# SPILL PREVENTION, CONTROL, AND COUNTERMEASURE (SPCC) PLAN

PREPARED FOR:

# **BEVERLY MUNICIPAL AIRPORT**

46 L.P. HENDERSON ROAD BEVERLY, MASSACHUSETTS 01915

PREPARED BY:

GZA GEOENVIRONMENTAL, INC.

SPRINGFIELD, MASSACHUSETTS 01103

PREPARED: APRIL 2013

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# **EMERGENCY CONTACT LIST**

# **Beverly Municipal Airport SPCC Coordinators**

Beverly Municipal Airport SPCC Coordinators		
Primary SPCC Coordinator	Off (070) 004 0070	
Robert Mezzetti, Airport Manager	Office: (978) 921-6072 Cell: (978) 771-8956	
·	(676) 77 1-6550	
Alternate SPCC Coordinator	Office: (978) 921-6072	
David Meuse, Mechanic	Cell: (978) 265-2195	
Tenant SPCC Coordinators		
North Atlantic Air, Inc. (East and West Side Operations)	Office: (978) 774-2070	
Kenneth Robinson (President, Primary SPCC Coordinator)	Cell: (978) 468-1358	
Something Different Cafe	Office: (978) 927-0070	
Linda McCarthy	Cell: (978) 524-0920	
City/State Agencies		
Beverly Fire Department	911 or (978) 922-2424	
Beverly Police Department	911 or (978) 922-1212	
Danvers Fire Department	911 or (978) 774-2425	
Danvers Police Department	911 or (978) 774-1213	
Wenham Fire Department	911 or (978) 468-5508	
Wenham Police Department	911 or (978) 468-4000	
Beverly Hospital – 85 Herrick Street, Beverly, MA	(978) 922-3000	
Wastewater Treatment Plant for Beverly, Salem	(978) 922-2600	
Wastewater Treatment Plant for Danvers (located in Middletown)	(978) 774-5054	
Wastewater Treatment Plant for Wenham	(978) 468-5520 (town hall)	
Massachusetts DEP Spill Hotline	(888) 304-1133	
Massachusetts DEP Northeast Region Office	(978) 694-3200	
Beverly Emergency Center Operations (Local Emergency Planning Committee (LEPC))	(978) 468-4421	
State Emergency Response Commission (SERC)	(508) 820-2000	

# **EMERGENCY CONTACT LIST**

# 

# SPILL/RELEASE REPORTING QUICK REFERENCE SUMMARY

Type of Spill	Who to Call	Time Frame
Any spill	SPCC Coordinator	Immediate
Oil spills greater than 10 gallons to land and oil spills that cause a sheen on waters of the state and/or U.S.	Massachusetts Department of Environmental Protection (MADEP) Applicable Fire and Police Depts. (Beverly, Danvers, Wenham)	Within 2 hours
Oil spills that cause a film or sheen on waters of the U.S.	National Response Center (NRC)	Immediately
Threats of Release	MADEP	Within 2 hours
Spills equal to or greater than the federal Reportable Quantity (RQ) that have the potential to affect offsite persons.	Beverly Emergency Center Operations (LEPC)	Immediately
	State Emergency Response Commission (SERC)	
Any spill determined to require outside assistance or spill response	Spill Response Contractor	As soon as need is determined

#### Massachusetts Reportable Releases

A release of any quantity of oil to navigable waters or to a storm drain that discharges to navigable waters must be reported within 2 hours to the MADEP. A release of 10 gallons or more of oil to the environment must be reported to the MADEP within 2 hours.

#### Federal Reportable Releases

A release of any quantity of oil to navigable waters or to a storm drain that discharges to navigable waters must be reported immediately to the NRC.

#### Notes:

- 1) A release to a containment structure is not considered a release to the environment.
- 2. Threat of release means a substantial likelihood of a release of oil and/or hazardous material which requires action to prevent or mitigate damage to health, safety, public welfare or the environment which may result from the release. A threat of release includes situations where a release is likely to occur, where the quantity of the release, if it occurred, would be equal to or greater than the applicable Reportable Quantity.

# **RECORD OF PERIODIC PLAN REVIEW**

Date of Review	Statement of Review
	I have completed review and evaluation of the SPCC Plan and will
	will not ☐ amend the plan as a result.
	Name: Ton JEHKINS
***************************************	Signature: Vout, XI
	I have completed review and evaluation of the SPCC Plan and will
	will not ☐ amend the plan as a result.  Name:
	Signature:  I have completed review and evaluation of the SPCC Plan and will
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	Name:
	Signature:
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,	Signature:
	I have completed review and evaluation of the SPCC Plan and will
·	will not amend the plan as a result.
	Name:
	Signature:
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# **RECORD OF PLAN REVISIONS**

Date of Revision	Description of Revision	PE Certification Required (Y/N)
December 2012	New Draft SPCC Plan (to replace existing SPCC Plan once finalized)	Yes, once finalized
April 2013	Revised SPCC Plan to address comments from Airport Management and Aviation Consultant for Facility (to replace existing SPCC Plan)	Yes
110000000000000000000000000000000000000		

# **PLAN DISTRIBUTION LIST**

	Facility Personnel/Departments	
1	SPCC Coordinator (Beverly Municipal Airport)	Robert Mezzetti
2	North Atlantic Air, Inc.	Kenneth Robinson
3	Something Different Cafe	Linda McCarthy
4	Airport Administration Office	Paul Barnico

**SECTION 1.0 - GENERAL INFORMATION** 

#### 1.1 Introduction

This Spill Prevention, Control, and Countermeasure Plan (the **Plan**) has been prepared for the Beverly Municipal Airport (the **Facility**) located at 46 L.P. Henderson Road in the City of Beverly and the towns of Wenham and Danvers, Massachusetts. The Plan has been prepared pursuant to the United States Environmental Protection Agency's (USEPA's) Oil Pollution Prevention Regulations (40 CFR Part 112). The Plan establishes preparedness, prevention, planning, spill response, and spill notification procedures as set forth 40 CFR Part 112.

The Plan has been compiled by GZA GeoEnvironmental, Inc. and the Facility, and has been reviewed and certified by a Registered Professional Engineer.

The Facility is comprised of the airport property and operations, owned by the City of Beverly (the **Owner**) and administered by the Beverly Airport Commission (the **Operator**), and operations of tenants with lease agreements with the Operator. The Facility includes operations controlled and maintained by the Owner and Airport management/staff, collectively referred to herein as the **Airport** or **Airport operations**. Entities who have lease agreements to conduct operations onsite are referred to herein collectively as the **Tenants** or individually or in smaller groups as a **tenant** or the **tenants**. This terminology will be used throughout the SPCC Plan to define roles and responsibilities.

The Facility has developed this Plan with the intent that it will serve as the generalized SPCC Plan for both the Airport's operations and Tenant operations. The Airport is responsible for implementation of the Plan as it relates to the Airport's operations. Individual tenants are responsible for implementation of the Plan as it pertains to that tenant's operations. Tenants that adopt the Plan as their own must adhere to all requirements of the Plan as it applies to their operations, equipment, and facilities and must commit resources to address spill response/cleanup, as indicated in a sign off of the plan in Appendix D of the Plan. All reports, inspections, and documentation required by the Plan shall be prepared by each tenant and provided to the Facility SPCC Coordinator, as discussed herein. Tenants must provide immediate notification to the Airport in the event that proposed changes in their tenant operations warrant modifications to or updates of the Plan. Tenants may choose to develop their own SPCC Plan to cover their own operations. In such cases, each individual tenant's SPCC Plan must be coordinated with and at least as stringent as the most current version of the Plan. Having an individual SPCC Plan does not eliminate the need for a tenant to provide information to the Facility SPCC Coordinator as per the Plan.

As of the date of the Plan, the following tenants had developed and are maintaining their own SPCC Plans to cover their tenant operations:

• North Atlantic Air, Inc. (for West Side Operations only)

It should be noted that not all tenants at the Facility are subject to the requirements of the Plan. Only those tenants who store oil in excess of the applicable regulatory thresholds are subject to the Plan.

The Plan, as updated, shall be maintained onsite in the Facility SPCC Coordinator's office. The Plan will be made available upon request for onsite review during normal business hours.

#### 1.1.1 Plan Outline

This Plan contains three main sections: 1) General Information, 2) Spill/Release Prevention Procedures, and 3) Oil Spill Contingency Plan.

<u>Section 1.0 - General Information</u> describes the Facility and the administration of this Plan including procedures for the distribution, periodic review, and amendment of the Plan.

<u>Section 2.0 - Spill/Release Prevention</u> identifies and establishes policies and procedures to be implemented with the goal of reducing the potential of a spill/release, including: a detailed description of areas of the Facility where oil is are used and stored; the associated containment systems; a description of the potential environmental receptors that may be affected; procedures for inspecting storage areas or equipment containing oil; a description of Beverly Municipal Airport's training program; delivery/storage procedures; and a discussion and assessment of the potential spill/release scenarios.

<u>Section 3.0 – Oil Spill Contingency Plan</u> identifies and establishes the response and notification procedures to be used in the event of a spill/release of oil including: steps to be taken when a spill/release is discovered; how to report a spill/release; and guidance on mitigation and cleanup of a spill/release and disposal of related waste.

# 1.1.2 Plan Review/Amendments

As set forth in 40 CFR 112.4 and 112.5, the Plan shall be amended by the Facility and recertified whenever required by the Regional Administrator of the USEPA, whenever applicable regulations are revised or added, or whenever there is a change in facility design, construction, operation, or maintenance which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

Examples of changes that may require amendment of the Plan may include, but are not limited to: commissioning or decommissioning containers; replacement, reconstruction or movement of containers; reconstruction, replacement, or installation of piping systems; construction or demolition that might alter secondary containment structures; changes of product or service; or revision of standard operation or maintenance procedures at the Facility. Such amendments are considered technical amendments. Technical amendments made to this Plan shall only be effective, and satisfy the requirements of 40 CFR Part 112, if certified by a Registered Professional Engineer. Administrative changes, such as a change of phone numbers, do not require certification by a Registered Professional Engineer.

In addition, the Plan shall be reviewed and evaluated at least once every five years by a Registered Professional Engineer. As a result of this review, the Plan must be amended to include more effective prevention and control technology if the technology is field-proven at the time of the review and will significantly reduce the likelihood of a discharge from the facility.

Any amendment made to the Plan must be prepared and implemented no later than 6 months from the date of the facility change requiring the amendment. All Plan reviews will be documented using the Record of Periodic Plan Review on Page iv of this Plan. Should any revisions to the Plan be required, such revisions will be documented on the Record of Plan Revisions on Page v of this Plan. The current revision date of the Plan is indicated in the lower left corner of each page.

# 1.1.3 Plan Distribution

This Plan will be distributed in accordance with the Plan Distribution List on Page v of this Plan.

