment failure	H.3.1
§ 112.7(c)	Secondary containment (and/or diversionary structures)	B.3.5, Table 1-1
§ 112.7(d)	Contingency planning	H.3.8
§ 112.7(e)	Inspections, tests, and records	H.3.3, SPCC Form 3
§ 112.7(f)(1)	Personnel training program requirements	H.3.4
§ 112.7(f)(2)	Accountability for discharge prevention	H.3.4
§ 112.7(f)(3)	Annual discharge prevention briefing	H.3.4
§ 112.7(g)	Security	1.3.4, H.3.5
§ 112.7(h)	Tank truck loading/ unloading	H.3.8
§ 112.7(i)	Brittle fracture evaluation requirements	H.3.9
§ 112.7(j)	Conformance with State requirements	H.2.3
§ 112.8(b)	Facility drainage	1.3.5, B.2.13
§ 112.8(c)(1)	Bulk storage containers are compatible with material stored	H.1.1

Final SPCC Rule	Description of Section	SWPPP/ SPCCP Section
§ 112.8(c)(2)	Bulk storage containers have appropriate secondary containment	B.3.5, Table 1-1
§ 112.8(c)(3)	Requirements for drainage of diked areas	A.1.7, H.3.6
§ 112.8(c)(4)	Cathodic protection for buried tanks	H.3.9
§ 112.8(c)(6)	Inspections and integrity testing for aboveground containers, piping, and support equipment	H.3.3
§ 112.8(c)(7)	Monitor internal steam heating coils	H.3.9
§ 112.8(c)(8)	Fail-safe engineering for tank systems, including high level alarm requirements	H.3.8
§ 112.8(c)(9)	Observe effluent treatment facilities	N/A
§ 112.8(c)(10)	Correct visible discharges	H.3.3
§ 112.8(c)(11)	Appropriate position of mobile oil containers	H.1.1
§ 112.8(d)	Facility transfer operations, pumping, and Facility process	H.3.9
§ 112.20(f)	Certification of substantial harm criteria	A.1.1, SPCC Form 2

H.0 SPILL PREVENTION, CONTROL, AND COUNTERMEASURE

H.1 INTRODUCTION

The Oil Pollution Prevention regulations (Federal Regulations 40 CFR Part 112 - Oil Pollution Prevention) administered under the authority of the United States Environmental Protection Agency (EPA), require certain facilities to prepare and implement a Spill Prevention, Control, and Countermeasure (SPCC) Plan in order to reduce or eliminate oil discharges to navigable waters of the United States. SPCC Plans document regulated containers at a Facility (or Airport) in addition to the inspection, testing, and maintenance procedures for those containers. The SPCC Plan also contains information regarding emergency response actions.

The Airport-wide aboveground oil storage capacity for the Airport totals more than 1,320 gallons, and oil discharges could potentially reach navigable waters. For these reasons according to 40 CFR 112.1, the Airport must prepare an SPCC Plan. The purpose of Section H.0 is to meet the SPCC Plan requirements. Aboveground tanks, underground tanks, mobile containers and portable fueling facilities have been reviewed for the purpose of inclusion in the Plan, as applicable. This Plan has been prepared in accordance with standard engineering practices and applicable industry standards. A copy of this Plan and all amendments is maintained at the Airport.

The status of USTs should be evaluated to ensure the tanks are meeting current UST regulations. Most USTs will not be covered by this Plan because they are regulated by 40 CFR 280 or 281. There are specific USTs that are exempt from 280 and 281, including USTs storing fuel for comfort heat and USTs that are 110 gallons or less. These USTs *are* covered by the SPCC regulations and must be managed accordingly and included in the Table below.

40 CFR 112.20(f) requires that affected facilities determine their potential for Substantial Harm. As required by 40 CFR 112.20(f), the Certification of the Applicability of the Substantial Harm Criteria will be documented using SPCC Form 2, which is available in Appendix E.

H.1.1 Oil Storage System Description

The Airport Site Map indicates the location of aboveground storage tanks, underground tanks, mobile and portable containers, equipment, and other potential pollutant sources. Section 1.2 describes the containers per Airport shop, building, or area. Contents and capacities of SPCC-regulated oil containers are presented in Table 1-1. Tanks are compatible with the material stored.

This Airport uses drums and portable totes with a storage capacity of 55 gallons or greater that may contain SPCC-regulated materials. Locations of portable containers are shown on the Airport Site Map. The Airport is implementing a policy to manage oils stored in these types of containers to prevent spills and discharges. This drum policy requires that all portable oil containers have secondary containment. This secondary

containment may include the use of spill kits and spill pallets, diked storage areas, and/or storing containers inside a building with no spill route to navigable waters. Secondary containment is required when containers covered under this policy are stationary and not in use for at least four consecutive hours.

H.1.2 Containers Not Covered By this Plan

Any oil containers with a capacity less than 55 gallons are exempt under Section 112.1(d)(5) of the new SPCC regulations, effective August 16, 2002. Also under these new regulations, the definition of “bulk storage container” (in §112.2) excludes oil-filled electrical equipment. Therefore, secondary containment (§112.7) is applicable to the transformers, but secondary containment with “sufficient freeboard to contain precipitation” (§112.8(c)) is not. Tanker trucks that are road worthy and that have license plates are exempt from the SPCC requirements.

H.2 GENERAL PLAN REQUIREMENTS

H.2.1 Owner’s Review and Plan Amendments

The Airport owner or operator shall amend the SPCC Plan whenever there is a change in the design, construction, operation or maintenance that materially affects the Airport’s potential for the discharge of oil. Examples of changes that may require amendment of the Plan include, but are not limited to: commissioning or decommissioning containers; replacement, reconstruction, or movement of containers; reconstruction, replacement, or repair of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or revision of standard operation or maintenance procedures at a Airport. Movement of containers within an area that does not increase the potential for a discharge would not require an update to the Plan.

The Airport owner or operator shall complete a review and evaluation of the SPCC Plan at least once every five years. SWPPP Form 11 is used for such reviews. If there are any technical amendments to the Plan, only when the Plan initially required certification by a Professional Engineer, must a PE recertify the Plan. SWPPP Form 11 is used to document that the amendments have been completed. Technical amendments include changes to the Plan that require engineering practice such as including physical modifications or changes in Airport procedures. If the changes are non-technical in nature (e.g., contact name, phone number, container identification number, etc.), then the Airport owner may recertify the Plan and indicate that no technical changes were made. This Plan must be amended within six months of the review if more effective, field-proven prevention and control technologies that would significantly reduce the likelihood of a discharge are available at the time of the review. Amendments to this SPCC Plan should be fully implemented as soon as possible, but no later than six months after changes occur or after the review period.

In addition to these conditions, it is recommended that the SPCC Plan be amended if procedural or control system failures result in releases, as this would indicate deficiencies in the existing SPCC Plan.

H.2.2 EPA Region IV Report

A report must be submitted to the USEPA Region IV office only if the Airport has discharged to water:

- More than 1,000 gallons of oil in a single discharge, or
- More than 42 gallons of oil in each of two discharges, occurring within any consecutive twelve-month period.

40 CFR 112.4(a) lists the information that must be submitted to the USEPA Regional Administrator within 60 days if either of the above thresholds is reached. This required information is also detailed on SPCC Form 5, which is available in Appendix E. The Regional Administrator may require that personnel submit the Plan for review.

The required information must be submitted to the following EPA address:

The Regional Administrator
U.S. Environmental Protection Agency, Region IV
61 Forsyth Street SW
Atlanta, GA 30303-3104

A complete copy of all of the above information provided to the USEPA Regional Administrator shall also be sent at the same time to NCDEQ at the address presented below:

North Carolina Department of Environment Quality
Division of Water Resources
1617 Mail Service Center
Raleigh, NC 27699-1617

Additionally, a copy of all information provided to USEPA and NCDEQ will be retained with this Plan at the Airport.

H.2.3 Conformance with Federal and State Regulations

This Plan is in conformance with applicable Federal, State, and local regulations. The main purpose of Section H of this Plan is to comply with the requirements of 40 CFR 112.

The following spill scenarios will be reported to NCDEQ Division of Water Resources in accordance with North Carolina's Oil Pollution Act, § 143-215.85(a) and (b).

If the petroleum discharged, released or spilled is:

- 25 gallons or more, or
- Causes a sheen on nearby surface water, or

-
- Is 100 feet or less from a surface water body,

then the person owning or having control over the oil must immediately take measures to collect and remove the discharge, and report the discharge to NCDEQ within 24 hours of discharge, and begin to restore the area affected by the discharge.

If the petroleum released or spilled is:

- Less than 25 gallons, and
- Does not cause a sheen on nearby surface water, and
- Is more than 100 feet from all surface water bodies,

then the person who owns or has control over the oil must immediately take measures to collect and remove the discharge.

If a spill or release cannot be cleaned up within 24 hours of the discharge or causes a sheen on nearby surface water, the person must immediately notify NCDEQ. If the petroleum released or spilled in any circumstance does not meet one of the above requirements, or is not permitted by GS 143-215.1, or it is not pursuant to a rule adopted by the Environmental Management Commission or a regulation of EPA, it must be reported to NCDEQ immediately.

Telephone numbers are contained in SPCC Form 4. Oil contained inside a containment area does not have to be reported.

H.2.4 Spill Response and Reporting

The success of any spill control and clean-up operation is often determined by the initial actions of the person discovering the spill. While this person will seldom be equipped to perform any clean-up procedures, she/he can and will initiate primary containment procedures to limit the impact of the spill. Such action will include securing the area to prevent additional contamination.

Spill Response

All spills must be reported to the SWPPT Leader or their designated representative immediately. The SWPPT Leader or their representative directs all response, cleanup, notification, and disposal efforts. Table A.1 and SPCC Form 4 contain the telephone numbers for agencies and companies that the SWPPT Leader may need to contact in the event of a spill.

Airport personnel trained in spill response provide initial response to spills. In the case of large volume spills, this Airport will request aid from the on-site or local Fire Department and other appropriate emergency response agencies may be contacted for assistance with large volume spills. (See Table H-1 Spill Response, Reporting and Cleanup below).

Warning signs placed at fuel stations, bulk storage tanks, or other refueling areas should contain emergency telephone numbers to aid in quick response. Fuel Stations that

operate 24-hours a day should post warning signs with 24-hour emergency telephone numbers. Also, refer to the Spill Contacts table in Section A.1.3 of this Plan for guidance.

Minor spills can be absorbed with dry granular absorbents, pads, booms or socks. Many liquid hazardous substances stored at the Airport are used inside buildings and are otherwise not normally exposed to the storm drainage system. Small spills can be controlled by sweeping or mopping the spilled material into approved containers for proper disposal. Proper disposal includes removing used absorbent compounds from the floor on a timely basis.

In the event a spill reaches the storm drainage system or waters of the State, Airport personnel will respond to the spill to expedite containment, and the SWPPT Leader will notify the appropriate spill response personnel (emergency response contractor or local Fire Department) for spill containment and/or cleanup. If a fire or security problem associated with a discharge arises, the Police and Fire Department shall be immediately contacted at 911 for emergency assistance.

This Airport does not use any extremely hazardous substances, but certain precautions regarding other materials are necessary. Spills that occur outside on vehicle parking lots or equipment storage lots where there is no secondary containment will be immediately addressed with appropriate spill response equipment and procedures. Necessary measures will be taken to prevent soil contamination and to prevent any spills from reaching the stormwater drainage system.

In general, there are four basic steps that are to be taken to control pollution that can result from a spill:

1. Stop the spill at the source.
2. Contain the spill.
3. Collect the spilled material.
4. Dispose of the spilled material and subsequent contaminated material properly and legally.

