

**New York State Department of Environmental Conservation
State Pollutant Discharge Elimination System (SPDES) Permit**

Best Management Practices Plan Implementation Training

Denise A. Branch, Manager

JFK Environmental Services

August/September 2010

JFK Airport BMPP Implementation Training

TODAY'S AGENDA

- Introduction
- Best Management Practices Plan (BMPP) Implementation Training Objectives
- Regulatory Requirements
- Facility Description & Activities
- Potential Pollution Sources
- Best Management Practices
- Comprehensive Site Compliance Evaluation

JFK Airport BMPP Implementation Training

Port Authority Training will include discussion of:

- Prohibited Discharges
- Deicing/Anti-icing Activities and Reporting
- Best Management Practices (BMP) Implementation
- Good Housekeeping
- Spill Prevention, Response, & Reporting
- Routine Inspections
- Recordkeeping Procedures

Regulatory
Requirements

Facility
Description

Potential
Pollutant
Sources

Stormwater
Management
Controls

Site
Compliance
Evaluation

Regulatory Requirements



“Contaminated stormwater discharges from industrial facilities into surface waters are to be minimized or eliminated” -- Clean Water Act

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Regulatory Requirements

- **National Pollutant Discharge Elimination System (NPDES)**
 - United States Environmental Protection Agency (USEPA) under 40 CFR Part 449 proposed a new rule in 2009 titled “Effluent Limitation Guidelines and New Source Performance Standards for the Airport Deicing Category.” Airports qualifying under this proposed rule would be required to collect a percentage of spent aircraft deicing fluid and treat the wastewater.
- **State Pollutant Discharge Elimination System (SPDES)**
 - New York State Department of Environmental Conservation (NYSDEC) *6NYCRR PART 750* program is geared towards *preserving, protecting, and improving* water sources from polluted stormwater runoff by instituting controls on discharge sources. JFK currently holds an individual industrial SPDES Permit.

Regulatory
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SPDES Permit Special Conditions

- Develop, maintain, and implement a **Best Management Practices Plan (BMPP)** to prevent significant release of pollutants to waters of the State and eliminate or reduce pollutant loadings in stormwater
- Develop and apply **Best Management Practices (BMPs)** to minimize potential releases
- **13 Minimum BMPs** – the minimum BMPs that shall be included in the BMPP to minimize potential releases
- Develop **Activity Specific BMPs** to address inadequate or absent BMPs

**Regulatory
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SPDES Permit Special Conditions (continued)

- **Good Housekeeping** – Tenants must implement practices/measures that prevent or minimize the contamination of stormwater runoff from various airport activities.
- **SWPPP for Construction Activities** – Construction activity that disturbs more than one acre at the JFK airport requires that the tenant prepare a SWPPP that conforms to the new GP-0-10-001.
- **SPCC (PBS) and/or SRP (CBS)** – Requires tenants compliance with all applicable regulations including those involving releases, registration, handling, and storage of petroleum and/or chemicals.
- **Routine Facility Inspections** – Tenants must utilize the BMPP Implementation Inspection and Environmental Infraction Corrective Action Inspection Form to track and monitor BMPP compliance.
- Prepare an **Annual Facility Review and Site Inspection Report** to evaluate the effectiveness of BMPP implementation.

Regulatory
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SPDES Permit Prohibited Discharges

- **Discharge which contains a visible sheen, foam, or odor, or may cause or contribute to a violation of water quality is prohibited.**
 - Spills or leaks, tank bottoms, maintenance wastewaters, wash waters where detergents or other chemicals have been used, tank hydrotest and ballast waters, contained fire fighting runoff, fire training water contaminated by contact with pollutants or containing foam or fire retardant additives, and unnecessary discharges of water or wastewater into secondary containment systems.