# 1.1.4 Certification of Substantial Harm Determination

As required by 40 CFR Part 112, included as Appendix A is a completed Certification of Substantial Harm Determination Form which demonstrates that the Facility including its Tenants does not meet the criteria for posing a risk of substantial harm to the environment, and is therefore not a covered facility.

# 1.1.5 Regulatory Cross Reference

40 CFR Part 112 requires that any SPCC Plan that does not specifically follow the regulatory format include a cross-reference of the Plan with the guidelines presented in Part 112. Accordingly, a regulatory cross reference is included as Appendix B to this Plan.

#### 1.2 PURPOSE AND SCOPE

The purpose of this Spill Prevention, Control, and Countermeasure (SPCC) Plan is to establish preparedness, prevention, planning, spill response, and spill notification procedures as set forth in the applicable state and federal regulations related to oil management. It identifies the procedures and equipment implemented and maintained by Beverly Municipal Airport to prevent and to minimize hazards to public health, safety, or welfare of the environment from fires, explosions, or any other unplanned sudden or non-sudden release of oil to air, soil, surface water or groundwater, and activities and guidelines to be implemented to mitigate these situations should they occur. The Plan also details the procedures implemented to prevent spills/releases of oil that violate applicable water quality standards, cause a sheen upon or discoloration of the surface of navigable waters or adjoining shorelines, or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

The Plan has been prepared pursuant to regulations set forth in 40 CFR Part 112, which state that any facility that has an aggregate oil storage capacity of 42,000-gallons below ground or 1,320-gallons aboveground and could reasonably be expected to discharge oil in harmful quantities into navigable waters of the United States must prepare and implement an SPCC Plan.

Completely buried storage tanks subject to all of the technical requirements of the applicable underground storage tanks regulations, and containers with storage capacities less than 55-gallons, are not considered in this determination, nor are they subject to the requirements of 40 CFR Part 112.

Oil is defined in 40 CFR 112.2 as:

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

The Facility exceeds the aboveground storage threshold quantities established in the regulations, and includes oil and petroleum products stored in tanks and equipment. It should be noted that this includes oil storage tanks and containers which are used for heating oil. Oil-containing equipment and containers with storage capacities less than 55-gallons are not addressed by the Plan.

# 1.2.1 General Facility Information

The Beverly Municipal Airport was constructed in 1928 and currently functions as a public general aviation and reliever airport. The main Airport parcel consists of approximately 415 acres, of which approximately 85 percent is open land. Approximately 60 acres is used for airport purposes and consists of two asphalt runways measuring approximately 5000 x 100 ft, and 4755 x 100 ft, as well as associated hangars, maintenance hangars and other related structures. A majority of the structures at the facility are located on the eastern portion of the Site. The Site is bordered to the east by a mix of residential, industrial and commercial properties, to the west by residential properties, to the north by open land and residential properties and to the south primarily by industrial properties. Wetlands are present at the Site along property margins and in limited infield areas.

Facility Name: Beverly Municipal Airport

Facility Address: 46 L.P. Henderson Road

Beverly, Massachusetts 01915

Main Phone Number: (978) 921-6072

Main Phone Number: (978) 921-6072

Latitude: 42° 35' 3" N

Longitude: 70° 54' 58" W

A Site Location Map is included as Figure 1 in the Figures Section of the Plan.

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# 1.2.2 Facility Oil Storage Overview

Oil storage at the Facility subject to the requirements of the Plan includes aboveground storage tanks (ASTs), underground storage tanks (USTs), oil stored in drums, and oil stored in mobile refuelers. Specific information for each oil storage location at the Facility is included in Tables 1 through 6 in the Tables Section of this Plan. The location of each oil storage tank and major oil-storing equipment is generally depicted in the Figures Section of the Plan.

In addition, there are oil-containing transformers at the Facility. However, any onsite transformers (either pole-mounted or pad-mounted) are owned and operated by other entities,

County:

specifically local utility companies and/or FAA, and are not under the control or ownership of the Facility. While the Facility will notify the appropriate entity in the event of an observed release or problem with the transformers, it does not control these features onsite and they are not addressed specifically in the Plan.

#### 1.2.3 Spill Prevention Coordinators

As required by 40 CFR Part 112, the Facility has designated personnel accountable for discharge prevention and who reports to Facility management. For the purposes of this Plan, these individuals are identified as the Spill Prevention Coordinators (SPCC Coordinators). The Facility has developed the Plan with the intent that it will serve as the SPCC Plan for both the Airport's operations and those of the Tenants at the Facility, except for those tenants that maintain their own SPCC Plans. The Airport is responsible for implementation of the Plan as it relates to its operations. Individual tenants are responsible for implementation of the Plan as it pertains to that tenant's operations.

The Facility SPCC Coordinator is directly responsible for the implementation of the Plan and all policies and procedures described in the Plan as they pertain to the Airport's operations. Specific responsibilities of the Facility SPCC Coordinator include:

- Coordinating the amendment and distribution of the Plan;
- Overseeing the implementation of this Plan at tenant locations;
- Implementing the operational controls and inspection program for oil containing tanks equipment directly controlled by the Owner; and
- Conducting the training program for Beverly Municipal Airport personnel.

In addition, each tenant operation storing oil in amounts applicable to the Plan shall designate a tenant SPCC Coordinator for their tenant operation. Each tenant SPCC Coordinator is directly responsible for the implementation of the Plan as it pertains to their specific operations and equipment. Specific responsibilities of the tenant SPCC Coordinators include:

- Implementing the operational controls and inspection program for oil containing tanks equipment directly controlled by the tenant; and
- Conducting the training program for tenant personnel.

In addition to the roles described above, each SPCC Coordinator is responsible for ensuring the expeditious and effective response to releases at the Facility. The Facility SPCC Coordinator is directly responsible for the implementation of the emergency response procedures described in this Plan for the Airport's operations, while each tenant SPCC Coordinator is responsible for implementing the emergency response and reporting procedures in the Plan for releases from equipment under their operational control.

Each SPCC Coordinator must be authorized to implement the Plan and utilize any resources described within the Plan to minimize the hazards to human health or the environment from a spill/release of oil. The Alternate SPCC Coordinator (or his designee) assumes the responsibilities of the Primary SPCC Coordinator in his/her absence. Specific responsibilities of the SPCC Coordinator include:

- Direct response efforts;
- Assess human health and environmental hazards and impacts;

- Assess spill/release to determine if external reporting is required and/or if spill contractor is needed;
- Initiate/coordinate incident response and communicate required follow-up actions;
- Conduct follow-up notifications with outside agencies;
- Initiate/coordinate sustained actions;
- Initiate/coordinate termination and follow-up actions; and
- Implement identified corrective actions.

The Primary and Alternate SPCC Coordinators, and their respective phone numbers and addresses, are identified on the Emergency Contact List on Pages i and ii of this Plan.

# 1.3 CONFORMANCE WITH STATE REQUIREMENTS

As required by 40 CFR Part 112, preparation of this SPCC Plan considered the requirements contained in the Code of Massachusetts Regulations (CMR) listed below:

•	310 CMR 30.000	Hazardous Waste
•	310 CMR 40.0000	Massachusetts Contingency Plan (MCP)
•	527 CMR 9.00	Massachusetts Tanks and Containers Regulations
•	502 CMR 5.00	Massachusetts Permit Requirements and Annual Inspection of Aboveground Storage Tanks or Containers

# 1.3.1 Massachusetts Hazardous Waste Regulation Conformance

The management of hazardous waste in Massachusetts is governed by 310 CMR 30.000. Particular to SPCC planning, these regulations include sections regarding the management of used oil and used oil containers, including labeling, and handling practices. Under current operations, the Facility may periodically generate used oil. Accordingly, any used oil generated at the Facility shall be managed in accordance with the applicable sections of 310 CMR 30.000.

# 1.3.2 Massachusetts Contingency Plan Regulation Conformance

The requirements associated with responding to, reporting, and cleaning up spills and/or releases or threats of release of hazardous materials in Massachusetts are governed by the Massachusetts Contingency Plan (MCP- 310 CMR 40.0000). Particular to SPCC planning, hazardous materials include oils. In the event of a release or threat of release at the Facility, the applicable SPCC Coordinator (individual tenant or Airport) will ensure that release will be appropriately handled in accordance with the specific requirements of the MCP.

# 1.3.3 Massachusetts Tanks and Containers Regulation Conformance

The Massachusetts Tanks and Containers Regulations apply to the design, construction, installation, testing, and maintenance of tanks and containers. The intent is to protect the public safety and welfare from the dangers of fire and/or explosion due to tank or container leakage of flammable and combustible liquids. Airport and Tenant Operations shall ensure the tanks are appropriately maintained in accordance with the application requirements of 527 CMR 9.00.

# 1.3.4 Massachusetts Permit Requirements and Annual Inspection of Aboveground Storage Tanks or Containers

State regulations 502 CMR 5.06 applies to aboveground storage tanks with capacities in excess of 10,000 gallons and used for the storage of any fluid other than water. These regulations require that such tanks be visually inspected on an annual basis, and that documentation of the inspections be submitted to the Massachusetts Department of Fire Services (MassDFS). All tanks at the Facility greater than 10,000-gallons and used to store any fluid other than water shall be inspected annually in accordance with these requirements.

#### 1.4 QUALIFIED FACILITY

In December 2006, portions of 40 CFR Part 112 were modified to allow a "qualified facility" to self-certify the SPCC Plan. A qualified facility is defined in 40 CFR 112.3(g) as one that:

"meets the following Tier I or Tier II qualified facility criteria:

- (1) A Tier I qualified facility meets the qualification criteria in paragraph (g)(2) of this section and has no individual aboveground oil storage container with a capacity greater than 5,000 U.S. gallons.
- (2) A Tier II qualified facility is one that has had no single discharge as described in Sec. 112.1(b) exceeding 1,000 U.S. gallons or no two discharges as described in Sec. 112.1(b) each exceeding 42 U.S. gallons within any twelve month period in the three years prior to the SPCC Plan self-certification date, or since becoming subject to this part if the facility has been in operation for less than three years (other than discharges as described in Sec. 112.1(b) that are the result of natural disasters, acts of war, or terrorism), and has an aggregate aboveground oil storage capacity of 10,000 U.S. gallons or less."

The Facility has an aggregate aboveground storage capacity of more than 10,000 gallons, and the Facility has implemented *Environmentally Equivalent* measures to comply with certain requirements of 40 CFR Part 112, which are required to be certified by a Registered Professional Engineer. These measures are described in detail in Section 1.5 of the Plan. Therefore, the Facility is not considered a qualified facility under 40 CFR Part 112.

