

Stormwater Pollution Prevention Plan

North Perry Airport



Prepared for:

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September 2020

NORTH PERRY AIRPORT

STORMWATER POLLUTION PREVENTION PLAN CERTIFICATION

FDEP FAC ID NO. FLR05A455

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who 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 fine and imprisonment for knowing violations.

Mr. Michael Pacitto
Director of Planning and Environmental,
Broward County Aviation Department

Date

NORTH PERRY AIRPORT

STORMWATER POLLUTION PREVENTION PLAN RECORD OF REVISION

Revision of the SWPPP should be made as appropriate to incorporate corrective actions to address an unauthorized discharge, exceedance of water quality standards, or inadequate control measures. Revisions in response to corrective actions will require re-certification of the SWPPP; whereas routine revisions can be documented below. The SWPPP shall be updated every five years.

Date	Revised by	Area of Revision	Summary of Revision



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1.0 INTRODUCTION

1.1 SITE DESCRIPTION

The North Perry Airport (Airport) is located in Broward County, Florida, between Pines Boulevard to the north, SW 72nd Avenue to the east, Pembroke Road to the south and South University Drive to the west (**Figure 1**). The central latitude and longitude coordinates of the Airport are 26.001120 and -80.239452. The Airport is a general aviation transportation facility that is approximately 520 acres in size. The activities performed at the Airport include private aircraft operations, private storage (airplanes and helicopters), aircraft maintenance, and private flight training. The SIC code for the airport is 4581.

Based on digitization of current aerial imagery, approximately 30 percent of the HWO facility is covered by impervious surfaces, such as buildings and paved areas such as runways, taxiways, and parking lots. The pervious surfaces, including grass and unvegetated soils that occur between runways, taxiways, and buildings cover approximately 70 percent of the facility. The types of ground coverages at the Airport include impervious surfaces, pervious surfaces, and building area. Impervious ground coverage is considered to be any surface within HWO that prevents the infiltration of stormwater runoff and directly generates stormwater runoff during rainfall events. The impervious ground coverages at HWO includes runways, taxiways, aprons, roadways, parking lots, and sidewalks. Pervious ground coverage is considered to be any surface within HWO that allows the infiltration of stormwater runoff into the ground. The pervious ground coverages at HWO includes open grass areas, retention areas, swale areas, landscaped areas, and undeveloped areas. The areas surrounding the Airport consist of residential property and small areas of commercial and industrial property.

1.2 STORMWATER POLLUTION PREVENTION TEAM

Table 1. SWPPP Team Members

Name	Role	Title	Contact Number	Phone
Michael Pacitto	SWPPP Team Leader	Director of Planning and Environmental	(954) 359-6103	
Winston Cannicle	SWPPP Co-Team Leader	Environmental Program Manager	(954) 359-6181	
Mishka Binns	SWPPP Inspector	Environmental Compliance Specialist	(954) 359-1043	
Ryan Goldman	SWPPP Inspector	Environmental Compliance Specialist	(954) 359-6216	



The success of the pollution prevention program is dependent on the level of effort put forth by the Storm Water Pollution Prevention Program (SWPPP) Team. The implementation of an effective storm water pollution prevention program requires success in two areas; permit maintenance and implementation of Best Management Practices (BMPs). Maintenance of the facility permit is discussed in Section 1.3.

The proper implementation of BMPs is driven by education and outreach for Airport staff and tenants. It is important that adequate understanding of the stormwater regulations, preventative measures, and response procedures has been attained by those responsible for operation of the Airport.

Additionally, routine facility inspections by the SWPPP team will help identify areas and operations that need improvement. The SWPPP team is also responsible for confirming that corrective measures have been adequately implemented to areas and operations identified as needing improvement.

The responsibilities of the SWPPP Team include:

- Implementing the SWPPP;
- Assigning tasks associated with SWPPP development and implementation to other qualified BCAD Staff or Authorized Agents, where appropriate;
- Ensuring that BMPs that are identified in the SWPPP are implemented;
- Ensuring the implementation of changes in facility operation that are identified in the SWPPP;
- Evaluating and identifying measures that would improve the SWPPP;
- Evaluating, identifying, and correcting the deficiencies in the SWPPP;
- Coordinating with BCAD Staff and Tenants to evaluate, identify, and recommend new BMPs;
- Coordinating with maintenance personnel to identify maintenance needs that are related to implementation of the SWPPP;
- Coordinating inspection and/or monitoring activities;
- Identifying existing or potential SWPPP violations;
- Coordinating the documentation and reporting of spills with the Broward County Aviation Facilities Development and Operations Regulatory Specialist;
- Maintaining spill incident records;
- Documenting corrective actions following spills;
- Providing employee training; and,
- Preparing and submitting reports.

In addition to the efforts of the SWPPP Team, each Airport tenant is responsible for permit compliance and BMP implementation at their facility.

1.3 REGULATORY FRAMEWORK

In 1972, the Federal Water Pollution Control Act (which later became known as the Clean Water Act (CWA)), was amended to require that the discharge of pollutants to waters of the United States from any point source be covered by a National Pollution Discharge Elimination Service (NPDES) permit. In 1987, amendments to the CWA added Section 402(p), establishing a framework for regulating and permitting municipal and industrial discharge of storm water under the NPDES program.

In October 2000, the Environmental Protection Agency (EPA) authorized the Florida Department of Environmental Protection (FDEP) to implement the NPDES stormwater permitting program in the State of Florida, except on Native American County Lands. The FDEP's authority to administer the NPDES program is set forth in Section 403.0885 of the Florida statutes. The authorization comprises the original September 1995 Multi-Sector Generic Permit (MSGP) and subsequent updates that were incorporated prior to 2000. Although the FDEP issues MSGPs independently of the EPA, the FDEP recommends that



facilities develop their Storm Water Pollution Prevention Plans in accordance with the recommendations of the EPA MSGP. The current EPA MSGP was issued in June 2015, and a proposed 2020 update is currently under review. A link to the 2015 EPA MSGP is provided in **Appendix A**.

The SWPPP Team has obtained permit coverage for the Airport through the submittal of a Notice of Intent (NOI) to the FDEP NPDES Stormwater Notices Center. The Sector S MSGP for the Airport was authorized on February 11, 2016 and expires on February 10, 2021. The FDEP Facility ID for the permit is FLR05A455-004. The permit coverage applies only to the Airport facilities and activities. Each tenant is required to obtain independent permit coverage, as well as develop and implement a site specific SWPPP.

The FDEP identifies the three key conditions of the permit as; the implementation of the SWPPP, record retention to demonstrate that the SWPPP is being implemented, and performing any required stormwater monitoring. For air transportation facilities covered under Sector S of the MSGP, stormwater monitoring is only required for facilities that use over 100,000 gallons of deicing fluid. Since no deicing fluid is used at HWO, stormwater monitoring is not required.

Additionally, the SWPPP Team helps facilitate other regulatory programs that also promote stormwater pollution prevention, including a hazardous material management program and a Spill Prevention Control and Countermeasures (SPCC) program for petroleum storage. For example, the Airport complies with the requirements of the Resource Conservation and Recovery Act (RCRA) by inspecting material storage areas for leaks or spills. During the inspections, leaks or spills that may impact stormwater are noted and cleaned immediately. The BMPs included in this SWPPP are also designed to prevent soil and groundwater contamination, which could lead to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) enforcement action.



In the event that a significant release of a regulated material were to occur, the SWPPP Team would work closely with the Broward County Environmental Engineering and Permitting Division (EEPD) to ensure that the release was properly addressed pursuant to 62-780 FAC. A significant release is defined in 62-780.210 FAC.



The receiving water body for the Airport is the South Broward Drainage District drainage canal Canal No. 1 that flows towards the south into the Snake Creek Canal (C-9). The Airport is located in Water Body ID (WBID) 3283, which has been determined to not be impaired under the Total Maximum Daily Load (TMDL) program that is administered under 62-303 FAC. The Airport is within the limits of the City of Pembroke Pines Municipal Separate Sewer System (MS4) permit that is managed under the Broward County MS4 with a permit ID of FLS000016-004.

2.0 SITE INVENTORY

2.1 SITE USE

The activities performed at the Airport which require the use of potential pollutants are presented below:

- Aircraft Fueling
- Aircraft Maintenance
- Aircraft Washing
- Chemical Storage
- Equipment Fueling
- Equipment Maintenance
- Equipment Storage
- Equipment Washing
- Fuel Storage
- Painting/Stripping
- Waste Management & Disposal

The typical potential pollutants used while performing the above listed activities are batteries, cleaning products including detergents, oil and grease, paint, petroleum products, and solvents. A description of where the activities are performed at the Airport is provided in **Appendix B**.

2.2 POTENTIAL POLLUTANT SOURCES

An inventory of stored materials and potential pollutant sources for the Broward County Aviation Department (BCAD) owned and operated facilities is provided in **Appendix C**, and a facility site plan is provided in **Appendix D**. An inventory of the potential pollutant sources at the tenant facilities is available in the Annual Comprehensive Site Evaluation (ACSE) Summary Report.

2.3 PAST SPILLS/ LEAKS

Pursuant to FAA AC 150 5320-15A, a review of the Open FDEP Cleanup Site GIS layer, that is available through the FDEP Map Direct portal, was performed to identify significant releases that have occurred within the last three years. The review indicates that no significant releases have occurred at the Airport in the last three years .

2.4 STORMWATER DRAINAGE SYSTEM

The Airport is located in Drainage Basin S-1 of the South Broward Drainage District (SBDD) (**Appendix E**). Stormwater runoff is collected in swales then percolates into the water table. The swales at the Airport are vegetated, which passively removes small amounts of pollutants from stormwater runoff by filtration through the grass and infiltration through the soil. Additionally, the vegetation provides limited erosion control. Stormwater flows discharge westward into SBDD Canal Number 1 within Basin S-1, located east of University Drive. SBDD Canal Number 1 flows to the south into Snake Creek Canal (C-9).

2.4.1 STORMWATER OUTFALLS

A structural outfall is not located at the airport, rather the majority of the stormwater runoff drains into SBDD Canal Number 1 via vegetated swales and overland flow.

2.4.2 VEGETATED SWALES

There are multiple vegetated swales at the Airport. The vegetated swales provide pre-treatment of stormwater prior to discharge into SBDD Canal Number 1.

2.5 RECEIVING WATER

The receiving water body for the Airport's stormwater runoff is SBDD Canal Number 1. Prior to entering SBDD Canal Number 1, stormwater runoff passes through a series of vegetated swales within the Airport that provide pre-treatment of stormwater. SBDD Canal Number 1 flows south into South Florida Water Management District (SFWMD) Snake Creek Canal (C-9). The location of the receiving waters is provided in **Appendix E**.

2.6 OFF SITE INFLUENCES

SBDD Basin S-2 is located west of HWO. It is bordered by Douglas Road to the east, Pines Boulevard to the north, Flamingo Road to the west and the Florida Turnpike Extension to the south. Both SBDD Basins S-1 and S-2 drain into SFWMD Snake Creek Canal. In addition, constituents of concern from vehicles using S University Dr., Pembroke Rd., other adjacent roads, and commercial and residential areas south and west of the Airport may potentially enter the stormwater in the SFWMD Snake Creek Canal.

3.0 SITE EVALUATION

3.1 STORMWATER SAMPLING

Since the Airport does not use 100,000 gallons or more of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis; stormwater sampling is not required as a condition of the Airport’s permit.