Steps 3 and 4 should only be undertaken by personnel that are properly trained in spill response and cleanup. Table H-1 summarizes spill response, reporting, and cleanup.

Table H-1. Spill Response, Reporting and Cleanup

Spill Volume	Response	Reporting	Cleanup
Any amount on-site	Airport Personnel	SWPPT Leader	Sorbent Material, Pads
25 gallons, or sheen, or ≤ 100 feet from water	Airport Personnel	SWPPT Leader, NCDEQ	Sorbent Material, Pads
Greater than 1,000 gallons	Airport Personnel, Fire Dept/Contractor	SWPPT Leader, NCDEQ	Qualified Hazmat Contractor
Any amount that reaches a navigable Water	Airport Personnel, Fire Dept/Contractor	SWPPT Leader, USEPA, NRC, NCDEQ	Qualified Hazmat Contractor

Spill Reporting

All releases of oil to waters of the United States (i.e. receiving stream) that cause a film, sheen, or deposition, or violate applicable water quality standards will be immediately reported to the National Response Center (NRC).

The Airport must report to NCDWR any non-compliance that endangers human health or the environment. Any information shall be provided orally within 24 hours (or as soon as practical) from the time the Airport becomes aware of the circumstances. A written submission to NCDWR shall also be provided within five (5) days of the time the Airport becomes aware of the circumstances.

The written submission will contain a description of the non-compliance, and its causes; the period of non-compliance, including exact dates and times, and if the non-compliance has not been corrected, the anticipated time compliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the non-compliance.

H.3 CONTAINER AREA SPECIFIC REQUIREMENTS

H.3.1 Potential Spill Scenarios

Equipment failures may result in discharges of oil or hazardous substances in varying amounts over varying periods of time. The types of structural, mechanical or instrument failure may include tank rupture, or piping and fitting failures associated with the use of various petroleum and non-petroleum products. These failures can occur as the result of structural deficiencies, material defects, unchecked corrosion, and extreme stresses resulting from unusual internal or external pressures, or external loads.

The potential spill sources, total quantity of the potential spill, probable direction of flow, and the method of containment are provided in the Airport Site Map and Table 1-1. Specific flow rates for each scenario are dependent on the size of the failure or rupture; however, the spill scenario is assumed to be a catastrophic release, where the entire

container quantity is released within two (2) minutes. Airport experience does not indicate a reasonable potential for equipment failure.

H.3.2 Diversionsary Control and Containment

Diversionsary control of Airport drainage is discussed further in the following sections of this plan: Airport Drainage (Section 1.3.5) and Management of Runoff (Section B.2.11). Secondary containment of tanks on-site is discussed in general terms in Section B.3.5 and listed specifically per container in Table 1-1.

H.3.3 Inspections, Tests, and Record Keeping

To comply with this section of the Oil Pollution Prevention regulations, Facilities will conduct regularly scheduled equipment/area inspections. The regulations require the PE sealing this Plan (where applicable) to rely on industry standards when developing an inspection schedule. These inspections focus on early detection of conditions that could lead to a release of oil from the various aboveground storage tanks or their ancillary equipment. Scheduled maintenance is also conducted on critical components of the various oil storage and transfer systems.

During normal daily duties, personnel perform casual visual inspections in addition to the documented inspections shown below. Monthly inspections of work areas will be conducted by the SWPPT Leader, unit or shop supervisor, or other designated personnel during normal duties. A written record is required for these inspections. SPCC Form 3 will be completed for the monthly inspections and will be maintained on-site with this Plan for at least three years. SWPPP Form 7 (Semi-Annual Site Inspection Checklist) also includes information that is applicable to SPCC regulated containers. Particular attention will be paid to leaks, spills, and properly operating equipment. Problems will be reported and corrected as soon as practical.

Visual inspections are performed by designated Airport employees on a monthly basis and include the following:

- Inspections of the aboveground tanks, piping, and fittings for signs of spills, releases, overfills or damage; and
- Inspections of exterior surfaces of the tanks, pumps, piping, valves, and other equipment for signs of leakage and maintenance requirements.

Steel Tank Institute (STI) SP001 is the industry standard that provides guidance on visual and certified inspections of aboveground steel tanks. The inspection schedule is based on container size, type and whether or not the container has secondary containment. Table H-2 shows the STI-recommended visual and certified inspections per steel AST at the Airport. Table information is sorted first by type of secondary containment, and then by container size.

Integrity testing is required for all bulk storage containers. Certified external and internal inspections noted in Table H-2 include integrity testing of tanks and are conducted by certified inspectors. However, EPA has clarified in recent guidance (see EPA letter to

the Petroleum Marketer's Association of America) that facilities may provide equivalent environmental protection as allowed under 40 CFR 112.7(a)(2) by conducting monthly visual inspections on certain containers. **CONTAINERS THAT ARE NOT REQUIRED TO UNDERGO INTEGRITY TESTING MUST MEET THE FOLLOWING CRITERIA:**

- Shop-built,
- Aboveground,
- Store non-corrosive materials,
- Have a storage capacity less than 30,000 gallons, and
- Have all sides including the bottom visible for inspection.

Drums, portable containers, and some aboveground storage tanks covered under this policy qualify for this allowance. Therefore, integrity testing of drums, portable containers and some ASTs is not required.

Monthly inspection records are maintained on-site for at least three years. The Airport maintains certified inspection and testing records for the life of the container.

H.3.4 Personnel Training

Designated oil handling personnel are expected to respond to an on-site release, and shall be properly trained in spill response. Records of this training are maintained on-site. It is the intent of the Airport to outsource spill clean up and site remediation of large releases; therefore, personnel training should meet the necessary requirements for first responder and spill containment activities.

Oil handling personnel are trained to prevent discharges. Training is held on at least an annual basis for all oil-handling personnel in spill prevention and response. New employees are trained within the first six months of employment.

This training includes a review of this SPCC Plan, applicable pollution control laws, and spill response procedures. Personnel also receive specific training in petroleum product handling procedures, good housekeeping procedures, and equipment maintenance and operation. The training also highlights and describes any known past spill events or failures, malfunctioning components, and recently developed precautionary measures. Records of annual training will be maintained with this SPCC Plan.

The Airport Director or appointee is accountable for discharge prevention at the Airport.

Table H-2. Tank Inspections

Tank Type	Size (gallons)	Secondary Containment	Type of Inspection	Inspection Frequency
AST	Up to 5,000	Concrete containment or double-walled	Visual	Monthly and Annually
AST	5,001 – 30,000	Concrete containment or double-walled	Visual	Monthly and Annually
AST	5,001 – 30,000	Concrete containment or double-walled	Certified External	20 years
AST	Up to 1,100	Earthen berm	Visual	Monthly and Annually
AST	1,101 to 5,000	Earthen berm	Visual	Monthly and Annually
AST	1,101 to 5,000	Earthen berm	Leak Test and Certified External	10 years
AST	5,001 – 30,000	Earthen berm	Visual	Monthly and Annually
AST	5,001 – 30,000	Earthen berm	Certified External and Leak Test or Certified External and Certified Internal	5 years 10 years 10 years 20 years
AST	Up to 1,100	None	Visual	Monthly and Annually
AST	Up to 1,100	None	Certified External	10 years
AST	Up to 1,100	None	Leak Test	10 years
AST	1,101 to 5,000	None	Visual	Monthly and Annually
AST	1,101 to 5,000	None	Leak Test and Certified External or Leak Test and Certified External and Certified Internal	2 years 5 years 5 years 5 years 10 years
AST	5,001 – 30,000	None	Visual	Monthly and Annually
AST	5,001 – 30,000	None	Leak Test and Certified External or Leak Test and Certified External and Certified Internal	1 year 5 years 5 years 5 years 10 years

H.3.5 Airport Security

Establishing a security system may prevent an accidental or intentional release of oil or hazardous substances to the stormwater drainage system as a result of vandalism, theft, sabotage, or other improper uses of Airport property. Section 1.3.4 describes security systems in place at the Airport.

H.3.6 Rainwater Inspection in Diked Areas

Secondary containment dikes for all outdoor bulk quantity aboveground storage tanks are inspected. Section B.4.7 describes releases from secondary containment structures.

H.3.7 Undiked Areas

The SPCC regulations require facilities to prevent potential discharges from undiked areas by designing Airport drainage systems to flow into catchment basins or lagoons. Most Airport drainage systems were not engineered in this fashion. The limited potential for spills outside of typical fuel handling areas does not warrant a complete redesign of the Airport's existing drainage system. The Airport's spill response capabilities as described in Section H.2.4 and proper personnel training as described in Sections B.4.4 and H.3.4 will protect against potential discharges to storm drainage systems from any undiked area. These procedures provide equivalent environmental protection (as allowed under 40 CFR 112.7(a)(2)) to a catchment basin.

H.3.8 General Product Handling

Airport personnel follow standard operating procedures for product handling as provided in the initial and annual training. Special care is given to loading and unloading since the likelihood of an oil spill is most probable during this operation. Vehicles entering the Airport will be warned either verbally or with signage of aboveground piping or other oil transfer operations. Tank truck unloading procedures will be conducted under the supervision of Airport personnel to ensure that proper unloading procedures are followed and to ensure that Airport personnel are present in the event of a release.

During transfer of fuel or delivery of hazardous substances to Airport areas, the driver and handlers will be responsible for preventing spills. Upon arrival at the Airport, the driver has the responsibility to inspect the tank truck for signs of leaks or unusual conditions prior to entering the site. Loading or unloading will occur in approved locations only.

The driver will ensure that all hoses are secure and that proper absorbent materials (e.g., pads, booms and socks) are available before unloading.

Drivers will use chock blocks and/or a vehicle break interlock system to prevent the premature disconnection of their truck during fuel transfer. During all fuel delivery operations, the driver will remain with the vehicle at all times. Sufficient volume (approximately 10% of the total capacity) will be maintained in the container for thermal expansion. If high-liquid level alarms or pump cut-off devices are not located on tanks,

personnel will monitor tank levels using dipsticks, visual observation or other approved method. A spill kit will be located near the area where loading or unloading is occurring. Drivers will visually inspect all valves and outlets for leakage when transfer is complete.

Tank trucks are used in the loading and unloading of diesel, waste oils, or gasoline at the ASTs located at the Airport. Typically, there is no secondary containment for the tanker trucks at these various locations. The Airport will maintain spill response equipment and follow spill contingency procedures during all loading and unloading events. Specific Airport procedures for loading and unloading are located on-site.

Refueler trucks and any other tanker trucks or bowzers that store petroleum products and that are parked at the Airport overnight must be parked in an area of the Airport that provides appropriate containment and/or diversionary structures or equipment designed to prevent discharged oil from reaching surface waters. These mobile storage tanks should be parked away from storm drains, storm ditches, or other stormwater conveyances. One of the following preventive systems or its equivalent should be used as a minimum:

- (i) Dikes, berms, or retaining walls sufficiently impervious to contain spilled oil;
- (ii) Curbing;
- (iii) Culverts, gutters, or other drainage systems;
- (iv) Weirs, booms, or other barriers;
- (v) Spill diversion ponds;
- (vi) Retention ponds; and/or
- (vii) Sorbent materials.

If the PE sealing this Plan determines that the installation of structures or equipment listed above to prevent discharged oil from reaching surface waters in the area is not practicable, the PE should clearly demonstrate such impracticability and provide the following:

- A strong oil contingency plan following the provision of 40 CFR part 109; and
- A written commitment of manpower, equipment, and materials required to expeditiously control and remove any harmful quantity of oil discharged.