#### 1.5 PLAN DEVIATIONS

In preparing an SPCC Plan, owners and operators are allowed to deviate from certain sections of 40 CFR Part 112, but must explain reasons for nonconformance and provide equivalent environmental protection. After performing an analysis of the Facility, the Plan includes deviations (as noted in this section) from 40 CFR Part 112.

# 1.5.1 Environmental Equivalence - General

The environmental equivalence provision, contained in 40 CFR 112.7(a)(2), allows for deviations from specific requirements of 40 CFR Part 112, as long as alternative measures are implemented which provide equivalent environmental protection. The environmental equivalence provision is a key mechanism of the performance-based 40 CFR Part 112 rule. This flexibility enables facilities to achieve environmental protection in a manner that fits their unique circumstances. It also allows facilities to adopt more protective industry practices and technologies as they become available. In the 40 CFR Part 112 context, equivalent

environmental protection can be defined as an equal level of protection of navigable waters and adjoining shorelines from oil pollution.

# 1.5.2 Environmental Equivalence - Integrity Testing

The Facility deviates from the integrity testing provision of 40 CFR 112.8(c)(6) for the aboveground oil storage tanks (aboveground storage tanks referred to herein as ASTs). This decision of environmental equivalence assumes that the secondary containment conditions as described in Section 1.6.2 of the Plan shall be met, and is also based on an evaluation of good engineering practices after considering the tank installation and operations procedures and alternative measures implemented by the Facility and described herein.

All of the aboveground tanks at the Facility shall be provided with dedicated sized secondary containment structures. All of the aboveground storage tanks shall be situated in a manner to allow for thorough visual inspections of the outer wall of the tanks, which shall be conducted a minimum of once per month. Tenant operations are responsible for their own inspections and recordkeeping regarding periodic visual inspections. Records shall be maintained at Tenant operations in accordance with the requirements of the Plan. The personnel performing periodic inspections of storage tanks shall be knowledgeable of tank operations, characteristics of the oil stored, and the type of the storage tanks and their associated components. The routine inspections shall focus specifically on detecting any change in conditions or signs of product leakage from the tank and its piping. If signs of leakage or deterioration from the tank or piping are observed by facility personnel, the situation shall be reported to the appropriate SPCC Coordinator, who determines the appropriate course of action for further evaluation or response activities.

The systems and measures to be implemented by the Facility and described above are considered to provide equivalent environmental protection to the non-destructive shell evaluation component of integrity testing required under 40 CFR 112.8(c)(6), since an appropriate and effective means of assessing the condition of the tank and its suitability for continued service shall be provided.

If, during a visual inspection, evidence is found that a tank may have been damaged or if the structural integrity of a tank may have been compromised in some manner, integrity testing methods may be employed to evaluate the tank. Any such testing will be conducted in accordance with generally accepted industry standards and will employ such methods as tightness testing, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of non-destructive shell testing. Records of all such testing, including comparison testing, shall be maintained by the tank owner and also provided to the Facility SPCC Coordinator within 10 business days of receipt of testing results.

The Facility also deviates from the integrity testing provision of 40 CFR 112.8(c)(6) for the oil storage containers located at the Facility. This decision on environmental equivalence likewise assumes that the secondary containment conditions as described in Section 1.6.2 of the Plan will be met, and is also based on an evaluation of good engineering practices after considering the use of the containers and operations procedures and alternative measures implemented by the Facility and described herein.

Storage containers at the Facility including Tenants (which consist of 55-gallon drums) shall be provided with dedicated sized secondary containment and stored inside at all times. Drums shall be situated in a manner which allows for thorough visual inspections of the containers,

which shall be conducted a minimum of once per month. Tenant operations are responsible for their own inspections and recordkeeping regarding periodic visual inspections. Records shall be maintained at Tenant operations in accordance with the requirements of the Plan. The personnel performing periodic inspections of storage containers shall be knowledgeable of the characteristics of the oil stored. The routine inspections shall focus specifically on detecting any change in conditions or signs of product leakage from a container. Additionally, containers are not typically maintained onsite for prolonged periods of time after the contents are emptied. Rather, containers storing virgin materials shall be sent for recycling and/or disposal once the container is empty, while containers storing used oil shall be shipped offsite for hazardous waste disposal and/or recycling once full. From time to time, individual operations may keep empty drums for future reuse to collect used oil or similar compatible materials, provided the drums are stored with all openings in the closed position, indoors, and in a manner which will prevent leakage of any residues in the drums. In this case, the empty drums may be stored onsite temporarily until needed. Drums shall only be reused for similar or chemically compatible contents and shall be stored inside.

The systems and measures implemented by the Facility and described above are considered to provide equivalent environmental protection to the non-destructive shell evaluation component of integrity testing required under 40 CFR 112.8(c)(6), since an appropriate and effective means of assessing the condition of a container and its suitability for continued service is provided.

## 1.5.3 Environmental Equivalence - Facility Security

40 CFR 112.7(g) requires sites to fully fence handling, processing, or oil storage, and lock and/or guard entrance gates when the facility is not in production or unattended. The entire airport perimeter is completely encompassed by a fence with security gates which are locked when the Facility is unattended. This includes areas where oil is in use or stored.

#### 1.6 APPROVAL AND CERTIFICATION

The Plan has been reviewed and approved by a representative of the Facility with the authority to commit the necessary resources for implementing the Plan, and by a Registered Professional Engineer as required by 40 CFR Part 112.

#### 1.6.1 Management Approval

The Plan has been reviewed and approved by a Facility representative with the authority to commit necessary resources for implementing the Plan. The programs and procedures outlined in this Plan will be implemented and periodically reviewed and updated in accordance with 40 CFR Part 112, as amended, and applicable state and local requirements. Additionally, in the event of a spill or release of oil, the necessary manpower, equipment and materials will be made available to expeditiously control and remove any harmful quantity of oil discharged.

(Signature)	(Name)
(Title)	(Date)

## 1.6.2 Professional Engineer Certification

I, being familiar with the provisions of 40 CFR Part 112, have reviewed the SPCC Plan for the Facility described herein (the Plan). I, or my representative, have visited and examined the facility located at the address above. The Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of 40 CFR Part 112. The Plan outlines procedures for required inspections and testing, and is adequate for the facility listed above.

This certification shall in no way relieve the owner or operator of their duty to implement this SPCC Plan in accordance with 40 CFR Part 112. Further, this certification is no longer valid when any planned or unplanned change takes place at the facility that can increase the potential for a discharge of oil to Waters of the United States or when the regulations imposing SPCC Plan requirements change or after the deadline to review the continued applicability of this Plan has passed. Certain information was provided by the Facility. It is understood that the Facility also certifies that the information provided is true and accurate.

Corrective action as listed below is needed regarding secondary containment, drainage, and preventative measures, based on observations made of Facility conditions relative to 40 CFR Part 112. In order for this certification to be valid, the Facility must implement the Plan and certain improvements. This certification is contingent upon the following improvements being implemented:

- Three (3) 55-gallon drums located at the Airport Manager's Office and Maintenance Building and used for the storage of motor oil shall be provided with sized secondary containment or removed from the Site by the drum owners;
- One (1) 275-gallon aboveground storage tank used for the storage of fuel oil and located in Building 45 in a closet shall be provided with sized secondary containment or removed or removed from the Site by the tank owner;
- One (1) 330-gallon aboveground storage tank used for the storage of fuel oil and located inside the Something Different Café Building shall be provided with sized secondary containment or removed from the Site by the tank owner;
- One (1) 55-gallon drum used for the storage of crushed oil filters located in the West Side hangar of North Atlantic Air, Inc shall be provided with sized secondary containment or removed from the Site by the drum owner;
- One (1) 275-gallon aboveground storage tank used for the storage of fuel oil and located in the East Side North Atlantic Air, Inc. hangar shall be provided with sized secondary containment by the tank owner;
- One (1) 55-gallon drum of unknown contents stored in Hangar 2 shall be provided with sized secondary containment or removed from the Site by the drum owner or current tenant. The drum shall be labeled with its contents.
- Details regarding the controls, operation, and design of the 5,000-gallon underground storage tank at North Atlantic Air's East Side operation shall be appended to this document by the tank owner.

- The current North Atlantic Air SPCC Plan must be amended to include East Side operations and floor drains. The plan must be reviewed and certified by a MA Registered Professional Engineer at least once every 5 years to remain valid.
- If not already in place, spill kits shall be provided at all fuel dispensing sites (two North Atlantic Air fuel farm sites and one Airport diesel pump site).

THOMAS E. JENKINS,

Should these improvements not be implemented, this certification will be considered

invalid.

(Signature)

MA

(Registration Number and State)

2013

(Date)



# **SECTION 2.0 - SPILL/RELEASE PREVENTION**

This section describes the storage of oil at the Facility and the spill/release prevention equipment and procedures implemented at the Facility, including secondary containment structures, oil handling and tank fueling procedures and personnel training.

Described below is the system of structural and non-structural controls that will be used to prevent a discharge or minimize the potential for a discharge of oil in harmful quantities into or onto the navigable waters of the United States and their adjoining shoreline. In general, the system will consist of:

- Spill containment structures;
- Operating procedures that are specifically designed to minimize the potential for a release of oil;
- Personnel training regarding the facilities available and the procedures established to prevent oil spills and subsequent discharges;
- Facility security measures;
- Routine inspections and record keeping; and
- Routine SPCC Plan effectiveness reviews and amendments.

The guidelines for the preparation and implementation of an SPCC Plan (40 CFR 112.7(c)) require the use of "appropriate containment and/or diversionary structures or equipment" to prevent an oil discharge. At a minimum, one of the following structural controls (or its equivalent) must be used for onshore facilities:

- Dikes, berms or retaining walls;
- Curbing;
- Culverting, gutters or other drainage systems;
- Culverting, gutters or other drainage systems;
- Weirs, booms or other barriers;
- Spill diversion ponds;
- Retention ponds; or
- Sorbent material.

Structural controls will be used as part of the discharge prevention system for the Facility oil handling activities as described below.

Non-structural controls can be just as effective as structural controls in spill prevention. Several non-structural controls will be used at the Facility. They include:

- Facility security;
- Personnel training:
- Routine inspections;

- Preventive maintenance: and
- Standard operating procedures (SOPs).

Some of these non-structural controls are discussed below, while other additional controls are discussed on a facility-wide basis in the following sections.

In addition to this system of structural and non-structural controls, the Facility has also provided a written commitment of manpower, equipment and materials required to expeditiously control and remove any harmful quantity of oil discharged (see Section 1.6).

# 2.1 FACILITY STORAGE OF OIL, CONTAINMENT SYSTEMS, CORROSION AND OVERFILL PROTECTION

This section describes the oil storage tanks and oil containing equipment, and the containment systems, corrosion protection, and overfill protection systems that are in place at the Facility.