3.2 ANNUAL COMPLIANCE INSPECTIONS

To monitor BMP implementation at the Airport, BCAD performs Annual Comprehensive Site Evaluation (ACSE) at approximately 20 tenant facilities per year. The ASCE consists of the following three main tasks: review of regulatory documents, a facility walkthrough, and follow up correspondence and / or follow up inspections to confirm that any observed deficiencies have been corrected. Following the completion of the ACSE inspections, an annual report summarizing the results of the ACSE compliance inspections is prepared. The tenant inspection form is provided in **Appendix F**. The information in the inspection report includes the following:

- Name(s) of ASCE inspectors
- Date(s) of ASCE inspection
- List of HWO tenant facilities being inspected
- Outline of inspection procedures
- Major observations relating to the implementation of the SWPPP
- Any incidents of non-compliance and actions taken

Additionally, each permittee at the Airport is also expected to perform an independent inspection for every facility covered under their MSGP. If a sub-tenant is included on a tenant’s MSGP; then the sub-tenant facility must be included in the annual inspection.

3.3 NON-STORMWATER DISCHARGE IDENTIFICATION & ELIMINATION

Identification and elimination of non-stormwater discharges is a component of the annual compliance inspections described above. During the compliance inspections, the following Best Management Practices (BMPs) are recommended:

- Prevent or reduce the discharge of pollutants to storm water from building and grounds maintenance by implementing cleaning practices that use little to no water.
- Eliminate liquid waste disposal down storm water drains. Post proper signage near storm drains to inform employees.



- Provide a process description to the BCAD Environmental Compliance Section for any runoff generating process (aircraft and vehicle washing, outdoor cleaning, and irrigation) for review and acceptance.
- Use alternative dry cleanup methods (for example: rags and sponges) to clean machinery.
- Berm any area where runoff producing activities may be performed and collect all waste water.
- Do not over irrigate. Irrigation system controllers should be set to apply between $\frac{1}{2}$ and $\frac{3}{4}$ inches per event.

4.0 STORMWATER MANAGEMENT CONTROLS

4.1 BEST MANAGEMENT PRACTICES

Recommended BMPs for standard Airport activities are provided in **Appendix G**. BCAD has developed these BMPs to facilitate employee training and tenant education. During the compliance inspections, the applicable BMPs are reviewed with each tenant to facilitate implementation and compliance. The BMPs cover the following activities:

- Aircraft, Vehicle, and Equipment Cleaning Areas;
- Aircraft, Vehicle, and Equipment Fueling;
- Aircraft, Vehicle, and Equipment Maintenance Areas;
- Aircraft, Vehicle, Equipment Painting and Storage;
- Fire Fighting Foam Discharge;
- Lavatory Waste;
- Fuel Farm
- Non-Stormwater Discharges;
- Oil/Water Separator;
- Outdoor Washdown/Sweeping Areas;
- Outdoor Waste and Material Handling;
- Significant Materials Storage;
- Spill Prevention Control and Countermeasures Plan (SPCC Plan);
- SWPPP Training and Education; and,
- Waste/Garbage Storage and Disposing.

4.2 STRUCTURAL CONTROLS

The Airport has implemented structural controls to help prevent the discharge of pollutants to the surrounding environment.

Vegetated swales are small channels used to transport storm water runoff that only contain storm water during storm events. Since the swale is empty during normal conditions, then the channel bed and banks remain vegetated. The vegetation in the channel slows the flow of water which promotes the settling of sediments. A majority of the storm water runoff at the Airport is transported through vegetated swales.



4.3 PREVENTATIVE MAINTENANCE PROGRAM

The Airport has a preventive maintenance program that involves the inspection and maintenance of stormwater structures and equipment. The program aims to inspect, test, maintain, and repair Airport equipment and systems to prevent breakdowns or failures that may result in the discharge of pollutants to surface waters. Tenants shall report any problems that may lead to pollutant discharges into stormwater to the SWPPP Team Leader.

4.4 SPILL RESPONSE PROCEDURES

The Airport has a spill prevention and response program, and each tenant has their own SPCC Plan if they store more than 1,320 gallons of oil; pursuant to 40 CFR Part 112. A review of a tenants SPCC plan is included as part of the ACSE inspections to ensure compliance with the Broward County EEPD requirements.

4.5 ROUTINE FACILITY INSPECTIONS

The Airport's BMP implementation program includes routine daily, semiweekly, monthly, and annual inspections. The facility inspection activities is discussed in sections 3.2 and 5.2.



4.6 ELIMINATION OF NON-STORMWATER DISCHARGE

Due to the fact that the Airport does not contain any structural outfalls there are no non-stormwater discharges to identify during the site evaluation.

5.0 PLAN IMPLEMENTATION

5.1 EMPLOYEE TRAINING PROGRAM

Proper training of employees reduces the potential for the release of regulated materials. The Airport has developed a SWPPP Training Program to educate employees about the requirements of the Airport SWPPP. This education program covers the following items:

- Stormwater drainage pathways
- Good housekeeping
- Disposal and control of waste
- Exposure minimization
- Material handling and storage procedures
- BMPs
- Spill response
- Notification Process

The Airport's policy is that supervisory Airport staff members and at least one representative from each division are required to attend an annual training workshop. These personnel are then responsible for providing instruction to personnel under their supervision. The training records will be kept at the SWPPP Team Leader's office. The training program will be reviewed annually by the SWPPP Team Leader to determine its effectiveness and to make any necessary changes to the program. The 2020 training program has been adapted for providing on line training in response to Covid -19 protocols for maintaining social distancing and reducing potential exposures.

Additionally, each tenant is expected to implement a similar training program, and proper implementation of the tenant training program is reviewed as part of the ACSE inspections.

5.2 FACILITY INSPECTION

In addition to the ACSE inspections for tenant facilities, several areas of the Airport are inspected regularly to promote compliance with the Airport's SWPPP. Operations and maintenance personnel perform visual inspections of the runways and taxiways on a daily basis to ensure that there are no spills, debris, waste, or any other issue that may impact normal Airport operations.

Storage tank inspections are performed monthly to confirm that fuel systems are not leaking and that electronic monitoring systems are working properly. Inspection procedures for other material storage areas that are owned and operated by BCAD, such as emergency generator fuel tanks, are detailed in the Spill Prevention Control and Countermeasures (SPCC) Plan for HWO.

Visual inspections of the drainage conveyance system structures are conducted semi-annually, or every 6 months, to make sure the Airport drainage system is operating properly and unobstructed. Should a structure be obstructed or fail, measures are taken to clear or repair the structure.

5.3 IMPLEMENTATION SCHEDULE

In accordance with the NPDES General Permit (FLR05A455-004), the SWPPP implementation schedule is presented below in **Table 2**.

Table 2. SWPPP Implementation Schedule

Stormwater Pollution Prevention Action Items	Implementation Schedule
BMP implementation	Continuous
Waste dumpster inspections	Semiweekly
Oil-water separator inspections	Monthly
Inlet drain and catch basin inspections	Quarterly
Material storage areas inspections	Quarterly
Ditch and swale inspections	Quarterly
Airport comprehensive inspections	Annually
Employee training	Annually

5.4 RECORD RETENTION REQUIREMENTS

Records described in the SWPPP must be retained on site for five years. These records shall be made available to the state and federal compliance officer upon request. Additionally, training records, maintenance logs, checklists, and inspection logs shall also be maintained. Maintaining a record of events that occur at the Airport is an effective way of documenting the progress of pollution prevention efforts and waste minimization. The records will provide information on past spills, ineffective BMPs, and other useful information that may be used for developing improved BMPs to prevent pollutant discharge to stormwater.

5.5 CORRECTIVE ACTION

Pursuant to section 4.1 of the 2015 EPA MSGP, the following occurrences will require review and revision of the SWPPP:

- An unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by this or another NPDES permit to a water of the U.S.).
- A discharge violates a numeric effluent limit listed in the facility permit.



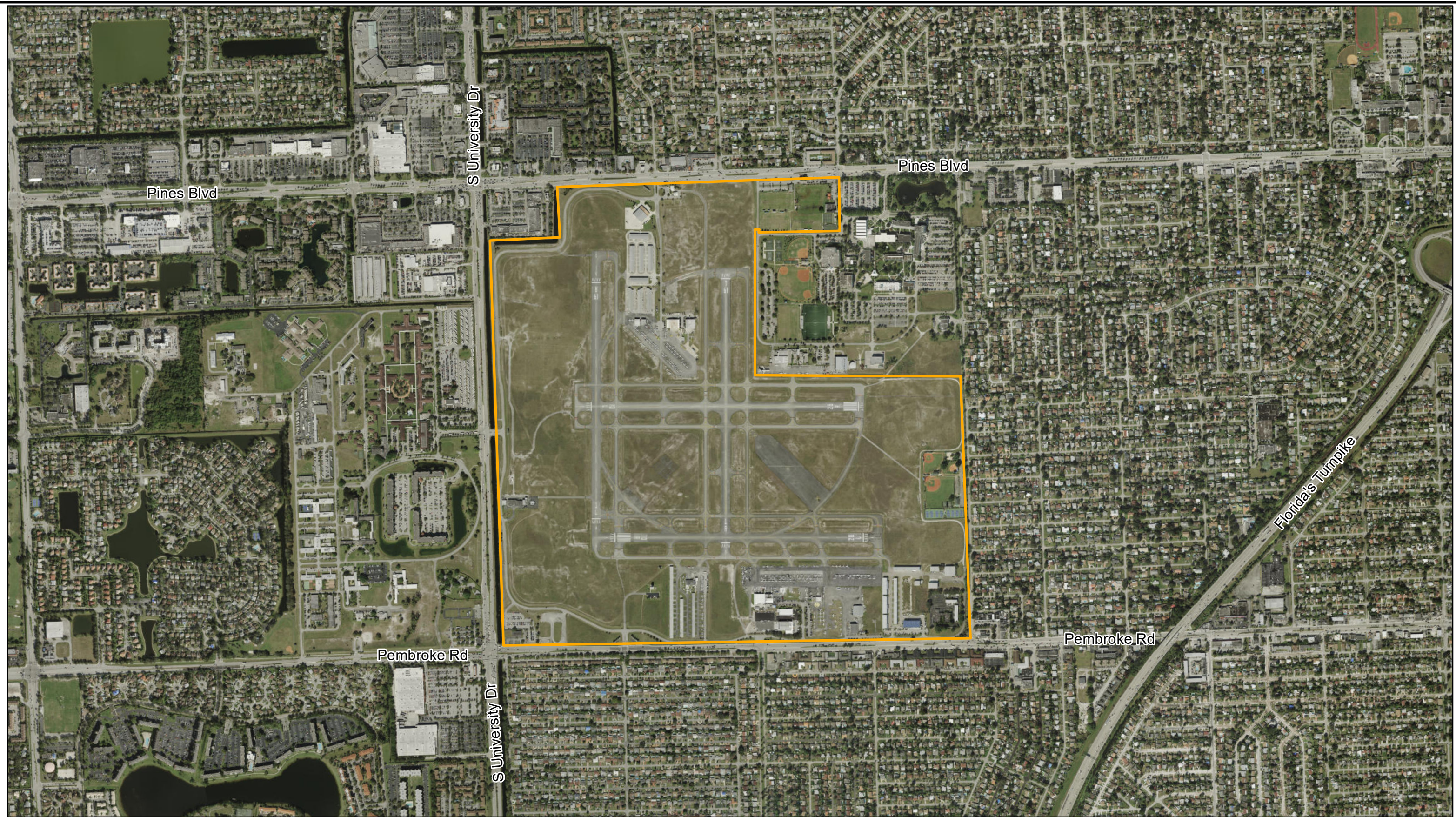
- Control measures are deemed not stringent enough for the discharge to meet applicable water quality standards or the non-numeric effluent limits in the facility permit.
- A required control measure was never installed, was installed incorrectly, or not in accordance with Parts 2 and/or 8 of the 2015 EPA MSGP, or is not being properly operated or maintained.
- Whenever a visual assessment shows evidence of stormwater pollution (e.g., color, odor, floating solids, settled solids, suspended solids, foam).

5.6 PLAN REVISION

The SWPPP shall be revised to incorporate changes in facility infrastructure and activities that could potentially alter the migration of stormwater runoff from the site or alter the potential pollutant sources. The amended SWPPP will have a description of the new activities that facilitated the need for a revision to the SWPPP.

