

Town of Islip

# Best Management Practices Plan

**Long Island MacArthur Airport (ISP)  
Ronkonkoma, NY 11779**

January 2023

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# Contents

- 1 Introduction..... 1**
- 1.1 Regulatory Background ..... 1**
- 1.1.1 Federal Requirement ..... 1
- 1.1.2 State Requirement ..... 2
- 1.2 SPDES Permit NY 0173703 ..... 2**
- 1.3 SPDES Special Conditions - Best Management Practices ..... 3**
- 1.3.1 Special Condition – Number 1 General ..... 4
- 1.3.2 Special Condition – Number 2 Compliance Deadlines ..... 5
- 1.3.3 Special Condition – Number 3 Facility Review ..... 5
- 1.3.4 Special Condition – Number 4 13 Minimum BMPs..... 6
- 1.3.5 Special Condition – Number 5 Facilities with Petroleum and/or Chemical Bulk Storage (PBS and CBS) Areas ..... 6
- 1.3.5.1 Spill Cleanup .....6
- 1.3.5.2 Discharge Operation .....6
- 1.3.5.3 Discharge Screening .....7
- 1.3.5.4 Discharge Monitoring.....7
- 1.3.5.4.1 Bulk Storage Secondary Containment Systems: .....7
- 1.3.5.4.2 Transfer Area Secondary Containment Systems: .....7
- 1.3.6 Special Condition – Number 5 SWPPP for Construction Activity ..... 7
- 1.3.7 Special Condition – Number 6 Airports Additional Requirements for BMPP ..... 8
- 1.3.7.1 Special Condition – Number 6.A.i Site Map .....8
- 1.3.7.2 Special Condition – Number 6.A.ii Summary of Potential Pollutant Sources .....8
- 1.3.7.3 Special Condition – Number 6.B.i Good Housekeeping .....8
- 1.3.7.4 Special Condition – Number 6.B.ii Source Reduction .....8
- 1.3.7.5 Special Condition – Number 6.B.iii Management of Runoff.....9
- 1.3.7.6 Special Condition – Number 6.B.iv Routine Facility Inspections .....9
- 1.3.7.7 Special Condition – Number 6.B.v Comprehensive Site Compliance Evaluation .....9
- 2 Airport Description ..... 10**
- 2.1 General..... 10
- 2.2 Land Use..... 10
- 2.3 Drainage System..... 11
- 2.3.1 Drainage Area A..... 11

- 2.3.2 Drainage Area B ..... 12
- 2.3.3 Drainage Area C ..... 12
- 2.3.4 Drainage Area D ..... 12
- 2.3.5 Drainage Area E ..... 12
- 2.3.6 Drainage Area F ..... 13
- 2.4 Historical Stormwater Monitoring ..... 13
- 2.5 Tenants and Target Industrial Activities ..... 13
- 3 Identification of Potential Pollution Sources ..... 14
  - 3.1 Non-Stormwater Discharges ..... 14
  - 3.2 Activity Specific Potential Pollution Sources ..... 14
    - 3.2.1 Aircraft, Vehicle, and Equipment Maintenance ..... 15
    - 3.2.2 Aircraft, Vehicle, and Equipment Fueling ..... 15
    - 3.2.3 Aircraft, Vehicle, and Equipment Washing ..... 15
    - 3.2.4 Aircraft Sanitary/Lavatory Service ..... 16
    - 3.2.5 Aircraft Deicing/Anti-Icing ..... 16
    - 3.2.6 Runway and Taxiway Deicing/Anti-Icing ..... 17
    - 3.2.7 Fuel Storage ..... 18
    - 3.2.8 Chemical Storage ..... 19
    - 3.2.9 Building and Grounds Maintenance ..... 19
    - 3.2.10 Outdoor Storage Activities ..... 19
  - 3.3 Summary of Pollutant Contact with Stormwater Potential ..... 20
  - 3.4 Potential Pollution Sources and Pollutants of Concern ..... 21
  - 3.5 Hard-Piped Non-Stormwater Discharge Identification ..... 22
  - 3.6 Runoff and Erosion Management ..... 22
  - 3.7 Spill Reporting and Leaks ..... 22
  - 3.8 Stormwater Monitoring and Sampling ..... 22
- 4 Storm Water Management Controls ..... 24
  - 4.1 General ..... 24
  - 4.2 Good Housekeeping Practices ..... 25
  - 4.3 Minimum Best Management Practices ..... 25
    - 4.3.1 Pollution Prevention Team ..... 25
    - 4.3.2 Reporting of BMP Incidents ..... 26
    - 4.3.3 Risk Identification & Assessment ..... 26

4.3.4	Employee Training.....	26
4.3.5	Inspections and Records .....	27
4.3.6	Security .....	27
4.3.7	Preventative Maintenance.....	27
4.3.8	Good Housekeeping .....	27
4.3.9	Materials/Waste Handling, Storage, and Compatibility .....	28
4.3.10	Spill Prevention and Response .....	28
4.3.11	Erosion and Sediment Control .....	28
4.3.12	Management of Runoff .....	28
4.3.13	Street Sweeping .....	28
4.4	Activity Specific BMPs .....	28
4.5	Source Reduction .....	29
4.5.1	Runway Deicing Operations .....	29
4.5.2	Aircraft Deicing/Anti-icing Operations .....	29
4.5.2.1	Forced-Air Deicing Systems/Cold Air Blast Deicing.....	29
4.5.2.2	Optimized Fluid Mixtures .....	29
4.5.2.3	Hybrid Deicing Systems.....	30
4.6	Management of Runoff.....	30
5	Comprehensive Site Compliance Evaluation .....	32
5.1	BMP Implementation Program .....	32
5.1.1	Site Inspection Report.....	32
5.1.1.1	Monthly and Quarterly Outfall Monitoring .....	32
5.1.1.2	Monthly Deicing/Anti-Icing Season Facility Inspections .....	33
5.1.1.3	BMPP Implementation Inspections.....	33
5.1.2	Discharge and Spill Reporting .....	33
5.1.3	BMPP Content Review .....	33
5.1.4	Comprehensive Site Compliance Evaluation .....	34

## Tables

Table 1. Stormwater Drainage Areas.....	11
Table 1. Airport Pollution Prevention Team.....	26

## Figures

<b>Figure 1. Airport Location Map .....</b>	<b>B</b>
<b>Figure 2. Existing Airport Layout Plan .....</b>	<b>B</b>
<b>Figure 3. Drainage Areas .....</b>	<b>B</b>
<b>Figure 4. Glycol Pretreatment System.....</b>	<b>B</b>

## Appendices

Appendix A.	SPDES Permit for ISP
Appendix B.	Location and Site Maps
Appendix C.	Potential Target Industrial Activities
Appendix D.	Best Management Practices
Appendix E.	Annual Site Compliance Evaluation

## Acronyms

AD	Aircraft Deicing/Anti-icing
AF	Aircraft Fueling
AM	Aircraft Maintenance
ANG	Air National Guard
AS	Aircraft Sanitary Service
AST	Aboveground Storage Tanks
BFF	Bulk Fuel Farm
BGM	Building and Grounds Maintenance
BMP	Best Management Practices
BMPP	Best Management Practices Plan
CBS	Chemical Bulk Storage
CS	Chemical Storage
CWA	Clean Water Act
DMR	Discharge Monitoring Report
EF	Equipment Fueling

## Best Management Practices Plan

ELG	effluent limitation guidelines
EM	Equipment Maintenance
FAA	Federal Aviation Administration
FBO	fixed base operators
FFF	firefighting foam
FH	Food Handling and Operations
FS	Fuel Storage
FT	Firefighting Foam Testing
gpm	gallons per minute
ISP	Long Island MacArthur Airport
MSDS	Material Safety Data Sheets
NPDES	National Pollutant Discharge Elimination System
NSPS	new source performance standards
NYSDEC	New York State Department of Environmental Conservation
PBS	Petroleum Bulk Storage
PH	petroleum hydrocarbons
POTW	Publicly Owned Treatment Works
R-TD	Runway and Taxiway Deicing/Anti-icing
RCP	Reinforced Concrete Pipe
SCDHS	Suffolk County Department of Health Services
SIC	standard industrial classification
SPCC	Spill Prevention, Control, and Countermeasure
SPDES	State Pollutant Discharge Elimination System
SRP	Spill Prevention Response
TOI	Town of Islip
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VF	Vehicles Fueling
VM	Vehicle Maintenance

# 1 Introduction

This guidance document represents the operational Best Management Practices Plan (BMPP) for the Long Island MacArthur Airport (ISP). It has been compiled to facilitate ISP compliance with the requirements of the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) program. This BMPP is intended for use by Town of Islip (TOI) Department of Transportation and Aviation and ISP tenants to provide consistent and effective management of stormwater runoff quality. The BMPP presents a description of the facility and a discussion of potential pollutant sources resulting from practices and activities at the airport. This BMPP also identifies existing stormwater management controls and Best Management Practices (BMPs) at the airport and identifies BMPs that reduce or eliminate pollutants entering the stormwater drainage system.

Tenants shall employ all practicable BMPs and always comply with applicable local, state, and federal regulations and conform to the ISP Rules and Regulations as well as the requirements of all applicable agreements pertaining to contractor, occupant, and tenant activities.

ISP currently holds an individual industrial SPDES Permit (Permit No. NY 0173703). The BMPP was prepared as a guidance document for airport tenants and ISP employees to adhere to the ISP's individual SPDES Permit. A copy of the individual SPDES Permit is included in **Appendix A**.

## 1.1 Regulatory Background

This section presents an overview of the regulatory history of the stormwater pollution control program at the federal and state levels.

### 1.1.1 Federal Requirement

The Federal Aviation Administration (FAA) imposed more stringent requirements on deicing activities to increase the margin of safety for aircraft operating during snow and ice conditions. These new protocols are grounded in the “clean aircraft concept”, which requires that aircraft surfaces must be free of snow and ice before departure and imposes time limits (holdover time) between the application of deicing fluids and aircraft departure. These revised FAA protocols (FAA, 1992) have increased the quantities of deicing fluids used by U.S. airlines and airports. This increase in deicing activity, along with increased air traffic, has resulted in greater quantities of deicing fluid being entrained in airport runoff. Consequently, each year large quantities of propylene glycol-based aircraft deicing fluids are used to de-ice aircraft.

In 1972, the Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), was enacted to require that the discharge of pollutants to waters of the United States from any point source be covered by a National Pollutant Discharge Elimination System (NPDES) permit. In 1987, amendments to the CWA added Section 402(p), establishing a framework for regulating municipal and industrial discharges of stormwater under the NPDES program. The NPDES program is administered by the United States Environmental Protection Agency (USEPA).

The NPDES regulations require operators of specific types of industrial activities to discharge stormwater to obtain NPDES permits. Stormwater associated with industrial activities is defined as stormwater runoff that exits any conveyance that is used for collecting and conveying stormwater that is directly related to manufacturing,

processing, material storage, and waste material disposal areas and similar areas where stormwater can contact industrial pollutants related to the industrial activity at an industrial facility. The airport's standard industrial classification (SIC) code of 4581 was included as a regulated industry and therefore is required to obtain NPDES permits.

The USEPA under 40 CFR Part 449 proposed a new rule on August 28, 2009, titled "Effluent Limitation Guidelines and New Source Performance Standards for the Airport Deicing Category." The comment period closed on February 26, 2010. The USEPA promulgated the Airport Deicing Effluent Guidelines on May 16, 2012. The USEPA requires technology based effluent limitation guidelines (ELGs) and new source performance standards (NSPS) under the CWA for discharges from airport deicing operations. The requirements generally apply to wastewater associated with the deicing of aircraft and airfield pavement at primary commercial airports that have 1,000 or more non-propeller aircraft departures, and 10,000 or more total annual departures. Airports qualifying under this rule are required to collect at least 60 percent of spent aircraft deicing fluid and treat the wastewater. Airports must meet the numeric discharge requirements for Chemical Oxygen Demand (daily maximum of 271 mg/L and weekly average of 154 mg/L) and Ammonia as Nitrogen (daily maximum of 14.7 mg/L) at the location where the effluent leaves the onsite treatment system. They may either treat the wastewater on-site or send it to an off-site treatment contractor or Publicly Owned Treatment Works (POTW). The ELGs are incorporated into the NPDES permits issued by USEPA, states, or tribes.

### 1.1.2 State Requirement

The federal regulations also allow states to implement the NPDES program and issue NPDES permits to regulate stormwater discharges associated with industrial activities. The NYSDEC has been delegated authority by the USEPA to implement the NPDES program under the SPDES program.

## 1.2 SPDES Permit NY 0173703

NYSDEC issued ISP an Individual Stormwater Permit (SPDES No.: NY0173703)/ DEC Number 1-4728-00783/00003 with a Permit Effective Date on September 1, 2018, and Permit Expiration Date of August 31, 2028. The SPDES Permit authorizes discharge covers discharges from stormwater associated with ISP industrial activities to groundwater.

### Outfall Monitoring

NYSDEC issued the SPDES Permit that authorizes stormwater discharge from the airport and requires the monitoring of Outfall Numbers 001 and 002. The monitoring (sampling/analysis) of these outfalls will be conducted by ISP. The outfalls will be monitored for parameters of interest based on the anticipated discharges from various activities at the airport.

Outfall 001 includes stormwater from tank farm area and discharges to groundwater. Outfall 002 includes stormwater from ramp area and discharges to groundwater. Outfalls 001 and 002 require monitoring of pH, oil and grease, benzene, toluene, xylene, and ethylbenzene. Outfall 002 also requires monitoring of total nitrogen, total phosphorus, and propylene glycol for propylene glycols associated with the airlines' deicing activities. **See Figure 1 in Attachment B for the locations of Outfalls 001 and 002.**

### TOI and Tenant Responsibility

The NYSDEC issued the SPDES Permit to the TOI as the owner and operator of the ISP. Compliance with the SPDES Permit requires monitoring of Outfalls 001 and 002 such that there are minimal impacts to stormwater from airport activities. Tenants and/or other entities that perform activities that can contribute to pollutant sources resulting from practices and activities at the airport and apply or otherwise use deicing and/or anti-icing materials at the airport shall be required to comply with the SPDES Permit.

### BMPP Implementation

This BMPP, as required by the SPDES Permit will discuss the current activities performed at the airport and provide guidance BMPs developed for areas occupied by tenants of the airport to help minimize activity-based impacts to stormwater. Tenants and/or other entities that apply or otherwise use deicing and/or anti-icing materials at the airport shall participate/review/adhere in the development of the BMPP.

### SPDES Compliance

In addition to stormwater discharge monitoring, the Individual SPDES Permit requires the ISP to track and report any anticipated (e.g., planned releases) or unanticipated (e.g., spills or leaks) non-compliance with the SPDES Permit. The Individual SPDES Permit requires that any non-compliance with permit conditions be reported to NYSDEC. Anticipated non-compliance is defined as any planned releases and unanticipated non-compliance events include unanticipated bypass, any upset which violates any effluent limitation in the permit, violation of maximum daily discharge limitation, and spills or leaks. Reports for anticipated non-compliance should be filed with NYSDEC prior to the discharge.

## 1.3 SPDES Special Conditions - Best Management Practices

The activities conducted at ISP involve multiple tenants performing many varied tasks associated with routine airport operations. Examples of the activities performed at the airport with the potential to cause pollution of stormwater discharges include but are not limited to aircraft, vehicle and equipment fueling and maintenance, building and grounds maintenance, chemical and fuel storage, and deicing/anti-icing of aircraft, taxiways, and runways, vehicle/equipment washing, and lavatory service operations.

ISP has developed a comprehensive approach to managing stormwater discharges associated with activities at the airport, including identifying potential pollutants through conducting of routine facility inspections, distribution of compliance performance forms, and development of plans and specific best management practices to minimize and/or reduce potential pollutant discharges to groundwater.

Permit Conditions and Special Permit Conditions from Permit Effective Date on September 1, 2008, Permit Effective Date on September 1, 2013, and Permit Effective Date on September 1, 2018, are included and reference to BMP and BMPP section are noted below to ensure compliance during the terms of the SPDES Permit. Most recent Special Conditions are noted and where appropriate Special Conditions from previous permit is noted herein.

### 1.3.1 Special Condition – Number 1 General

Special Condition – BMPP, Page 4 of 9 of the SPDES Permit requires ISP to develop, maintain, and implement a BMPP to prevent releases of significant amounts of pollutants, including deicing/anti-icing chemicals, to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage. The BMPP shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan or Spill Prevention and Response (SPR) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMPP shall be submitted to the NYSDEC as required in Special Condition 2 and a copy must be maintained at the facility and shall be available to authorized NYSDEC representatives upon request. The BMPs applicable to each area of the facility occupied by a particular tenant shall be consistent with an overall BMPP for the entire airport. The permittee shall maintain, update, and assure the proper implementation of the overall BMPP.

In accordance with Special Condition– Best Management Practices Number 1, TOI compiled this BMPP for ISP. The BMPP is intended for use by ISP and tenants to provide consistent and effective management of storm water runoff quality. The BMPP presents a description of the various facilities at ISP and a discussion of potential pollutant sources resulting from practices and activities at ISP. The BMPP also identifies existing storm water management controls and BMPs at the various facilities at ISP and identifies BMPs that reduce or eliminate pollutants entering the stormwater drainage system. The ISP BMPP identifies 15 BMPs to eliminate or reduce pollutants in storm water runoff:

- BMP 1: Aircraft Deicing
- BMP 2: Aircraft, Vehicle, and Equipment Fueling
- BMP 3: Aircraft, Vehicle, and Equipment Maintenance
- BMP 4: Aircraft, Vehicle and Equipment Washing, Steam Cleaning and Degreasing
- BMP 5: Building Cleaning and Maintenance
- BMP 6: Chemical and Petroleum Storage and Handling
- BMP 7: Elimination of Non-Storm water Discharges to Storm Drains
- BMP 8: Spills Management
- BMP 9: Oil/Water Separators
- BMP 10: Outdoor Handling of Material
- BMP 11: Outdoor Material and Equipment Storage
- BMP 12: Waste Management
- BMP 13: Stormwater Pollution Prevention Education
- BMP 14: Pavement Sweeping & Stormwater Facility Maintenance
- BMP 15: Security

The ISP BMPP has been provided to the tenants for review and implementation. TOI has reviewed facility components and systems to confirm industrial activities conducted at each of the tenant facilities. In addition, the TOI has conducted site visits and inspections to clarify facility components and systems, confirm the routine operations of some of the tenants, and confirm ongoing operations and the current use of BMPs by some of the tenants.

### **1.3.2 Special Condition – Number 2 Compliance Deadlines**

Special Condition – BMPP, Page 4 of 9 of the SPDES requires ISP to implement and maintain a BMPP. The BMPP shall be reviewed annually and shall be modified whenever (a) changes at the facility materially increase the potential for release of pollutants' (b) actual release indicate the plan is inadequate; or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the Discharge Monitoring Report (DMR), that the annual review has been completed.

In accordance with Special Condition – Number 2, ISP prepared an Annual Site Compliance Evaluation in Fall 2022 and an updated BMPP in Winter 2023. A copy of the current BMPP was submitted to the NYSDEC as required in Special Condition 2 and a copy will be maintained at the facility and shall be available to authorized NYSDEC representatives upon request.

### **1.3.3 Special Condition – Number 3 Facility Review**

Special Condition – Best Management Practices Number 3 on Page 4 of 9 of the SPDES Permit requires “the permittee to review and inspect all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where material or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. Tenants and/or other entities who apply or otherwise use deicing and/or anti-icing materials at the facility shall participate in this facility review and inspection. Tenants and/or other entities who apply or otherwise use deicing and/or anti-icing materials shall also provide all necessary information to the permittee for the permittee to complete its evaluation. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility’s history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases. The review and inspection shall evaluate whether measures to reduce pollutant loadings identified in the BMPP are adequate and properly implemented in accordance with the terms of this permit or whether additional control measures are needed.”

In accordance with Special Condition – Number 3, ISP prepared an Annual Site Compliance Evaluation in Fall 2022 for all ISP entities and tenants at ISP. The Annual Site Compliance Evaluation consisted of inspections and review of all ISP and tenant facility components and systems including; fueling stations, waste storage areas, above ground and underground storage tanks (e.g. petroleum, glycol and chemical storage), spills management and oil/water separators, loading areas, material handling area, deicing/anti-icing; which have the potential to discharge to one or more of the ISP outfalls listed in the SPDES Permit, covering six (6) drainage areas and evaluation of overall effectiveness of the BMPP.

The Annual Site Compliance Evaluation provides a basis for evaluating the overall effectiveness of the BMPP and measuring the BMPP performance. The Annual Site Compliance Evaluation also documents the date, time, inspection methodology, inspectors, BMP conformance evaluation results, and the overall effectiveness of the BMPP. Any proposed modifications to the inspection procedures and approach for BMP implementation will also be included with this report.

### 1.3.4 Special Condition – Number 4 13 Minimum BMPs

Special Condition – Best Special Condition – Best Management Practices, Number 4 on Page 4 of 9 of the SPDES Permit requires development of 13 minimum BMPs to prevent or minimize the potential release of pollutants to the waters of the State. **Section 4** of the ISP BMPP discusses the 13 minimum BMPs, including two (2) additional BMPs, that were developed using the September 1992 manual for *Storm Water Management for Industrial Activities*, EPA 832-R-92-006 as reference. Activity specific BMPs that are applicable to ISP activities are provided in **Appendix D**.

### 1.3.5 Special Condition – Number 5 Facilities with Petroleum and/or Chemical Bulk Storage (PBS and CBS) Areas

Special Condition – Best Management Practices, Number 5 on Page 4 of 13 of the SPDES Permit (Permit Effective Date 2013) requires that facilities with petroleum and/or chemical bulk storage areas must comply with all applicable regulations including those involving releases, registration, handling, and storage of petroleum and/or chemicals; stormwater discharges from handling and storage areas should be eliminated where practical. Tenants that store petroleum and hazardous chemicals must comply with all applicable regulations and prepare and maintain a Spill Prevention Control and Counter measure (SPCC) Plan and Spill Prevention and Response (SPR) Plan. ISP obtained tenant SPCCs and SPRs and incorporated information contained in those plans during the development of the BMPP

In accordance with Special Condition Number 5, Compliance must be maintained with all applicable regulations including those involving releases, registration, handling, and storage (6NYCRR 595-599 and 612-614). Stormwater discharges from handling and storage areas should be eliminated where practical.

#### 1.3.5.1 Spill Cleanup

All spilled or leaked substances must be removed from secondary containment systems as soon as practical and for CBS storage areas within 24 hours, unless written authorization is received from the Department. The containment system must be thoroughly cleaned to remove any residual contamination which could cause contamination of stormwater and the resulting discharge of pollutants to waters of the State. Following spill cleanup, the affected area must be completely flushed with clean water three times and the water removed after each flushing for proper disposal in an on-site or off-site wastewater treatment plant designed to treat such water and permitted to discharge such wastewater. Alternately, the permittee may test the first batch of stormwater following the spill cleanup to determine discharge acceptability. If the water contains no pollutants, it may be discharged. Otherwise, it must be disposed of as noted above. See Discharge Monitoring below for the list of parameters to be sampled for.

#### 1.3.5.2 Discharge Operation

Stormwater must be removed before it compromises the required containment system capacity. Each discharge may only proceed with the prior approval of the permittee staff person responsible for ensuring SPDES permit compliance. Bulk storage secondary containment drainage systems must be locked in a closed position except when the operator is in the process of draining accumulated stormwater. Transfer area secondary containment drainage systems must be locked in a closed position during all transfers and must not be reopened unless the transfer area is clean of contaminants. Stormwater discharges from secondary containment systems should be

avoided during periods of precipitation. A logbook shall be maintained on site noting the date, time and personnel supervising each discharge.

### **1.3.5.3 Discharge Screening**

Prior to each discharge from a secondary containment system the stormwater must be screened for contamination\*. All stormwaters must be inspected for visible evidence of contamination. Additional screening methods shall be developed by the permittee as part of the overall BMP Plan, e.g., the use of volatile gas meters to detect the presence of gross levels of gasoline or volatile organic compounds. If the screening indicates contamination, the permittee must collect and analyze a representative samples' of the stormwater. If the water contains no pollutants, it may be discharged. Otherwise, it must either be disposed of in an on-site or off-site wastewater treatment plant designed to treat and permitted to discharge such wastewater or the Regional Water Engineer can be contacted to determine if it may be discharged without treatment.

### **1.3.5.4 Discharge Monitoring**

Unless the discharge from any bulk storage containment system outlet is identified in the SPDES permit as an outfall with explicit effluent and monitoring requirements, the permittee shall monitor the outlet as follows:

#### **1.3.5.4.1 Bulk Storage Secondary Containment Systems:**

(a) The volume of each discharge from each outlet must be monitored. Discharge volume may be calculated by measuring the depth of water within the containment area times the wetted area converted to gallons or by other suitable methods. A representative sample shall be collected of the first discharge' following any cleaned-up spill or leak. The sample must be analyzed for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present.

(b) Every fourth discharge\* from each outlet must be sampled for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present\*\*.

#### **1.3.5.4.2 Transfer Area Secondary Containment Systems:**

The first discharge' following any spill or leak must be sampled for flow, pH, the substance(s) transferred in that area and any other pollutants the permittee knows or has reason to believe are present\*\*.

## **1.3.6 Special Condition – Number 5 SWPPP for Construction Activity**

Special Condition – Best Management Practices, Number 4 on Page 5 of 9 of the SPDES Permit requires development of a Stormwater Pollution Prevention Plan (SWPPP) prior to the initiation of any site disturbance of one (1) acre or more of uncontaminated areas. The NYSDEC has prepared a new SPDES General Permit (GP-0-20-001) for Stormwater Discharges from Construction Activity. The GP-0-20-001 for Stormwater Discharges from Construction Activity became effective on January 29, 2020 and will expire on January 28, 2025.

Stormwater at MacArthur Airport is conveyed to catch basins that discharge to groundwater. According to SPDES General Permit (GP-0-20-001) a SWPPP is not required for discharges of stormwater from construction activity to groundwaters.

## **1.3.7 Special Condition – Number 6 Airports Additional Requirements for BMPP**

### **1.3.7.1 Special Condition – Number 6.A.i Site Map**

Special Condition – Best Management Practices, Number 6.A.i on Page 5 of 9 of the SPDES Permit requires a site map that will identify where any of the following activities may be exposed to precipitation/surface runoff: aircraft and runway deicing/anti-icing operations; fueling stations; aircraft, ground vehicle, and equipment maintenance/cleaning areas; and storage areas for aircraft, ground vehicles and equipment awaiting maintenance.

In accordance with Special Condition – Number 6.A.i., ISP prepared a site map identifying these activities which is provided in Appendix B. Section 3 identifies and describes all activities at ISP.

### **1.3.7.2 Special Condition – Number 6.A.ii Summary of Potential Pollutant Sources**

Special Condition – Best Management Practices, Number 6.A.ii on Page 5 of 9 of the SPDES Permit requires a narrative description of the potential pollutants sources from the following activities: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing/anti-icing operations (including apron and centralized aircraft deicing/anti-icing stations, runways, taxiways, and ramps). Facilities which conduct deicing/anti-icing operations shall maintain a record of the types (including the Material Safety Data Sheets (MSDS)) and monthly quantities of deicing/anti-icing chemicals used, either as measures amounts, or in the absence of metering, as estimated amounts. This includes all deicing/anti-icing chemicals. Tenants and fixed-base operators who conduct deicing/anti-icing operations provide the above information to ISP which is included in the ISP BMPP.