## 2.1.1 Oil Storage Tanks

A wide range of aboveground and underground storage tanks are in use at the Facility. These tanks are used to store heating oil for hangar heating purposes, fuel for aircraft being serviced at the Facility, fuel for vehicles and equipment onsite, used oil and new oil associated with maintenance activities, and diesel fuel for an onsite emergency generator. Aboveground and underground storage tanks and associated piping and equipment at the Facility appear to be fully compatible with their respective contents in the manner in which they are stored.

Aboveground and underground storage tanks at the Facility including Tenant operations shall be provided with secondary containment via the use of double walled tanks or dedicated sized secondary containment structures. Overfill protection shall be provided through the installation of automatic tank gauging systems, audible vent whistles, or manual inventory controls, during which tank ullage shall be verified prior to a delivery and the delivery process shall be continuously monitored by appropriately qualified Facility personnel to prevent an overfill from occurring.

Aboveground and underground storage tanks at the Facility shall be protected from corrosion either via the use of dedicated cathodic protection systems, by maintaining aboveground tanks with a coating of paint, by choosing non-corroding materials for tanks and piping for aboveground and/or underground tanks, or by placing aboveground tanks indoors in areas not likely to be exposed to precipitation.

Piping to each of the tanks at the Facility shall be adequately protected from vehicular damage, and shall be supported to minimize damage due to abrasion and from expansion and contraction of the piping. Piping materials are primarily either single-walled sleeved copper or single-walled steel. In some cases, piping leading to nozzles is flexible rubber hosing/piping. In limited areas, single-walled copper piping is not sheathed. In general, sheathing shall be added to these lines to provide additional protection. Piping is overhead in most cases, but in some cases is partially buried or along the ground surface. The tables included with the Plan summarize observed piping types and alignments onsite.

For those tanks which are bulk storage and transfer tanks or fuel tanks connected to fuel dispenser pumps, emergency shutoffs or usage controls are in place either at the tank/pump or

adjacent hangar. In most cases, a key must be turned or a button must be pushed at a secured location before product can flow or be pumped.

Specific and detailed information related to individual oil storage tanks at the Facility, including oil capacity, construction type, and other specific details is included in Tables 1 through 6, in the Tables Section of the Plan.

# 2.1.2 Oil Storage Containers

Oil storage containers at the Facility include drums used for the storage of both virgin and used oil products. The drums are all of similar construction, typically 55-gallon steel or poly containers. All oil storage containers at the Facility appear to be fully compatible with their respective contents in the manner in which they are stored.

Storage containers shall be provided with secondary containment via the use of sized secondary containment structures. Since some hangars currently have floor drains, drums stored inside must have sized secondary containment, since a release from a drum could potentially reach floor drains and be transported beyond the immediate area. Overfill protection shall be provided through the use of manual inventory controls, during which only small quantities of material are added to a drum at one time, by qualified facility personnel.

Oil storage containers at the Facility shall be protected from corrosion by placing the containers indoors in areas not likely to be exposed to precipitation.

Specific and detailed information related to individual oil storage containers at the Facility, including oil capacity, construction type, and other specific details is included in Tables 1 through 6, in the Tables Section of the Plan. It is noted that inventory at the Facility may vary throughout the year, in response to changes in demand. As such, the exact number of oil storage containers (drums, etc.) may differ slightly from what is listed in these tables.

#### 2.1.3 Mobile Refuelers

Three mobile refueling vehicles are used by one tenant (North Atlantic Air) at the Facility. These vehicles are used for the onsite refueling of aircraft. Two of the mobile refuelers have a 2000-gallon capacity and are used for Jet A fuel. The third mobile refueler has a 1,200-gallon capacity and is used for AVGAS. The three mobile refuelers used for fueling aircraft are tank trucks of similar construction, with single-walled steel tank portions of the vehicles, with associated fueling hoses, nozzles and pumping systems. All mobile refuelers in use at the Facility are fully compatible with their respective contents in the manner in which they are stored.

The Jet A mobile refuelers used by NAA are refueled at NAA's fuel farm on the west side of the airport. The fuel farm consists of two 10,000-gallon ASTs. The100LL mobile refueler is refueled at NAA's East Side fuel tank, which consists of one 8,000-gallon UST. Procedures for refueling are listed in a small shed and by the pump.

Mobile refuelers are not subject to the size-specific secondary containment requirements of 40 CFR Part 112, but instead must meet the general secondary requirements of the regulations. The general secondary requirements state that a facility must provide containment sufficient for the most likely discharge from the containers and from oil transfers into or from the mobile refueler. Accordingly, the tenant does not provide secondary containment structures for the

mobile refuelers but instead relies on operational and procedural controls to minimize the potential for discharged material from migrating beyond the immediate area. The measures implemented at the Beverly Municipal Airport include active containment of any material released, to provide for containment of oil released during the spill scenarios most likely to occur from these activities.

For those vehicles which are refueling within 25 feet of a downstream drainage structure, drain covers or booms shall be used during fueling as a preventative measure. For overnight parked vehicles, controls such as diversionary structures and oil water separators will be considered in conjunction with future construction projects.

Overfill protection for mobile refuelers is provided at a minimum through the use of manual inventory controls, during which vehicle ullage is verified prior to loading and the loading process is continuously monitored by appropriately qualified facility personnel to prevent an overfill from occurring.

Specific and detailed information related to individual mobile refuelers at the Facility, including oil capacity, construction type, and other specific details is included in Tables 1 through 6, in the Tables Section of the Plan.

# 2.2 FIELD-CONSTRUCTED CONTAINER EVALUATION

The Facility does not appear to maintain any field-constructed aboveground containers<sup>1</sup>. If the Facility planned to install field-constructed aboveground containers, the container must be evaluated for risk of discharge or failure due to brittle fracture or other catastrophe and take any action, as necessary. In such an event, the Plan's conformance with 40 CFR Part 112 would require updating.

# 2.3 ASSESSMENT OF SPILL/RELEASE SCENARIOS

Although oil and petroleum product storage at the Facility is carefully contained and managed, the Facility has considered the potential environmental spill release scenarios associated with each storage location. As required by 40 CFR Part 112, the Plan includes a prediction of the direction, rate of flow, and total quantity of oil which could be discharged from the Facility as a result of each type of major equipment failure.

In general, a spill outside a hangar and containment area would likely impact the immediate area and surrounding soils, and could migrate via overland flow or to onsite catch basins, ultimately discharging offsite to the vegetated wetlands or watercourses/waterbodies which border developed areas of the Site. The following sections describe the activities which could result in major equipment failures likely to result in a release at the Facility.

#### 2.3.1 Bulk Oil Loading/Unloading

Tank trucks delivering oil to the Facility generally vary in capacity but can be up to 10,000 gallons in size, while mobile refuelers in use at the Facility range from 1,200-gallons up to 2,000 gallons. Releases from these vehicles could occur during the process of loading a mobile refueler from an onsite tank, or during the delivery of oil to bulk storage tanks at the Facility.

<sup>&</sup>lt;sup>1</sup> A "field-constructed aboveground container" is one that is assembled or reassembled outside the factory at the location of intended use.

Such release would vary from small releases to catastrophic failures of a tank, fueling hose, or the vehicle. To minimize the likelihood of a release occurring during bulk oil loading/unloading, the Facility shall implement the procedures described in Section 2.9 of this Plan.

As indicated in Section 2.4, due to its topographical location, the Facility is divided between four (4) separate watersheds, each discharging to a separate location. The majority of the paved runway and taxiway surfaces at the Facility drain via sheet flow to vegetated swales and filter strip type areas before stormwater runoff flows enter the Facility's piped drainage system. The Facility's piped stormwater system drains to a series of stormwater outfalls to swales, wetlands, and watercourses located along the periphery of the airfield. In some locations, such as along aprons, near hangars, and in parking areas, catch basins are located within paved areas. Due to the age of the Facility, catch basins and storm drain pipes along the airfield have likely been added over time to address localized flooding and drainage issues and in response to onsite development. As a result, systems at the Facility have changed over time and will most likely continue to be retrofit in the future.

In general, there are wetland areas located along the edges of cleared areas associated with the Facility's runways, taxiways, and aprons. There are large wetland areas located along Runway 16-34 at its northern edge and along the east side of the central portion of the runway. There are also wetlands along the north side of the eastern edge of Taxiway A, and along the south side of Runway 9-27. Wetlands are also located in the triangle shaped area created by the intersection of the two main runways and Taxiway F. Wetlands are also located along the western side of the Facility, along Taxiway B and along the western property line. Wetlands water quality classification is tied to the waterbody the wetland borders or discharges to, so the individual onsite wetlands vary in classification based on the waterbodies listed above.

Should a release occur during a bulk oil loading/unloading activity, the direction and rate of the flow of the released material to a nearby storm drain or navigable water would be dependent on the location of the release, the quantity of oil released, and the weather conditions at the time of the incident. The rate of flow could vary greatly, ranging from a release which does not migrate beyond the immediate release area, to one which travels at several feet per second. Should a release occur during a these operations, the most likely discharge would involve a leak or rupture from a transfer hose, resulting in no more than 25 to 30 gallons of oil being released. However, because these activities are conducted by, or in the presence of, qualified facility personnel, and because of the precautionary measures employed to minimize the likelihood of a discharge entering the stormwater collection system, the likelihood of a release occurring which migrates to nearby water bodies is considered unlikely. Employees involved in transfer shall be properly trained and controls such as booms and drain covers shall be immediately available for use in a spill scenario.

Specific information regarding the direction and proximity of each oil storage tank to nearby stormwater catch basins or water resources is included in Tables 1 through 6, in the Tables Section of the Plan.

# 2.3.2 Oil Storage Tanks and Associated Piping

There are several aboveground and underground storage tanks currently operated at the Facility. The tanks are used for a wide range of applications, including hangar heating, emergency generators, aviation fuel storage and diesel fuel storage for various equipment. Releases could occur from the tanks or their associated piping and pumping systems due to operator error or due to the mechanical or structural failure of some component of a tank

system. Releases due to operator error, such as inadvertently spilling oil while dispensing product from a tank are likely to result in a small release, which would likely be immediately contained by Facility personnel. Releases due to some form of mechanical or structural failure would likely involve larger quantities of oil being released, potentially even the entire contents of an aboveground or underground storage tank.

Should a release occur from the primary storage vessel of a tank, it is likely that the released material would be contained within the containment structure for the tank (either a dedicated secondary structure, or the double-walled structure of the tank - see conditional certification items in Section 1.6.2 of the Plan). Such structures would provide for adequate containment until such time as the release could be properly mitigated. If a release were to occur from a tank system's piping or other associated equipment, it is possible that the release would not be contained within the containment structure, but instead would be discharged to the ground surface or subsurface environment. The specific scenario would depend on the location of the failure and the quantity of material released. The direction and rate of the flow of the released material to a nearby storm drain or navigable water would be dependent on the location of the release, the quantity of oil released, and the weather conditions at the time of the incident. The rate of flow could vary greatly, ranging from a release which does not migrate beyond the immediate release area, to one which travels at several feet per second. Should such a release occur inside, the concrete floor should provide for some containment until such time as the release could be properly mitigated. Specific information regarding the direction and proximity of each oil storage tank to nearby stormwater catch basins or water resources is included in Tables 1 through 6, in the Tables Section of the Plan.