In general, personnel follow the spill prevention procedures below when transferring product to and from a tanker truck:

1. Load or unload in approved locations only;
2. Verify the remaining volume of the receiving container;
3. Properly close all drainage valves for any secondary containment;
4. Allow sufficient volume (approximately 10% of the total capacity) in the container for thermal expansion;
5. Visually inspect all valves for leakage when transfer is complete.

H.3.9 Tank and Piping Requirements

Completely buried or partially buried metallic storage tanks will either have a protective coating or cathodic protection compatible with local soil conditions.

If steam heating coils are present on-site, monitor the steam return and exhaust lines for contamination.

Any field-constructed aboveground tanks will be evaluated for risk of discharge or failure due to brittle fracture if the tank undergoes repair, alteration, reconstruction or change in service.

Aboveground piping is located at the Airport. The Airport piping systems have been designed with proper pipe supports to minimize abrasion and corrosion and allow for expansion and contraction. Buried piping that is installed, modified or replaced in the future will either have a protective coating or cathodic protection. In the event that piping is exposed during an excavation, the pipe will be inspected for corrosion.

**SPILL PREVENTION,
CONTROL AND
COUNTERMEASURE PLAN**

FOR

Landmark Aviation - INT
3821 N. Liberty Street
Winston-Salem, NC 27105
December 11, 2012

PREPARED FOR:

**Mr. Bill Shoe
Landmark Aviation - INT
3821 N. Liberty Street
Winston-Salem, NC 27105
(336) 776-6060**

PREPARED BY:

 **2G Environmental, LLC**

**4154 Brasher Drive
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(770) 852-7477**

2G Project 2012-54

CERTIFICATION
(40 CFR 112.3(d))

I hereby certify that I have examined the facility and, being familiar with the provisions of 40 CFR Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices. Procedures have been established for inspections and testing and the plan is adequate for the facility.

Name: George S. Gamble, PE

Signature: _____

Date: _____

PE Registration Number / 20001 / Georgia

SPCC PLAN REVIEW

(40 CFR 112.5(b))

A complete review and evaluation of the SPCC plan must be conducted at least every five years, and evidence of the reviews recorded below. Technical amendments to the SPCC plan must be certified by a professional engineer.

By signing below, the undersigned attests to the following: “I have completed review and evaluation of the SPCC Plan for the Landmark Aviation location at 3821 N. Liberty Street, Winston-Salem, NC 27105 on the date indicated and will or will not amend the Plan as a result”.

<u>Date of Review</u>	<u>Name of Reviewer</u>	<u>Signature of Reviewer</u>	<u>Amendment of Plan</u> <u>(Yes or No)</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

MANAGEMENT APPROVAL
(40 CFR 112.7)

This SPCC plan has the full approval of management with the authority to commit resources.

Title: General Manager

Signature: _____

Name (Printed): _____

Date: _____

Plan Review Log

Date	Name	Description of Change	Comments
12/11/12	G. Gamble	Revised Plan to apply to only Airport Side and other associated changes	

** Note: Technical changes such as new tanks, new refueler trucks, or significant changes in storm water flow patterns require a Professional Engineer to re-certify the plan. Administrative changes such as changing names or phone numbers can be made by the facility and documented on this form.

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FIGURES

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ATTACHMENTS

ATTACHMENT 1:	Certification of Substantial Harm Determination Form
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ATTACHMENT 3:	Containment Area Draining Log
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1.0 INTRODUCTION

WHAT IS A SPILL PREVENTION, CONTROL AND COUNTERMEASURE PLAN?

A Spill Prevention, Control and Countermeasure (SPCC) plan is a written document required by the United States Environmental Protection Agency (U.S. EPA) regulations contained in Title 40, Code of Federal Regulations, Part 112 (40 CFR 112). The purpose of the plan is to prevent discharge of oil products into the navigable waters of the United States and the plan must include the following general elements.

- A description of the facility including specific spill control features
- A drawing showing the location of all tanks and containers (55-gallons or more)
- Identification of the responsible person for spill control
- Procedures to report a discharge with appropriate phone numbers
- A prediction of direction of flow if a spill occurs
- Written procedures for inspection of tanks and spill control features
- A description of training procedures used
- A description of the security and lighting for the facility
- Provisions for loading and unloading of oil products

WHAT FACILITIES NEED TO PREPARE A SPCC PLAN?

A facility is subject to SPCC requirements if:

- The total aboveground storage capacity exceeds **1,320 gallons** (includes only containers for storage volumes of 55 gallons or more and may include underground storage tanks if not regulated by 40 CFR 280 or 281).
- The capacity must include fuel tanks, used oil tanks, new oil tanks (and perhaps others).

The SPCC plan is not required to be filed with U.S. EPA, but a copy must be available for on-site review by the Regional Administrator during normal working hours.

WHAT INFORMATION DO I NEED TO HAVE TO REPORT A SPILL?

A spill must be reported to the EPA and the state if 25 gallons of fuel or oil is spilled on the soil or if any fuel or oil gets into the storm sewer system and creates a sheen on the water. Contact information for reporting is located in Section 5.0 of this report. In addition to this reporting, a written report is required by the U.S. EPA if either of the following quantities is spilled.

- Any single discharge more than 1,000 gallons
- Any two discharges more than 42 gallons each within a 12-month period

Spill information must be reported to U.S. EPA and the appropriate state agency within 60 days if either of the above thresholds are reached. The report is to contain the following information:

1. Name of the facility
2. Your name
3. Location of the facility
4. Maximum storage or handling capacity of the facility and normal daily throughput
5. Corrective action and countermeasures you have taken, including a description of equipment repairs and replacements
6. An adequate description of the facility, including maps, flow diagrams, and topographical maps, as necessary
7. The cause of such discharge, including a failure analysis of the system or subsystem in which the failure occurred
8. Additional preventive measures you have taken or contemplated to minimize the possibility of recurrence, and
9. Such other information as the Regional Administrator may reasonably require pertinent to the Plan or discharge.

The SPCC plan shall be amended within six months whenever there is a change in facility design, construction, operation, or maintenance that materially affects the facility's spill potential. The plan must be reviewed at least once every five years and amended to include more effective prevention and control technology, if such technology will significantly reduce the likelihood of a spill event and has been proven in the field. Technical changes must be certified by a registered professional engineer.

If the owners and operators of a facility required to prepare an SPCC plan are not required to submit a facility response plan, the SPCC plan must include a signed certification form, contained in Appendix C to 40 CFR Part 112. A completed copy of this certification form is included in Attachment 1 to this SPCC Plan.

This SPCC Plan conforms with state and local requirements. The state of North Carolina defers to the Federal requirements for Spill Prevention Control and Countermeasures.

2.0 FACILITY INFORMATION

2.1 Facility Description 40CFR112.7(a)(3)

Facility Name: Landmark Aviation, INT

Address: 3821 N. Liberty Street
Winston-Salem, NC 27105

Facility Contacts: Primary:
Bill Shoe
General Manager
Office 336-776-6060
Cell 336-601-3051

Secondary (FBO):
David Souzis
Line Supervisor
Office 336-776-6060
Cell 336-420-1789

Secondary (Heritage Hangar):
Wayne Moore
Shop Foreman
Office 336-776-6060
Cell 336-406-6953

Owner: Airport Commission of Forsyth County

Owner Contact: Airport Director
Mark Davidson
336-767-6361 x101

Location: The facility is located in Winston-Salem, NC, approximately 0.5 mile east of the intersection of US 52 and Akron Drive. Figure 1 shows the facility location and Figure 2 shows the general area topography.

Facility Description: This facility is a general aviation fixed base operation (FBO) which provides general management of the Winston-Salem Smith Reynolds Airport. Site activities include aircraft storage in hangars, aircraft storage in outside tie-downs, aircraft re-fueling, aircraft maintenance, aircraft sales, charter aircraft services, and other related activities.

Oil Storage Capacity:

- (1) 12,000-gallon steel single wall AST containing aviation gasoline (AVGAS) near the Race Hangar. The tank is placed inside a concrete secondary containment area.
- (1) 300-gallon steel single wall AST containing waste AVGAS near the Race Hangar. The tank is placed inside a concrete secondary containment area.
- (1) 6,000-gallon steel single wall AST containing self serve AVGAS in the Heritage Hangar area. The tank is placed inside a concrete secondary containment area.
- (1) 300-gallon steel single wall AST containing waste AVGAS in the Heritage Hangar area. The tank is placed inside a concrete secondary containment area.
- (1) 275-gallon steel single wall AST containing waste jet fuel in the FBO area. The tank is placed inside a steel secondary containment tub.
- (1) 275-gallon steel single wall AST containing diesel fuel in the FBO area. The tank is placed inside a steel secondary containment tub.
- (1) 5,000-gallon steel single wall mobile refueler for jet fuel. The refuelers are parked inside an asphalt bermed containment area.
- (2) 3,000-gallon steel single wall mobile refuelers for jet fuel. The refuelers are parked inside an asphalt bermed containment area.
- (1) 1,000-gallon steel single wall mobile refueler for AVGAS. The refuelers are parked inside an asphalt bermed containment area.
- (1) 700-gallon steel single wall mobile refueler for AVGAS. The refuelers are parked inside an asphalt bermed containment area.
- (3) 55-gallon steel drums containing waste oil. The drums are located on an integrated spill control pallet inside the FBO Hangar.
- (2) 55-gallon steel drums containing waste oil. The drums are located on an integrated spill control pallet inside the Heritage Hangar.
- (1) 95-gallon polyethylene double wall drum containing waste oil. The drum is stored outside the Heritage Hangar.
- (2) 15,000-gallon steel double wall ASTs containing jet fuel. The tanks are placed adjacent to the North State Aviation facility.

(1) 275-gallon steel single wall AST containing jet fuel used for tanks at the North State Aviation facility. The tank is placed inside a steel secondary containment tub.

Total oil storage capacity: 59,495 gallons

Figure 3 shows the location of the ASTs and drum storage on a site layout drawing. Material safety data sheets (MSDSs) for all fuels, oils and other materials stored on-site are available in the General Manager’s office.

2.2 Past Spill Experience
40 CFR 112.4

<u>Description of spill</u>	<u>Corrective action taken</u>	<u>Plan for preventing recurrence</u>
March 2005 – A spill of approximately 30 gallons of jet fuel occurred while refueling a DC-9 on the Terminal Ramp. Fuel spilled from the vent while filling the aircraft tank. Fire Department notified and they made additional reports to regulators.	Spilled cleaned up with absorbent materials and properly discarded.	Conduct training and ensure personnel are aware of potential for spills from aircraft vent while fueling the aircraft.