In accordance with Special Condition Number 6.A.ii, Tenants provide ISP with monthly quantities of deicing/anti-icing chemicals used, the number of aircraft deiced during the event, and the date of deicing and/or anti-icing, in addition, tenants maintain MSDS sheets. These forms also gather information about the use of BMPs by tenants during the application of deicing/anti-icing materials.

Section 3 identifies and describes all activities and potential pollution sources of stormwater pollution at ISP.

### **1.3.7.3 Special Condition – Number 6.B.i Good Housekeeping**

Special Condition – Best Management Practices, Number 6.B.i on Page 6 of 9 of the SPDES Permit requires a description and practices measures that prevent or minimize the contamination of stormwater runoff from various airport activities.

Section 4 discusses recommended BMPs that are applicable to ISP activities.

### **1.3.7.4 Special Condition – Number 6.B.ii Source Reduction**

Special Condition – Best Management Practices, Number 6.B.ii on Page 6 of 9 of the SPDES Permit suggests alternatives to the use of glycol-based deicing/anti-icing chemical.

Section 4 discusses some alternatives to the use of glycol-based deicing/anti-icing chemical that are practiced that can reduce the aggregate amount of deicing/anti-icing chemicals used and/or lessen the environmental impact.

### **1.3.7.5 Special Condition – Number 6.B.iii Management of Runoff**

Special Condition – Best Management Practices, Number 6.B.iii on Page 7 of 9 of the SPDES Permit indicates that ISP shall describe and implement a program to control to manage contaminated runoff to reduce the amount of pollutants being discharges from ISP. The stormwater management program shall describe the primary issues that are currently driving decisions regarding the types of deicing runoff for collection systems, recovery systems, and conveyance systems.

Section 4 discusses stormwater management to control and manage contaminated runoff to reduce the amount of pollutants being discharged from ISP.

### **1.3.7.6 Special Condition – Number 6.B.iv Routine Facility Inspections**

Special Condition – Best Management Practices, Number 6.B.iv on Page 7 of 9 of the SPDES Permit indicates that routine facility inspections shall be specified in the ISP BMPP.

In accordance with Special Condition Number 6.B.iv, ISP prepared an Annual Site Compliance Evaluation in Fall 2022 to track and monitor BMPP effectiveness.

Sections 4 and 5 discuss the routine inspections conducted at the facility, inspection forms, a recommended schedule, a list of the pollution prevention team personnel, employee training requirements, facility inspection protocol, monitoring requirements, recordkeeping, and reporting procedures, BMPP updates, and comprehensive site compliance evaluation.

### **1.3.7.7 Special Condition – Number 6.B.v Comprehensive Site Compliance Evaluation**

Special Condition – Best Management Practices, Number 6.B.v on Page 7 of 9 of the SPDES Permit indicates that an annual site compliance evaluation shall be conducted by qualified facility personnel during periods of actual deicing operations, if possible.

In accordance with Special Condition Number 6.B.v, ISP completed the Annual Site Compliance Evaluation in Fall 2022.

Section 5 discusses the facility inspection protocol and comprehensive site compliance evaluation that is conducted on an annual basis.

## 2 Airport Description

This section describes the location of ISP, current airport land uses, and the airport stormwater drainage system. In addition, a comprehensive list of the facilities and tenant activities has been included.

### 2.1 General

Long Island MacArthur Airport is at 100 Arrival Avenue Ronkonkoma, Suffolk County, NY 11779. The Town of Islip Department of Transportation and Aviation owns and operates the ISP. The airport is bound on the south by Route 454, Veteran's Highway, on the west by Smithtown Avenue, on the north by Railroad Avenue and on the east side by Lincoln Avenue as shown on **Figure 1 in Appendix B**.

The airport covers approximately 1,311 acres with a total of 65 facilities and 31 tenants. The airport incorporates three (3) runways, fourteen (14) taxiways, aircraft ramps, a main terminal building, parking lots, bulk fuel facilities and numerous individual buildings and aircraft hangars. The airport is serviced by several major air carriers and is also an active general aviation and corporate aviation facility serving the Long Island area. Typically, the airport operates 24 hours per day, seven (7) days per week and has a staff of 85 TOI employees.

The airport Standard Industrial Code (SIC) is 4582, "Air Transportation".

The TOI owns the following buildings at ISP:

1. Main Terminal and Baggage Area (Building #1)
2. Two vehicle maintenance facilities (Buildings #11 & #12).
3. Airport Fire and Rescue (Building # 5)
4. Bulk Fuel Farm (Building #21)
5. Whitney Hangar (Building # 20)
6. Aero Trades Hangar (Building # 53)
7. Security Outpost (Building # 66)
8. Town Hazmat Office (Building # 15)
9. Compost facility (Buildings #57, #58 & #59, which are excluded from this BMPP)

Major airport tenants currently include the FAA, Southwest Airlines, and Frontier Airlines, Breeze Airways plus fixed base operators (FBOs) who under license to ISP provide hangar, maintenance and fueling service to general aviation and corporate aircraft. In addition, there are several corporate hangars and miscellaneous aircraft support/maintenance service facilities. The Clarion Hotel is also on the airport property. An airport layout plan, including building numbers, is provided in **Figure 2 in Appendix B**.

### 2.2 Land Use

The airport can be characterized as commercial, surrounded by commercial properties to the north, south, and west, with residential areas to the east of the airport property. The airport occupies 1,311 acres and includes approximately 165 acres of impervious surfaces, or 14% of the total area. The nearest surface water is Lake Ronkonkoma which is approximately one (1) mile north northwest of the northwest corner of the airport.

## 2.3 Drainage System

**Figure 3 in Appendix B** is the current Airport Location Plan (ALP), indicating the major structures plus impervious and pervious areas of the airport. The airport occupies 1,311 acres and includes approximately 165 acres of impervious surfaces, or 14% of the total area.

The stormwater drainage network at ISP consists of six (6) drainage areas. Storm water from impervious surfaces drains either as surface sheet flow, or in buried storm drain lines, typically to either natural grassy swale areas or manmade recharge basins which vary from 20 to 50 feet deep. Since groundwater is 50 feet below grade, the deeper recharge basins have groundwater exposed.

Since none of the stormwater discharged at ISP enters surface water of the US, the discharge points will be defined as those points where point discharge of stormwater into the ground (and thus to the groundwater) occurs. Typically, this is via pervious grassy swale areas, or recharge basins serving large impervious area watersheds such as aircraft runways or ramps. Individual or multiple drywells are typically used to drain vehicle parking areas. The surface topography is relatively flat, ranging in elevation from 77 feet to 98 feet above sea level. The soil is typically sand or gravel, with scrub pine vegetation and the depth to groundwater is approximately 50 feet.

**Figure 3 in Appendix B** provides the drainage areas at ISP and the points of discharge (to groundwater) for each of these drainage areas and the apparent storm water drainage patterns. A description of the airport storm drainage system is provided below. **Table 1** presents the description of the characteristics of each drainage area.

*Table 1. Stormwater Drainage Areas*

Drainage Area	Description	Discharges to
A	Terminal Area & Southeast Side of Airport	Recharge Basin 1
B	General Aviation at West Side of Airport	Recharge Basin 2
C	Central, East Side Runways and Taxiways	Swale Area 3
D	Central, North Side Runways and Taxiways	Swale Area 4
E	General Aviation and South-Central Side of Airport	Recharge Basin 5
F	Southwest Corner, General Aviation, Taxiway & Runways	Swale Area 6

### 2.3.1 Drainage Area A

Drainage Area A is located on the southeast side of the airport and includes the terminal building, short term parking and the fueling and deicing ramp at the terminal. Paved aircraft and vehicle parking areas are affected by industrial activities and are therefore included in this BMPP. This watershed consists largely of impervious concrete or asphalt pavement, most of which involves industrial activity, and it drains via a network of buried storm drains to Recharge Basin 1, which is approximately fifty feet deep with groundwater constantly exposed. Some of the vehicle parking lots discharge stormwater directly via drywells. The pervious areas drain directly to groundwater as the soil is a sand gravel mix and stormwater does not remain on the surface after a storm event.

### **2.3.2 Drainage Area B**

Drainage Area B is located on the west side of the airport and includes all the west side aircraft hangars and adjacent taxiways and runways. Paved aircraft and vehicle parking areas are affected by industrial activities and are therefore included in this BMPP. This watershed consists largely of impervious concrete or asphalt pavement, most of which involves industrial activity such as impervious hangar ramps, taxiways, and runways, which drain via a network of buried storm drains and open swales into a grassy recharge basin bounded by Runway 15R, Runway 6 and Taxiway W. Some of the vehicle parking lots discharge stormwater directly via drywells. The pervious areas drain directly to groundwater as the soil is a sand gravel mix and stormwater does not remain on the surface after a storm event. Because of the high permeability of the soils in the pervious areas, and the absence of site activities in such pervious areas, drainage from pervious areas will not be addressed further in this BMPP, unless they act as recharge basins.

### **2.3.3 Drainage Area C**

Drainage Area C is located on the east side of the airport and is bounded by Taxiway E, Runway 33R, Runway 24, and the eastern property line of the airport. It includes these impervious areas plus large areas of grass and native trees. Buried culverts under taxiways and runways are used to direct stormwater into natural grassy swale areas. Because of the high permeability of the soils in the pervious area, and the relative absence of industrial activities, except for private hangars adjacent to the Civil Air Patrol building, drainage from this pervious area will not be addressed further in this BMPP.

### **2.3.4 Drainage Area D**

Drainage Area D is located on the north side of the Airport and is bounded by Runway 15R, Runway 24, and Railroad Avenue on the northern property line of the Airport. It includes these impervious areas plus large areas of grass and native trees, and the Town of Islip Compost Facility plus the Long Island Railroad Ronkonkoma rail yard. Buried culverts under taxiways and runways are used to direct stormwater into natural grassy swale areas. Because of the high permeability of the soils in the pervious area and the relative absence of industrial activities (the Compost Facility and rail yard are not included in the Airport), drainage from this pervious area will not be addressed further in this BMPP.

### **2.3.5 Drainage Area E**

Drainage Area E is located on the south-central side of the airport (between Taxiway S and the Terminal) and it includes all the south side aircraft hangars, ramps, the bulk fuel facility and one FBO, (Modern Aviation), the Air National Guard (ANG) helicopter facility plus rental car facilities and the Airport maintenance facility. This watershed consists largely of impervious concrete or asphalt pavement, most of which involves industrial activity such as hangar ramps where fueling and deicing takes place, and rental car fueling and maintenance. Some of the vehicle parking lots discharge stormwater directly to groundwater via drywells. The pervious areas drain directly to groundwater as the soil is a sand gravel mix and stormwater does not remain on the surface after a storm event. Because of the high permeability of the soils in the pervious areas, and the absence of site activities in such pervious areas, drainage from pervious areas will not be addressed further in this BMPP, unless they act as recharge basins.

### 2.3.6 Drainage Area F

Drainage Area F is located on the southeast corner of the airport (between Taxiway S, Runway 6 and Veterans Memorial Highway) and it includes one FBO (Mid Island Air Service) the airport bulk fuel facility the south side aircraft hangars, ramps, the bulk fuel facility, and the Holiday Inn hotel. This watershed consists largely of impervious concrete or asphalt pavement, most of which involves industrial activity such as the bulk fuel facility, hangar ramps where fueling and deicing takes place. Some of the vehicle parking lots discharge stormwater directly to groundwater via drywells. The pervious areas drain directly to groundwater as the soil is a sand gravel mix and stormwater does not remain on the surface after a storm event. Because of the high permeability of the soils in the pervious areas, and the absence of site activities in such pervious areas, drainage from pervious areas will not be addressed further in this BMPP, unless they act as recharge basins.

Average annual rainfall at ISP is 47 inches and a 25-year one hour rainstorm is 2.5” and a 25-year, 24-hour storm is 5.8”.

## 2.4 Historical Stormwater Monitoring

ISP performs monthly monitoring of Outfalls 001 and 002.

## 2.5 Tenants and Target Industrial Activities

ISP’s tenants conduct a variety of industrial activities supporting the airport’s operations with the potential to impact the quality of stormwater runoff at the airport.

Site inspections, interviews, and past environmental plans were reviewed to determine potential stormwater runoff impacts at the tenant facilities. Based on this information, the following activities that occur at the airport pose a potential to impact stormwater quality at ISP:

- Aircraft Deicing/Anti-Icing (AD)
- Aircraft Fueling (AF)
- Aircraft Maintenance (AM)
- Aircraft Rental/Sales (AR)
- Outdoor Storage Areas (OS)
- Chemical Storage (CS)
- Equipment Degreasing (ED)
- Vehicle Fueling (VF)
- Equipment Storage (ES)
- Fuel Storage (FS)
- Floor Washdown (FW)
- Aircraft Painting (AP)
- Aircraft Washing (AW)
- Grounds Maintenance (GM)
- Runway Maintenance (RM)
- Equipment Fueling (EF)
- Vehicle Washing (VW)
- Equipment Maintenance (EM)

**Appendix D** provides recommended BMPs for each of these Target Industrial Activities. For purposes of this BMPP, the term “vehicles” includes mobile equipment powered by petroleum-based fuels (e.g., trucks, luggage tugs, etc.) while “equipment” is used to describe other non-mobile equipment (e.g., generators). A more specific discussion of tenant activities and the potential pollution sources related to the activities is presented in Section 3.

## 3 Identification of Potential Pollution Sources

This section identifies and describes all activities and potential sources of stormwater pollution at ISP. Specifically, potential stormwater pollutants, areas of potential pollutant contact with stormwater, activity-based non-stormwater discharges, potential hard-piped non-stormwater discharges, and historic spills and leaks were explored through the BMPP questionnaire, onsite interviews, and a thorough visual inspection.

Historical data and environmental audits were used to facilitate interviews with tenants. The tenants were asked to provide the following information:

- General description of operations conducted at each of the tenant's locations;
- Facility stormwater drainage patterns;
- Specific target activities conducted at the facility, and whether they are performed indoors or outdoors;
- Inventory of chemicals at each location and chemical storage practices;
- Identification of potential pollution sources;
- Identification of any existing best management practices;
- Identification of non-stormwater discharges and possible illicit connections to the stormwater drainage system;
- Description of deicing operations; and
- Identification of historic leaks and spills.

### 3.1 Non-Stormwater Discharges

Several sources of non-stormwater discharges are possible at ISP. Non stormwater discharges include small spills from aircraft, equipment, vehicle fueling and washing, and firefighting foam (FFF). Aircraft deicing during dry weather can also lead to non-stormwater discharges. Frost can occur on airplane wings during dry weather when surrounding air temperatures reach the "frost point" where water vapor in the air sublimates directly to ice and coats the wing. Deicing does not occur at ISP airport during non-deicing months and therefore is not a source of stormwater discharge during that period. However, if deicing were required or if deicing were to occur during the non-deicing months, the deicing entity would be responsible for preventing discharges to the stormwater systems.

Firefighting foam testing is not performed at ISP. Firefighting foam can be a potential pollutant during emergency situations where uncontrolled discharge could migrate to the stormwater drainage system. If firefighting foam is discharged during an incident, it will be treated as a spill and cleaned up to the maximum practicable extent to minimize the potential for pollutant migration into the stormwater drainage.

### 3.2 Activity Specific Potential Pollution Sources

A brief description of the activities with the greatest potential to be discharged into the stormwater drainage system and the areas in which they are performed is provided below.

### **3.2.1 Aircraft, Vehicle, and Equipment Maintenance**

Chemicals such as lubricating oils, hydraulic oils, fuels, degreasers, and other cleaning products are routinely used in airport maintenance activities. Small leaks and spills are not uncommon during maintenance activities; therefore, the potential for pollutant contact with stormwater is greatly increased when these activities are performed outdoors. This potential is further increased if these outdoor activities are performed near stormwater drains. Generally, indoor areas only present a potential for pollutant contact with stormwater if floor drains discharge to the stormwater drainage system.

Major aircraft maintenance such as engine overhauls and repair are not performed at ISP. The air carriers perform some light aircraft maintenance at ramps including adding oil and changing oil, tires, and lights. Tenants are required to use drip pans when performing maintenance such as adding oil or changing oil at the ramps. Tenants are educated on the potential impacts and risks of pollutants entering the drainage system because of maintenance activities. The small spills of chemicals and petroleum hydrocarbons that occur during these limited aircraft maintenance operations are typically cleaned up using granular absorbent materials. There is a potential that residuals from small spills in these areas can become entrained in the overland flow of stormwater runoff and thus drained to catch basins through a Reinforced Concrete Pipe (RCP) lateral varying in size from 6-inch to 24-inch. These laterals connect to the main RCP which then increases in size up to 42-inch. Once the main RCP leaves the terminal area the RCP increases in size up to 72 inch as it enters Recharge Basin #1.

Major vehicle and equipment maintenance is not performed at ISP, however some minor maintenance activity to vehicles and equipment does occur at several tenant locations. Based on the extent to which these activities are performed, they present a low potential for pollutant contact with stormwater.

### **3.2.2 Aircraft, Vehicle, and Equipment Fueling**

Aircraft and vehicle fueling is performed at various locations throughout the airport property. Aircraft fueling is performed outdoors at the ramp locations at the passenger terminal, the FBOs and corporate hangars. The greatest concern with aircraft and vehicle fueling is the potential for minor spills, which usually originate from topping-off or overfilling of aircraft and vehicles. The major constituents of aircraft and vehicle fuels are petroleum and hydrocarbons. These minor spills can be entrained in the overland flow of stormwater runoff and transported into the stormwater drainage system.

ISP tenants routinely perform aircraft fueling at ramps and no aircraft fueling occurs indoors. Vehicle fueling occurs outdoors at the locations indicated above. Considering the large volume of aircraft and vehicle fueling performed outdoors at ISP, these activities present significant potential for pollutant contact with stormwater.

### **3.2.3 Aircraft, Vehicle, and Equipment Washing**

Aircraft washing in outdoor areas is not allowed at ISP due to Suffolk County Department of Health Services (SCDHS) Article 7 which imposes restrictions in groundwater aquifer areas. Washing operations must ensure that all wastewater is captured and taken off site for disposal. No vehicle wash water may enter storm drains or pervious areas. None of the tenants at ISP perform outdoor aircraft washing.

No vehicle wash water discharges into the storm drains. Vehicle washing that is typically associated with the car rental areas occurs within a designated area on the leasehold and is part of a 100% recycle, zero discharge system.

Considering that these operations are either performed indoors or that all wash water is collected for disposal via off site when performed in outdoor areas, these activities present a low potential for pollutant contact to stormwater.

### **3.2.4 Aircraft Sanitary/Lavatory Service**

Aircraft sanitary service operations involve connecting a hose from the tank on a lavatory truck to the aircraft's lavatory facilities and emptying the contents into the truck. The contents are disposed of offsite. Minor spills may occur during the connection and disconnection of the hose onto and off the aircraft. Personnel are instructed to position a "Waste Catch Bucket" under the lavatory service panel. There is a potential that biocides, bacteria, and other pollutants from these minor spills can become entrained in the overland flow of stormwater runoff and be transported to the stormwater drainage system.

Due to the low volume of aircraft sanitary services performed on ISP airport property and the observation of routine minor spills, this activity presents a moderate potential for pollutant contact with stormwater.

### **3.2.5 Aircraft Deicing/Anti-Icing**

Deicing/anti-icing operations protect runways, taxiways, and aircraft from accidents, which can result from ice and snow build-up on runways, taxiways, and aircraft during inclement weather. Deicing is performed as necessary at ISP during the winter season, (November through March). The deicing/anti-icing season may fluctuate based on local weather conditions and other weather conditions around the country. Aircraft, runways, taxiways, aprons are deiced or anti-iced at the airport.

Aircraft deicing removes snow, ice, or frost from the aircraft via the use of propylene glycol or a blend of propylene glycol with water. Aircraft deicing/anti-icing activities are performed by tenants. Deicing agent is sprayed onto the aircraft from a tank truck. The ratio of glycol to water in Type I deicing fluid varies from tenant to tenant. Type IV anti-icing fluid is usually applied without dilution. Application ratios vary depending on use and weather conditions.

Ice and snow are typically removed from aircraft using a heated mixture of Type I deicing fluid and hot water applied under pressure. Undiluted Type I fluids must contain a minimum of 80 percent propylene glycol by weight, with the balance composed of water, buffers, wetting agents, and oxidation inhibitors. Deicing chemicals used in aircraft deicing must also be non-corrosive to prevent damage to aircraft aluminum and sensitive electronic systems. Type I deicing fluid is applied at gate areas at the passenger terminal.

Aircraft anti-icing may follow deicing to prevent the further accumulation of snow or ice on the deiced surfaces either while aircraft are waiting for take-off during especially severe weather, or during overnight parking. Anti-icing is accomplished by applying Type IV anti-icing fluid to clean (i.e., ice free) aircraft surfaces. Type IV anti-icing fluids are also composed of propylene glycol, along with thickeners that allow the fluid to cling to the aircraft and provide prolonged protection and longer holdover times. This increased viscosity is lost when Type IV anti-icing fluid undergoes shear stresses, such as those experienced during takeoff. The unique characteristics of Type IV anti-icing fluid require that special low-shear applicator nozzles be used. In addition, because Type IV fluid adheres to the aircraft until an air speed of approximately 85 knots is reached, it is widely dispersed through sloughing during taxiing and takeoff. Also because of this property, Type IV fluid is only used on larger aircraft that reach a rotational speed of more than 85 knots during takeoff. Anti-icing is conducted at the same locations as deicing.

Propylene glycol (Type I or Type IV) is stored in aboveground storage tanks (ASTs) adjacent to the passenger terminal. The aircraft deicing vehicles fill up at this storage area and then the aircraft deicing normally occurs at the gates at the passenger terminal. Primary deicing occurs within one hour of takeoff.

At ISP, air carrier deicing takes place on the aircraft terminal apron. The deicing and anti-icing fluid (currently propylene glycol diluted with water) is stored in AST on the air side of the Terminal Building, and deicer trucks are used to transport, heat, and apply the deicing fluid to aircraft. Stormwater runoff from this ramp is collected from a series of catch basins by an underground concrete pipe which discharges into Recharge Basin A, located northeast of the Terminal Buildings.

The discharge of aircraft deicing fluid / stormwater contaminated with propylene glycol deicing fluid to groundwater within a drinking water aquifer is a regulated discharge under the current SPDES permit, and groundwater monitoring wells down gradient of Retention Basin A are used to monitor the impact of deicing activities on the aquifer.

Overspray of deicing/anti-icing fluids and drip and shear of deicing/anti-icing fluids during takeoff and landings have the potential to impact stormwater runoff. Deicing material that falls off the aircraft during deicing is collected in catch basins and transported through the airport's storm drain system. Deicer that remains on the aircraft after application either drips off while taxiing to a runway or shears off the aircraft during takeoff. Deicer that shears off the aircraft either falls onto the runway or infield or is dispersed as small droplets into the air.

All the tenants at ISP now use propylene glycol and the use of ethylene glycol is strongly discouraged. Potential pollutants from deicing/anti-icing activities include propylene glycol. ISP airport is required to maintain a record of the types (including the material safety data sheets (MSDS)) and monthly quantities of deicing/anti-icing chemical used. Tenants who conduct deicing/anti-icing operations shall provide the above information to airport staff for inclusion in the ISP BMP for the entire facility. MSDSs for deicing/anti-icing chemicals used at ISP airport and the monthly usage of these chemicals shall be provided to the airport.

The use of deicing chemicals presents a high potential for contamination of stormwater during winter months. Figure 4 located in Appendix B indicates the location of deicing activities and treatment at ISP.

Considering the volume of aircraft and number of runways and taxiways at ISP and that the deicing activities are performed outdoors prior to or during precipitation events these activities present significant potential for contact with stormwater. The airport installed an aircraft deicing fluid pretreatment system to process all aircraft deicing fluid captured in the terminal ramp drainage system during an aircraft deicing event prior to discharge to groundwater.

### **3.2.6 Runway and Taxiway Deicing/Anti-Icing**

Runway, taxiway, ramp, and apron deicing is the responsibility of the TOI. The purpose of pavement deicing/anti-icing is to break the bond holding ice and snow to the surfaces of runways and taxiways, facilitating mechanical ice and snow removal also to maintain adequate friction between aircraft tires and the runway. Residual deicing materials on the pavement provide anti-icing protection.

Runway, taxiway, and ramp deicing normally utilize sodium formate, and/or potassium acetate. Typically, airport runways are sprayed with deicing agents and anti-icing agents, in extreme icing conditions only, to prevent the buildup of ice and snow that would inhibit , takeoff, and landing. Sand is typically used to prevent slippage at the gate area.

In addition, sand/salt mixtures are used at ISP to improve traction at the terminal roadway system, pedestrian traffic areas, and parking areas when necessary. The sand applied in the terminal area is collected by sweepers once the pavement has dried. Sand applied to the terminal roadway system generally is washed to the edge of the pavement, is trapped by the soils and vegetation of the infield areas, or travels to the storm drain system. ISP uses visual observation to determine the frequency and severity of grit or sand/salt application applied to maintain traction, adjusting as necessary, consistent with flight and road traffic safety.

Spent deicing fluid has the potential to contaminate groundwater or surface water it flows off airport runways to storm drains or to waterways as sheet runoff.

### 3.2.7 Fuel Storage

Six (6) 50,000-gallon jet fuel ASTs, which contain aircraft Jet-A fuel, are located at the facility's Bulk Fuel Farm (BFF) which is owned by the airport. These six (6) tanks are used for commercial aircraft operations. In addition, the BFF has two (2) 30,000-gallon underground storage tanks (USTs) for Jet-A and one (1) 12,000-gallon UST for avgas, for use by FBOs. These tanks have been approved by the SCDHS, Office of Pollution Control. The responsibility for this function has been delegated to this agency by the NYSDEC under the Petroleum Bulk Storage (PBS) regulations.

Each tank is equipped with high level alarm, inventory monitoring and tank overfill systems. This high-level system activates alarms and shutdown procedures to prevent tank overfilling.

Concrete dikes surround the BFF ASTs, with 150 percent containment capacity. This 150 percent containment can hold the contents of a single largest tank plus sufficient freeboard to allow for precipitation. The dike at the BFF is equipped with drain valves. Stormwater collected in the diked area is drained into a pretreatment facility. This facility has an oil water separator to scavenge floating oil store it. The effluent from the oil water separator is pumped through a liquid phase carbon filter prior to discharge to one of two (2) 20,000-gallon stormwater USTs. The full UST is sampled and analyzed by a laboratory for compliance with SPDES requirements prior to discharge at outfall #001.

Any discharge of BFF containing stormwater must comply with Permit Limits on Page 3 of 9 of the SPDES Permit, a copy of which is provided in **Appendix A**.

The BFF is operated by Swissport who maintain an SPCC Plan which includes appropriate spill prevention and clean up measures.