# 2.3.3 Aircraft and Vehicle / Equipment Fueling Activities

Aircraft are primarily fueled at the Facility by mobile refuelers (tank trucks) staffed by trained and certified personnel from NAA, ranging in size from 1,200-gallons to 2,000-gallons, operated by a tenant (NAA). At the 100LL fuel pump at the NAA East Side operation, selected users are allowed to self-fuel their aircraft from this pump and tank. These users have dedicated access cards, are trained by NAA, and must sign off on training. Vehicles and equipment are also fueled by trained airport personnel at the diesel pump near the electrical vault. Releases from these vehicles could occur during the process of fueling an aircraft or equipment. Such release would vary from small releases to catastrophic failures of a fueling hose or the vehicle. To minimize the likelihood of a release occurring during aircraft fueling, the Facility shall follow applicable industry specific standards for the refueling of aircraft, as described in Section 2.9 of the Plan.

As indicated in Section 2.4, the Facility is divided between four (4) separate watersheds, each discharging to a separate location (Wenham Swamp, Wenham Lake, Bass River, and Frost Fish Pond). The majority of the paved runway and taxiway surfaces at the Facility drain via sheet flow to vegetated swales and filter strip type areas before stormwater runoff flows enter the Facility's piped drainage system. Should a release occur during a bulk oil loading/unloading activity, the direction and rate of the flow of the released material to a nearby storm drain or navigable water would be dependent on the location of the release, the quantity of oil released, and the weather conditions at the time of the incident. The rate of flow could vary greatly, ranging from a release which does not migrate beyond the immediate release area, to one which travels at several feet per second. Should a release occur during a these operations, the most likely discharge would involve a leak or rupture from a transfer hose, resulting in no more than 25 to 30 gallons of oil being released. However, because these activities are conducted by, or in the presence of, qualified facility personnel, and because of the precautionary

measures employed to minimize the likelihood of a discharge entering the stormwater collection system, the likelihood of a release occurring which migrates to nearby water bodies is considered unlikely.

For those vehicles which are refueling within 25 feet of a downstream drainage structure, drain covers or booms shall be used during fueling as a preventative measure. In addition, personnel involved in fueling shall be properly trained.

Specific information regarding the direction and proximity of each oil storage tank to nearby stormwater catch basins is included in Tables 1 through 6, in the Tables Section of the Plan.

# 2.3.4 Facility Maintenance Activities

The normal maintenance activities conducted at the Facility on transfer lines, pumps and other operating equipment have the possibility of creating discharges resulting from spills or leaks. To the extent possible, maintenance is performed inside, in closed hangars, which will provide for some containment in the event of a release/spill. Beyond this, Facility personnel conducting such activities are properly trained on the safe handling and management of oil and the procedures contained in the Plan. Should a release occur during Facility maintenance activities, procedures put in place for isolating transfer lines, pumps, valves and/or instrumentation that is undergoing preventative maintenance or repair should minimize the likelihood of any spills or leaks occurring.

#### 2.4 FACILITY DRAINAGE

The Facility is characterized by large expanses of maintained grassland areas and other vegetated areas on regulated portions of the Facility. Impervious areas onsite consist of runways, taxiways, aprons, hangars/aviation related structures, and access drives, with parking lots and a few non-aviation related operations in public areas.

The majority of the oil storage at the Facility is along the East and West Ramp areas, which contain the hangars, businesses, and associated oil storage at the Facility. Due to its topographical location, the Facility is divided between four (4) separate watersheds or subbasins. Approximate sub-basin boundaries are shown on Figure 2, the overall layout and drainage plan for the Facility. The sub-basins are as follows:

- Runoff from the northern portion of the 16 end of Runway 16-34 discharges to the north toward Wenham Swamp. Per 314 CMR 4.00, Wenham Swamp is classified as a Class A water, due to the fact that it is tributary to Putnamville Reservoir, which is a Class A Outstanding Resource Water and a drinking water source.
- Runoff from the central eastern portion of the Facility drains toward unnamed wetlands to the east of developed portions of the Facility which discharge to Airport Brook, which eventually discharges to Wenham Lake, a Class A drinking water source, located the east of the Facility. As per 314 MCR 4.00, Airport Brook is classified as a Class A Outstanding Resource Water, due to the fact that it is a tributary to Wenham Lake.
- Runoff from the southeastern corner of the Facility discharges southward toward unnamed wetlands which discharge to the headwaters of the Bass River. The Bass River is a Class B water and is also listed on the Massachusetts 2010 Integrated List of

Waters as a Category 5 water, one which requires a Total Maximum Daily Load (TMDL) to be established. The listed impairment is for Turbidity.

Runoff from the center and western portions of the Facility discharges westward toward
Frost Fish Brook and unnamed tributaries thereto. Frost Fish Brook is classified as a
Class B water and is the stream segment in the vicinity of areas where the Facility
discharges to is also listed on the Massachusetts 2010 Integrated List of Waters as a
Category 5 water, one which requires a TMDL. The listed impairment is for Fecal
Coliform.

In general, there are wetland areas located along the edges of cleared areas associated with the Facility's runways, taxiways, and aprons. There are large wetland areas located along Runway 16-34 at its northern edge and along the east side of the central portion of the runway. There are also wetlands along the north side of the eastern edge of Taxiway A, and along the south side of Runway 9-27. Wetlands are also located in the triangle shaped area created by the intersection of the two main runways and Taxiway F. Wetlands are also located along the western side of the Facility, along Taxiway B and along the western property line. Wetlands water quality classification is tied to the waterbody the wetland borders or discharges to, so the individual onsite wetlands vary in classification based on the waterbodies listed above.

The majority of the paved runway and taxiway surfaces at the Facility drain via sheet flow to vegetated swales and filter strip type areas before stormwater runoff enters the Facility's piped drainage system. In some locations (such as along aprons, near hangars, and in parking areas) catch basins are located within paved areas. Due to the age of the Facility, catch basins and storm drain pipes along the airfield have likely been added over time to address localized flooding and drainage issues and in response to onsite development. As a result, systems at the Facility have changed over time. The Facility's piped stormwater system drains to a series of stormwater outfalls to swales, wetlands, and watercourses located along the periphery of the airfield, as shown on the Site Map (Figure 2) and discussed previously. The following table summarizes the outfalls and non-piped concentration points which discharge stormwater runoff from the industrial activity areas at the Facility, based on pre-existing stormwater mapping and limited field review of the system.

Outfalls and concentration points which discharge runoff solely from non-industrial activity areas of the Facility (runways, taxiways, and other areas where materials are not stored, used, or produced) are not included in the table below. They are shown on the Site Map, but are not numbered. These non-industrial stormwater outfalls are labels as NIO (for "non-industrial outfall) on the Site Map.

Outfalls and concentration points which discharge stormwater that may be comingled (receiving runoff from both industrial and non industrial activity areas) are listed in the table and are subject to the requirements of the United States Environmental Protection Agency (EPA) Multi-Sector General Permit (MSGP) 2008 for stormwater discharges associated with industrial activities, including quarterly visual assessments and all inspections, as discussed later in this document.

Overall, there are approximately 20 known outfalls or culverts at the Facility, as shown on the Site Map. Of these, five (5) outfall pipes appear to discharge runoff from areas of the Facility involved in industrial activities and are discussed in the table below (Discharge Points (Outfalls 1-5)). The remainder of the outfalls or culverts (Discharge Points 6-9) take flow only from the airfield, vehicle parking lots, roadways, or other non-industrial activity areas.

In addition to the traditional piped systems, there is a large vegetated swale that runs along the west side of the apron on the Airport's East Side apron and another along the south side of the NAA East Side hangar. There is also a trench drain in this area, along the pavement in Taxiway G, near the apron area in front of the NAA East Side hangar. There are also some areas that drain only via a combination of sheet flow and concentrated flow, to pervious areas without pipes or an outfall, as denoted in the table below. In all, there are four (4) such areas that will need to be considered as stormwater runoff discharge points from industrial activity areas of the Facility. Because not all locations where runoff leaves the Site or concentrates into a swale or other conveyance involve a pipe or "outfall", these locations are tabulated below and included on the figures as "discharge points", rather than outfalls.

# Industrial Activity Area Outfalls/Discharge Points

Outfall/	Contributing	Description of Contributing Area
Discharge Point ID	Drainage Area	Description of Contributing / Tea
1	A	Apron area in front of NAA East Side Hangar, small portion of Runway 16-34, portion of Taxiway G, portion of detention area and grassed area to east of Runway 16-34. Discharge point is piped outfall which is the outlet from a detention basin, located to north of NAA apron pavement in swale.
2	В	Fueling area for NAA 100LL tank and pump, tie-downs, edge of NAA hangar, portion of apron, and other paved travel lanes. This outlet is a swale and discharge point will be the swale at the fence line.
3	С	Area along apron and tie-downs in front and to the side of Warner Aerocraft. This outlet area is not a pipe or swale. Discharge point will be the edge of pavement along the tie-downs to the side/rear of Warner Aerocraft.
4	D	Apron and grassed swale, paved parking area (landside), are around tower (Building 52), AB Aviation (Building 54, Hangar 2, Hangar 47), Airport Maintenance Building. Discharge point is piped outfall which is located off pavement, into treeline.
5	E	Portion of Taxiway A, area by Hangar 47, Hangar 5, including swale to east of Hangar 5. Discharge point is piped outfall located to south of Hangar 6, into treeline.
6	F	Area in front of Hangar 5, portion of Taxiway A. Discharge point is piped outfall which is in brush beyond regularly cleared area. If pipe cannot be located, sample from catch basin inlet at surface.
7	G	Area in front of Quonset hut near CAT Aviation. There is no piped outfall here. Discharge point will be at edge of pavement, prior to flow entering a swale.
8	Н	Area in front of CAT Aviation, Hangars 7, 8, 9, 10, wetland area, including swale along CAT Aviation access road. Discharge point is inlet pipe to catch basin to capture flows from swale and runoff from wetland area which takes other industrial flows.
9	I	Landside parking lot on West Side, area by Fuel Farm, and north side of Hangar 10. Discharge point is piped outfall located just beyond cleared area in wetland/brush.