Regulatory Requirements

Facility Description

Potential Pollutant Sources

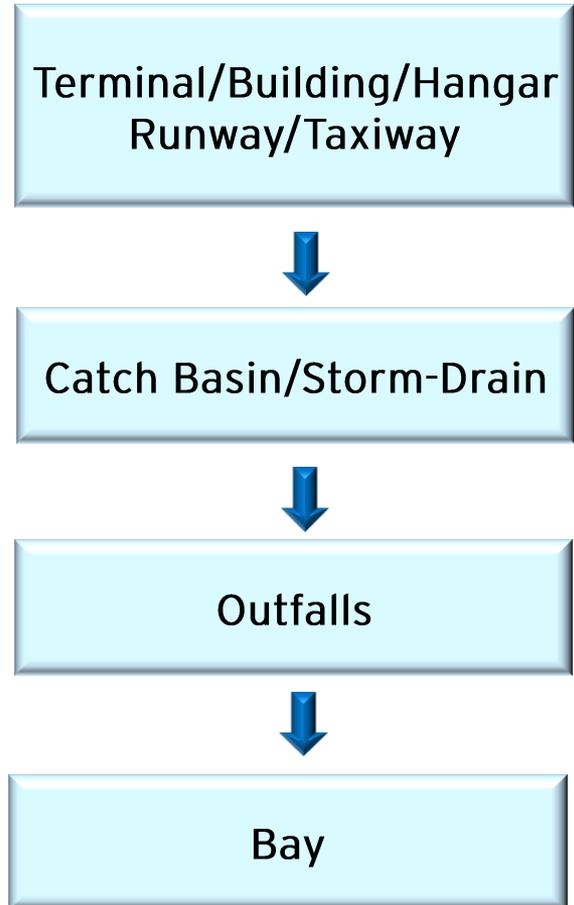
Stormwater Management Controls

Site Compliance Evaluation

Site Map

Identify where activities may be exposed to runoff

- 4,590 acres
- Terminals (CTA is approx. 880 acres)
- Buildings
- Hangars
- 9 miles of runway
- 25 miles of taxiway
- 16 drainage areas
- 6,000 catch basins
- 26 stormwater outfalls
- Outfalls discharge to Jamaica Bay, Thurston Bay, Head of Bay, and Bergen Basin



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Responsible & Accountable Parties

Identify whom is responsible at the facility to document and maintain compliance with BMPP

- **Tenants** whom manage multiple “sub-tenants” are responsible for the actions of those sub-tenants.
- **Tenants** are required to train additional members of their staff and sub-tenant staff.
- **All Sub-Tenants and Facility Staff (e.g., contractors, sub-contractors, and deicing entities)** are responsible to maintain compliance with the BMPP and report spills and other BMP incidents if they occur no matter whom caused the incident.

Regulatory Requirements

Facility Description

Potential Pollutant Sources

Stormwater Management Controls

Site Compliance Evaluation

Potential Pollution Sources and Pollutants of Concern

- **Aircraft, Vehicle, and Equipment Maintenance**

- Oil and Grease
- Petroleum Hydrocarbons
- Propylene Glycol
- Halogenated and Non-Halogenated Solvents

- **Aircraft, Vehicle, and Equipment Fueling**

- Petroleum Hydrocarbons
- Fuel Vapors

- **Aircraft Sanitary Service**

- Biocides
- Bacteria



Regulatory Requirements

Facility Description

Potential Pollutant Sources

Stormwater Management Controls

Site Compliance Evaluation

Potential Pollution Sources and Pollutants of Concern

- **Building and Grounds Maintenance**
 - Pesticides
 - Herbicides
 - Oils and Grease
 - Petroleum Hydrocarbons
- **Chemical Storage and Fuel Storage**
 - Petroleum Hydrocarbons
 - Lubricants
 - Paints
 - Battery Acid
 - Solvents
- **Lavatory Service Operations**
 - Lavatory Chemicals
 - Lavatory Waste
 - Lavatory Truck Wash Water



Regulatory Requirements

Facility Description

Potential Pollutant Sources

Stormwater Management Controls

Site Compliance Evaluation

Potential Pollution Sources and Pollutants of Concern

- **Food Handling Operations**
 - Oil and grease
 - Bacteria
- **Fire Fighting Foam Testing**
 - Volatile Organic Compounds
- **Aircraft Deicing/Anti-icing**
 - Propylene Glycol
 - Sodium Acetate
 - Potassium Acetate
- **Runway and Taxiway Deicing/Anti-icing**
 - Propylene Glycol
 - Sodium Acetate
 - Potassium Acetate



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Pollution Source Impacts to Receiving Water Quality

- **Ethylene Glycol (prohibited at JFK Airport) and Propylene Glycol**-Decreases available dissolved oxygen (DO) in waterways
- **Oil and Grease**-Disrupts fish and wildlife habitat and can have direct effects on individual species
- **Pesticides/Herbicides and Lavatory Waste**-can be lethal to fish and other wildlife



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Best Management Practices (BMPs)

Objective is to identify programs, technologies, operating method, measure or device that controls, removes, or reduces pollution.

- Consists of:
 - 13 Minimum BMPs
 - 19 Activity Specific BMPs
 - Additional Plans

Regulatory
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13 Minimum General BMPs Must Include

1. Pollution Prevention Team
2. Reporting of BMP Incidents
3. Risk Identification and Assessment
4. Employee Training
5. Inspections and Records
6. Security and Site Access
7. Preventive Maintenance
8. Good Housekeeping
9. Material/Waste Handling, Storage, and Compatibility
10. Spill Prevention & Response
11. Erosion & Sediment Control
12. Management of Runoff
13. Street Sweeping

General BMPs

BMP 1 Pollution Prevention Team

- Designate a Pollution Prevention Team Member
 - Responsible for implementation of BMPs
 - Ensure implementation of BMPs
 - Retain copy of BMPP onsite
 - Provide feedback to Environmental Services regarding BMPP compliance

Pollution Prevention Team Member must be identified and on the Pollution Prevention Team Member Designation Form provided to Denise A. Branch at JFKEnvironmental@panynj.gov, Manager, Environmental Services annually.