In addition, the airport has petroleum tanks located at:

- Main Terminal and Baggage Area (Building #1)
  - 2,000-gallon AST, boiler back up fuel
- Vehicle maintenance facilities (Buildings #11 & #12)
  - 5,000-gallon UST for diesel fuel
  - 5,000-gallon UST for gasoline
  - 2,000-gallon UST for gasoline
  - 1,000-gallon UST for waste oil
  - Two (2) 275-gallon ASTs for engine oil and hydraulic fluid

### **3.2.8 Chemical Storage**

ISP airport maintenance facilities typically store paints and thinners in stockrooms, parts cleaning fluids at its automotive garages, and anti-icing and deicing glycol at TOI and tenant areas. Chemicals stored outdoors at the ISP airport include propylene glycol; all other chemicals are located indoors. Chemicals are stored in double walled tanks located on concrete slabs with absorbent material available to facilitate cleanup or in secondary containment to capture any spills. Chemicals stored indoors present a low potential for pollutant contact with stormwater.

### **3.2.9 Building and Grounds Maintenance**

Most of the building and ground maintenance at ISP is performed by the TOI. Several tenants subcontract building maintenance services to outside professionals. Pesticides and herbicides are used to maintain aprons, runways, and building green spaces. During rainfall events, accumulated residues from pesticide and herbicide usage can encounter stormwater and be transported into the stormwater drainage system.

ISP's licensed maintenance staff perform pesticide and herbicide applications to service landscaped areas. Due to the limited areas of non-indigenous plants at the airport property this activity presents a moderate potential for pollutant contact with stormwater.

### **3.2.10 Outdoor Storage Activities**

Raw materials, by-products, leaking equipment and vehicles, and containers exposed to stormwater at outdoor storage areas can adversely impact stormwater runoff.

There are numerous vehicle and equipment storage areas throughout ISP airport. Several tenants store gasoline and/or diesel fuel on airport property. Most of this storage is located outdoors and is primarily comprised of ASTs, drums, and stationary tanker trucks. Materials stored outdoors at ISP airport include jet fuel, gasoline, diesel, waste oil, lubricating oil, propylene glycol, and aircraft and vehicle detergents. Ground support equipment and vehicles are also parked or stored outdoors at various locations throughout ISP airport. Fluids (e.g., fuel oil, propylene glycol, hydraulic fluid, chemical toilet water, and deicing fluids) leaking from vehicles can adversely impact stormwater runoff. Potential pollutants from outdoor storage activities include oil and grease, petroleum hydrocarbons, metals, volatile organic compounds, and propylene glycol.

Fifty-five (55) gallon storage drums are typically used at ISP airport to store virgin and waste material. Many of these drums are in interior maintenance areas and as such they are not being exposed to stormwater. Under SCDHS regulations, no floor drains are allowed in indoor storage areas as they would form potential release pathways.

Considering the aircraft and ground vehicle fueling and fuel truck staging areas and the frequency with which minor spills occur, this activity presents a significant potential for stormwater pollutant contact.

### 3.3 Summary of Pollutant Contact with Stormwater Potential

As part of the Annual Site Compliance Evaluation prepared for ISP to evaluate the effectiveness of BMP implementation and performance, the potential for pollutant contact from the industrial activities above was re-evaluated and is presented in Table 2 below. Table 2 serves to determine if additional BMPs are required or if BMP modifications are needed for any of the target industrial activities at ISP because of increased potentials for pollutants to encounter stormwater identified during the review of the Annual Site Compliance Evaluation.

<b>Table 2: Pollutant Contact with Stormwater Potential</b>			
<b>Activity Specific Potential Pollutant Sources</b>	<b>2016 BMPP</b>	<b>2022 Annual Site Compliance Evaluation</b>	<b>2023 BMPP</b>
Aircraft, Vehicle, and Equipment Maintenance	Low	Based on Number of incidents	Low
Aircraft, Vehicle, and Equipment Fueling	High	Based on Number of Spills/Leaks	Moderate
Aircraft, Vehicle, and Equipment Washing	Low	Based on Number of incidents	Low
Aircraft Sanitary/Lavatory Service	Moderate	Based on Number of incidents	Moderate
Aircraft Deicing/Anti-Icing	High	Based on use	High
Runway and Deicing/Anti-Icing	Low	Based on use	Low
Fuel/Equipment Storage	Moderate	Based on Number of spills/leaks	Moderate
Chemical Storage	Low	Based on Number of incidents	Low
Building and Grounds Maintenance	Moderate	Based on Number of incidents	Moderate
Outdoor Storage Activities	Moderate	Based on Number of incidents	Moderate

Based on the evaluation of the Annual Site Compliance Evaluation to determine BMP effectiveness, much of the identified pollution contact with stormwater potential stayed constant. The results of this evaluation confirm that BMPs are effective in controlling the potential for pollutants from industrial activities to enter the stormwater, and that no additional BMPs are needed for these activities.

### 3.4 Potential Pollution Sources and Pollutants of Concern

Many of ISP's tenants perform activities in areas that present the potential for stormwater pollutants to be discharged into the stormwater system. The tenant activities with the greatest potential to contribute to stormwater pollution and some of the contaminants of concern for each activity are listed below:

Aircraft Deicing/Anti-icing (AD)

- Glycols
- Sodium acetate
- Potassium acetate

Aircraft, Vehicle, and Equipment Maintenance (AM, EM, VM)

- Oil and grease
- Petroleum hydrocarbons
- Propylene Glycol
- Halogenated Solvents
- Non-halogenated Solvents

Aircraft, Vehicle, and Equipment Fueling (AF, EF, VF)

- Petroleum hydrocarbons
- Fuel Vapors

Aircraft Sanitary Service (AS)

- Biocides
- Bacteria

Building and Grounds Maintenance (BGM, PH)

- Pesticides
- Herbicides
- Oils and grease
- Petroleum Hydrocarbons

Chemical Storage (CS) and Fuel Storage (FS)

- Petroleum hydrocarbons
- Lubricants
- Paints
- Battery Acid
- Solvents

Food Handling Operations (FH)

- Oil and grease
- Bacteria

Firefighting Foam Testing (FT)

- Volatile organic compounds, Per- and Polyfluoroalkyl Substances (PFAS)

#### Runway and Taxiway Deicing/Anti-icing (R-TD)

- Glycols
- Sodium acetate
- Potassium acetate

The potential pollutants that may be discharged into the stormwater drainage system from a tenant location are based on the activities conducted by the tenant. The pollutants consist primarily of petroleum products (such as fuels, oils, and greases), halogenated and non-halogenated solvents, and deicing fluids (propylene glycol), oils, greases, petroleum hydrocarbons, solvents, and glycols from aircraft, equipment, and vehicle fueling, maintenance, and washing activities are potential pollutants because the activities are generally performed outdoors in proximity to storm drains. Pollutants from these activities potentially can be transported to the stormwater drainage system either as direct spills (dry weather flow) or from rainfall runoff that mobilizes residual contaminants (wet weather flow).

### **3.5 Hard-Piped Non-Stormwater Discharge Identification**

ISP staff is not currently aware of any existing hard-piped, non-stormwater discharges with potential to discharge into the existing stormwater drainage system. Further, in the event new or suspected hard-piped, non-stormwater discharges are discovered, they will be dye/smoke tested for confirmation and eliminated/sealed as needed. Hard-piped illicit connections are defined as equipment that discharges directly to the stormwater drainage system. These could include oil/water separators, interior floor and trench drains, utility sinks, and chiller and boiler overflow/blow down lines.

### **3.6 Runoff and Erosion Management**

There is little potential for erosion problems at ISP since most of the airport is impervious. The stormwater drainage system is a closed RCP conduit that discharges directly into Recharge Basins. The principal potential source for erosion at ISP can occur during construction activities. Construction projects of any size should be reviewed before the project begins to determine if adequate soil and erosion control procedures will be implemented.

### **3.7 Spill Reporting and Leaks**

A list of reportable quantity spills and leaks of toxic or hazardous pollutants that have occurred during the past three (3) years at areas that are exposed to precipitation or that otherwise drain to a stormwater conveyance at ISP airport are recorded. Each act of non-compliance shall include a short description of the non-compliance, a description of any actions and mitigation taken or proposed by the TOI or tenant entity to limit environmental impact associated with the non-compliance. The TOI or tenant shall provide an estimate of the date when the corrective or mitigation action will be completed.

### **3.8 Stormwater Monitoring and Sampling**

Stormwater monitoring and sampling data provides information on the quality of stormwater runoff at ISP airport. The stormwater analytical data is used to identify the types and sources of pollutants and to provide a means for

## Best Management Practices Plan

evaluating the environmental risk for stormwater runoff, ISP is subject to various stormwater monitoring and sampling as required by Special Condition 1, Page 3 of 9 of the SPDES Permit.

## 4 Storm Water Management Controls

### 4.1 General

A stormwater BMP is defined as any program, technology, process, siting criteria, operating method, measure, or device that controls, removes, or reduces pollution. The permit requires the development and implementation of BMPs to address pollutants originating from industrial sources. Appropriate BMPs for industrial facilities were selected based on a site reconnaissance, tenant interviews, and information obtained from tenant questionnaires. Areas of actual or potential pollutant contact are evaluated and applicable BMPs are recommended or implemented to eliminate or minimize the potential for discharge of stormwater pollutants. BMPs can be classified into categories based on whether the intended stormwater control objective is quality control or quantity control.

Quality control BMPs are designed to limit the types and concentrations of pollutants found in stormwater runoff and are subdivided into source control BMPs and treatment control BMPs. Source control BMPs are operational practices intended to prevent pollutants from entering surface waters by altering performance of activities to eliminate or minimize pollution produced because of the activity. Source control BMPs generally involve eliminating a target activity's exposure to stormwater and typically include the following:

- Moving an outdoor operation indoors;
- Covering an outdoor activity or storage area with either a roof or a lean-to;
- Placing chemical or petroleum storage containers in a shed or under a lean-to;
- Storing hazardous materials/wastes in covered, contained areas.

A properly designed and implemented spill response program can also be an effective method for protecting stormwater quality. Spill response programs rely upon employee awareness and training to be effective.

Treatment control BMPs are a type of quality control BMP that treats stormwater to remove pollutants. Examples of treatment BMPs include:

- Oil/water separators;
- Grass swales;
- Retention basins;
- Infiltration; and
- Filtration.

Quantity control BMPs are intended to control the runoff volume or peak discharge rate. The use of stormwater detention basins is one example of a quantity control BMP. A properly designed and maintained detention basin can also decrease the amount of pollutants entering surface waters, thereby improving receiving water quality.

Section 2.5 described industrial activities typically performed by ISP tenants. A more detailed discussion of potential pollution sources is described in Section 3. Activities performed indoors have less potential to affect runoff water quality, although practices such as hosing down indoor floor space to outdoor areas after performing industrial activities contradict the potential water quality benefits of performing industrial activities under cover.

ISP tenants perform industrial activities directly related to aviation, such as aircraft operation, maintenance, and cargo handling, as well as general industrial activities such as vehicle maintenance, equipment storage, and facility maintenance. Many of the ISP tenants have already implemented a variety of acceptable BMPs to

minimize the effects of these activities on stormwater quality. The following sections supplement and enhance current BMP implementation and provide for consistent airport-wide application.

## 4.2 Good Housekeeping Practices

Good housekeeping practices that address housekeeping, operational, structural, and contingency considerations that can be taken to help achieve environmental compliance are utilized at ISP. The purpose and intent of good housekeeping is to minimize the exposure of pollutants to rainfall and runoff, The following practices are the basis of a good housekeeping program and are the minimum acceptable at ISP:

- Walkways, aisles, roadways, and exits are always to be kept clear.
- Small spills are to be cleaned up immediately and disposed of in an approved manner.
- Refuse is to be placed in an appropriate container.
- Material and products are stored in a neat and orderly fashion with particular attention not to block walkways or access routes.
- Chemical containers are to be stored in enclosed or covered areas whenever possible to minimize contact with stormwater.
- Chemical storage containers are to be properly labeled.
- Empty drums are to be placed only in their designated area.
- Chemical containers and/or drums are always to be kept closed when not in use.
- Inside floors are to be kept clear of debris and spills and are to be swept or mopped regularly.
- Tools and equipment are to be kept clean and neatly stored when not in use.

## 4.3 Minimum Best Management Practices

The maximum benefit of a stormwater pollution prevention program can be achieved only if tenants implement the BMPs that correspond to the target industrial activities performed at their facilities. Special Condition - Best Management Practices, Number 4 on Page 4 of 9 of the SPDES Permit requires development of 13 minimum BMPs to prevent or minimize the potential release of pollutants to the waters of the State.

### 4.3.1 Pollution Prevention Team

Individual tenants shall have designated personnel responsible for implementing the BMPs at corresponding tenant sites. Table 3 lists the members of the airport Pollution Prevention Team (PPT) for all facilities covered under the ISP BMPP. This list will be updated when a change to the personnel occurs. It is the responsibility of each facility to notify the ISP BMPP coordinator or their designated representative when there are personnel changes. Other PPT member responsibilities include ensuring implementation of appropriate BMPs, retaining a copy of the implemented BMPP onsite, and providing feedback to the ISP BMPP coordinator or a representative regarding BMPP compliance.

Table 1. Airport Pollution Prevention Team

Name	Title	BMPP Function
Robert Schneider	Deputy Commissioner	BMPP Executive
Al Cinotti	Town of Islip – Chief of Fire Rescue	BMPP Coordinator

The BMPP Coordinator for the facility is Al Cinotti (631-467-3279) and his duties include the following:

The BMPP Coordinator will implement this BMP for all TOI operated facilities and will inspect each tenant facility to ensure that they are following the SPDES permit requirements. Each tenant facility will be surveyed to confirm conformance with the requirements of the airport BMPP. In addition, the airport will conduct regular facility and stormwater drainage system inspections for both airport and tenant operated facilities to ensure that the required BMPs have been implemented and monitored by the tenants in accordance with the requirements of the BMPP.

### 4.3.2 Reporting of BMP Incidents

All spills that occur on airport property are to be reported to and logged by the BMPP Coordinator. These spills will be added to the spill history and kept with the BMPP. The BMPP coordinator will document the chemical spilled, location of spill, quantity spilled, date and time, corrective action taken and whether the spill resulted in a non-stormwater discharge. Tenants shall be individually responsible for reporting all spills to the appropriate regulatory agency.

Tenants are required to notify TOI and Fire Rescue with a spill of any size identifying the event date/time, location, type of spill, response, gallons spilled, cause/reason for spill or leak, and recommended remedial action.

The Fire Rescue team will respond to the incident to ensure the spill is being handled correctly. In the event the air carrier cannot handle the release TOI will mitigate the spill with the staff of ISP Fire Rescue and Maintenance.

If ISP Fire Rescue and Maintenance are unable to handle the spill, TOI contacts the TOI Haz-Mat Response Team and if further assistance is needed TOI will request assistance from the Suffolk County Strike Team.

### 4.3.3 Risk Identification & Assessment

Identify and determine the potential pollutant sources from each tenant and their leasehold. This will entail gathering information, at a minimum, with respect to the type of activities performed at their site, the type of materials stored which potentially can contribute pollution to stormwater runoff from ISP. Based on this information the most appropriate BMPs are selected to prevent or control pollutants from these areas.

### 4.3.4 Employee Training

The ISP BMPP Coordinator shall make available a copy of the BMPP and offer a BMPP implementation training for PPT members. These members in turn are to train their own staff. Training will cover items such as prohibited discharges, inspections, spill response, good housekeeping, implementation of BMPs, deicing activities and record keeping procedures.

### **4.3.5 Inspections and Records**

As part of the Annual Site Compliance Evaluation, qualified facility personnel are to inspect designated equipment and areas of the airport on an annual basis to assess the effectiveness of BMP implementation and the overall BMPP. All records should be kept for at least three (3) years after the termination of the existing permit.

### **4.3.6 Security**

Proper security measures are taken to prevent unauthorized access to secure areas at ISP. Heightened procedures have been implemented as an extra precaution. Criminal background checks, carry-on bags are searched more carefully, and passengers' names are cross-checked with lists of people the Federal government deems suspicious. Security systems are in place to prevent an accidental or intentional release of material to stormwater runoff, include training security personnel, lighting, and access control. ISP security measures require all current and prospective employees who have access to secure areas of airports to undergo fingerprinting and criminal history background checks.

### **4.3.7 Preventative Maintenance**

A preventative maintenance program involves routine inspection and maintenance of structural BMPs (i.e., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to identify and correct conditions that could cause breakdowns or failures, which could potentially result in the discharge of pollutants to the stormwater drainage system. This includes identifying equipment and areas to inspect and development of a schedule for routine inspections. The prompt repair or replacement of defective equipment found during inspections and testing should be performed and documented. The most appropriate BMPs are selected to prevent or control pollutants from these areas which potentially can contribute pollution to stormwater runoff from ISP.

### **4.3.8 Good Housekeeping**

Good housekeeping requires routine maintenance of equipment and chemical storage areas in a clean and orderly manner to reduce the likelihood of contaminating stormwater runoff. Basic operation and maintenance BMPs incorporated into a Good housekeeping program include maintenance conducted on the terminal apron and in dedicated hangars. The following practices are part of the good housekeeping program:

- performing maintenance activities indoors;
- maintaining an organized inventory of material used in the maintenance areas;
- draining all parts of fluids prior to disposal;
- preventing the practice of hosing down the apron or hangar floor;
- using dry cleanup methods, and
- Collecting stormwater runoff from the maintenance area and providing treatment or recycling.

### **4.3.9 Materials/Waste Handling, Storage, and Compatibility**

Employees should be trained in which materials are hazardous, where they are stored, how they are labeled, and in their proper use. A program has been established to identify material, promote waste reduction and recycling. Establish designated storage areas and segregate waste. Communicate recycling requirements and instructions.

### **4.3.10 Spill Prevention and Response**

A SPCC and SPR plan should be evaluated to identify and characterize potential spills, to eliminate or reduce spill potential, and how to respond when a spill occurs. The SPR should include, at a minimum, a copy of the NYSDEC registration application and certificate issued under 6 NYCRR 596.2, a detailed site plan that locates and identifies tanks, transfer stations, and connecting piping, a plan for spill response at the facility which includes a prediction of the flow or dispersion of a spill, a map showing areas that could be impacted by a spill including sewers, wells, ditches, etc., spill reporting procedures, plans for drills, summary of releases occurring in the last five years including reports associated with these releases, identification and assessment of causes of spills, leaks, releases at the Facility, status report on compliance with 6 NYCRR, and the names and phone numbers for emergency contacts, coordinators, and clean-up contractors.

### **4.3.11 Erosion and Sediment Control**

As indicated in Special Condition 5 on page 5 of 9 of the SPDES permit, SWPPPs are not required for discharges of stormwater from construction activity to groundwaters. Since there are no surface waters present at ISP, construction SWPPPs are not required.

### **4.3.12 Management of Runoff**

The BMPs in Appendix D have been proven to be effective at reducing the discharge of pollutants to the stormwater drainage system at ISP.

### **4.3.13 Street Sweeping**

Sweeping can remove small quantities of solids from areas that are exposed to precipitation or stormwater runoff. Sweeping areas that include dust can take place before rainfall or contact with stormwater runoff.

## **4.4 Activity Specific BMPs**

Appendix D identifies recommended BMPs that are applicable to specific airport activities. Each tenant is required to implement at least one (1) BMP for each activity, and the BMP(s) to implement is(are) determined by the tenant and approved by the airport PPT. Appendix D focuses on low-cost source control BMPs and identifies treatment control BMPs such as oil/water separators, where applicable.

These activity specific BMPs are included in Appendix D and apply to the following activities:

- BMP 1: Aircraft Deicing
- BMP 2: Aircraft, Vehicle, and Equipment Fueling
- BMP 3: Aircraft, Vehicle, and Equipment Maintenance
- BMP 4: Aircraft, Vehicle and Equipment Washing, Steam Cleaning and Degreasing

BMP 5:	Building Cleaning and Maintenance
BMP 6:	Chemical and Petroleum Storage and Handling
BMP 7:	Elimination of Non-Storm water Discharges to Storm Drains
BMP 8:	Spills Management
BMP 9:	Oil/Water Separators
BMP 10:	Outdoor Handling of Material
BMP 11:	Outdoor Material and Equipment Storage
BMP 12:	Waste Management
BMP 13:	Stormwater Pollution Prevention Education
BMP 14:	Pavement Sweeping & Stormwater Facility Maintenance
BMP 15:	Security

## 4.5 Source Reduction

To the maximum extent possible all tenants are required to reduce, reuse, and recycle pollutants generated at ISP. ISP tenants are expected to consider substitute chemicals, segregate activities, and promote recycling. Special Condition - Best Management Practices, Number 6.B.ii (a) and (b) on Page 6 of 9 of the SPDES Permit suggests alternatives to the use of glycol based deicing/anti-icing chemical, evaluate present application rates to ensure against excessive over application by analyzing application rates and adjusting as necessary, consistent with consideration of flight safety, and require that tenants and/or other entities who apply or otherwise use deicing and/or anti-icing materials to determine whether excessive application of deicing/anti-icing chemicals occurs, and adjust as necessary, consistent with consideration of flight safety. The following are some alternatives to the use of glycol-based deicing/anti-icing chemical that are being used at the ISP airport that can reduce the aggregate amount of deicing/anti-icing chemicals used and/or lessen the environmental impact.

### 4.5.1 Runway Deicing Operations

ISP currently uses sand which is applied to runways , taxiways, and aprons to maintain traction, adjusting as necessary, consistent with flight safety.

### 4.5.2 Aircraft Deicing/Anti-icing Operations

#### 4.5.2.1 Forced-Air Deicing Systems/Cold Air Blast Deicing

Cold air blast deicing systems use heated compressed air to blow snow and ice off aircraft wings. Air blast deicing may be followed by conventional deicing/anti-icing or accompanied by a fine spray of glycol deicing fluid to prevent new ice formation. A self-contained, truck mounted unit which removes snow and ice from aircraft surfaces by a high-pressure air jet combined with a fine spray of glycol can be used to prevent new ice formation. The airport shall encourage the use of hot air blast deicing systems when tenants replace deicing equipment. ISP used deicing fluids on the runway very infrequently.

#### 4.5.2.2 Optimized Fluid Mixtures

The FAA mixture requirements for "clean aircraft concept" are based on the difference in temperature between the outside air temperature and the freeze point temperature of the deicing mixture. This is known as the "buffer".

For example, a typical 50/50 mixture of a standard Type I deicing fluid and water has a freeze point of -18°F and, therefore, can be used when the outside air temperature is as low as 0°F, allowing for the 18°F buffer.

Airlines typically use a 50/50 mixture of Type I deicing fluid and water for deicing purposes. However, the blend of undiluted deicing fluid and water required to achieve the necessary buffer is dependent on ambient temperature, with the ratio ranging between 60 percent deicing fluid to 40 percent water for temperatures below as 0°F, and 20 percent deicing fluid to 80 percent water for temperatures above -25°F. Hot water alone can be effective at temperatures above 28°F. This fact allows significantly more dilute deicing fluid solutions to remain effective when used at airports located in regions where the temperature rarely falls below 20°F. At the ISP airport some tenants perform regular monitoring of air temperature allowing the use of deicing mixtures with less than the typical 50 percent concentration of glycol, thereby reducing the overall amount of deicing fluid applied. This technique provides for a direct reduction in the total amount of deicing fluid used with minimal impact on airlines operations. The airport shall encourage the use of such deicing systems when tenants replace deicing equipment.

#### **4.5.2.3 Hybrid Deicing Systems**

An innovative aircraft deicing system utilizing forced hot air in combination with a low flow deicing fluid nozzle has been developed. The system is configured similarly to a conventional deicing truck with an operator bucket mounted on a boom and dual tanks for Type I and Type IV deicing and anti-icing fluids. In addition, the unit has a turbine compressor that provides a high velocity air stream, The heart of the system is an applicator turret mounted on the bucket. The applicator head has a ring-shaped nozzle for the air stream and dual (9 and 16 gallons per minute (gpm)) nozzles in the center of the ring for deicing fluid conventional deicing nozzles flow at 45 gpm). Separate controls are provided for each of the nozzles. The applicator head has an operating range of about 10 feet at the 9-gpm flow, and 15-20 feet at 18 gpm. The system can be operated in either deicing or anti-icing modes.

Overall, the hybrid deicing unit can result in a reduction in deicing fluid usage by tenants at ISP airport, Reductions in biological oxygen demand (BOD) loads from glycol can be greater because variable fluid mixtures can be used to suit ambient temperatures, rather than using a single mixture (e.g., 50/50 mix of glycol and water). TOI shall encourage the use of such deicing systems when tenants replace deicing equipment.

## **4.6 Management of Runoff**

Special Condition - Best Management Practices, Number 6.B.iii on Page 6 of 9 of the SPDES Permit indicates that the ISP shall describe and implement a program to control to manage contaminated runoff to reduce the amount of pollutants being discharged at the airport. The stormwater management program shall describe the primary issues that are currently driving decisions regarding the types of deicing runoff for collection systems, recovery systems, and conveyance systems.

To address environmental concerns associated with wintertime aircraft operations, significant effort has been focused on developing solutions for the management of deicing chemical runoff. These included the development of alternative aircraft and runway deicers that are more environmentally friendly, innovative deicing fluid application methods, and alternative collection and treatment methods. ISP developed BMPs to reduce the discharge of deicing and anti-icing materials and manage contaminated runoff to reduce the amount of pollutants being discharged at the airport. Figure 3 in Appendix B indicates the aircraft deicing areas at the passenger terminal plus the drainage system to the recharge basin. The downgradient monitoring wells for propylene glycol

## Best Management Practices Plan

are also indicated in Figure 4. ISP installed a deicing fluid pre-treatment system utilizing a submerged wetlands system as shown on Figure 4 in Appendix B.

## 5 Comprehensive Site Compliance Evaluation

### 5.1 BMP Implementation Program

Special Condition - Best Management Practices, Number 6.B.iv and 6.B.v on Page 7 of 9 of the SPDES Permit indicates that TOI shall describe and initiate a BMP implementation program that will specify the routine facility inspections and discuss the comprehensive site compliance evaluations. The implementation program described below is designed to facilitate the proper and timely installation and maintenance of existing and proposed BMPs for ISP tenants.

The BMPs identified in this BMPP were implemented as indicated by NYSDEC to comply with the SPDES Permit. Any changes to the ISP BMPP will be documented and a revised BMPP will be distributed to tenants after revisions are approved by NYSDEC. ISP employees and tenants are provided a copy of the BMPP to review important aspects of the BMPP such as prohibited discharges, inspections, spill response, good housekeeping, and implementation of BMPs, deicing activities, and record keeping procedures.

#### 5.1.1 Site Inspection Report

The results of the Annual Comprehensive Site Compliance Evaluation will document the date, time, inspection methodology, inspectors, BMP conformance evaluation results, and the overall effectiveness of the stormwater pollution prevention program. The results of monitoring efforts conducted throughout the year will also be included with this report.

##### 5.1.1.1 Monthly and Quarterly Outfall Monitoring

The permit requires monthly and quarterly monitoring for the following parameters at Outfalls Number 001 and 002. Monitoring documentation must contain the following information:

- The date, exact place, and time of sampling and measurements;
- The initials or name(s) of the individuals who performed the sampling or measurements;
- The dates) on which analyses were performed;
- The time(s) analyses were initiated;
- The initials or name(s) of the individual(s) who performed the analyses;
- References and written procedures, when available, for the analytical techniques or methods used; and
- The results of laboratory analyses.