## 2.4.1 Drainage from Diked Storage Areas

Diked storage areas at the Facility consist of double-walled tanks as well as dedicated sized secondary containment structures designed to capture and contain oils released from aboveground and underground storage tanks and drums. Many of these structures and/or tanks are located indoors, and are not likely to accumulate precipitation due to rain or snow. Those tanks and/or structures that are located outdoors are closed and/or covered systems therefore are also not likely to accumulate stormwater. Should liquid be detected within a double wall tank or containment structure, it would likely be from a leaking tank or storage container and as such would not be drained to the ground surface. Instead, any liquid detected within the containment tank would be removed and managed accordingly. North Atlantic Air, Inc. – West Side is in the process of constructing what appears to be a diked area around the Jet A AST fueling area. Once completed, this will require review and updating of the SPCC Plan.

# 2.4.2 Drainage from Undiked Areas with Potential for Discharge

Undiked areas of the facility with a potential for discharge include areas where tank trucks are positioned during bulk oil deliveries, where mobile refuelers are parked when not in use, where mobile refuelers are positioned when loading from a storage tank, and where mobile refuelers are positioned when fueling aircraft at the Facility. These activities are conducted throughout the hangar and ramp areas, on paved surfaces. Drainage from these areas is via overland flow to onsite stormwater catch basins as described in Section 2.4 above. These areas and activities are not subject to the size-specific secondary containment requirements of 40 CFR Part 112, but instead must meet the general secondary requirements of the regulations. The general secondary requirements state that a facility must provide containment sufficient for the most likely discharge from the containers and from oil transfers into or from the mobile refueler. Accordingly, the Facility does not provide sized secondary containment structures but instead relies on operational and procedural controls to minimize the potential for discharged material from migrating beyond the immediate area. The measures implemented at the Facility should provide for sufficient containment of oil released during the spill scenarios most likely to occur from these activities.

# 2.4.3 Drainage from Indoor Areas

In the event of an indoor oil spill, it is unlikely oil would escape a hangar to navigable water due to the configuration of each hangar's exterior drainage system, the likely small quantity of material released, and the likelihood that the released material would be discovered quickly by Facility personnel or trapped by the hangar's structure.

For those operations with floor drains which have drums or other tanks inside, materials could potentially reach the floor drain in the event of a release. Provision of dedicated secondary containment, such as spill pallets, shall be required in this case, as will absorbents and drain covers.

#### 2.5 INSPECTION PROCEDURES

#### 2.5.1 Periodic Visual Inspections

In accordance with 40 CFR Part 112, Facility personnel shall conduct periodic visual inspections of the tanks and equipment as part of routine operation and preventative maintenance

procedures. These inspections shall be conducted to identify malfunctions, deterioration, operator error, and discharge which may cause or lead to spills/releases. Each tenant SPCC Coordinator is responsible for ensuring that inspections occur of tanks and equipment within their portions of the Facility. The Facility SPCC Coordinator is responsible for ensuring that inspections are conducted for those tanks operated by the Airport, and for ensuring that tenant SPCC Coordinators are conducting inspections of the tanks within their respective areas. Inspections of tanks and equipment at the Facility shall be performed at least once per month by the Facility SPCC Coordinator (or his designee) for Airport operations and by each tenant SPCC Coordinator, or their designee for their individual operations. Individual operations may require more stringent or more frequent inspections based on industry standards. Timelines set forth in the Plan are a minimum and any industry specific requirements for inspections must be met by the Airport and Tenants, in addition to any requirements of the Plan. Industry specific requirements are not addressed in the Plan for brevity and clarity.

Periodic visual inspections shall be documented by the applicable SPCC Coordinator using inspection forms developed by each individual operation location to address the requirements of the Plan as well as other operational objectives of each tenant. A sample form is appended to the Plan and may be used as a starting point for the individual operations at the Facility to develop their own forms.

Inspections will address the following items at a minimum, but may include additional inspection items as needed:

- 1. All storage tanks and equipment will be examined for leaks from seams, rivets and bolts, where applicable, and gaskets and for signs of deterioration (e.g., discoloration, corrosion, cracks) of the vessel, aboveground foundation and tank structure supports.
- 2. All tank monitoring and/or leak detection systems will be checked for proper operation.
- 3. All associated piping will be checked for dripping, loose joints, damage to supports, and pipe deflection.
- All connections will be checked for leakage, drainage, tightness, and appropriate capping;
- 5. All pumps will be checked for evidence of leakage, proper operation, and damage;
- 6. All storage areas and containment systems will be inspected for integrity and the accumulation of stored product. If oil is observed in the containment system, the source of the oil will be determined.
- 7. The security of the tanks/areas/equipment will be checked (i.e., tank valves and equipment locked and secured, doors to tank and storage areas locked).

If a problem is detected during an inspection, notification will be made by the inspecting party to the applicable tenant SPCC Coordinator, who will be responsible for initiating and implementing the corrective action to mitigate the problem. Tenant SPCC Coordinators are also responsible for reporting the condition to the Facility SPCC Coordinator. If the inspection reveals a release or threat of release, the spill/release response procedures in Section 3 of the Plan will be implemented.

## 2.5.2 Visual Inspection Records

As noted previously, periodic visual inspections will be documented using inspection forms developed by or for each individual tenant operation to address the requirements of the Plan as well as other operational objectives of each tenant. The completed inspection forms will be retained by the applicable SPCC Coordinators for a minimum of three years from the date of inspection and copies provided to the Facility SPCC Coordinator upon request.

# 2.5.3 Third-Party UST Inspections

In addition to the periodic visual inspections described above, the underground storage tanks at the Facility are subject to a independent third-party inspection at least once every three years, beginning no later than August 2010, in accordance with the requirements of 527 CMR 9.00. The intent of this inspections is to verify that the tanks and their associated systems are functioning properly and compliant with the applicable requirements of 527 CMR 9.00. The results of the inspection are reported to the Massachusetts Department of Environmental Protection. Copies of the inspection reports will be retained onsite by the applicable SPCC Coordinators and retained for a minimum of three years from the date of the inspection. Tenant SPCC Coordinators shall also provide copies of these records to the Facility SPCC Coordinator to be maintained with the Plan.

#### 2.6 INTEGRITY TESTING

This section describes the integrity testing program, developed and implemented by the Facility as required by 40 CFR Part 112. The Facility deviates from the integrity testing requirements of 40 CFR Part 112. The deviation from this requirement is described below and also discussed in Section 1.5.2 - Environmental Equivalence- Integrity Testing.

#### 2.6.1 Oil Storage Tanks

The Facility deviates from the integrity testing provision of 40 CFR 112.8(c)(6) for the aboveground oil storage tanks located at the Facility. This decision of environmental equivalence assumes the secondary containment conditions as described in Section 1.6.2 of the Plan will be met, and is also based on an evaluation of good engineering practices after considering the tank installation and operations procedures and alternative measures implemented by the Facility and described herein.

Each of the aboveground tanks at the Facility shall be provided with dedicated sized secondary containment structures and be situated in a manner which allows for thorough visual inspections of the outer wall of the tanks, which shall be conducted a minimum of once per month by the applicable SPCC Coordinator. The personnel performing periodic inspections of storage tanks shall be knowledgeable of tank operations, characteristics of the oil stored, and the type of the storage tanks and their associated components. The routine inspections shall focus specifically on detecting any change in conditions or signs of product leakage from the tank and its piping. If signs of leakage or deterioration from the tank or piping are observed by the inspecting personnel, the situation shall be reported to the appropriate SPCC Coordinator, who determines the appropriate course of action for further evaluation or response activities.

The systems and measures implemented by the Facility and described above are considered to provide equivalent environmental protection as the non-destructive shell evaluation component

of integrity testing required under 40 CFR 112.8(c)(6), since an appropriate and effective means of assessing the condition of the tank and its suitability for continued service is provided.

If, during a visual inspection, evidence is found that a tank may have been damaged or if the structural integrity of a tank may have been compromised in some manner, integrity testing methods may be employed to evaluate the tank. Any such testing will be conducted in accordance with generally accepted industry standards and will employ such methods as tightness testing, hydrostatic testing, radiographic testing, ultrasonic testing, acoustic emissions testing, or another system of non-destructive shell testing. Records of all such testing, including comparison testing, shall be provided to the appropriate SPCC Coordinator and records maintained for a period of at least three years. A copy of all reports shall also be submitted to the Facility SPCC Coordinator.

Underground storage tanks at the Facility shall be subjected to integrity testing on a recurrent basis. Testing shall be conducted on each of the underground storage tanks at least once every 10 years, and will consist of hydrostatic pressure testing, tightness testing, or another similar industry standard practice or methodology. Records of all such testing, including comparison testing shall be provided to the appropriate SPCC Coordinator and records maintained for a period of at least three years. A copy of all reports shall also be submitted to the Facility SPCC Coordinator.

## 2.6.2 Oil Storage Containers

The Facility deviates from the integrity testing provision of 40 CFR 112.8(c)(6) for the oil storage containers located at the Facility. This decision on environmental equivalence assumes that the secondary containment conditions as described in Section 1.6.2 of the Plan will be met, and is also based on an evaluation of good engineering practices after considering the use of the containers and operations procedures and alternative measures implemented by the Facility and described herein.

Storage containers at the Facility consist of 55-gallon drums and shall be provided with secondary containment structures and be situated in a manner which allows for thorough visual inspections of the containers, which shall be conducted a minimum of once per month. The personnel performing periodic inspections of storage containers are knowledgeable of the characteristics of the oil stored. The routine inspections shall focus specifically on detecting any change in conditions or signs of product leakage from a container. Additionally, containers are not typically maintained onsite for prolonged periods of time after they are emptied. Rather, containers storing virgin materials are sent for recycling and/or disposal once the container is empty, while containers storing used oil are shipped offsite for hazardous waste disposal and/or recycling once full. In some cases, containers are stored onsite once empty to be used for future used oil generated or other compatible compounds. In such cases, the used containers, which may contain oil residues, shall be kept inside, away from doorway or floor drains to provide for containment of residues in the event of a leak or release. Once the container is being used to accumulate product, it shall be provided with sized secondary containment.

The systems and measures implemented by the Facility and described above are considered to provide equivalent environmental protection as the non-destructive shell evaluation component of integrity testing required under 40 CFR 112.8(c)(6), since an appropriate and effective means of assessing the condition of a container and its suitability for continued service is provided.

#### 2.6.3 Mobile Refuelers

Mobile refuelers are not specifically subject to the integrity testing provisions of 40 CFR 112.8(c)(6) but instead are subject to ongoing maintenance, inspection and testing in accordance with the USDOT regulations pertaining to the use of tank trucks. These requirements include periodic visual inspections of the entire vehicle as well as periodic inspection and testing of the tank component of the vehicle by the truck owners. All records shall be maintained at the applicable operation for a period of at least three years and copies provided to the Facility SPCC Coordinator upon request.