3.0 POTENTIAL EQUIPMENT FAILURES

40 CFR 112.7(b)

Oil Storage / Transfer Location	Potential Spill Event	Potential Spill Direction	Potential Volume Released and Spill Rate
12,000-gallon AVGAS AST at Race Hangar	Complete or partial failure of tank	Contained by the concrete secondary containment dike	1 to 12,000 gallons/ Gradual to instantaneous
12,000-gallon AVGAS AST at Race Hangar	Overfill of tank	Contained by the concrete secondary containment dike	1 to 8,500 gallons/ Several gallons per minute
12,000-gallon AVGAS AST at Race Hangar	Failure of transfer piping leading to tank	Contained by the concrete secondary containment dike	1 to 12,000 gallons/ Gradual to instantaneous
300-gallon waste fuel AST in AVGAS containment at Race Hangar	Complete or partial failure of tank	Contained by the concrete secondary containment dike	1 to 300 gallons/ Gradual to instantaneous
300-gallon waste fuel AST in AVGAS containment at Race Hangar	Overfill of tank	Contained by the concrete secondary containment dike	1 to 5 gallons/ Several gallons per minute
300-gallon waste fuel AST in AVGAS containment at Race Hangar	Failure of transfer piping for the tank	Contained by the concrete secondary containment dike	1 to 300 gallons/ Gradual to instantaneous
6,000-gallon self-serve AVGAS AST at Heritage Hangar	Complete or partial failure of tank	Contained by the concrete secondary containment dike	1 to 6,000 gallons/ Gradual to instantaneous
6,000-gallon self-serve AVGAS AST at Heritage Hangar	Overfill of tank	Contained by the concrete secondary containment dike	1 to 1,000 gallons/ Several gallons per minute
6,000-gallon self-serve AVGAS AST at Heritage Hangar	Failure of transfer piping leading to tank	Contained by the concrete secondary containment dike	1 to 6,000 gallons/ Gradual to instantaneous
300-gallon waste fuel AST in self-serve AVGAS containment at Heritage Hangar	Complete or partial failure of tank	Contained by the concrete secondary containment dike	1 to 300 gallons/ Gradual to instantaneous
300-gallon waste fuel AST in self-serve AVGAS containment at Heritage Hangar	Overfill of tank	Contained by the concrete secondary containment dike	1 to 5 gallons/ Several gallons per minute

Oil Storage / Transfer Location	Potential Spill Event	Potential Spill Direction	Potential Volume Released and Spill Rate
300-gallon waste fuel AST in self-serve AVGAS containment at Heritage Hangar	Failure of transfer piping for the tank	Contained by the concrete secondary containment dike	1 to 300 gallons/ Gradual to instantaneous
15,000-gallon jet fuel tanks at North State Aviation	Complete or partial failure of tank	Contained by the integrated second wall of the tank	1 to 15,000 gallons/ Gradual to instantaneous
15,000-gallon jet fuel tanks at North State Aviation	Overfill of tank	Contained by the integrated second wall of the tank or to the ground flowing west	1 to 15,000 gallons/ Several gallons per minute
15,000-gallon jet fuel tanks at North State Aviation	Failure of transfer piping for the tank	Contained by the integrated second wall of the tank or to the ground flowing west	1 to 15,000 gallons/ Gradual to instantaneous
275-gallon jet fuel AST at North State Aviation	Complete or partial failure of tank	Contained by the steel secondary containment tub	1 to 275 gallons/ Gradual to instantaneous
275-gallon jet fuel AST at North State Aviation	Overfill of tank	Contained by the steel secondary containment tub or to the ground flowing west	1 to 5 gallons/ Several gallons per minute
275-gallon jet fuel AST at North State Aviation	Failure of transfer piping for the tank	Contained by the steel secondary containment tub or to the ground flowing west	1 to 275 gallons/ Gradual to instantaneous
275-gallon waste fuel AST at the jet fuel tank farm	Complete or partial failure of tank	Contained by the steel secondary containment tub	1 to 275 gallons/ Gradual to instantaneous
275-gallon waste fuel AST at the jet fuel tank farm	Overfill of tank	Contained by the steel secondary containment tub or to the ground flowing north	1 to 5 gallons/ Several gallons per minute
275-gallon waste fuel AST at the jet fuel tank farm	Failure of transfer piping for the tank	Contained by the steel secondary containment tub or to the ground flowing north	1 to 275 gallons/ Gradual to instantaneous
275-gallon diesel fuel AST at the jet fuel tank farm	Complete or partial failure of tank	Contained by the steel secondary containment tub	1 to 275 gallons/ Gradual to instantaneous
275-gallon diesel fuel AST at the jet fuel tank farm	Overfill of tank	Contained by the steel secondary containment tub or to the ground flowing north	1 to 5 gallons/ Several gallons per minute
275-gallon diesel fuel AST at the jet fuel tank farm	Failure of transfer piping for the tank	Contained by the steel secondary containment tub or to the ground flowing north	1 to 275 gallons/ Gradual to instantaneous

Oil Storage / Transfer Location	Potential Spill Event	Potential Spill Direction	Potential Volume Released and Spill Rate
Jet fuel or AVGAS mobile refueler	Complete or partial failure of tank	Contained by the mobile refueler parking containment area berms. Spill equipment will be used to control spill if being used on parking apron. Spill flow to stormwater drop inlets will be protected.	1 to 5,000 gallons/ Gradual to instantaneous
Jet fuel or AVGAS mobile refueler	Failure of transfer piping for the tank	Contained by the mobile refueler parking containment area berms. Spill equipment will be used to control spill if being used on parking apron. Spill flow to stormwater drop inlets will be protected.	1 to 5,000 gallons/ Gradual to instantaneous
55-gallon drums containing waste oil at Heritage Hangar	Complete or partial failure of drum	Contained by the integrated spill control pallet	1 to 55 gallons/ Gradual to instantaneous
95-gallon AST containing waste oil at Heritage Hangar	Complete or partial failure of tank	Contained by the integrated second wall of the polyethylene tank	1 to 95 gallons/ Gradual to instantaneous
8,000-gallon truck unloading AVGAS to the 12,000-gallon AVGAS AST	Complete or partial failure of tank on truck	Contained by the unloading area containment berms or to the ground flowing east towards stormwater drop inlet near runway	1 to 8,000 gallons/ Gradual to instantaneous
8,000-gallon truck unloading AVGAS to the 12,000-gallon AVGAS AST	Failure of transfer hose	Contained by the unloading area containment berms or to the ground flowing east towards stormwater drop inlet near runway	1 to 8,000 gallons/ Several gallons per minute
1,000-gallon truck unloading AVGAS to the 6,000-gallon self-serve AVGAS AST	Complete or partial failure of tank on truck	Contained by the “active containment system” and the available spill kit or to the ground flowing south	1 to 1,000 gallons/ Gradual to instantaneous
1,000-gallon truck unloading AVGAS to the 6,000-gallon self-serve AVGAS AST	Failure of transfer hose	Contained by the “active containment system” and the available spill kit or to the ground flowing south	1 to 1,000 gallons/ Several gallons per minute
Unloading waste jet fuel from 275-gallon jet fuel tank at the North State Aviation facility to a 3,000-gallon truck	Complete or partial failure of tank on truck	Contained by the “active containment system” and the available spill kit or to the ground flowing west	1 to 3,000 gallons/ Gradual to instantaneous

Oil Storage / Transfer Location	Potential Spill Event	Potential Spill Direction	Potential Volume Released and Spill Rate
Unloading waste jet fuel from 275-gallon jet fuel tank at the North State Aviation facility to a 3,000-gallon truck	Failure of transfer hose	Contained by the “active containment system” and the available spill kit or to the ground flowing west	1 to 3,000 gallons/ Several gallons per minute
Unloading waste jet fuel from 275-gallon jet fuel tank at the jet fuel tank farm area to a 3,000-gallon truck	Complete or partial failure of tank on truck	Contained by the “active containment system” and the available spill kit or to the ground flowing north	1 to 3,000 gallons/ Gradual to instantaneous
Unloading waste jet fuel from 275-gallon jet fuel tank at the jet fuel tank farm area to a 3,000-gallon truck	Failure of transfer hose	Contained by the “active containment system” and the available spill kit or to the ground flowing north	1 to 3,000 gallons/ Several gallons per minute
Unloading waste oil from the waste oil drums at the Heritage Hangar to a 3,000-gallon truck	Complete or partial failure of tank on truck	Contained by the “active containment system” and the available spill kit or to the ground flowing south	1 to 3,000 gallons/ Gradual to instantaneous
Unloading waste oil from the waste oil drums at the Heritage Hangar to a 3,000-gallon truck	Failure of transfer hose	Contained by the “active containment system” and the available spill kit or to the ground flowing south	1 to 3,000 gallons/ Several gallons per minute

4.0 PREVENTION MEASURES PROVIDED

4.1 Facility Drainage

40 CFR 112.8(b)

Surface drainage from paved areas around the FBO flows into a series of storm sewer drop inlets or into the grassy areas along the taxiways. The stormwater generally flows to the north on the northern part of the airport and to the south on the southern part of the airport. The stormwater flows into the Brushy Branch on the north side of the airport and an unnamed tributary of the Brushy Branch on the south side of the airport. Figure 4 shows the site drainage.

4.2 Bulk Storage Tanks

40 CFR 112.7(c)(1) and 112.8(c)

Storage Tank Material Compatibility:

40 CFR 112.8(c)(1)

All ASTs are constructed of steel and are compatible with their contents. Waste oil is stored in polyethylene drums and is compatible with its contents. The refuelers are constructed of steel and are compatible with their contents.

Storage Tank Secondary Containment:

40 CFR 112.8(c)(2) and 112.8(c)(11)

The 12,000-gallon AVGAS tank and the 300-gallon waste AVGAS tank in the tank farm near the Race Hangar are located in a concrete secondary containment area. The concrete is compatible with the contents of the tank and is sufficiently impervious to contain the tank contents. The containment area includes a drainage line with a valve. The valve remains closed except to drain rain water from the containment area. The contents of the containment area are inspected to ensure no fuel or oil is present before opening the valve.

The 6,000-gallon AVGAS tank and the 300-gallon waste AVGAS tank in the self-serve tank farm area near the Heritage Hangar are located in a concrete secondary containment area. The concrete is compatible with the contents of the tank and is sufficiently impervious to contain the tank contents. The containment area includes a drainage line with a valve. The valve remains closed except to drain rain water from the containment area. The contents of the containment area are inspected to ensure no fuel or oil is present before opening the valve.

The 275-gallon jet fuel tank near the North State Aviation facility is located in a steel secondary containment tub. The steel secondary containment is compatible with the contents of the tank and is sufficiently impervious to contain the tank contents. The containment device includes a drainage line with a plug. The plug remains closed except to drain rain water from the containment area. The contents of the containment area are inspected to ensure no fuel or oil is present before opening the plug.

The 275-gallon waste jet fuel tank at the underground jet fuel tank area is located in a steel secondary containment tub. The steel secondary containment is compatible with the contents of the tank and is sufficiently impervious to contain the tank contents. The containment device includes a drainage line with a plug. The plug remains closed except to drain rain water from the containment area. The contents of the containment area are inspected to ensure no fuel or oil is present before opening the plug.

The 275-gallon diesel fuel tank at the underground jet fuel tank area is located in a steel secondary containment tub. The steel secondary containment is compatible with the contents of the tank and is sufficiently impervious to contain the tank contents. The containment device includes a drainage line with a plug. The plug remains closed except to drain rain water from the containment area. The contents of the containment area are inspected to ensure no fuel or oil is present before opening the plug.

The mobile refuelers are parked inside an asphalt bermed containment area. The berm provides containment for these trucks and is compatible with the contents of all trucks and is sufficiently impervious to contain the truck contents. Stormwater is inspected to ensure no oil is present before allowing to drain out.

The waste oil drums stored at the FBO Hangar area are placed on an integrated spill control pallet. The pallet is compatible with the contents of the drums and is sufficiently impervious to contain the drum contents.

The waste oil drums stored at the Heritage Hangar area are placed on an integrated spill control pallet. The pallet is compatible with the contents of the drums and is sufficiently impervious to contain the drum contents.

The 95-gallon polyethylene drums containing waste oil at the Heritage Hangar area has an integrated second wall built into the drum to provide secondary containment. The polyethylene is compatible with the contents of the drums and is sufficiently impervious to contain the drum contents.

The 15,000-gallon jet fuel tanks at the North State Aviation facility are double walled tanks. The steel secondary wall is compatible with the contents of the tanks and is sufficiently impervious to contain the tank contents.

Drainage of Diked Areas:

40 CFR 112.8(c)(3)

Accumulated rainwater will be inspected prior to discharge. The inspection form in Attachment 3 will be used to document each event. An estimated level of water will be documented as well as verification that no fuel is present (even a sheen) and if the checks prove satisfactory, the drain valve will be opened and the accumulated rain water will be released to the storm water system. Once complete the technician will document that the drain valve has been properly closed and locked (if appropriate).