Monitoring must be conducted in accordance with test procedures approved under 40 CFR Part 136.

ISP is required to submit the monitoring results in a DMR to the NYSDEC monthly. All monitoring reports, sample data, applications, and other records pertaining to monitoring efforts shall be retained for at least five (5) years from the date of the record.

### **5.1.1.2 Monthly Deicing/Anti-Icing Season Facility Inspections**

The permit requires monthly inspections during deicing/anti-icing season ( November through April). If deicing occurs before or after this period, the inspections shall be expanded to include all months during which deicing chemical may be used. Also, if a significant or deleteriously large quantities of deicing chemical are spills or discharged, or if water quality impacts have been reported, the inspection frequency shall be increased to weekly until such time as the chemical spills/discharge or impacts are reduced to acceptable levels.

Tenants who conduct deicing/anti-icing operations must provide the TOI BMPP Coordinator a monthly deicing/anti-icing usage. Tenants and ISP maintain a record of the types and monthly quantities of deicing/anti-icing chemical used (including the Material Safety Data Sheets (MSDSs).

TOI conducts monthly inspections of deicing/anti-icing materials storage and handling areas from November through April.

### **5.1.1.3 BMPP Implementation Inspections**

An Annual Site Compliance Evaluation included in Appendix E includes procedures and protocols for inspections to be performed to adhere to specific BMPs identified in the BMPP required by the SPDES Permit. TOI personnel and tenants operating at ISP perform self-inspections of material storage areas, material handling areas, and disposal areas to assess and make sure their facilities comply with the BMPs. Tenants are responsible for addressing all non-compliance issues at their respective facilities in accordance with Federal, State, and local environmental regulations as per their lease agreements. An Annual Site Compliance Evaluation will be used to assess BMPP implementation effectiveness.

## **5.1.2 Discharge and Spill Reporting**

Any results of outfall monitoring required above, excluding screening data, must be submitted to the NYSDEC by appending them to the corresponding DMR. Failure to perform the required discharge monitoring and reporting shall constitute a violation of the terms of the SPDES permit.

Tenants are required to notify TOI and Fire Rescue with a spill of any size identifying the event date/time, location, type of spill, response, gallons spilled, cause/reason for spill or leak, and recommended remedial action.

The Fire Rescue team will respond to the incident to ensure the spill is being handled correctly. In the event the air carrier cannot handle the release TOI will mitigate the spill with the staff of ISP Fire Rescue and Maintenance.

If ISP Fire Rescue and Maintenance are unable to handle the spill, TOI contacts the TOI Haz-Mat Response Team and if further assistance is needed TOI will request assistance from the Suffolk County Strike Team.

## **5.1.3 BMPP Content Review**

BMPP elements will be reviewed annually. Any necessary revisions to the BMPP, based on the facility inspections, will be documented, and incorporated. The BMPP will also be amended if there are changes in construction, operation, or maintenance that may affect the discharge of pollutants to surface water, groundwater, or the stormwater drainage system. Individual tenants are required to notify the ISP BMPP coordinator or their representative as early as feasible when contemplating any such changes. The BMPP will also be modified if certain BMPs are shown to be ineffective in achieving the general objective of controlling pollutants in stormwater.

An Annual Site Compliance Evaluation included in Appendix E was an addition to the BMPP to assist TOI and tenants with review of procedures and protocols for inspections to be performed to adhere to specific BMPs identified in the BMPP required by the SPDES Permit. The Annual Site Compliance Evaluation will be used to assess BMPP implementation effectiveness.

#### **5.1.4 Comprehensive Site Compliance Evaluation**

An inspection of tenant facilities will be conducted, and the frequency of the inspections is as follows:

- Annual inspections by PPT personnel (accompanied by the designated tenant representative) to verify that all BMPP elements are properly implemented at the facility.
- Routine self-inspection by tenants of their leaseholds/operations to ensure that BMPs have been and continue to be properly implemented.
- Deicing operations inspections will be scheduled during the deicing season.
- If the inspection is not practical during active deicing or the weather is inclement, the inspection will be conducted when operations are likely to occur, and the material and equipment of deicing are in place.
- Deicing samples shall be conducted once per month during deicing/anti-icing season (November to April).
- Deicing inspections shall be expanded to include all the months during which deicing chemicals may be used.
- Deicing inspections will be conducted if significantly or deleteriously large quantities of deicing chemicals are being spilled or discharged, or if water quality impacts have been reported, the inspection frequency shall be increased to weekly until such time as the chemical spills/discharges or impacts are reduced to acceptable levels.

The Annual Site Compliance Evaluation should include visual inspections of activities potentially impacting stormwater, the need for additional BMPs, and evidence of pollutants entering the drainage system. A report documenting the scope, observations, and any instances of non-compliance and recommendations of the Annual Site Compliance Evaluation should be added to the BMPP and retained as part of the BMPP until one year after the expiration of the permit.

The PPT personnel designated and trained to implement the BMPP will perform the Annual Site Compliance Evaluation and provide the ISP BMPP coordinator or their representative with complete and accurate information. All inspections will be carefully documented and required changes will be incorporated into the BMPP. These records will be retained until three (3) years after the coverage from the current industrial permit is terminated.

# Appendix A

## SPDES Permit for ISP

**New York State Department of Environmental Conservation**  
**Division of Environmental Permits**  
NYSDEC HEADQUARTERS  
625 BROADWAY  
ALBANY, NY 12233  
(518) 402-9167



**SPDES PERMIT RENEWAL**

12/19/2017

**ROBERT A SCHNEIDER**  
**LONG ISLAND MACARTHUR AIRPORT**  
**100 ARRIVAL AVE**  
**RONKONKOMA NY 11779**

**Permittee Name: TOWN OF ISLIP**  
**Facility Name: LONG ISLAND MACARTHUR AIRPORT**  
**Ind. Code: 4581 County: SUFFOLK**  
**DEC ID: 1-4728-00783/00003 SPDES No.: NY0173703**  
**Permit Effective Date: 9/1/2018**  
**Permit Expiration Date: 8/31/2028**

Dear Permittee,


The State Pollutant Elimination System (SPDES) permit renewal for the facility referenced above is approved with the new effective and expiration dates. This letter together with the previous valid permit for this facility effective on 09/01/2013 and any subsequent modifications constitute authorization to discharge wastewater in accordance with all terms, conditions and limitations specified in the previously issued permit(s).

As a reminder, SPDES permits are renewed at a central location in Albany in order to make the process more efficient. All other concerns with your permit, including applications for permit modification or transfer to a new owner, a name change, and other questions, should be directed to:

Regional Permit Administrator  
NYSDEC Region 1 Headquarters  
SUNY @ Stony Brook|50 Circle Rd  
Stony Brook, NY 11790-3409  
(631) 444-0365

If you have already filed an application for modification of your permit, it will be processed separately by that office.

If you have questions concerning this permit renewal, please contact MICHAEL R SCHAEFER at (518) 402-9167.

Sincerely,  
  
Kent P. Sanders  
Deputy Permit Administrator

CC:  
RPA  
BWC

RWE  
File

BWP

**New York State Department of Environmental Conservation**  
**Division of Environmental Permits, Region One**  
**SUNY @ Stony Brook, 50 Circle Road, Stony Brook, NY 11790-3409**  
Phone: (631) 444-0365 Fax: (631) 444-0360  
Website: [www.dec.ny.gov](http://www.dec.ny.gov)



May 17, 2013

Long Island MacArthur Airport  
Attn: Robert A. Schneider  
100 Arrival Avenue  
Ronkonkoma NY 11779

**Re: Permit # 1-4728-00783/00003**  
**SPDES Number: NY0173703**

Dear Permittee:

In conformance with the requirements of the State Uniform Procedures Act (Article 70, ECL) and its implementing regulations (6 NYCRR, Part 621) we are enclosing your permit. Please carefully read all permit conditions and special permit conditions contained in the permit to ensure compliance during the term of the permit. If you are unable to comply with any conditions, please contact us at the above address.

Sincerely,



Matthew R. Penski  
Environmental Analyst 1

cc: CO BWP – Permit Coordinator  
Water, R1  
File



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
**State Pollutant Discharge Elimination System (SPDES)**  
**DISCHARGE PERMIT**

First3.99

Industrial Code:	<b>4581</b>	SPDES Number:	<b>NY0173703</b>
Discharge Class (CL):	<b>01</b>	DEC Number:	<b>1-4728-00783/00003</b>
Toxic Class (TX):	<b>T</b>	Effective Date (EDP):	<b>September 1, 2008</b>
Major Drainage Basin:	<b>17</b>	Expiration Date (ExDP):	<b>August 31, 2013</b>
Sub Drainage Basin:	<b>01</b>	Modification Dates: (EDPM)	<b>May 31, 2013</b>
Water Index Number:	<b>Groundwater</b>		
Compact Area:			

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

**PERMITTEE NAME AND ADDRESS**

Name:	<b>Long Island MacArthur Airport</b>	Attention:	<b>Robert A. Schneider</b>
Street:	<b>100 Arrival Avenue</b>		
City:	<b>Ronkonkoma</b>	State:	<b>NY</b>
		Zip Code:	<b>11779</b>

is authorized to discharge from the facility described below:

**FACILITY NAME AND ADDRESS**

Name:	<b>Long Island MacArthur Airport</b>		
Location (C,T,V):	<b>(T) Islip</b>	County:	<b>Suffolk</b>
Facility Address:	<b>100 Arrival Avenue</b>		
City:	<b>Ronkonkoma</b>	State:	<b>NY</b>
		Zip Code:	<b>11779</b>
NYTM -E:		NYTM - N:	
From Outfall No.:	<b>001</b>	at Latitude:	<b>40 ° 47 ' 23 "</b>
		& Longitude:	<b>73 ° 06 ' 23 "</b>
into receiving waters known as:	<b>Groundwater</b>		Class: <b>GA</b>

and (list other Outfalls, Receiving Waters & Water Classifications)  
 002, 003 Groundwater – GA

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1 and 750-2.

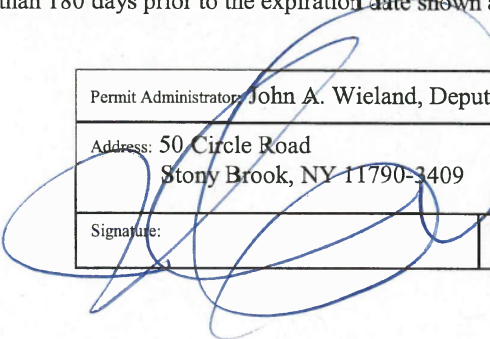
**DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS**

Mailing Name:	<b>Robert A. Schneider – Long Island MacArthur Airport</b>		
Street:	<b>100 Arrival Avenue</b>		
City:	<b>Ronkonkoma</b>	State:	<b>NY</b>
		Zip Code:	<b>11779</b>
Responsible Official or Agent:	<b>Robert A. Schneider</b>	Phone:	<b>631-467-3300</b>

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

CO BWP - Permit Coordinator  
 RWE  
 RPA

Permit Administrator:	<b>John A. Wieland, Deputy Permit Administrator</b>
Address:	<b>50 Circle Road          Stony Brook, NY 11790-3409</b>
Signature:	
Date:	<b>05/17/20</b>

## PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS

OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.	This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP)

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.	See below	See below

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL	COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based limits, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the permittee shall use the approved EPA analytical method with the lowest possible detection limit as promulgated under 40CFR Part 136 for the determination of the concentrations of parameters present in the sample unless otherwise specified. If a sample result is below the detection limit of the most sensitive method, compliance with the permit limit for that parameter was achieved. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This PQL can be neither lowered nor raised without a modification of this permit.	Action Levels are monitoring requirements, as defined below in Note 2, which trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, temperature, or concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly. All monitoring periods (quarterly, semiannual, annual, etc) are based upon the calendar year unless otherwise specified in this Permit.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

### Notes:

#### 1. EFFLUENT LIMIT TYPES:

- a. **DAILY DISCHARGE:** The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
- b. **DAILY MAX.:** The highest allowable daily discharge. **DAILY MIN.:** The lowest allowable daily discharge.
- c. **MONTHLY AVG:** The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
- d. **7 DAY ARITHMETIC MEAN (7 day average):** The highest allowable average of daily discharges over a calendar week.
- e. **30 DAY GEOMETRIC MEAN:** The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
- f. **7 DAY GEOMETRIC MEAN:** The highest allowable geometric mean of daily discharges over a calendar week.
- g. **RANGE:** The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.

2. **ACTION LEVELS:** Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards.

**PERMIT LIMITS, LEVELS AND MONITORING**

OUTFALL	WASTEWATER TYPE			RECEIVING WATER		EFFECTIVE	EXPIRING	
001	Stormwater from Tank Farm Area			Groundwater		EDPM	ExDP	
PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY		SAMPLE TYPE	FOOTNOTES (FN)	
pH	5.5	8.5	SU	Monthly		Grab		
PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Oil & Grease	NA	15			mg/L	Monthly	Grab	
Benzene	NA	0.7			ug/L	Monthly	Grab	
Toluene	NA	5			ug/L	Monthly	Grab	
Xylene	NA	5			ug/L	Monthly	Grab	1
Ethylbenzene	NA	5			ug/L	Monthly	Grab	

OUTFALL	WASTEWATER TYPE			RECEIVING WATER		EFFECTIVE	EXPIRING	
002	Stormwater from Ramp Area			Groundwater		EDPM	ExDP	
PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY		SAMPLE TYPE	FOOTNOTES (FN)	
pH	5.5	8.5	SU	Monthly		Grab		
PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		COMPLIANCE LEVEL/ ML	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Avg	Daily Max						
Oil & Grease	NA	15			mg/L	Monthly	Grab	
Benzene	NA	0.7			ug/L	Monthly	Grab	
Toluene	NA	5			ug/L	Monthly	Grab	
Xylene	NA	5			ug/L	Monthly	Grab	1
Ethylbenzene	NA	5			ug/L	Monthly	Grab	
Total Nitrogen	NA	10			mg/L	Monthly	Grab	2
Total Phosphorus	NA	Monitor			mg/L	Monthly	Grab	2
Propylene Glycol	NA	1			mg/L	Monthly	Grab	3

OUTFALL	WASTEWATER TYPE			RECEIVING WATER		EFFECTIVE	EXPIRING	
003	Sanitary Discharges – No Monitoring Required			Groundwater		EDPM	ExDP	

**FOOTNOTES:**

1. Applicable to each isomer: m, o, and p individually.
2. Samples are to be collected monthly from November to April.
3. Propylene Glycol samples are to be collected from downgradient monitoring wells MW1 & MW2. These samples are to be collected monthly from November to April.

## SPECIAL CONDITIONS - INDUSTRY BEST MANAGEMENT PRACTICES

1. **General** - The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage. The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the Department as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized Department representatives upon request.
2. **Compliance Deadlines** - A completed BMP plan was submitted January 28, 2010. The BMP plan shall be reviewed annually and shall be modified whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions (with the exception of SWPPPs - see item (5.) below) must be submitted to the Regional Water Engineer within 30 days. Note that the permittee is not required to obtain Department approval of the BMP plan (or of any SWPPPs) unless notified otherwise. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.
3. **Facility Review** - The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases. The review shall address all substances present at the facility that are identified in Tables 6-10. of SPDES application Form NY-2C (available at [http://www.dec.ny.gov/docs/permits\\_ej\\_operations\\_pdf/form2c.pdf](http://www.dec.ny.gov/docs/permits_ej_operations_pdf/form2c.pdf)) or that are required to be monitored for the SPDES permit.
4. **13 Minimum BMPs:** Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of stormwater elements of the BMP is available in the September 1992 manual *Storm Water Management for Industrial Activities*, EPA 832-R-92-006 (available from NTIS, 703-487-4650, order # PB 92235969). As a minimum, the plan shall include the following BMPs:
 

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

Note that for some facilities, especially those with few employees, some of the above BMPs may not be applicable. It is acceptable in these cases to indicate "Not Applicable" for the portion(s) of the BMP Plan that do not apply to your facility, along with an explanation.

**SPECIAL CONDITIONS - INDUSTRY BEST MANAGEMENT PRACTICES (continued)**

5. **Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater From Construction Activity to Surface Waters** - As part of BMP #11, a SWPPP shall be developed prior to the initiation of any site disturbance of one acre or more of uncontaminated area. Uncontaminated area means soils or groundwater which are free of contamination by any toxic or non-conventional pollutants identified in Tables 6-10 of SPDES application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting discharge of contaminated stormwater is not authorized by this permit unless the discharge is under State or Federal oversight as part of a remedial program or after review by the Regional Water Engineer; nor is such discharge authorized by any SPDES general permit for stormwater discharges. SWPPPs are not required for discharges of stormwater from construction activity to groundwaters. The SWPPP shall conform to the *New York Standards and Specifications for Erosion and Sediment Control* and *New York State Stormwater Management Design Manual*, unless a variance has been obtained from the Regional Water Engineer, and to any local requirements. The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity **at least 30 days prior to soil disturbance**. The SWPPP shall also be submitted to the Regional Water Engineer if contamination, as defined above, is involved and the permittee must obtain a determination of any SPDES permit modifications and/or additional treatment which may be required prior to soil disturbance. Otherwise the SWPPP shall be submitted to the Department only upon request. When a SWPPP is required, a properly completed *Notice of Intent* (NOI) form shall be submitted (available at [www.dec.ny.gov/chemical/43133.html](http://www.dec.ny.gov/chemical/43133.html)) prior to soil disturbance. Note that submission of a NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges, nor are any additional permit fees incurred. SWPPPs must be developed and submitted for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP are properly implemented.

6. **Airports:** The BMP plan must include pertinent elements of the SWPPP for industrial activities. The requirements listed under this section apply to stormwater discharges associated with industrial activity from air transportation facilities including air transportation (scheduled and non-scheduled); air courier services; airports; flying fields (except those maintained by aviation clubs); air terminal services including air traffic control (except government); aircraft storage at airports; aircraft upholstery repair; airfreight handling at airports; airport hangar rental; airport leasing, if operating airport; airport terminal services; hangar operation; airport, aircraft service and maintenance including aircraft cleaning and janitorial service; aircraft servicing /repairing except on a factory basis); vehicle maintenance shops; material handling facilities; equipment clearing operations; and airport/aircraft deicing and anti-icing. [Note: For the purpose of this section, the term "deicing" is defined as the process to remove frost, snow, or ice and "anti-icing" is the process which prevents the accumulation of frost, snow, or ice.] Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or deicing/anti-icing operations are addressed under this section. Tenants and/or other entities that apply or otherwise use deicing and/or anti-icing materials shall provide all necessary information to the permittee for the permittee to complete all requirements under this section.

**Additional Requirements for the BMP Plan:** BMPs shall be developed for areas of the facility occupied by tenants of the airport and shall be integrated with the BMP plan for the entire airport. For the purposes of this permit, tenants of the airport facility include airline passenger or cargo companies, fixed based operators and other parties who have contracts with the airport authority to conduct business operations on airport property and whose operations result in stormwater discharges associated with industrial activity. The BMP plan shall include, at a minimum, the following items.

A. Site description

(i) Site map - The site map shall identify where any of the following activities may be exposed to precipitation/surface runoff: aircraft and runway deicing/anti-icing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; and storage areas for aircraft, ground vehicles and equipment awaiting maintenance.

(ii) Summary of potential pollutant sources - A narrative description of the potential pollutant sources from the following activities: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing/anti-icing operations (including apron and centralized aircraft deicing/anti-icing stations, runways, taxiways and ramps). Facilities which conduct deicing/anti-icing operations shall maintain a record of the types (including the Material Safety Data Sheets (MSDS)) and monthly quantities of deicing/anti-icing chemicals used, either as measured amounts, or in the absence of metering, as estimated amounts. This includes all deicing/anti-icing chemicals, not just glycols and urea (e.g., potassium acetate). Tenants and fixed-base operators who conduct deicing/anti-icing operations shall provide the above information to the airport authority for inclusion in the BMP for the entire facility.

**B. Stormwater controls****(i) Good housekeeping**

(a) Aircraft, ground vehicle and equipment maintenance areas - The permittee must describe and implement measures that prevent or minimize the contamination of stormwater runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangars). The following practices (or their equivalents) shall be considered: performing maintenance activities indoors; maintaining an organized inventory of materials used in the maintenance areas; draining all parts of fluids prior to disposal; preventing the practice of hosing down the apron or hangar floor; using dry cleanup methods ; and collecting the stormwater runoff from the maintenance area and providing treatment or recycling.

(b) Aircraft, ground vehicle and equipment cleaning areas - Permittees shall ensure that cleaning of equipment is conducted in designated areas only and clearly identify these areas on the ground and delineate them on the site map. The permittee must describe and implement measures that prevent or minimize the contamination of the stormwater runoff from cleaning areas.

(c) Aircraft, ground vehicle and equipment storage areas - The storage of aircraft, ground vehicles and equipment awaiting maintenance must be confined to designated areas (delineated on the site map). The following BMPs (or their equivalents) shall be considered: indoor storage of aircraft and ground vehicles; the use of drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding storage areas.

(d) Material storage areas - Storage vessels of all materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) must be maintained in good condition, so as to prevent or minimize contamination of stormwater, and plainly labeled (e.g., "used oil," "Contaminated Jet A," etc.). The permittee must describe and implement measures that prevent or minimize contamination of precipitation/runoff from storage areas. The following BMPs or their equivalents shall be considered: indoor storage of materials centralized storage areas for waste materials; and installation of berms/dikes around storage areas.

(e) Airport fuel system and fueling areas - The permittee must describe and implement measures that prevent or minimize the discharge of fuels to the storm sewer/surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. The following BMPs (or their equivalents) shall be considered: implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); using dry cleanup methods; and collecting the stormwater runoff.

(ii) Source reduction - The permittee shall consider alternatives to the use of urea and glycol-based airfield deicing/anti-icing chemicals to reduce the aggregate amount of airfield deicing/anti-icing. The permittee shall require the tenants and/or other entities who apply or otherwise use deicing and/or anti-icing materials to consider alternatives to the use of urea and glycol-based deicing/anti-icing chemicals to reduce the aggregate amount of deicing/anti-icing chemicals used and/or lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; anhydrous potassium acetate.

(a) Runway deicing operations - The Permittee shall evaluate present application rates to ensure against excessive over application by analyzing application rates and adjusting as necessary, consistent with considerations of flight safety. Also the following BMP options shall be considered (or their equivalents): metered application of chemicals; prewetting dry chemical constituents prior to application; installation of runway ice detection systems; implementing anti-icing operations as a preventive measure against ice buildup.

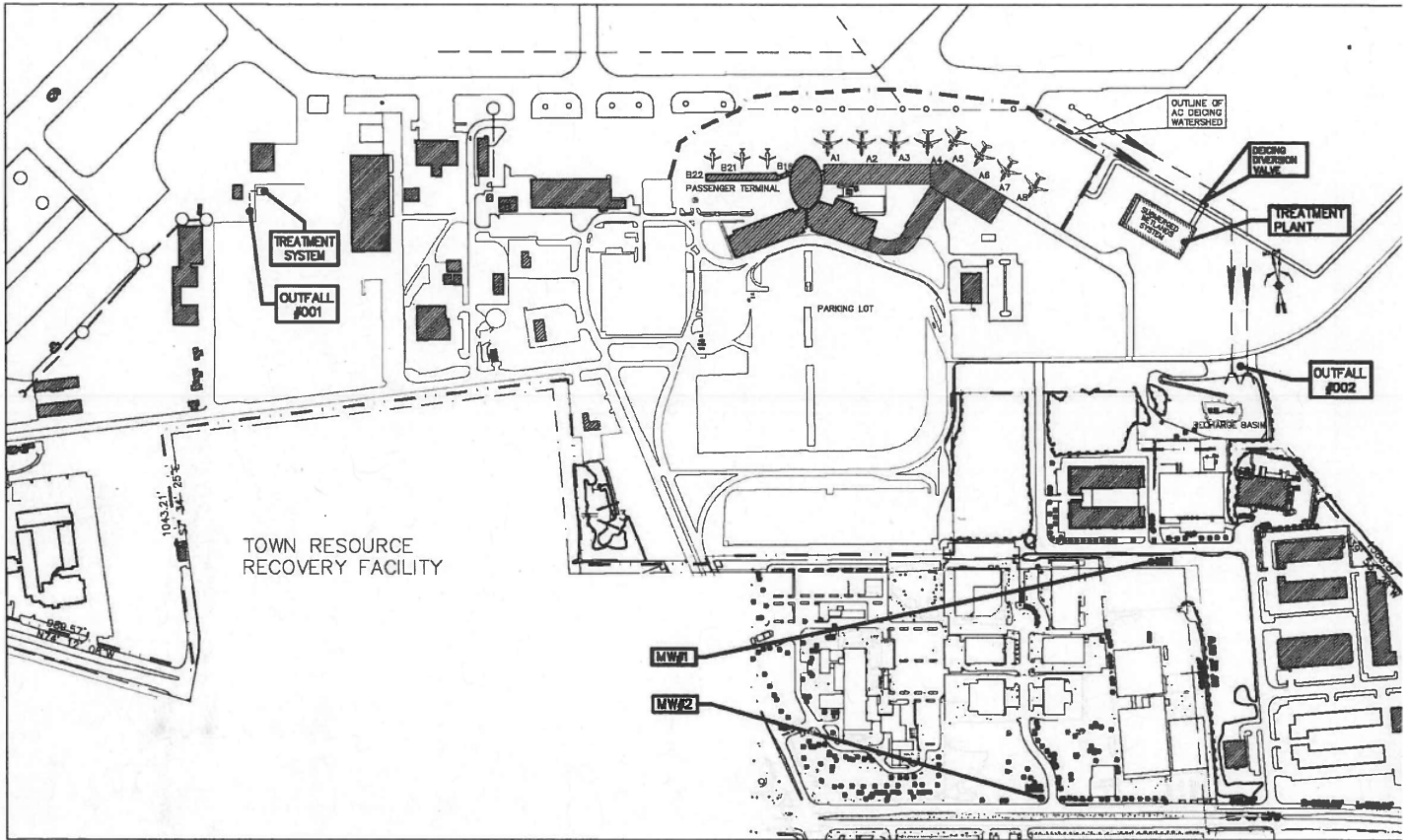
(b) Aircraft deicing/anti-icing operations - The Permittee shall require tenants and/or other entities who apply or otherwise use deicing and/or anti-icing materials to determine whether excessive application of deicing/anti-icing chemicals occurs, and adjust as necessary, consistent with considerations of flight safety. This evaluation should be carried out by the personnel most familiar with the particular aircraft and flight operations in question (versus an outside entity such as the airport authority). The use of alternative deicing/anti-icing agents as well as containment measures for all applied chemicals shall be considered. Also, the following BMP options (or their equivalents) shall be considered for reducing deicing fluid use: forced-air deicing systems; computer-controlled fixed-gantry systems; infrared technology; hot water; varying glycol content to air temperature; enclosed-basket deicing trucks; mechanical methods; solar radiation; hangar storage; aircraft covers; and thermal blankets for MD-80s and DC-9s. The use of ice-detection systems and airport traffic flow strategies and departure slot allocation systems shall also be considered.