Figures

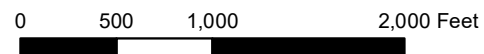




Source: Imagery, ESRI 2012



1 inch = 1,000 feet



Legend

Site Boundary

Drawn	Date
SJH	9/22/2020
Checked	Date
RF	9/22/2020

wood.
Miami, Florida
Project Number
6783-18-3072

**North Perry Airport
Storm Water Pollution
Prevention Plan**

**Figure 1
Site
Location Map**

Appendix A

Regulatory References

2015 EPA MSGP

https://www.epa.gov/sites/production/files/2015-10/documents/msgp2015_finalpermit.pdf

FDEP Regulations

<https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-621>

<https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-780>

FAA Guidance

https://www.faa.gov/regulations_policies/advisory_circulars/index.cfm/go/document.information/documentID/74205

Broward County Water Resource Management Ordinance

https://www.municode.com/library/fl/broward_county/codes/code_of_ordinances?nodeId=PTIICOR_CH36WAREMA

Appendix B
Site Activity Descriptions



North Perry Airport

Storm Water Pollution Prevention Plan

Site Activity Descriptions

Aircraft Fueling

Aircraft leaving from the HWO are typically refueled through mobile re-fuelers. There are a limited number of fueling areas at HWO where mobile re-fuelers are able to obtain fuel.

Aircraft Maintenance

Aircraft maintenance is performed in limited capacity at HWO from a variety of facilities. The performance of any aircraft maintenance outside of a hangar is discouraged at HWO.

Aircraft Washing

Aircraft washing is prohibited at HWO unless BCAD has reviewed and accepted the washing system. Dry washing is the preferred method of exterior aircraft cleaning at HWO.

Chemical Storage

Most maintenance facilities store used oil in limited quantities. Other than petroleum products, no bulk chemical storage is performed at HWO.

Equipment Fueling

A limited number of fueling locations are present at HWO. These facilities typically perform a low volume of refueling; typically for mobile re-fuelers and maintenance vehicles.

Equipment Maintenance

Equipment maintenance is not performed as a primary service by any tenants of HWO.

Equipment Storage

Most equipment storage is performed at individual facilities, and is encouraged to be limited to indoors.

Equipment Washing

Equipment washing is prohibited at HWO unless the BCAD Environmental Compliance Section has reviewed and accepted the washing system. Equipment washing is not performed as a primary service by any tenants of HWO.

Fuel Storage

Fuel storage is performed at a limited number of facilities at HWO, and these facilities typically service mobile re-fuelers and small aircraft.

Painting/Stripping

Painting and stripping activities are prohibited unless a proper paint booth is in place. A limited number of paint booths are located at HWO.

Waste Management & Disposal

Waste management and disposal is not performed as a primary service by any tenants of HWO.

Appendix C

Potential Pollutant Sources



Appendix C
 Potential Pollutant Sources
 Stormwater Pollution Prevention Plan
 North Perry Airport

Trade Name	Constituents/ Material Type	Facility Name	Storage Location	Storage Volume	Typical Use
Hydrochloric Acid	Hydrochloric Acid	Bldg. 3	Outside, Covered, on Ground	1 gallon	Aircraft and Vehicle Maintenance
Element 4 Herbicide	Triclopr butoxy ethyl ester, kerosene	Bldg. 3	Inside Fire Cabinet	5 gallons	Landscaping
Lesco Prosecutor Herbicide	Isopropylamine salt of glyphosate	Bldg. 3	Inside on a pallet	30 gallons	Landscaping
Transmission Fluid	Highly refined mineral oil and additives (DMSO-extract)	Bldg. 3	Covered in a Fire Cabinet	5 gallons	Vehicle Maintenance
Anti-Freeze	Ethylene Glycol	Bldg. 3	Covered in a Fire Cabinet	5 gallons	Vehicle & Equipment Maintenance
Gasoline	Light Fraction Petroleum Hydrocarbons	Bldg. 3	Fire Cabinet	7.5 gallons	Vehicle Fueling
Diesel	Median Fraction Petroleum Hydrocarbons	Bldg. 3	Fire Cabinet	5 gallons	Vehicle Fueling
Motor Oil	Highly refined mineral oil	Bldg. 3	Covered in a Fire Cabinet	1 quart	Vehicle Maintenance
Acrylic Paint	Propenoic Acid, Ethylenecarboxylic Acid, Acrylic Polymer Emulsion, Polyethylene-Based	Bldg. 3	Covered on a Spill Pallet	6 gallons	Building or Vehicle Maintenance

Note: The facility locations are provided in the Facility Site Plan provided in Appendix D.

Appendix C
 Potential Pollutant Sources
 Stormwater Pollution Prevention Plan
 North Perry Airport

Location	Potential Pollutants	Potential
Roadways	Hydraulic Fluids, Brake Fluid, Fuel, and Anti-Freeze	Leaking fluids from vehicles.
Hangar Aprons	Hydraulic Fluids, Brake Fluid, Fuel, and Anti-Freeze	Leaking fluids from vehicles and aircraft.
Commercial and General Aviation	Hydraulic Fluids, Brake Fluid, Fuel, Anti-Freeze, Lubricants, Solvents, and Deicing Fluid	Spills during maintenance activities, refueling, cleaning, and deicing.
Runways & Taxiways	Hydraulic Fluids, Brake Fluid, Fuel, and Anti-Freeze	Leaking fluids from vehicles and aircraft.
Parking Areas	Hydraulic Fluids, Brake Fluid, Fuel, and Anti-Freeze	Leaking fluids from vehicles.
Fuel Farm	Hydraulic Fluids, Brake Fluid, Fuel, and Anti-Freeze	Spills during refueling. Leaking fluids from vehicles and mobile refueling trucks.
Lawns, Swales, and Ditches	Pesticides, Herbicides, and Fertilizers	Spills during application of turf ammendments.
Maintenance Buildings	Pesticides, Herbicides, Fertilizers, Hydraulic Fluids, Solvents, Lubricants, Brake Fluids, Paints, and Anti-Freeze	Leaking fluids from maintenance equipment and stored materials. Spills during refueling

Appendix D

Facility Site Plan

Please contact a SWPPP Inspector listed on Table 1 for a copy of the Facility Site Plan.

Appendix E

South Broward Drainage District Map

<http://www.sbdd.org/pdfs/District%20Map%202012-31-09.pdf>

Appendix F

Tenant Inspection Form



SWPPP ACSE REPORT

Initial Inspection

Re-Inspection

FACILITY AND INSPECTION INFORMATION

FACILITY NAME: _____

FDEP FACILITY ID: _____

FACILITY ADDRESS: _____

FACILITY SUBTENANT(S): _____

FACILITY REPRESENTATIVE(S): _____ **TELEPHONE:** _____

FACILITY PERMITTEE: _____ **EMAIL:** _____ **TELEPHONE:** _____

_____ **MOBILE:** _____

INSPECTION DATE: _____ **INSPECTOR'S NAME:** _____

INSPECTOR'S COMPANY: _____

SUMMARY OF ACTIVITIES

<input type="checkbox"/> Aircraft lavatory service	<input type="checkbox"/> Equipment repair	<input type="checkbox"/> Vehicle repair
<input type="checkbox"/> Aircraft maintenance	<input type="checkbox"/> Equipment storage	<input type="checkbox"/> Vehicle washing
<input type="checkbox"/> Aircraft painting	<input type="checkbox"/> GSE	<input type="checkbox"/> Chemical storage
<input type="checkbox"/> Aircraft refueling	<input type="checkbox"/> Food service	<input type="checkbox"/> Oil storage
<input type="checkbox"/> Aircraft washing	<input type="checkbox"/> Potable water flushing	_____
<input type="checkbox"/> Cargo handling	<input type="checkbox"/> Vehicle fueling	_____
<input type="checkbox"/> Equipment cleaning	<input type="checkbox"/> Vehicle maintenance	_____
<input type="checkbox"/> Equipment maintenance	<input type="checkbox"/> Vehicle painting	_____

Flight operations and maintenance

LIST OF POTENTIAL POLLUTANTS

Material	Stored Properly	Comment

PERMIT

Granted MSGP coverage by FDEP NPDES: YES NO N/A Exp Date

Granted "No Exposure" by FDEP NPDES: YES NO N/A

Submitted NOI to obtain MSGP coverage: YES NO N/A

Maintains copy of MSGP confirmation letter: YES NO N/A

Maintains copy of the MSGP with SWPPP: YES NO N/A

Hazardous Material License: YES NO N/A Exp Date

Hazardous Material License Location: _____

Tank License: YES NO N/A Exp Date

Tank License Location: _____

SWPPP ACSE REPORT

SWPPP

Has a SWPPP been prepared for facility:	YES <input type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	
Is the SWPPP available for review:	YES <input type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	
Has the SWPPP been made facility-specific:	YES <input type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	
Has the SWPPP been properly updated:	YES <input type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	
Has the appropriate documentation from the past 3 years been kept:	YES <input type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	
Have training records been kept:	YES <input type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	

CONDITION OF STORM DRAIN & OUTDOOR AREAS

Stormwater runoff apparent during inspection:	YES <input type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	
Airport stormdrain within 100 feet of site:	YES <input type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	
Presence of on-site stormwater drain(s):	YES <input type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	
Presence of on-site oil-water separator(s):	YES <input type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	
Outfall within 500 feet of site:	YES <input type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	
Any staining from spills or dumping evident: (Please photodocument any evidence)	YES <input type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	
Evidence of illicit dumping into storm drain: (Please photodocument any evidence)	YES <input type="checkbox"/>	NO <input type="checkbox"/>	N/A <input type="checkbox"/>	

BULK FUEL STORAGE

Number of Tanks Aggregate Capacity

Tank No.	Tank Type	Tank Product	Capacity (gal)	Condition	Comments

SW - Single Wall DW - Double Wall	AG - Avgas LL - 100LL J - JetA G - Gasoline D - Diesel O - Other U - Used Oil	S - Good P - Poor M - Needs Work
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SWPPP ACSE REPORT
BEST MANAGEMENT PRACTICES

No.	Areas of Concern	Performed in House or Subcontracted		Current Best Management Practices (BMPs)	BMPs Appear Sufficient to Protect Surface Water (Y/N/N/A)	Improvements to BMPs (Discuss with Tenant); BMP Subcontractors	Tenants Intials/ Inspectors Initials
		In House	Subcontracted				
1	Aircraft Cleaning & Washing	In House		Dry Washing	Wash Water Contained		Representative:
				Performed under Cover	Stormwater Segregated from Wash Area		Inspector:
		Subcontracted		Performed in Bermmed Area			
		Not Performed		All wash water recovered			
				Wash Water Recycled			
2	Lav Cleanout	In House		Spill Kits on Lav Stations	Spills Can Be Contained		Representative:
		Subcontracted		Lav Truck Maintenance Log	Lav Trucks in Proper Condition		Inspector:
		Not Performed		Employee Training Log			
3	Equipment Maint.	In House		Performed Only Indoors	Stormwater is Segregated From Maint. Area		Representative:
		Subcontracted		Spill Kits and Spill Pans Used	Spills Do Not Contact Pavement		Inspector:
		Not Performed		Proper Disposal Methods			MK
4	Aircraft Fueling	In House		Performed under Cover	Stormwater is Segregated From Fueling Area		Representative:
		Subcontracted		Spill Kits and Spill Pans Used	Spills Do Not Contact Pavement		Inspector:
		Not Performed		Proper Containment Methods			
5	Equipment Painting	In House		Performed Only Indoors	Stormwater Segregated From Painting Area		Representative:
		Subcontracted		All Wastes Collected (Sanding & Scraping)	All Potential Pollutants Contained & Collected		Inspector:
		Not Performed		Proper Containment Methods			
6	Equipment Loading	In House		All Equipment is Properly Maintained	All Potential Pollutants Contained & Collected		Representative:
		Subcontracted					Inspector:
		Not Performed		Spill Kits and Spill Pans Used			
7	Waste Collection & Disposal	In House		Contain Spills & Fix Leaks	All Wastes Contained & Segregated From Stormwater		Representative:
		Subcontracted					Inspector:
		Not Performed		Prevent Stormwater Collection In Waste Containers			
8	Chemical Storage	In House		Proper Secondary Containment	All Containers & Storage Areas In Good Condition		Representative:
				Containers Segregated From Stormwater			Inspector:
		Not Performed		Spill Kits Available			MK
9	Bulk Fuel Storage	In House		Proper Implementation of SPCCP & Inspections Records Are Current	All Tanks & Fueling Areas In Good Condition		Representative:
				Tanks Segregated From SW, or SW is Retained & Visually Inspected			Inspector:
		Not Performed		Fueling Area is Undercover			