General BMPs

BMP 2 Reporting of BMP Incidents – Petroleum Spills

Type of Spill	Quantity	Did Spill Enter Storm Drain?	Agency to Notify	Phone Number
Petroleum	Greater than (>) 5 gallons	Yes	NYSDEC NRC USCG PANYNJ	1-800-457-7362 1-800-424-8802 1-718-354-4120 <i>See Spill Guidance Sheet for all PANYNJ Numbers</i>
Petroleum	Greater than (>) 5 gallons	No	NYSDEC PANYNJ	1-800-457-7362 <i>See Spill Guidance Sheet for all PANYNJ Numbers</i>
Petroleum	Less than (<) 5 gallons	Yes	NYSDEC NRC USCG PANYNJ	1-800-457-7362 1-800-424-8802 1-718-354-4120 <i>See Spill Guidance Sheet for all PANYNJ Numbers</i>
Petroleum	Less than (<) 5 gallons	No	PANYNJ*	<i>See Spill Guidance Sheet for all PANYNJ Numbers</i>

- *** All Spills must be cleaned up within 2 hours of discovery or NYSDEC and NRC must be notified regardless of the quantity of material spilled.**
- Notify Environmental Services, PANYNJ Police and Operations of any spills
- Complete PANYNJ Spill Reporting Form within one business day

General BMPs

BMP 2 Reporting of BMP Incidents – Hazardous Substance Spills

Type of Spill	Quantity	Did Spill Enter Storm Drain?	Agency to Notify	Phone Number
Hazardous Substance	Greater than (>) Reportable Quantity (RQ)	Yes	NYSDEC NRC USCG PANYNJ	1-800-457-7362 1-800-424-8802 1-718-354-4120 <i>See Spill Guidance Sheet for all PANYNJ Numbers</i>
Hazardous Substance	Greater than (>) Reportable Quantity (RQ)	No	NYSDEC NRC PANYNJ	1-800-457-7362 1-800-424-8802 <i>See Spill Guidance Sheet for all PANYNJ Numbers</i>
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Hazardous Substance	Less than (<) Reportable Quantity (RQ)	No	PANYNJ*	<i>See Spill Guidance Sheet for all PANYNJ Numbers</i>

- * All Spills must be cleaned up within 2 hours of discovery or NYSDEC and NRC must be notified regardless of the quantity of material spilled.
- Notify Environmental Services, PANYNJ Police and Operations of any spills
- Complete PANYNJ Spill Reporting Form within one business day

General BMPs

BMP 3 Risk Identification & Assessment

- Tenants complete questionnaire to determine potential pollutant sources
- Completed questionnaires are used to identify BMPs to prevent or control pollutants

BMP 4 Employee Training

- Environmental Services will provide BMPP training and awareness on an *annual basis* and as a required provision for new tenant occupancy
- Tenants are expected to train sub-tenants and other staff members

BMP 5 Inspections and Records

- Qualified personnel shall inspect designated equipment and areas of JFK Airport on an annual basis to assess effectiveness of BMP implementation and the overall BMPP
- Regular visual inspections shall ensure that BMPs are implemented
- Inspections shall take place during storm events to ensure BMPs are effectively working
- Inspections shall take place during operation of equipment or activities being examined

General BMPs

BMP 5 Inspections and Records (continued)

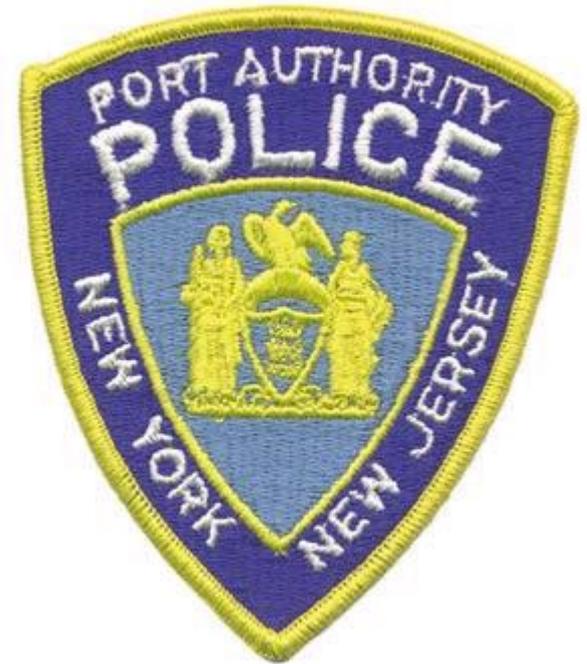
- Inspection shall document spills and leaks
- Inspection shall record types and amounts of pollutants
- Inspections shall record and document BMP activities
- Records shall note all environmental infractions