(iii) Management of runoff - Where deicing/anti-icing operations occur, the permittee, tenants and/or other entities who apply or otherwise use deicing and/or anti-icing materials shall describe and implement a program to control or manage contaminated runoff to reduce the amount of pollutants being discharged from the site. The following BMPs (or their equivalents) shall be considered: establishing a dedicated deicing facility with a runoff collection/recovery system; using vacuum/collection trucks; storing contaminated stormwater/deicing fluids in tanks and releasing controlled amounts to a publicly owned treatment works; collecting contaminated runoff in a wet pond for biochemical decomposition (be aware of attracting wildlife that may prove hazardous to flight operations); and directing runoff into vegetative swales or other infiltration measures. The plan shall consider the recovery of deicing/anti-icing materials when these materials are applied during nonprecipitation events (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains, etc.) to prevent these materials from later becoming a source of stormwater contamination. Used deicing fluid should be recycled whenever possible.

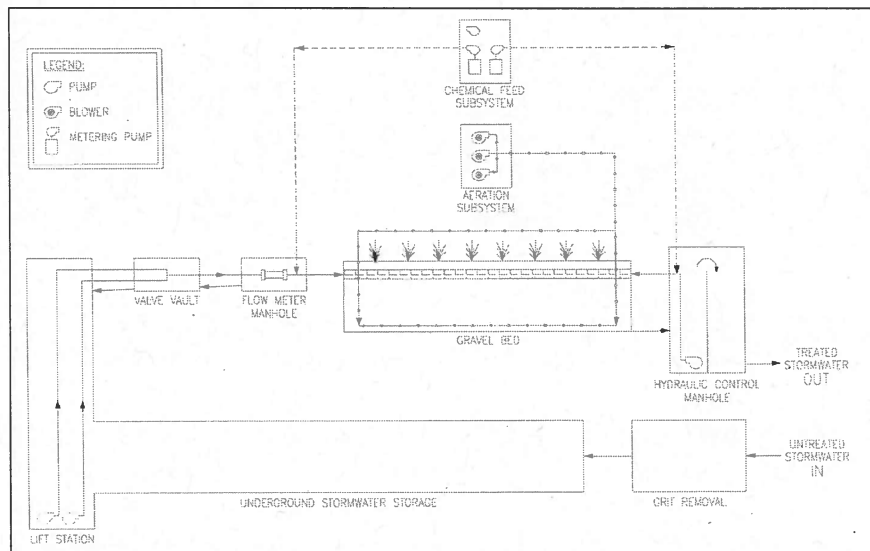
(iv) Routine facility inspections - The inspection frequency shall be specified in the plan. At a minimum, inspections shall be conducted once per month during deicing/anti-icing season (e.g., October through April for most airports). If deicing occurs before or after this period, the inspections shall be expanded to include all months during which deicing chemicals may be used. Also, if significantly or deleteriously large quantities of deicing chemicals are being spilled or discharged, or if water quality impacts have been reported, the inspection frequency shall be increased to weekly until such time as the chemical spills/discharges or impacts are reduced to acceptable levels.

(v) Comprehensive site compliance evaluation - The annual site compliance evaluations shall be conducted by qualified facility personnel during periods of actual deicing operations, if possible. If not practicable during active deicing or if the weather is too inclement, the evaluations shall be conducted when deicing operations are likely to occur and the materials and equipment for deicing are in place.

# MONITORING LOCATIONS



Facility Map



Water flow diagram for Outfall 002

**RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS**

- a) 6 NYCRR Part 750 is hereby incorporated by reference and its conditions are enforceable requirements of this permit. The permittee shall comply with all conditions set forth in this permit and with 6 NYCRR Part 750, including, but not limited to: additional monitoring and reporting requirements and conditions, including noncompliance reporting.
- b) The monitoring information required by this permit shall be summarized, signed and retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent. **Also, monitoring information required by this permit shall be summarized and reported by submitting;**

(if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

(if box is checked) an annual report to the Regional Water Engineer at the address specified below. The annual report is due by February 1 each year and must summarize information for January to December of the previous year in a format acceptable to the Department.

(if box is checked) a monthly "Wastewater Facility Operation Report..." (form 92-15-7) to the:

Regional Water Engineer and/or  County Health Department or Environmental Control Agency specified below

Send the **original** of each DMR page to:  
 Department of Environmental Conservation  
 Division of Water  
 Bureau of Water Compliance  
 625 Broadway, Albany, NY 12233-3506  
 Phone: (518) 402-8177

Send a **copy** of each DMR page to:  
 Department of Environmental Conservation  
 Regional Water Engineer  
 SUNY @ Stony Brook  
 50 Circle Road  
 Stony Brook, NY 11790-3409  
 Phone: 631-444-0405

- c) Monitoring and analysis shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- d) More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.
- e) Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- f) Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- g) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

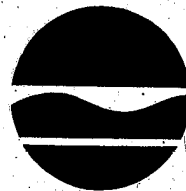
**New York State Department of Environmental Conservation**

**Division of Environmental Permits, Region One**

SUNY @ Stony Brook, 50 Circle Road, Stony Brook, NY 11790 - 3409

Phone: (631) 444-0365 • FAX: (631) 444-0360

Website: www.dec.state.ny.us



Alexander B. Grannis  
Commissioner

**PERMIT MODIFICATION**

September 22, 2009

Long Island Macarthur Airport  
Attn: Robert A. Schneider  
100 Arrival Avenue  
Ronkonkoma NY 11779

**Re: Permit # 1-4728-00783/00003**  
**Long Island Macarthur Airport**  
**SPDES # NY0173703**

Dear Permittee:

The Department of Environmental Conservation has reviewed your request to modify the above permit and finds the changes to be acceptable. Therefore, in conformance with the requirements of the State Uniform Procedures Act (Article 70, ECL) and its implementing regulations (6NYCRR, Part 621) we are enclosing your **modified** permit. Please carefully read all permit conditions and special permit conditions contained in the permit to insure compliance during the term of the permit. If you are unable to comply with any conditions contact us at the above address.

This permit amendment must be kept available on site during periods when permitted activities are being conducted.

Sincerely,

Matthew R. Penski  
Environmental Analyst I

**Enclosures**

cc: W. O'Brien, DOW  
N.D. Eryou, PHD, PE  
File



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
**State Pollutant Discharge Elimination System (SPDES)**  
**DISCHARGE PERMIT**

First3.99

Industrial Code: 4581  
 Discharge Class (CL): 01  
 Toxic Class (TX): T  
 Major Drainage Basin: 17  
 Sub Drainage Basin: 01  
 Water Index Number:  
 Compact Area:

SPDES Number: NY0173703  
 DEC Number: 1-4728-00783/00003  
 Effective Date (EDP): 9/01/2008  
 Expiration Date (ExDP): 9/1/2013  
 Modification Dates:(EDPM) 11/1/2009

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq.)(hereinafter referred to as "the Act").

**PERMITTEE NAME AND ADDRESS**

Name: Long Island Macarthur Airport  
 Street: 100 Arrival Avenue  
 City: Ronkonkoma

Attention: Robert A. Schneider

State: NY Zip Code: 11779  
 is authorized to discharge from the facility described below:

**FACILITY NAME AND ADDRESS**

Name: Long Island Macarthur Airport  
 Location (C,T,V): Islip (T)  
 Facility Address: 100 Arrival Avenue  
 City: Ronkonkoma

County: Suffolk

State: NY Zip Code: 11779

NYTM - N: 4517.7

From Outfall No.: 001-003 at Latitude: 40 ° 47 " 23 ' & Longitude: 73 ° 06 " 71 "

Class: GA

into receiving waters known as: Groundwater  
 and; (list other Outfalls, Receiving Waters & Water Classifications)

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth this permit; and 6 NYCRR Part 750-1.2(a) and 750-2.

**DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS**

Mailing Name: Long Island Macarthur Airport  
 Street: 100 Arrival Avenue  
 City: Ronkonkoma  
 Responsible Official or Agent: Robert A. Schneider

State: NY Zip Code: 11779  
 Phone: 631-467-3300

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

CO BWP - Permit Coordinator  
 RWE  
 RPA  
 J.Meyers, SCDHS

Permit Administrator: John A. Wieland, Deputy Permit Administrator	
Address: NYSDEC SUNY@Stony Brook 50 Circle Road Stony Brook, New York, 11790-3409	
Signature:	Date: 09 22 2009

**PERMIT LIMITS, LEVELS AND MONITORING DEFINITIONS**

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OUTFALL	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING		
	This cell describes the type of wastewater authorized for discharge. Examples include process or sanitary wastewater, storm water, non-contact cooling water.	This cell lists classified waters of the state to which the listed outfall discharges.	The date this page starts in effect. (e.g. EDP or EDPM)	The date this page is no longer in effect. (e.g. ExDP)		
PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQ.	SAMPLE TYPE	
e.g. pH, TRC, Temperature, D.O.	The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.	SU, °F, mg/l, etc.			
PARA-METER	EFFLUENT LIMIT	PRACTICAL QUANTITATION LIMIT (PQL)	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based standards, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the analytical method specified in the permit shall be used to monitor the amount of the pollutant in the outfall to this level, provided that the laboratory analyst has complied with the specified quality assurance/quality control procedures in the relevant method. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This PQL can be neither lowered nor raised without a modification of this permit.	Type I or Type II Action Levels are monitoring requirements, as defined below in Note 2, that trigger additional monitoring and permit review when exceeded.	This can include units of flow, pH, mass, Temperature, concentration. Examples include µg/l, lbs/d, etc.	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

**Note 1: DAILY DISCHARGE:** The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day. **DAILY MAX:** The highest allowable daily discharge. **DAILY MIN:** The lowest allowable daily discharge. **MONTHLY AVG (daily avg):** The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. **RANGE:** The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown. **7 DAY ARITHMETIC MEAN (7 day average):** The highest allowable average of daily discharges over a calendar week. **12 MRA (twelve month rolling avg):** The average of the most recent twelve month's monthly averages. **30 DAY GEOMETRIC MEAN (30 d geo mean):** The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. **7 DAY GEOMETRIC MEAN (7 d geo mean):** The highest allowable geometric mean of daily discharges over a calendar week.

**Note 2: ACTION LEVELS:** Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards. **TYPE I:** The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results in excess of the stated Action Level. **TYPE II:** The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results that show the stated action level exceeded for four of six consecutive samples, or for two of six consecutive samples by 20 % or more, or for any one sample by 50 % or more.

**PERMIT LIMITS, LEVELS AND MONITORING**

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OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Stormwater from Tank Farm Area	Groundwater	11/1/2009	9/1/2013

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	5.5	8.8	SU	Monthly	Grab	

PARAMETER	COMPLIANCE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
				TYPE II				
Oil & Grease	NA	15			mg/l	Batch	Grab	
Benzene	NA	0.7			ug/l	Batch	Grab	
Toluene	NA	5			ug/l	Batch	Grab	
Xylene	NA	5			ug/l	Batch	Grab	1
Ethylbenzene	NA	5			ug/l	Batch	Grab	

NOTES:  
1. Applicable to each isomer: m, o and p individually.

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
002	Stormwater from Ramp Areas	Groundwater	11/1/2009	9/1/2013

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pH	5.5	8.8	SU	Monthly	Grab	

PARAMETER	COMPLIANCE LIMIT		MONITORING ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
				TYPE II				
Oil & Grease	NA	15			mg/l	Monthly	Grab	
Benzene	NA	0.7			ug/l	Monthly	Grab	
Toluene	NA	5			ug/l	Monthly	Grab	
Xylene	NA	5			ug/l	Monthly	Grab	1
Ethylbenzene	NA	5			ug/l	Monthly	Grab	
Propylene Glycol	NA	1000			ug/l	Monthly	Grab	2

**NOTES:**

1. Applicable to each isomer: m, o and p individually.
2. Propylene Glycol samples are to be collected from downgradient monitoring wells MW1 & MW2. These samples are to be collected monthly from November to April. Prior to the first deicing season the permittee shall purge and sample the groundwater monitoring wells on three consecutive days for Propylene Glycol. These sample results are to be submitted to this Department to determine the ambient levels

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
003	Sanitary Discharges	Groundwater	9/1/2008	9/1/2013

**NO MONITORING REQUIRED**

## SPECIAL CONDITIONS - INDUSTRY BEST MANAGEMENT PRACTICES

1. **General** - The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage.

The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the Department as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized Department representatives upon request.

2. **Compliance Deadlines** - The initial completed BMP plan shall be submitted within six months of effective date of this permit to the Regional Water Engineer. The BMP plan shall be implemented within 6 months of submission, unless a different time frame is approved by the Department. The BMP plan shall be reviewed annually and shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions (with the exception of SWPPPs - see item (4.B.) below) must be submitted to the Regional Water Engineer within 30 days. Note that the permittee is not required to obtain Department approval of the BMP plan (or of any SWPPPs) unless notified otherwise. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.

3. **Facility Review** - The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases.

The review shall address all substances present at the facility that are identified in Tables 6-10 of SPDES application Form NY-2C (available at [http://www.dec.ny.gov/docs/permits\\_ej\\_operations\\_pdf/form2c.pdf](http://www.dec.ny.gov/docs/permits_ej_operations_pdf/form2c.pdf)) or that are required to be monitored for by the SPDES permit.

4. **A. 13 Minimum BMPs** - Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of stormwater elements of the BMP is available in the September 1992 manual *Storm Water Management for Industrial Activities*, EPA 832-R-92-006 (available from NTIS, 703-487-4650, order # PB 92235969). As a minimum, the plan shall include the following BMPs:

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

Note that for some facilities, especially those with few employees, some of the above BMPs may not be applicable. It is acceptable in these cases to indicate "Not Applicable" for the portion(s) of the BMP Plan that do not apply to your facility, along with an explanation.

**B. Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater From Construction Activity to Surface Waters** - As part of BMP #11, a SWPPP shall be developed prior to the initiation of any site disturbance of one acre or more of uncontaminated area. Uncontaminated area means soils or groundwater which are free of contamination by any toxic or non-conventional pollutants identified in Tables 6-10 of SPDES application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting discharge of contaminated stormwater is not authorized by this permit unless the discharge is under State or Federal oversight as part of a remedial program or after review by the Regional Water Engineer; nor is such discharge authorized by any SPDES general permit for stormwater discharges. SWPPPs are not required for discharges of stormwater from construction activity to groundwaters.

The SWPPP shall conform to the *New York Standards and Specifications for Erosion and Sediment Control* and *New York State Stormwater Management Design Manual*, unless a variance has been obtained from the Regional Water Engineer, and to any local requirements. The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity at least 30 days prior to soil disturbance. The SWPPP shall also be submitted to the Regional Water Engineer if contamination, as defined above, is involved and the permittee must obtain a determination of any SPDES permit modifications and/or additional treatment which may be required prior to soil disturbance. Otherwise, the SWPPP shall be submitted to the Department only upon request. When a SWPPP is required, a properly completed *Notice of Intent (NOI)* form shall be submitted (available at [www.dec.ny.gov/chemical/43133.html](http://www.dec.ny.gov/chemical/43133.html)) prior to soil disturbance. Note that submission of a NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges, nor are any additional permit fees incurred. SWPPPs must be developed and submitted for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP are properly implemented.

5. **Facilities with Petroleum and/or Chemical Bulk Storage (PBS and CBS) Areas** - Compliance must be maintained with all applicable regulations including those involving releases, registration, handling and storage (6NYCRR 595-599 and 612-614). Stormwater discharges from handling and storage areas should be eliminated where practical.

A. **Spill Cleanup** - All spilled or leaked substances must be removed from secondary containment systems as soon as practical and for CBS storage areas within 24 hours, unless written authorization is received from the Department. The containment system must be thoroughly cleaned to remove any residual contamination which could cause contamination of stormwater and the resulting discharge of pollutants to waters of the State. Following spill cleanup the affected area must be completely flushed with clean water three times and the water removed after each flushing for proper disposal in an on-site or off-site wastewater treatment plant designed to treat such water and permitted to discharge such wastewater. Alternately, the permittee may test the first batch of stormwater following the spill cleanup to determine discharge acceptability. If the water contains no pollutants it may be discharged. Otherwise it must be disposed of as noted above. See *Discharge Monitoring* below for the list of parameters to be sampled for.

B. **Discharge Operation** - Stormwater must be removed before it compromises the required containment system capacity. Each discharge may only proceed with the prior approval of the permittee staff person responsible for ensuring SPDES permit compliance. Bulk storage secondary containment drainage systems must be locked in a closed position except when the operator is in the process of draining accumulated stormwater. Transfer area secondary containment drainage systems must be locked in a closed position during all transfers and must not be reopened unless the transfer area is clean of contaminants. Stormwater discharges from secondary containment systems should be avoided during periods of precipitation. A logbook shall be maintained on site noting the date, time and personnel supervising each discharge.

C. **Discharge Screening** - Prior to each discharge from a secondary containment system the stormwater must be screened for contamination. All stormwater must be inspected for visible evidence of contamination. Additional screening methods shall be developed by the permittee as part of the overall BMP Plan, e.g. the use of volatile gas meters to detect the presence of gross levels of gasoline or volatile organic compounds. If the screening indicates contamination, the permittee must collect and analyze a representative sample of the stormwater. If the water contains no pollutants it may be discharged. Otherwise it must either be disposed of in an on site or off site wastewater treatment plant designed to treat and permitted to discharge such wastewater or the Regional Water Engineer can be contacted to determine if it may be discharged without treatment.

D. **Discharge Monitoring** - Unless the discharge from any bulk storage containment system outlet is identified in the SPDES permit as an outfall with explicit effluent and monitoring requirements, the permittee shall monitor the outlet as follows:

(i) *Bulk Storage Secondary Containment Systems:*

(a) The volume of each discharge from each outlet must be monitored. Discharge volume may be calculated by measuring the depth of water within the containment area times the wetted area converted to gallons or by other suitable methods. A representative sample shall be collected of the first discharge\* following any cleaned up spill or leak. The sample must be analyzed for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present\*\*.

(b) Every fourth discharge\* from each outlet must be sampled for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present\*\*.

(ii) *Transfer Area Secondary Containment Systems:*

The first discharge\* following any spill or leak must be sampled for flow, pH, the substance(s) transferred in that area and any other pollutants the permittee knows or has reason to believe are present\*\*.

6. **Airports:** The BMP plan must include pertinent elements of the SWPPP for industrial activities.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from air transportation facilities including air transportation (scheduled and non-scheduled); air courier services; airports; flying fields (except those maintained by aviation clubs); air terminal services including air traffic control (except government); aircraft storage at airports; aircraft upholstery repair; airfreight handling at airports; airport hangar rental; airport leasing, if operating airport; airport terminal services; hangar operation; airport, aircraft service and maintenance including aircraft cleaning and janitorial service; aircraft servicing /repairing except on a factory basis); vehicle maintenance shops; material handling facilities; equipment clearing operations; and airport/aircraft deicing and anti-icing. [Note: For the purpose of this section, the term "deicing" is defined as the process to remove frost, snow, or ice and "anti-icing" is the process which prevents the accumulation of frost, snow, or ice.] Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or deicing/anti-icing operations are addressed under this section. Tenants and/or other entities that apply or otherwise use deicing and/or anti-icing materials shall provide all necessary information to the permittee for the permittee to complete all requirements under this section.

**Additional Requirements for the BMP Plan:** BMPs shall be developed for areas of the facility occupied by tenants of the airport and shall be integrated with the BMP plan for the entire airport. For the purposes of this permit, tenants of the airport facility include airline passenger or cargo companies, fixed based operators and other parties who have contracts with the airport authority to conduct business operations on airport property and whose operations result in stormwater discharges associated with industrial activity. The BMP plan shall include, at a minimum, the following items.

A. Site description

(i) Site map - The site map shall identify where any of the following activities may be exposed to precipitation/surface runoff: aircraft and runway deicing/anti-icing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; and storage areas for aircraft, ground vehicles and equipment awaiting maintenance.

(ii) Summary of potential pollutant sources - A narrative description of the potential pollutant sources from the following activities: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing/anti-icing operations (including apron and centralized aircraft deicing/anti-icing stations, runways, taxiways and ramps). Facilities which conduct deicing/anti-icing operations shall maintain a record of the types (including the Material Safety Data Sheets (MSDS)) and monthly quantities of deicing/anti-icing chemicals used, either as measured amounts, or in the absence of metering, as estimated amounts. This includes all deicing/anti-icing chemicals, not just glycols and urea (e.g., potassium acetate). Tenants and fixed-base operators who conduct deicing/anti-icing operations shall provide the above information to the airport authority for inclusion in the BMP for the entire facility.

B. Stormwater controls(i) Good housekeeping

(a) Aircraft, ground vehicle and equipment maintenance areas - The permittee must describe and implement measures that prevent or minimize the contamination of stormwater runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangars). The following practices (or their equivalents) shall be considered: performing maintenance activities indoors; maintaining an organized inventory of materials used in the maintenance areas; draining all parts of fluids prior to disposal; preventing the practice of hosing down the apron or hangar floor; using dry cleanup methods; and collecting the stormwater runoff from the maintenance area and providing treatment or recycling.

the drains, etc.) to prevent these materials from later becoming a source of stormwater contamination. Used deicing fluid should be recycled whenever possible.

(iv) Routine facility inspections - The inspection frequency shall be specified in the plan. At a minimum, inspections shall be conducted once per month during deicing/anti-icing season (e.g., October through April for most airports). If deicing occurs before or after this period, the inspections shall be expanded to include all months during which deicing chemicals may be used. Also, if significantly or deleteriously large quantities of deicing chemicals are being spilled or discharged, or if water quality impacts have been reported, the inspection frequency shall be increased to weekly until such time as the chemical spills/discharges or impacts are reduced to acceptable levels.

(v) Comprehensive site compliance evaluation - The annual site compliance evaluations shall be conducted by qualified facility personnel during periods of actual deicing operations, if possible. If not practicable during active deicing or if the weather is too inclement, the evaluations shall be conducted when deicing operations are likely to occur and the materials and equipment for deicing are in place.

E. Discharge Reporting - Any results of monitoring required above, excluding screening data, must be submitted to the Department by appending them to the corresponding DMR. Failure to perform the required discharge monitoring and reporting shall constitute a violation of the terms of the SPDES permit.

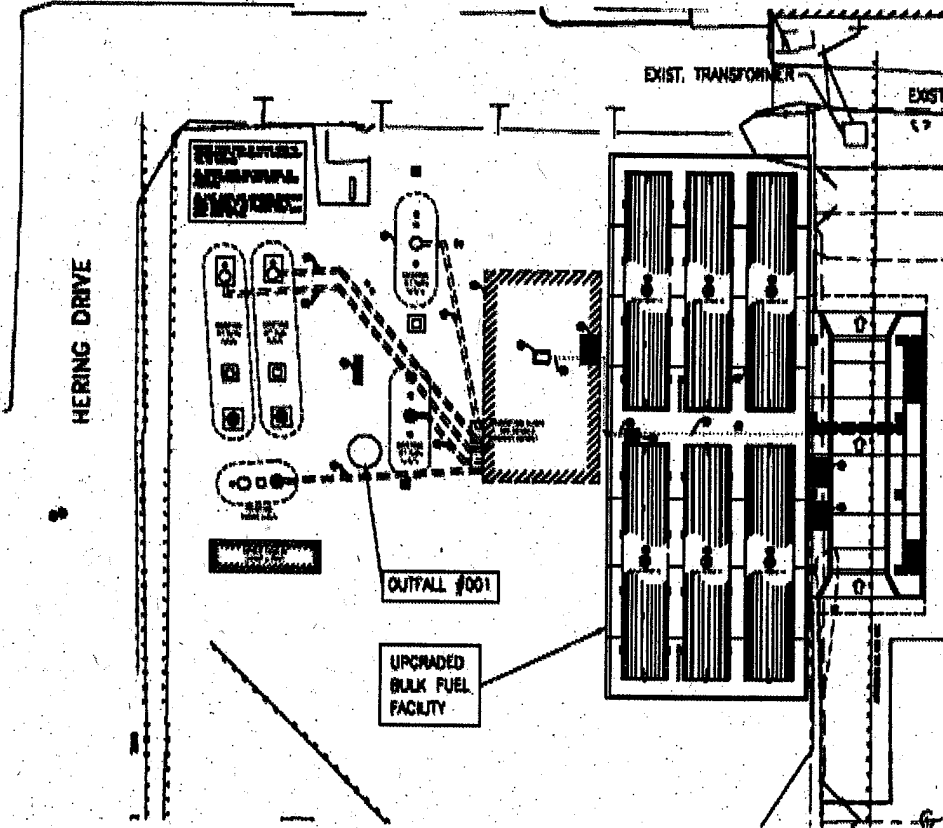
F. Prohibited Discharges - In all cases, any discharge which contains a visible sheen, foam, or odor, or may cause or contribute to a violation of water quality is prohibited. The following discharges are prohibited unless specifically authorized elsewhere in this SPDES permit: spills or leaks, tank 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.

\* Discharge includes stormwater discharges and snow and ice removal. If applicable, a representative sample of snow and/or ice should be collected and allowed to melt prior to assessment.

\*\* If the stored substance is gasoline or aviation fuel then sample for oil & grease, benzene, ethylbenzene, naphthalene, toluene and total xylenes (EPA method 602). If the stored substance is kerosene, diesel fuel, fuel oil, or lubricating oil then sample for oil & grease and polynuclear aromatic hydrocarbons (EPA method 610). If the substance(s) are listed in Tables 6-8 of SPDES application form NY-2C then sampling is required. If the substance(s) are listed in NY-2C Tables 9-10 sampling for appropriate indicator parameters may be required, e.g. BOD<sub>5</sub> or toxicity testing. Contact the facility inspector for further guidance. In all cases flow and pH monitoring is required.