ADDITIONAL INSPECTION COMMENTS

Do you have a storage tank (Yes/No): What size is the Tank:

Do you have a Spill Control and Countermeasures Plan (Yes/No): Do you Recycle (Yes/No):

Do you have a Hazardous Materials License (Yes/No):

In Case of Spill Company Name: Contact Name: Phone:

**SWPPP ACSE REPORT
PHOTODOCUMENTATION**

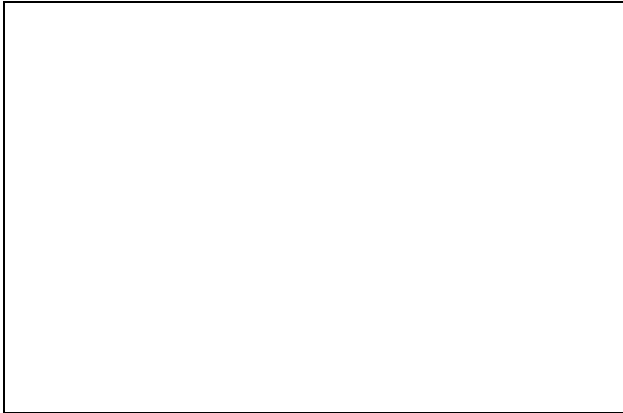


Photo 1:

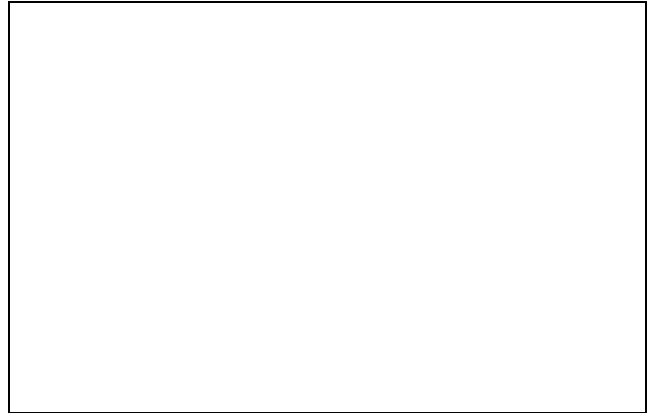


Photo 2:

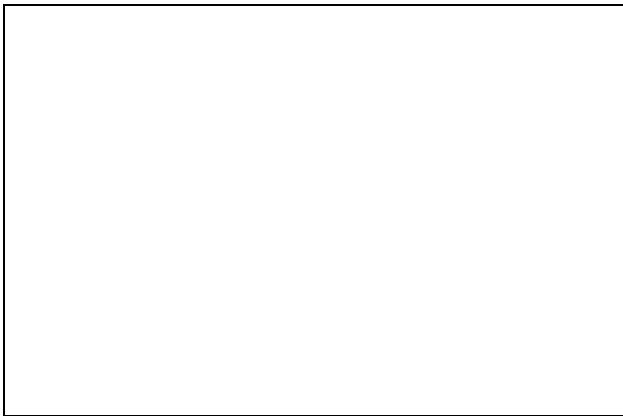


Photo 3:

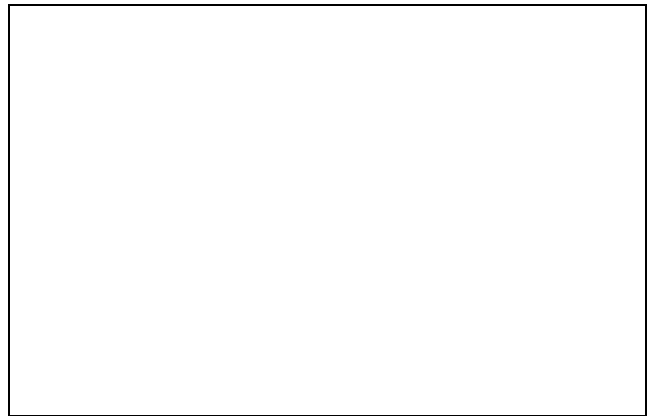


Photo 4:

FACILITY CORRECTIVE ACTION

SWPPP ITEM	PROBLEM NOTED / REQUESTED INFORMATION	CORRECTIVE ACTION REQUESTED	TENANT* RESPONSE

SUMMARY EVALUATION

PERMIT
 SWPPP / RECORDS / REPORTS
 CONDITION OF STORM DRAIN & OUTDOOR AREAS
 BEST MANAGEMENT PRACTICES

S = Satisfactory M = Marginal (Needs Improvement) U = Unsatisfactory N/A = Not Applicable

Re-Inspection Suggested

Appendix G

Best Management Practices



FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

AIRCRAFT, VEHICLE, AND EQUIPMENT FUELING

PURPOSE:

Prevent fuel spills and leaks, and reduce their impacts to stormwater.

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

- Design fueling areas to prevent the run-on of stormwater and the runoff of spills by employing the following approaches:
 - Cover the fueling area if possible.
 - Use a perimeter drain or slope the fueling area to a dead-end sump or oil/water separator.
 - Pave the fueling area with concrete rather than asphalt.
- If stormwater runoff from fueling areas is not collected, install an appropriately-sized oil/water separator.
- Install and maintain vapor recovery systems where required and/or appropriate.
- Existing underground fuel storage tanks should be upgraded with leak detection, spill containment, and overflow protection.
- Design facilities to include secondary containment where required and/or appropriate.

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

Implement the following to the maximum extent practicable.

Good Housekeeping

- Fuel pumps intended for vehicular use (not aircraft) should be posted with signs stating “No Topping Off” to prevent overflow.
- Use absorbent materials and spot cleaning for small spills; do not hose down the areas unless the storm drain is blocked and drainage is collected by vacuum truck and disposed of through a permitted connection to the sanitary sewer.
- Properly dispose of any fuel spills and leaks. Always dispose of materials in an approved manner; use an approved treatment facility through a permitted connection. Never discharge materials to a catch basin or storm drain.
- Use pigs/mats over catch basins during fueling activity.
- Manage the disposal of water that collects in fuel tanks and fueling hydrant sumps according to state and federal regulations.
- Provide curbing or posts around fuel pumps to prevent collisions from vehicles.
- Clearly label fuel drums (used, diesel, gasoline).

TARGETED ACTIVITIES

- Aircraft/Vehicle/Equipment Fueling
- Taking pre-flight fuel samples
- Apron/Floor Washdown

SIGNIFICANT MATERIALS

- Fuel

KEY APPROACHES

- Install berms or curbing around fueling areas
- Use absorbent materials and/or vacuum equipment for spills
- Install proper equipment for fuel dispensing and tank monitoring to prevent spills, leaks and overflows
- Use GATS JARS to take fuel samples; dispose of samples at collection sites; use fire-rated containers for storage of fuel samples

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

Physical Site Usage

- Avoid mobile fueling of equipment wherever feasible; fuel equipment at designated fueling areas.
- Store fuel drums indoors, when possible.

Structural Controls

- Cover the fueling area, if possible.
- Divert stormwater runoff away from fueling area to avoid stormwater contact with contaminated surfaces through the use of berms or curbing.
- Install gate valves at catch basins for use during fueling activity.
- Employ secondary containment or cover when transferring fuel from a tank truck to a fuel tank.
- Use double-walled tanks with overflow protection, if possible.

Equipment

- Provide appropriate monitoring for tanks containing fuel, such as:
 - Level indicators and gauges.
 - Overfill protection and alarms.
 - Intertial leak detection for double-walled tanks.
 - Routine inspection/lockout for drainage valves for tank containment areas.
- Fuel dispensing equipment should be equipped with “breakaway” hose connections that will provide emergency shut-down of flow should the fueling connection be broken through movement.
- Automatic shut-off mechanisms should be in place on fuel tankers. These valves should remain in the closed position unless manually opened during fueling.
- Use GATS JARS for collecting fuel samples, which enables clear and bright fuel to be returned to the aircraft fuel tank.

Maintenance

- Inspect, clean, and maintain sumps and oil/water separators at appropriate intervals.

Contingency Response

- Develop and implement a Spill Prevention Control and Countermeasure (SPCC) Plan or Spill Response Plan.
- Maintain a well stocked spill kit in locations where spills are likely to occur.
- Furnish adequate spill response information, equipment, and materials on all fueling vehicles.

Inspection and Training

- Inspect fueling areas and storage tanks regularly. Record all maintenance activities and inspections relating to fueling equipment and containers in a log book.
- Underground fuel storage tanks should be tested as required by federal and state laws.
- Provide spill response training to personnel to address all types of spills.

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
- 42 CFR 103 – Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – hazardous substances
- 40 CFR 110.3 Discharge of Oil
- 40 CFR 112 Oil Pollution Prevention (SPCC OPA/Plans)
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

AIRCRAFT, VEHICLE, AND EQUIPMENT MAINTENANCE AREAS

PURPOSE:

Prevent or reduce the discharge of pollutants to stormwater from aircraft, vehicle, and equipment maintenance and repair, including ground vehicle and equipment painting/stripping and floor washdowns.

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

- Provide covered maintenance areas when designing new facilities or upgrading existing facilities. Utilize indoor areas, lean-tos, or portable covers.
- Include appropriate stormwater quality structures (oil/water separators, sumps, first flush diversion basins, etc) in the design of outdoor maintenance areas.

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

Implement the following to the maximum extent practicable.

Good Housekeeping

- Use drip pans.
- Use absorbent materials at potential problem areas. Collect/remove absorbent materials from the area after use and dispose in appropriate manner.
- Drain and crush oil filters (and oil containers) before recycling or disposal. Store crushed oil filters and empty lubricant containers in a leak-proof container – cover if outdoors.
- Label storm drain inlets to indicate they are to receive no wastes.
- Drain and properly dispose of all fluids and remove batteries from salvage aircraft, vehicles, and equipment.
- Drain parts and equipment of all fluids. Store on secondary containment under cover.
- Recycle or properly dispose of grease, oil, antifreeze, brake fluid, cleaning solutions, hydraulic fluid, batteries, transmission fluid, and filters.
- Use biodegradable products and substitute materials with less hazardous properties where feasible.

Physical Site Usage

- Where feasible, move maintenance activities indoors or provide cover over work area.
- Use designated washing, steam cleaning, and degreasing areas to clean equipment.
- Store mechanical parts and equipment that may yield even small amounts of contaminants (e.g. oil or grease) under cover and away from drains.

TARGETED ACTIVITIES

- Aircraft/Vehicle/ Equipment Maintenance
- Aircraft/Vehicle/ Equipment Painting or Stripping
- Apron/Floor Washdown
- Potable Water System Cleaning

SIGNIFICANT MATERIALS

- Oil and Grease
- Vehicle Fluids
- Solvents/Cleaning Solutions
- Fuel
- Battery Acid
- Paint

KEY APPROACHES

- Conduct maintenance indoors, or in covered area
- Prevent wash water discharges to the storm drain
- Clean catch basins regularly
- Collect and properly dispose of all fluids

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

AIRCRAFT, VEHICLE, AND EQUIPMENT MAINTENANCE AREAS

Structural Controls

- Provide maintenance and cleaning areas with runoff controls that prevent discharge to storm sewers.
- Install and maintain catch basin filter inserts that assist in the removal of oil and grease, sediments and floatables.