#### 2.7 TRAINING

The following sections describe the SPCC training program for the Facility. The following Facility personnel will participate in <u>initial and annual SPCC training</u>:

- Personnel whose job description requires them to work with oil;
- Personnel who could reasonably be expected to respond in the event of a spill or release of petroleum products or hazardous waste;
- Any other personnel at the discretion of the applicable SPCC Coordinator.

SPCC training shall be conducted in accordance with the requirements of 40 CFR Part 112 and designed to ensure employees can successfully perform their job responsibilities and that Facility personnel are able to effectively respond to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems. These training elements include:

- Operation and maintenance of equipment to prevent discharges;
- Discharge procedure protocols;
- Applicable pollution control laws, rules and regulations;
- General facility operations; and
- Contents of the SPCC Plan.

New employees that meet the above listed criteria, or employees that assume job responsibilities meeting the above listed criteria, will receive initial training within six months of being hired and/or prior to working unsupervised. Additionally, all personnel with job responsibilities meeting the above criteria will receive <u>annual</u> refresher training. The type of training provided to each employee varies depending on the area of the Facility the employee works in, and the individual employee's level of responsibility with respect to oil management.

Each tenant SPCC Coordinator is responsible for ensuring that their personnel are properly trained. The Facility SPCC Coordinator is responsible for training Airport personnel, and for verifying that the individual tenant SPCC Coordinators are conducting the required training for their personnel.

Training at the Facility shall either be conducted internally as on the job training or by competent outside agencies in a formal classroom setting. All training shall be documented using appropriate forms as determined by the Facility SPCC Coordinator and/or the applicable tenant SPCC Coordinator, identifying the type of training provided, the date of the training, the name of the employee(s) trained, and the name of the instructor providing the training. These records shall be retained for at least three years from the date the training was conducted. Tenant

training records shall be provided to the Facility SPCC Coordinator by the Tenants on an annual basis.

## 2.8 SECURITY AND LIGHTING

40 CFR 112.7(g) requires sites to fully fence handling, processing, or oil storage, and lock and/or guard entrance gates when the facility is not in production or unattended. The entire airport perimeter is completely encompassed by a fence with security gates. This includes areas where oil is in use or stored. Secured areas of the Facility are equipped with a security fence which includes access gates which can only be opened with proper ID or codes. Only authorized personnel may obtain the required ID or codes needed to open the gates.

# 2.9 OIL HANDLING AND VEHICLE LOADING/UNLOADING PROCEDURES

The following sections describe the general oil handling, tank fueling, and aircraft fueling procedures to be followed at the Facility.

# 2.9.1 General Oil Handling Procedures

Activities requiring oil usage at the Facility shall only be conducted by qualified personnel familiar with the requirements of the Plan and typically involve hangar/equipment maintenance activities, aircraft maintenance, and aircraft fueling operations. Maintenance activities requiring the use of oil are typically conducted indoors. If floor drains are present, extra care is taken to ensure that should any material be spilled, it will not enter a hangar floor drain, especially for cases where the drain is not currently properly connected. Aircraft fueling activities are conducted outdoors, but are conducted by appropriately trained Facility personnel. Facilities with floor drains shall have drain covers and/or booms available for immediate use inside the hangar.

# 2.9.2 Storage Tank Fueling Procedures

The Facility does not operate a tank truck loading/unloading rack as defined in 40 CFR Part 112. Instead, each tank is equipped with an independent filling location. However, the Facility has developed procedures for the fueling of tanks at the Facility to minimize the likelihood of spills/releases occurring during the fueling of these tanks. The procedures require that drivers supervise the entire delivery process, that deliveries only take place during normal working hours, that the delivery vehicle is parked as close as practical to the tank to be filled to minimize delivery hose length, and that applicable personnel familiar with the procedures in the Plan be present for the delivery process. The procedures for fuel deliveries are as follows:

- 1. Appropriately qualified Airport or tenant personnel will be present during all fuel delivery activities.
- 2. A visual inspection of the truck will be made to insure that no oil is leaking. If an oil leak is observed, the procedure for oil spill response will be followed.
- Airport or tenant personnel will assist the driver (if necessary) in the proper positioning of the vehicle, and will confirm that the driver installs wheel chocks or applies the parking brake to prevent vehicle departure until the transfer has been completed.

- Airport or tenant personnel will verify the volume of oil to be delivered and the amount of free space in the tank to ensure an overfill does not occur.
- 5. The fuel delivery truck driver will verify that all hose connections are secure. He/she will remain with the vehicle throughout the off-loading of the oil, and will continually monitor for leaks. The off-loading will be terminated if any problems occur. Fill will be limited to a maximum of 95% of tank capacity.
- 6. At the completion of the off-loading, the fuel delivery truck drive will assure that all valves are closed and all pumps are stopped before allowing the fill lines to be disconnected. A pail and/or absorbent pads will be used as appropriate to contain any oil drips during and following the disconnection of the fill line. Used oil or oil contaminated absorbents will be placed in an appropriate waste accumulation drum and managed appropriately by Airport or tenant personnel.
- 7. Airport or tenant personnel will repeat the visual inspection of the vehicle, authorize the removal of the wheel chocks or deactivation of the parking brake, and verify that the vehicle departs from the Facility.
- 8. Airport or tenant personnel will assure that the tank is returned to the pre-delivery condition.

In addition, for fuel deliveries in secured areas of the Facility, all Airport security and safety procedures shall apply. Fuel delivery to secure areas of the Facility shall be escorted and monitored. Vehicles shall also be inspected as determined necessary by the Airport.

# 2.9.3 Aircraft Fueling Procedures

Aircraft at the Facility are fueled in accordance with applicable industry standards, specific to the particular type of aircraft being fueled. These industry standards are hereby incorporated by reference. Only employees who have undergone standardized industry training and have appropriate certifications to conduct aircraft fueling activities are considered qualified and allowed to fuel aircraft at the Facility using mobile refuelers. Certified operators are allowed to self-fuel through controlled access to the 100LL pumps located at the North Atlantic Air East Side Operation.

Copies of the procedures shall be maintained onsite by the Tenant facilities conducting aircraft refueling activities, and shall be provided to the Facility SPCC Coordinator.

# 2.9.4 Mobile Refueling Truck Loading Procedures

As indicated in Section 2.9.2, the Facility does not operate a tank truck loading/unloading rack as defined in 40 CFR Part 112. Instead, each tank used to fuel mobile refueling vehicles is equipped with an independent dispensing/pumping system. Additionally, the Facility has developed procedures for the loading of mobile refueling vehicles, very similar to those described in Section 2.9.2 above. These procedures are intended to minimize the likelihood of spills/releases occurring during the loading of these vehicles. The procedures require that drivers supervise the entire loading process, that the vehicle is parked as close as practical to the tank to be loaded from to minimize the likelihood of release from hose damage during loading, and that only personnel familiar with the procedures in the Plan conduct the loading operations. The procedures for mobile refueling truck loading are as follows:

- 1. Appropriately qualified Airport or tenant personnel will be present during all loading activities.
- 2. A visual inspection of the truck will be made to insure that no oil is leaking. If an oil leak is observed, the procedure for oil spill response will be followed.
- 3. Airport or tenant personnel will ensure the vehicle is properly positioned, and will confirm that wheel chocks are installed to prevent vehicle departure until the transfer has been completed.
- 4. Airport or tenant personnel will verify the volume of oil to be loaded and the amount of free space in the truck to ensure an overfill does not occur.
- Vehicle operator will verify that all hose connections are secure. He/she will remain with the vehicle throughout the loading of the oil, and will continually monitor for leaks. The loading will be terminated if any problems occur. Fill will be limited to a maximum of 95% of vehicle capacity.
- 6. At the completion of the loading, the truck driver will assure that all valves are closed and all pumps are stopped before allowing the lines to be disconnected. A pail and/or absorbent pads will be used as appropriate to contain any oil drips during and following the disconnection of the fill line. Used oil or oil contaminated absorbents will be placed in an appropriate waste accumulation drum and managed appropriately by Beverly Municipal Airport or tenant personnel.
- 7. Airport or tenant personnel will repeat the visual inspection of the vehicle and authorize the removal of the wheel chocks.
- 8. Airport or tenant personnel will assure that the tank is returned to the pre-delivery condition.

# 2.9.5 Warning or Barrier System for Vehicles

The Facility shall follow standard operating procedures to assure fuel delivery trucks and aircraft fueling vehicles do not depart without assuring all hose connections have been disconnected.

At a minimum, all mobile refueling trucks have parking brakes set during aircraft fueling operation. In addition, depending on the vehicle, the truck may be equipped with interlock systems that prevent the dispensing of fuel unless the parking brake has been set (depending on the truck). In the event that an interlock is not operational, the Facility will require the truck to employ wheel chocks during tank fueling and aircraft fueling operations. Furthermore, the fuel delivery vehicle, including the lowermost valve on the vehicle, will be inspected prior to hose disconnection and vehicle departure.

**SECTION 3.0 - OIL SPILL CONTINGENCY PLAN** 

The following sections describe the spill/release response procedures to be implemented in the event of a spill/release of oil at the Facility.

#### 3.1 REGULATORY BACKGROUND

USEPA regulations define a spill event as the discharge of oil, in harmful quantities, into or upon the navigable waters of the United States or adjoining shorelines. Harmful quantities are defined as a discharge that violates applicable water quality standards or causes a sheen upon, or discoloration of, the surface of the water or the adjoining shorelines. Contaminated groundwater may also have the potential to seep, leach, or flow into navigable waters, which would be included in this definition. Navigable waters are defined as all waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters subject to the ebb and flow of the tide; all interstate waters. including interstate wetlands; all other waters such as intrastate lakes, rivers, streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce. Storm drains are also considered to fall under the definition of a navigable waterway since most storm drains discharge into a navigable waterway. Accordingly, any spill at the Facility, which reaches the adjacent wetland or water resource areas, or the local stormwater collection system, must be considered subject to these regulations. In addition, the Environmental Protection Agency has established release reporting/mitigation requirements for certain hazardous materials. According to 40 CFR 302 and 40 CFR 355, a quantity of hazardous material released to the environment in excess of its designated reportable quantity (RQ) requires the notification to EPA. Lists of these hazardous materials and their respective RQs can be found in the federal regulations at 40 CFR 302.4 and Appendix A of 40 CFR 355. According to the Massachusetts Contingency Plan (310 CMR 40.000), a quantity of hazardous material released to the environment in a 24-hour period that exceeds its designated reportable quantity (RQ) requires notification to MADEP.