General BMPs

BMP 6 Security and Site Access

- PANYNJ will train security personnel to be aware of potential illicit discharges
- PANYNJ training shall include lighting and access control



BMP 7 Preventive Maintenance

- Routine inspection and maintenance of structural BMPs (oil/water separator, catch basins)
- Routine inspection and testing of equipment & systems can identify and correct conditions that could cause failure
- Prompt repair of defective equipment
- Schedule tests and document inspections
- *As per 6 NYCRR Part 613.3(d): Maintenance of Spill Prevention Equipment, “The owner or operator must keep all gauges, valves, and other equipment for spill prevention in good working order”*



BMP 8 Good Housekeeping

- Perform maintenance activities indoors
- Collect stormwater runoff from maintenance area and provide treatment or recycling
- Use dry cleanup methods
- Drain all part of fluid prior to disposal
- Prevent practice of hosing down the apron or hangar floor
- Maintain an inventory of material used



BMP 8 Good Housekeeping (Continued)

- Keep debris out of work areas and maintain proper storage to avoid clutter
- Maintain effective organization of equipment, drums, batteries, etc. to minimize accidental contact with storm drains or catch basins
- Clean heavily utilized areas routinely to minimize small spills and leaks from entering storm drain



General BMPs

BMP 9 Material/Waste Handling, Storage (Continued) Appropriate Labeling and Petroleum Bulk Storage (PBS/Chemical Bulk Storage (CBS) Registration:

As per 6 NYCRR Part 612.2(e): Registration of Facilities, “The operator must display a registration certificate which is current and valid on the premises of the facility at all times.”

As per 6 NYCRR Part 613.3(b) Color Coding of Fill Ports, “the owner or operator must permanently mark all fill ports to identify the product inside the tank. These markings must be consistent with the color and symbol code of the American Petroleum Institute.”

BMP 10 Spill Prevention & Response

- Spill Prevention & Response (SPR) Plan
- Spill Prevention Control & Countermeasure (SPCC) Plan
- Assemble a spill response team
- Identify potential spill areas
- Develop procedures to clean-up spills & materials handling



BMP 11 Erosion and Sediment Control

- NYSDEC has issued a new General Permit (GP-0-10-001) covering discharges from construction sites which superseded the previous GP-0-08-001 which expired January 2010.
- Construction project that involves soil disturbance of one or more acres must follow the SPDES Permit “Special Conditions–Best Management Practices”, Item 4, Part B “Stormwater Pollution Prevention Plans (SWPPPs)” which requires the preparation and submittal of a Notice of Intent (NOI) and SWPPP.
- SWPPP must be prepared and implemented in conformance with the new NYSDEC SPDES GP-0-10-001.

BMP 12 Management of Runoff

- Implement BMP in the BMPP as a means of reducing discharge of pollutants to stormwater

BMP 13 Street Sweeping

- Sweeping can remove small quantities of solids exposed to stormwater
- Sweeping dust before rainfall minimizes contact with stormwater
- PANYNJ performs street sweeping on a routine basis in catch basin areas and reasonable efforts are made to repair eroded or cracked areas where contaminants from stormwater runoff could leach into the soil.



Regulatory
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Facility
Description

Potential
Pollutant
Sources

**Stormwater
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Activity Specific BMPs

1. Aircraft Deicing/Anti-icing
2. Aircraft, Vehicle, and Equipment Fueling
3. Aircraft, Vehicle, and Equipment Maintenance
4. Aircraft, Vehicle, and Equipment Washing
5. Building Cleaning and Maintenance
6. Chemical and Petroleum Storage and Handling
7. Elimination of Non-Stormwater Discharges to Storm Drains
8. Spills Management
9. Lavatory Service Operations
10. Oil/Water Separators
11. Outdoor Handling of Material
12. Outdoor Material and Equipment Storage
13. Waste Management
14. Fire Fighting Foam Discharge
15. Stormwater Pollution Prevention Education
16. Street Sweeping and Stormwater Facility Management
17. Security
18. Rubber Removal
19. Runway and Taxiway Anti-icing

■ BMP 1 Aircraft Deicing/Anti-icing

- Ethylene glycol is prohibited
- Apply only required amounts of deicing fluid
- Use range of glycol/water blends
- Upgrade existing truck fleet
- Use Radiant Deicing Facility
- Educate personnel about the use of deicing agents
- Record type and quantity of deicing material used and report monthly quantities to PANYNJ
- Report propylene glycol (ethylene glycol is prohibited) releases to appropriate regulatory agencies