Maintenance

- Maintain clean equipment by eliminating excessive amounts of external oil and grease buildup. Use water-based cleaning agents or non-chlorinated solvents to clean equipment.
- Regularly clean any catch basins which receive runoff from a maintenance area, especially after larger storms.
- Inspect, clean and maintain sump and oil/water separators, if necessary.

Contingency Response

- Maintain a well stocked spill kit in locations where spills are likely to occur.
- Furnish all maintenance vehicles with a spill kit and spill response procedures.

Inspection and Training

- Provide employee training for spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.
- Provide employee stormwater quality awareness training.
- Develop regular maintenance and inspection programs for oil/water separators.
- Characterize wastes collected from oil/water separators. Provide appropriate employee training.

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
- 42 CFR 103 – Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – hazardous substances
- 40 CFR 110.3 Discharge of Oil
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

AIRCRAFT, VEHICLE, AND EQUIPMENT PAINTING AND STORAGE

PURPOSE:

Prevent or reduce discharge of pollutants to stormwater drains from aircraft, vehicle, or equipment painting activities or paint storage.

APPROACH:

Good Housekeeping

- Use efficient paint equipment to reduce the amount of over spray waste.
- Tarps, drip pans, or other spill control devices are used to prevent paints, solvents, or other materials from entering stormwater drainage.
- Paint equipment should be cleaned and maintained regularly.
- Painting is performed in ventilated areas and does not allow overspray to enter stormwater drainage.
- Sanding of vehicles, aircraft, and equipment is performed inside in a well ventilated area.
- After sanding is complete, the waste is collected and disposed of properly.
- Work areas are clean and clear of debris and grit to prevent wind from carrying dust into stormwater drainage.
- Paint, paint thinner, and solvents are recycled.
- Waste paint, paint thinner, and solvents are disposed of properly or stored in cabinets away from stormwater drainage.

Maintenance

- Use dirty solvents to clean painting equipment.

Inspection and Training

- Provide employee training for spill prevention and clean up, right-to-know awareness, hazardous materials management and stormwater pollution prevention.

TARGETED ACTIVITIES

- Aircraft / Vehicle / Equipment Painting or Stripping
- Chemical Storage

SIGNIFICANT MATERIALS

- Solvents
- Paints
- Cleaning Solutions

KEY APPROACHES

- Prevent paint waste from reaching stormwater drainage.
- Use spill control devices.
- Painting and sanding are performed in ventilated areas.
- Waste paint, paint thinner, and solvents are either stored or disposed of properly.

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

AIRCRAFT, VEHICLE, AND EQUIPMENT PAINTING AND STORAGE

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
- 42 CFR 103 – Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – hazardous substances
- 40 CFR 110.3 Discharge of Oil
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

FIRE FIGHTING FOAM DISCHARGE

PURPOSE:

Eliminate discharges to the storm drain system associated with flushing or testing of aircraft fire fighting foam (AFFF) systems.

TARGETED ACTIVITIES

- Fire Fighting Equipment Testing and Flushing

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

- Design testing facility with the following characteristics:
 - Located away from storm drain inlets, drainage facilities, or water bodies.
 - Paved with concrete or asphalt, or stabilized with an aggregate base.
 - Berm to contain foam and to prevent run-on.
 - Configure discharge area with a sump to allow collection and disposal of foam.
- Discharge foam waste to a sanitary sewer (industrial waste water permitting may be required). Foam waste shall not be discharged to storm drains or water bodies.

SIGNIFICANT MATERIALS

- Aircraft Fire Fighting Foam (AFFF)

KEY APPROACHES

- Perform testing operations in designated areas
- Properly dispose of, or recycle, foam discharge
- Service sump regularly

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

- Perform fire fighting foam testing operations only in designated areas.
- Properly dispose of, or recycle, foam discharge.
- Conduct berm repair and patching.
- Regularly inspect, clean, and maintain equipment and testing facility.

Contingency Response

- Maintain a well stocked spill kit in locations near area of activity.

Inspection and Training

- Regularly inspect testing facility.
- Provide employee training for spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

FIRE FIGHTING FOAM DISCHARGE

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
- 42 CFR 103 – Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – hazardous substances
- 40 CFR 110.3 Discharge of Oil
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

MARINA AND BOATYARD MAINTENANCE

PURPOSE:

Prevent or reduce the discharge of pollutants to stormwater from marina/boat wash-down and maintenance operations.

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

- Install oil/grit separators to capture petroleum spills and coarse sediment. Sweep routinely around storm drains to keep debris out.
- Incorporate appropriate waste receiving facilities for maintenance and washing equipment.
- Incorporate oil/water separators or other water quality devices into project designs.
- Pressure washing pads are cleaned daily and/or immediately after use to prevent organic material and paint chips from entering the stormwater systems.
- Build a wash rack with berms to minimize run-on to other areas.

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

- Collect and discharge wash water to the sanitary sewer system through a permitted connection.
- Use designated and approved discharge facilities to dispose of waste derived from apron/ramp cleaning.
- Perform boat repair and maintenance work inside a building or under a covered area, if possible.
- Use tarps, plastic sheeting or petroleum absorbent pads to catch any leaks which might occur during service.
- Conduct berm repair and patching.
- Zincs, stainless steel, aluminum, brass, bronze and other metals should be stored in a container and recycled.

Contingency Response

- Maintain a well stocked spill kit in locations where spills are likely to occur.

TARGETED ACTIVITIES

- Boat Repair and Maintenance
- Vessel Washing
- Dry Sanding of Vessels

SIGNIFICANT MATERIALS

- Oil and Grease
- Solvents/ Cleaning Solutions
- Fuel
- Aircraft Fire Fighting Foam (AFFF)
- Sediment
- Floatables

KEY APPROACHES

- Repair or replace any leaking connections, valves, pipes, and hoses on vessels while inside a building or covered area.
- Use dustless sanding techniques
- Stationary skids for fueling watercrafts.

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

MARINA AND BOATYARD MAINTENANCE

Inspection and Training

- Provide employee training for spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.
- Develop regular maintenance and inspection programs for oil/water separators.
- Characterize wastes collected from oil/water separators.
- Dispose of wastes properly and provide appropriate employee training.

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
- 42 CFR 103 – Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – hazardous substances
- 40 CFR 110.3 Discharge of Oil
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

AIRCRAFT, VEHICLE, AND EQUIPMENT WASHING CLEANING AND

PURPOSE:

Prevent or reduce the discharge of pollutants to stormwater drains from aircraft, vehicle, and equipment cleaning activities.

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

- Use off-site commercial washing where feasible.
- Evaluate the need for incorporating a wash water recycling system into the project design.
- Outdoor washing operations should have the following design characteristics:
 - Paved with portland cement concrete (PCC).
 - Bermed and/or covered to prevent contact with stormwater.
 - Sloped to facilitate wash water collection.
 - Wash water should be collected in a dead-end sump for removal or discharged to the sanitary sewer through a permitted connection.
 - Discharge piping serving uncovered wash areas should have a positive shut-off valve that allows switching between the storm drain and the sanitary sewer.
 - Wash areas should be clearly identified with appropriate signage.
 - Equipped with an oil/water separator designed to operate under stormwater runoff conditions to treat stormwater volumes and flow rates. (Regulatory agency approvals are required.)

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

Implement the following to the maximum extent practicable.

Good Housekeeping

- Use “dry” washing and surface preparation techniques when possible. Consider dry washing as an option regardless of aircraft size. Remove all materials (i.e., drippings and residue) using vacuum methods. Dispose of properly.
- Provide secondary containment, and cover if possible, for containers of washing and steam cleaning additives.
- Use pigs/mats to control the discharge of wash water.
- Use biodegradable phosphate-free detergents.
- Keep wash area clean and free of waste.
- Include proper signage to prohibit the discharge of waste oils into the drains.
- Collect stormwater runoff from cleaning area and provide treatment or recycling.

TARGETED ACTIVITIES

- Aircraft/Vehicle/Equipment Painting or Stripping
- Aircraft/Vehicle/Equipment Washing or Cleaning

SIGNIFICANT MATERIALS

- Oil and Grease
- Solvent
- Vehicle Fluids
- Cleaning Solutions

KEY APPROACHES

- Use designated area
- Use dry washing techniques
- Recycle wash water or discharge appropriately
- Cover catch basins
- Provide training

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT
AIRCRAFT, VEHICLE, AND EQUIPMENT WASHING CLEANING AND

- Keep degreasing activities in a fully enclosed area, if possible, and located away from storm drains.
- Properly dispose of cleaning/degreasing waste.

Physical Site Usage

- Use off-site commercial washing and steam cleaning where feasible.
- Use designated wash areas that are covered and/or bermed to prevent contamination of stormwater by contact with wastes.
- Perform all cleaning operations indoors, when possible.

Structural Controls

- Gate valves at catch basins will prevent discharge to the storm drainage system during washing activities by facilitating the collection of wash water.
- Filter and recycle wash water when possible.

Maintenance

- Patch and repair berms and PCC to maintain contaminant system.
- Inspect, clean, and maintain sumps, oil/water separators, and on-site treatment and recycling units.

Management

- File a Wash Plan for approval by the Aviation Department prior to commencing wet washing activities in any area outside designated wash rack.

Contingency Response

- Maintain a well stocked spill kit in locations where spills of cleaning chemicals are likely to occur.

Inspection and Training

- Provide employee training for spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.
- Develop regular maintenance and inspection programs.
- Characterize wastes derived from oil/water separators. Provide appropriate employee training.

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
- 42 CFR 103 – Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – hazardous substances
- 40 CFR 110.3 Discharge of Oil
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- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

LAVATORY WASTE

PURPOSE:

Eliminate discharges to the storm drain system associated with ground servicing of aircraft lavatory facilities. The sanitary sewage and associated rinse waters producing during the servicing of aircraft lavatory facilities must be discharged to a wastewater treatment facility under appropriate permitting. Trucks or trailers equipped with bulk storage tanks are typically used to service lavatory facilities. Non-stormwater discharges and residuals associated with servicing these facilities can be classified as follows:

- Discharges and residuals associated with diluting and mixing the surfactants and disinfectants used for servicing lavatory facilities.
- Discharges and residuals associated with transferring materials from the aircraft.
- Discharges and residuals associated with transporting and disposing materials to the sanitary sewer system.

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

- If possible, design triturator facilities to be covered, with low roll-over type berming.
- Include a source of water at the triturator for clean up of lavatory service equipment.
- Coordinate permitting of the triturator sanitary sewer connection through the local stormwater and sanitary sewer agencies.
- Triturator facilities should not be located near storm drains.

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

- Do not discharge lavatory waste to sanitary sewer connections other than triturator facilities. Other industrial-type connections may be equipped with bypass gates, which, if improperly maintained or defective, may discharge to the stormwater collection system.
- Drain the aircraft connecting hose as completely as possible into the storage tank after servicing an aircraft. Properly secure all hoses, valves, and equipment when transporting waste to eliminate leakage and spills.
- Use only surfactants and disinfectants approved for discharge to the sanitary sewer system. Do not discharge or rinse other unapproved chemicals or materials into the triturator facility.
- If possible, perform surfactant/disinfectant mixing and transfers in the triturator area or under cover. This will allow the rinsing of minor spills and splashes to enter the sanitary sewer system.
- Do not perform lavatory truck cleanout/backflushing at any location other than triturator facilities.
- Utilize buckets or pans to capture drippage from aircraft lavatory access fittings. Immediately dump the drippage into the bulk storage tank on the service cart or truck.