Tank Integrity Testing:

40 CFR 112.8(c)(6) and 40 CFR 112.7(i)

Test each aboveground container for integrity on a regular schedule, and whenever you make material repairs. For typical SPCC plans, visual inspections are typically required along with another testing technique such as hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of non-destructive shell testing. Since this facility has only shop-built tanks less than 30,000 gallons each and the containers are not in contact with the ground, the EPA allows visual inspections under the rules for “equivalent environmental protection.” Keep comparison records and you must also inspect the container’s supports and foundations. Tank integrity inspections are included in the quarterly inspection program defined in Attachment 5. Records of tests shall be kept for a minimum of three years.

If any of the tanks undergo repairs or alterations that may affect the risk of a discharge due to brittle fracture, the tank must be evaluated by a certified tank inspector prior to bringing the tank back into service. If the tank has failed due to brittle fracture in the past, the tank must also be evaluated by a certified tank inspector prior to bringing the tank back into service.

Tank High Level Indication:

40 CFR 112.8(c)(8)

Level indication for all tanks except the waste AVGAS and waste jet fuel tanks is provided with a visible level gauge. The waste AVGAS and waste jet fuel tanks are sticked to determine the level. Before material is transferred to the tank, the level gauge is observed to determine the depth of fuel. Calculations are made to ensure that the tank has sufficient volume available to accept the fuel to be transferred. The technician remains in the immediate vicinity of the tanks while filling the tanks and can respond in the event of an overflow event.

The refueler trucks are equipped with calibrated dispenser flow meters. Records are kept to tally the amount of fuel dispensed each day. The filling procedure for the refueler requires the technician to be present when transferring fuel from the bulk storage tank to the refueler. When the refueler is filled, technician transfers the same amount of fuel that was dispensed that day. An automatic shut-off device will engage if the refueler reaches 90% of its capacity. The flow meters and high level alarms are inspected annually.

Observe Area for System Upsets:

40 CFR 112.8(c)(9)

Managers and technicians are required to observe the tank storage areas frequently enough to detect possible system upsets that could cause a discharge of oil to the environment. Any spill or leak must be promptly reported to the General Manager.

Proper Removal of Spilled Oil:
40 CFR 112.8(c)(10)

Technicians are required to promptly correct visible discharges which result in a loss of oil from the container, including but not limited to seams, gaskets, piping, pumps, valves, rivets, and bolts. Technicians must promptly remove any accumulations of oil in diked areas.

4.3 Facility Transfer Operations, Pumping and Facility Process
40 CFR 112.7(h) and 112.8(d)

AVGAS is supplied to the fuel tanks by a third party vendor. The vendor arrives on-site and parks his truck adjacent to the fuel tank and inside the unloading area containment (to be installed). The tank level gauge is observed to determine the available tank volume. A hose is connected from the truck to the tank inlet nozzle inside the containment area. The vendor monitors the level gauges to ensure that the tank does not overflow. Secondary containment is provided by the asphalt berms.

Waste oil from the waste oil drums at the Heritage Hangar and the main hangar area is picked up by a third party vendor. The vendor arrives on-site and parks his truck adjacent to the waste oil drums. Secondary containment for the transfer is provided by the “active containment system” and the available spill kit. A hose is connected from the truck to the drum outlet bung. The vendor monitors the level gauges on his truck to ensure that the truck does not overflow.

The mobile refuelers drive into the unloading area containment and park next to the jet fuel tank or the AVGAS tank. A hose is connected to the tank nozzle and also connected to the refueler nozzle. Fuel is pumped from the tank to the refueler. The filling procedure for the refueler requires the technician to be present when transferring fuel from the bulk storage tank to the refueler. When the refueler is filled, technician transfers the same amount of fuel that was dispensed that day. An automatic shut-off device will engage if the refueler reaches 90% of its capacity. The flow meters and high level alarms are inspected annually.

4.4 Inspections and Records
40 CFR 112.7(e)

Quarterly inspections are also conducted to look for evidence of releases or potential releases. The inspections will follow the Landmark Aviation’s corporate Internal Evaluation Program (IEP) which is an integrated inspection program. The inspections will incorporate requirements for SPCC, Storm Water, OSHA, FAA, Air Transport Association, and other requirements into one inspection program. This program will integrate into the company’s Safety and Quality Management System (SQMS) and will adhere to the requirements of the company SQMS Manual.

The inspections will include three quarterly audits that will be completed by the local staff at the Fixed Base Operation (FBO) and a fourth quarter validation inspection that will be conducted by the Director of Safety or a Regional Safety Representative (RSR). The validation audits may occur in any of the four quarters of the year and the remaining three quarters will be conducted by the local FBO as described above.

The inspections questions will come from a pool so that each quarter will provide different questions for the auditor to complete. The validation audits will be more comprehensive than the other quarterly audits and will also provide the Safety Assurance function as described in the company's SQMS Manual. This not only provides the benefit of Safety Assurance, but will require an independent representative outside of the local FBO to conduct the validation audit.

Specifically relating to SPCC requirements, the audits will include any of the following audit questions.

- Is a copy of the site specific SPCC Plan at the FBO?
- Are employees trained and documented in Spill Prevention Control and Countermeasures?
- Have you reviewed your SPCC Plan to ensure that your spill containment materials are sufficient to handle a spill the size stipulated in the plan?
- Is secondary containment provided for bulk storage of liquids including all 55-gallon drums?
- Are refueler trucks parked in a containment area or as defined in the SPCC Plan?
- Is spill equipment in each truck?
- Are hoses in good condition?
- Is there any evidence of spills or leaks?
- Are all product deliveries and transfers observed?
- Are tanks/drums leaking?
- Is piping leaking?
- Is level gauge functionally checked?
- Is oil/fuel on the ground?
- Is spill equipment adequate?
- Are tank supports adequate?

- Are excessive stains visible on pavement and/or vegetative drainage swales?
- Is accumulated rainwater inspected prior to release?
- Is each rainwater release documented in book or on checklist?
- Is drain valve closed after each draining of rainwater?
- Is drain valve provided with a lock?
- Is drain valve handle marked for open/closed positions?
- Is storm water present in truck unloading area?
- Is oil/fuel on water in truck unloading area?
- Is there any other evidence of pollution in truck unloading area?

Documentation for the quarterly audits will be maintained electronically and corrective actions will also be maintained in the same system. Any items that are discovered that requires correction will be recorded and will be documented through resolution. A copy of the policy for Internal Evaluation Program Guide Audits is provided as Attachment 5.

In addition to the documented quarterly audits described above, each FBO conducts quality assurance inspections at the tank farm and each refueler truck daily. Any leaks, evidence of prior leaks, or any unusual condition observed during these daily inspections will be reported to the General Manager and appropriate action will be taken to correct the situation.

4.5 Personnel, Training and Spill Prevention Procedures

40 CFR 112.7(f)(10)

The General Manager is the designated person accountable for spill prevention at the facility.

Training is provided annually to all employees involved in handling oil, chemicals or oil-based waste. Documentation of the training topics and attendees is maintained for a minimum of three years.

- General facility operations
- Procedures for oil handling
- Operation and maintenance of equipment used to prevent discharges
- Requirements for reporting a discharge
- Pollution control laws, rules and regulations
- Contents of the facility SPCC Plan
- Discussion of previous discharges, malfunctioning components, and new precautions

4.6 Security

40 CFR 112.7(g)

All ASTs are located inside the perimeter fence of the airport. The airport has restricted access and the gates are locked. The drain for the fuel farm containment area remains normally closed to prevent inadvertent discharge of water accumulated in the containment area. No pipelines are present outside of the facility.

Outside lighting is present around the fuel farm, including areas where oil is loaded and unloaded. Lighting is adequate to detect spills at night and deter vandalism.

5.0 COUNTERMEASURES IF A SPILL OCCURS

If a spill occurs, the emergency spill procedure will be followed (a copy is provided in Attachment 6). The General Manager will make proper notification to the emergency contacts provided below. The spill report provided in Attachment 7 will be used to gather the necessary information prior to notifications. If a spill occurs during loading or unloading operations, the third-party vendor will have primary responsibility for countermeasures.

5.1 Emergency Contacts

Facility Contacts:

- | | |
|---|---|
| 1) General Manager | Office 336-776-6060
Cell 336-601-3051 |
| 2) Line Supervisor (FBO) | Office 336-776-6060
Cell 336-420-1789 |
| 3) Shop Foreman (Heritage) | Office 336-776-6060
Cell 336-406-6953 |
| 4) A&D Environmental, High Point, NC
(Spill Response Contractor) | Office 336-434-7752
Toll Free 800-434-7750 |

Local Authorities – The local authorities must be contacted in the event of a reportable spill. The list below provides phone numbers of agencies that should be contacted.

- | | |
|--|------------------------------|
| National Response Center | 800-424-8802 |
| US EPA, Region IV | 404-562-8700 |
| NC Dept. of Environment, Health, & Nat. Res. | 919-733-5291 or 800-858-0368 |
| Local Airport Fire Department | 336-727-8084 |
| Emergency Response | 911 |

5.2 Spill Contingency Plan

In the event of a spill, there are several contingencies built into the system which will prevent the spill from migrating off site. Each contingency is described in this section by area.

AVGAS Tank Farm Area by Race Hangar If a spill were to occur in the AVGAS Tank Farm Area by the Race Hangar, the first level of contingency would be the concrete containment dike. The containment area is designed to contain the largest tank which would be adequate to contain a very large spill. If the fuel spilled past the containment dike, the fuel would flow in a easterly direction towards the storm drain inlet in the grass. The spill kit would be deployed to prevent fuel from entering the storm drain inlet and serves as the second level of contingency for this area. If the spill entered the storm drain inlet, booms would be placed at the discharge on the north side of the airport to prevent fuel from flowing off airport property. Additional booms would be placed downstream if needed. The prearranged spill response contractor would be summoned to provide assistance. The booms and the spill response contractor provide the third level of contingency for this area.

AVGAS Tank Farm Area by Heritage Hangar If a spill were to occur in the AVGAS Tank Farm Area by the Heritage Hangar, the first level of contingency would be the concrete containment dike. The containment area is designed to contain the largest tank which would be adequate to contain a very large spill. If the fuel spilled past the containment dike, the fuel would flow in a southerly direction towards the outfall on the south side of the airport. The spill kit would be deployed to prevent fuel from flowing off airport property and serves as the second level of contingency for this area. If the spill continued off airport property, booms would be placed at the discharge to prevent fuel from flowing into the creek. Additional booms would be placed downstream if needed. The prearranged spill response contractor would be summoned to provide assistance. The booms and the spill response contractor provide the third level of contingency for this area.

Refuelers Parked in Parking Area The refuelers are parked in the area outside the Landmark Hangar when they are not in service. If a spill were to occur from the refuelers in the parking area, the first level of contingency would be the asphalt berms. The berms are designed to contain a spill of the largest refueler truck and provide the first level of contingency for this area. If a spill continued past the berms, the fuel would flow in a northerly direction towards the storm drain inlet in the ramp. The spill kit would be deployed and booms would be placed at the storm drain inlet to prevent fuel from entering the storm water collection system. The spill kit serves as the second level of contingency for this area. If a spill entered the storm water collection system, booms would be placed at the discharge near the terminal parking lot. Additional booms would be placed downstream if needed. The prearranged spill response contractor would be summoned to provide assistance. The booms and the spill response contractor provide the third level of contingency for this area.