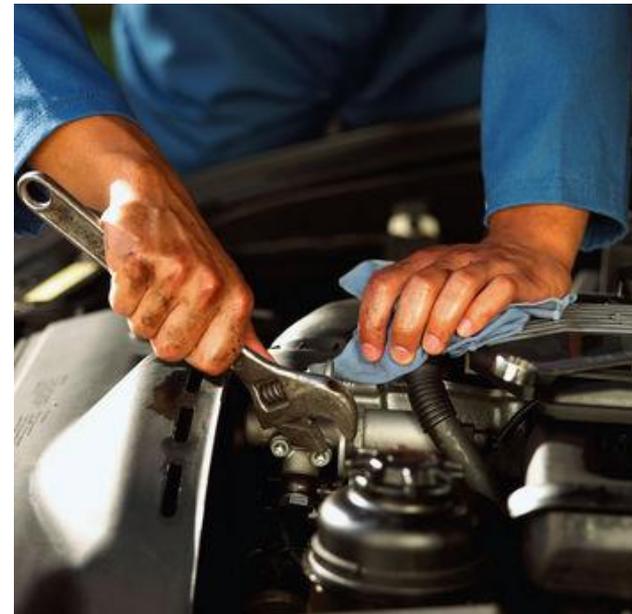
Ethylene glycol is strictly prohibited for use at JFK Airport.

All Tenants are required to document and submit monthly deicing/anti icing summary reports to Denise A. Branch at JFKEnvironmental@panynj.gov by the 15th of the month following deicing activities indicating the quantity of Propylene Glycol utilized at the specific facility.

- **BMP 2 Aircraft, Vehicle, and Equipment Fueling**
 - Install berms or curbing around fueling areas where feasible
 - Use absorbent materials and/or vacuum equipment for spills
 - Install proper equipment for fuel dispensing to prevent spills, leaks, and overflows
 - Install vapor recovery systems at fuel dispenser and tanks
 - Install canopies



- **BMP 3 Aircraft, Vehicle, and Equipment Maintenance**
 - Perform maintenance indoors, if possible
 - Cap floor drains in areas where maintenance occurs
 - Consider off-site maintenance by contractors
 - Initiate employee spill prevention and response training



- **BMP 4 Aircraft, Vehicle, and Equipment Washing**
 - Use dry washing techniques in designated areas
 - Recycle wash water or discharge appropriately
 - Reclaim/recover wash water
 - Cover catch basins



■ BMP 5 Building Cleaning and Maintenance

- Perform maintenance indoors, if possible
- Cap floor drains in maintenance areas
- Consider off-site maintenance by contractors
- Initiate employee spill prevention and response training



Pesticide/Herbicide Operational Considerations:

- Have pesticide product information available at facility; make information available to tenants and employees.
- Maintain a schedule for pesticide application and a record of pesticide usage.

■ BMP 6 Chemical and Petroleum Bulk Storage Handling

- Post PBS/CBS registration certificates at the facility at all times.
- Maintain legible labels on all containers and tanks and verify that petroleum tanks have symbols and colors that are consistent with the American Petroleum Institute Standards.
- Store all chemical and petroleum products in a covered area.
- Perform routine inspections and maintenance
- Inspect and repair equipment regularly
- Initiate employee spill prevention and response training
- Report spills to appropriate regulatory agencies

As per 6 NYCRR Part 612.2(e): Registration of Facilities, “The operator must display a registration certificate which is current and valid on the premises of the facility at all times.”

BMP 7 Elimination of Non-Stormwater Discharges to Storm Drains

- Non-stormwater discharges can be classified as follows: washwater, deicing fluids, petroleum or chemical spills, process wastewater, treated cooling water, and sanitary wastewater (through a pipe).
- Perform inspections and enforcement with regular corrective action measures
- Promote education of vendors, contractors, and the public
- Initiate employee training

***Stormwater
Runoff***

***...only rain water
belongs in the
storm water
drain...***

BMP 8 Spills Management

- All tenants and sub-tenants are responsible to report spills at their facilities
- Routine maintenance is an effective means to minimize small leaks and spills
- Develop and implement Spill Prevention Control & Countermeasure (SPCC) and Spill Prevention & Response (SRP) Plan and conduct training
- SPCC and SRP plans should be periodically reviewed and updated as physical changes are made to the facility (e.g. layout, number of tanks, types of processes).

BMP 9 Lavatory Service Operations

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



BMP 10 Oil/Water Separator

- Inspected and cleaned frequently of accumulated oil, grease, floating debris, and sediment
- Replace absorbent pads as needed
- Remove standing water during cleaning
- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur
- Perform and document in a log book all inspections and maintenance operations
- Develop a written operating, sampling, and reporting procedure under local storm water authority guidelines

BMP 11 Outdoor Handling of Material

- Conduct loading/unloading under cover
- Avoid transferring material in close proximity to drain inlets
- Use drip pans under hoses
- Contain and absorb leaks during transfers
- Consider contracting maintenance operations for material handling equipment.
- Designate an appropriate area for contractors to perform maintenance activities.
- Verify proper waste disposal practices for contractors.