TARGETED ACTIVITIES

- Aircraft Lavatory Service
- Lavatory Truck Cleanout/Backflushing

SIGNIFICANT MATERIALS

- Lavatory Chemicals
- Lavatory Waste
- Lavatory Truck Wash Water

KEY APPROACHES

- Do not discharge lavatory waste to sanitary sewer connections other than triturator facilities
- Utilize buckets or pans to capture drippage from aircraft lavatory access fittings
- Do not perform lavatory truck cleanout or backflushing at any location other than triturator facilities
- Carry absorbent and other containment equipment on the lavatory service equipment

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LAVATORY WASTE

- Carefully handle chemicals and chemical concentrates. Immediately collect dry chemicals or absorb liquid chemicals for proper disposal. Do not hose down spills unless the discharge enters the sanitary sewer system through a permitted connection (triturator facility).
- Practice good housekeeping techniques at the triturator facility. Immediately clean spills of wastes and chemicals.

Contingency Response

- Carry absorbent and other containment equipment on the lavatory service equipment.
- Maintain a well stocked spill kit in locations where spills are likely to occur.

Inspection and Training

- Perform regular inspections of the hose and fittings used for transferring lavatory waste. Keep the equipment in good working order. Replace worn equipment before leaks develop. Notify appropriate ground service personnel if it is noticed that the aircraft lavatory fittings require maintenance.
- Provide employee training for spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
- 42 CFR 103 – Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – hazardous substances
- 40 CFR 110.3 Discharge of Oil
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
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- 40 CFR 401 Effluent Limitation Guidelines

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NON-STORMWATER DISCHARGES

PURPOSE:

Existing discharges: Eliminate non-stormwater discharges to the stormwater collection system. Non-stormwater discharges can be classified as follows: 1) *Activity-based* (subtle), and 2) *Overt* (hard pipe connection). Activity-based non-stormwater discharges may include: wash water, and spillage. Overt non-stormwater discharges may include: process wastewater, treated cooling water, and sanitary wastewater.

Prevention of illicit connections: Prevent improper physical connections to the storm drain system from sanitary sewers, floor drains, industrial process discharge lines, and wash racks through education, developing project approval conditions, and performing both construction phase and post-construction inspections.

GENERAL APPROACH:

Identification of Activity-Based (Subtle) Discharges:

The following techniques may be used to identify activity-based non-stormwater discharges to the stormwater collection system:

- Perform frequent activity inspections to identify non-stormwater discharges – stagger inspection times to cover all work periods.
- Perform visual inspections of discharge points to the storm drain system – observe uncharacteristic volumes, colors, turbidity, odors, deposition, staining, floatables, and foaming characteristics of any flow.

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

- Perform inspections during the design review and project construction phases to ensure drainage, wastewater, and water supply connections are correct (no cross connections or illicit hookups).
- Develop a set of as-built prints for all projects. Keep a set of the prints at the facility.
- Design projects to include adequate waste repositories at locations near waste origin points.
- Provide adequate and appropriate area for functions such as steam cleaning, degreasing, painting, mechanical maintenance, chemical/fuel storage and delivery, material handling, waste handling and storage, lavatory service, and food preparation.

TARGETED ACTIVITIES

- All activities with potential to impact stormwater

SIGNIFICANT MATERIALS

- Oil and Grease
- Antifreeze
- Fuel
- Solvent/Cleaning Solutions
- Battery Acid
- Pesticides/Herbicides/Fertilizers
- Paint
- Aircraft Fire Fighting Foam (ARFFF)
- Scrap Metal and Parts
- Garbage and Hazardous Wastes
- Sediment
- Landscape Waste
- Floatables
- Lavatory Chemicals and Waste
- Potable Water System Cleaning Chemicals
- Rubber Particles

KEY APPROACHES

- Perform inspections and enforcement
- Provide training for employees
- Promote education of vendors/public

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NON-STORMWATER DISCHARGES

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

- Use “dry” cleaning and surface preparation techniques where feasible.
- Limit the availability of outdoor water supplies (hose bibs).
- Post signs at outdoor water sources stating the appropriate uses and discouraging uses that would introduce pollutants to the storm drain system/receiving waters.

Contingency Response

- Develop and implement a Spill Prevention Control and Countermeasure (SPCC) Plan.
- Maintain a well stocked spill kit in locations where spills are likely to occur.

Inspection and Training

- Inspect waste containers frequently for leaks and proper closure seal.
- Develop employee training programs which emphasize the proper disposal procedures for operations-derived wastes.
- Provide employee training for spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
- 42 CFR 103 – Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – hazardous substances
- 40 CFR 110.3 Discharge of Oil
- 40 CFR 112 Oil Pollution Prevention (SPCC/OPA Plans)
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines

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OUTDOOR SIGNIFICANT MATERIALS STORAGE

PURPOSE:

Prevent or reduce the discharge of pollutants to stormwater from outdoor significant materials.

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

- Require the use of appropriate water quality control structures for fuel, waste, and chemical storage areas. Develop appropriate minimum performance standards for these water quality control structures and implement a reporting program to monitor the performance and maintenance of these structures.
- Chemical, fuel, and oil dispensing (non-aircraft) sites, and waste collection areas should be sloped to contain releases and covered, if possible.
- Develop standardized guidelines for the management of stormwater, which collects in secondary containment areas.

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

Good Housekeeping

- Avoid dispensing from drums positioned horizontally in cradles. Dispensing materials from upright drums equipped with hand pumps is preferred. Always use secondary containment and self closing spigots if dispensing from horizontally positioned drums.
- Store drums and containers on spill containment pallets or other structures to keep the container out of contact with stormwater.
- Discharge collected stormwater from secondary containment areas according to guidelines developed by the federal government and applicable state and local regulations.
- Store all materials in their original containers or containers approved for that use. Ensure that all containers are appropriately sealed.
- Store empty containers in fully enclosed areas, under cover, or move them off-site.
- Protect all significant materials from rainfall, run-on, run-off, and wind dispersal to the maximum extent practicable. Viable options are:
 - Store material in a fully enclosed area.
 - Cover an outdoor storage area with a roof or awning.
 - Cover the material with a temporary covering made of polyethylene, polypropylene, or hypalon.
 - Minimize stormwater run-on by enclosing the area, building a berm around the area, storing indoors, or completely cover the stored material.
- Properly label all chemical containers with information, including their contents, hazards, spill response and first aid procedures, manufacturer's name and address, and storage requirements. Maintain copies of MSDS on file for any materials stored and/or handled by the applicator.

TARGETED ACTIVITIES

- Aircraft/Vehicle Equipment Fueling
- Aircraft/Vehicle Equipment Maintenance
- Aircraft Lavatory Service
- Aircraft/Vehicle Equipment Washing or Cleaning
- Fuel/Chemical Storage
- Equipment Storage

SIGNIFICANT MATERIALS

- Fuel
- Solvent
- Cleaning Solutions
- Liquid Wastes
- Lavatory Chemicals/Waste

KEY APPROACHES

- Store materials in a covered or fully enclosed area
- Provide a secondary contaminant
- Implement an SPCC, if requires
- Perform and document periodic inspections

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OUTDOOR SIGNIFICANT MATERIALS STORAGE

- Maintain a spill response plan near the material or waste storage area.

Physical Site Usage

- Reduce the quantities of material and waste stored outside to the minimum volume required based on variables such as release potential, usage, and shelf life.
- Make use of existing overhangs as covered storage areas.

Structural Controls

- Provide berms or secondarily contain storage tankers, ASTs, drums, and containers.
- Install and maintain catch basin filter inserts.

Maintenance

- Inspect, clean, and maintain sumps, if applicable.

Contingency Response

- Develop and implement a Spill Prevention Control and Countermeasure (SPCC) Plan.
- Maintain a well stocked spill kit where spills are likely to occur.
- Post signs at all chemical storage locations in clearly visible locations noting the materials stored, emergency contacts, and spill cleanup procedures.

Inspection and Training

- Provide employee training for spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.
- Perform and document periodic inspections in a log book. Inspection items should include the following:
 - o Check containers for external corrosion and structural failure.
 - o Check for spills and overfills due to operator failure.
 - o Check for failure of piping system (pipes, pumps, flanges, couplings, hoses, and valves).
 - o Check for leaks or spills during pumping of liquids or gases.
 - o Visually inspect new tanks or containers for loose fittings, poor welds, and improper or poorly fitted gaskets.
 - o Inspect tank foundations and storage area coatings

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
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- 40 CFR 110.3 Discharge of Oil
- 40 CFR 112 Oil Pollution Prevention (SPCC/OPA Plans)
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines
- 40 CFR 260 et. seq. Identification and Listing of Hazardous Waste

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OIL/WATER SEPARATOR

PURPOSE:

Oil/water separators are baffled chambers designated to remove petroleum compounds and greases from stormwater. Oil/water separators also remove floatable debris and settled solids (sediment).

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

Oil/water separators are typically used in areas where the concentrations of petroleum hydrocarbons, floatables, or sediment may be abnormally high and source control techniques are not very effective. There are two types of oil/water separators: the American Petroleum Institute (API) separator and the coalescing plate separator (CPS). Design, sizing, and placement of oil/water separators are dependent on several factors including: tributary area, type of activity, pollutant type and concentration, and water temperature.

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

- Separators must be inspected and cleaned frequently of accumulated oil, grease, floating debris, and sediments to be effective stormwater quality controls.
- Oil absorbent pads are to be replaced as needed but will always be replaced prior to the wet season.
- The effluent shutoff valve will be closed during cleanup operations.
- Any standing water removed during the cleanup operation must be disposed of in accordance with federal, state, and local regulatory requirements.
- Any standing water removed during the cleanup operation must be replaced with clean water to prevent oil carry-over through the outlet.

Contingency Response

- Maintain a well stocked spill kit in locations where spills are likely to occur.

Inspection and Training

- Provide employee training for spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.
- Perform and document in a log book all inspections and maintenance operations.
- Develop a written operating, sampling, and reporting procedure under local stormwater authority guidelines. Train appropriate employees to implement these procedures.

TARGETED ACTIVITIES

- Aircraft/Vehicle/Equipment Fueling
- Aircraft/Vehicle/Equipment Washing
- Fuel/Chemical Storage
- Installing, Cleaning, and Maintaining Oil/Water Separators

SIGNIFICANT MATERIALS

- Oil and Grease
- Fuel
- Floatables
- Sediment

KEY APPROACHES

- Frequently inspect and clean separators
- Replace absorbent pads as needed

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OIL/WATER SEPARATOR

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
- 42 CFR 103 – Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – hazardous substances
- 40 CFR 110.3 Discharge of Oil
- 40 CFR 112 Oil Pollution Prevention (SPCC/OPA Plans)
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines

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OUTDOOR WASHDOWN/SWEEPING

PURPOSE:

Prevent or reduce the discharge of pollutants to stormwater from indoor and outdoor washdown and sweeping operations.

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

- Consider contracting apron washing/sweeping services. Using appropriate contractors will decrease waste handling responsibilities.
- Incorporate appropriate waste receiving facilities for sweepers and washing equipment.
- Incorporate oil/water separators or other water quality devices into project designs.
- Consider incorporating gate valves in areas where apron washing will occur. The gate valves will direct wash water to the sanitary sewer in dry weather and will direct stormwater to the storm drain system during wet weather.
- Employ berms to minimize run-on to other areas.

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

- Collect and discharge wash water to the sanitary sewer system through a permitted connection.
- Use designated and approved discharge facilities to dispose of waste derived from apron/ramp cleaning.
- Use "dry" sweeping techniques where feasible.
- Dispose of sweepings in an appropriate manner.
- Conduct berm repair and patching.
- Inspect, clean, and maintain sumps and oil/water separators.

Contingency Response

- Maintain a well stocked spill kit in locations where spills are likely to occur.