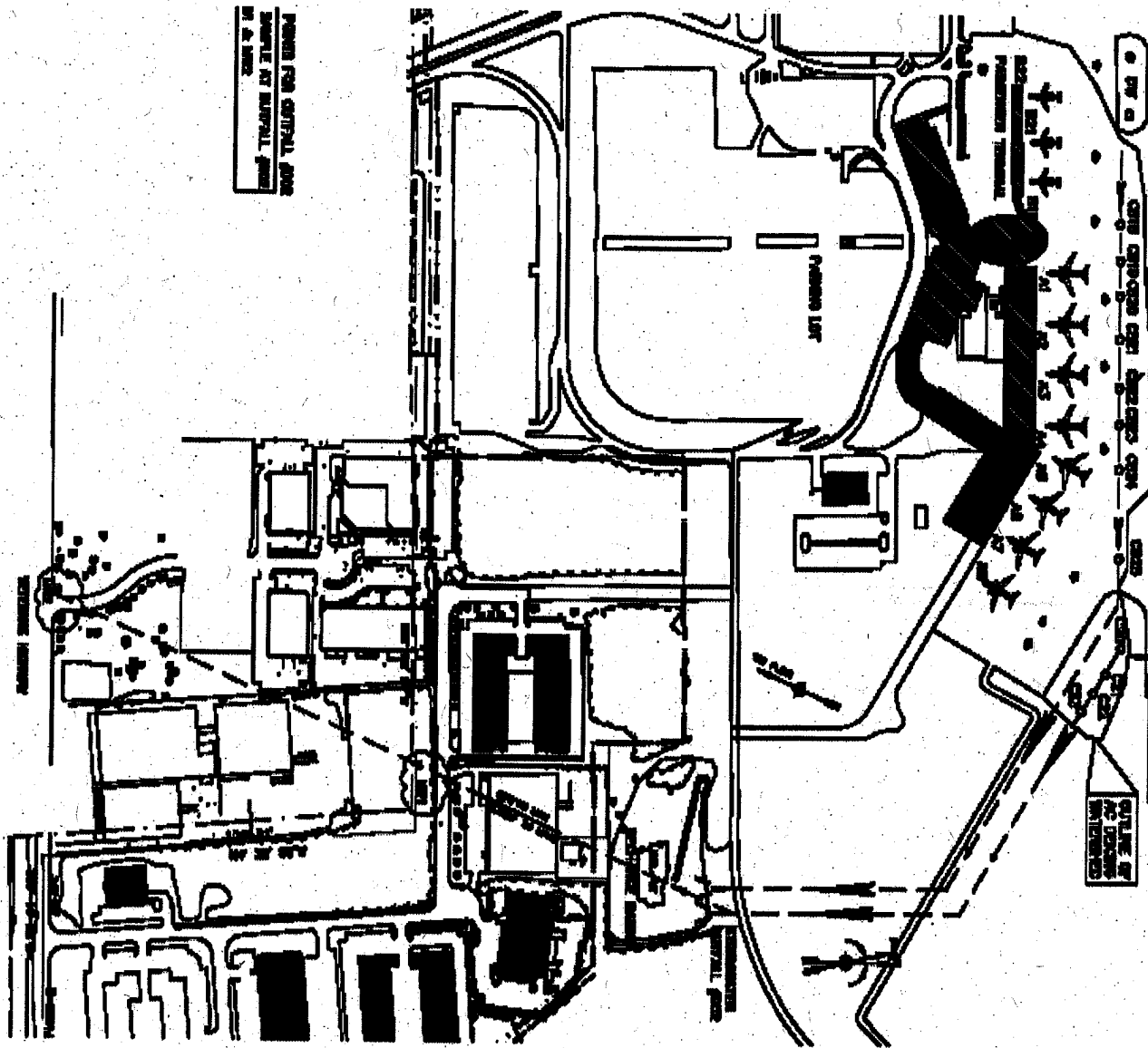
### MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below: Outfall #001



### MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below: Outfall # 002



## RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- a) The permittee shall also refer to 6 NYCRR Part 750-1.2(a) and 750-2 for additional information concerning monitoring and reporting requirements and conditions.
- b) The monitoring information required by this permit shall be summarized, signed and retained for a period of five years from the date of the sampling for subsequent inspection by the Department or its designated agent. Also, monitoring information required by this permit shall be summarized and reported by submitting;

(if box is checked) completed and signed Discharge Monitoring Report (DMR) forms for each 1 month reporting period to the locations specified below. Blank forms are available at the Department's Albany office listed below. The first reporting period begins on the effective date of this permit and the reports will be due no later than the 28th day of the month following the end of each reporting period.

(if box is checked) an annual report to the Regional Water Engineer at the address specified below. The annual report is due by February 1 and must summarize information for January to December of the previous year in a format acceptable to the Department.

(if box is checked) a monthly "Wastewater Facility Operation Report..." (form 92-15-7) to the:

Regional Water Engineer and/or  County Health Department or Environmental Control Agency specified below

Send the DMRs with original signatures to:

Department of Environmental Conservation  
Division of Water  
Bureau of Water Compliance Programs  
625 Broadway  
Albany, New York 12233-3506

Phone: (518) 402-8177

Send a copy of each DMR page to:

Department of Environmental Conservation  
Regional Water Engineer  
SUNY @ Stony Brook  
50 Circle Road  
Stony Brook, New York, 11790-3409

Phone: (631) 444-0405

- c) Noncompliance with the provisions of this permit shall be reported to the Department as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2.
- d) Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- e) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR Part 136 or as specified in this permit, the results of this monitoring shall be included in the calculations and recording of the data on the Discharge Monitoring Reports.
- f) Calculation for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- g) Unless otherwise specified, all information recorded on the Discharge Monitoring Report shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- h) Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section five hundred two of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be sent to the Environmental Laboratory Accreditation Program, New York State Health Department Center for Laboratories and Research, Division of Environmental Sciences, The Nelson A. Rockefeller Empire State Plaza, Albany, New York 12201.

# Appendix B

## Location and Site Maps

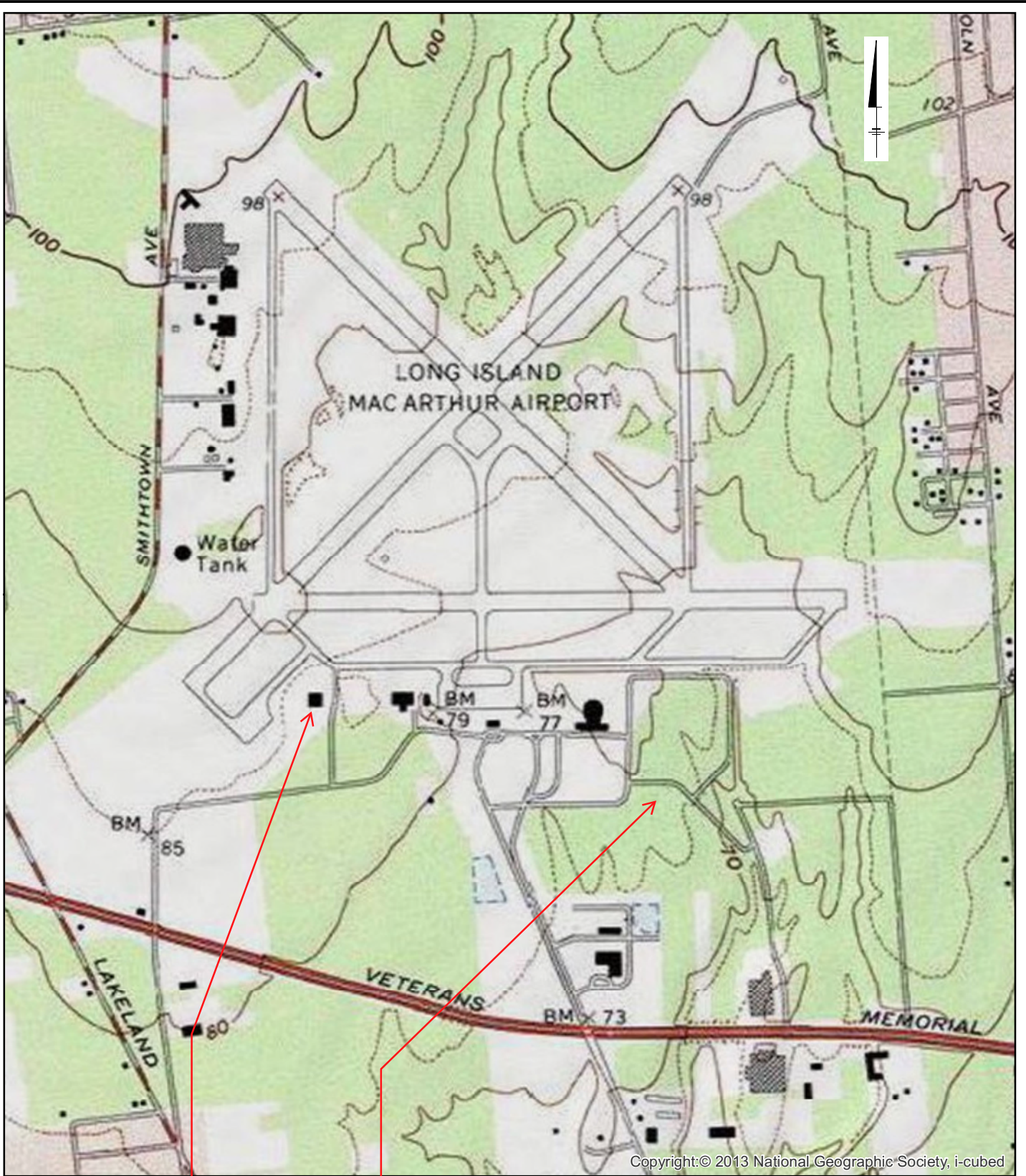
*Figure 1. Airport Location Map*

*Figure 2. Existing Airport Layout Plan*

*Figure 3. Drainage Areas*

*Figure 4. Glycol Pre-treatment System*

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OUTFALL #001

OUTFALL #002

MACARTHUR AIRPORT  
RONKONKOMA, NY

AIRPORT LOCATOR MAP

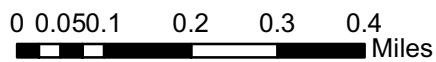
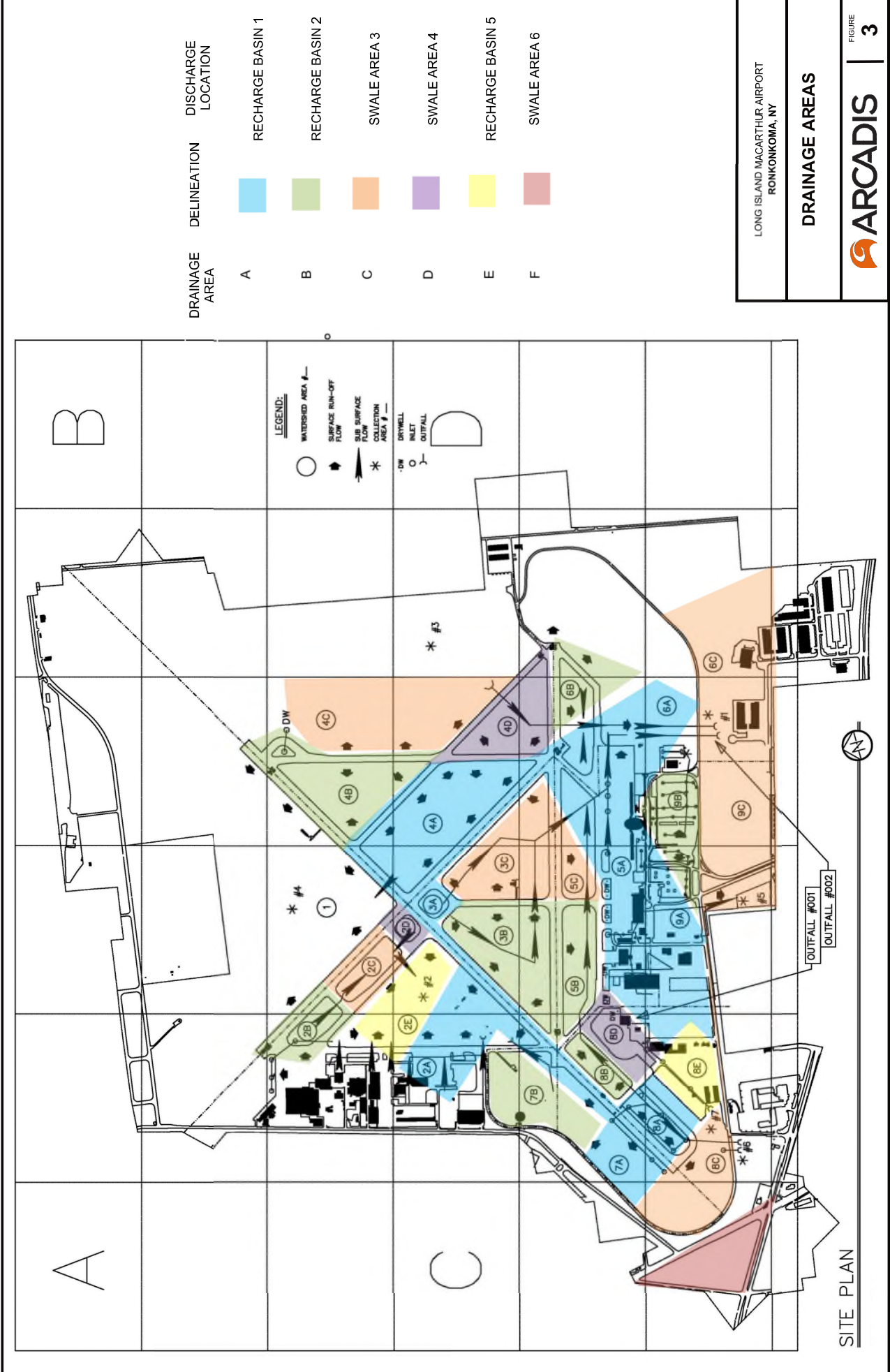


FIGURE  
1





DRAINAGE AREA	DELINEATION	DISCHARGE LOCATION
A		RECHARGE BASIN 1
B		RECHARGE BASIN 2
C		SWALE AREA 3
D		SWALE AREA 4
E		RECHARGE BASIN 5
F		SWALE AREA 6

**LEGEND:**

- WATERSHED AREA #
- SURFACE RUN-OFF FLOW
- SW SURFACE FLOW
- COLLECTION AREA #
- DRYWELL
- INLET
- OUTFALL

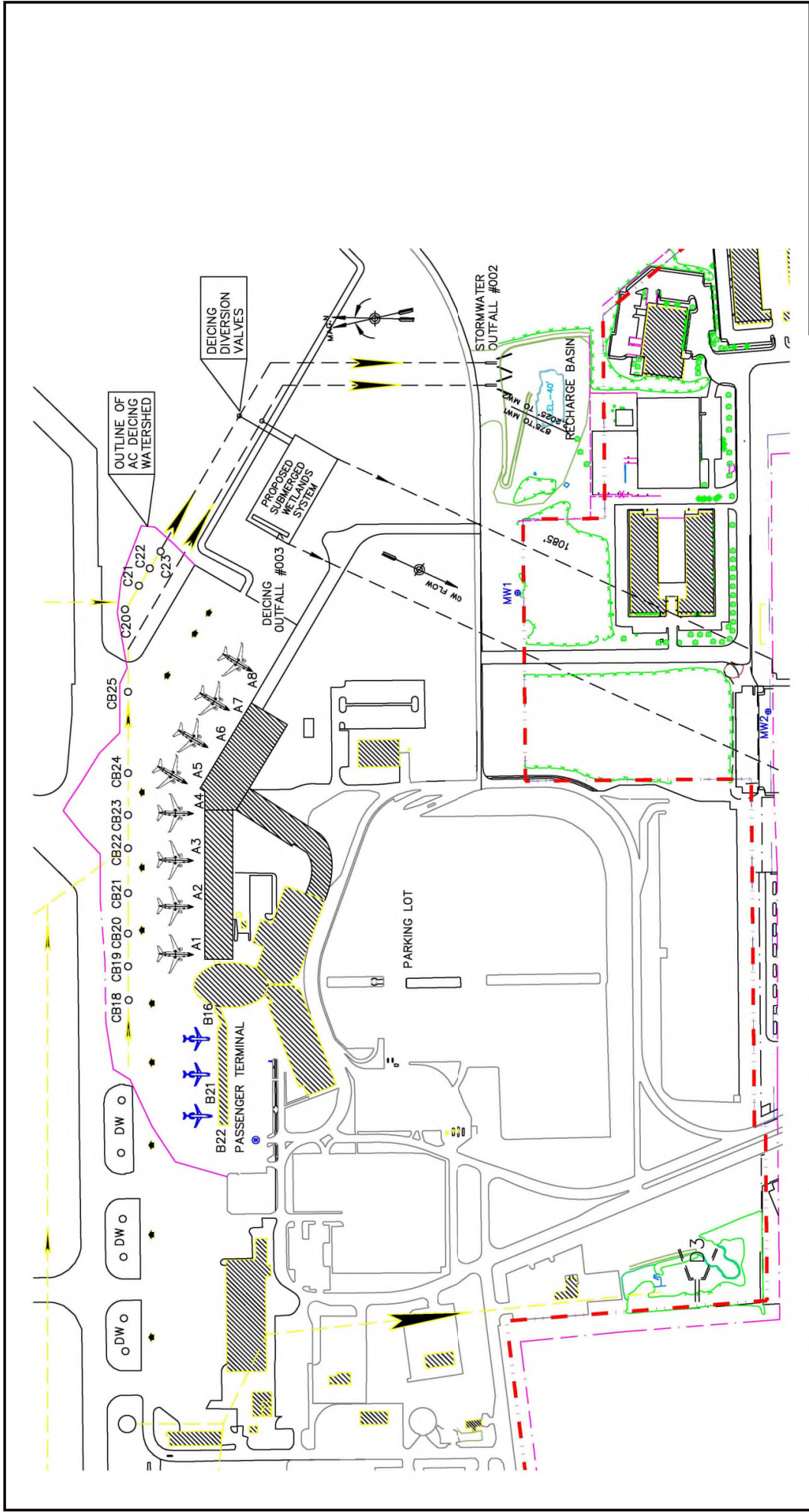
LONG ISLAND MACARTHUR AIRPORT  
RONKONKOMA, NY

**DRAINAGE AREAS**

**ARCADIS**

FIGURE **3**

SITE PLAN



AIRCRAFT DEICING AREA  
NOT TO SCALE:

STORMWATER MONITORING POINTS FOR OUTFALL #002  
PROPOSED MONITORING POINT AT OUTFALL #002  
PROPOSED DEICING VALVES - MW1 & MW2



LONG ISLAND MACARTHUR AIRPORT  
RONKONKOMA, NY

GLYCOL PRETREATMENT SYSTEM

ARCADIS

FIGURE 4

# Appendix C

## Potential Target Industrial Activities

**LONG ISLAND MACARTHUR AIRPORT (ISP)**

**BEST MANAGEMENT PRACTICES – POTENTIAL TARGET INDUSTRIAL ACTIVITIES**

Target Activities	RECOMMENDED STORMWATER BEST MANAGEMENT PRACTICE																
	BMP1	BMP2	BMP3	BMP4	BMP5	BMP6	BMP6	BMP6	BMP7	BMP8	BMP9	BMP10	BMP11	BMP12	BMP13	BMP14	BMP15
AC Deicing	X					X			X	X	X	X	X		X	X	
AC Fueling		X				X			X	X	X	X	X		X		X
AC Maint			X			X			X	X	X	X	X	X	X	X	
Grounds Maint					X	X			X	X	X	X	X		X	X	
Chem Storage						X			X	X	X	X	X	X	X		X
Equip Fueling						X			X	X	X	X	X	X	X		
Equip. Maint			X			X			X	X	X	X	X		X	X	
Fuel Storage						X			X	X	X	X	X		X		
Vehicle Fuel			X			X			X	X	X	X	X		X	X	
Vehicle Maint			X			X			X	X	X	X	X		X	X	
Waste Mg't						X			X	X	X	X	X		X	X	

X = Recommended BMPs for Target Industrial Activity

Key to Best Management Practices (BMPs):

- BMP 1 Aircraft Deicing
- BMP 2 Aircraft, Vehicle & Equipment Fueling
- BMP 3 Aircraft, Vehicle & Equipment Maintenance
- BMP 4 Aircraft, Vehicle & Equipment Washing, Steam Cleaning & Degreasing
- BMP 5 Building & Grounds Maintenance
- BMP 6 Chemical & Fuel Storage and Handling
- BMP 7 Elimination of Non-Stormwater Discharges to Stormwater Drains
- BMP 8 Spills Management
- BMP 9 Oil/Water Separators
- BMP 10 Outdoor Handling of Material
- BMP 11 Outdoor Materials Storage
- BMP 12 Waste Management
- BMP 13 Stormwater Pollution Prevention Education
- BMP 14 Sweeping & Maintenance
- BMP 15 Security

# Appendix D

## Best Management Practices

**Town of Islip  
Long Island MacArthur Airport**

**BMP1 AIRCRAFT DEICING**

**PURPOSE:**

Prevent or reduce the discharge of pollutants to soil, groundwater and/or stormwater from aircraft deicing and anti-icing procedures. The level of chemical pollutants associated with the discharge of deicing compounds to groundwater, can impact groundwater quality.

**APPROACH TO EXISTING FACILITY ACTIVITIES:**

***Operational Considerations***

- Personnel involved with deicing operations are trained. The training should, at a minimum, include source reduction techniques, best management practices, good housekeeping and should educate about the environmental impacts of over spraying.
- Depending on weather conditions, apply only enough fluid to surfaces to ensure the safe operation of the aircraft. Excess fluid dripped to the ground enters directly into the storm drainage system.
- Depending on weather conditions use a range of propylene glycol/water blends (i.e., warmer temperatures, use a 30/70 glycol/water blend, colder temperatures/inclement weather use a 55/45 mix) to minimize the discharge of contaminants.
- The purchase of new deicing trucks should include more efficient nozzles, heated deicing agent, blending capabilities and air.
- Consider using alternative low environmental-impact deicing/anti-icing compounds now under development, once approved by the FAA. Implement forthcoming recommendations of the FAA technical committee on deicing.
- Transfer deicing agents only in paved areas.
- The use of ethylene glycol deicing fluid is discouraged at ISP.

**RELEVANT RULES AND REGULATIONS:**

- 6 NYCRR Parts 595-599 Chemical Bulk Storage Regulations
- 6 NYCRR Parts 370-374 New York State Hazardous Waste Regulations
- 6 NYCRR Part 360 Solid Waste Regulations
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for StormWater Discharges
- 40 CFR 302 Designation of Reportable Quantities and Notification Requirements for Hazardous Substances under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know
- 40 CFR 401 Effluent Limitation Guidelines

**Town of Islip  
Long Island MacArthur Airport**

**BMP2            AIRCRAFT, VEHICLE AND EQUIPMENT FUELING**

**PURPOSE:**

Prevent or reduce the discharge of pollutants to stormwater, groundwater, soil, and air from aircraft, vehicle, and equipment fueling.

**APPROACH TO EXISTING FACILITY ACTIVITIES:**

***Operational Considerations***

*General*

- Install shear valves or "breakaway" hose connections at all fuel dispensing stations and on all fuel dispensing equipment that will provide emergency shutdown of flow should the fueling connection be broken through movement.
- Periodically check hoses associated with fuel dispensing for leaks and tears.
- 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 absorbent materials and spot cleaning for small spills; do not hose down the area unless the storm drains in close proximity are blocked and drainage is collected by vacuum vehicle and disposed of through a permitted connection to an approved treatment facility.
- Avoid mobile fueling of equipment wherever feasible; fuel mobile equipment at designated fueling areas. Use drain blockers (e.g., pigs/mats) at catch basins or install gate valves at catch basins for use during fueling activity.
- Collect and properly dispose of any fuel spilled or leaked. Vacuum equipment/vehicles are recommended for collection.
- Always dispose of materials in an approved manner. Never discharge materials to a catch basin.
- Employ secondary containment or cover when transferring fuel from a tank truck to a vehicle or equipment fuel tank. .
- Manage the disposal of water that collects in fuel tanks and fueling hydrant sumps according to state and federal regulations.
- Inspect, clean and maintain sumps and oil/water separators at appropriate intervals.

*Motor Vehicle/Equipment*

- Ensure that motor vehicle fuel composition meets seasonal requirements for oxygen content and volatility.
- Operate appropriate vapor recovery equipment at gasoline dispensing sites.
- Install berms or curbing to divert stormwater runoff away from fueling area to avoid contact with contaminated surfaces.

### ***Operational Considerations (Continued)***

- Provide appropriate monitoring for tanks containing fuel, such as:
  - Level indicators and gauges
  - Overfill protection with alarms
  - Interstitial leak detection for double-walled tanks
  - Routine inspection/lockout for drainage valves for tank containment areas.
- Test spill prevention/overfill protection equipment annually.
- Fuel pumps intended for vehicular use should be posted with signs stating 'No Topping Off' to prevent overflow.

### ***Aircraft***

- Tanker trucks (aviation fueling vehicles) should be equipped with spill response kits.
- Periodically inspect valves on mobile aircraft fuelers and on aircraft wing tips.

### ***Contingency Response***

- Conduct proper spill reporting to the appropriate regulatory agencies.
- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may likely occur. Furnish all maintenance vehicles with adequate supplies of spill response materials and appropriate spill response procedures.
- Develop and implement a Spill Prevention Control and Countermeasure Plan (SPCC), required in 40 CFR 112.3(a), (b).
- Conduct proper spill reporting to the appropriate regulatory agencies.

### ***Inspection and Testing***

- 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 the appropriate level of employee training in the following areas; 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 these wastes properly and provide appropriate employee training.

### **APPROACH TO FUTURE FACILITY DESIGNS AND UPGRADES:**

- Design fueling areas to prevent the run-on of stormwater and the runoff of spills by employing the following approaches (where authorized by the Town of Islip):
  - 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.
  - Where covering is infeasible and the fuel dispensing area has an asphalt pavement surface, consider applying a suitable sealant that protects the asphalt

- from spilled fuels.
- If a dead-end sump is not used to collect spills, install an appropriately sized oil/water separator.

### **APPROACH TO SPILLS AT EXISTING FACILITIES**

- Prevent spills from entering storm drains, floor drains, other receiving waters, and soil, through use of absorbent pigs, booms, or other means.
- Minimize immediate fire and safety hazards.
- Report any discharge of petroleum greater than 5 gallons to NYSDEC within 2 hours of discovery. Notify NYSDEC and/or the National Response Center for releases of a reportable quantity of a hazardous substance.
- If appropriate, sound alarms.
- Remove and dispose contaminated soil/material.
- Remove and recover free product in surface or groundwaters.
- Repair or replace leaking equipment.
- Perform other actions which regulatory agencies may require.
- Install Stage I and Stage II vapor recovery systems on gasoline dispensing equipment.
- Install shear valves on all fuel dispensing equipment.
- Design facilities to include secondary containment where required and/or appropriate.
- Upgrade or replace existing fuel storage tanks to have leak detection, spill containment, and overflow prevention before December 22, 1998.

### **RELEVANT RULES AND REGULATIONS:**

- 6 NYCRR 608, 611 Oil Spill Prevention and Compensation Act
- 6 NYCRR 595-597 Chemical Bulk Storage
- 6 NYCRR Part 360 Solid Waste Regulations
- 6 NYCRR 360-14 Waste Oil Regulations
- 6 NYCRR Parts 612-614 Petroleum Bulk Storage
- 6 NYCRR Part 371 Hazardous Waste Regulations
- 29 CFR 1910 (Subparts G, H, I, J, and K,) Hazardous Materials, Environmental Controls, and Personnel. Protection.
- 29 CFR 1910.1200 OSHA Hazard Communication Standard
- 40 CFR 122-124 NPDES Regulations for Stormwater Discharges
- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management
- 40 CFR 264-265 Preparedness, Prevention and Contingency Plan (PPCP)
- 40 CFR 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know
- 40 CFR 413, 433, and 469 NPDES Toxic Organic Management Plan (NPDESTOMP)
- 40 CFR 761 Toxic Substances
- 40 CFR 33 Oil Pollution Act of 1990
- 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 401 Effluent Limitation Guidelines

**Town of Islip  
Long Island MacArthur Airport**

**BMP3            AIRCRAFT, VEHICLE AND EQUIPMENT MAINTENANCE**

**PURPOSE:**

Prevent or reduce the discharge of pollutants to surface water, groundwater, plus soil and air from aircraft, vehicle, and equipment maintenance and repair, including ground vehicle and floor washdowns.