BMP 12 Outdoor Material and Equipment Storage

- Store materials indoors or under cover
- Store drums/containers on pallets
- Provide berming or secondary containment
- Develop/implement SPCC, if required
- Discharge stormwater from secondary collection accordingly
- Properly label all containers and store in original containers
- Perform and document periodic inspections



As per 6 NYCRR Part 613.3(b): Color Coding of Fill Ports, "the owner or operator must permanently mark all fill ports to identify the product inside the tank consistent with the color and symbol code of the American Petroleum Institute."

BMP 13 Waste Management

- Streamline operations to minimize waste generation
- Provide sheltered waste storage and recycle
- Use licensed firms for waste carting and disposal
- Maintain records of waste generation and disposal
- Obtain appropriate registrations for hazardous waste generation
- Provide employee training in waste handling, storage, and disposal



BMP 14 Fire Fighting Foam Discharge

- Perform testing operations in designated areas
- Properly dispose or recycle foam discharge
- Discharge must be collected, drummed, and transported to an approved and permitting facility
- Service sump regularly
- Routinely clean and maintain collection vault as necessary



BMP 15 Stormwater Pollution Prevention Education

- Develop and implement a program to inform personnel at all levels
- Explain components and goals of activity specific BMPs
- Conduct regular training sessions and mandate participation

Port Authority of New York and New Jersey
John F. Kennedy International Airport

Stormwater Runoff

...only rain water belongs in the storm drain

Did You Know Stormwater Management?

Stormwater management is an integral part of JFK Airport environment. Port Authority personnel and tenants most common daily activities can have an unhealthy impact on New York's waterways. Every time it rains, everything we leave on the taxiway, runway, tarmac, parking lots, and roads wash through our catch basins and storm drains into our outfalls. Stormwater runoff is what the rain washes away. Stormwater runoff can pick up chemicals and potential pollutants of concern that flow in the storm sewer system through outfalls that directly discharge to Jamaica Bay, Thurston Bay, Head of Bay, and Bergen Basin. Anything that enters the stormwater system is an untreated discharge into waterbodies under the jurisdiction of New York State Department of Environmental Conservation (NYSDEC). The NYSDEC State Pollutant Discharge Elimination System (SPDES) Permit that JFK Airport must adhere to prohibits a discharge which contains a visible sheen, foam, or odor, or may cause or contribute to a violation of water quality or allows potential pollutants to enter the storm drains.

BMPs have been developed to prevent significant releases of pollutants to waters of the state.

For additional information contact
Ms. Denise A. Branch
Manager, Environmental Services
The Port Authority of NY & NJ
JFK International Airport
Building 14, 3rd Floor
Jamaica, NY 11430, 718-244-3568
dbranch@panynj.gov

or visit www.panynj.gov/airports/jfk-facts-info.html

BMP
THE PORT AUTHORITY OF NY&NJ

BMP 16 Street Sweeping and Stormwater Facility Maintenance

- Perform landside street sweeping daily from Spring – Fall
- Aeronautical areas and roadways swept once per week
- Perform street sweeping as necessary during winter months
- Sweep roadways at least three times per week
- Inspect/repair roadways and runways routinely
- Repair eroded sites



BMP 17 Security

- Prevent unauthorized access to secure areas at JFK Airport to prevent illicit discharges

BMP 18 Rubber Removal

- Perform regular runway/taxiway rubber removal from take-off and landings
- Collect residue during cleaning

BMP 19 Runway and Taxiway Anti-icing

- Urea is strictly prohibited
- Apply only required amounts of fluid and solid material
- Educate personnel about the proper use of pavement anti-icers and deicer agents
- Report propylene glycol (ethylene glycol is prohibited) releases to appropriate regulatory agencies



Regulatory Requirements

Facility Description

Potential Pollutant Sources

Stormwater Management Controls

Site Compliance Evaluation

Source Reduction

“To the maximum extent possible, all tenants are required to reduce, reuse, and recycle pollutants generated at JFK Airport.”

Aircraft Deicing/Anti-icing Operations

- Forced-Air Deicing Systems/Hot Air Blast Deicing
- Infra-Red Technology/Infra-Red Heaters
- Optimized Fluid Mixers
- Hybrid Deicing/Anti-icing Systems
- Irregular Operations Network ('IROPSnet')
- Physical/Mechanical Methods

Port Authority of New York and New Jersey
John F. Kennedy International Airport

Best Management Practices Plan
BMPP
Deicing/Anti-icing

Potential Pollution Sources and Pollutants of Concern

- Aircraft Deicing/Anti-icing
 - Propylene Glycols
 - Sodium Acetate
 - Potassium Acetate
- Runway and Taxiway Deicing/Anti-icing
 - Propylene Glycols
 - Sodium Acetate
 - Potassium Acetate

Activity Specific BMPs

BMP 1 Aircraft Deicing

- Ethylene glycol and urea are prohibited
- Apply only required amounts of fluid
- Use range of glycol/water blends
- Upgrade existing truck fleet
- Use Radiant Deicing Facility
- Educate personnel about the use of deicing agents
- Record type and quantity of deicing material used and report monthly quantities to PANYNJ

Source Reduction

Aircraft Deicing/Anti-icing Operations

- Forced-Air Deicing Systems/Hot Air Blast Deicing
- Infra-Red Technology/Infra-Red Heaters
- Optimized Fluid Mixers
- Hybrid Deicing Systems
- Irregular Operations Network ('IROPSnet')
- Physical/Mechanical Methods

To the maximum extent possible, all tenants are required to reduce, reuse, and recycle pollutants generated at JFK Airport.