Inspection and Training

- Provide employee training for spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.
- Develop regular maintenance and inspection programs for oil/water separators.
- Characterize wastes collected from oil/water separators. Dispose of wastes properly and provide appropriate employee training.

TARGETED ACTIVITIES

- Apron Washing
- Ramp Scrubbing
- Outdoor/Power Washing
- Floor Washdown

SIGNIFICANT MATERIALS

- Oil and Grease
- Solvents/ Cleaning Solutions
- Fuel
- Aircraft Fire Fighting Foam (AFFF)
- Sediment
- Floatables

KEY APPROACHES

- Collect and discharge wash water to the sewer
- Use "dry" sweeping techniques
- Dispose of sweepings

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OUTDOOR WASHDOWN/SWEEPING

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
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- 40 CFR 401 Effluent Limitation Guidelines

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OUTDOOR WASTE AND MATERIAL HANDLING

PURPOSE:

Prevent or reduce the discharge of pollutants to stormwater from handling potential pollutants outside enclosed buildings.

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

- Design outdoor waste and material handling areas to prevent stormwater run-on through the use of the following practices:
 - o Grading or berming
 - o Positioning roof downspout to direct stormwater away from outdoor waste and material handling areas
- Design facilities so that materials which may contribute pollutants to stormwater may be stored indoors or under cover.
- Incorporate oil/water separators into exposed loading dock designs.

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

Good Housekeeping

- Use seals or door skirts between vehicles and structures to prevent material exposure to rainfall.
- Contain and adsorb leaks during transfers and spillage from hose disconnections; dispose of residue properly.
- Avoid transferring or using materials in close proximity to storm drain inlets. Cover nearby storm drain inlets during material transfer or use.
- Use drip pans to contain small releases and promptly clean and remove drip pans when not in use.
- Transfer and use liquids only in paved areas.
- Provide contractors and haulers with copies of pertinent BMPs. Require contractor/hauler adherence to BMP specifications.
- Consider contracting maintenance operations for material handling equipment. Designate an appropriate area for contractors to perform maintenance activities. Verify proper waste disposal practices of contractors.

Physical Site Usage

- Protect all loading/unloading activities and material use areas from rainfall, run-on and wind dispersal to the maximum extent practicable. Viable options include conducting activities under existing cover, or moving indoors.
- Position tank trucks or delivery vehicles so that possible spills or leaks can be contained.
- Provide appropriate spill containments, hand pumps, and other devices to minimize releases during material transfer.

TARGETED ACTIVITIES

- Aircraft/Vehicle/Equipment Deicing
- Aircraft/Vehicle/Equipment Fueling
- Aircraft/Vehicle/Equipment Maintenance
- Aircraft Lavatory Service
- Cargo Handling
- Fuel/Chemical Storage
- Pesticide/Herbicide Usage
- Runway Deicing

SIGNIFICANT MATERIALS

- Fuel
- Pesticides and Herbicides
- Oil and Grease
- Solvents/Cleaning Solutions
- Battery Acid
- Lavatory Chemicals and Waste
- Deicing Chemicals

KEY APPROACHES

- Conduct loading/unloading under cover
- Transfer materials in paved areas, away from storm drain inlets
- Contain and absorb releases
- Maintain readily accessible spill kits
- Immediately place waste and materials in proper storage/disposal location

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OUTDOOR WASTE AND MATERIAL HANDLING

Structural Controls

- Cover loading/unloading areas/docks and material use areas to reduce exposure of materials to rain. Construct roofing structures over material handling areas, or move indoors.
- Investigate feasibility of relocating storm drain inlets away from fuel hydrants or fuel dispensing and storage areas.

Maintenance

- Inspect loading/unloading areas and material use areas for repair and patching.
- Inspect, clean, and maintain oil/water separators.

Contingency Response

- Maintain a well stocked spill kit in locations where spills are likely to occur.
- Include spill kits on appropriate material handling vehicles and equipment.

Inspection and Training

- Conduct regular inspections and make repairs as necessary.
- Check loading/unloading equipment (valves, pumps, flanges, and connections) regularly for leaks.
- Develop and implement a written operations plan which describes loading/unloading procedures.
- Provide proper training for material handling equipment operators.
- Provide employee training for spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
- 42 CFR 103 – Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – hazardous substances
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- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines

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PARKING AREAS

PURPOSE:

Prevent or reduce discharge of pollutants to stormwater drains from aircraft, vehicle, and equipment parking areas.

APPROACH TO FUTURE FACILITIES AND UPGRADES:

- Install an oil removal system such as oil water separator, catch basin filter, or equivalent in high use areas.
- Apply only as much sealer as required to completely cover the paved area. Remove any excess and store or dispose of appropriately.

APPROACH TO EXISTING FACILITY ACTIVITIES:

- Collect all waste, liquid and solid, for appropriate disposal.
- Schedule maintenance, such as seal coating and repair work as needed.
- Protect storm drains, gutters, or off-site migration points from any liquid or solid waste during maintenance or repair work.
- Regularly clean parking lots to remove dirt, accumulations of grease and oil, general debris, and trash.
- If a wet cleaning method is used, ensure that the storm drains or off-site migration points are protected.

Contingency Response

- Keep spill response equipment for hydrocarbon clean up on-site. Promptly clean up any spill of liquid or solid wastes. Do not hose down an area to clean or handle a spill, unless the liquid will be completely contained.

Inspection and Training

- Inspect all outfall drainage structures for illicit discharges.
- Provide employee training for spill prevention and clean up, right-to-know awareness, hazardous materials management, and stormwater pollution prevention.

TARGETED ACTIVITIES

- Aircraft / Vehicle / Equipment Parking

SIGNIFICANT MATERIALS

- Oil and grease
- Waste

KEY APPROACHES

- Regularly clean parking areas.
- Properly dispose of all liquid and solid waste.
- Protect storm drains, gutters, or off-site migration points from any liquid or solid waste.

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PARKING AREAS

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
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PEST MANAGEMENT AND LANDSCAPING MAINTENANCE

PURPOSE:

Prevent or reduce the discharge of pollutants to stormwater from pest management and landscaping maintenance by minimizing the use of pesticides and fertilizers, keeping debris from entering storm drains, and maintaining the stormwater collection system.

TARGETED ACTIVITIES

- Building Maintenance
- Grounds Maintenance
- Pesticide/Herbicide Use
- Outdoor Washdown

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

- Incorporate areas of landscape into project design to reduce runoff discharge from a site.
- Incorporate design considerations such as leaving or planting native vegetation to reduce irrigation, fertilizer, and pesticide needs.
- Select landscaping plants that require little maintenance and/or pest control.
- Incorporate stormwater detention/retention to reduce peak runoff flows and for water quality control.

SIGNIFICANT MATERIALS

- Pesticides/Herbicides/Fertilizers
- Oil and Grease
- Sediment
- Landscape Waste
- Washdown Waste
- Building Maintenance Materials

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

Good Housekeeping

- Collect outdoor washdown water and properly dispose of it through a permitted connection to the sanitary sewer.
- Clean any catch basins that receive runoff from maintenance areas on a regular basis.
- Minimize the use of pesticides, herbicides, and fertilizers. Use according to directions. Seek less harmful/toxic products to replace ones currently used.
- Utilize integrated pest management where appropriate.
- Properly dispose of landscape waste, wash water, sweepings, and sediments.
- Regularly clean paved surfaces that are exposed to industrial activity. Use “dry” cleaning techniques, such as sweeping, whenever possible.

KEY APPROACHES

- Keep paved surfaces cleaned and swept
- Clean catch basins regularly using vacuum trucks
- Manage use of pesticides/herbicides/fertilizers

Structural Controls

- Provide landscaped areas where erosion is becoming a problem.

Contingency Response

- Maintain a well stocked spill kit in locations where spills are likely to occur.

Inspection and Training

- Provide employee training for spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.

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PEST MANAGEMENT AND LANDSCAPING MAINTENANCE

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
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RUNWAY RUBBER REMOVAL

PURPOSE:

Eliminate discharges to the storm drain of particulate rubber generated by runway rubber removal activities.

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

- Design runway storm drain culverts to allow placement of particulate capture devices, such as haybales or filter fabric, that will capture rubber and dirt particles generated during runway rubber removal activities.

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

- Place devices that will capture rubber and dirt particulates, such as haybales or filter fabric, over storm drain culverts or at other areas that will capture rubber and dirt particles generated during runway rubber removal activities.
- Use manual or mechanical cleaning methods (ordinary mechanical street sweepers) to remove rubber particulates from the runway and adjacent paved areas after runway rubber removal activities.

Inspection and Training

- Provide employee training for spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.
- Inspect storm drain culverts or runway drainage areas after runway rubber removal activities.

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
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- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines

TARGETED ACTIVITIES

- Runway Rubber Removal

SIGNIFICANT MATERIALS

- Rubber particles
- Dirt particles

KEY APPROACHES

- Use haybales or filter fabric over culverts
- Use manual or mechanical cleaning methods (e.g., street sweepers) to remove particulates following normal removal process

FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

EROSION AND SEDIMENT CONTROL

PURPOSE:

Prevent or reduce the discharge of pollutants to stormwater from construction and landscaping activities, runoff, and other ground disturbing activities.

APPROACH TO FUTURE FACILITIES AND UPGRADES:

- Incorporate sediment and erosion control measures into design to prevent or minimize discharge of pollutants into stormwater.
- Preserve and incorporate natural vegetation into design.
- Locate construction staging areas and waste collection areas away from drainage structures.
- Use appropriate BMPs for stormwater runoff treatment.

APPROACH TO EXISTING FACILITY ACTIVITIES:

Good Housekeeping

- Clean catch basins and drainage structures regularly.
- Collect and dispose of waste regularly.

Physical Site Usage

- Locate staging areas in disturbed areas.
- Preserve natural vegetation.
- Utilize erosion control measures over exposed ground.

Structural Controls

- Silt fence, sand bags and sand
- Brush barrier, mulching, and sodding
- Check dams, berms, interceptor dikes and swales
- Dust control and inlet protection
- Sediment trap/filters/chambers
- Temporary sediment basin/rock dams
- Gradient terraces and subsurface drains
- Ponds, baffle boxes, stormceptors, and stormwater vaults

Maintenance

- Inspection of erosion and sediment control measures
- Drainage system maintenance

Contingency Response

- Maintain adequate sediment and erosion control materials to replace damaged materials (silt fence, etc.)
- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may occur.

TARGETED ACTIVITIES

- Design
- Construction
- Landscaping
- Maintenance
- Inspections

SIGNIFICANT MATERIALS

- Sediment
- Pesticides/Herbicides/Fertilizers
- Oil and Grease
- Trash

KEY APPROACHES

- Preserve natural vegetation
- Utilize the 2007 FDOT FDEP Sediment and Erosion Control Manual
<http://www.dot.state.fl.us/rddesign/dr/files/Erosion-and-Sediment-Control-Manual-June-2007.pdf>
- Keep erosion and sediment control measures in place at all times.

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EROSION AND SEDIMENT CONTROL

Inspection and Training

- Provide adequate level of training.
- Require contractor construction inspectors to have a certificate from Florida Stormwater, Erosion and Sediment Control Inspectors Training Certification Program.

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
- 42 CFR 103 – Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – hazardous substances
- 40 CFR 110.3 Discharge of Oil
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines

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SPILL PLAN

PURPOSE:

Prevent or reduce the discharge of pollutants to stormwater resulting from petroleum products or other materials.

GENERAL APPROACH:

Owners and operators of facilities that store, process, or refine oil or oil products may be required by federal law (40 CFR 112) to develop and implement a Spill Prevention Control and Countermeasure (SPCC) Plan. Emergency spill cleanup plans should include the following information:

- A description of the facility including the owner's name and address, the nature of the facility activity, and at the general types and quantities of chemicals stored at the facility.
- A site plan showing the location of storage areas for chemicals, the location of storm drains, site drainage patterns, fire water source locations, and the location and description of any devices used to contain spills, such as positive shut-off control valves.
- Notification procedures to be implemented in the event of a spill, such as key company personnel and local, state, and federal agencies.
- Instructions regarding spill containment and cleanup procedures.
- Designated personnel with overall spill response cleanup responsibility.