**APPROACH TO EXISTING FACILITY ACTIVITIES:**

***Operational Considerations***

Minimum maintenance activities, including preflight checks and emergency repairs, shall employ the following to the extent practicable. All other maintenance shall be performed indoors or at off site facilities.

*Good Housekeeping*

- Use drip pans.
- Use absorbent materials at potential problem' areas. Collect/remove absorbent materials from area after use and dispose of them in an 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 - covered if outdoors.
- Label storm drain inlets to indicate they are to receive no wastes. Do not hose down work areas to the storm or sanitary drainage system or use concrete cleaning products unless the storm drain inlet is blocked and wash water is collected and properly disposed of through a permitted sewer connection. As an alternative, use mops, dry sweeping compound, or contract professional cleaning services. Confirm the use of appropriate disposal practices by contract cleaning services.
- Drain and properly dispose of all fluids and remove batteries from salvage aircraft, vehicles, and equipment.
- Recycle or properly dispose of the following: greases, oils, antifreeze, brake fluid, solvents or other cleaning solutions, hydraulic fluid, batteries, transmission fluid, and filters.
- Use biodegradable products and substitute materials with less hazardous properties where feasible.
- Tenants are required to use drip pans when performing maintenance such as adding oil or changing oil at the ramps.
- Tenants are educated on the potential impacts and risks of pollutants entering the drainage system as a result of maintenance activities.

### *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 oil water separators that receive wastewater from a maintenance area. Do not flush wastes into receiving waters. Activities such as painting and stripping, battery charging, and welding may require air permitting; check with local and state agencies for applicability.

### *Physical Site Usage*

- Conduct maintenance activities indoors, or conduct off airport where possible.
- Use designated washing, steam cleaning, and degreasing areas to clean equipment.
- Store mechanical parts and equipment that may yield even small amounts of contaminants (i.e., oil or grease) under cover and away from drains.

### *Structural Control*

- Maintenance and cleaning areas should be equipped with runoff controls that prevent discharge to storm and sanitary sewers.

### *Contingency Response*

- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur. Furnish all maintenance vehicles with adequate supplies of spill response materials and appropriate spill response procedures.

### *Inspection and Testing*

- Provide the appropriate level of employee training in the following areas: 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. Dispose of these wastes properly and provide appropriate employee training.

### **APPROACH TO FUTURE FACILITY DESIGNS AND UPGRADES:**

- Provide indoor maintenance areas when designing new facilities or upgrading existing facilities.
- Do not install floor drains in areas where maintenance is to be performed.

## **APPROACH TO SPILLS AT EXISTING FACILITIES**

- Prevent spills from entering storm drains, floor drains, other receiving waters, and soil, through use of absorbent pigs, booms, or other means.
- Minimize immediate fire and safety hazards.
- If appropriate, sound alarms.
- Report any discharge of petroleum greater than 5 gallons to NYSDEC within 2 hours of discovery. Notify NYSDEC and/or the National Response Center for releases of a reportable quantity of a hazardous substance.
- Remove and dispose contaminated soil/material.
- Remove and recover free product in surface or groundwater.
- Repair or replace leaking equipment.
- Perform other actions which regulatory agencies may require

## **RELEVANT RULES AND REGULATIONS:**

- 6 NYCRR 608, 611 Oil Spill Prevention and Compensation Act
- 6 NYCRR 595-597 Chemical Bulk Storage Regulations
- 6 NYCRR Part 360 Solid Waste Regulations
- 6 NYCRR 360-14 Waste Oil Regulations
- 6 NYCRR Parts 612-614 Petroleum Bulk Storage Regulations
- 6 NYCRR Part 371 Hazardous Waste Regulations
- 29 CFR 1910 (Subparts G, H, I, J, and K,) Hazardous Materials, Environmental Controls, and Personnel Protection.
- 29 CFR 1910.1200 OSHA Hazard Communication Standard
- 40 CFR 122-124 NPDES Regulations for Stormwater Discharges
- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management
- 40 CFR 264-265 Preparedness, Prevention and Contingency Plan (PPCP)
- 40 CFR 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know
- 40 CFR 413, 433, and 469 NPDES Toxic Organic Management Plan (NPDESTOMP)
- 40 CFR 761 Toxic Substances
- 40 CFR 33 Oil Pollution Act of 1990

**Town of Islip  
Long Island MacArthur Airport**

**BMP4            AIRCRAFT, VEHICLE AND EQUIPMENT WASHING, STEAM  
CLEANING AND DEGREASING**

**PURPOSE:**

Prevent or reduce the discharge of pollutants to soil, groundwater, and stormwater drains from aircraft, vehicle, and equipment washing, and equipment degreasing.

**APPROACH TO EXISTING FACILITY ACTIVITIES:**

Aircraft, vehicle, and equipment washing, steam cleaning, and degreasing are prohibited at ISP with the following exceptions:

- Vehicles, aircraft, and equipment are washed indoors only and any wastewater generated must be disposed of off site by a licensed hauler.
- Washing is prohibited at ISP's outdoor areas as there are no sanitary sewer connections at the airport.
- Collection of wash water is not an acceptable alternative. For cleaning activities allowed at ISP, refer to the following operational, contingency and training approaches.

***Operational Considerations***

Implement the following to the maximum extent practical:

*Good Housekeeping*

- Use "dry" washing and surface preparation techniques where feasible. Several products are available to clean even the largest aircraft. Remove all materials (i.e., drippings and residue) using vacuum methods. Dispose of properly.
- Provide secondary containment for containers of washing and steam cleaning additives.
- Use biodegradable phosphate-free detergents.
- Keep washing area clean and free of waste.
- Include proper signage indicating that the discharge of waste oils into the drains is strictly prohibited.
- Discharge wash water to an approved treatment facility (sanitary sewer system) through a permitted connection.
- Ensure that wash water discharged to the sanitary sewer meets the pretreatment standards of the local POTW which treats the water.

*Physical Site Usage*

- Consider off site commercial washing and steam cleaning where feasible. Using appropriate off-site facilities that will decrease the waste generated onsite.
- Cover catch basins
- Provide training
- Do not contract with auto dealers or other cleaning companies that use wet

- operations discharging to the storm drain system or receiving waters.
- Always use facility-designated indoor wash areas, or the ISP designated outdoor wash area, to prevent contamination of stormwater by contact with wastes.

#### *Maintenance*

- Inspect, clean, and maintain oil/water separators that are connected to indoor floor drains and receive discharges of washwater.

#### *Contingency Response*

- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.

#### *Inspection and Training*

- Provide the appropriate level of employee training in the following areas: 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 derived from oil/water separators.

#### **APPROACH TO FUTURE FACILITY DESIGNS AND UPGRADES:**

- Consider off-site commercial washing where feasible. Using appropriate off site facilities that will decrease the waste generated on-site.

#### **APPROACH TO SPILLS AT EXISTING FACILITIES**

- Prevent spills from entering storm drains, floor drains, other receiving waters, and soil, through use of absorbent pigs, booms, or other means.
- Minimize immediate fire and safety hazards.
- Report any discharge of petroleum greater than 5 gallons to NYSDEC within 2 hours of discovery. Notify NYSDEC and/or the National Response Center for releases of a reportable quantity of a hazardous substance (see Spills Management).
- If appropriate, sound alarms.
- Remove and dispose contaminated soil/material.
- Remove and recover free product in surface waters or groundwaters.
- Repair or replace leaking equipment.
- Perform other actions which regulatory agencies may require.

#### **RELEVANT RULES AND REGULATIONS:**

- 6 NYCRR Part 360 Solid Waste Regulations
- 6 NYCRR Parts 370-373 Hazardous Waste Regulations
- New York State Environmental Conservation Law
- 40 CFR 112 Oil Pollution Prevention for Spill Prevention Control and Countermeasure (SPCC) Plan
- 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 Stormwater Discharges
- 40 CFR 401 Effluent Limitation Guidelines

**Town of Islip  
Long Island MacArthur Airport**

**BMP5 BUILDING CLEANING AND MAINTENANCE**

**PURPOSE:**

Comply with state and federal regulations regarding safe work practices for equipment which may be used in building cleaning and maintenance. Prevent or reduce the discharge of pollutants to soil or groundwater via storm sewer. Sources of pollutant discharges include equipment blowdown, waste handling and disposal, and other discharges. Prevent air emissions from building maintenance, cleaning and HVAC operations.

**APPROACH TO EXISTING FACILITY ACTIVITIES:**

***Operational Considerations***

*Pesticides*

- Develop integrated pest management programs where appropriate.
- Minimize use of pesticides and fertilizers. Use pesticides and fertilizers according to directions. Seek less harmful/toxic pesticides and fertilizers to replace ones currently used.
- Use only certified pesticides applicators.
- 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.
- When performing self-application,
  - make sure employees are certified pesticide applicators
  - have effective backflow prevention devices for application equipment - provide proper personnel protection equipment to persons handling, loading, mixing, and applying pesticides
  - store pesticides in their original containers with legible labels. - send annual report to NYSDEC detailing pesticide application.

*Stationary Combustion Installations*

- Perform annual boiler inspections and tune-ups.
- Operate boilers and other stationary combustion installations within their permissible limits and maintain a log of boiler operation and maintenance.
- If possible, do not allow discharges of boiler blowdown to the sanitary sewer and never discharge blowdown to the storm sewer system. Properly dispose blowdown with other oily wastewaters.
- Check that fuel composition meets NYSDEC requirements for sulfur.

## **RELEVANT RULES AND REGULATIONS:**

- 6 NYCRR Part 368 Recycling Emblems
- 6 NYCRR Parts 325 and 326 Pesticide Storage, Handling, and Disposal
- NYS Environmental Conservation Law, Article 33
- 6 NYCRR Parts 370-374 New York State Hazardous Waste Management Regulations
- 6 NYCRR Part 360 New York State Solid Waste Disposal Regulations
- 6 NYCRR Part 376 New York State Land Disposal Restrictions
- 29 CFR 1910 Subpart N-Material Handling and Storage
- 29 CFR 1910.1200 OSHA Hazard Communication Standard
- 40 CFR 112 Oil Pollution Prevention for Spill Prevention and Control and Countermeasure (SPCC) Plans
- 40 CFR 122 National Pollutant Discharge Elimination System (NPDES) Regulation
- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management
- 40 CFR 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right to Know
- 40 CFR 761 Toxic Substances
- 40 CFR 171-173, 175 and 177 Department of Transportation Regulations
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Stormwater Discharge
- 40 CFR 401 Effluent Limitation Guidelines

**Town of Islip  
Long Island MacArthur Airport**

**BMP6            CHEMICAL AND PETROLEUM STORAGE AND HANDLING**

**PURPOSE:**

Ensure compliance with state and federal regulations regarding registration, handling, and storage of chemicals. Prevent or reduce discharge of pollutants to storm sewer or air by minimizing storage of materials on site, storing materials in designated areas, installing secondary containment and conducting regular inspections of storage areas. Storage of chemicals and petroleum products can pose the following risks: stormwater pollution, injury to workers or visitors, groundwater pollution, soil contamination, air pollution.

**APPROACH TO STORAGE AT EXISTING FACILITIES:**

***Operational Considerations***

*Monitoring*

- Perform inventory monitoring of all chemicals delivered to and stored on site; report inventories on annual basis, whenever required by state or local agencies.
- Maintain inventories in as small a quantity as practical.
- Perform weekly inspection of tanks and containers for leaks.

*Storage*

- Designate areas for chemical storage of containers (may not be possible for tanks).
- Store all chemical and petroleum products in a covered area.
- Store containers within secondary containment, such as within berms or dikes.
- Keep all chemicals in original containers.
- Keep all containers closed when not in use to prevent spills and air emissions.
- Maintain legible labels on all containers and tanks. Label all fillports of petroleum tanks with symbols and colors that are consistent with the American Petroleum Institute Standards.
- Comply with fire codes for storage of ignitable, flammable, or reactive liquids.
- To the extent practical, minimize storage and handling.

*Training*

- Train employees in storage procedures.
- Train employees in spill prevention and clean-up procedures.

*Compliance*

- Comply with all applicable state and federal regulations applying to tanks including requirements for:

- registration of aboveground storage tanks (ASTs) and underground storage tanks (USTs) inspection of storage tanks
- preparation of Spill Prevention Report for facilities with chemical storage tanks
- preparation of Spill Prevention Control and Countermeasure Plan for aboveground petroleum storage greater than 600 gallons in one container or 1320 gallons total, or for facilities with more than 40,000 gallons of underground storage
- labeling
- inventory monitoring and associated record keeping
- UST tightness testing, AST inspections and associated record keeping tank closure
- Major On-Shore Storage Facilities (>400,000 gallons on-site petroleum storage) must maintain sufficient records to substantiate average daily throughput and quantity of monthly fuel transfers.
- pay monthly license fee
- When taking tanks temporarily out-of-service, follow state and federal standards for temporary closure. When placing tanks permanently out-of-service, follow state and federal standards for permanent closure; report change in service to NYSDEC.

#### **APPROACH TO SPILLS AT EXISTING FACILITIES:**

- Prevent spills from entering storm drains, floor drains, other receiving waters, and soil, through use of absorbent pigs, booms, or other means.
- Minimize immediate fire and safety hazards.
- Report any discharge of petroleum greater than 5 gallons to NYSDEC within 2 hours of discovery. Notify NYSDEC and/or the National Response Center for releases at or above the reportable quantity of hazardous substance.
- If appropriate, sound alarms.
- Remove and dispose of contaminated soil/material.
- Remove and recover free product in surface or ground waters.
- Repair or replace leaking equipment.
- Perform other actions which regulatory agencies may require.

#### *Contingency Response*

- Develop and implement a Spill Prevention Control and Countermeasure (SPCC) Plan, if required under guidelines set forth in 40 CFR, Section 112.3(a), (b).
- Develop and implement a Spill Prevention Report (SPR), if required under the guidelines set forth in 6 NYCRR Parts 595-599.
- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spill may be likely to occur.

#### *Inspection and Training*

- Inspect containers frequently for leaks and proper closure seal.
- Develop employee training programs which emphasize the proper storage and handling procedures for chemical and petroleum products.
- Provide the appropriate level of employee training in the following areas: spill response and prevention, storm water pollution prevention education, right-to-know awareness training, and hazardous materials management.

## **APPROACH TO FUTURE FACILITY DESIGNS AND UPGRADES:**

- Existing underground chemical and petroleum storage tanks should be upgraded with leak detection, spill containment, and overfill protection before December 22, 1998, the federal regulatory deadline.
- Incorporate adequate chemical and petroleum storage facilities into future buildings.
- Design facilities which have sheltered (covered) material storage areas.
- Construct secondary containment in proposed aboveground chemical and petroleum storage areas.
- Do not construct floor drains in areas where chemicals will be stored.
- When determining the size the layout of the chemical storage room, consider fire codes for reactive, flammable, and ignitable materials.

## **RELEVANT RULES AND REGULATIONS:**

- 6 NYCRR Parts 595-599 Chemical Bulk Storage Regulations
- 6 NYCRR Parts 610, 612-614 Petroleum Bulk Storage Regulations
- 6 NYCRR Parts 608, 611 Oil Spill Prevention and Compensation Act
- New York State Environmental Conservation Law Articles 37 & 40
- New York State Uniform Fire Prevention and Building Code
- 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 Stormwater Discharges
- 40 CFR 401 Effluent Limitation Guidelines
- 40 CFR 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).
- 40 CFR 280-281 Underground Storage Tanks
- 40 CFR 372 Chemical Release Reporting: Community Right-to-Know
- 29 CFR 1910.1200 OSHA Hazard Communication Standard
- 49 CFR 171-173, 175 and 177 Department of Transportation Regulations

**Town of Islip  
Long Island MacArthur Airport**

**BMP7            ELIMINATION OF NON-STORM WATER DISCHARGES TO STORM  
DRAINS**

**PURPOSE:**

Existing discharges: Eliminate non-stormwater discharges to the stormwater collection system. Non-stormwater discharges can be classified as follows: washwater, deicing fluids, and spillage, process wastewater, treated cooling water, and sanitary wastewater (through a pipe).

Prevention of illicit connections: Physical connections to the storm drain system from sanitary sewers, floor drains, industrial process discharge lines, and wash racks that are not expressly permitted by local, New York State or Federal governing agencies.

**APPROACH TO EXISTING FACILITY ACTIVITIES:**

*General*

- 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.

*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 which would introduce pollutants to the storm drain system/receiving waters.
- Mark storm drains for easy identification and prevention of illicit discharges

*Required Plan and/or Permits*

- 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. In addition, owners or operators of a hazardous bulk storage facility (defined by NYSDEC Chemical Bulk Storage Regulations) are required to prepare and maintain a Spill Prevention Report (SPR). See BMP-8, "Spills Management," for additional information.

### *Contingency Response*

- Follow spill notification and reporting procedures as described in BMP-8, "Spills Management." Follow contingency plans for spill containment as described in facility's SPCC or SPR, if applicable.
- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spill may be likely to occur.
- Inspect waste containers frequently for leaks and proper closure seals. Keep dumpsters covered and plug any holes to prevent leaks from waste materials or run-through of liquid wastes and/or rainwater.
- Develop employee training programs which emphasize the proper storage and disposal procedures for operations derived wastes, particularly waste waters. (See BMP 13, "Waste Management")
- Provide the appropriate level of employee training in the following areas: spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, and hazardous materials management.

### **APPROACH TO FUTURE FACILITY DESIGNS AND UPGRADES:**

- Provide marking on storm drains for easy identification and prevention of illicit discharges.
- 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 drawings for all projects. Keep a set of the drawings at the facility.
- Design projects to include adequate waste repositories at locations near waste origin points.
- Provide adequate and appropriately designed facilities for functions such as painting, mechanical maintenance, chemical/fuel storage and delivery, material handling, waste handling and storage, lavatory service, and food preparation.

### **APPROACH TO SPILLS AT EXISTING FACILITIES:**

- Prevent spills from entering storm drains, floor drains, other receiving waters, and soil, through use of absorbent pigs, booms, or other means.
- Minimize immediate fire and safety hazards.
- Report any discharge of petroleum greater than 5 gallons to NYSDEC within 2 hours of discovery. Notify NYSDEC and/or the National Response Center for releases of a reportable quantity of a hazardous substance
- If appropriate, sound alarms.
- Remove and dispose contaminated soil/material.
- Remove and recover free product in surface or ground waters.
- Repair or replace leaking equipment.
- Perform other actions which regulatory agencies may require.

**RELEVANT RULES AND REGULATIONS:**

- 6 NYCRR Parts 612-614 Petroleum Bulk Storage Regulations
- 6 NYCRR Parts 595-599 Chemical Bulk Storage Regulations
- New York State Environmental Conservation Law, Title 8, Article 17
- 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 Stormwater Discharges
- 40 CFR 401 Effluent Limitation Guidelines

**Town of Islip  
Long Island MacArthur Airport**

**BMP8            SPILLS MANAGEMENT**

**PURPOSE:**

Prevent or reduce the discharge of pollutants to soil, groundwater, stormwater, surface water or air resulting from spills. Develop spill prevention plans to contain accidental and continuous releases of petroleum products or hazardous substances. Identify proper reporting procedures to implement in the event of a spill.

**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.
- A spill clean-up contractor should be under contract with the tenant and available immediately during emergency situations.

*Required Plans*

Owners and operators of facilities that store, process, or refine oil or oil products maybe required by federal law (40 CFR 112) to develop and implement a Spill Prevention Control and Countermeasure (SPCC) Plan. In addition, owners or operators of a hazardous bulk storage facility (defined by NYSDEC Chemical Bulk Storage Regulations) are required to prepare and maintain a Spill Prevention Report (SPR). SPCC and SPR 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 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 cleanup procedures.
- Designated personnel with overall spill response cleanup responsibility.

Spill prevention plans should be periodically updated as physical changes are made to the facility (e.g. layout, number of tanks, types of processes).

### *Notification Requirements*

- Notify all applicable local, state and federal agencies in the event of a spill, including the following:
  - Local Fire Department : 911
  - NYSDEC Spills Hotline : 1-800-457-7362
  - National Response Center - if spill exceeds the reportable quantity (RQ): 1-800-424-8802 - NYCDEP Spill Hotline: 1-718-595-4646
  - US Coast Guard - if spill is near or has potential to enter navigable waters of the US including surface waters and adjoining shorelines: 1-718-354-4109
- Most spills of petroleum and hazardous substances (above the RQ) must be reported within two hours.
- Provide relevant information regarding the spill including:
  - Time, date, location, duration and estimated quantity of the release
  - Source of the release and identification of substance released into the environment
  - Individuals with authority/responsibility to implement or oversee clean-up

### *Contingency Response*

- Implement spill containment and cleanup procedures immediately, as described in SPCC Plan and/or SPR.
- Maintain contract with spill clean-up contractor for immediate mobilization during emergency situations.
- Contact clean-up contractors as identified in spill prevention plans.
- Perform follow-up reporting procedures as required by regulatory agencies or as identified in the facility's SPCC Plan and/or SPR.
- For continuous releases (e.g., ethylene glycol), provide required telephone and written notifications to appropriate state and local agencies.
- Properly dispose any materials that have been contaminated as a result of a spill.

### *Inspection and Training*

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

### **APPROACH TO FUTURE FACILITY DESIGNS AND UPGRADES:**

- Design bulk storage facilities which utilize effective spill prevention and containment technology.
- Locate bulk storage facilities in areas which minimize potential discharge to soil, groundwater, surface water, storm water or sanitary systems.

## **RELEVANT RULES AND REGULATIONS:**

- 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
- Article 12, New York State Navigation Law
- 6 NYCRR Parts 612-614 Petroleum Bulk Storage Regulations
- 6 NYCRR Parts 595-599 Chemical Bulk Storage Regulations
- 6 NYCRR Parts 608, 611 Oil Spill Prevention and Compensation Act
- 40 CFR 372 Toxic Chemical Release Reporting: Community Rights to Know
- 40 CFR 302 Resignation, Reportable Quantities and Notification Requirements for Hazardous Substance under CERCLA

**Town of Islip  
Long Island MacArthur Airport**

**BMP 9 OIL WATER SEPARATORS**

**PURPOSE:**

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

**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 storm water quality controls.
- Oil absorbent pads are to be replaced as needed but should always be replaced prior to the wet season.
- The effluent shutoff valve should be closed during cleaning operations.
- Any standing water removed during the cleaning operation must be disposed of in accordance with federal, state, and local requirements.
- Any standing water removed during the cleaning operation must be replaced with clean water to prevent oil carry-over through the outlet.

*Contingency Response*

- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.

*Inspection and Training*

- Provide the appropriate level of employee training in the following areas: spill response and prevention, storm water 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 storm water authority guidelines.
- Train appropriate employees to implement these procedures.

**APPROACH TO FUTURE FACILITY DESIGNS 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 is dependent on several factors

including: tributary area, type of activity, pollutant type and concentration, and water temperature. General sizing guidelines for API separators include the following:

- Horizontal velocity: 3 feet per minute.
- Depth of 3 to 8 feet.
- Depth-to-width ratio of 0.3 to 0.5.
- Width of 6 to 16 feet.
- Baffle height-to-depth ratios of 0.85 for top baffles and 0.15 for bottom baffles.

CPS separator sizing is more complex. Sizing calculations require the inclusion of information such as packing plate surface areas and plate angles. CPS separators can, due to their packed plate design, remove the same quantities of oils and greases while occupying less space than API separators.

#### **RELEVANT RULES AND REGULATIONS:**

- 6 NYCRR Parts 608, 611 Oil Spill Prevention on Compensation Act
- 6 NYCRR Part 360-14 Waste Oil Regulations
- 6 NYCRR Parts 612-614 Petroleum Bulk Storage Regulations
- 40 CFR 40 Effluent Limitation Guidelines
- 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 Stormwater Discharges

**Town of Islip  
Long Island MacArthur Airport**

**BMP 10      OUTDOOR HANDLING OF MATERIAL**

**PURPOSE:**

Prevent or reduce the discharge of pollutants to soil, groundwater, surface water or stormwater from loading and unloading of material and cargo.

**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 materials in close proximity to storm drain inlets.
- Use drip pans under hoses.
- Transfer liquids only in paved areas. Portland cement paving should be used if the liquid is asphalt reactive.
- Provide contractors and haulers with copies of pertinent GEPs. Require contractor/hauler adherence to GEP 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 from rainfall, run-on and wind dispersal to the maximum extent practical. Viable options include conducting loading/unloading under existing cover, or moving indoors.
- Position tank trucks or delivery vehicles so that possible spills or leaks can be contained.

*Structural Controls*

- Cover loading/unloading areas/docks to reduce exposure of materials to rain. Construct roofing structure over material handling area, or move indoors.

*Maintenance*

- Conduct berm repair and patching.
- Inspect, clean and maintain oil/water separators.

### *Contingency Response*

- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.
- Include spill kits on appropriate material handling vehicles and equipment.

### *Inspection and Training*

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

### **APPROACH TO FUTURE FACILITY DESIGNS AND UPGRADES:**

- Design loading/unloading areas to prevent stormwater run-on through the use of the following practices:
  - Grading or berming.
  - Positioning roof downspout to direct stormwater away from loading/ unloading 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 SPILLS AT EXISTING FACILITIES:**

- Prevent spills from entering storm drains, floor drains, other receiving waters, and soil, through use of absorbent pigs, booms, or other means.
- Minimize immediate fire and safety hazards. If appropriate, sound alarms.
- Report any discharge of petroleum greater than 5 gallons to NYSDEC within 2 hours of discovery. Notify NYSDEC and/or the National Response Center for releases of a reportable quantity of a hazardous substance.
- Remove and dispose contaminated soil/ material.
- Remove and recover free product in surface or ground waters.
- Repair or replace leaking equipment.
- Perform other actions which regulatory agencies may require.

**RELEVANT RULES AND REGULATIONS:**

- 6 NYCRR Parts 6085611 Oil Spill Prevention and Compensation Act
- 6 NYCRR Parts 612-614 Petroleum Bulk Storage Regulations
- 6 NYCRR Parts 595-599 Chemical Bulk Storage Regulations
- 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 Stormwater Discharges

**Town of Islip  
Long Island MacArthur Airport**

**BMP 11      OUTDOOR MATERIAL AND EQUIPMENT STORAGE**

**PURPOSE:**

Prevent or reduce the discharge of pollutants to soil, groundwater, surface water, or stormwater from outdoor storage areas for significant material (e.g., fuels, chemicals, bagged material on pallets, soils or asphalt material bulk storage, deicing compounds, and equipment etc.).

**APPROACH TO EXISTING FACILITY ACTIVITIES:**

***Operational Considerations***

*Good Housekeeping*

- Avoid dispensing from drums positioned horizontally in cradles. Dispense materials from upright drums equipped with hand pumps if possible. Always use drip pans and self-closing spigots, if dispensing from horizontally positioned drums.
- Store drums and containers on pallets or other structures to keep the container out of contact with stormwater.
- Use drum lids to prevent rainfall from washing materials and drippage from the top of containers to the storm drain system.
- Discharge collected storm water 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 indoors or under cover or move them off site.
- 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. See local and New York State requirements for labeling. Maintain copies of MSDS on file for any materials stored and/or handled by the applicator.

*Physical Site Usage*

- Protect all significant materials from rainfall, run-on, runoff and wind dispersal to the maximum extent practical. Viable options are:
  - Store material indoors.
  - Cover the storage area with a roof.
  - 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, store indoors, or completely cover.