# 3.2 DISCOVERY OF A SPILL/RELEASE, INTERNAL NOTIFICATION AND IMMEDIATE ACTIONS

#### 3.2.1 Initial Actions

The person(s) discovering a spill/release plays a critical role in determining the appropriate immediate actions to ensure their safety and the safety of others, as well as the protection of the environment. These immediate actions are based on various factors, including the nature of the release, the quantity of material released, the location of the release, etc. The person discovering a spill/release should attempt to contain the situation by evacuating the area, restricting access to the area, and isolating potential environmental discharge points, if possible, and provided such measures can be done safely. Spilled/released materials should be

contained with absorbent materials or containment booms to prevent the material from spreading beyond the immediate area of release and if possible, keep it from contacting unpaved areas. The person discovering the release should then initiate the notification procedures described in Section 3.2.2 below.

An important facet to consider in responding to and mitigating a spill/release is to contain and minimize pathways to the environment. Every effort should be made to contain spills at the source rather than resort to separation of the material from the environment or downstream waters. This can be accomplished by isolating sumps, floor and roof drains, and hangar berms around potential environmental receptors using absorbent or absorbent booms. In the event of a spill that occurs outside of secondary containment or escapes secondary containment, priority must be given to protecting pathways to the surface and subsurface water runoff collection system.

#### 3.2.2 Internal Notification

Concurrent with the measures described in Section 3.2.1 above, the person(s) discovering a spill/release must immediately report the situation to the Facility SPCC Coordinator (or their alternate if the primary coordinator is not immediately available) and to their respective tenant SPCC Coordinator. The phone numbers for these individuals are located in the Emergency Contact List on Page i of this Plan. The person making the notification should provide as much information regarding the release as possible. Where possible, the person making the notification should attempt to provide the following:

- Location of spill;
- Date and time discovered;
- Name of material spilled:
- Amount spilled and source of spill;
- Associated hazards:
- Location and description of potential and actual environmental receptors (e.g., storm drains, water bodies, etc.) if applicable;
- Actions being used to stop, remove, and/or mitigate the effects of the spill; and
- Description of any damages or personnel injuries.

If notified first, the Facility SPCC Coordinator will notify the appropriate tenant SPCC Coordinator. Conversely, if a tenant SPCC Coordinator is notified first, that individual will notify the Facility SPCC Coordinator concurrently with initiating spill response efforts. The appropriate SPCC Coordinator will evaluate the situation to determine immediate actions required and the need for a spill response contractor to clean-up the spill, if necessary. Once the SPCC Coordinator has been notified of any emergency incident, the SPCC Coordinator will conduct an immediate hazard assessment to determine the appropriate course of action for addressing the release. If it is determined that that spill/release can be safely addressed by onsite personnel, the SPCC Coordinator may direct personnel to initiate appropriate clean up actions. For spills/releases which cannot be readily managed by onsite personnel, the SPCC Coordinator may contact an appropriately qualified spill cleanup contractor to provide assistance.

If there is an immediate threat to human life (e.g., a fire in progress or fumes overcoming personnel) or if there is a threat of a release, the SPCC Coordinator will immediately notify the applicable Fire Department(s) (in addition to the notifications described above). A "Threat of Release" is defined as a substantial likelihood of a release of oil and/or hazardous material which requires action to prevent or mitigate damage to health, safety, public welfare or the

environment which may result from the release. If an uncontrollable spill/release has occurred and/or if the spill/release has migrated beyond the Facility, the SPCC Coordinator may request the assistance of the Fire Department(s) and a spill response contractor. Phone numbers for these emergency contacts are identified on the Emergency Contact List on Page i of the Plan.

#### 3.3 EXTERNAL NOTIFICATIONS

The SPCC Coordinator assuming responsibility for the spill/release (Facility or individual tenant SPCC Coordinator) will determine if a reportable release has occurred and will perform notification to outside agencies if necessary. If the spill exceeds the Reportable Quantity (RQ) specified under the Massachusetts Contingency Plan, enters the environment, threatens or contacts a navigable waterway, or poses any risk of injury to health or the environment, the SPCC Coordinator will conduct reporting to outside agencies in accordance with the following sections.

# 3.3.1 State and Local Reporting Requirements

If a spill/release exceeds the applicable RQ and enters the environment, the spill must be reported to MADEP within 2 hours of discovery the spill/release. If there is an existing threat of release, the situation must also be reported to MADEP within 2 hours. A Threat of Release is defined as a substantial likelihood of a release of oil and/or hazardous material which requires action to prevent or mitigate damage to health, safety, public welfare of the environment which may result from the release. In addition, a spill/release that migrates off of the Site and/or results in personal injury, and all fires or explosions, must be reported to the Police and Fire Departments. Additionally, a spill/release that enters the sanitary sewer system should be reported to the Wastewater Treatment Plant. In the event personnel at the Facility are injured, local emergency services should be notified immediately. A list of appropriate state and local contacts, and their respective phone numbers are identified on the Emergency Contact List on Page i of this Plan.

#### 3.3.2 Federal Reporting Requirements

If a spill/release causes a sheen or discoloration of navigable waters or adjoining shorelines, the spill must be immediately reported to the National Response Center (NRC). The NRC will notify the EPA. Although not required, EPA Region I may be notified directly in addition to notifying the NRC. In addition, the spill/release should also be reported, if required by SARA Title III/Emergency Planning and Community Right-To-Know Act, to the State Emergency Response Commission and Local Emergency Planning Committee. The contact numbers for each of these agencies are identified on the Emergency Contact List on Page i of the Plan.

#### 3.3.3 Oil Pollution Prevention Regulations Reporting Requirements

In addition to the reporting requirements discussed above, any single discharge of 1,000-gallons or more of oil, or any two discharges of oil in excess of 42-gallons each within one twelve month period, must be reported to the Regional Administrator of EPA within 60-days. The following information must be submitted:

- Facility name and location:
- Maximum storage capacity of the facility and normal daily throughput;
- An adequate description of the facility including maps, flow diagrams and topographic maps, as necessary;

- The cause of the discharge(s), including an analysis of what caused the discharge;
- Corrective actions that have been taken, including descriptions of equipment repairs and replacement;
- Preventive measures taken to prevent a recurrence; and
- Any other information requested by EPA.

#### 3.4 FOLLOW-UP ACTIONS

## 3.4.1 Clean Up of Spill and Spill Area

At the conclusion of spill response activities, Facility personnel (or the emergency response contractor) will begin decontamination of equipment and affected Site areas. Surfaces that are contaminated by the spill/release shall be cleaned by the use of an appropriate cleaning substance. All materials used in the clean-up, including aqueous cleaning substances, must be minimized, contained and properly disposed. Occasionally, porous materials (such as wood, soil, or sorbent) may be contaminated; such materials will require special handling for disposal. All tools and equipment that have been used during a spill response or clean-up effort must be thoroughly decontaminated.

## 3.4.2 Recovery and Disposal of Spilled Material

All spill cleanup material shall be recovered into appropriate containers (e.g., 1-gallon metal containers, open-top 55-gallon drums; or, if the size of the spill warrants, into a roll-off container(s)). Care must be taken when cleaning up spills in order to minimize the generation of additional waste. When containers are filled after a clean-up, the container's top shall be secured and the container shall be appropriately labeled and managed in accordance with the requirements of 310 CMR 30.000, if applicable.

#### 3.4.3 Incident Documentation

All reported spills/releases shall be documented using the Spill/Release Incident Report Form contained in Appendix C, or a similar form which facilitates the collection of the appropriate relevant information. The report shall be prepared by the SPCC Coordinator responsible for the release, or his/her designee. At a minimum, the report should document the following items:

- Location of spill;
- Date, time, and duration of release;
- Name of the material released;
- Source and total volume of the release;
- The cause of the release:
- Actions or clean-up procedures used to stop, remove, and/or mitigate the effects of the release;
- Preventive measures taken to prevent a recurrence;
- Corrective actions that have been taken, including descriptions of equipment repairs and replacement;
- A description of all affected environmental receptors or media;
- Personnel who discovered and/or participated in the spill remediation;
- Equipment used during the clean-up;
- Waste quantity and disposal method (e.g., transporter, TSDF, etc.);
- Description of any damages or personnel injuries;
- Name of any organizations contacted including the applicable agency report numbers;

- Name, address and phone number of responsible party (e.g., owner of a private vehicle leaking fuel in a parking lot); and
- Tag number and owner if a motor vehicle is involved.

The applicable Tenant SPCC Coordinator will ensure that appropriate follow-up notifications are conducted in accordance with applicable regulations. Furthermore, the applicable SPCC Coordinator will retain the information regarding the release for a minimum of three years from the date of release.

For spills/releases by tenants, copies of any such records shall be provided to the Facility SPCC Coordinator to be retained in his/her files within one (1) week of the release date. For releases requiring a prolonged spill response, an initial report shall be field with the Facility SPCC Coordinator within one (1) week of the release, with additional reports filed biweekly to document continued action. Along with the spill report, the tenant shall provide to the Facility SPCC Coordinator a timeline for all Corrective Actions. Based on the spill report and timeline, the Facility Coordinator may request additional information or comment on the proposed action and timeline. Based on the severity of the release, the Facility SPCC Coordinator may elect to increase the frequency of inspections required to be completed by the tenant and/or the frequency of Airport staff inspections of the Facility and may request additional information to be filed with the Plan.

#### 3.4.4 Remediation and Corrective Action

SPCC Coordinators are responsible for implementation of appropriate corrective measures to minimize the potential for reoccurrence of a release at their own operations. Examples of corrective action measures include the purchase of equipment, the upgrade or reengineering of equipment, installation of secondary containment or leak alarms, increased personnel training, etc. Incidents which require continued remediation/clean-up will be the responsibility of the applicable SPCC Coordinator.

#### 3.5 EMERGENCY RESPONSE EQUIPMENT

#### 3.5.1 Onsite Spill Response Equipment

Airport operations and the Tenants at the Facility maintain various spill response equipment capable of addressing spills/releases of oil at the Facility. The equipment includes various spill kits, spill response materials, brooms, shovels, dust pans, absorbent and absorbent booms. These materials are for use in responding to small spills/releases of oil at the facility and are generally sufficient for addressing small releases of materials such as would be encountered from a minor leak from a container, tank, or piece of equipment, or a minor release during tank or aircraft fueling activities. These materials shall be fully compatible with the oils stored at the Site. All emergency response equipment at the Site shall be properly maintained and periodically inspected as part of routine activities at the Site.

#### 3.5.2 Communications Systems

The Airport operates various communications systems at the Facility which can be employed during an emergency at the Facility. Communications systems at the Facility include land-line telephones, cellular phones, fire alarms, two-way radios, and paging systems, All personnel working at the Facility have continuous access to one or more of these systems in the event of an emergency at the Site.

# 3.5.3 Emergency Response Contractor Equipment

In addition to the spill equipment maintained onsite, Airport operations and Tenants shall retain the services of an appropriately qualified spill response contractor if necessary. Spill response contractors typically maintain a wide range of response equipment capable of handling the types of releases which could occur at the Site.