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

- Post a summary of the plan at appropriate site locations, identifying the spill cleanup coordinators, location of cleanup equipment, and phone numbers of regulatory agencies to be contacted in the event of a spill.
- Maintain an inventory of appropriate cleanup materials on-site and strategically deploy cleanup materials based on the type and quantities of chemicals present.
- Make absorbents readily available in fueling areas.
- Label spill kit containers.

Contingency Response

- Perform the following notifications in the event of a spill:
 - o Fire Department
 - o Local Health Department
 - o State Office of Emergency Services
 - o National Response Center – if spill exceeds reportable quantity (RQ)
- Containment and cleanup of spills shall begin immediately.

TARGETED ACTIVITIES

- Aircraft/Vehicle/Equipment Deicing
- Aircraft/Vehicle/Equipment Fueling
- Aircraft Lavatory Service
- Aircraft/Vehicle/Equipment Washing
- Cargo Handling
- Fuel/Chemical Storage
- Pesticide/Herbicide Use
- Runway Deicing

SIGNIFICANT MATERIALS

- Lavatory Chemicals and Waste
- Fuel
- Oil and Grease
- Solvents/Cleaning Solutions
- Pesticides/Herbicides/Fertilizers
- Battery Acid
- Antifreeze
- Deicing Fluid

KEY APPROACHES

- Implement SPCC (if required)
- SPCC implementation training
- Immediate containment/cleanup of spills
- Availability of spill response equipment/materials
- Required agency notification

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SPILL PLAN

Inspection and Training

- Provide formal training in plan execution to key personnel, with additional training for first responder level personnel (29 CFR 1910.120). All employees should have basic knowledge of spill control procedures.

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
- 42 CFR 103 – Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – hazardous substances
- 40 CFR 110.3 Discharge of Oil
- 40 CFR 112 Oil Pollution Prevention (SPCC/OPA Plan)
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines

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STORMWATER POLLUTION PREVENTION TRAINING AND EDUCATION

PURPOSE:

Prevent or reduce the discharge of pollutants to stormwater through implementing an educational program targeting employees, contractors, vendors, and the public.

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

- Work early on with design and construction engineers, and local stormwater authorities to incorporate proactive stormwater management features into projects, such as decreased impervious areas, infiltration BMPs, biofilters, oil/water separators, etc.
- Inform all construction contractors of their responsibility to comply with adopted BMPs and with regulations prohibiting cross connections between sanitary sewers and storm drains. Provide contractors subcontractors with copies of relevant BMPs during specification and bidding phases.

APPROACH TO EXISTING FACILITY ACTIVITIES:

Contingency Response

- Provide adequate implementation training for facilities with a Spill Prevention Control and Countermeasure (SPCC) Plan.
- Adequately train employees in the use of spill response equipment and materials.

Inspection and Training

- Perform and document frequent inspections of work areas, waste storage facilities, maintenance areas, and contractor projects to examine compliance with BMPs. Follow up with additional training or enforcement as required. Incorporate inspection findings into subsequent training efforts.
- Design stormwater pollution education programs to contain the following elements:
 - o Promote the proper storage, use, and disposal of landscape maintenance chemicals and other potentially harmful chemicals.
 - o Promote the use of safer alternative products such as: short-lived pesticides, non-chlorinated solvents, water-based paints, non-aerosol products.
 - o Encourage the use of “dry” washing processes for aircraft, vehicles, and equipment.

TARGETED ACTIVITIES

- All Activities with Potential to Impact Stormwater

SIGNIFICANT MATERIALS

- Oil and Grease
- Vehicle Fluids
- Fuel
- Solvents/Cleaning Solutions
- Battery Acid
- Pesticides/Herbicides/Fertilizers
- Paint
- Metals
- Dumpster Wastes
- Sediment
- Landscape Waste
- Floatables
- Lavatory Chemicals and Waste
- Runway Rubber Waste
- Other Miscellaneous Chemicals

KEY APPROACHES

- Perform inspections and enforcement
- Provide training for employees
- Promote education of vendors/public
- Show Storm Water Training Video to employees

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STORMWATER POLLUTION PREVENTION TRAINING AND EDUCATION

Inspection and Training (Continued)

- Design stormwater pollution education programs to contain the following elements:
 - Encourage efficient and safe housekeeping practices in industrial activity areas.
 - Increase awareness of the detrimental environmental impacts that results when fuel, antifreeze, pesticides, lubricants, detergents, paints and other wastes are dumped onto the ground or into storm drains.
 - Promote source reduction and recycling of waste materials.
 - Increase awareness of possible penalties and fines associated with discharge of pollutants into storm drains.
 - Increase awareness of what is and what is not allowed in storm drains. Provide a mechanism for violations to be reported.
 - Hold annual training workshops.
 - Provide new employee training.

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
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- 40 CFR 110.3 Discharge of Oil
- 40 CFR 112 Oil Pollution Prevention (SPCC/OPA Plans)
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines

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WASTE/GARBAGE COLLECTION, STORAGE, AND DISPOSAL

PURPOSE:

Prevent or reduce the discharge of pollutants to stormwater from waste storage and disposal by tracking waste generation, storage, and proper disposal; reducing waste generation and disposal through source reduction, re-use, and recycling; and preventing run-on and runoff from waste management areas.

APPROACH TO FUTURE FACILITIES AND UPGRADES:

Design of New Facilities and Existing Facility Upgrades

- Avoid the following characteristics when examining candidate sites for storing wastes:
 - Excessive slope
 - High water table
 - Locations near storm drain inlets
 - Locations near public access areas
- Waste handling and storage areas should be covered, if possible.
- Develop standardized guidelines for the management of stormwater that collects in secondary containment areas.
- Incorporate sanitary sewer drains into bermed, outdoor, non-hazardous waste storage areas, if approved by the local wastewater treatment agencies/regulations.
- Provide contained (and covered, if possible) area for hazardous waste collection sites.

APPROACH TO EXISTING FACILITY ACTIVITIES:

Operational Considerations

Good Housekeeping

- Perform regular housekeeping to maintain waste storage areas in a clean and orderly condition.
- Recycle materials whenever possible.
- Inspect waste management areas for spills and waste management containers for leaks.
- Ensure that sediments and wastes are prevented from being washed, leached, or otherwise carried off-site.
- Completely drain containers (e.g., quart oil cans) prior to disposal in trash receptacles.
- Eliminate waste collection piles (i.e., “boneyards”).
- Schedule waste pickup as frequently as necessary to keep storage of waste to a minimum and to avoid overloaded/overfilled disposal containers.
- Minimize spills and fugitive losses such as dust or mist from loading areas.
- Maintain a minimal inventory of required chemicals to reduce the magnitude of potential spills and limit waste generation.
- Track waste generation:
 - Characterize waste streams
 - Evaluate the process generating the waste for pollution prevention opportunities.

TARGETED ACTIVITIES

- Aircraft/Vehicle/Equipment Maintenance
- Aircraft/Vehicle/Equipment Painting or Stripping
- Fuel/Chemical Storage
- Garbage Collection

SIGNIFICANT MATERIALS

- Oil and Grease
- Vehicle Fluids
- Solvents/Cleaning Solutions
- Dumpster Wastes

KEY APPROACHES

- Cover waste storage areas
- Recycle materials
- Regularly inspect and clean waste storage areas
- Berm waste storage areas to prevent contact with run-on or runoff
- Perform dumpster cleaning in designated areas
- Properly dispose of all fluids

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WASTE/GARBAGE COLLECTION, STORAGE, AND DISPOSAL

- Maintain accurate information on waste streams using: manifests, bills of lading, biennial reports, permits, environmental audits, SARA Title III reports, emission reports, Material Safety Data sheets (MSDS), NPDES discharge monitoring reports, inventory reports, data on chemical spills, and emissions data.
- Find substitutes for harmful chemicals.
- Properly dispose of unusable chemical inventory.

Physical Site Usage

- Segregate and separate wastes.
- Avoid locating waste handling and storage in areas with storm drain inlets/catch basins.
- Locate waste storage areas beneath existing cover, if possible.

Structural Controls

- Enclose or berm waste storage areas, if possible, to prevent contact with run-on or runoff.

Garbage Collection Areas

- Design facilities to provide shelter and secondary containment for dumpsters.
- Use covered dumpsters and keep them closed and locked.
- Use only dumpsters with plugged drain holes to prevent leaks from waste materials.
- Do not dispose of liquid wastes into dumpsters. Completely drain liquid waste containers prior to disposal.
- Perform dumpster cleaning in designated areas that are bermed to contain wash water for a subsequent disposal or discharge to the sanitary sewer. Dispose of or recycle all fluids collected.

Contingency Response

- Maintain a well stocked spill kit in locations where spills are likely to occur.
- Equip waste transport vehicles with spill containment equipment.

Inspection and Training

- Provide employee training for spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.
- Perform and document periodic inspections of hazardous and non-hazardous waste storage areas. Inspection items should include the following:
 - Check containers for external corrosion and structural failure.
 - Check for spills and overfills due to operator failure.
 - Check for failure of piping system (pipes, pumps, flanges, couplings, hoses, and valves).
 - Check for leaks or spills during pumping of liquids or gases.
 - Visually inspect new tanks or containers for loose fittings, poor welds, and improper or poorly fitted gaskets.
 - Inspect tank foundations and storage area coatings.
 - Inspect dumpster areas for signs of leakage.

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WASTE/GARBAGE COLLECTION, STORAGE, AND DISPOSAL

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
- 42 CFR 103 – Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – hazardous substances
- 40 CFR 110.3 Discharge of Oil
- 40 CFR Oil Pollution Prevention (SPCC/OPA Plans)
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 401 Effluent Limitation Guidelines
- 40 CFR 260 et. seq. Identification and Listing of Hazardous Waste

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Food Handling and Restaurant Waste Water

PURPOSE:

Prevent or reduce discharge of pollutants to stormwater drains from food handling, kitchen cleaning activities or grease handling.

TARGETED ACTIVITIES

- Food Handling / Cleaning / Cooking Waste Handling
- Oil/Grease Handling and Storage

APPROACH:

Good Housekeeping

- Pour wash water into a utility sink or curbed cleaning facility with a floor drain, do not pour into parking lots, alley, sidewalk or street.
- Use dry methods for spill cleanup, do not hose down spills.
- Clean floor mats, filters and garbage cans in a utility sink or curbed cleaning facility with a drain.
- Recycle grease and oil, do not pour it into sinks, floor drains or onto a parking lot or street.
- Keep dumpster area clean and lid closed, do not fill with liquid waste or hose it out.

Maintenance

- Ensure solidified grease is not present around grease trap.
- Make sure storage areas and trash containers are free of cracks, leaks and spillage.

SIGNIFICANT MATERIALS

- Oil
- Grease
- Cleaning Solutions

KEY APPROACHES

- Prevent oil/grease and cleaning byproducts from reaching stormwater drainage.
- Use spill control devices.
- Cleaning and disposal of oil and grease are performed in proper sinks or drain areas.
- Waste cooking byproducts are either stored or disposed of properly.

Inspection and Training

- Provide employee training for spill prevention and clean up, right-to-know awareness, hazardous materials management and stormwater pollution prevention.

RELEVANT RULES AND REGULATIONS:

- Rule 62-621.300 Florida Administrative Code (FAC) – NPDES Generic Permits
- Subsection 62-770.160(1) of the Florida Administrative Code – Petroleum Contamination Clean Up Criteria
- 40 CFR 261 – Resource Conservation Act (RCRA) – hazardous wastes
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