Refuelers Working on Aircraft Apron If a spill were to occur from the refuelers while they were servicing an aircraft on the aircraft apron, the fuel would spill directly to the pavement. Each refueler is equipped with a small spill kit that includes absorbent pads, absorbent booms, and other materials. The small spill kit provides the first level of contingency for this area. If the spill was too large to clean up with the available small spill kit, the fuel would flow across the parking apron towards one of the storm water drains. The large spill kit would be deployed and booms would be placed on the pavement to prevent fuel from flowing into the storm drain. The large spill kit and the booms provide the second level of contingency for this area. If the fuel spill continued into the storm drain system, the fuel would flow in a southerly direction towards the outfall in the Terminal Building parking lot. Booms would be placed at the outfall to prevent fuel from flowing off airport property. Additional booms would be placed downstream if needed. The prearranged spill response contractor would be summoned to provide assistance. The booms and the spill response contractor provide the second level of contingency for this area.

FIGURES

ATTACHMENTS

ATTACHMENT 1

CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

CERTIFICATION OF SUBSTANTIAL HARM DETERMINATION FORM

Facility Name: Landmark Aviation, INT
Winston-Salem, NC 27105

- 1) Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
YES _____ NO X__

- 2) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground storage tank area?
YES _____ NO X__

- 3) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments?
YES _____ NO X__

- 4) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance such that a discharge from the facility would shut down a public drinking water intake?
YES _____ NO X__

- 5) Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
YES _____ NO X__

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

General Manager

(Signature)

(Date)

(Printed)

ATTACHMENT 2

CONTAINMENT AREA CAPACITY CALCULATIONS

CONTAINMENT AREA CAPACITY CALCULATIONS

Tank Contents	Tank Capacity (gallons)	Containment Material	Dike Dimensions (feet)	Dike Capacity (gallons)	Dike Capacity (% of Tank Capacity)
AVGAS in main tank farm	12,000	Concrete	45' x 20' x 3.5'	23,562	196%
AVGAS in self-serve area	6,000	Concrete	15' x 25' x 2.5'	7,012	117%
Jet Fuel and AVGAS in mobile refueler	5,000	Asphalt berm	40' x 15' x 0.5' and 55' x 18' x 0.5'	5,947	119%
55-gallon drums in smoke oil storage building	55	Steel building walls and steel threshold	40' x 20' x 0.1'	498	907%
55-gallon drums inside hazardous materials storage building	55	Concrete floor and gutters	15' x 8' x 0.3'	299	544%

ATTACHMENT 3

CONTAINMENT AREA DRAINING FORM

CONTAINMENT AREA DRAINAGE FORM

(To be completed each time valves are opened)

Date						
Time						
Initials						
Does area contain any fuel – even a sheen on the water?						
Approximate depth of water at valve (inches)						
Drain valve closed?						

Date						
Time						
Initials						
Does area contain any fuel – even a sheen on the water?						
Approximate depth of water at valve (inches)						
Drain valve closed?						

Date						
Time						
Initials						
Does area contain any fuel – even a sheen on the water?						
Approximate depth of water at valve (inches)						
Drain valve closed?						

ATTACHMENT 4

TANK TRUCK UNLOADING PROCEDURES

TANK TRUCK UNLOADING PROCEDURES

The following procedures must be followed to prevent releases during unloading of bulk liquids.

- 1) Delivery and pick up drivers must call before arriving on site to notify the Line Manager.
- 2) Truck driver must check in with a Landmark Aviation Technician**. Wheel chocks for the truck must be in-place.
- 3) The Technician checks the tanker truck containment area to verify the containment area is secure. The Technician then provides access to tanks, unlocking fill ports if necessary.
- 4) Spill containment equipment is moved to the unloading area for any minor spills that may occur.
- 5) The tank level measurements are taken before filling to determine how much capacity is available for filling.
- 6) The truck driver must observe the tank level gauge, the truck level gauge, and the entire unloading process.
- 7) After the liquid transfer is complete, hoses must be drained into the tank or a container (and properly handled) to prevent this material from being released.
- 8) Close and secure tank fill ports.
- 9) Tank level measurements are taken after filling to ensure the proper transfer was made.
- 10) The area should be inspected by the Technician for any minor and/or incidental drips of spills, and any identified should be immediately cleaned up, and residues disposed of properly. (Any spill equipment used should be replaced.)

**** *The Technician must be SPCC trained as required by this plan.***

ATTACHMENT 5

INTERNAL EVALUATION PROGRAM

Purpose: This guide explains the procedures and requirements for the Landmark Aviation (LMA) Internal Evaluation Program (IEP).

Authority: Director of Safety, Regional Safety Reps and General Manager

Objective: Landmark employees shall comply with the procedures in this guide regarding IEP self and validation audits requirements at Landmark Aviation.

Guidelines:

1. All Landmark Aviation facilities and business units are to follow this guide to evaluate safety systems deficiencies.
2. The IEP is designed to determine the Safety and Quality Management Systems (SQMS) deficiencies at LMA facilities. It is not a method of “rating” a facility or comparing facilities. Combining the results of location self and validation audits determines and measures trends in the LMA safety systems.
3. Self audit questions are divided into 3 quarterly checklists for each calendar year. The checklists contain non-repetitive questions for each quarter (some questions will be repeated to review conditions which may change frequently). A “yes” answer means there is no deficiency for the subject. There is a reference for each question.
4. The GM will assign an auditor to perform the self audits. The GM is the responsible manager for the location and may also be the auditor. Ideally, the assigned auditor will rotate each quarter.
5. The quarterly self audits may begin on the first day of the quarter and deficiencies shall be corrected as required by the checklist-scheduled correction due date. The deficiency correction due date is a column on the spreadsheet. You determine the due date based on the Risk Assessment Index (RAI) column. Acceptable (A) RAI=no corrective action due date; Review (R) RAI=one month corrective action due; Unacceptable (U) RAI=consider immediate corrective action. See the SQMS Manual chapter 3.
6. The quarterly self audit checklists are to be completed using the assigned spreadsheet and submitted (uploaded) by the last day of the second month (Feb, May, Aug and Nov) in each quarter. It is NOT required when a validation audit has been scheduled for your location/business unit. The validation audits are conducted by the Director of Safety or a Regional Safety Representative (RSR).
7. Validation audit questions may not be from the quarterly checklists. Some questions are intended to measure risk controls which are in place. Validation audits measure the quality management (Safety Assurance) function of the SQMS.
8. For a better understanding of a checklist question, contact the following: For line services questions and OSHA contact the RSR for your location, for charter operations contact the Charter Director of Safety and for aircraft maintenance contact the Charter Director of Maintenance. If charter or MRO are not at your location check N/A.

Reference: Landmark Aviation, Safety and Quality Management Systems Manual

ATTACHMENT 6
EMERGENCY RESPONSE PROCEDURES

EMERGENCY RESPONSE PROCEDURES

Introduction

The primary purpose of these procedures is safety. *Safety is Paramount!*

Fuel spills present an extremely hazardous fire potential and should be handled as such. An important, but secondary, consideration is the environmental concern. Sound environmental practices should be used whenever practical, but never at the expense of safety.

Because of variables such as spill size, flammable liquid type, wind and weather conditions, ramp slope, equipment arrangement, aircraft occupancy, equipment and personnel available, NO SPECIFIC set of instructions will apply in every case. However, every fuel spill, no matter how small, should be treated as a potential fire source. Fuel fumes are heavier than air and will accumulate in low areas. Only a spark is needed to produce an explosive fire. Therefore, prompt action, good judgment and initiative are required when dealing with fuel spills.

Environmental concerns must also be considered. Since stormwater run-off flows into an underground storm sewer system, this water can quickly be transferred to the downstream creek.

In addition, North Carolina soils are not only very porous, but may allow for standing water as well. As the rain fall increases with heavier storms, spilled fuel can travel many miles off site and contaminate millions of gallons of water as well as thousands of tons of soil along the way. The water table can become contaminated from fuel spills as well. This is why all fuel spills must be kept from advancing into unpaved or grassy areas, drainage canals or stormwater drains. It is good practice to study ramp drainage flows during heavy rain. This gives an excellent indication of how fuel will flow during a large spill. A map is available in the SPCC plan to show drains, grassy areas, drainage canals as well as flow directions. Understanding flow directions will help with the containment of the fuel spill.

**** WARNING****

NEVER ATTEMPT TO WASH DOWN A FUEL SPILL WITH WATER. THIS WILL ONLY SPREAD THE PROBLEM.

I. Spill Size

- A. Class III fuel spills are less than 18 inches in diameter or less than five gallons.
 - Usually fuel spills of this nature are considered minor. They can be cleaned up with absorbent pads or oil dry depending upon the particular situation.
 - Avoid all sparks or sources of ignition within 50 feet until spilled fuel is cleaned up.
 - Contact supervisor and fill out a fuel spill report. These will be kept in the Line Office.

B. Class II fuel spills are greater than 18 inches, but less than 10 feet in diameter and are not of a continuous flowing nature. They are typically less than 25 gallons.

- If the fuel spill is within 50 feet of an aircraft, or in an area of high hazard, post a fire guard up-wind of the spill with a dry chemical fire extinguisher at hand.
- Avoid all sparks or sources of ignition within 50 feet until the spilled fuel is made safe or cleaned up.
- The fuel spill can be contained with the absorbent booms and cleaned up with absorbent pads.
- Contact supervisor and General Manager, the supervisor will fill out the spill report form.
- Obtain assistance from the local fire department if, in the opinion of the person in charge of the operation, this is deemed necessary.

C. Class I fuel spills are over 10 feet in diameter or of a continuous flowing nature. They are typically greater than 25 gallons.

- Notify the General Manager IMMEDIATELY.
- Summon the local fire department.
- Evacuate all personnel or passengers and crew if the spill is within 50 feet of an aircraft.
- Post a fire guard up-wind of the spill with a dry chemical fire extinguisher.
- Stop the flow of fuel if possible by closing emergency shut-off valves or shutting down the source of power to the pumps.
- Mobile equipment and any aircraft may be withdrawn from the area or left “as is” until the spill is removed or made safe. No fixed rule can be made as fire safety will vary with each circumstance. “Shutting down” equipment or moving vehicles may provide a source of ignition.
- The Line Manager and/or the General Manager will notify proper fire and environmental agencies.

Neither an idle aircraft nor any automotive, electrical or any spark-producing equipment in the area should be started before the spilled fuel is removed or made safe. A good practice is to not actuate any electrical switches unless absolutely necessary. If a vehicle engine is running at the time of the spill, it is normally good practice to drive it from the hazard area.

If circumstance dictate that the vehicle should not be moved, but it should be shut down, the engine speed should be reduced to idle prior to cutting ignition and the gear selection should be “in gear” in order to help prevent back fire. Non-involved vehicles should never be driven through a fuel spill.

II. Spill Clean-up.

All spill clean-up should be cleaned up using the absorbent pads and booms. These materials are kept in the Line Office. In case the absorbent material is not enough to contain the spill, use clay absorbent material, but only after all absorbent material has been used.

There are a minimum of 2 – 3’ x 150’ rolls and 200 – 3’ x 3’ pads to be kept in stock at all times. In addition, there are 55-gallon sealable drums for containment of the contaminated absorbent pads.

A fully saturated 3’ x 3’ pad will weigh approximately 10 pounds and hold 1 ½ gallons of jet fuel. This fact should be considered so that the absorbent pads can be applied in a safe economical and efficient manner. Any saturated pads should be wrung out into a waste fuel drum. The wrung pad should then be put in separate drum and secured until it is disposed of.

If fuel reaches an unpaved area, the contaminated soil should be removed as soon as possible and placed in a separate container. The management will decide on the disposal method.

If fuel flows into the stormwater drainage ditch, booms can be used to float on top of the water and prevent fuel from flowing further downstream.