For additional information contact: Mr. Dennis A. Smith, Manager, Environmental Services, The Port Authority of NY & NJ, JFK International Airport, Building 24, 2nd Floor, Jamaica, NY 11430, 718.244.2668, dsmith@panynj.gov

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Additional Plans from:

- Stormwater Pollution Prevention Plan (SWPPP) (40 CFR 122-124)
- Spill Prevention Control and Countermeasure (SPCC) Plan (40 CFR, Section 112); (*6 NYCRR Part 595-599*)
- Spill Prevention and Response (SPR) Plan (*6 NYCRR Part 595-599; 6 NYCRR Part 612-614*)
- Soil and Erosion Control (SESC) Plan
- Internal policies and procedures for environmental release reporting & response

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PANYNJ BMPP Implementation

‘Objective is to evaluate the effectiveness of the BMPP’

- **Comprehensive Site Compliance Evaluation Consists of:**
 - BMPP Training
 - Routine Facility Inspections
 - Environmental Infractions
 - Annual Facility Review and Site Inspection Report
 - BMPP Content Review

Regulatory Requirements

Facility Description

Potential Pollutant Sources

Stormwater Management Controls

Site Compliance Evaluation

General SPDES Permit NY 0008109 BMPP Compliance Calendar

Compliance Requirement	Compliance Timeframe
SPDES Permit No. 0008109	Effective 10/1/07 – 5/31/11
Final Best Management Practices Plan	Approved by NYSDEC on July 6, 2009
2009 BMPP Training	July 29, 2009 August 24, 2009 November 12, 2009
Conduct 2010 BMPP Training	August/September 2010

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Tenant BMPP Implementation

Consists of:

- Attend BMPP Training
- Conduct Routine Facility Inspections
- Corrective Action for Environmental Infractions
- Complete Reporting Forms
- Document Implementation of BMPP by the following actions:
 - Completion of Post-Training BMPP Exam
 - Sign-off on BMPP Receipt and Training Attendance
 - Documentation demonstrating additional staff not currently in attendance have been trained on the BMPP



Regulatory Requirements

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PANYNJ BMPP Reporting Requirements

Specific Reporting Forms	Frequency
Spill Reporting Form	Within one day of incident
Monthly Deicing/Anti-icing Inspection Forms	Monthly
BMP Implementation Inspection Form	Semi-annually and at least once during deicing season
Environmental Infraction and Corrective Action Form	When applicable
Lavatory Service Operations Inspection Form	Monthly
Vehicle Washing Operations Inspection Form	Monthly

Regulatory Requirements

Facility Description

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Site Compliance Evaluation

Tenant BMPP Reporting Requirements

Specific Reporting Forms	Frequency
Spill Reporting Form	Within one day of incident
Deicing/Anti-icing Reporting Form	By 15 th of the Month following deicing/anti-icing activities
BMP Implementation Inspection Form	Semi-annually and at least once during deicing/anti-icing season
Pollution Prevention Team Designation Form	Annually

Regulatory
RequirementsFacility
DescriptionPotential
Pollutant
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Compliance
Evaluation

PANYNJ Routine Facility Inspections

- Inspections are performed to adhere to specific BMPs identified in the BMPP
- Inspection Report will highlight areas of improvement and/or non-compliance
- **Facility Systems Inspected:**
 - material storage areas
 - in-plant transfer, process, and material handling areas
 - loading and unloading operations
 - storm water, erosion, and sediment control measures
 - process emergency systems, and sludge waste disposal areas
 - deicing and/or anti-icing materials storage and handling areas

Regulatory Requirements

Facility Description

Potential Pollutant Sources

Stormwater Management Controls

Site Compliance Evaluation

PANYNJ Routine Facility Inspections

Facility Component and System Inspection	Frequency of Inspections Generated by MMIS	BMP Implemented
Refueling Stations	Quarterly	2, 6, 11, 12
Fuel Hydrant Pits	Bi-Weekly	3, 7, 8, 11, 12
Catch Basins	Bi-Weekly	3, 7, 8, 11, 12, 14, 16
Outfalls	Daily	3, 7, 8, 11, 12, 14, 16
Wastewater Treatment Plants	Daily	13
Aboveground and Underground Storage Tanks	Monthly/Weekly	1, 2, 6, 11, 12
PBS Tanks	Weekly	2, 6, 11, 12
Erosion and Sediment Control	At least weekly or within 24 hours after a storm event of 0.5 inches or greater	7, 15