- Reduce the quantities of significant materials stored outside (i.e., chemicals) to the minimum volume required based on variables such as release potential, usage, and shelf life.
- Make use of existing overhangs to the extent practicable.

#### *Structural Controls*

- Provide berming or secondarily contain storage tankers, ASTs, drums and containers.
- Install, maintain, and replace catch basin filter inserts consistent with manufacturers specifications.

#### *Maintenance*

- Inspect, clean and maintain sumps, on a regular basis.
- Periodically inspect all equipment stored outdoors, including trash compactors, vehicles, etc. If leaks are noted, repair immediately. If repairs are not possible, confine and contain the leak, ensuring that it does not enter any storm drains until clean up or reports can be completed.

#### *Contingency Response*

- Develop and implement a Spill Prevention Control and Countermeasures (SPCC) Plan, if required under guidelines set forth in 40 CFR, Section 112.3(a), and (b), submit to NYSDEC for approval.
- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.
- Post appropriate signs at all chemical storage locations in clearly visible locations noting the materials stored, emergency contacts, and spill cleanup procedures.

#### *Inspection and Training*

- Perform and document periodic inspections in a logbook. Inspection items should include the following:
  - External corrosion and structural failure.
  - Spills and overfills due to operator failure.
  - Failure of piping system (pipes, pumps, flanges, couplings, hoses, and valves).
  - Leaks or spills during pumping of liquids or gases.
  - Loose fittings, poor welds, and improper or poorly fitted gaskets.
  - Tank foundations and storage area coatings.
- Provide the appropriate level of employee training in spill response and prevention, stormwater pollution prevention, right-to-know awareness, and hazardous material management.

## **RELEVANT RULES AND REGULATIONS**

- 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 Stormwater Discharges
- 40 CFR 401 Effluent Limitation Guidelines
- 6 NYCRR Parts 595-599 Chemical Bulk Storage Regulations
- 6 NYCRR Parts 612-614 Petroleum Bulk Storage Regulations
- 6 NYCRR Part 360 Solid Waste Disposal Regulations
- 6 NYCRR Parts 370-374 New York State Hazardous Waste Management

**Town of Islip  
Long Island MacArthur Airport**

**BMP 12      WASTE MANAGEMENT**

**PURPOSE:**

Minimize waste production and increase awareness in waste management options. Prevent or reduce discharge of pollutants to soil, groundwater, surface water and stormwater. Comply with state and federal regulations pertaining to the generation and disposal of solid and hazardous waste.

**APPROACH TO EXISTING FACILITY ACTIVITIES:**

***General***

In general, the following is an appropriate hierarchy for waste generation and disposal:  
REDUCE = REUSE = RECYCLE = DISPOSE

**Reduce:** Evaluate areas where operations can be altered to minimize the production of waste. Examples: a) Amount of wastewater generated during vehicle washing can be minimized by installation of a washwater recovery and recycling system; b) At times, the amount of packaging can be minimized.

**Reuse:** Some materials can be reused several times before disposal. Examples: a) Packing material can often be reused; b) Installation of a solvent recovery system will allow solvent to be used several times before being spent. **Recycle:** Identify operations that generate cardboard, wood pallets, used oil, metals, plastic and glass. If possible, source separate and send to appropriate recycling facility.

**Dispose:** This is the last option for material that no longer appears to have any reuse capabilities and is a material that cannot be recycled. This material (e.g. food waste, aircraft cabin waste) should be sent to a licensed disposal facility.

In order to apply the waste management hierarchy, identify all waste streams, including aircraft waste and note the most common method of disposition of each waste type. Consider developing a waste minimization plan for the facility based on the waste management hierarchy. The plan should define strategies for waste minimization based on the analysis of facility waste streams. The plan should be made available to all employees.

***Operational Considerations***

*Tracking*

- Characterize waste streams, and evaluate the process generating the waste. Do not mix wastes that have not been characterized as hazardous or nonhazardous.
- Determine whether waste is considered to be hazardous or non-hazardous. This determination can be made by knowledge of the process generating the waste and the type of waste material (ignitable, reactive, corrosive, RCRA listed waste, etc.) or by chemical analysis.

- Avoid mixing hazardous and non-hazardous wastes to minimize the quantity that must be disposed in accordance with hazardous waste regulations.

#### *Wastewater Discharges*

- Clean any catch basins that receive stormwater runoff from maintenance areas on a regular basis. Use a vacuum truck to remove accumulated materials. Do not flush any wastes into receiving waters.
- Prevent leaks from dumpsters and compactors from entering storm drains.
- For equipment that does not blowdown continuously, collect blowdown in a container and properly dispose with other oily waste waters; do not dispose into storm drain or floor drains.
- Avoid discharges of wastewater into floor drains, by sealing floor drains in areas where industrial wastewater is likely to be discharged.
- Ensure that equipment that blows down continuously is not discharging to a storm drain.
- Clearly mark storm drains for easy identification and prevention of illicit discharges.

#### *Miscellaneous*

- Maintain a minimal inventory of required chemicals to reduce the magnitude of potential spills and limit waste generation.
- Find substitutes for harmful chemicals - properly dispose of unusable chemical inventory.
- Encourage employees to recommend areas where operations can be altered to minimize waste generation.

#### *Contingency Response*

- Maintain adequate supplies of spill response equipment and materials in accessible locations near areas where spills may be likely to occur.
- Equip waste transport vehicles with spill containment equipment.
- Collect outdoor washdown water and properly dispose of it through a permitted connection to an approved treatment facility. Approval from treatment facility required for discharge.
- Report all spills to the appropriate regulatory agencies.

#### *Inspection and Training*

- Provide the appropriate level of employee training in the following areas; spill response and prevention, stormwater pollution prevention education, right-to-know awareness training, waste minimization techniques, and hazardous materials management. Include periodic refresher training.
- Perform and document in a log book periodic inspections of hazardous and non-hazardous waste storage areas.

Inspection items should include the following:

- Check 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).

#### **APPROACH TO FUTURE FACILITY DESIGNS AND 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 drawings for all projects. Keep a set of the drawings at the facility.
- Design projects to include adequate waste storage areas at locations near waste generation points.
- Provide adequate and appropriately designed facilities 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.

#### **RELEVANT RULES AND REGULATIONS:**

- 6 NYCRR Part 368 Recycling Emblems
- 6 NYCRR Parts 325 and 326 Pesticide Storage, Handling, and Disposal
- NYS Environmental Conservation Law, Article 33
- 6 NYCRR Parts 370-374 New York State Hazardous Waste Management Regulations
- 6 NYCRR Part 360 New York State Solid Waste Disposal Regulations
- 6 NYCRR Part 376 New York State Land Disposal Restrictions
- 29 CFR 1910 (Subparts G, H, I, J and K) Hazardous Materials, Environmental Controls, and Personnel Protection
- 29 CFR 1910 Subpart N- Material handling and Storage
- 29 CFR 1910.1200 OSHA Hazard Communication Standard
- 40 CFR 112 Oil Pollution Prevention for Spill Prevention and Control and Countermeasure (SPCC) Plans
- 40 CFR 122 National Pollutant Discharge Elimination System (NPDES) Regulation
- 40 CFR 260-262, 268, and 270-272 Hazardous Waste Management
- 40 CFR 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- 40 CFR 372 Toxic Chemical Release Reporting: Community Right to Know
- 40 CFR 761 Toxic Substances
- 40 CFR 171-173, 175 and 177 Department of Transportation Regulations
- 40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
- 40 CFR 122-124 NPDES Regulations for Stormwater Discharges
- 40 CFR 401 Effluent Limitation Guidelines

**Town of Islip  
Long Island MacArthur Airport**

**BMP 13        STORM WATER POLLUTION PREVENTION EDUCATION**

**PURPOSE:**

Prevent or reduce the discharge of pollutants to storm water from activities through implementing an education program targeting employees, 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 storm water authorities to incorporate proactive storm water 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 and 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, if required developed under guidelines set forth in 40 CFR, Section 112.3(a), (b).
- Adequately train employees in the use of spill response equipment and materials.

***Inspection and Training***

- Perform and document in a log book 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 storm water pollution education programs to contain the following elements:
  - Promote the proper storage, use, and disposal of landscape maintenance chemicals and other potentially harmful chemicals.
  - Promote the use of safer alternative products such as: short-lived pesticides, non-chlorinated solvents, water-based paints, non-aerosol products. Encourage the use of "dry" washing processes for aircraft, vehicles, and equipment.
- Design storm water 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 result 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 to enter storm drains.
- Provide a mechanism for violations to be reported.

**REQUIREMENTS:**

- Capital and O&M costs are minimal for educational programs.
- Educational programs need to be ongoing. Information and training must be disseminated at regular intervals.

**LIMITATIONS:**

- The success of educational programs is difficult to measure. Acceptance and awareness are critical factors.

**RELEVANT RULES AND REGULATIONS:**

- 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

**Town of Islip  
Long Island MacArthur Airport**

**BMP 14      PAVEMENT SWEEPING & STORM WATER FACILITY MAINTENANCE**

**PURPOSE:**

The solids and floatable control aspect of this BMP focuses on using preventive measures to reduce the amount of solids and floatable materials entering the storm system. Many solids on the street come from pavement, tire and vehicle equipment wear, and often contain heavy metals and petroleum products. Solids are also produced by erosion along roads.

**APPROACH TO EXISTING FACILITY ACTIVITIES:**

***Pavement sweeping***

All aeronautical areas and roadways will be swept on an as required basis. Airport employees will inspect the stability of shoulders, embankments, ditches and soils along the streets at least twice a year. Eroding sites will be repaired.

***Stormwater Facility Maintenance***

The Airport is required to maintain all stormwater facilities to ensure that they are properly functioning and operating at the designed efficiency. A catch basin is a vault or a chamber that is usually associated with the storm drain inlet. The catch basin usually has the capability to trap debris and some sediment before they travel farther into the storm system. If catch basins are not cleaned periodically, they may fill up with debris and stop functioning properly. To mitigate that possibility, the Airport schedules annual catch basin cleaning, where all sediment and debris from pavement runoff is removed and the vault is cleaned out. At the same time the basin is inspected for proper operation.

**RELEVANT RULES AND REGULATIONS:**

- NYS Environmental Conservation Law, Article 33
- 40 CFR 112 Oil Pollution Prevention for Spill Prevention and Control and Countermeasure (SPCC) Plans
- 40 CFR 122 National Pollutant Discharge Elimination System (NPDES) Regulation
- 40 CFR 171-173, 175 and 177 Department of Transportation Regulations
- 40 CFR 122-124 NPDES Regulations for Stormwater Discharges
- 40 CFR 401 Effluent Limitation Guidelines

**Town of Islip  
Long Island MacArthur Airport**

**BMP 15                      SECURITY**

**PURPOSE:**

Heightened security began before the new Aviation Security and Transportation Act of 2001 became law on November 19, 2001. Criminal background checks on all airport employees have begun and must be completed by year-end. Carry-on bags are searched more carefully, and passengers' names are crossed-checked with lists of people the Federal government deems suspicious.

In addition, the Airport recently announced additional implementation of airport security measures that will require all current and prospective employees who have access to secure areas of airports to undergo fingerprinting and criminal history background checks.

The Airport also will make greater use of closed circuit television cameras to supplement access control systems to help law enforcement personnel determine the nature of an intrusion or an alarm.

# Appendix E

## Annual Site Compliance Evaluation

**Annual Site Compliance Evaluation  
 Long Island MacArthur Airport (ISP)  
 Ronkonkoma, NY 11779**

The Annual Site Compliance Evaluation includes procedures and protocols for inspections to be performed to adhere to specific Best Management Practices (BMPs) identified in the BMPP required by the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) Permit for ISP. TOI shall use this evaluation form to assess BMPP implementation effectiveness and follow-up actions.

<b>I. FACILITY INFORMATION</b>				
<i>Instructions: Give the tenant/facility's name, terminal, and building numbers, and address or location of tenant's facility. Give the tenant contact name, as it is legally referred to, of the person, business, public organization, or other entity that owns or operates the tenant's facility. Give the name, title, and work telephone number of the Pollution Prevention Team (PPT) member who is thoroughly familiar with the operation of the facility and with the facts reported in this BMPP Implementation Inspection Report and who can be contacted by the TOI for additional information.</i>				
1. TENANT/FACILITY NAME		2. TERMINAL NUMBER(s)	3. BUILDING NUMBER(s)	
4. MAILING ADDRESS/LOCATION OF PROPERTY		5. CITY	6. STATE	
				7. ZIP CODE
8. TENANT CONTACT (Name)		9. MAILING ADDRESS (if different from No. 4.)	10. CONTACT PHONE NUMBER	
11. POLLUTION PREVENTION TEAM MEMBER (Name)		12. CONTACT PHONE NUMBER	13. EMAIL ADDRESS	
14. COMMENTS		15. NOTES		
<b>Nature of Facility</b>				
<i>Instructions: Provide a brief description of the nature of the business in the space provided.</i>				
16. PROPERTY TYPE (Circle One): COMMERCIAL TELECOMMUNICATIONS PARKING CARGO MAINTENANCE OTHER (Specify) _____				
17. VENDORS (Circle One): Y e s o r N o _____				
18. PROVIDE A GENERAL DESCRIPTION OF THE FACILITY OPERATIONS _____				
_____				
_____				
Additional Remarks: _____				
_____				
_____				

**II. BMPP IMPLEMENTATION INSPECTION**

*Instructions: Before proceeding to conduct the BMPP Inspection and complete the BMPP Implementation Inspection Form please verify that a review of the facility components and systems has been completed to identify potential industrial activities that contribute to stormwater pollution discharges at ISP located in Appendix D of the ISP BMPP.*

- 19. HAS THE MEMBER WHO IS THOROUGHLY FAMILIAR WITH THE OPERATION OF THE FACILITY REVIEWED THE ISP BMPP? (Circle One) **YES NO**
- 20. DO TENANT PERSONNEL RECEIVE GENERAL TRAINING FOR MANAGING OF RUNOFF FROM SITE? (Circle One) **YES NO**
- 21. DO TENANT PERSONNEL RECEIVE SPECIFIC TRAINING FOR PREVENTING POLLUTION AND CONTROLLING RUNOFF FROM SITE (BMP IMPLEMENTATION)? (Circle One) **YES NO**
- 22. ARE TRAINING RECORDS AND EDUCATIONAL MATERIALS AVAILABLE FOR REVIEW? (Circle One) **YES NO**
- 23. DOES FACILITY HAVE CURRENT ENVIRONMENTAL PLANS (Circle One) **YES NO** (Circle Applicable):  
 SPILL RESPONSE PLAN (SRP) SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN (SPCC) OTHER (Specify) \_\_\_\_\_

**BMPP IMPLEMENTATION INSPECTION FORM**

*Instructions: Check boxes to indicate if identified BMPs are being implemented for the following activities conducted at ISP. Please also check the box which best describes the effectiveness of BMP implementation as described below:*

*Check "SATISFACTORY" if BMPs (including source control BMPs) are used and are effective.*

*Check "NEEDS IMPROVEMENT" if either no BMPs are used, or if some BMPs are used but are not effective in minimizing non-stormwater discharges.*

ISP BMPs	BMP Used			BMP Implementation Effectiveness	
	Yes	No	N/A	Satisfactory	Needs Improvement
<b>BMP 1 AIRCRAFT DEICING.</b>					
1. Is propylene glycol used at the facility? (If no, then proceed to next BMP, if yes, then complete remaining questions)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are appropriate glycol/water blends utilized during deicing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are there plans to upgrade the existing truck fleet/spray nozzles?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Does your facility have designated personnel that dispense the deicing material?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are personnel educated and trained regarding the use of deicing material?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the type and quantity of deicing material used reported to the TOI monthly on the Deicing/Anti-icing Reporting Form?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are all propylene glycol (ethylene glycol is prohibited) releases reported to the appropriate entity and the TOI?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BMP 2 AIRCRAFT, VEHICLE, AND EQUIPMENT FUELING.</b>					
1. Are berms or curbing installed around fueling areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are absorbent materials and/or vacuum equipment available for spills?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are vapor recovery systems installed and utilized at fuel dispensers and tanks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are canopies installed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is preventive maintenance utilized to inspect, and correct? Malfunctions?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ISP BMPs	BMP Used			BMP Implementation Effectiveness	
	Yes	No	N/A	Satisfactory	Needs Improvement
<b>BMP 3 AIRCRAFT, VEHICLE, AND EQUIPMENT MAINTENANCE.</b>					
1. Is maintenance performed indoors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are floor drains located in maintenance areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are materials used in repair and minor remodeling (paints, etc.) stored properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are employees trained on spill prevention and response?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are safer alternative products used whenever possible?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are adequate records kept in accordance with applicable regulations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BMP 4 AIRCRAFT, VEHICLE, AND EQUIPMENT WASHING, STEAM CLEANING AND DEGREASING.</b>					
1. Are dry washing techniques utilized in designated areas and wherever possible?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is wash water recycled or discharged appropriately?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are catch basins covered during washing operations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BMP 5 BUILDING CLEANING AND MAINTENANCE.</b>					
1. Are pesticides and fertilizers used and stored properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is maintenance performed indoors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are floor drains located in maintenance areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are materials used in repair and minor remodeling (paints, etc.) stored properly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are employees trained on spill prevention and response?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are safer alternative products used whenever possible?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are adequate records kept in accordance with applicable regulations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BMP 6 CHEMICAL AND PETROLEUM BULK STORAGE HANDLING.</b>					
1. Are routine inspections and maintenance performed at all locations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are employees trained on spill prevention and response?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are all spills reported to appropriate regulatory agencies and the TOI ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are adequate records kept in accordance with applicable regulations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BMP 7 ELIMINATION OF NON-STORMWATER DISCHARGES TO STORM DRAINS.</b>					
1. Are inspections and enforcement with regular corrective action measures conducted at the facility?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are employees trained on methods to eliminate discharges to storm drains?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Has the BMPP been distributed to all and reviewed by all appropriate staff, tenant personnel/contractors?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BMP 8 SPILLS MANAGEMENT.</b>					
1. Does the facility maintain and implement a SPCC?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is immediate containment/cleanup of spills performed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are applicable absorbent materials and vacuum cleaners immediately accessible for spill events?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are all spill events reported to appropriate regulatory agencies and the TOI ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ISP Airport BMPs	BMP Used			BMP Implementation Effectiveness	
	Yes	No	N/A	Satisfactory	Needs Improvement
<b>BMP 9 OIL/WATER SEPARATORS.</b>					
1. Are oil/water separators inspected and cleaned frequently of accumulated oil, grease, floating debris, and sediment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are absorbent pads replaced on a routine basis?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is standing water removed during cleaning operations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BMP 10 OUTDOOR HANDLING OF MATERIAL.</b>					
1. Is loading/unloading conducted under cover?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is transferring material next to storm drain inlets avoided to the maximum extent possible?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are drip pans used under hoses?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are material transfer leaks immediately contained and absorbed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BMP 11 OUTDOOR MATERIAL AND EQUIPMENT STORAGE.</b>					
1. Are covers used to protect all raw materials, by-products, finished products items stored outside?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are chemicals, drums, or bagged materials on pallets or similar method that keep them off the ground?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are hazardous materials (if permitted in lease) stored in properly designed secondary containment areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are drip pans and containers used in areas where drips or leaks may occur?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are berms, curbs, or other structures in place to minimize pollutants from entering the storm water system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are all containers properly labeled?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are periodic inspections conducted for storage areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BMP 12 WASTE MANAGEMENT.</b>					
1. Are measures taken to streamline operations to minimize waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are wastes segregated/separated/recycled to maximum extent?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is storage area designed to prevent storm water runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are waste dumpsters covered?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are records of waste generation and disposal maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are licensed firms utilized for waste disposal?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ISP BMPs	BMP Used			BMP Implementation Effectiveness	
	Yes	No	N/A	Satisfactory	Needs Improvement
<b>BMP 13 STORMWATER POLLUTION PREVENTION EDUCATION.</b>					
1. Is an organization-wide BMP implementation training program in place to inform personnel?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the program adequately explain components and goals of Activity Specific BMPs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are mandatory and regular training sessions conducted for employees?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are training records kept in accordance with applicable regulations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BMP 14 PAVEMENT SWEEPING AND STORMWATER FACILITY MAINTENANCE.</b>					
1. Is landside street sweeping conducted daily from Spring-Fall?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are aeronautical areas and roadways swept once per week?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is street sweeping performed as necessary during winter months?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are roadways inspected and repaired routinely?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BMP 15 SECURITY.</b>					
1. Are appropriate security measures taken to prevent unauthorized access at secure areas to prevent illicit discharges?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**III. BMP ASSESSMENT AND CORRECTIVE ACTION**  
*Instructions: Visual inspections evaluate the effectiveness of stormwater BMPs. Provide any observations taken during the inspection that may warrant revisions to the BMPs. Specify any deficiencies in the BMPs inspected and note any corrective action that may/should be taken.*

**24. OBSERVATIONS/COMMENTS** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**25. CORRECTIVE ACTION** \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**IV. INSPECTION INFORMATION**

*Instructions: Provide name of party who conducted the inspection.*

26. INSPECTOR NAME (Printed) \_\_\_\_\_

27. CONTACT PHONE NUMBER \_\_\_\_\_

28. DATE/TIME OF INSPECTION \_\_\_\_\_

29. TIME OF INSPECTION (Circle One)      ANNUAL                      (DEICING SEASON – from November to April)

30. NAMES OF TENANTS ACCOMPANYING INSPECTOR \_\_\_\_\_

31. NAMES OF TENANTS ACCOMPANYING INSPECTOR \_\_\_\_\_

**HELPFUL HINTS FOR STORMWATER INSPECTIONS**

**AREAS AND ACTIVITIES WITH POTENTIAL TO SPILL HAZARDOUS FLUIDS**

- ✓ SPILL KITS AVAILABLE IF NEEDED
- ✓ SPILL RESPONSE AGENCY PHONE NUMBERS CLEARLY POSTED
- ✓ MATERIAL SAFETY DATA SHEETS AVAILABLE FOR PRODUCTS

**PARKING LOTS**

- ✓ PAVED AREAS SWEEPED DOWN AND NOT HOSED OFF
- ✓ TRASH RECEPTACLES AVAILABLE TO PREVENT LITTER
- ✓ SPILLS OR LEAKS SPOT CLEANED AS NEEDED

**BUILDING AND GROUNDS MAINTENANCE**

- ✓ VEGETATION LEFT IN PLACE WHERE POSSIBLE
- ✓ SOIL EROSION NOT OBSERVED
- ✓ GROUNDS FREE OF LITTER
- ✓ PAVED AREAS SWEEPED DOWN AND NOT HOSED OFF
- ✓ SAFER ALTERNATIVE PRODUCTS IN USE
- ✓ TRASH RECEPTACLES AVAILABLE TO PREVENT LITTER
- ✓ MINIMAL USE OF PESTICIDES AND FERTILIZERS

**PARK AND LANDSCAPE MAINTENANCE**

- ✓ SOIL EROSION NOT OBSERVED
- ✓ GROUNDS FREE OF LITTER
- ✓ PAVED AREAS SWEEPED DOWN AND NOT HOSED OFF
- ✓ IRRIGATION SYSTEMS DESIGNED TO PREVENT RUNOFF
- ✓ USE OF PESTICIDES AND FERTILIZERS ONLY AS NEEDED

**OUTDOOR LOADING/UNLOADING OF MATERIALS**

- ✓ MATERIAL LOADING/UNLOADING AREAS ENCLOSED OR COVERED
- ✓ LOADING AND UNLOADING CONDUCTED IN DRY WEATHER IF NOT COVERED
- ✓ LOADING AND UNLOADING AREA BERMED OR SLOPED TO CONTAIN SPILLAGE
- ✓ NO DISCHARGE TO STORM DRAIN
- ✓ DRIP PANS AVAILABLE TO CAPTURE LIQUID LEAKS

**OUTDOOR STORAGE OF MATERIALS/PRODUCTS/EQUIPMENT**

- ✓ HAZARDOUS MATERIALS LABELED, COVERED, AND CONTAINED
- ✓ STOCKPILED MATERIALS COVERED
- ✓ NO SIGNS OF EXCESSIVE LEAKING FROM STORED EQUIPMENT
- ✓ DRIP PANS AVAILABLE TO CAPTURE EQUIPMENT LEAKS
- ✓ STORAGE AREA FREE OF LITTER
- ✓ GENERAL GOOD HOUSEKEEPING OBSERVED

**WASTE HANDLING AND DISPOSAL**

- ✓ RECYCLABLE MATERIALS BEING RECYCLED
- ✓ WASTE CONTAINERS COVERED TO PREVENT STORM WATER RUNOFF/RUN-ON
- ✓ DRIP PANS AVAILABLE TO CAPTURE GREASE WHEN TRANSFERRED
- ✓ AREA SWEEPED DOWN ON REGULAR BASIS
- ✓ AREA FREE OF STAINS OR OTHER SIGNS OF POLLUTANTS GOING INTO STORM DRAIN SYSTEM
- ✓ WASTE CONTAINERS IN GOOD CONDITION FREE FROM LEAKS
- ✓ GENERAL GOOD HOUSEKEEPING OBSERVED
- ✓ NO LITTERING SIGNS POSTED

**ERODIBLE SURFACE AREAS**

- ✓ PRESERVE NATURAL VEGETATION
- ✓ VEGETATION LEFT IN PLACE WHERE POSSIBLE
- ✓ SOIL EROSION NOT OBSERVED
- ✓ CHEMICAL STABILIZATION OR GEOSYNTHETICS IN USE ON BARE GROUND
- ✓ PAVED AREAS SWEEPED REGULARLY

**ILLICIT CONNECTIONS/ILLEGAL DISCHARGES**

- ✓ SIGNS OF ILLICIT CONNECTIONS TO STORM WATER CONVEYANCE SYSTEM(S)
- ✓ SIGNS OF ILLEGAL/UNKNOWN DISCHARGE OBSERVED GOING FROM THE LEASE PREMISES ONTO ADJACENT PROPERTY OR INTO THE STREET
- ✓ SIGNS OF ILLEGAL/OR UNKNOWN DISCHARGE OBSERVED COMING FROM ADJACENT PROPERTY ONTO THE LEASE PREMISES
- ✓ STAINED PAVEMENT IN AREAS NEAR OR SURROUNDING CATCH BASIN OR STORM WATER OUTFALL

**BMPP IMPLEMENTATION INSPECTION FORM**

- BMPP Implementation Effectiveness
- Results of BMP Inspection
- Presented in Annual Facility Review and Site Inspection Report
- Ensure Training of BMPP
- Completed Semi-Annually and at least during Deicing/Anti-icing Season

**BMPP KEY COMPLIANCE**

- Avoid costly permit violations and problems meeting SPDES permit compliance requirements with proper inspection and maintenance of BMPs.
- Stormwater BMPs require regular inspections and maintenance to ensure long-term proper function.
- Inspections are the most effective way to detect and avoid potential problems before they become a liability.

**FOR ADDITIONAL INFORMATION CONTACT:**

Al Cinotti  
Chief Fire Safety Officer  
Town of Islip – Department of Aviation  
Long Island MacArthur Airport (ISP)  
Bayport Aerodrome (23N)  
100 Arrival Avenue, Suite 100  
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