Fuel Farm

A metal cabinet or a spill kit will contain absorbent pads and booms at the fuel farm.

Fuel spilled in the containment area of the farm will remain in the concrete containment area. A waste contractor will be used to remove contaminated water and fuel from the containment area. The areas covered by the spill should be cleared of all debris.

Hangar

Electrical equipment should be shut down immediately. Contain spill, move aircraft and equipment as necessary. Notify management, control access, and remove all personnel from hangar and adjacent offices.

All line personnel will read this program and will be properly trained in the methods described herein. Fire extinguisher training by the Fire Department will also be part of this program. This training will become part of each employee's permanent training records and kept in his/her personnel file.

After every fuel spill, a complete investigative report must be submitted to the management. This report will include the cause, weather, what emergency procedures were properly carried out and what corrective measures are required.

*****REMEMBER*****

ACT PROMPTLY

USE COMMON SENSE

1. Stop flow of fuel at the source and contain the spill.
2. Notify the Management.
3. Eliminate any source of spark within 50 feet of area.
4. Do not permit any unauthorized personnel closer than 50 feet of area.
5. Have a minimum of a 150-pound dry chemical fire extinguisher located up-wind of the area.
6. Do not permit spill to advance toward sewers, unpaved areas or any other drains.
7. Use absorbent pads for all clean-ups if possible.
8. Complete Investigative Report.

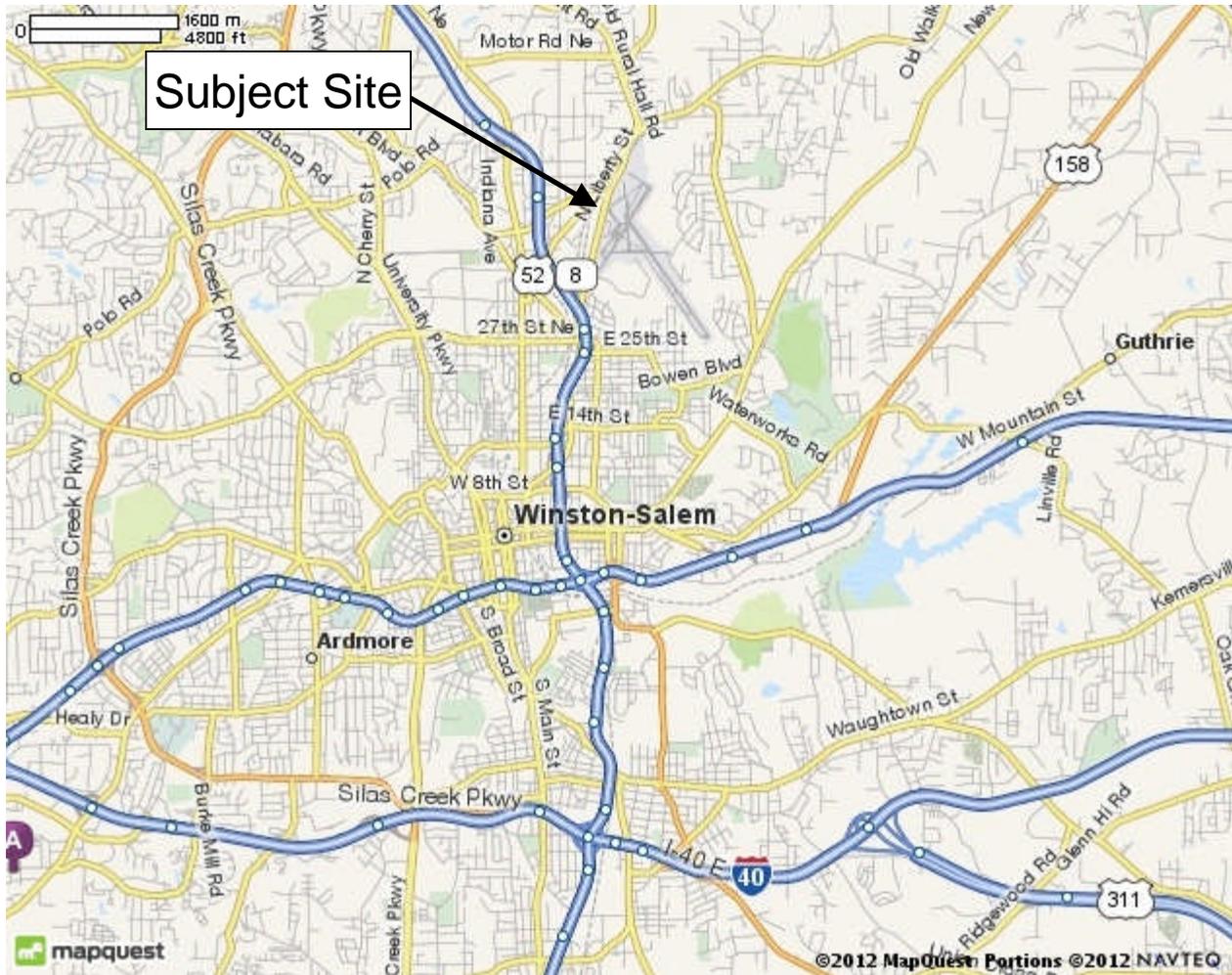
ATTACHMENT 7

SPILL REPORTING FORM

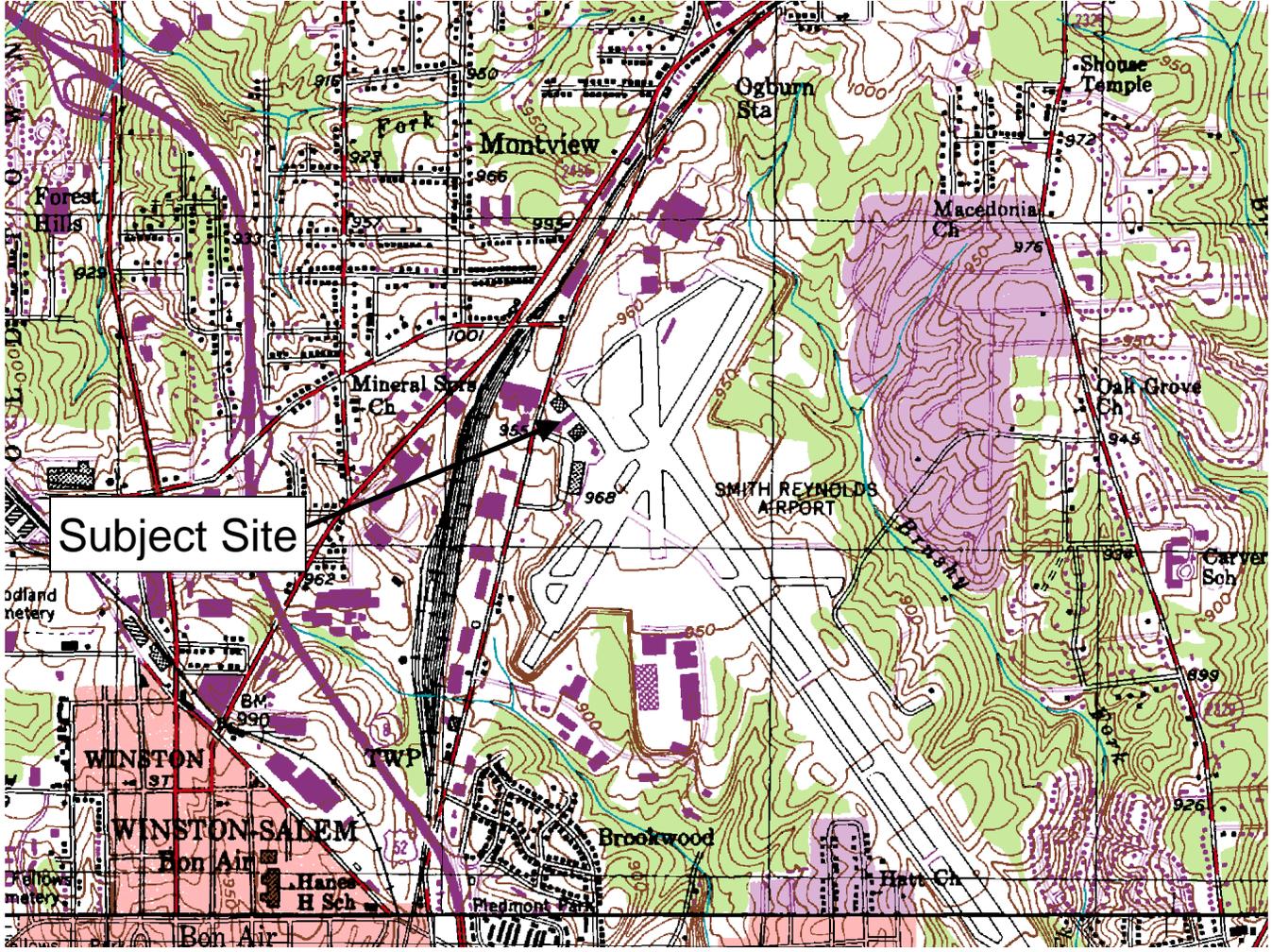
In the event of a discharge of oil to navigable waters or adjoining shorelines, the following information will be provided to the National Response Center and state regulatory agencies as defined in Section 5.0 of this plan :

Information provided to the National Response Center in the Event of a Discharge			
Discharge/Discovery Date		Time	
Facility Name			
Facility Location (Address/Lat-Long/Section Township Range)			
Name of reporting individual		Telephone #	
Type of material discharged		Estimated total quantity discharged	Gallons/Barrels
Source of the discharge		Media affected	<input type="checkbox"/> Soil
			<input type="checkbox"/> Water (specify)
			<input type="checkbox"/> Other (specify)
Actions taken			
Damage or injuries	<input type="checkbox"/> No <input type="checkbox"/> Yes (specify)	Evacuation needed?	<input type="checkbox"/> No <input type="checkbox"/> Yes (specify)
Organizations and individuals contacted	<input type="checkbox"/> National Response Center 800-424-8802 Time		
	<input type="checkbox"/> Cleanup contractor (Specify) Time		
	<input type="checkbox"/> Facility personnel (Specify) Time		
	<input type="checkbox"/> State Agency (Specify) Time		
	<input type="checkbox"/> Other (Specify) Time		