Regulatory Requirements

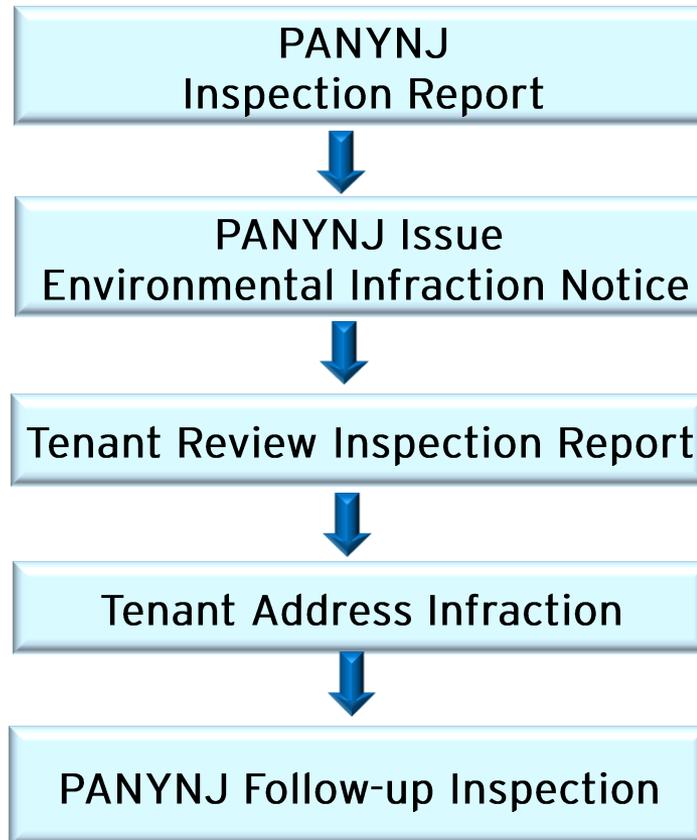
Facility Description

Potential Pollutant Sources

Stormwater Management Controls

Site Compliance Evaluation

Inspection Report – Environmental Infractions



Regulatory
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Corrective Action - Environmental Infractions

- **PANYNJ** issues an infraction via the Environmental Infraction Corrective Action Reporting Form when a regulatory offense or a violation of the JFK BMPP has occurred during an inspection
- **Tenant** must address all infractions issued at their respective facilities prior to PANYNJ re-inspection
- **PANYNJ** to perform a follow-up inspection to identify if the environmental infraction has been corrected
- **Tenant** may be required to submit formal documentation to the PANYNJ verifying that corrective action has been taken
- **PANYNJ** may issue a formal report to NYSDEC Police for enforcement if appropriate corrective action has not been taken

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Annual Facility Review & Site Inspection Report

- Evaluates the effectiveness of the BMPP
- Documents Results of Inspections & Reporting
- Reporting forms developed to adequately document all inspections and gather tenant information for annual reporting include the following:
 - Spill Reporting
 - Deicing/Anti-icing Reporting/Monthly Deicing/Anti-icing Inspection
 - BMPP Implementation
 - Environmental Infraction Corrective Action
 - Lavatory Service Operations Inspection
 - Vehicle Washing Operations Inspection
 - Pollution Prevention Team Member Designation Form

PANYNJ Website

PANYNJ – JFK Airport BMPP Plan and Forms are available at:

<http://www.panynj.gov/airports/jfk-facts-info.html>

The following information is available on the PANYNJ Website

- [JFK Stormwater Best Management Practices Plan](#)
- [Deicing/Anti-icing Reporting Form](#)
- [BMPP Implementation Inspection Form](#)
- [Spill Reporting Form](#)
- [Environmental Infraction Corrective Action Inspection Form](#)
- [Pollution Prevention Team Member Designation Form](#)

Tenant Submissions to PANYNJ

All tenants are required to complete the following:

- [Deicing/Anti-icing Reporting Form](#)
- [BMPP Implementation Inspection Form](#)
- [Spill Reporting Form](#)
- [Environmental Infraction Corrective Action Inspection Form](#)
- [Pollution Prevention Team Member Designation Form](#)
- [BMPP Staff Training Documentation](#)

Please send completed forms the

JFK Environmental Email at:

JFKEnvironmental@panynj.gov

Federal & State Links

- USEPA *Storm Water Management for Industrial Activities, EPA 832-R-92-006*

- www.nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=20000469L.txt

- USEPA – Storm Water

www.epa.gov/ebtpages/watestormwater.html



- NYSDEC – Division of Water SPDES Program

www.dec.ny.gov/permits/6054.html



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Questions?

Please pick up a copy of the JFK BMPP Training Assessment and sign the BMPP Training Sign-In Sheet