Facility Name: _____

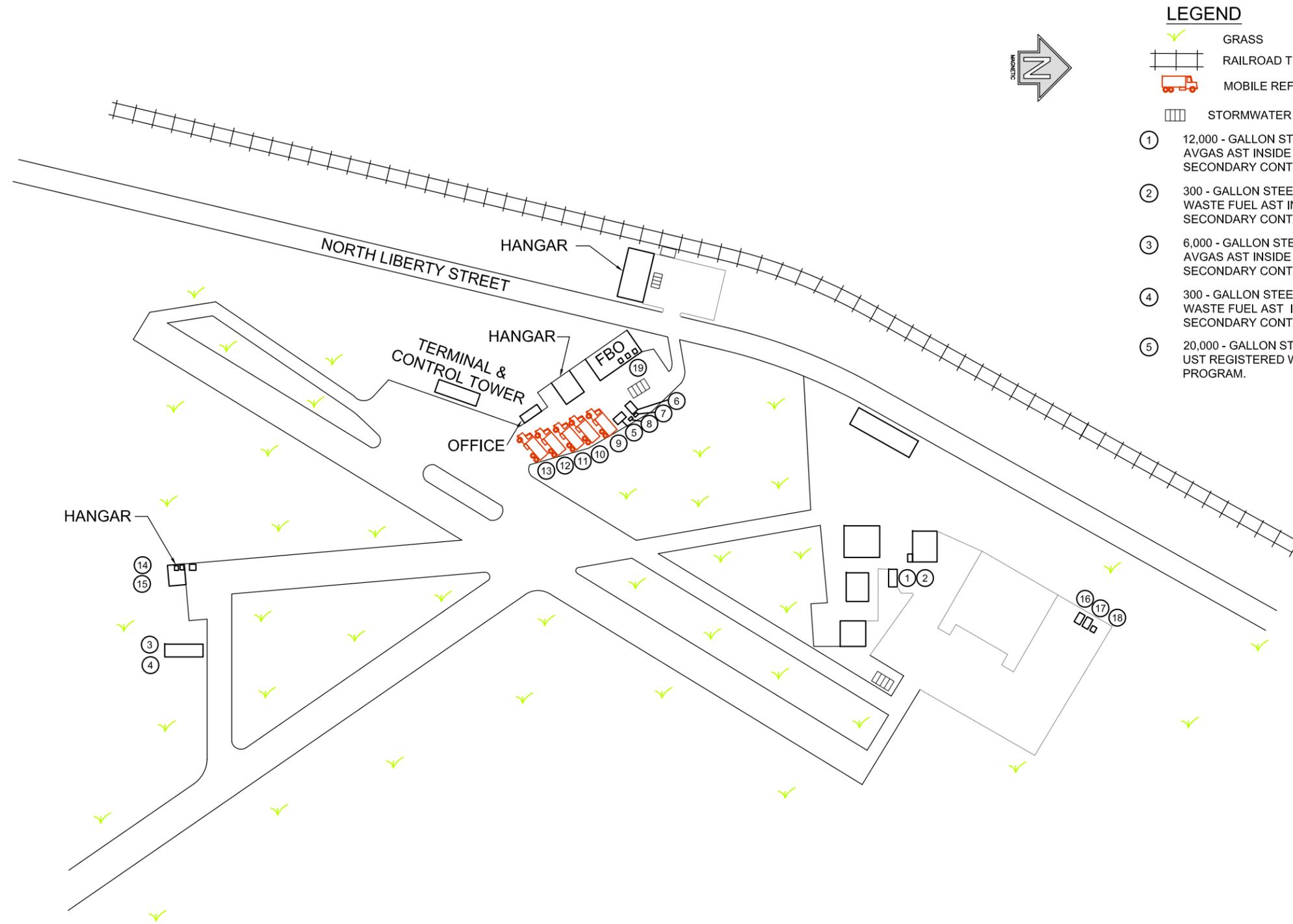


 4154 Brasher Drive, Marietta, GA 30066 Phone/Fax: 770-852-1477, Cell: 678-232-2627	Project:	2012-54	Site Location Map Landmark Aviation, INT 3821 N. Liberty Street Winston-Salem, NC 27105	Figure No.
	Scale:	NTS		1
	Date:	10/9/12		
	Drawn By:	GSG		



Subject Site

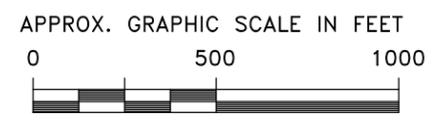
 4154 Brasher Drive, Marietta, GA 30066 Phone/Fax: 770-852-1477, Cell: 678-232-2627	Project:	2012-54	Topographic Map Landmark Aviation, INT 3821 N. Liberty Street Winston-Salem, NC 27105	Figure No.
	Scale:	NTS		2
	Date:	10/9/12		
	Drawn By:	GSG		



LEGEND

- GRASS
- RAILROAD TRACKS
- MOBILE REFUELER
- STORMWATER DROP INLET
- ① 12,000 - GALLON STEEL SINGLE WALL AVGAS AST INSIDE CONCRETE SECONDARY CONTAINMENT.
- ② 300 - GALLON STEEL SINGLE WALL WASTE FUEL AST INSIDE CONCRETE SECONDARY CONTAINMENT.
- ③ 6,000 - GALLON STEEL SINGLE WALL AVGAS AST INSIDE CONCRETE SECONDARY CONTAINMENT.
- ④ 300 - GALLON STEEL SINGLE WALL WASTE FUEL AST INSIDE CONCRETE SECONDARY CONTAINMENT.
- ⑤ 20,000 - GALLON STEEL JET FUEL UST REGISTERED WITH STATE UST PROGRAM.

- ⑥ 4,000 - GALLON STEEL GASOLINE UST REGISTERED WITH STATE UST PROGRAM.
- ⑦ 275 - GALLON STEEL SINGLE WALL DIESEL FUEL AST INSIDE STEEL SECONDARY CONTAINMENT TUB.
- ⑧ 275 - GALLON STEEL SINGLE WALL WASTE FUEL AST INSIDE STEEL SECONDARY CONTAINMENT TUB.
- ⑨ 5,000 - GALLON STEEL SINGLE WALL MOBILE REFUELER FOR JET FUEL. INSIDE ASPHALT BERMED SECONDARY CONTAINMENT.
- ⑩ 3,000 - GALLON STEEL SINGLE WALL MOBILE REFUELER FOR JET FUEL. INSIDE ASPHALT BERMED SECONDARY CONTAINMENT.
- ⑪ 3,000 - GALLON STEEL SINGLE WALL MOBILE REFUELER FOR JET FUEL. INSIDE ASPHALT BERMED SECONDARY CONTAINMENT.
- ⑫ 1,000 - GALLON STEEL SINGLE WALL MOBILE REFUELER FOR AVGAS. INSIDE ASPHALT BERMED SECONDARY CONTAINMENT.
- ⑬ 800 - GALLON STEEL SINGLE WALL MOBILE REFUELER FOR AVGAS. INSIDE ASPHALT BERMED SECONDARY CONTAINMENT.
- ⑭ (2) 55 - GALLON STEEL DRUMS CONTAINING WASTE OIL. DRUMS ARE STORED ON AN INTEGRATED SPILL CONTROL PALLET.
- ⑮ (1) 95 - GALLON POLYETHYLENE DOUBLE WALL DRUMS CONTAINING WASTE OIL.
- ⑯ 15,000 - GALLON STEEL DOUBLE WALL JET FUEL AST WITHIN CURBED SECONDARY CONTAINMENT.
- ⑰ 15,000 - GALLON STEEL DOUBLE WALL JET FUEL AST WITHIN CURBED SECONDARY CONTAINMENT.
- ⑱ 275 - GALLON STEEL SINGLE WALL WASTE JET FUEL AST INSIDE STEEL SECONDARY CONTAINMENT TUB.
- ⑲ (3) 55 - GALLON STEEL DRUMS CONTAINING WASTE OIL. DRUMS ARE STORED ON AN INTEGRATED SPILL CONTROL PALLET.



LANDMARK AVIATION - INT
 3821 N. LIBERTY STREET
 WINSTON-SALEM, NC 27105

2G ENVIRONMENTAL PROJECT NO: 2012-54

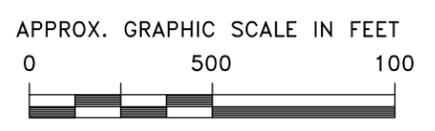
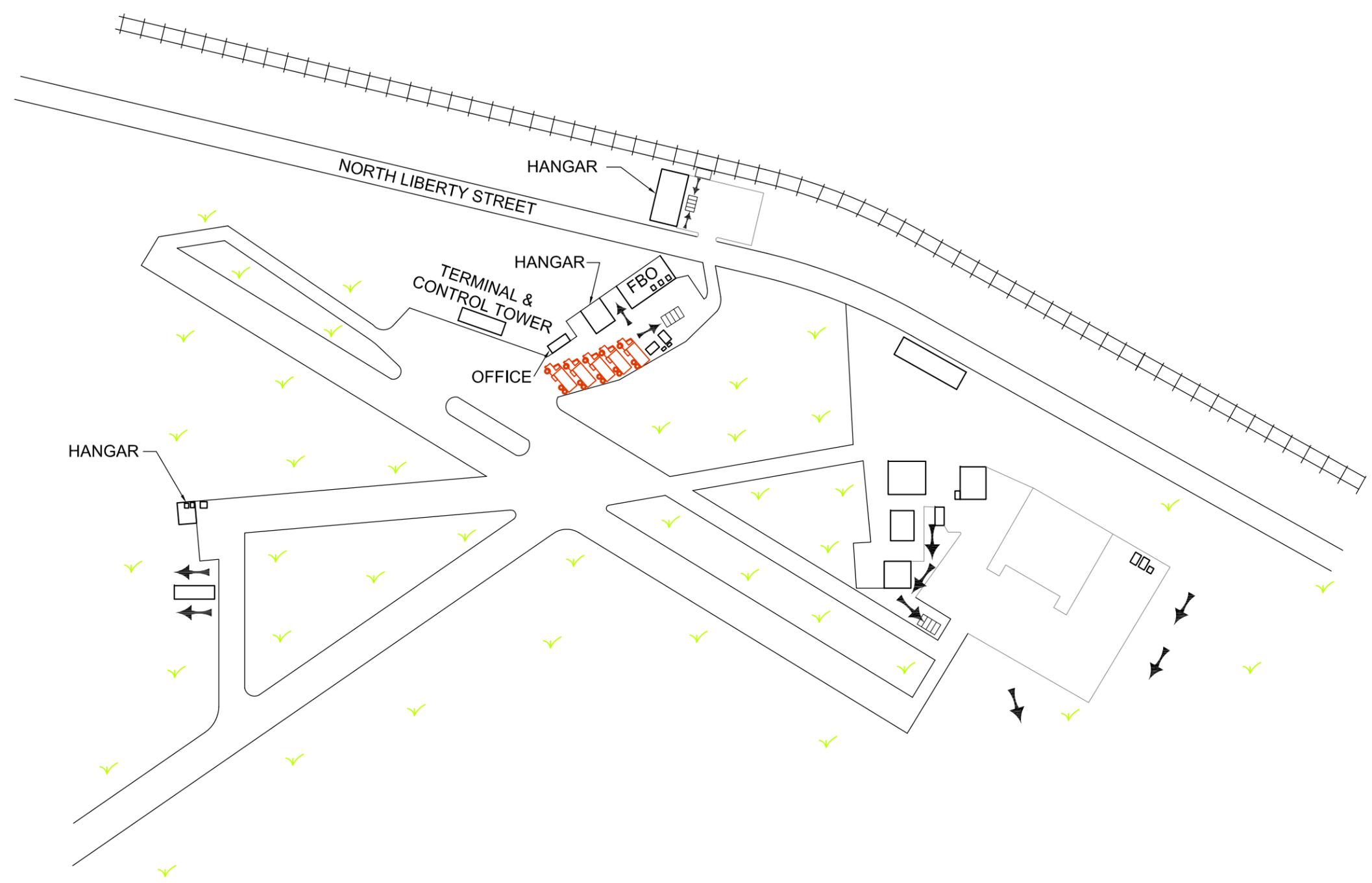


4154 Brasher Drive, Marietta, GA 30066
 Phone/Fax: 770-852-7477, Cell: 678-232-2627

SITE MAP

DESIGNED: GSG	CHECKED: GSG	DATE: Oct, 16, 2012	FIGURE
DRAWN: CFS	DWG NO. Winston Salem Site Plan.dwg	SCALE: INDICATED	3

- LEGEND**
-  GRASS
 -  SURFACE GRADIENT WATER FLOW DIRECTION
 -  RAILROAD TRACKS
 -  MOBILE REFUELER
 -  STORMWATER DROP INLET



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 WINSTON-SALEM, NC 27105

2G ENVIRONMENTAL PROJECT NO: 2012-54



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STORMWATER FLOW MAP

DESIGNED: GSG	CHECKED: GSG	DATE: Oct, 16, 2012	FIGURE
DRAWN: CFS	DWG NO. Winston Salem Site Plan.dwg	SCALE: INDICATED	4